REGULAR MEETING
OF THE MADERA CITY COUNCIL

205 W. 4th Street, Madera, California 93637

NOTICE AND AGENDA

Wednesday, January 21, 2015
6:00 p.m. – Closed Session
6:30 p.m. – Regular Session

Council Chambers
City Hall

6:00 p.m. **CALL TO ORDER CLOSED SESSION**

ROLL CALL: **Mayor Robert L. Poythress**
Mayor Pro Tem William Oliver
Council Member Charles F. Rigby
Council Member Sally J. Bomprezzi
Council Member Andrew J. Medellin
Council Member Donald E. Holley
Council Member Derek O. Robinson Sr.

PUBLIC COMMENT: **Closed Session**

The first fifteen minutes of this portion of the meeting are reserved for members of the public to address the Council on Closed Session items listed on the Agenda. Speakers seeking to comment on other items are requested to make those comments during the Public Comment portion of the meeting at 6:30 p.m. Speakers shall be limited to three minutes. Speakers will be asked to identify themselves and state the subject of their comment. The Council is prohibited by law from taking any action on matters discussed that are not on the Agenda, and no adverse conclusions should be drawn if the Council does not respond to public comment at this time.

A. **CLOSED SESSION** ***Closed Session items not concluded prior to the Regular Session may be continued at the end of the Regular Session.***

A-1 Closed Session Announcement – City Attorney

A-2 Conference with Legal Counsel – Pending Litigation pursuant to Government Code §54956.9(d)(1): 2 cases:

Matthew Wiles WCAB No. ADJ 9551686
Miguel Ramirez WCAB No. ADJ 7786539

A. **RECONVENE CLOSED SESSION**

A-3 Closed Session Report – City Attorney

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6:30 p.m. **CALL TO ORDER REGULAR SESSION**

ROLL CALL: **Mayor Robert L. Poythress**
Mayor Pro Tem William Oliver
Council Member Charles F. Rigby
Council Member Sally J. Bomprezzi
Council Member Andrew J. Medellin
Council Member Donald E. Holley
Council Member Derek O. Robinson Sr.

INVOCATION: Pastor Roger Leach, Valley West Christian Center

PLEDGE OF ALLEGIANCE:

PUBLIC COMMENT:

The first fifteen minutes of the meeting are reserved for members of the public to address the Council on items which are within the subject matter jurisdiction of the Council. Speakers shall be limited to three minutes. Speakers will be asked to identify themselves and state the subject of their comment. If the subject is an item on the Agenda, the Mayor has the option of asking the speaker to hold the comment until that item is called. Comments on items listed as a Public Hearing on the Agenda should be held until the hearing is opened. The Council is prohibited by law from taking any action on matters discussed that are not on the Agenda, and no adverse conclusions should be drawn if the Council does not respond to public comment at this time.

PRESENTATIONS

1. Proclamation in Recognition of the Homeless Point-In-Time Count
2. San Joaquin Valley Air Pollution Control District Grant Awards

INTRODUCTIONS Introduction of Police Officers Joseph Velasquez and Ryan Vasquez

B. CONSENT CALENDAR

B-1 Minutes – There are no minutes for consideration.

B-2 Information Only – Warrant Disbursement Report

B-3 Consideration of a Resolution Ratifying and Approving a Subordination Agreement for Arborpoint Apartments (Report by Daniel Abdella)

B-4 Consideration of a Resolution Approving the Submission of Applications to the Housing Related Parks Program 2014 and Authorizing the City Administrator to Execute All Required Grant Documents (Report by Daniel Abdella)

B-5 Consideration of a Resolution of the City Council, of the City of Madera, California, Approving Subordinations for Esmeralda R. Ceja for a HOME and CalHOME First Time Home Buyer Loan and Authorizing the City Administrator to Sign on Behalf of the City of Madera (Report by Daniel Abdella)

B-6 Consideration of a Resolution Appointing Richard Broadhead to the City of Madera Airport Advisory Commission (Report by Dave Randall)

B-7 Consideration of a Resolution Approving Four Agreements with Pacific Gas & Electric Company for the Rule 20B Undergrounding of Existing Overhead Electric Facilities and Street Lighting Electrical Services for Pine Street & West Pecan Avenue Improvement Project (Report by Keith Helmuth)

B-8 Consideration of a Resolution Approving the Appointment of Representatives to the Community Development Block Group Review & Advisory Committee (Report by Daniel Abdella)

B-9 Consideration of a Resolution Accepting a San Joaquin Valley Air Pollution Control District Grant from the Bicycle Infrastructure Component of the Reduce Motor Vehicle Emissions II Program and Ratifying and Approving the Standard Agreement with the District (Report by Daniel Abdella)

B-10 Consideration of a Resolution Accepting a San Joaquin Valley Air Pollution Control District Grant from the Alt Fuel/Hybrid Vehicle Rebate Component of the Reduce Motor Vehicle Emissions II Program and Ratifying and Approving the Standard Agreement with the District (Report by Daniel Abdella)

B-11 Consideration of a Resolution Reappointing Rae Gomes to the City of Madera Beautification Committee (Report by Mary Anne Seay)

B-12 Consideration of a Resolution Approving an Agreement With Love's Travel Stops and Country Stores For Funding of an Environmental Impact Report Relating to the Development of the Love's Travel Center and Authorizing the Mayor to Execute the Agreement on Behalf of the City (Report by David Merchen)

B-13 Consideration of a Resolution Approving an Agreement with Quad Knopf for Preparation of an Environmental Impact Report Relating to the Development of the Love's Travel Center and Authorizing the Mayor to Execute the Agreement on Behalf of the City (Report by David Merchen)

B-14 Consideration of a Resolution Approving a Subscription Agreement with Nichols Consulting for SB90 State Mandated Cost Reimbursement Claim Preparation Services (Report by Tim Przybyla)

B-15 Consideration of a Resolution Granting an Easement to Madera Irrigation District for an Irrigation Pipeline Located on Parcels Owned by the City of Madera in Industrial Subdivision 2014-S-01, Pecan Avenue and Pine Street (Report by Keith Helmuth)

C. HEARINGS, PETITIONS, BIDS, RESOLUTIONS, ORDINANCES, AND AGREEMENT

C-1 A Public Hearing to Consider an Appeal by Mr. Ajit Gill of Planning Commission Conditions of Approval for CUP 2014-26, VAR 2014-06 and SPR 2014-39

And

Consideration of a Resolution of Determination on Appeal (Report by Chris Boyle)

C-2 Public Hearing and Consideration of a Resolution Adopting the Madera County Integrated Regional Water Management Plan (Report by David Merchen)

C-3 Consideration of a Resolution Approving Amendments to the City's Sidewalk Repair Cost Sharing Reimbursement Program to Allow Repairs to be Made Directly by and/or Through The City, and to Allow Eligibility in the Program to Include Non Residential Properties (Report by Dave Randall)

D. WRITTEN COMMUNICATIONS

There are no items for this section.

E. ADMINISTRATIVE REPORTS

E-1 Consideration of a Request to Adopt a Resolution Supporting the Renewal of Madera County Recycling Market Development Zone (RMDZ) (Report by Bobby Kahn)

E-2 Informational Report on a Change in Crime Analytics Software for the Madera Police Department (Report by Steve Frazier)

E-3 Acceptance of Audited Financial Statement and Single Audit Report (Federal Grants) for the Fiscal Year Ended June 30, 2014 (Report by Tim Przybyla)

F. COUNCIL REPORTS

ADJOURNMENT – Next regular meeting February 4, 2015

Any writing related to an agenda item for the open session of this meeting distributed to the City Council less than 72 hours before this meeting is available for inspection at the City of Madera Office of the City Clerk, 205 W. 4th Street, Madera, California 93637 during normal business hours.

The meeting room is accessible to the physically disabled, and the services of a translator can be made available. Request for additional accommodations for the disabled, signers, assistive listening devices, or translators needed to assist participation in this public meeting should be made at least seventy two (72) hours prior to the meeting. Please call the Human Resources Office at (559) 661-5401. Those who are hearing impaired may call 711 or 1-800-735-2929 for TTY Relay Service.

Para asistencia en Español sobre este aviso, por favor llame al (559) 661-5405.

I, Sonia Alvarez, City Clerk for the City of Madera, declare under penalty of perjury that I posted the above agenda for the regular meeting of the Madera City Council for January 21, 2015, near the front entrances of City Hall at 3:00 p.m. on January 16, 2015.

Sonia Alvarez

Sonia Alvarez, City Clerk

Return to Agenda

Agenda: January 21, 2015

Item: B-1

There are no Minutes for consideration.

Return to Agenda

City of Madera

Council Meeting Of January 21, 2015
Agenda Item No. B-2

Memorandum To: The Honorable Mayor,
City Council and City Administrator

From: Office of the Director of Finance

Subject: Listing of Warrants Issued

Date: 1/21/2015

Attached, for your information, is the register of the warrants for the City of Madera covering obligations paid during the period of:

December 25, 2014 to January 8, 2015

Each demand has been audited and I hereby certify to their accuracy and that there were sufficient funds for their payment.

General Warrant:	197962-198087	$	1,492,584.82
Wire Transfer	Union Bank Payroll and Taxes	$	524,903.78
Wire Transfer	SDI	$	1,473.71
Wire Transfer	Cal Pers	$	156,737.92

Respectfully submitted,

Tim Przybyla
Financial Services Director

CITY OF MADERA
REGISTER OF AUDITED DEMANDS FOR BANK #1-UNION BANK GENERAL ACCOUNT
January 8, 2015

CHECK	PAY DATE	ISSUED TO	DESCRIPTION	AMOUNT
197962	12/31/2014	AT&T	11/14 SVS 5596641409647	1,141.11
197963	12/31/2014	AT&T	11/14 SVS 2343429813438	637.65
197964	12/31/2014	ALL VALLEY ADMINISTRATORS	MEDICAL & CHILD CARE EXPENSE 01/02/15 PR	766.19
197965	12/31/2014	COMCAST	CITY INTERNET CONNECTION 12/15-01/14/15	1,520.00
197966	12/31/2014	MARTINEZ TONY	Utility Billing Deposit Refund	19.55
197967	12/31/2014	OCAMPO BONIFACIO	Utility Billing Credit Refund	84.27
197968	12/31/2014	SANTOS PABLO OR CITY OF MADERA	Utility Billing Credit Refund	228.15
197969	12/31/2014	GRACIA RICHARD	Utility Billing Credit Refund	168.09
197970	12/31/2014	RODRIGUEZ SOFIA	Utility Billing Credit Refund	169.36
197971	12/31/2014	MACULANS KARL	Utility Billing Credit Refund	120.23
197972	12/31/2014	CONDE JOSE L	Utility Billing Credit Refund	215.93
197973	12/31/2014	PEREZ FRANCISCO	Utility Billing Credit Refund	177.29
197974	12/31/2014	SCHOETTLER ERIC	Utility Billing Credit Refund	27.45
197975	12/31/2014	QUINONEZ ANTHONY	Utility Billing Deposit Refund	62.26
197976	12/31/2014	NAJERA SANTIAGO JULIA	Utility Billing Credit Refund	159.88
197977	12/31/2014	SALINAS BARTOLO	Utility Billing Credit Refund	248.10
197978	12/31/2014	AMEZOLA MIGUEL	Utility Billing Deposit Refund	65.33
197979	12/31/2014	REED THOMAS	Utility Billing Deposit Refund	62.69
197980	12/31/2014	SOLORIO LORENA	Utility Billing Credit Refund	191.37
197981	12/31/2014	HERNANDEZ SARAH ALEXANDRA	Utility Billing Credit Refund	133.39
197982	12/31/2014	VALDEZ SANTIAGO	Utility Billing Credit Refund	108.72
197983	12/31/2014	DOMOKOS MARIANN OR CITY OF MADERA	Utility Billing Credit Refund	150.34
197984	12/31/2014	BURELL CHRISTTINE	Utility Billing Credit Refund	150.31
197985	12/31/2014	MEISNER SHANNON OR CITY OF MADERA	Utility Billing Credit Refund	150.29
197986	12/31/2014	POND LOUIS C	Utility Billing Deposit Refund	72.08
197987	12/31/2014	LLOREN DURBIN	Utility Billing Deposit Refund	65.80
197988	12/31/2014	SALDATE RICKY	Utility Billing Credit Refund	127.38
197989	12/31/2014	INTELIS CORPORATION	Utility Billing Credit Refund	201.99
197990	12/31/2014	BHANDAL CONSTRUCTION	Utility Billing Credit Refund	146.24
197991	12/31/2014	BATTH NEENA	Utility Billing Credit Refund	166.18
197992	12/31/2014	GILL GURSHANKTI SINGH	Utility Billing Credit Refund	37.69
197993	12/31/2014	YAVASILE MICHAEL A	Utility Billing Credit Refund	145.10
197994	12/31/2014	DMP DEVELOPMENT	Utility Billing Deposit Refund	25.57
197995	12/31/2014	INTELIS CORPORATION	Utility Billing Credit Refund	172.29
197996	12/31/2014	TRAN THUY NGOC OR CITY OF MADERA	Utility Billing Credit Refund	199.08
197997	12/31/2014	JAKUSZ PROPERTY MAINTENANCE	DECEMBER 2014 MONTHLY MAINTENANCE	28,235.07
197998	12/31/2014	FORENSIC NURSE SPECIALISTS, INC.	ASSAULT EXAMINATION	2,700.00
197999	12/31/2014	JSL CONSTRUCTION INC.	PMT #7- 27152 SAN BRUNO AVE	3,240.00
198000	12/31/2014	N.P.C.-ORCHARD TRUST COMPANY	PLAN #340227-01 FOR 01/02/2015 PAYROLL	5,681.06
198001	12/31/2014	N.P.C.-ORCHARD TRUST COMPANY	PLAN #340227-02 FOR 01/02/2015 PAYROLL	1,679.74
198002	12/31/2014	PACIFIC GAS & ELECTRIC	10/14 SVS 3533032414-2	284,723.68
198003	12/31/2014	P G AND E	12/14 SVS 8307681856-2	33,549.40
198004	12/31/2014	REGENCE BLUECROSSS BLUESHIELD OF UTAH	CITY PD RETIREE MEDICAL CHUMLEY 01/15	144.00
198005	12/31/2014	SHEKLANIAN, SHANT	PER DIEM ICI HOMICIDE COURSE	671.00
198006	12/31/2014	TESEI PETROLEUM INC.	FUEL CHARGES 12/01/14- 12/10/14	11,879.65
198007	12/31/2014	VERIZON WIRELESS	CELL PHONE CHARGES NOV 11- DEC 10	3,463.97
198008	1/8/2015	AT&T	12/14 SVS 2343711544689	2,436.15
198009	1/8/2015	AECOM	ENGINEERING SVS FOR CNG	1,782.00
198010	1/8/2015	ALL VALLEY ADMINISTRATORS	2014 SECTION 125 PLAN ANNUAL CHARGE	250.00
198011	1/8/2015	CDW GOVERNMENT, INC	NETWORK ROUTER ANNUAL MAINTENANCE	3,483.16
198012	1/8/2015	CALIFORNIA CLIMATE CONTROL, INC.	HVAC MAINTENANCE	1,584.95
198013	1/8/2015	CALIFORNIA CLIMATE CONTROL, INC.	HVAC MAINTENANCE	116.00
198014	1/8/2015	CALIFORNIA DEPARTMENT OF JUSTICE	FINGERPRINTING	111.00
198015	1/8/2015	DEPARTMENT OF CONSERVATION	2ND QTR 14/15 SMIP FEE REPORTING	1,196.84
198016	1/8/2015	CANON FINANCIAL SERVICES	PER COPY CHARGE BREAKDOWN 7/1- 9/30/14	3,015.66
198017	1/8/2015	CSJVRMA	2014/2015 3RD QUARTER DEPOSITS	632,253.00
198018	1/8/2015	CERTIFIED LABORATORIES	GEAR OIL	1,659.40
198019	1/8/2015	CHIARAMONTE, GIACHINO	PER DIEM SHOT SHOW	337.25
198020	1/8/2015	COLONIAL LIFE & ACCIDENT INSURANCE CO	E700482-3 FOR 01/02/2015 PAYROLL	1,121.17
198021	1/8/2015	COMCAST	01/15 SVS	88.69
198022	1/8/2015	COMMUNITY MEDICAL CENTER	11/14 LEGAL BLOOD DRAW	175.00
198023	1/8/2015	CONCENTRA MEDICAL CENTERS	PHYSICAL EXAM	411.00
198024	1/8/2015	CORELOGIC INFORMATION SOLUTIONS INC	METROSCAN 11/14	150.00
198025	1/8/2015	CULLINS, DELTON	PER DIEM CCSA WORKSHOP	142.00

198026	1/8/2015	DIAMOND COMMUNICATIONS	ALARM MONITOR	115.00
198027	1/8/2015	ADMINISTRATIVE SOLUTIONS INC.	CITY PD RETIREE BILL 1/1-2/1/15 SKEELS	119.20
198028	1/8/2015	FIRE SAFETY SOLUTIONS, LLC	FIRE PROTECTION ENG SVS 12/16- 12/31/14	5,643.75
198029	1/8/2015	FRAZIER, STEVE	PER DIEM SHOT SHOW	337.25
198030	1/8/2015	FRESNO BEE, THE	HELP WANTED AD	401.99
198031	1/8/2015	FRESNO COUNTY ECONOMIC OPPTY. COMMISSION	ADC MEALS NOVEMBER 2014	358.56
198032	1/8/2015	FRESNO MADERA AREA AGENCY ON AGING	11/14 UNSERVED MEALS	64.65
198033	1/8/2015	FRESNO REPROGRAPHICS	TS-18 HSIP PROJECT PLANS/SPECS	513.04
198034	1/8/2015	BURLESON, LACY	PER DIEM UCR COMP SKILLS CRIME ANALYSIS	248.50
198035	1/8/2015	GRAINGER, INC.	DIGESTER HEATERS MAINTENANCE	674.37
198036	1/8/2015	HERITAGE K9	PURCHASE OF POLICE SERVICE DOG	8,100.00
198037	1/8/2015	HOT TANK SUPPLY CO.	SERVICE PARTS WASHERS	484.65
198038	1/8/2015	JSL CONSTRUCTION INC.	REPAIRS- NSP3 27152 SAN JOSE	6,407.53
198039	1/8/2015	LEAGUE OF CALIF. CITIES	MEMBERSHIP DUES YEAR 2015	16,841.73
198040	1/8/2015	MUNISERVICES, LLC	STARS SVS FOR 2ND QTR 2014 REPORTS	1,207.00
198041	1/8/2015	MACK, ROBERT	PER DIEM CCSA WORKSHOP	142.00
198042	1/8/2015	CITY OF MADERA	ADC WATER/TRASH DECEMBER 2014	115.35
198043	1/8/2015	MADERA CLEANERS & LAUNDRY	FLOOR MAT SERVICE	32.30
198044	1/8/2015	MADERA COUNTY AUDITOR-CONTROLLER	ANIMAL SHELTERING NOV-DEC FY 14/15	75,000.00
198045	1/8/2015	MADERA CO. ENVIRONMENTAL HEALTH DEPT	HAZMAT ANNUAL PERMIT FEE	1,331.00
198046	1/8/2015	MADERA HONDA SUZUKI	INSTALLATION OF CAMERA	2,256.80
198047	1/8/2015	MADERA PRIVATE SECURITY PATROL	SECURITY SVC	44.00
198048	1/8/2015	MADERA TRIBUNE	PUBLIC HEARING NOTICE GWMP	594.88
198049	1/8/2015	MADERA TRIBUNE	HELP WANTED AD	215.58
198050	1/8/2015	MARTINEZ, ANDREW	PER DIEM CODE ENF OFFICER COURSE	335.50
198051	1/8/2015	MONTES, STEVEN	PER DIEM CODE ENF OFFICER COURSE	335.50
198052	1/8/2015	WILLDAN FINANCIAL SERVICES	ANNUAL DISTRICT ADMIN SVS JANUARY 2015	783.05
198053	1/8/2015	RAMIRES PINEDA, CARMELO	UTILITY BILLING CREDIT REFUND	102.62
198054	1/8/2015	P G AND E	12/14 SVS 3499945233-6	551.39
198055	1/8/2015	PALAZZOLA, JOHN	PER DIEM SHOT SHOW	337.25
198056	1/8/2015	PAY PLUS SOLUTIONS, INC.	CALPERS MONTHLY SUBSCRIPTION NOV '14	247.00
198057	1/8/2015	PECK'S PRINTERY	ENVELOPES	570.14
198058	1/8/2015	PARR, LARISSA HOPE	UTILITY BILLING CREDIT REFUND	72.79
198059	1/8/2015	OLIVER, WILL	PER DIEM LOCC NEW COUNCIL MEMBERS ACADMY	321.85
198060	1/8/2015	VALLE, SOFIA	FACILITY DEPOSIT REFUND	250.00
198061	1/8/2015	MARTINEZ, CARLOS	FACILITY DEPOSIT REFUND	100.00
198062	1/8/2015	MARTINEZ-VASQUEZ, MEDARDO	FACILITY DEPOSIT REFUND	250.00
198063	1/8/2015	TORREZ, ALEXANDRA	PARK DEPOSIT REFUND	50.00
198064	1/8/2015	RESENDEZ, LETICIA	FACILITY DEPOSIT REFUND	100.00
198065	1/8/2015	DORADO, FIDEL	FACILITY DEPOSIT REFUND	100.00
198066	1/8/2015	BENITEZ, ANGEL	FACILITY DEPOSIT REFUND	100.00
198067	1/8/2015	WATROUS, ANA	FACILITY DEPOSIT REFUND	100.00
198068	1/8/2015	TOLLE, ALAN E	DEPOSIT REFUND	135.00
198069	1/8/2015	JAXX	CREDIT ON ACCOUNT #52115	10.23
198070	1/8/2015	AMIGO'S WIRELESS	CREDIT ON ACCOUNT #52224	30.00
198071	1/8/2015	PIERCE CONSTRUCTION	ASPHALT PATCHING	13,736.60
198072	1/8/2015	RESERVE ACCOUNT	PREPAID POSTAGE METER USEAGE JUL- DEC 14	1,200.00
198073	1/8/2015	PITNEY BOWES GLOBAL FINANCIAL SERVICES	QTRLY EQUIP RENTAL SEP 30- DEC 30 2014	367.68
198074	1/8/2015	PITNEY BOWES, INC.	POSTAGE MACHINE RENTAL FEE	145.89
198075	1/8/2015	POLYDYNE INC.	SLUDGE DEWATERING	5,365.44
198076	1/8/2015	PROVOST & PRITCHARD CONSULTING GROUP	PERMIT COMPLIANCE	286.04
198077	1/8/2015	REGENCE BLUECROSSS BLUESHIELD OF UTAH	CITY PD RETIREE BILL JANUARY 2015 CHUMLY	144.70
198078	1/8/2015	SIMPLEXGRINNELL	FIRE EXTINGUISHER INSPECTION	525.32
198079	1/8/2015	STATE BOARD OF EQUALIZATION	2014 EXCISE TAX DUE TO STATE BOARD	36,671.12
198080	1/8/2015	STEVE DOVALI CONSTRUCTION	WELL 18 PROGRESS PMT #3	240,745.20
198081	1/8/2015	TAG/AMS, INC.	DOT TESTING	195.00
198082	1/8/2015	TESEI PETROLEUM, INC.	FUEL	807.94
198083	1/8/2015	TESEI PETROLEUM INC.	FUEL CHARGES 12/11/14- 12/20/14	10,688.09
198084	1/8/2015	VILLA GARDENING SERVICE INC	DECEMBER GARDENING SVC- 1063 SAN CARLOS	715.00
198085	1/8/2015	VANTAGEPOINT TRANSFER AGENTS-457	PLAN #302351 CONTRIBS FOR 01/02/2015	17,453.01
198086	1/8/2015	WEST COAST ARBORISTS, INC.	OCTOBER STREET TREE MAINTENANCE	2,940.00
198087	1/8/2015	ZEE MEDICAL SERVICE CO.	MEDICAL SUPPLIES	68.15
			Bank # 1 - Union Bank General Account Total	1,492,584.82

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REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER B-3
APPROVED BY

GRANT ADMINISTRATOR

CITY ADMINISTRATOR

SUBJECT: **Consideration of a Resolution Ratifying and Approving a Subordination Agreement for Arborpoint Apartments**

RECOMMENDATION:

Staff recommends Council approve the Resolution Ratifying the Subordination Agreement.

DISCUSSION:

The City received a Home Investments Partnerships Program (HOME) grant for $3 million. This amount and low income housing tax credits, funds from the developer and their bank financed the construction of the Arborpoint Apartments, a 65-unit, affordable, multi-family apartment complex.

To secure a loan on the complex, the developer entered into a Multifamily Loan and Security Agreement with Greystone Servicing Corporation, Inc., a Georgia corporation. Greystone is the Senior Lender and the City is the Subordinate Lender. This transaction required the City to sign a Subordination Agreement. It allows the City's subordinate loan to continue to be secured by a mortgage lien against the mortgaged property.

After the City signed and forwarded the Subordination Agreement for recording, paragraphs A and B of the Subordination Agreement were modified. The modifications allow for concurrent recording of the Senior Loan Agreement, Senior Loan, Senior Note secured by a Multifamily Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filing. In addition, the modifications collectively reference the City's HOME Subordinate Deed of Trust, Note and other documents, which evidence, guaranty, secure or otherwise pertain to the Subordinate Loan as Subordinate Loan Documents.

FINANCIAL IMPACT:

Funding for the Arborpoint Apartments consisted of low income housing tax credits, funds from the developer, their bank and HOME. Approving the Resolution Ratifying the Subordination Agreement for Arborpoint Apartments does not affect the General Fund.

VISION MADERA 2025 ACTION PLAN CONSISTENCY:

This request is consistent with the Vision Madera 2025 Action Plan as follows:

Strategy 101.8:

Promote and encourage development and redevelopment of low- and moderate-costs housing.

RESOLUTION NO.: 15-____

A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF MADERA, CALIFORNIA, RATIFYING AND APPROVING A SUBORDINATINON AGREEMENT FOR ARBORPOINT APARTMENTS

WHEREAS: The City received a Home Investments Partnerships Program (HOME) grant for $3 million to contribute for the construction of the Arborpoint Apartments; and

WHEREAS: To secure a loan on the complex, the developer entered into a Multifamily Loan and Security Agreement with Greystone Servicing Corporation, Inc., a Georgia corporation; and

WHEREAS: The transaction required the City to sign a Subordination Agreement to allow the City's subordinate loan to continue to be secured by a mortgage lien against the mortgaged property; and

WHEREAS: Paragraphs A and B of the Subordination Agreement were modified to allow for concurrent recording of the Senior Loan Agreement, Senior Loan, Senior Note secured by a Multifamily Deed of Trust, Assignment of Leases and Rents, Security Agreement and Fixture Filing; and

WHEREAS: The modifications collectively reference the City's HOME Subordinate Deed of Trust, Note and other documents, which evidence, guaranty, secure or otherwise pertain to the Subordinate Loan as Subordinate Loan Documents.

IT IS NOW THEREFORE RESOLVED THAT:

1. The above recitals are true and correct.

2. The Subordination Agreement, a copy of which is on file in the office of the City Clerk and referred to for particulars, is hereby ratified and approved.

3. The Mayor's execution of the Subordination Agreement on behalf of the City of Madera is hereby ratified and approved.

4. This resolution is effective immediately upon adoption.

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REPORT TO CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER B-4

APPROVED BY:

DEPARTMENT DIRECTOR

CITY ADMINISTRATOR

SUBJECT:

CONSIDERATION OF A RESOLUTION APPROVING THE SUBMISSION OF APPLICATIONS TO THE HOUSING RELATED PARKS PROGRAM 2014 AND AUTHORIZING THE CITY ADMINISTRATOR TO EXECUTE ALL REQUIRED GRANT DOCUMENTS

RECOMMENDATION:

Staff recommends that Council approve a resolution authorizing the submission of Housing Related Parks Program grant applications on behalf of the City of Madera.

DISCUSSION:

On December 10th 2014, the Department of Housing and Community Development released the Housing-Related Parks Program (HRPP) application for FY 2014-2015. The HRPP provides grants to eligible cities and counties that meet the program's requirements to apply. These grants fund the expansion or improvement of a community's park facilities and successful awards do not require a match of local funds. Grant awards range from a minimum of $75,000 and do not have a maximum other than the $35 million allocated for the entire fiscal year.

Staff has determined that the City meets the minimum requirements to submit an HRPP application and believes that our park system would benefit from such an award. Potential projects that could benefit from this grant include, but are not limited to, the creation of a new park in the vacant lot at 128 Sherwood Way and the rehabilitation of Knox Park located in the southeast corner of the city. Should grant funds be received, they will be programmed into the capital improvement program (CIP). All CIP projects are ultimately subject to Council approval.

FISCAL IMPACT:

Submission of a grant application to the HRPP Program for FY 2014-2015 will not impact the General Fund as all costs associated with a successful application will be borne by grant resources.

VISION MADERA 2025 PLAN:

Submission of a grant application to the HRPP Program supports the objectives of Strategy 115 by seeking sufficient economic resources to provide adequate City services and prepare for future growth.

RESOLUTION NO._____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, AUTHORIZING THE SUBMISSION OF A GRANT APPLICATION TO THE FY 2014-2015 CALIFORNIA HOUSING RELATED PARKS PROGRAM

WHEREAS, the State of California, Department of Housing and Community Development (Department) has issued a Notice of Funding Availability dated December 10, 2014 (NOFA), under its Housing-Related Parks (HRP) Program; and

WHEREAS, the City of Madera (Applicant) desires to apply for a HRP Program grant and submit the 2014 Designated Program Year Application Package released by the Department for the HRP Program; and

WHEREAS, the Department is authorized to approve funding allocations for the HRP Program, subject to the terms and conditions of the NOFA, Program Guidelines, Application Package, and Standard Agreement.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds orders and resolves as follows:

1. The above recitals are true and correct.

2. Applicant is hereby authorized and directed to apply for and submit to the Department the HRP Program Application Package released December 2014 for the 2014-2015 Designated Program Year.

3. The City Administrator, or his/her designee, is hereby authorized and directed to enter into, execute, and deliver a State of California Standard Agreement (Standard Agreement), and any and all other documents required or deemed necessary or appropriate to secure the HRP Program Grant from the Department, and all amendments thereto (collectively, the "HRP Grant Documents").

4. Applicant shall be subject to the terms and conditions as specified in the Standard Agreement. Funds are to be used for allowable capital asset project expenditures to be identified in Exhibit A of the Standard Agreement. The application in full is incorporated as part of the Standard Agreement. Any and all activities funded, information provided, and timelines represented in the application are enforceable through the Standard Agreement. Applicant hereby agrees to use the funds for eligible capital asset(s) in the manner presented in the application as approved by the Department and in accordance with the NOFA and Program Guidelines and Application Package.

5. The City Administrator, or his/her designee, is/are authorized to execute in the name of Applicant the HRP Program Application Package and the HRP Grant Documents as required by the Department for participation in the HRP Program.

6. This resolution is effective immediately.

****

Return to Agenda

REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER B-5

APPROVED BY

GRANT ADMINISTRATOR

CITY ADMINISTRATOR

SUBJECT: CONSIDERATION OF A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF MADERA, CALIFORNIA, APPROVING SUBORDINATIONS FOR ESMERALDA R. CEJA FOR A HOME AND CALHOME FIRST TIME HOME BUYER LOAN AND AUTHORIZING THE CITY ADMINISTRATOR TO SIGN ON BEHALF OF THE CITY OF MADERA

RECOMMENDATION: Staff recommends Council approve the resolution to subordinate the City's first time homebuyer loans for Esmeralda R. Ceja.

DISCUSSION:

Ms. Ceja received first time homebuyer assistance August 13, 2008. Her assistance consisted of a HOME loan for $39,806 and a $31,000 CalHome loan. She is refinancing her existing first mortgage. According to our Loan Servicing Policies and Procedures, subordinations with no cash out are permitted. No cash out means there are no additional charges on the transaction above loan and escrow closing fees. In addition, there are no third party debt payoffs or additional encumbrances on the property above traditional refinance transaction costs. The refinance should lower the housing cost of the household by providing them with a lower interest rate. Finally, the Principal, Interest, Taxes and Insurance (PITI) shall be included in the monthly mortgage payment. The chart below provides details about the existing and proposed first loan.

Loan Terms	Loan Length	Interest	Principal, Interest, Taxes, Insurance and Mortgage Insurance, if any	Principal	Interest Paid Over Life of Loan
Present	23 years	4.50	$703.35	$100,140.00	$84,879.00
Proposed	30 years	3.75	$525.56	$103,413.12	$68,998.90

The proposed refinance meets all of the requirements of our Loan Servicing Policies and Procedures. It reduces the borrower's interest rate, includes PITI in the monthly mortgage payment, and it lowers their housing costs and the amount of interest paid over the life of the loan. As a result, Staff urges Council to approve the subordinations requested by Ms. Ceja.

FINANCIAL IMPACT:

The proposed subordinations do not impact the General Fund because this is a grant-funded activity.

VISION MADERA 2025 ACTION PLAN CONSISTENCY:

The Plan does not address requests for subordinations. Likewise, it does not conflict with the Plan.

RESOLUTION NO.: 2015-____

A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF MADERA, CALIFORNIA, APPROVING SUBORDINATIONS FOR ESMERALDA R. CEJA FOR A HOME AND CALHOME FIRST TIME HOME BUYER LOAN AND AUTHORIZING THE CITY ADMINISTRATOR TO SIGN ON BEHALF OF THE CITY OF MADERA

WHEREAS, the borrower received a HOME and a CalHome First Time Home Buyer Loan for $39,806 and $31,000; respectively, and signed a Declaration of Covenants and Restrictions, a Deed of Trust and a Promissory Note dated August 13, 2008 for each loan; and

WHEREAS, the borrower wishes to refinance the existing first loan associated with the property and Subordination Agreements are recommended based on findings as follows:

1. The proposed refinance is consistent with the requirements for allowing subordinations under the City of Madera Loan Servicing Policies and Procedures. The refinance reduces the borrower's interest rate, includes PITI in the monthly mortgage payment, and it lowers their housing costs and the amount of interest paid over the life of the loan.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY FINDS, ORDERS AND RESOLVES AS FOLLOWS:

1. The above recitals are true and correct.
2. The Subordination Agreements, copies of which are on file in the office of the City Clerk and referred to for particulars, are hereby approved.
3. The City Administrator is authorized to execute the Subordination Agreements on behalf of the City of Madera.
4. The City Clerk is hereby authorized and directed to forward a certified copy of this resolution to the Grant Administrator, who is authorized to take such action as necessary to implement the terms of the Resolution.
5. This Resolution is effective immediately upon adoption.

PASSED AND ADOPTED by the City Council, of the City of Madera, California, this 21st day of January 2015 by the following vote:

****

RECORDING REQUESTED BY
Esmeralda Ceja

When Recorded Mail to:

City of Madera
205 West 4th Street
Madera, CA 93637
Attn: City Clerk's Office

SPACE ABOVE THIS LINE FOR RECORDER'S USE

SUBORDINATION AGREEMENT

NOTICE: THIS SUBORDINATION AGREEMENT RESULTS IN YOUR SECURITY INTEREST IN THE PROPERTY BECOMING SUBJECT TO AND OF LOWER PRIORITY THAN THE LIEN OF SOME OTHER OR LATER SECURITY INSTRUMENT.

THIS SUBORDINATION AGREEMENT, made this _____ day of _____, 2015, by Esmeralda R. Ceja, owner(s) of the land hereinafter described and hereinafter referred to as "Owner," and the City of Madera present owner and holder of the deed of trust and note first hereinafter described and hereinafter referred to as "Beneficiary";

WITNESSETH

WHEREAS, Owner(s) have executed a deed of trust, dated August 13, 2008, to the City of Madera, a Municipal corporation, as trustee, covering:

LOT 33, INCLUSIVE OF SUBDIVISION NO. 01-S-14, COTTONWOOD ESTATES PHASE I SUBDIVISION, ACCORDING TO THE MAP THEREOF RECORDED APRIL 24, 2003 IN BOOK 51 OF MAPS, PAGES 64 AND 65, MADERA COUNTY RECORDS.

APN: 009-520-020-000

WHEREAS, the Subordinate Deed of Trust was security for a promissory note in the amount of $39,806.00, dated August 13, 2008, in favor of Beneficiary, which deed of trust was recorded on August 21, 2008, as Instrument No. 2008028972 Official Records of said county ("Subordinate Deed of Trust"); and

WHEREAS, the Subordinate Deed of Trust was security for a promissory note in the amount of $39,806.00 executed on August 13, 2008, by Owner(s) in favor of Beneficiary; and

WHEREAS, Owner desires to obtain a loan, hereafter referred to as the "Refinancing Loan" in an amount not to exceed $103,413.12 and is about to execute a deed of trust and note in a sum not to exceed $103,413.12, dated the _____day of _____, 2015, in favor of Wells Fargo Home Mortgage Corporation, hereinafter referred to as "Lender", payable with interest and upon the terms and conditions described herein, which deed of trust is to be recorded concurrently herewith; and

WHEREAS, Lender is willing to make the Refinancing Loan provided the deed of trust securing it (the Superior Deed of Trust) is a lien or charge on the Real Property prior and superior to the lien or charge of the Subordinate Deed of Trust, and provided further that Beneficiary specifically and unconditionally subordinates the lien or charge of the Subordinate Deed of Trust to the Superior Deed of Trust; and

WHEREAS, it is mutually beneficial to Beneficiary and Owners that Lender make the Refinancing Loan to Owners and Beneficiary is willing to subordinate the lien to the Subordinate Deed of Trust, insofar as it encumbers the Real Property, to the Superior Deed of Trust in order that Owners may obtain the Refinancing Loan from Lender.

NOW, THEREFORE, in consideration of the mutual benefits accruing to the parties hereto and other valuable consideration, the receipt and sufficiency of which consideration is hereby acknowledged, and in order to induce Lender to make the loan above referred to, it is hereby declared, understood and agreed as follows:

1. The terms concerning the Refinancing Loan to which the Subordinate Deed of Trust shall be subordinated shall be as follows:

a. The total amount of the Refinancing Loan shall not exceed $103,413.12.

b. No portion of the Refinancing Loan shall be used for anything other than to satisfy the existing first deed of trust used to purchase the Property and pay costs connected with obtaining the Refinancing Loan on the Property.

c. The Refinancing Loan bears interest, exclusive of late charges, penalties, or fees payable in case of default, at a fixed rate not to exceed 3.75% per annum.

d. The Refinancing Loan is payable in equal monthly installments of principal and interest over a period of Thirty years from the date of the Superior Deed of Trust with the total unpaid balance all due and payable at the end of that period.

2. Beneficiary hereby subordinates the Subordinate Deed of Trust to the Superior Deed of Trust, which shall be recorded concurrently with this instrument in the Office of the County Recorder of Madera County, California. Beneficiary further declares that the lien of the Superior Deed of Trust shall be and is in all respects prior and superior to the lien of the Subordinate Deed of Trust

and that the Superior Deed of Trust and any renewals or extensions of the Superior Deed of Trust and the note secured by it shall be and remain at all times a lien or charge on the Real property, prior and superior to the lien or charge of the Subordinate Deed of Trust.

3. Beneficiary acknowledges that it intentionally waives, relinquishes, and subordinates the priority and superiority of the lien or charge of the Subordinate Deed of Trust in favor of the lien or charge of the Superior Deed of Trust, and that it understands that in reliance on and in consideration of this waiver, relinquishment, and subordination specific loans and advances are being and will be made, and that specific monetary and other obligations are being and will be entered into by third parties, that would not be made or entered into but for the reliance on the waiver, relinquishment, and subordination. Beneficiary further acknowledges that an endorsement has been placed on the note secured by the Subordinate Deed of Trust and that the Subordinate Deed of Trust has by this instrument been subordinated to the lien or charge of the Superior Deed of Trust.

4. This Agreement contains the whole agreement between the parties relating to the deed of trust loans, and the priority of those loans. There are no agreements, written or oral, outside or separate from this agreement, and all prior negotiations, if any, are merged into this agreement.

5. This Subordination Agreement shall inure to the benefit of Lender, its legal representatives, successors, and assigns, and shall be binding on Beneficiary and Owners, their respective heirs, legal representatives, successors, and assigns.

NOTICE: THIS SUBORDINATION AGREEMENT CONTAINS A PROVISION WHICH ALLOWS THE PERSON OBLIGATED ON YOUR REAL PROPERTY SECURITY TO OBTAIN A LOAN, A PORTION OF WHICH MAY BE EXPENDED FOR OTHER PURPOSES THAN IMPROVEMENT OF THE LAND.

City of Madera, Beneficiary

David R. Tooley, City Administrator

Owner(s)

Esmeralda R. Ceja

ATTACH NOTARY ACKNOWLEDGMENT

RECORDING REQUESTED BY
Esmeralda Ceja

When Recorded Mail to:

City of Madera
205 West 4th Street
Madera, CA 93637
Attn: City Clerk's Office

SPACE ABOVE THIS LINE FOR RECORDER'S USE

SUBORDINATION AGREEMENT

NOTICE: THIS SUBORDINATION AGREEMENT RESULTS IN YOUR SECURITY INTEREST IN THE PROPERTY BECOMING SUBJECT TO AND OF LOWER PRIORITY THAN THE LIEN OF SOME OTHER OR LATER SECURITY INSTRUMENT.

THIS SUBORDINATION AGREEMENT, made this _____ day of _____, 2015, by Esmeralda R. Ceja, owner(s) of the land hereinafter described and hereinafter referred to as "Owner," and the City of Madera present owner and holder of the deed of trust and note first hereinafter described and hereinafter referred to as "Beneficiary";

WITNESSETH

WHEREAS, Owner(s) have executed a deed of trust, dated August 13, 2008, to the City of Madera, a Municipal corporation, as trustee, covering:

LOT 33, INCLUSIVE OF SUBDIVISION NO. 01-S-14, COTTONWOOD ESTATES PHASE I SUBDIVISION, ACCORDING TO THE MAP THEREOF RECORDED APRIL 24, 2003 IN BOOK 51 OF MAPS, PAGES 64 AND 65, MADERA COUNTY RECORDS.

APN: 009-520-020-000

WHEREAS, the Subordinate Deed of Trust was security for a promissory note in the amount of $31,000.00, dated August 13, 2008, in favor of Beneficiary, which deed of trust was recorded on August 21, 2008, as Instrument No. 2008028973 Official Records of said county ("Subordinate Deed of Trust"); and

WHEREAS, the Subordinate Deed of Trust was security for a promissory note in the amount of $31,000.00 executed on August 13, 2008, by Owner(s) in favor of Beneficiary; and

WHEREAS, Owner desires to obtain a loan, hereafter referred to as the "Refinancing Loan" in an amount not to exceed $103,413.12 and is about to execute a deed of trust and note in a sum not to exceed $103,413.12, dated the _____day of _____, 2015, in favor of Wells Fargo Home Mortgage Corporation, hereinafter referred to as "Lender", payable with interest and upon the terms and conditions described herein, which deed of trust is to be recorded concurrently herewith; and

WHEREAS, Lender is willing to make the Refinancing Loan provided the deed of trust securing it (the Superior Deed of Trust) is a lien or charge on the Real Property prior and superior to the lien or charge of the Subordinate Deed of Trust, and provided further that Beneficiary specifically and unconditionally subordinates the lien or charge of the Subordinate Deed of Trust to the Superior Deed of Trust; and

WHEREAS, it is mutually beneficial to Beneficiary and Owners that Lender make the Refinancing Loan to Owners and Beneficiary is willing to subordinate the lien to the Subordinate Deed of Trust, insofar as it encumbers the Real Property, to the Superior Deed of Trust in order that Owners may obtain the Refinancing Loan from Lender.

NOW, THEREFORE, in consideration of the mutual benefits accruing to the parties hereto and other valuable consideration, the receipt and sufficiency of which consideration is hereby acknowledged, and in order to induce Lender to make the loan above referred to, it is hereby declared, understood and agreed as follows:

1. The terms concerning the Refinancing Loan to which the Subordinate Deed of Trust shall be subordinated shall be as follows:

a. The total amount of the Refinancing Loan shall not exceed $103,413.12.

b. No portion of the Refinancing Loan shall be used for anything other than to satisfy the existing first deed of trust used to purchase the Property and pay costs connected with obtaining the Refinancing Loan on the Property.

c. The Refinancing Loan bears interest, exclusive of late charges, penalties, or fees payable in case of default, at a fixed rate not to exceed 3.75% per annum.

d. The Refinancing Loan is payable in equal monthly installments of principal and interest over a period of Thirty years from the date of the Superior Deed of Trust with the total unpaid balance all due and payable at the end of that period.

2. Beneficiary hereby subordinates the Subordinate Deed of Trust to the Superior Deed of Trust, which shall be recorded concurrently with this instrument in the Office of the County Recorder of Madera County, California. Beneficiary further declares that the lien of the Superior Deed of Trust shall be and is in all respects prior and superior to the lien of the Subordinate Deed of Trust

and that the Superior Deed of Trust and any renewals or extensions of the Superior Deed of Trust and the note secured by it shall be and remain at all times a lien or charge on the Real property, prior and superior to the lien or charge of the Subordinate Deed of Trust.

3. Beneficiary acknowledges that it intentionally waives, relinquishes, and subordinates the priority and superiority of the lien or charge of the Subordinate Deed of Trust in favor of the lien or charge of the Superior Deed of Trust, and that it understands that in reliance on and in consideration of this waiver, relinquishment, and subordination specific loans and advances are being and will be made, and that specific monetary and other obligations are being and will be entered into by third parties, that would not be made or entered into but for the reliance on the waiver, relinquishment, and subordination. Beneficiary further acknowledges that an endorsement has been placed on the note secured by the Subordinate Deed of Trust and that the Subordinate Deed of Trust has by this instrument been subordinated to the lien or charge of the Superior Deed of Trust.

4. This Agreement contains the whole agreement between the parties relating to the deed of trust loans, and the priority of those loans. There are no agreements, written or oral, outside or separate from this agreement, and all prior negotiations, if any, are merged into this agreement.

5. This Subordination Agreement shall inure to the benefit of Lender, its legal representatives, successors, and assigns, and shall be binding on Beneficiary and Owners, their respective heirs, legal representatives, successors, and assigns.

NOTICE: THIS SUBORDINATION AGREEMENT CONTAINS A PROVISION WHICH ALLOWS THE PERSON OBLIGATED ON YOUR REAL PROPERTY SECURITY TO OBTAIN A LOAN, A PORTION OF WHICH MAY BE EXPENDED FOR OTHER PURPOSES THAN IMPROVEMENT OF THE LAND.

City of Madera, Beneficiary

Owner(s)

_____

David R. Tooley, City Administrator

_____

Esmeralda R. Ceja

ATTACH NOTARY ACKNOWLEDGMENT

Return to Agenda

REPORT TO CITY COUNCIL

MEETING DATE: January 21, 2015

AGENDA ITEM NUMBER: B-6

Approved By:

PUBLIC WORKS DIRECTOR

CITY ADMINISTRATOR

SUBJECT:

Consideration of a Resolution Appointing Richard Broadhead to the City of Madera Airport Advisory Commission.

RECOMMENDATION:

Staff recommends that the Council adopt a resolution appointing Richard Broadhead to the City of Madera Airport Advisory Commission.

DISCUSSION:

The City of Madera Airport Advisory Commission (AAC) is a Council appointed body established in order to serve in an advisory capacity only to the City Council and staff on matters involving the Madera Municipal Airport. The AAC is tasked with reviewing the annual budget, recommending capital projects, review and recommend airport policies and operation procedures, and to review and recommend action regarding land use surrounding the airport.

The City Council approved an update of the AAC bylaws on October 15, 2014 and shifted from a five member panel to seven members, with each member of the City Council nominating a member of the ACC. This necessitated that additional members be added to the Commission and the existing appointments be reconfirmed.

Councilman Derek Robinson has indicated a desire to nominate and appoint Richard Broadhead to the AAC to serve a term concurrent with his own. Mr. Broadhead is a private pilot with 35 years membership in the Airport Owners and Pilots Association (AOPA) and has previous military avionics maintenance experience. Additionally, Mr. Broadhead previously served on the Los Banos Airport Commission prior to moving to Madera. As a result, he will bring a breadth of experience and understanding of aeronautical issues and concerns to the Airport Advisory Commission.

FINANCIAL IMPACT:

There are no financial impacts from the recommended actions, as the Commission serves without compensation.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN:

While this item does not directly implement a Vision action item, it is not in conflict with one either.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, APPOINTING RICHARD BROADHEAD TO THE CITY OF MADERA AIRPORT ADVISORY COMMISSION

WHEREAS, vacancies exist in the City of Madera Airport Advisory Commission for the Mayor and City Council Members; and

WHEREAS, the City Council in previous action has adopted an Ordinance that specifies nomination and appointment procedures, and terms of office for members of City Boards and Commissions; and

WHEREAS, Richard Broadhead has been duly nominated to fill the vacancy of the appointment for Councilmember Robinson; and.

WHEREAS, the nominee has the requisite experience and desire to fulfill the responsibilities of the posts.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.
2. Richard Broadhead is hereby appointed to the office of the Airport Advisory Commission of the City of Madera for the term prescribed by Ordinance.
3. This resolution is effective immediately upon adoption.

RECEIVED
City of Madera City Clerk
By: D Alvarez
Date: 10/30/14
C: PW Director / Airport

CITY OF MADERA
COMMISSION, BOARD, AND COMMITTEE

APPLICATION

I hereby request that I be considered as a nominee for the following City of Madera Commission, Board, or Committee:

PLEASE CHECK ONE OR MORE:

- ☐ ADA Advisory Council
- ☑ Airport Advisory Commission
- ☐ Beautification Committee
- ☐ Civil Service Commission
- ☐ CDBG Review and Advisory Committee
- ☐ Loan Review Committee
- ☐ Planning Commission
- ☐ Transit Advisory Board
- ☐ Other: _____

Please type or print in ink.

Broadhead	Richard	M
LAST NAME	FIRST NAME	M.I.
1794 Monroe Ave	Madera, Ca., 93638	559-673-7335
HOME ADDRESS	CITY, STATE, ZIP	HOME PHONE
1794 Monroe Ave	Madera, ca., 93638	mick44@earthlink.net
MAILING ADDRESS	CITY, STATE ZIP	E-MAIL ADDRESS
retired		
EMPLOYER	JOB TITLE	BUSINESS PHONE

LENGTH OF RESIDENCE IN CITY OF MADERA	ARE YOU A REGISTERED VOTER OF THE CITY OF MADERA?	HAVE YOU EVER BEEN CONVICTED OF A FELONY?
8 YEARS 10 MONTHS	☑ YES ☐ NO	☐ YES ☑ NO

EDUCATIONAL BACKGROUND:

BS Industrial Technology; CSU Long Beach , Long Beach. Ca

PLEASE LIST ANY ORGANIZATIONS OF WHICH YOU ARE A MEMBER AND ANY OFFICES YOU HAVE HELD IN THOSE ORGANIZATIONS:

AOPA membership - 35yrs

PLEASE LIST ANY APPOINTED PUBLIC BOARDS OR COMMISSIONS ON WHICH YOU HAVE SERVED, DATES OF SERVICE AND ANY CHAIRMANSHIP OR OFFICE HELD:

City of Los Banos, Airport Commission approx 1 yr in 2005-2006

I AM INTERESTED IN SERVING FOR THE FOLLOWING REASONS:

Interest in aviation as a private pilot, previous military aircraft maintenance (avionics)
Encouraged to see more utilization of our airport

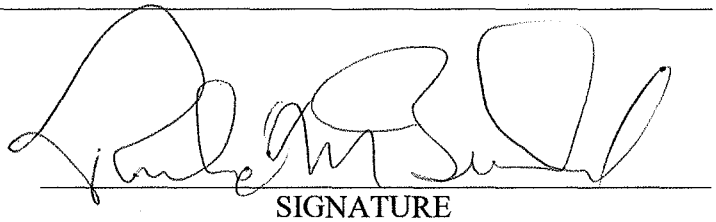
REFERENCES (Optional):

Derek O Robinson Member Madera City Council (Madera, Ca)

Steve Palm General Manager, Hiller Aircraft Co.(Madera Ca)

10/30/2014

DATE



SIGNATURE

PLEASE RETURN COMPLETED APPLICATION TO:

CITY OF MADERA
OFFICE OF THE CITY CLERK
205 West Fourth Street
Madera, CA 93637
(559) 661-5405
(559) 674-2972 Fax

Return to Agenda

REPORT TO CITY COUNCIL

Approved By:

Department Director

City Administrator

Council Meeting of January 21, 2015
Agenda Item Number B-7

SUBJECT: CONSIDERATION OF A RESOLUTION APPROVING FOUR AGREEMENTS WITH PACIFIC GAS & ELECTRIC COMPANY FOR THE RULE 20B UNDERGROUNDING OF EXISTING OVERHEAD ELECTRIC FACILITIES AND STREET LIGHTING ELECTRICAL SERVICES FOR SOUTH PINE STREET & WEST PECAN AVENUE IMPROVEMENT PROJECT

RECOMMENDATION:

1. That the City Council approves a Resolution:

   a. Approving the Agreement to Perform Tariff Related Work for Rule 20B – Underground existing overhead electric facilities.

   b. Approving Distribution Service and Extension Agreement with Attachments Exhibit A - Cost Summary.

   c. Approving the Agreement to Perform Tariff Related Work for Install Street Light Service Point and/or Circuit (2).

   d. Approving the Agreement to Perform Tariff Related Work for Install Traffic Controller Service Point and/or Circuit (TC1).

SUMMARY:

The Pine/Pecan Improvement Project funding is included in the FY 2014/15 City Budget as approved by City Council. Council has approved the award of a contract for the construction of the street and utility improvements. A portion of the utility improvements must be performed by PG&E for the undergrounding of their existing facilities. The subject agreements are necessary for PG&E to perform those improvements. The funding for PG&E's cost is included in the budget.

DISCUSSION:

The improvement project for widening and reconstructing South Pine Street and West Pecan Avenue to arterial street standards includes: concrete curb & gutter, sidewalk and ADA ramps, installation of sewer mains and sewer laterals, installation of water mains and service laterals, fire hydrants, and installation of storm drain pipelines and drainage structures. Street construction includes removing existing pavement, grading roadway, placing aggregate base and asphalt concrete paving.

Also, included in the project is the relocation of an existing Madera Irrigation District pipeline and installation of a new stronger pipeline to withstand the street traffic impacts including new manholes and connections to the existing MID system.

Included in the project is installation of LED street lights and installation of electrical meters for the new street lights and future traffic signals. An Agreement with PG&E is necessary for providing the electrical service for street lights and traffic controller. The Agreement for providing the electrical service for street lights is in the amount of $740.76. The Agreement or providing the electrical service for the transformer and electrical service for the traffic controller is in the amount of $22,435.59.

Included in the project is undergrounding of existing PG&E overhead electrical lines and AT&T overhead communication lines within the arterial street right-of-way and dedicated public utility easements. A joint utility trench will include the conduits required for the PG&E, AT&T and Comcast underground systems. Included with this work are concrete pads, substructures, utility manholes and vaults for electrical facilities. PG&E, AT&T and Comcast will provide and install cabling/wiring as required to energize and/or to activate their facilities.

To comply with the requirements for a Rule 20B Utility Undergrounding, the City submitted an application to PG&E for the Rule 20B underground design and installation. The PG&E standard Agreement to Perform Tariff Schedule Related Work (Agreement A) is for a total net amount of $331,070.26. Also, a Distribution Service and Extension Agreement is required by PG&E. This agreement includes the exhibits for the Payments Summary and the Reimbursement Summary specified in Agreement A.

The Agreement A includes a cost of $187,311.94 for design engineering and administrative costs. PG&E staff has indicated that this cost item is driven by the construction man-hours and a CPUC cost allocation formula. It is obvious to staff that this cost item could not reflect actual costs. We are in the process of determining whether a formal dispute of costs is warranted.

The Agreement A lists PG&E costs, less a $302,142.12 cost credit for an equivalent overhead system, in the amount of $732,132.44 for their work, based on the value of the joint trench, conduits & structures, underground system and the tie-in by PG&E staff. A credit in the amount of $401,062.18 is applied to this cost for the value of the joint trench, conduits & structures that will be installed by the City. The net cost is $331,070.26.

Since the undergrounding of utilities with the improvements on Arterial Streets is consistent with the City's Vision 2025 Plan, the Agreement A in the amount of $331,070.26 is recommended to Council for approval. It is also recommended that Council approve the other two agreements in the amounts of $740.76 and $22,435.59. There is no fee for the Distribution Service and Extension Agreement.

An agreement with AT&T has been approved by Council in the amount of $63,700 for their cost of installing their facilities. The approval of the four agreements is necessary to avoid significant delays to the completion of the project and the electrical service to the adjacent parcels that will be ready for development.

FINANCIAL IMPACT:

Funding for project construction, including utility undergrounding, was programmed in the City of Madera's Fiscal Year 2014/15 Budget. The available funding for the project is in the following Funds:

DIF: 40845 – Water Pipe, Account #: 0500-5061	$259,000
DIF: 45100 – Storm Drain, Account #: 6490-5061	$470,000
DIF: 45219 – Public Works, Account #: 6820-5061	$152,000
DIF: 45262 – Median Island, Account #: 0656-5061	$190,000
DIF: 45263 – Arterial/Collector Streets, Account #: 0661-5061	$969,000
DIF: 45264 – Traffic Signal, Account #: 0666-5061	$ 77,000
Local Transportation Fund – Streets, Account #: 5830-5061	$1,198,000
RSTP Federal Exchange – Streets, Account #: 5380-5061	$1,582,000
TOTAL:	$4,745,000

The funding for PG&E and AT&T costs are funded by the Local Transportation Fund - Streets approved for the project.

Construction of the project will not have a financial impact on the City's General Fund. The ongoing maintenance and energy costs for the additional street lighting will be funded with annual Gas Tax revenues.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN:

Strategy 121.8 – Upgrade the City's street circulation capacity by the widening of Pine Street and Pecan Avenue to arterial standards.
Strategy 126.0 – This project supports the Strategy Action 126 for providing clean attractive streets that are safe and aesthetically pleasing and also supports the delivery of infrastructure to support economic growth, consistent with the principles outlined in the Vision Action Plan.
Strategy 126.6 – The project includes installation of sidewalks and ADA ramps.

RESOLUTION NO. 15-__

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, APPROVING FOUR AGREEMENTS WITH THE PACIFIC GAS & ELECTRIC COMPANY TO PERFORM TARIFF SCHEDULE RELATED WORK FOR THE SOUTH PINE STREET/WEST PECAN AVENUE IMPROVEMENT PROJECT AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENTS ON BEHALF OF THE CITY

WHEREAS, the City has awarded a construction contract for the South Pine Street/West Pecan Avenue Improvement Project (the Project); and

WHEREAS, the Project requires installing the existing utilities underground; and

WHEREAS, the installation of the electrical system must be performed by Pacific Gas and Electric Company (PG&E) crews; and

WHEREAS, PG&E has prepared three of their standard "Agreement to Perform Tariff Schedule Related Work" agreements for the necessary installation of the electrical system and one standard "Distribution Service and Extension Agreement" for cost and reimbursement summary declarations; and

WHEREAS, the four agreements with PG&E for such electrical systems design and installation services are recommended for approval and a copy of each agreement is on file in the Office of the City Clerk,

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.

2. The Agreement to Perform Tariff Schedule Related Work to install streetlight service point and/or circuit (2) in the amount of $740.76, a copy of which is on file in the Office of the City Clerk and referred to for particulars, is hereby approved.

3. The Agreement to Perform Tariff Schedule Related Work to install traffic controller service point and/or circuit (TC1) in the amount of $22,435.59, a copy of which is on file in the Office of the City Clerk, is hereby approved.

4. The Agreement to Perform Tariff Schedule Related Work for Rule 20B – underground existing overhead electric facilities in the amount of $331,070.26, a copy of which is on file in the Office of the City Clerk, is hereby approved.

5. The Distribution Service and Extension Agreement Declarations describing the Summary of Payment and Reimbursement Summary, a copy of which is on file in the Office of the City Clerk, is hereby approved.

6. The Mayor is authorized to execute the four agreements on behalf of the City.

7. This Resolution is effective immediately upon adoption.

* * * * * * * *

Pacific Gas and Electric Company

Agreement to Perform Tariff Schedule Related Work

DISTRIBUTION:

- ☐ APPLICANT (Original)
- ☐ DIVISION (Original)
- ☐ ACCTG. SVCS.

REFERENCES:

Notification #	107977366
Contract #	1180675
ELS-PM #	31090590

CITY OF MADERA, A Government Agency (Applicant) has requested PACIFIC GAS AND ELECTRIC COMPANY, a California corporation (PG&E), to perform the tariff schedule related work as located and described in paragraph 3 herein. PG&E agrees to perform the requested work and furnish all necessary labor, equipment, materials and related facilities required therefor, subject to the following conditions:

1. Whenever part or all of the requested work is to be furnished or performed upon property other than that of Applicant, Applicant shall first procure from such owners all necessary rights-of-way and/or permits in a form satisfactory to PG&E and without cost to it.

2. Applicant shall indemnify and hold harmless PG&E, its officers, agents and employees, against all loss, damage, expense and liability resulting from injury to or death of any person, including but not limited to, employees of PG&E, Applicant or any third party, or for the loss, destruction or damage to property, including, but not limited to property of PG&E, Applicant or any third party, arising out of or in any way connected with the performance of this agreement, however caused, except to the extent caused by the active negligence or willful misconduct of PG&E, its officers, agents and employees. Applicant will, on PG&E's request, defend any suit asserting a claim covered by this indemnity. Applicant will pay all costs that may be incurred by PG&E in enforcing this indemnity, including reasonable attorneys' fees.

3. The location and requested work are described as follows: (Describe in detail the materials and facilities to be furnished and/or work to be performed by PG&E. If more space is required, use other side and attach any necessary drawings as Exhibits A, B, C, etc):

LOCATION: **NW CORNER SOUTH PINE ST & W. PECAN MADERA, 93637**

DESCRIPTION OF WORK: **Install Streetlight Service Point and/or Circuit (2)**

Engineering & Administrative Costs		$88.60
Streetlight Service - Facilities & Connection	(+)	$376.16
Total Amount Subject to Allowance	(=)	$464.76
Streetlight Service Point Allowance	(-)	$0.00
Balance	(=)	$464.76
Re-Engineering Costs	(+)	$0.00
Subtotal	**(=)**	**$464.76**
plus ITCC @ 0.0%	(+)	$0.00
Streetlight Service Point - Connection Only	(+)	$276.00
Less Applicant Provided Work:		
Cost beyond Allowance by Applicant	(-)	$0.00
Total Streetlight Non-Refundable Payment	**(=)**	**$740.76**
Amount shown does not include PG&E Contributions of:		$0.00

4. Applicant shall pay to PG&E, promptly upon demand by PG&E, as the complete contract price hereunder, the sum of Seven Hundred Forty Dollars And Seventy-Six Cents ($740.76)

Upon completion of requested work, ownership shall vest in: [X] PG&E [ ] Applicant

Executed this _____ day of _____

CITY OF MADERA, A Government Agency
Applicant

PACIFIC GAS & ELECTRIC COMPANY

By: _____

By: Mike Redman

ROBERT POYTHRESS
Print/Type/Name

Mike Redman

Title: **MAYOR**

Title: **Service Planning Supervisor**

Mailing Address: 205 W 4TH STREET
MADERA, CA 93637

Pacific Gas and Electric Company
Agreement to Perform Tariff Schedule Related Work

DISTRIBUTION:
- ☐ APPLICANT (Original)
- ☐ DIVISION (Original)
- ☐ ACCTG. SVCS.

REFERENCES:

Notification #	107977366
Contract #	1180675
PM #	31090590
MLX #	0

CITY OF MADERA, A Government Agency (Applicant) has requested PACIFIC GAS AND ELECTRIC COMPANY, a California corporation (PG&E), to perform the tariff schedule related work as located and described in paragraph 3 herein. PG&E agrees to perform the requested work and furnish all necessary labor, equipment, materials and related facilities required therefor, subject to the following conditions:

1. Whenever part or all of the requested work is to be furnished or performed upon property other than that of Applicant, Applicant shall first procure from such owners all necessary rights-of-way and/or permits in a form satisfactory to PG&E and without cost to it.

2. Applicant shall indemnify and hold harmless PG&E, its officers, agents and employees, against all loss, damage, expense and liability resulting from injury to or death of any person, including but not limited to, employees of PG&E, Applicant or any third party, or for the loss, destruction or damage to property, including, but not limited to property of PG&E, Applicant or any third party, arising out of or in any way connected with the performance of this agreement, however caused, except to the extent caused by the active negligence or willful misconduct of PG&E, its officers, agents and employees. Applicant will, on PG&E's request, defend any suit asserting a claim covered by this indemnity. Applicant will pay all costs that may be incurred by PG&E in enforcing this indemnity, including reasonable attorneys' fees.

3. The location and requested work are described as follows: (Describe in detail the materials and facilities to be furnished and/or work to be performed by PG&E. If more space is required, use other side and attach any necessary drawings as Exhibits A, B, C, etc):

LOCATION: **NW CORNER SOUTH PINE ST & W. PECAN, MADERA, 93637**

DESCRIPTION OF WORK: **Install Traffic Controller Service Point and/or Circuit (TC1)**

Engineering & Administrative Costs		$4,358.70
Traffic Control Extension - Facilities & Connection	(+)	$17,591.09
Total Amount Subject to Allowance	(=)	$21,949.79
Traffic Control Allowance		$0.00
Traffic Control Extension Allowance	(-)	$0.00
Balance	(=)	$21,949.79
Re-Engineering Costs	(+)	$0.00
TC Svc Dlvry Pnt Extn - Inspection	(+)	$485.81
TC Svc Dlvry Pnt Extn - Trench and Excavation	(+)	$5,793.12
TC Svc Dlvry Pnt Extn - Conduit/ Subst	(+)	$5,214.17
Subtotal	**(=)**	**$33,442.88**
plus ITCC @ 0.0%	(+)	$0.00
Traffic Control Extension - Connection Only	(+)	$0.00
Applicant Provided Work:		
Cost beyond Allowance by Applicant	(-)	$0.00
TC Svc Dlvry Pnt Extn - Trench and Excavation	(-)	$5,793.12
TC Svc Dlvry Pnt Extn - Conduit/ Subst	(-)	$5,214.17
Less Applicant provided work	(-)	$11,007.29
Total Traffic Control Non-Refundable Payment	**(=)**	**$22,435.59**
Amount shown does not include PG&E Contributions of:		$0.00

62-4527 (Rev 1/91)
Service Planning
Advice No. 1633-G/1342-E
Effective 4/02/91

107977366E

* Automated document, Preliminary Statement, Part A

4. Applicant shall pay to PG&E, promptly upon demand by PG&E, as the complete contract price hereunder, the sum of Twenty-Two Thousand Four Hundred Thirty-Five Dollars And Sixty Cents ($22,435.59)

Upon completion of requested work, ownership shall vest in: [x] PG&E [ ] Applicant

Executed this _____ day of _____

CITY OF MADERA, A Government Agency
Applicant

PACIFIC GAS & ELECTRIC COMPANY

By: _____

By: Mike Redman

ROBERT POYTHRESS
Print/Type/Name

Mike Redman

Title: **MAYOR**

Title: **Service Planning Supervisor**

Mailing Address: 205 W 4TH STREET
MADERA, CA 93637

Pacific Gas and Electric Company

Agreement to Perform Tariff Schedule Related Work

DISTRIBUTION:

- ☐ APPLICANT (Original)
- ☐ DIVISION (Original)
- ☐ ACCTG. SVCS.

REFERENCES:

Notification #	107977360
Contract #	1180659
R20-PM #	31080826

CITY OF MADERA, A Government Agency (Applicant) has requested PACIFIC GAS AND ELECTRIC COMPANY, a California corporation (PG&E), to perform the tariff schedule related work as located and described in paragraph 3 herein. PG&E agrees to perform the requested work and furnish all necessary labor, equipment, materials and related facilities required therefor, subject to the following conditions:

1. Whenever part or all of the requested work is to be furnished or performed upon property other than that of Applicant, Applicant shall first procure from such owners all necessary rights-of-way and/or permits in a form satisfactory to PG&E and without cost to it.

2. Applicant shall indemnify and hold harmless PG&E, its officers, agents and employees, against all loss, damage, expense and liability resulting from injury to or death of any person, including but not limited to, employees of PG&E, Applicant or any third party, or for the loss, destruction or damage to property, including, but not limited to property of PG&E, Applicant or any third party, arising out of or in any way connected with the performance of this agreement, however caused, except to the extent caused by the active negligence or willful misconduct of PG&E, its officers, agents and employees. Applicant will, on PG&E's request, defend any suit asserting a claim covered by this indemnity. Applicant will pay all costs that may be incurred by PG&E in enforcing this indemnity, including reasonable attorneys' fees.

3. The location and requested work are described as follows: (Describe in detail the materials and facilities to be furnished and/or work to be performed by PG&E. If more space is required, use other side and attach any necessary drawings as Exhibits A, B, C, etc):

LOCATION: **NW CORNER SOUTH PINE STREET & PECAN, MADERA, 93637**

DESCRIPTION OF WORK: **Rule 20B - Underground existing overhead electric facilities**

Engineering & Administrative Costs		$187,311.94
Value of Applicant Design Work	(+)	$0.00
Cost of Additional Applicant Design Plan Checks	(+)	$0.00
Value of 20B Underground System	(+)	$187,548.79
Tie-In of 20B by PG&E	(+)	$255,382.07
PG&E Land Rights Costs	(+)	$0.00
Inspection Fees	(+)	$2,969.59
Value of 20B Trench & Excavation	(+)	$299,388.71
Value of 20B Conduits & Substructures	(+)	$101,673.47
Rule 20B Trench Permits Obtained by PG&E	(+)	$0.00
less Cost of Equivalent Overhead System	(-)	$302,142.12
SUB TOTAL	**(=)**	**$732,132.44**
plus ITCC @ 0%	(+)	$0.00
less 20B Underground System Installed by Applicant	(-)	$0.00
less 20B Trench & Excavation Provided by Applicant	(-)	$299,388.71
less 20B Conduits & Substructures Installed by Applicant	(-)	$101,673.47
less Value of Applicant Design Work	(-)	$0.00
Electric Rule 20B Cash Payment	**(=)**	**$331,070.26**

4. Applicant shall pay to PG&E, promptly upon demand by PG&E, as the complete contract price hereunder, the sum of Three Hundred Thirty-One Thousand Seventy Dollars And Twenty-Six Cents ($331,070.26)

Upon completion of requested work, ownership shall vest in: [X] PG&E [ ] Applicant

Executed this _____ day of _____

CITY OF MADERA, A Government Agency	**PACIFIC GAS & ELECTRIC COMPANY**
Applicant	
By: _____	**By:** Mike Redman
ROBERT POYTHRESS	**Mike Redman**
Print/Type/Name	
Title: **MAYOR**	**Title:** **Service Planning Supervisor**

Mailing Address: 205 W 4TH STREET
MADERA CA 93637

Pacific Gas and Electric Company

DISTRIBUTION:
- ☐ Applicant (copy)
- ☐ Division (copy)
- ☐ CFM (Original)
- ☐ T&CS

REFERENCES:
Notification # 107977360
Contract # 1180659
E-PM #
G-PM #
Prior MLX E /G
Customer # 1131789

DISTRIBUTION SERVICE AND EXTENSION AGREEMENT DECLARATIONS [1]

Submitted to Applicant by:
KIRK ATHERTON

Date of issuance: October 31, 2014

1. **CITY OF MADERA, A Government Agency (Applicant), has requested PACIFIC GAS & ELECTRIC COMPANY, a California corporation (PG&E), to deliver energy to the property situated at NW CORNER SOUTH PINE STREET & PECAN, MADERA, 93637 and shown on the attached drawings.**

2. **Applicable Documents**. The cost summary for the facilities to be installed is attached hereto as Exhibit A. These facilities shall be installed in accordance with the applicable rules on file with the California Public Utilities Commission (which may include Gas and Electric Rules 2, 13, 15, 16, and 20), as well as the requirements set forth in the Provisions and the General Terms and Conditions for Gas and Electric Service by Applicant.

3. **Construction Options.** The responsibility for providing line extension work is divided between PG&E and the Applicant. However, Applicant may choose to have a qualified contractor perform some of the work that is PG&E's responsibility, and may choose to have PG&E perform some or all of the work that is the Applicant's responsibility. PG&E will reimburse or collect money based on its estimate of the costs, subject to the applicable rules. Based on Applicant's request, the contract costs are based on the following construction options:

PG&E Responsibility [1]		To Be Performed By	
		PG&E	Applicant
Gas	Main Trench	☐	☐
	Main Pipe Installation	☐	☐
	Service Pipe Installation	☐	☐
Electric	Distribution Wire and Equipment Installation	☐	☐
	Service Wire Installation	☐	☐

Applicant Responsibility [2]		To Be Performed By	
		PG&E	Applicant
Gas	Service Trench	☐	☐
Electric	Distribution Trench	☐	☐
	Service Trench	☐	☐
	Distribution Substructure Installation	☐	☐
	Service Substructure Installation	☐	☐

1. PG&E's responsibilities per Rule 15.b.1.b and Rule 16.D.2
2. Applicant's responsibilities per Rule 15.b.1.a and Rule 16.D.1

4. [X] N/A

Refund/Discount Option Selection

Applicant, in accordance with PG&E's extension rules, must select **one** of the following options for each commodity you are requesting service (gas and/or electric). Once the selection has been made, it cannot be changed.

Gas	Electric
[ ] 10-Year Subject to Refund Option or [ ] Non-Refundable 50% Discount Option	[ ] 10-Year Subject to Refund Option or [ ] Non-Refundable 50% Discount Option

N/A N/A

ACCEPTED:

APPLICANT: CITY OF MADERA, A Government Agency

By:	
(Authorized Signature)	
ROBERT POYTHRESS	
(Type or Print Name)	
TITLE:	**MAYOR**
DATE:	
MAILING ADDRESS:	**205 W 4TH STREET** **MADERA, CA 93637**

PACIFIC GAS AND ELECTRIC COMPANY:

By:	Mike Redman
(Authorized Signature)	
Mike Redman	
(Type or Print Name)	
TITLE:	**Service Planning Supervisor**
DIVISION:	**Yosemite**
DATE:	

Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY

REFERENCES: Notification # 107977360
Contract # 1180659
E-PM #
G-PM #

Applicant: **CITY OF MADERA, A Government Agency**

Project Location/Name: **NW CORNER SOUTH PINE STREET & PECAN, MADERA, 93637**

SUMMARY OF PAYMENTS

The total cash payment you need to make depends upon your selection of the 10 Year Refundable Advance Option or the Non-Refundable Discount Option for your gas and/or electric extension under Rule 15. Since you may elect one option for the gas extension and a different option for the electric extension, several different cash payments are available. Each payment option is summarized below. These payments include all billing under this Agreement including payments subject to refund, and non-refundable payments. To determine what is refundable or non-refundable, or to see full detailed billing information, please see the attached cost summaries. Even if you have no payment due for your gas and/or electric extension (Rule 15), you must still elect the 10 Year Refundable or Non-Refundable Discount Option for each extension on the second page of the Declarations.

10 Year Refundable Advance Option - Gas & Electric (1)	**$331,070.26**	(2)
-- OR		
Non-Refundable Discount Option - Gas & Electric (1)	**$331,070.26**	(3)
-- OR		
10 Year Refundable Advance Option - Gas / Non-Refundable Discount Option - Electric (1)	**$331,070.26**	(2)
-- OR		
10 Year Refundable Advance Option - Electric / Non-Refundable Discount Option - Gas (1)	**$331,070.26**	(2)

(1) Amounts shown do not include reimbursements for facilities that are normally the responsibility of PG&E per our tariffs. See the Reimbursement Summary for a total of all Reimbursements to be paid upon acceptance of facilities.

(2) The payment amount shown on this line includes both refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. The total payment is not subject to refund. Please see the attached detailed Cost Summaries to determine the portion of this payment that may be subject to refund.

(3) The payment amount shown on this line includes only non-refundable payments under Rule 15 for the gas and/or electric extension, plus other non-refundable payments. None of the payment shown is subject to refund.

Pacific Gas and Electric Company REFERENCES:
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY

REFERENCES:

Notification #	107977360
Contract #	1180659
PM #	31080826

Applicant: CITY OF MADERA, A Government Agency

Project Location/Name: NW CORNER SOUTH PINE STREET & PECAN, MADERA

ELECTRIC RULE 20B

Non Refundable Payments

Engineering & Administrative Costs		$187,311.94	
Value of Applicant Design Work	(+)	$0.00	
Cost of Additional Applicant Design Plan Check	(+)	$0.00	
Value of 20B Underground System	(+)	$187,548.79	
Tie-In of 20B by PG&E	(+)	$255,382.07	
PG&E Land Rights Costs	(+)	$0.00	
Inspection Fees	(+)	$2,969.59	
Value of 20B Trench & Excavation	(+)	$299,388.71	
Value of 20B Conduits & Substructures	(+)	$101,673.47	
Rule 20B Trench Permits Obtained by PG&E	(+)	$0.00	
less Cost of Equivalent Overhead System	(-)	$302,142.12	
SUB TOTAL	(=)	$732,132.44	
plus ITCC @ 0.0%	(+)	$0.00	
less 20B Underground System Installed by Applicant	(-)	$0.00	
less 20B Trench & Excavation Provided by Applicant	(-)	$299,388.71	
less 20B Conduits & Substructures Installed by Applicant	(-)	$101,673.47	
less Value of Applicant Design Work	(-)	$0.00	
	(=)		$331,070.26 [1]

Electric Rule 20B Cash Payment

Total Rule 20B Non-Refundable Payment	$331,070.26 [1]

(1) For Contractor Installed Projects (Option 2A), credit amounts will be reimbursed upon acceptance of facilities. See Reimbursement Summary for a total of Reimbursements and Credits to be paid upon acceptance of facilities

107977360E

Form 79-1004
Tariffs and Compliance
Advice 2458-G-C/2379-E-C
Decision 03-03-032
Effective: July 1, 2004

* Automated document, Preliminary Statement, Part A

Pacific Gas and Electric Company
DISTRIBUTION AND SERVICE EXTENSION AGREEMENT
EXHIBIT A - COST SUMMARY

REFERENCES:

Notification #	107977360
Contract #	1180659
E15-PM #	31080826
E16R-PM #	
E20B-PM #	
E20C-PM #	
G15-PM #	
G16R-PM #	

Applicant: **CITY OF MADERA, A Government Agency**
Project Location/Name: **NW CORNER SOUTH PINE STREET & PECAN, MADERA, 93637**

REIMBURSEMENT SUMMARY

Reimbursements are provided for facilities that are installed by the Applicant which are normally the responsibility of PG&E per our tariffs. Reimbursements will be made after the facilities are accepted by PG&E, operational and ready to supply service. Reimbursable payments made for services will be reimbursed at the average rate shown as each service is connected. All reimbursements will be based upon PG&E's estimated costs.

Electric Rule 15

10 Year Refundable Advance Credit Amount		$0.00 (1)	
		- or -	
Non-Refundable Discount Option Credit Amount		$0.00 (1)	
Joint Pole Credits	(+)	$0.00	
PG&E Betterments	(+)	$0.00	
SUB TOTAL: w/ 10 Year Refundable Advance Credit Amount		(=)	$0.00
			- or -
w/ Non-Refundable Discount Credit Amount		(=)	$0.00

Electric Rule 16

Joint Pole Credits		$0.00	
Applicant Design Work within the Allowance	(+)	$0.00	
SUB TOTAL:		(=)	$0.00

Reimbursements per Service Completion - Electric

Energized System	$0.00 /service (2)	
Non-energized System	$0.00 /service (2)	

Electric Rule 20B

Joint Pole Credits		$0.00	
Rule 20B Payment Credit	(+)	$0.00	
SUB TOTAL:		(=)	$0.00

Electric Rule 20C

Joint Pole Credits		$0.00	
Rule 20C Payment Credit	(+)	$0.00	
SUB TOTAL:		(=)	$0.00

Streetlights

LS-1

Standard Luminaries		$0.00	
Standard Poles & Arms	(+)	$0.00	
Protective Tubes	(+)	$0.00	
Internal Wiring	(+)	$0.00	
Overhead Conductor	(+)	$0.00	
Underground Conductor	(+)	$0.00	
Connections	(+)	$0.00	

LS-2

Connections	(+)	$0.00	
SUB TOTAL:		(=)	$0.00

Gas Rule 15

10 Year Refundable Advance Credit Amount		$0.00[1]	
		- or -	
Non-Refundable Discount Option Credit Amount		$0.00[1]	
PG&E Betterments	(+)	$0.00	
SUB TOTAL: w/ 10 Year Refundable Advance Credit Amount		(=)	$0.00
			- or -
w/ Non-Refundable Discount Credit Amount		(=)	$0.00

Gas Rule 16

Stub Services		$0.00	
Applicant Design Work within the Allowance	(+)	$0.00	
SUB TOTAL:		(=)	$0.00

Reimbursements per Service Completion - Gas

Pressurized System	$0.00 /service[2]	
Non-Pressurized System	$0.00 /service[2]	

Total Reimbursement

10 Year Refundable Advance Option - Gas & Electric	$0.00[3]
-- OR	
Non-Refundable Discount Option - Gas & Electric	$0.00[3]
-- OR	
10 Year Refundable Advance Option - Gas / Non-Refundable Discount Option - Electric	$0.00[3]
-- OR	
10 Year Refundable Advance Option - Electric / Non-Refundable Discount Option - Gas	$0.00[3]

(1) 10 Year Refundable and Discount Option credit amounts will be paid upon acceptance of facilities. Credit amounts are subject to future deficiency billing in accordance with the tariff.
(2) This Reimbursement will be paid on a per service basis as each service is completed.
(3) Excludes service completion reimbursements made under Rule 16. Service completion reimbursements will be made as each service is connected, on a per service basis.

Return to Agenda

REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER B-8
APPROVED BY

GRANT ADMINISTRATOR

CITY ADMINISTRATOR

SUBJECT: Consideration of a Resolution Approving the Appointment of Representatives to the Community Development Block Group Review & Advisory Committee

RECOMMENDATION:

Staff recommends adoption of a resolution making appointments to the Community Development Block Grant (CDBG) Review and Advisory Committee (RAC).

DISCUSSION:

The RAC provides the Council with recommendations for the allocation of CDBG funds through a public hearing process that allows for greater community involvement. Additionally, the committee monitors the City's compliance with the CDBG Consolidated Plan and our progress implementing the Vision Madera 2025 Action Plan. After receiving input through this public process, the RAC makes recommendations regarding the allocation of CDBG funds that are consistent with both of these plans. Staff then takes these recommendations to Council, which ultimately decides the final allocation of this grant. Council is not bound by the RAC's findings and may allocate CDBG funds according to their own preferences.

The RAC consists of 7 members who serve as representatives of individual Council Members and the Mayor. In preparation for the FY 15/16 allocation, Staff has identified the potential RAC candidates included in Attachment A. Staff intends to provide the final draft of this attachment as part of a late distribution in order to provide Council with adequate time to select suitable candidates. Given its significant role and their expressed desire to serve, Staff urges Council to approve a resolution appointing these individuals to the Madera CDBG RAC.

FINANCIAL IMPACT:

The appointment of individuals to the RAC will not impact the General Fund because the committee serves in an advisory capacity. Council's final allocation of funds will determine the ultimate financial impact to the City of the CDBG award.

VISION MADERA 2025 CONSISTENCY:

Given the broad scope of this grant, the CDBG program has the potential to advance an extensive number of the Vision Plan's objectives. The specific areas of this plan that receive support will be determined by the actual allocation of CDBG funds.

RESOLUTION NO.: 2015-____

A RESOLUTION OF THE CITY COUNCIL, OF THE CITY OF MADERA, CALIFORNIA, APPROVING THE APPOINTMENT OF REPRESENTATIVES TO THE COMMUNITY DEVELOPMENT BLOCK GROUP REVIEW & ADVISORY COMMITTEE

WHEREAS, the City of Madera formed the Review & Advisory Committee (RAC) to provide recommendations to Council regarding the allocation of its Community Development Block Grants (CDBG); and

WHEREAS, the Council appoints the 7-members of the RAC, who serve as volunteers on this advisory body; and

WHEREAS, the Council wishes to appoint the individuals listed in Attachment A to the Madera RAC.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF MADERA AS FOLLOWS:

1. The above recitals are true and correct.

2. The individuals listed on Attachment A, incorporated herein, are appointed to serve on the CDBG RAC for the terms prescribed by the committee's bylaws.

3. This resolution is effective immediately upon adoption.

****

Attachment A: RAC Candidates

RAC Candidate	Nominating Council Member
Ken Hutchings	Robert Poythress
Candace Talley	Sally Bomprezzi
	Andy Medellin
	Donald Holley
	Derek Robinson
	Will Oliver
	Charles Rigby

Return to Agenda

REPORT TO CITY COUNCIL

Approved by:

Department Director

City Administrator

Council Meeting of: January 21, 2015

Agenda Number: B-9

SUBJECT: **Consideration of a Resolution Accepting a San Joaquin Valley Air Pollution Control District (District) Grant from the Bicycle Infrastructure Component of the Reduce Motor Vehicle Emissions II Program and Ratifying and Approving the Standard Agreement with the District**

RECOMMENDATION: Adoption of the resolution accepting a San Joaquin Valley Air Pollution Control District Grant from the Bicycle Infrastructure Component of the Reduce Motor Vehicle Emissions II Program.

DISCUSSION: On January 8, 2015, staff received confirmation from the San Joaquin Valley Air Pollution Control District (District) that the City would receive a $54,866 grant from the Bicycle Infrastructure component of the Reduce Motor Vehicle Emissions II (REMOVE II) Program. The grant will be used to construct the "missing link" of the Madera Bicycle Trail Project resulting in an uninterrupted route for the trail. The City of Madera estimates this project will require a total of $717,376.30 and has already secured $568,000 in funding. This grant will help with the remaining $149,376.30 that is needed to complete the project.

FINANCIAL IMPACT: Acceptance of the grant will not impact the General Fund because the majority of required funding has already been secured.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN: Approval of this agreement is not specifically addressed in the vision 2025 plan, but falls within the parameters to provide for A Well Planned City.

RESOLUTION NO. _____

RESOLUTION OF THE COUNCIL OF THE CITY OF MADERA, CALIFORNIA, ACCEPTING A SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GRANT FROM THE BICYCLE INFRASTRUCTURE COMPONENT OF THE REDUCE MOTOR VEHICLE EMISSIONS II PROGRAM AND RATIFYING AND APPROVING THE STANDARD AGREEMENT WITH THE DISTRICT

WHEREAS, the San Joaquin Valley Air Pollution Control District (District) offers a grant from the Bicycle Infrastructure Component of the Reduce Motor Vehicle Emissions Program; and

WHEREAS, the City has successfully secured such a grant from the District; and

WHEREAS, the City of Madera is in need of $149,376.30 additional funding to complete the "missing link" of the Madera Bicycle Trail Project; and

WHEREAS, the grant will provide $54,866 of the additional funding needed;

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds orders and resolves as follows:

1. The above recitals are true and correct.

2. The Standard Agreement with the District for the Grant, a copy of which is on file in the office of the City Clerk, is hereby ratified and approved.

3. The City Administrator is hereby authorized to execute the Standard Agreement.

4. The resolution is effective immediately upon adoption.

5. A signed copy of this resolution shall be placed on file in the office of the Financial Services Director.

****

Agreement No. **C-34756-A**

REMOVE II BICYCLE INFRASTRUCTURE AGREEMENT

This Agreement is made and entered into this ____ day of _____, 2015, by and between the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, a unified air pollution control district formed pursuant to California Health and Safety Code section 40150 et seq. (District), and **City of Madera** (Participant).

WITNESSETH:

WHEREAS, the California Clean Air Act (CCAA) requires local air pollution control districts to reduce emissions from motor vehicles;

WHEREAS, AB 2766, AB 923, SB 709, and AB 2522 authorize districts to impose fees upon certain registered motor vehicles within the district, and the governing board of the District has imposed said fees;

WHEREAS, said legislation requires District to use said funds for activities related to reduce air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988; and

WHEREAS, the District has developed other funding mechanisms in order to provide grant monies for its incentive programs; and

WHEREAS, on April 22, 2005, District began accepting applications to approve for funding those projects deemed to be most suitable for vehicle license fee and other funding; and

WHEREAS, Participant has proposed a project that meets the eligibility criteria of REMOVE II that has been approved by District for funding; and

WHEREAS, Participant represents that it is willing and able to complete the proposed project set forth herein within the timeframe specified in this Agreement.

NOW, THEREFORE, based on their mutual promises, covenants, and conditions, the parties hereby agree as follows:

1. PROJECT

Participant proposes to complete its project, **Construction of a Class I bicycle trail along the northern bank of the Fresno River with undercrossings at Gateway Drive and the UPRR track with access points to the existing Fresno River Bicycle Trail**, as set forth in the Participant's application; attached hereto and incorporated herein as **Exhibit A**. Participant agrees to furnish all labor, materials, equipment, licenses, permits, fees, and other incidentals necessary to perform and complete, per schedule, in a professional manner, the project described herein. Participant represents that Participant has the expertise, match funding, and resources necessary to adequately perform and complete the project specified in Exhibit A and in accordance to this Agreement and the exhibits incorporated herein.

In the event of any conflict between or among the terms and conditions of this Agreement, the exhibits incorporated herein, and the documents referred to and incorporated herein, such conflict shall be resolved by giving precedence in the following order of priority:

1. To the text of this Agreement
2. Exhibit B of this Agreement
3. Exhibit A of this Agreement
4. Exhibit C of this Agreement

2. PERIOD OF PERFORMANCE/TIMETABLE

Participant shall commence performance of work and produce all work products in accordance with the work schedule, deadlines for performance. Participant shall complete the project in its entirety and in accordance with Exhibit A by the timeframe specified in paragraph 24 of this Agreement, unless this Agreement is terminated sooner as provided for elsewhere in this Agreement. Participant is responsible for and must comply with meeting and obtaining all local, state, and/or federal permitting, licensing, and/or certifying requirements necessary to complete the project.

3. COMPENSATION

The total obligation of District under this Agreement shall not exceed **Fifty-Four Thousand Eight Hundred Sixty-Six dollars ($54,866)** and supersedes any requested funding amount by the Participant identified in Exhibit A.

Participant shall obtain through other sources sufficient additional monies to fund the total cost of the project as outlined in Exhibit A. Satisfactory written evidence of such funding commitments shall be provided to District prior to the release by District of any funds under this Agreement. In the event funding from other sources for the total cost of the project as outlined in Exhibit A is not received by Participant, District reserves the right to terminate or re-negotiate this Agreement. In that event, if requested by District, Participant shall return any District funds advanced.

A. Payments: Advance payments and progress payments shall not be permitted. Payments will be permitted only at which time equivalent services and/or project milestones have been satisfactorily completed, and only for eligible costs allowed as specified in REMOVE II Program Guidelines for the Bicycle Infrastructure Component; attached hereto and incorporated herein as **Exhibit B**. District shall reimburse Participant after receipt and verification of a properly supported financial claim and inspection by District staff, which includes the following:

1) REMOVE II Program – Bicycle Infrastructure Component Project Guidance Document and Claim for Payment Form, attached hereto an incorporated herein as **Exhibit C**: The Form must be filled in completely and be signed by the contract signing authority.

2) Supporting Documentation that supports completion of work and/or milestone: Supporting documentation may include, but is not limited to, copies of invoices, checks, and receipts for work completed that is specific to the project in this Agreement as specified in Exhibit A. Other forms of supporting documentation

may be accepted as deemed appropriate by the District.

Claims and all supporting documentation shall be submitted to San Joaquin Valley Unified Air Pollution Control District at the following address:

San Joaquin Valley Air Pollution Control District
Attention: Incentives Program
1990 East Gettysburg Avenue
Fresno, California 93726-0244

District will issue payment to Participant upon receipt of proper documentation and verification that Participant has satisfactorily completed the work for which compensation is sought.

The amount to be paid to Participant under this Agreement is limited to eligible costs identified in Exhibit A and deemed eligible in Exhibit B and includes all sales and use taxes incurred pursuant to this Agreement, if any, including any such taxes due on equipment purchased by Participant. Participant shall not receive additional compensation for reimbursement of such taxes and shall not decrease work to compensate therefore. Any other expenses incurred by Participant for this project which exceed the eligible costs identified in Exhibit A and deemed eligible in Exhibit B, or are deemed ineligible in Exhibit B, are the responsibility of Participant. Participant shall make payment of such expenses as necessary to ensure the completion of the project in accordance to Exhibit A by the timeframe specified in paragraph 24 of this Agreement.

Concurrently with the submission of any claim for payment, Participant shall certify (through copies of invoices issued, checks, receipts, and the like) that complete payment has been made to any and all subcontractor(s) as provided.

B. Surplus Funds: Any compensation, which is not expended by Participant pursuant to the terms and conditions of this Agreement by the project completion date, shall automatically revert to District. Only expenditures incurred by Participant in the direct performance of this Agreement will be reimbursed by District.

Allowable expenditures under this Agreement are specifically established and included in Exhibit A and Exhibit B.

C. Closeout Period: Participant shall submit all final claims within sixty (60) days following the final month of activities for which payment is claimed. No action will be taken by District on claims submitted beyond the 60-day closeout period without reasonable justification and written approval from District.

4. REPORTING REQUIREMENTS

Participant shall perform the following reporting requirements, as applicable and as specified in Exhibit C.

A. Quarterly Reports (for Public Transportation – Transit and Rail Passenger Subsidy Components only): If quarterly reports are identified and required in Exhibit C, Participant shall submit regular reports on a quarterly basis according to the project compliance specified in Exhibit C. The report shall detail the work performed during the current reporting period; problems identified, solved, and/or unresolved; and include any other pertinent information requested on the Quarterly Report in Exhibit C. Quarterly reports shall be required prior, or concurrent, with submission of any claim for payment.

B. Summary Report: If a summary report is identified and required in Exhibit C, upon completion of the project, Participant shall submit a summary report which shall detail the final project product and any other pertinent information requested on the Summary Report Form in Exhibit C. Summary reports shall be required prior, or concurrent, with submission of any claim for payment.

C. Annual Reports: If annual reports are identified and required in Exhibit C, Participant is required to complete and submit annual reports to District for two (2) subsequent years, commencing approximately one year following the completion of the project. The annual report shall detail the project's viability and include any other pertinent information requested on the Annual Report Form in Exhibit C.

5. NON-ALLOCATION OF FUNDS

The terms of this Agreement are contingent on the approval and receipt of funds by the appropriating government agency. Should sufficient funds not be allocated, District shall promptly notify Participant and Participant shall not be obligated to continue providing services until sufficient funds have been obtained by District. The scope of the project may be modified or this Agreement terminated at any time by either party after District provides Participant notice of insufficient funds. Following such notice, either party may terminate this Agreement after first providing the other party thirty (30) days' prior written notice of such termination.

6. INDEPENDENT CONTRACTOR

In performance of the work, duties, and obligations assumed by Participant under this Agreement, it is mutually understood and agreed that Participant, including any and all of Participant's officers, agents, and employees, will at all times be acting and performing as an independent contractor and shall act in an independent capacity and not as an officer, agent, servant, employee, joint venture, partner, or associate of District. Furthermore, District shall have no right to control or supervise or direct the manner or method by which Participant shall perform its work and function. However, District shall retain the right to administer this Agreement so as to verify that Participant is performing its obligations in accordance with the terms and conditions thereof. Participant and District shall comply with all applicable provisions of law and the rules and regulations, if any, of governmental authorities having jurisdiction over matters the subject thereof.

Because of its status as an independent contractor, Participant shall have absolutely no right to employment rights and benefits available to District employees. Participant shall be solely liable and responsible for providing to, or on behalf of, itself all legally required employee benefits. In addition, Participant shall be solely responsible and save District harmless from all matters relating to payment of Participant's employees, including compliance with social security, withholding, and all

other regulations governing such matters. It is acknowledged that during the term of this Agreement, Participant may be providing services to others unrelated to District or to this Agreement.

7. TERMINATION

A. Breach of Agreement: District may immediately suspend or terminate this Agreement, in whole or in part, where in the determination of District there is:

1. An illegal or improper use of funds;
2. A failure to comply with any term of this Agreement;
3. A substantially incorrect or incomplete report submitted to District; or
4. Improperly performed services and/or improperly completed project.

In no event shall any payment by District constitute a waiver by District of any breach of this Agreement or any default, which may then exist on the part of Participant. Neither shall such payment impair or prejudice any remedy available to District with respect to the breach or default. District shall have the right to demand of Participant the repayment to District of any and all funds disbursed to Participant under this Agreement which in the judgment of District were not expended in accordance with the terms of this Agreement. Participant shall promptly refund any such funds upon demand.

In addition to immediate suspension or termination, District may impose any other remedies available at law, in equity, or otherwise specified in this Agreement.

B. Without Cause: Either party may terminate this Agreement at any time upon giving the other party at least thirty (30) days' advance written notice of intention to terminate. District shall have the right to demand the repayment of a portion of or all funds paid to Participant should termination of the Agreement result in an incomplete project that does not satisfactorily meet the criteria in which funding was awarded to the project. District has the sole discretion to review and assess the

project completeness in relation to the funding criteria utilized to evaluate the project and make such determinations for repayment and/or payment. In such cases, Participant may, subject to paragraph 3, still be eligible to be paid the reasonable value of services satisfactorily rendered and actual, reasonable costs incurred up to the time of the termination, as determined by District. Upon such termination, all the work produced by Participant shall be promptly delivered to District.

8. MODIFICATION

Any matters of this Agreement may be modified from time to time by the written consent of all the parties without in any way affecting the remainder. With the exception of modifications or amendments which do not affect costs or payments under this Agreement, Participant understands that District Governing Board approval may be required.

9. NON-ASSIGNMENT

Neither party shall assign, transfer, or subcontract this Agreement, nor their rights or duties under this Agreement, without the prior express, written consent of the other party.

10. INDEMNIFICATION

Participant agrees to indemnify, save, hold harmless, and at District's request, defend District, its boards, committees, representatives, officers, agents, and employees from and against any and all costs and expenses (including reasonable attorneys' fees and litigation costs), damages, liabilities, claims, and losses (whether in contract, tort, or strict liability, including, but not limited to, personal injury, death, and property damage) which arise or are alleged to arise directly or indirectly from any act or omission of Participant, its officers, agents, subcontractors, or employees in the performance of this Agreement or out of the operations conducted by the Participant.

11. INSURANCE

A. Without limiting District's right to obtain indemnification from Participant or any third parties, Participant, at its sole expense, shall maintain in full

force and effect the following insurance policies throughout the term of this Agreement:

1) Commercial general liability insurance with minimum limits of coverage in the amount of Five Million Dollars ($5,000,000) per occurrence;

2) Commercial automobile liability insurance which covers bodily injury and property damage with a combined single limit with minimum limits of coverage in the amount of Five Million Dollars ($5,000,000) per occurrence.

3) Workers' compensation insurance in accordance with California law.

B. Except for workers' compensation insurance, such insurance policies shall name District, its officers, agents, and employees, individually and collectively, as additional insureds. Such coverage for additional insured shall apply as primary insurance and any other insurance, or self-insurance, maintained by District, its officers, agents, and employees, shall be excess only and not contributing with insurance provided under Participant's policies herein. This insurance shall not be canceled or changed without a minimum of thirty (30) days' advance, written notice given to District.

C. Prior to the commencement of performing its obligations under this Agreement, Participant shall provide certifications of insurance and additional insured endorsements on the foregoing policy, as required herein, to District, stating that such insurance coverages have been obtained and are in full force; that District, its officers, agents, and employees will not be responsible for any premiums on the policy. This insurance shall not be canceled or changed without a minimum of thirty (30) days' advance, written notice given to District.

D. In the event Participant fails to keep in effect at all times insurance coverage as herein provide, District may, in addition to other remedies it may have, suspend or terminate this Agreement upon the occurrence of such event.

E. If Participant is a government entity, then it may self-insure such

of those risks identified in paragraph11.A.1 of this Agreement, provided, however, that:

1) Such self-insurance plans shall be reasonably satisfactory to District; and

2) All those provisions identified in subparagraph 11.C of this Agreement concerning the relationship of Participant's primary and District's excess insurance to each other, the requirement of Participant delivering a certificate of insurance and additional insured endorsement or other suitable evidence to District, and the cancellation/change of insurance requirements shall apply to such self-insurance plans.

12. AUDITS AND INSPECTIONS

Participant shall at any time during regular business hours, and as often as District may deem necessary, make available to District for examination all of its records and data with respect to the matters covered in this Agreement. Participant shall, upon request by District, permit District to audit and inspect all such records and data necessary to ensure Participant's compliance with the terms of this Agreement.

District shall provide Participant notice of any negative audit findings and allow at least thirty (30) days to respond to and cure any such issues. If, after the audit cure period expires, District makes a determination that funds provided to Participant pursuant to this Agreement were not spent in conformance with this Agreement or any other applicable provisions of law, District shall present any ongoing issues to Participant's representative and the parties shall personally discuss measures to resolve the situation. Following the meeting between Participant and District, if based on District's reasonable determination that the problems have not been resolved, Participant agrees to immediately reimburse District all funds determined to have been expended not in conformance with said provisions.

Participant shall retain all records and data for activities performed under this Agreement for at least three (3) years from the date of final payment under this

Agreement or until all state and federal audits are completed for that fiscal year, whichever is later.

If this Agreement exceeds Ten Thousand Dollars ($10,000), Participant shall be subject to the examination and audit of the auditor general for a period of three (3) years after final payment under contract (California Government Code § 8546.7).

13. NOTICES

The persons and their addresses having authority to give and receive notices under this Agreement are as follows:

PARTICIPANT	DISTRICT
David R. Tooley	**Seyed Sadredin**
City Administrator	**Executive Director/APCO**
City of Madera	**San Joaquin Valley Unified APCD**
205 W. 4th Street	**1990 East Gettysburg Avenue**
Madera, CA 93637	**Fresno, CA 93726**

Any and all notices between District and Participant provided for or permitted under this Agreement or by law shall be in writing and shall be deemed duly served when personally delivered to one of the parties, or in lieu of such personal service, when deposited in the United States mail, postage prepared, addressed to such party.

14. POLITICAL ACTIVITY PROHIBITED

None of the funds, materials, property, or services provided under this Agreement shall be used for any political activity, or to further the election or defeat of any candidate for public office contrary to federal or state laws, statutes, regulations, rules, or guidelines.

15. LOBBYING PROHIBITED

None of the funds provided under this Agreement shall be used for publicity, lobbying, or propaganda purposes designed to support or defeat legislation

before the Congress of the United States of America or the Legislature of the State of California.

16. CONFLICT OF INTEREST

No officer, employee, or agent of District who exercises any function or responsibility for planning and carrying out the services provided under this Agreement shall have any direct or indirect personal financial interest in this Agreement. Participant shall comply with all federal and state conflict of interest laws, statutes, and regulations, which shall be applicable to all parties and beneficiaries under this Agreement and any officer, agent, or employee of District.

17. GOVERNING LAW

This Agreement shall be governed in all respects by the laws of the State of California. Venue for any action arising out of this Agreement shall only be in Fresno County, California.

18. COMPLIANCE WITH LAWS

Participant shall comply will all federal and state laws, statutes, regulations, rules, and guidelines which apply to its performance under this Agreement, including California driving eligibility and financial liability laws.

19. BINDING ON SUCCESSORS

This Agreement, including all covenants and conditions contained herein, shall be binding upon and inure to the benefit of the parties, including their respective successors-in-interest, assigns, and legal representatives.

20. TIME IS OF THE ESSENCE

It is understood that for Participant's performance under this Agreement, time is of the essence. The parties reasonably anticipate that Participant will, to the reasonable satisfaction of District, complete all activities provided herein within the time schedule outlined in the attachments to this Agreement, provided that Participant is not caused unreasonable delay in such performance.

21. DATA OWNERSHIP

Upon termination or expiration of this Agreement, all data which is received, collected, produced, or developed by Participant under this Agreement shall become the exclusive property of District, provided, however, Participant shall be allowed to retain a copy of any non-confidential data received, collected, produced, or developed by Participant under this Agreement subject to District's exclusive ownership rights stated herein. Accordingly, Participant shall, if requested, surrender to District all such data which is in its possession (including its subcontractors or agents), without any reservation of right or title, not otherwise enumerated herein.

District shall have the right at reasonable times during the term of this Agreement to inspect and reproduce any data received, collected, produced, or developed by Participant under this Agreement. No reports, professional papers, information, inventions, improvements, discoveries, or data obtained, prepared, assembled, or developed by Participant, pursuant to this Agreement, shall be released or made available (except to District) without prior, express written approval of District while this Agreement is in force.

22. NO THIRD-PARTY BENEFICIARIES

Notwithstanding anything else stated to the contrary herein, it is understood that Participant's services and activities under this Agreement are being rendered only for the benefit of District, and no other person, firm, corporation, or entity shall be deemed an intended third-party beneficiary of this Agreement.

23. SEVERABILITY

In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Agreement, and the Agreement shall then be construed as if such unenforceable provisions are not a part hereof.

24. SPECIAL CONDITIONS

The entire proposed project must be completed within One (1) year(s) of

Agreement execution. No Agreement extensions will be granted without reasonable justification and written approval from the District. Funds may not be used to meet Americans with Disabilities Act (ADA) requirements.

25. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between Participant and District with respect to the subject matter hereof and supersedes all previous negotiations, proposals, commitments, writings, advertisements, publications, and understandings of any nature whatsoever unless expressly included in this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first hereinabove written.

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PARTICIPANT
City of Madera

David R. Tooley
City Administrator

Participant Business Entity:

Tax ID Number: _____

DISTRICT
San Joaquin Valley Unified Air Pollution Control District

_____
Seyed Sadredin
Executive Director/APCO

Approved as to legal form:
San Joaquin Valley Unified Air Pollution Control District

_____
Annette Ballatore-Williamson
District Counsel

Approved as to accounting form:
San Joaquin Valley Unified Air Pollution Control District

_____
Mehri Barati, C.P.A.
Director of Administrative Services

For accounting use only:
Program: _____
Account No.: _____

BICYCLE INFRASTRUCTURE INCENTIVE COMPONENT
REMOVE II PROGRAM APPLICATION

A.	APPLICANT INFORMATION		
Organization: **City of Madera**			
Contact name: **Gina Daniels**			
Person with contract signing authority: **David R. Tooley**			
Street/mailing address: **205 W. 4th Street**			
City: **Madera**		State: **CA**	Zip code: **93637**
Phone: (**559**) **661-5443**		Fax: (**559**) **674-2972**	
E-mail: **gdaniels@cityofmadera.com**		Mobile Phone: ( )	
Geographic area served by organization: **City of Madera**			
Geographic area to be served by bicycle facility or linkage project (if different than above): **same**			

I hereby certify that all information provided in this application and any attachments are true and correct to the best of my knowledge, and that I have read the separate Guidelines, Policies and Procedures document for this program component.

Printed Name of Responsible Party: **David R. Tooley**	Title: **City Administrator**
Signature of Responsible Party: (Must sign in BLUE INK ONLY)	Date: 9/30/14

INFORMATION ABOUT THE BICYCLE INFRASTRUCTURE PROJECT

All requested information below must be provided.

B.	INFORMATION ABOUT BICYCLE PROJECT		
1.	Funding dollars requested ($): **149,376.30** Eligible amount - $54,866 (ck 12/18/14)	2.	Total project cost: **$717,376.30**
3.	Location and description of bicycle project: **see Attachment**		
4.	Project length in linear feet and miles: **1,100 lf**	5.	Class I Path or Class II Lane: **Class I Path**
6.	Number of days (D) of use per year: **365** Default maximum days 275 (ck 12/18/14)	7.	Annual average daily traffic (ADT) on roadway parallel to project site (number of vehicle trips/day): **Gateway N/O 4th St: NB 6,845 SB 5,468**
8.	The city population: **62,624**	9.	Public university or college present (provide name and distance to project site): **NA**
10.	List the different activity centers located near project site. Specify those within ¼ and those within ½ mile: **see Attachment**		
11.	Additional funding sources and amounts, if available: **see Attachment**		

BICYCLE INFRASTRUCTURE SUPPLEMENTAL PROJECT INFORMATION

1. Discuss how the bicycle infrastructure project will effectively contribute to a comprehensive alternative transportation network for daily bicycle commuters.

   see Attachment

2. Describe the location of the bicycle infrastructure project and explain the necessary changes or improvements to the site for the benefit of commuter bicycling.

   see Attachment

3. Explain and provide the travel activity data for both vehicle and bicycle travel at the proposed bicycle project site, if available.

   see Attachment

4. Explain how the bicycle infrastructure project will increase commuter bicycling and reduce the number of vehicle miles traveled.

   see Attachment

5. Describe how the bicycle infrastructure project will eliminate any barriers or gaps in the bicycle transportation network.

   see Attachment

6. Explain if the bicycle facility project will conform to Caltrans design standards. The ARB recommends bike lanes should meet Caltrans' full width standard depending on the street facility.

   see Attachment

7. Describe the various activity centers (especially schools) in close proximity to the bicycle project site and explain how the facility will improve the accessibility and utilization for bicycle travel.

   see Attachment

8. List other funding sources solicited by your organization that would contribute to the project's feasibility for completion.

   see Attachment

9. Discuss the one-year timeline for project completion in quarterly phases. Describe separately each phase of work to be performed and list tasks within each phase of work.

   see Attachment

10. Provide detailed information on the structural design, required materials and cost breakdown for the bicycle infrastructure project (provide supportive documentation such as diagrams, plans and invoices).

    see Attachment

CITY OF MADERA
BICYCLE INFRASTRUCTURE PROJECT

ATTACHMENT

3. Location and description of bicycle project:

The Madera Bicycle Trail Project would occupy a centralized area within our community and run along the northern bank of the Fresno River to the east of Highway 99. The project would include two access points to the existing Fresno River Bicycle Trail at Sharon Avenue and Gateway Drive. Finally, the proposed Madera Bicycle Trail Project would pass beneath sections of both Gateway Drive and the Union Pacific Rail Road track. (*see: Vicinity Map of the Madera Bicycle Trail Project*)

The Madera Bicycle Trail Project seeks to construct the "missing link" of this popular path and would provide bicyclists with a convenient, safe, and uninterrupted route to the area's numerous destinations. Currently, bicyclists must either cross Gateway Drive and the Union Pacific Rail Road (UPRR) track or take a detour along Sharon Avenue and Cleveland Avenue if they want to visit the destinations to the west of Highway 99. The proposed project will feature a Class I Bicycle Trail that will extend approximately 1,100 lf along the northern bank of the Fresno River. Additionally, the project will also include 512 lf of hand rails at the appropriate locations (e.g. elevation changes) and two concrete benches with trash receptacles along the path. This project will also include the necessary erosion control measures and a suitable rail road undercrossing for bicyclists. The City of Madera estimates this project will require a total of $717,376.30 and has already secured $568,000 in funding. Thus, the city submits this Bicycle Infrastructure Incentive Component application seeking the remaining $149,376.30 to fully realize the proposed Fresno Bicycle Trail project.

10. List the different activity centers located near project site. Specify those within ¼ and those within ½ mile:

The area surrounding the proposed project contains a number of activity centers including:

¼ Mile-

1. Zero-Gravity Skate Park
2. Rotary Park
3. Madera County Vector Control
4. Madera Drive-In

½ Mile-

5. Madera Fairgrounds/Swap Meet
6. Washington Elementary School
7. Thomas Jefferson Middle School
8. Save Mart Shopping Center
9. Madera Farm Services Agency
10. Arbor Vitae Cemetery

EXHIBIT A

While technically more distant from the project site, the area immediately to the northwest contains our community's primary commercial district which contains the following activity centers:

1. The Madera Market Shopping Center (e.g. Wal-Mart)
2. Madera County Resource Management Agency
3. The Commons Shopping Center (e.g. Lowes)
4. Pak'N Save Shopping Center

Further, the area to the southeast contains the following government activity centers:

1. Madera City Hall
2. Madera County Government Center

(*see: Vicinity Map of the Madera Bicycle Trail Project*)

11. Additional funding sources and amounts, if available:

Bicycle Transportation Account (BTA):	$215,000
Congestion Mitigation & Air Quality (CMAQ):	$298,000
City of Madera (Local Funds):	$ 55,000
	$568,000

BICYCLE INFRASTRUCTURE SUPPLEMENTAL PROJECT INFORMATION

1. Discuss how the bicycle infrastructure project will effectively contribute to a comprehensive alternative transportation network for daily bicycle commuters.

The proposed Madera Bicycle Trail Project will encourage increased walking and bicycling by providing the "missing link" that currently exists in our trail system. The addition of this link would facilitate travel by pedestrians and bicyclists, especially from the more economically disadvantaged area on the eastern side of our community. Upon completion of this project, the Madera Bicycle Trail Project will provide an uninterrupted east-west route within our city. This route will grant access to our primary retail centers, multiple recreational destinations, local schools, and numerous employers.

2. Describe the location of the bicycle infrastructure project and explain the necessary changes or improvements to the site for the benefit of commuter bicycling.

The proposed Madera Bicycle Trail Project would extend along the northern bank of the Fresno River to the east of Highway 99. The project would grant access to the existing Fresno River Trail at Sharon Avenue and Gateway Drive. These access points would open to a trail that passed beneath sections of both Gateway Drive and the UPRR track. This would fill the "missing link" of the existing trail and provide bicyclists with a convenient, safe, and uninterrupted course to the area's numerous destinations. Currently, bicyclists must either cross this street and track or take a lengthy detour up to the 5-legged intersection at the confluence of Cleveland Avenue, Country Club Drive, and Gateway Drive. Travelers who opt for the later route must then follow Gateway Drive back to the existing river trail. Given the length and potential difficulties of this later route, the city believes that most users of active transportation modes instead choose the risks associated with crossing the UPRR tracks and Gateway Drive.

The proposed project will feature a Class I Bicycle Trail that will extend approximately 1,100 lf along the northern bank of the Fresno River. Additionally, the project will also include 512 lf of hand rails at the appropriate locations (e.g. elevation changes) and two concrete benches with trash receptacles along the path. This project will also include the necessary erosion control measures and a suitable rail road undercrossing for bicyclists. The City of Madera estimates this project will require a total of $717,376.30 and has already secured $568,000 in funding. Thus, the city submits this Bicycle Infrastructure Incentive Component application seeking the remaining $149,376.30 to fully realize the proposed Fresno Bicycle Trail project.

3. Explain and provide the travel activity data for both vehicle and bicycle travel at the proposed bicycle project site, if available.

- The City of Madera derived its traffic data from the County of Madera Traffic Monitoring Program 2014 Traffic Volume Report. Since the proposed project lies in an undeveloped area along the Fresno River, the city relied on data for Gateway Drive north of 4th Street to determine the vehicle activity for the project site. The northbound route registered an ADT of 6,845 motorized vehicles, while the southbound route experienced an ADT of 5,468. (*see MCTC Traffic Report 2014* http://www.maderactc.org/wp-content/uploads/2014/09/2014-MCTC-Traffic-Volume-Report-September-2014.pdf)

The bicycle travel activity for this site is unavailable, which is not unexpected given its undeveloped condition.

4. Explain how the bicycle infrastructure project will increase commuter bicycling and reduce the number of vehicle miles traveled.

The proposed project should increase commuter bicycling and reduce the number of VMT's by eliminating the existing gap in the Fresno River Trail, which serves as our community's primary east-west bicycling route. The completion of this "missing link" will increase connectivity and remove the twin barriers to mobility posed by Gateway Drive and the UPRR track. Removal of these barriers will provide residents with an uninterrupted non-motorized route to access the commercial, employment, recreational, and public services that lie to the west of this gap. The City of Madera submits this application in the sincere belief that completion of the proposed project will improve the ability of our residents to safely and conveniently reach these destinations.

5. Describe how the bicycle infrastructure project will eliminate any barriers or gaps in the bicycle transportation network.

The Madera Bicycle Trail Project will increase connectivity by eliminating the existing gap in the Fresno River Trail, which serves as the primary non-motorized route in our community. The completion of this "missing link" will remove the twin barriers to mobility posed by Gateway Drive and the UPRR track. Elimination of these barriers in the bicycle infrastructure network will provide residents with uninterrupted access to the various destinations that lie along this trail.

6. Explain if the bicycle facility project will conform to Caltrans design standards. The ARB recommends bike lanes should meet Caltrans' full width standard depending on the street facility.

The City of Madera has designed the proposed project to conform with all Caltrans design standards. (*see Preliminary Plans and Engineer's Estimate*)

7. Describe the various activity centers (especially schools) in close proximity to the bicycle project site and explain how the facility will improve the accessibility and utilization for bicycle travel.

Multiple activity centers lie in close proximity to the proposed bicycle project site or will become more accessible as a result of this project. For instance, the Rotary Park and Zero-Gravity Skate Park provide year-round outdoor recreational activities and are both located within ¼ mile of the project. The George Washington Elementary School and Thomas Jefferson Middle School serve the neighborhoods surrounding the project site and fall within a ½ mile radius. Further, the Madera County Fairgrounds hosts the popular Madera Swap Meet and it also lies with ½ mile. While outside these radii, the primary commercial district in our community lies near the western stretch of the Fresno River Trail. Construction of this missing link will allow bicyclists to safely and conveniently access these locations, particularly those on the western side of our community. (*see: Vicinity Map of the Madera Bicycle Trail Project*)

The facility will improve this trail's accessibility and utilization for bicycle travel by closing the existing gap at Gateway Drive and the UPRR tracks. Currently, this "missing link" forces bicyclists to choose between the hazards of crossing these obstacles or taking a lengthy detour to the busy intersection at Cleveland Avenue. Since this gap occurs near the center of the trail, we anticipate that the proposed project will encourage increased bicycle usage throughout our entire community rather than just in the immediate vicinity of the proposed project.

8. List other funding sources solicited by your organization that would contribute to the project's feasibility for completion.

The City of Madera has secured the following funding for the Fresno Bicycle Trail Project:

Bicycle Transportation Account (BTA):	$215,000
Congestion Mitigation & Air Quality (CMAQ):	$298,000
City of Madera (Local Funds):	$ 55,000
	$568,000

Our community has no pending applications for funding this project other than this REMOVE II application.

9. Discuss the one-year timeline for project completion in quarterly phases. Describe separately each phase of work to be performed and list tasks within each phase of work. (Estimates only. Not obligatory milestones. ck 12/18/14)

Activity	Quarter
Begin Environmental (PA&ED) Phase	Complete
Circulate Draft Environmental Document	Complete
Draft Project Report	Complete
End Environmental Phase (PA&ED Milestone)	Complete
Begin Design (PS&E) Phase	Complete
Begin Right of Way Phase	Complete
End Design Phase (Ready to List for Advertisement Milestone)	1st
End Right of Way Phase (Right of Way Certification Milestone)	1st
Begin Construction Phase (Contract Award Milestone)	2nd
End Construction Phase (Construction Acceptance Milestone)	4th
Begin Closeout Phase	4th
End Closeout Phase (Closeout Report)	4th

10. Provide detailed information on the structural design, required materials and cost breakdown for the bicycle infrastructure project (provide supportive documentation such as diagrams, plans and invoices).

(*See Preliminary Plans and Engineer's Estimate*)

BICYCLE INFRASTRUCTURE COMPONENT
REMOVE II PROGRAM
GUIDELINES, POLICIES, AND PROCEDURES

SECTION I INTRODUCTION

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is seeking applications for incentive funds for the development of a comprehensive bicycle transportation network. The expansion of Bicycle Infrastructure may provide air quality improvements as an alternative to motorized vehicular travel, according to the terms and conditions described in these guidelines.

The purpose of the Bicycle Infrastructure Incentive Component is to encourage the development and expansion of bicycle transportation facilities that promotes the use of bicycles as a safe and viable transportation alternative. Commuter bicycling has numerous benefits for the air quality by reducing motor vehicle emissions, fuel consumption and vehicle miles traveled in the San Joaquin Valley. As a result, this program will assist the SJVAPCD in attaining federal and state air quality standards.

The SJVAPCD is providing incentives to municipalities, government agencies, and public educational institutions interested in the funding of:

Transportation routes to support a commuter bicycling network include:

- Class I Bicycle Path Construction
- Class II Bicycle Lane Striping

Funds are available for eligible projects that meet specific program criteria on a first-come, first-serve basis until the program funds are exhausted. These guidelines describe the policies and procedures of the Bicycle Infrastructure Incentive Component of the REMOVE II Program. For additional copies of Guidelines, Policies and Procedures or applications only, please call:

(559) 230-5858

For further information please contact:

San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230–5800

www.valleyair.org

SECTION II BACKGROUND

The SJVAPCD is comprised of eight counties: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the San Joaquin Valley portion of Kern. The SJVAPCD does not meet the health based National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter ten (10) microns or less in diameter (PM10), and is required to implement strategies that will result in emissions reductions. Reactive organic gases (ROG) and nitrogen oxides (NOx) are precursors that react in sunlight to form ozone. NOx is also important in the formation of secondary PM10. Internal combustion engines are a significant source category that provides an opportunity to pursue substantial emission reductions.

The Bicycle Infrastructure Component provides incentives for the development of bicycle routes including Class I bicycle paths/trails and Class II bicycle lanes. These facilities provide the network for transportation, and the expansion of these bicycle routes are encouraged under this program component. Therefore, the purpose is to promote bicycle rider-ship as a form of alternative transportation by providing a safe, accessible and convenient bicycle transportation network through the development of these commuter bicycling facilities.

SECTION III ELIGIBLE PARTICIPANTS AND PROJECTS

Any municipality, government agency, or public educational institution may apply to receive an incentive under this program.

The incentive amount for bicycle projects will be determined based on California Air Resources Board (ARB) calculation methodology for cost effectiveness and emissions reductions. The maximum funding levels for qualifying bicycle infrastructure projects are established as follows:

Project Category	Maximum Incentives
Class I Bicycle Paths/Trails	Up to $150,000 per project
Class II Bicycle Lanes	Up to $100,000 per project

- Only one incentive is available per application, and in addition, applications will be restricted to one project category. Therefore, applicants shall not incorporate more than one project category for a combined grant application. However, separate applications may be submitted for additional project categories.
- Funds will be awarded on a first-come, first-serve basis to all applications that meet the criteria and requirements, while program funds are available. In the event that proposals are submitted on the same day, proposals will be funded in the order of the best overall cost-effectiveness until funds are exhausted.

- Additional funding sources are not a requirement for participation in the Bicycle Infrastructure Incentive Component. Other co-funding is encouraged, and may be useful to cover ineligible portions of the project cost, but is not a requirement. State of California incentives, state and federal tax credits may be available.

- Program funds should not be used for projects that would have proceeded without SJVAPCD assistance. Projects with large cost savings to the system operator would not be eligible, since they should be considered an investment by the agency/organization. Projects where all cost savings accrue to the public users of the system would be eligible.

- Applicants must provide information of all funding sources that have been solicited to fund a project or program. Established SJVAPCD Governing Board guidelines require that applicants shall not use SJVAPCD program funds to supplant other existing potential funding sources.

- SJVAPCD funds may not be utilized for administrative or operational costs. The program will not allow funds to be used to reimburse an applicant for the cost of preparing/submitting an application or for the administration of a project including indirect costs for research foundations and educational institutions.

The criteria for the **Bicycle Infrastructure Incentive Component** are as follows:

- The bicycle infrastructure project must promote bicycling to reduce vehicle miles traveled (VMT) and traffic congestion (idling time).

- The bicycle infrastructure project should eliminate barriers or gaps within the general (existing) bicycle transportation network of the community. Linkage to existing facilities is highly encouraged.

- The bicycle infrastructure project must contribute to the reduction of motor vehicle emissions and the promotion of clean air.

- The bicycle project must contribute to the development of a widespread alternative transportation network of paths, lanes and routes for commuter bicycling purposes.

- The bicycle project should improve accessibility for bicyclists to utilize the public transit bus system or other options for intermodal transportation purposes.

- The bicycle project must improve the general safety conditions for bicyclists and increase their visibility or awareness to motorists.

The bicycle project must contribute to the reduction of single occupancy vehicle (SOV) travel.

SECTION IV PROGRAM REQUIREMENTS

In addition to the above criteria, the following elements are set forth as program requirements:

- The bicycle infrastructure project shall be based within the geographic area of the SJVAPCD. (*See map in Section VIII*)

- The bicycle infrastructure project will directly support and augment commuter bicycle travel within the boundaries of the SJVAPCD.

- Simple annual reports will be required for two (2) years from the beginning of the bicycle facility operation. The reports shall include such information as commuter traffic data, notable changes to motor vehicle traffic counts, and details regarding any major safety or bike facility problems experienced. In addition, reporting of the facility maintenance, changes in the composition or number of activity centers proximal to the project site, and surrounding bicycle facilities will be required.

- Applicants must not use the possible elimination of an existing project or program to justify their proposal, or in the determination of emission reduction. If a project or program was, or is currently in existence, then no additional emission reductions will be granted. In addition, SJVAPCD funds may not be utilized for administrative or operational costs.

- Bicycle paths or trails should not be designed for recreational purposes. Rather, they must be designed for the primary accommodation to improve transportation access for bicyclists. Bicycle paths/trails should provide convenient links to other bicycle routes within the transportation network to be effective.

- Landscaping, seating accommodations (benches), and general cosmetic or aesthetic features will not be eligible for funding under this incentive program. This program is restricted to the physical materials and structural development of bicycle transportation routes specified in Section One for this grant program.

- Bicycle bridges and tunnels are highly discouraged and will be considered only on a case-by-case basis. Justification must be provided such as specific roadway or freeway conditions that require such structures for accessibility.

- Project sites should target areas where there is a high demand or necessity for bicycle facility development or improvement. These locations should exhibit high traffic flow and commuter travel to areas of frequent activity such as primary/secondary schools, shops, colleges, churches, libraries, downtown commerce, community parks and centers (activity centers).

- Potential project sites should include areas representing disadvantaged communities. Residents in these areas are largely limited economically and are

more likely to benefit and utilize alternative forms of transportation such as bicycling and walking.

- If the bicycle project is not completed within the minimum one (1) year term set forth in this program, the funds may be awarded to other bicycle infrastructure projects by the SJVAPCD.

- The SJVAPCD will not fund any bicycle projects implemented prior to the application process. The bicycle infrastructure plan must be approved by the SJVAPCD prior to construction and procurement of materials.

- Applicant agrees that any emission reductions associated with this program will be claimed and retired by the SJVAPCD in the interest of air quality improvement for the residents of the San Joaquin Valley. Applying agency or organization waives, for all time, the right to claim emission reduction credits which may accrue at any time as a result of this program, and agrees not to apply to the SJVAPCD or any other agency for such credits.

- Evidence of applicable insurance coverage must be provided upon request.

- ARB Methodology will be utilized for calculating the cost effectiveness and emissions reduction values for each project application under review. The calculations will have a direct impact on determining the incentive amount for each approved project under the Bicycle Program. Applicants may evaluate their bicycle project proposal using Cost Effectiveness Analysis Tools from the ARB web site at www.arb.ca.gov/planning/tsaq/eval/eval.htm (2003 Edition).

Pre-monitoring and post-monitoring inspections will be required of proposed project sites, equipment and materials. Monitoring data will be required in the form of annual reports to assess the efficacy of the project.

Criteria and requirements may be reviewed, as new information becomes available, and can be revised at the discretion of the Executive Director/Air Pollution Control Officer as needed.

The SJVAPCD reserves the right to deny any applicant an incentive in which the SJVAPCD concludes does not meet the general criteria or requirements described in the general guidelines for this grant program. Determination of funding is at the full discretion of the SJVAPCD.

SECTION V APPLICATION/ PROGRAM PROCESS

The application and program participation process is as follows:

1. Develop a bicycle proposal that qualifies under the list of bicycle infrastructure projects to support a commuter bicycle network for this incentive program.

2. You may contact the SJVAPCD to ensure a selected bicycle project is eligible for participation in the program.

3. Complete and provide all the necessary information on the application forms. In addition, any required information or documentation to support the merit of the bicycle infrastructure project to the SJVAPCD (proof of insurance, project maps, project design lay-out, blue-prints, reports, models or displays, etc.).

4. Once the proposed bicycle infrastructure project is formulated, apply to SJVAPCD to obtain authorization to receive an incentive. After the application is approved, the SJVAPCD will set aside funding for your project provided the bicycle infrastructure project meets all eligibility criteria set forth in this document.

5. Sign a simple contract with the SJVAPCD agreeing to facilitate the bicycle project in the San Joaquin Valley, to have appropriate insurance coverage, to provide annual reports on bicycle facility or linkage operation, and other standard provisions.

6. Construct the bicycle path/lane or install the bicycle facility equipment according to the approved project design.

7. Submit copy of invoices, list of the project costs breakdown and the SJVAPCD Request For Payment form, and other required information to the SJVAPCD.

8. SJVAPCD reviews information and processes payment.

9. Applicant fills out a SJVAPCD report form annually for two years.

Timeframe Goals:

The SJVAPCD will make every effort to process applications quickly. If numerous applications are received on the first day, it may not be possible to meet the processing goals listed as follows:

1. The application is reviewed by SJVAPCD staff for completeness within thirty (30) working days of receipt of the application. If the application is incomplete, it will be returned to the applicant with a description of areas in which the application is

inadequate. Any revised application that is not returned by the applicant with the requested information within fourteen (14) calendar days is rendered null and void, and resubmittal is required.

2. An evaluation period of approximately thirty (30) working days will follow for staff to assess the emission reductions, cost effectiveness, and validate the project proposal and application meets all the criteria established for the program component. In addition, pre-inspection and post-inspection of the proposed project site may be required.

3. Upon approval of the application, the SJVAPCD will prepare a standard contract for signature by the applicant and the SJVAPCD. The contract process may take a minimum of eight (8) weeks to complete.

4. Applicant submits equipment invoices, receipts, and SJVAPCD Claim(s) for Payment form. The SJVAPCD will issue payment within thirty (30) days after verification that the bicycle infrastructure project has been placed into service.

5. Applicant submits annual reports that contain any changes to vehicle miles traveled, bike facility usage, and describes any major safety or maintenance problems experienced. The SJVAPCD maintains the right to monitor the project periodically to ensure that the bicycle facilities are kept in service.

The ARB states that emissions reductions result from the decrease in emissions associated with auto trips replaced by bicycle trips for commute or other non-recreational purposes. Therefore, the emphasis for all bicycle infrastructure projects should be for the promotion and accommodation of bicycling as a viable alternative transportation method to driving. Benefits include the substantial reduction of motor vehicle trips and emissions in the San Joaquin Valley. Improving the safety, accessibility and convenience for bicycle travel attracts more individuals to consider this transportation alternative as a practical mode for daily commutes.

SECTION VI INFORMATION NEEDED FOR APPLICATION

The applicant must provide detailed information about each bicycle infrastructure project. Additional information may be requested during the review process if needed.

Applicant Information

- Organization name, address, contact name, person with contract signing authority, phone, fax and email.

- The geographic area where the bicycle facility or linkages project will be operated. The bicycle infrastructure project must directly augment bicycle commuter travel within the SJVAPCD.

Required Information

- The amount of funding requested for this grant program.
- The detailed project costs and itemized breakdown.
- Location and description of the proposed project site for bicycle paths and lanes.
- The number of operating days per year for the bicycle facility or transportation network site.
- The average length of the bicycle trips (miles per trip in one direction) specific to this bicycle project site.
- The annual Average Daily Traffic (ADT) volume on the roadway parallel to the bicycle project (trips per day and is usually less than 30,000).
- The project class (1 or 2) and the project facility specifications.
- List the various types of activity centers in the vicinity of the bicycle project.
- Facility and equipment cost components list.
- The length or distance (linear miles or feet) of the project for bicycle path or lane.
- The estimated number of bicycle traffic per day of the project site.
- Maps of the project, design layout, and/or visual displays.

Incentive Amounts

Incentive amounts for bicycle facility and linkage projects will be based on maximum project funding as follows:

Class I Bicycle Path maximum funding: $150,000.
Class II Bicycle Lane maximum funding: $100,000.

The determination of incentive funds for bicycle infrastructure projects will be affected by emission reduction and cost effectiveness calculations based on ARB Methodology.

Funds will be awarded on a first-come, first-serve basis to all applications that meet the criteria and requirements, while program funds are available. In the event that the proposals are submitted on the same day, proposals will be funded in the order of the best over-all cost effectiveness until funds are exhausted.

Cost Effectiveness and Emission Reductions:

ARB methodology will be utilized for calculating the cost effectiveness and emissions reduction for each project application. These calculations will have a direct impact on the incentive determination for each approved project under this bicycle program. The maximum acceptable cost effectiveness value for any proposed bicycle transportation or linkage project is $20/lb (ROG, NOx and PM10). However, the SJVAPCD encourages all applicants to achieve a cost effectiveness value less than $10/lb to increase their funding potential. Historically, these projects have achieved an average cost effectiveness below $6/lb of emission reduction. Therefore, the project design to minimize the cost per pound of pollutants and the project efficacy to achieve emissions reduction is highly encouraged. Methods to find the cost effectiveness of funding air quality projects and utilization of the Cost Effectiveness Analysis Tools is available at the ARB website: www.arb.ca.gov/planning/tsag/eval/eval.htm. The ARB requires the SJVAPCD to utilize the most current Emission Factor Tables for the calculation methodology. The SJVAPCD will utilize the ARB 2004 Emission Factor Tables for project calculations. Please refer to the 2004 Emission Factor Tables available at the SJVAPCD web site.

Please note that the SJVAPCD does not fund all projects identified in the calculation methodologies. Contact the ARB Transportation Strategies Group at (916) 445 – 0098 if you have any questions regarding these methodologies.

Project Monitoring:

- Pre-monitoring and post-monitoring inspections may be required of proposed project sites, equipment and materials. Monitoring data will be required in the form of annual reports to assess the efficacy of the project. .

SECTION VII CONTRACT REQUIREMENTS

Those applicants that receive funding must enter into explicit contracts with the SJVAPCD setting forth specific performance criteria to ensure compliance with statute and audit requirements.

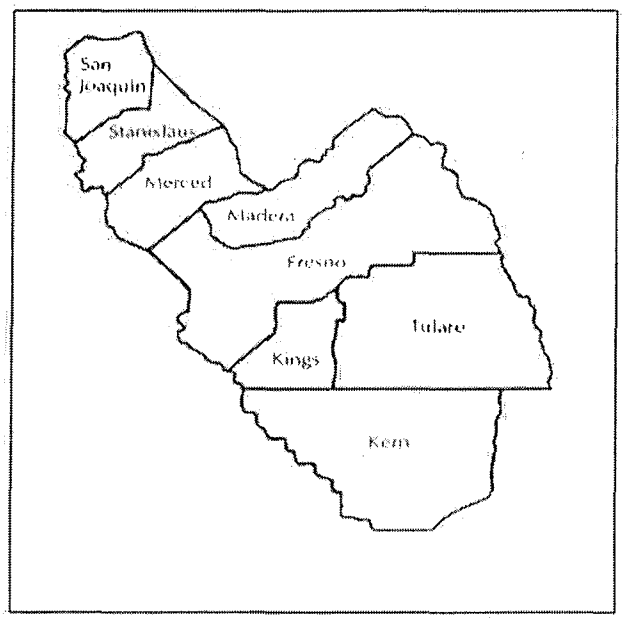
Contract preparation will begin immediately upon SJVAPCD approval of an application. The bicycle infrastructure project must be put into service within one (1) year from the date of contract signature. All projects will be reimbursed only after the bicycle infrastructure is operational, placed into service and verified by the SJVAPCD staff.

Prior to receiving any funds, the grantee must provide the SJVAPCD with the following documents:

1. **SJVAPCD Claim(s) for Payment** with copies of itemized invoices and receipts.
2. **Verification of appropriate signing authority** - The signing authority must be the person authorized in the contract as the person who can act on all fiscal matters on behalf of the funded agency or entity. This may be accomplished by resolution, or the like.
3. **Verification of all insurance requirements identified in the contract** - If self-insured, a letter from a risk manager or the like will be acceptable

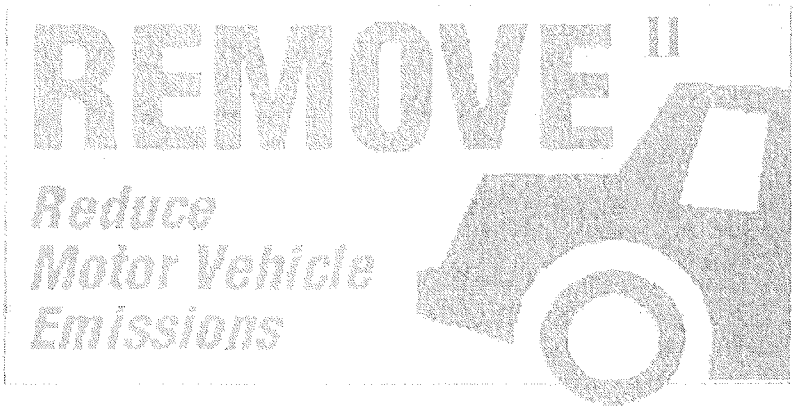
The contract will require the applicant to perform adequate record keeping for the SJVAPCD to verify the appropriate use of government funds. It will also include reporting requirements by the applicant. Contract monitoring will be performed by SJVAPCD staff on a periodic basis. Additionally, the SJVAPCD reserves the right to conduct a fiscal audit to ensure appropriate expenditure of funds.

SECTION VIII MAP OF THE SJVAPCD



San Joaquin Valley
Air Pollution
Control District

REMOVE II Program
Project Guidance Document
Bicycle Infrastructure Component



Approximately one year after grant funds have been issued, you may receive a 1099.

For information regarding the tax implications on grant funds, please consult your tax advisor. The SJVAPCD does not provide tax advice.

EXHIBIT C

REMOVE II Program
Project Guidance

Introduction

The REMOVE (***RE***duce ***MO***tor ***V***ehicle ***E***missions) II Program is an innovative program that allocates fees received from motor vehicle registrations for local projects that reduce emissions from motor vehicles. The San Joaquin Valley Air Pollution Control District (SJVAPCD) Board approved the changes to implement the REMOVE II Program. The SJVAPCD makes a final funding determination based upon approved program guidelines and makes funds available to Participants.

This guidance document is designed to provide REMOVE II Program Participants with the required instructions and guidance for the successful completion of their grant.

Purpose

Upon execution of an agreement with the SJVAPCD, all Participants will receive this guidance document with a copy of a signed agreement. The Participant will have one year from the agreement execution date to complete the grant. This document has two components: Project Administration and Project Compliance. The project administration section describes the functions of grant documentation and reimbursement procedures. The project compliance section describes the functions of monitoring and grant close-out.

SJVAPCD staff is available to answer questions and to provide assistance to Participants regarding these procedures. Please read the entire document and enclosed agreement in order to fully understand the requirements. Any and all questions should be directed to:

Charlene Cano
SJVAPCD
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Phone (559) 230-5800
FAX (559) 230-6111
E-mail: charlene.cano@valleyair.org

PROJECT ADMINISTRATION

GRANT DOCUMENTATION

The Participant shall retain documents for three (3) years after the final payment or termination of the agreement Pertinent documents will include copies of invoices, checks, final reports and any other documents related to the verification or cost of the project. In addition, the following information must be provided prior to receiving any reimbursements from the SJVAPCD:

PROOF OF INSURANCE

The agreement (Section 11) specifies the level and amount of insurance the SJVAPCD will require. All insurance requirements must be met before any reimbursements will be made by the SJVAPCD. Please submit an updated copy of your certificate of insurance along with any claims for payment.

REIMBURSEMENT

The Participant shall be reimbursed as per agreement, after receipt and verification of a properly supported financial claim and inspection by SJVAPCD staff. Any compensation that is not expended by the Participant pursuant to the terms and conditions of the agreement shall revert to the SJVAPCD.

PAYMENT

The SJVAPCD will not provide advances or progress payments to Participants. Participants must submit request for payment on the SJVAPCD *Claim for Payment* form only. Included in this guidance document is the SJVAPCD *Claim for Payment* form for your use. All claims must be signed and dated by the appropriate signing authority or they will be returned to the applicant. All claims for payment must adhere to the specified line item budgets identified in your agreement. Concurrent with the submission of any claim for payment, Participant shall provide invoices, checks, receipts and the like to indicate that work has been completed.

PROJECT COMPLIANCE

SITE VISIT

Depending on the type of grant and the necessity, Participants may be scheduled for a site visit by SJVAPCD staff. The purpose of the visit is to ensure that projects are complete and operational. The ultimate goal is to share project successes with other agencies throughout the SJVAPCD and the state. SJVAPCD staff may request to take photographs and videotapes of projects.

EXTENSIONS

All activities must be completed within the time specified in their agreement. Agreement extensions will not be granted without reasonable justification and written approval from the SJVAPCD.

GRANT CLOSEOUT

Participants shall, per agreement (Section 3c), submit all final claims and reports within 60 sixty days following the final month of activities for which payment is claimed. No action will be taken on claims submitted beyond the 60-day closeout period without reasonable justification and written approval from the SJVAPCD.

ANNUAL REPORT

Annual reports are used to verify that Participants are on a timely schedule, and can also to identify any potential problems or delays. Included in this guidance is an annual report form for your use. Each Participant will have executed an agreement on a different date; therefore, Participants must indicate their agreement execution date and also indicate which annual report is being submitted.

AUDIT

The SJVAPCD may audit the Participant, which should make available all of its records and data with respect to the project. As per agreement (Section 12) Participant shall be subject to an audit by the SJVAPCD to determine if the revenues received by Participant utilized as provided by law.

Reimbursement Checklist

- ☐ Completed and signed SJVAPCD Claim for Payment form.
- ☐ Submitted all invoices, cancelled checks, receipts, etc.
- ☐ Submitted proof of insurance.
- ☐ Requested a site visit for post-project inspection.

San Joaquin Valley
Air Pollution Control
District

REMOVE II Program Annual Report

Each applicant must fill out this form each year after reimbursement.

YEAR: **YEAR 1 [ ]** **YEAR 2 [ ]** **Date:** _____

PROJECT #: _____

AGENCY: _____

CONTACT: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE: _____

Agreement Date: _____

Grant Information

1. **Total grant amount:** **$** _____

2. **Discuss any changes in the activity centers that influences the bicycle travel activity:**

_____

_____

_____

_____

3. **Describe maintenance of the facility to sustain the safety for frequent bicycle travel:**

_____

_____

_____

_____

4. **Describe facility's accessibility and effectiveness as a bicycle transportation route:**

_____

_____

_____

_____

San Joaquin Valley Air Pollution Control District

REMOVE II - Claim for Payment

Project Number:

Payee :

Address :

Please check one of the following :		
	☐ Individual/Sole Proprietor	☐ Trust/Estate
	☐ C Corporation	☐ Government
	☐ S Corporation	☐ Limited Liability Company (C Corporation, S Corporation, Partnership)
	☐ Partnership	

Federal Tax I.D. # :

Social Security # :

Telephone # :

Fax # :

Date	Description	Amount Paid	Grant Amount
		Total Claim	

Signature of Program Applicant Date

For District Use Only

For District Use Only

SJVUAPCD Approval Date

Administrative Services Use Only

Audited By Date

Reviewed By Date

Object	Fund	Year	Dept	Sub-Dept	Type	Program	Phase	Entity	Amount	1099 Code
		1	90	92	-					
					-					
					-					
Stipend					-					
Expense					-					
Table					-					

Vendor Number : Total $

San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

January 8, 2015

Gina Daniels
City of Madera
205 W. 4th Street
Madera, CA 93637

RE: REMOVE II Program Application for **Project # C-34756-A: Construction of a Class I bicycle trail along the northern bank of the Fresno River with undercrossings at Gateway Drive and the UPRR track with access points to the existing Fresno River Bicycle Trail,**

Dear Gina Daniels:

Congratulations, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has awarded **$54,866** of REMOVE (***RE***duce ***MO***tor ***V***ehicle ***E***missions) II Program funds to **City of Madera.** Enclosed is a draft contract from the **Bicycle Infrastructure** component of the REMOVE II Program. Please verify that the information included is accurate, sign, and return the contract by **January 22, 2015**, in order to expedite its completion.

Please do not date or place any stamps on the contract. Contracts will not be officially executed until signatures from all parties involved (Applicants and SJVAPCD) have been obtained. The contract will be dated when the final signature is received.

Please return the contract to the SJVAPCD Central Region Office only.

Reimbursement procedures and a copy of the contract will be provided to all applicants after the contract has been fully signed and executed.

Please note: Once a contract is executed it becomes public record and may be accessed by anyone submitting an official request. Engine dealers, representatives from product manufacturers, lending institutions, and the media have requested copies of executed contracts from SJVAPCD incentive programs. The SJVAPCD does not endorse anyone who contacts you regarding product sales or financing opportunities.

If you have any questions, please contact me at (559) 230-5800.

Sincerely,

REMOVE II Staff
San Joaquin Valley Air District

Enclosure

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

Return to Agenda

REPORT TO CITY COUNCIL

Approved by:

Department Director

City Administrator

Council Meeting of: January 21, 2015

Agenda Number: B-10

SUBJECT: **Consideration of a Resolution Accepting a San Joaquin Valley Air Pollution Control District (District) Grant from the Alternative Fuel/Hybrid Vehicle Rebate Component of the Reduce Motor Vehicle Emissions II Program and Ratifying and Approving the Standard Agreement with the District**

RECOMMENDATION: Staff recommends adoption of the resolution accepting a San Joaquin Valley Air Pollution Control District Grant from the Alt Fuel/Hybrid Vehicle Rebate Component of the Reduce Motor Vehicle Emissions II Program.

DISCUSSION: On November 20, 2014, staff received confirmation from the San Joaquin Valley Air Pollution Control District (District) that the City would receive a $15,000 grant from the Alt Fuel/Hybrid Vehicle Rebate Component of the Reduce Motor Vehicle Emissions II (REMOVE II) Program. The grant will be used to provide Natural Gas Vehicle Maintenance and Diagnostic Training by the National Gas Vehicle Institute (NGVI) for the fleet staff. This training will educate our fleet technicians to understand the operation, maintenance, diagnosis and repair of light and medium duty natural gas vehicles. Given our existing NGV fleet and the potential for its continued growth, Staff urges Council to accept the grant.

FINANCIAL IMPACT: Acceptance of the grant will not impact the General Fund because grant funds will completely provide for all related expenses.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN: Approval of this agreement is not specifically addressed in the vision 2025 plan, but falls within the parameters to provide for A Well Planned City.

RESOLUTION NO. _____

RESOLUTION OF THE COUNCIL OF THE CITY OF MADERA, CALIFORNIA, ACCEPTING A SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GRANT FROM THE ALTERNATIVE FUEL/HYBRID VEHICLE REBATE COMPONENT OF THE REDUCE MOTOR VEHICLE EMISSIONS II PROGRAM AND RATIFYING AND APPROVING THE STANDARD AGREEMENT WITH THE DISTRICT

WHEREAS, the San Joaquin Valley Air Pollution Control District (District) offers a grant from the Alt Fuel/Hybrid Vehicle Rebate Component of the Reduce Motor Vehicle Emissions II Program; and

WHEREAS, the Fleet Department believes that this training would be beneficial to their staff; and

WHEREAS, the City has successfully secured such a grant from the District;

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds orders and resolves as follows:

1. The above recitals are true and correct.

2. The Standard Agreement with the District for the grant, a copy of which is on file in the office of the City Clerk, is hereby ratified and approved.

3. The City Administrator is hereby authorized to execute the Standard Agreement.

4. The resolution is effective immediately upon adoption.

5. A signed copy of this resolution shall be placed on file in the office of the Financial Services Director.

****

Agreement No. **C-33033-A**

REMOVE II ALT FUEL/HYBRID VEHICLE TRAINING AGREEMENT

This Agreement is made and entered into this 17th day of December, 2014, by and between the SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT, a unified air pollution control district formed pursuant to California Health and Safety Code section 40150 et seq. (District), and **City of Madera** (Participant).

WITNESSETH:

WHEREAS, the California Clean Air Act (CCAA) requires local air pollution control districts to reduce emissions from motor vehicles;

WHEREAS, AB 2766, AB 923, SB 709, and AB 2522 authorize districts to impose fees upon certain registered motor vehicles within the district, and the governing board of the District has imposed said fees;

WHEREAS, said legislation requires District to use said funds for activities related to reduce air pollution from motor vehicles and for related planning, monitoring, enforcement, and technical studies necessary for the implementation of the California Clean Air Act of 1988; and

WHEREAS, the District has developed other funding mechanisms in order to provide grant monies for its incentive programs; and

WHEREAS, on April 22, 2005, District began accepting applications to approve for funding those projects deemed to be most suitable for vehicle license fee and other funding; and

WHEREAS, Participant has proposed a project that meets the eligibility criteria of REMOVE II that has been approved by District for funding; and

WHEREAS, Participant represents that it is willing and able to complete the proposed project set forth herein within the timeframe specified in this Agreement.

NOW, THEREFORE, based on their mutual promises, covenants, and conditions, the parties hereby agree as follows:

1. PROJECT

Participant proposes to complete its project, **Natural Gas Vehicle Maintenance and Diagnostics Training by the National Gas Vehicle Institute for approximately ten (10) technicians**, as set forth in the Participant's application; attached hereto and incorporated herein as **Exhibit A**. Participant agrees to furnish all labor, materials, equipment, licenses, permits, fees, and other incidentals necessary to perform and complete, per schedule, in a professional manner, the project described herein. Participant represents that Participant has the expertise, match funding, and resources necessary to adequately perform and complete the project specified in Exhibit A and in accordance to this Agreement and the exhibits incorporated herein.

In the event of any conflict between or among the terms and conditions of this Agreement, the exhibits incorporated herein, and the documents referred to and incorporated herein, such conflict shall be resolved by giving precedence in the following order of priority:

1. To the text of this Agreement
2. Exhibit A of this Agreement
3. Exhibit B of this Agreement
4. Exhibit C of this Agreement

2. PERIOD OF PERFORMANCE/TIMETABLE

Participant shall commence performance of work and produce all work products in accordance with the work schedule, deadlines for performance. Participant shall complete the project in its entirety and in accordance with Exhibit A by the timeframe specified in paragraph 24 of this Agreement, unless this Agreement is terminated sooner as provided for elsewhere in this Agreement. Participant is responsible for and must comply with meeting and obtaining all local, state, and/or federal permitting, licensing, and/or certifying requirements necessary to complete the project.

3. COMPENSATION

The total obligation of District under this Agreement shall not exceed **Fifteen Thousand dollars ($15,000)** and supersedes any requested funding amount by the Participant identified in Exhibit A.

Participant shall obtain through other sources sufficient additional monies to fund the total cost of the project as outlined in Exhibit A. Satisfactory written evidence of such funding commitments shall be provided to District prior to the release by District of any funds under this Agreement. In the event funding from other sources for the total cost of the project as outlined in Exhibit A is not received by Participant, District reserves the right to terminate or re-negotiate this Agreement. In that event, if requested by District, Participant shall return any District funds advanced.

A. Payments: Advance payments and progress payments shall not be permitted. Payments will be permitted only at which time equivalent services and/or project milestones have been satisfactorily completed, and only for eligible costs allowed as specified in REMOVE II Program Guidelines for the Alt Fuel/Hybrid Vehicle Training Component; attached hereto and incorporated herein as **Exhibit B**. District shall reimburse Participant after receipt and verification of a properly supported financial claim and inspection by District staff, which includes the following:

1) REMOVE II Program – Alt Fuel/Hybrid Vehicle Training Component Project Guidance Document and Claim for Payment Form, attached hereto an incorporated herein as **Exhibit C**: The Form must be filled in completely and be signed by the contract signing authority.

2) Supporting Documentation that supports completion of work and/or milestone: Supporting documentation may include, but is not limited to, copies of invoices, checks, and receipts for work completed that is specific to the project in this Agreement as specified in Exhibit A. Other forms of supporting documentation may be accepted as deemed appropriate by the District.

Claims and all supporting documentation shall be submitted to San Joaquin Valley Unified Air Pollution Control District at the following address:

San Joaquin Valley Air Pollution Control District

Attention: Incentives Program

1990 East Gettysburg Avenue

Fresno, California 93726-0244

District will issue payment to Participant upon receipt of proper documentation and verification that Participant has satisfactorily completed the work for which compensation is sought.

The amount to be paid to Participant under this Agreement is limited to eligible costs identified in Exhibit A and deemed eligible in Exhibit B and includes all sales and use taxes incurred pursuant to this Agreement, if any, including any such taxes due on equipment purchased by Participant. Participant shall not receive additional compensation for reimbursement of such taxes and shall not decrease work to compensate therefore. Any other expenses incurred by Participant for this project which exceed the eligible costs identified in Exhibit A and deemed eligible in Exhibit B, or are deemed ineligible in Exhibit B, are the responsibility of Participant. Participant shall make payment of such expenses as necessary to ensure the completion of the project in accordance to Exhibit A by the timeframe specified in paragraph 24 of this Agreement.

Concurrently with the submission of any claim for payment, Participant shall certify (through copies of invoices issued, checks, receipts, and the like) that complete payment has been made to any and all subcontractor(s) as provided.

B. Surplus Funds: Any compensation, which is not expended by Participant pursuant to the terms and conditions of this Agreement by the project completion date, shall automatically revert to District. Only expenditures incurred by Participant in the direct performance of this Agreement will be reimbursed by District. Allowable expenditures under this Agreement are specifically established and included

in Exhibit A and Exhibit B.

C. Closeout Period: Participant shall submit all final claims within sixty (60) days following the final month of activities for which payment is claimed. No action will be taken by District on claims submitted beyond the 60-day closeout period without reasonable justification and written approval from District.

4. REPORTING REQUIREMENTS

Participant shall perform the following reporting requirements, as applicable and as specified in Exhibit C.

A. Quarterly Reports (for Public Transportation – Transit and Rail Passenger Subsidy Components only): If quarterly reports are identified and required in Exhibit C, Participant shall submit regular reports on a quarterly basis according to the project compliance specified in Exhibit C. The report shall detail the work performed during the current reporting period; problems identified, solved, and/or unresolved; and include any other pertinent information requested on the Quarterly Report in Exhibit C. Quarterly reports shall be required prior, or concurrent, with submission of any claim for payment.

B. Summary Report: If a summary report is identified and required in Exhibit C, upon completion of the project, Participant shall submit a summary report which shall detail the final project product and any other pertinent information requested on the Summary Report Form in Exhibit C. Summary reports shall be required prior, or concurrent, with submission of any claim for payment.

C. Annual Reports: If annual reports are identified and required in Exhibit C, Participant is required to complete and submit annual reports to District for two (2) subsequent years, commencing approximately one year following the completion of the project. The annual report shall detail the project's viability and include any other pertinent information requested on the Annual Report Form in Exhibit C.

5. NON-ALLOCATION OF FUNDS

The terms of this Agreement are contingent on the approval and receipt of funds by the appropriating government agency. Should sufficient funds not be allocated, District shall promptly notify Participant and Participant shall not be obligated to continue providing services until sufficient funds have been obtained by District. The scope of the project may be modified or this Agreement terminated at any time by either party after District provides Participant notice of insufficient funds. Following such notice, either party may terminate this Agreement after first providing the other party thirty (30) days' prior written notice of such termination.

6. INDEPENDENT CONTRACTOR

In performance of the work, duties, and obligations assumed by Participant under this Agreement, it is mutually understood and agreed that Participant, including any and all of Participant's officers, agents, and employees, will at all times be acting and performing as an independent contractor and shall act in an independent capacity and not as an officer, agent, servant, employee, joint venture, partner, or associate of District. Furthermore, District shall have no right to control or supervise or direct the manner or method by which Participant shall perform its work and function. However, District shall retain the right to administer this Agreement so as to verify that Participant is performing its obligations in accordance with the terms and conditions thereof. Participant and District shall comply with all applicable provisions of law and the rules and regulations, if any, of governmental authorities having jurisdiction over matters the subject thereof.

Because of its status as an independent contractor, Participant shall have absolutely no right to employment rights and benefits available to District employees. Participant shall be solely liable and responsible for providing to, or on behalf of, itself all legally required employee benefits. In addition, Participant shall be solely responsible and save District harmless from all matters relating to payment of Participant's employees, including compliance with social security, withholding, and all other regulations governing such matters. It is acknowledged that during the term of

this Agreement, Participant may be providing services to others unrelated to District or to this Agreement.

7. TERMINATION

A. Breach of Agreement: District may immediately suspend or terminate this Agreement, in whole or in part, where in the determination of District there is:

1. An illegal or improper use of funds;
2. A failure to comply with any term of this Agreement;
3. A substantially incorrect or incomplete report submitted to District; or
4. Improperly performed services and/or improperly completed project.

In no event shall any payment by District constitute a waiver by District of any breach of this Agreement or any default, which may then exist on the part of Participant. Neither shall such payment impair or prejudice any remedy available to District with respect to the breach or default. District shall have the right to demand of Participant the repayment to District of any and all funds disbursed to Participant under this Agreement which in the judgment of District were not expended in accordance with the terms of this Agreement. Participant shall promptly refund any such funds upon demand.

In addition to immediate suspension or termination, District may impose any other remedies available at law, in equity, or otherwise specified in this Agreement.

B. Without Cause: Either party may terminate this Agreement at any time upon giving the other party at least thirty (30) days' advance written notice of intention to terminate. District shall have the right to demand the repayment of a portion of or all funds paid to Participant should termination of the Agreement result in an incomplete project that does not satisfactorily meet the criteria in which funding was awarded to the project. District has the sole discretion to review and assess the project completeness in relation to the funding criteria utilized to evaluate the project

and make such determinations for repayment and/or payment. In such cases, Participant may, subject to paragraph 3, still be eligible to be paid the reasonable value of services satisfactorily rendered and actual, reasonable costs incurred up to the time of the termination, as determined by District. Upon such termination, all the work produced by Participant shall be promptly delivered to District.

8. MODIFICATION

Any matters of this Agreement may be modified from time to time by the written consent of all the parties without in any way affecting the remainder. With the exception of modifications or amendments which do not affect costs or payments under this Agreement, Participant understands that District Governing Board approval may be required.

9. NON-ASSIGNMENT

Neither party shall assign, transfer, or subcontract this Agreement, nor their rights or duties under this Agreement, without the prior express, written consent of the other party.

10. INDEMNIFICATION

Participant agrees to indemnify, save, hold harmless, and at District's request, defend District, its boards, committees, representatives, officers, agents, and employees from and against any and all costs and expenses (including reasonable attorneys' fees and litigation costs), damages, liabilities, claims, and losses (whether in contract, tort, or strict liability, including, but not limited to, personal injury, death, and property damage) which arise or are alleged to arise directly or indirectly from any act or omission of Participant, its officers, agents, subcontractors, or employees in the performance of this Agreement or out of the operations conducted by the Participant.

11. INSURANCE

A. Without limiting District's right to obtain indemnification from Participant or any third parties, Participant, at its sole expense, shall maintain in full force and effect the following insurance policies throughout the term of this

Agreement:

1) Commercial general liability insurance with minimum limits of coverage in the amount of Five Million Dollars ($5,000,000) per occurrence;

2) Commercial automobile liability insurance which covers bodily injury and property damage with a combined single limit with minimum limits of coverage in the amount of Five Million Dollars ($5,000,000) per occurrence.

3) Workers' compensation insurance in accordance with California law.

B. Except for workers' compensation insurance, such insurance policies shall name District, its officers, agents, and employees, individually and collectively, as additional insureds. Such coverage for additional insured shall apply as primary insurance and any other insurance, or self-insurance, maintained by District, its officers, agents, and employees, shall be excess only and not contributing with insurance provided under Participant's policies herein. This insurance shall not be canceled or changed without a minimum of thirty (30) days' advance, written notice given to District.

C. Prior to the commencement of performing its obligations under this Agreement, Participant shall provide certifications of insurance and additional insured endorsements on the foregoing policy, as required herein, to District, stating that such insurance coverages have been obtained and are in full force; that District, its officers, agents, and employees will not be responsible for any premiums on the policy. This insurance shall not be canceled or changed without a minimum of thirty (30) days' advance, written notice given to District.

D. In the event Participant fails to keep in effect at all times insurance coverage as herein provide, District may, in addition to other remedies it may have, suspend or terminate this Agreement upon the occurrence of such event.

E. If Participant is a government entity, then it may self-insure such of those risks identified in paragraph11.A.1 of this Agreement, provided, however,

that:

1) Such self-insurance plans shall be reasonably satisfactory to District; and

2) All those provisions identified in subparagraph 11.C of this Agreement concerning the relationship of Participant's primary and District's excess insurance to each other, the requirement of Participant delivering a certificate of insurance and additional insured endorsement or other suitable evidence to District, and the cancellation/change of insurance requirements shall apply to such self-insurance plans.

12. AUDITS AND INSPECTIONS

Participant shall at any time during regular business hours, and as often as District may deem necessary, make available to District for examination all of its records and data with respect to the matters covered in this Agreement. Participant shall, upon request by District, permit District to audit and inspect all such records and data necessary to ensure Participant's compliance with the terms of this Agreement.

District shall provide Participant notice of any negative audit findings and allow at least thirty (30) days to respond to and cure any such issues. If, after the audit cure period expires, District makes a determination that funds provided to Participant pursuant to this Agreement were not spent in conformance with this Agreement or any other applicable provisions of law, District shall present any ongoing issues to Participant's representative and the parties shall personally discuss measures to resolve the situation. Following the meeting between Participant and District, if based on District's reasonable determination that the problems have not been resolved, Participant agrees to immediately reimburse District all funds determined to have been expended not in conformance with said provisions.

Participant shall retain all records and data for activities performed under this Agreement for at least three (3) years from the date of final payment under this Agreement or until all state and federal audits are completed for that fiscal year,

whichever is later.

If this Agreement exceeds Ten Thousand Dollars ($10,000), Participant shall be subject to the examination and audit of the auditor general for a period of three (3) years after final payment under contract (California Government Code § 8546.7).

13. NOTICES

The persons and their addresses having authority to give and receive notices under this Agreement are as follows:

PARTICIPANT	DISTRICT
David Tooley	**Seyed Sadredin**
City Administrator	**Executive Director/APCO**
City of Madera	**San Joaquin Valley Unified APCD**
205 W. Fourth St.	**1990 East Gettysburg Avenue**
Madera, CA 93637	**Fresno, CA 93726**

Any and all notices between District and Participant provided for or permitted under this Agreement or by law shall be in writing and shall be deemed duly served when personally delivered to one of the parties, or in lieu of such personal service, when deposited in the United States mail, postage prepared, addressed to such party.

14. POLITICAL ACTIVITY PROHIBITED

None of the funds, materials, property, or services provided under this Agreement shall be used for any political activity, or to further the election or defeat of any candidate for public office contrary to federal or state laws, statutes, regulations, rules, or guidelines.

15. LOBBYING PROHIBITED

None of the funds provided under this Agreement shall be used for publicity, lobbying, or propaganda purposes designed to support or defeat legislation before the Congress of the United States of America or the Legislature of the State of

California.

16. CONFLICT OF INTEREST

No officer, employee, or agent of District who exercises any function or responsibility for planning and carrying out the services provided under this Agreement shall have any direct or indirect personal financial interest in this Agreement. Participant shall comply with all federal and state conflict of interest laws, statutes, and regulations, which shall be applicable to all parties and beneficiaries under this Agreement and any officer, agent, or employee of District.

17. GOVERNING LAW

This Agreement shall be governed in all respects by the laws of the State of California. Venue for any action arising out of this Agreement shall only be in Fresno County, California.

18. COMPLIANCE WITH LAWS

Participant shall comply will all federal and state laws, statutes, regulations, rules, and guidelines which apply to its performance under this Agreement, including California driving eligibility and financial liability laws.

19. BINDING ON SUCCESSORS

This Agreement, including all covenants and conditions contained herein, shall be binding upon and inure to the benefit of the parties, including their respective successors-in-interest, assigns, and legal representatives.

20. TIME IS OF THE ESSENCE

It is understood that for Participant's performance under this Agreement, time is of the essence. The parties reasonably anticipate that Participant will, to the reasonable satisfaction of District, complete all activities provided herein within the time schedule outlined in the attachments to this Agreement, provided that Participant is not caused unreasonable delay in such performance.

21. DATA OWNERSHIP

Upon termination or expiration of this Agreement, all data which is

received, collected, produced, or developed by Participant under this Agreement shall become the exclusive property of District, provided, however, Participant shall be allowed to retain a copy of any non-confidential data received, collected, produced, or developed by Participant under this Agreement subject to District's exclusive ownership rights stated herein. Accordingly, Participant shall, if requested, surrender to District all such data which is in its possession (including its subcontractors or agents), without any reservation of right or title, not otherwise enumerated herein.

District shall have the right at reasonable times during the term of this Agreement to inspect and reproduce any data received, collected, produced, or developed by Participant under this Agreement. No reports, professional papers, information, inventions, improvements, discoveries, or data obtained, prepared, assembled, or developed by Participant, pursuant to this Agreement, shall be released or made available (except to District) without prior, express written approval of District while this Agreement is in force.

22. NO THIRD-PARTY BENEFICIARIES

Notwithstanding anything else stated to the contrary herein, it is understood that Participant's services and activities under this Agreement are being rendered only for the benefit of District, and no other person, firm, corporation, or entity shall be deemed an intended third-party beneficiary of this Agreement.

23. SEVERABILITY

In the event that any one or more of the provisions contained in this Agreement shall for any reason be held to be unenforceable in any respect by a court of competent jurisdiction, such holding shall not affect any other provisions of this Agreement, and the Agreement shall then be construed as if such unenforceable provisions are not a part hereof.

24. SPECIAL CONDITIONS

The entire proposed project must be completed within One (1) year(s) of Agreement execution. No Agreement extensions will be granted without reasonable

justification and written approval from the District. Funds may not be used to meet Americans with Disabilities Act (ADA) requirements.

25. ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between Participant and District with respect to the subject matter hereof and supersedes all previous negotiations, proposals, commitments, writings, advertisements, publications, and understandings of any nature whatsoever unless expressly included in this Agreement.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first hereinabove written.

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PARTICIPANT
City of Madera

David Tooley
City Administrator

DISTRICT
San Joaquin Valley Unified Air Pollution Control District

Seyed Sadredin
Executive Director/APCO

Approved as to legal form:
San Joaquin Valley Unified Air Pollution Control District

Anhette Ballatore-Williamson
District Counsel

Approved as to accounting form:
San Joaquin Valley Unified Air Pollution Control District

Mehri Barati, C.P.A.
Director of Administrative Services

Participant Business Entity:

Tax ID Number: 94-6000365

For accounting use only:

Program: # 239

Account No.:

'14 SEP 29 AM 7:1

ALTERNATIVE FUELS MECHANIC TRAINING REMOVE II PROGRAM APPLICATION

A.	APPLICANT INFORMATION		
Organization: **City of Madera**			
Contact name: **Gina Daniels**			
Person with contract signing authority: **David Tooley**			
Street/mailing address: **205 W. Fourth Street**			
City: **Madera**		State: **CA**	Zip code: **93637**
Phone: (**559**) **661-5443**		Fax: (**559**) **675-7067**	
E-mail: **gdaniels@cityofmadera.com**		Mobile Phone: ( )	
Geographic area served by organization: **City of Madera**			
Geographic area to be served by the alternative fuels technology training (if different than above):			

I hereby certify that all information provided in this application and any attachments are true and correct to the best of my knowledge, and that I have read the separate Guidelines, Policies and Procedures document for this program component.

Printed Name of Responsible Party:	Title:
David Tooley	**City Administrator**
Signature of Responsible Party: (Must sign in BLUE INK ONLY)	Date: 9/17/14

ORIGINAL

Exhibit A

INFORMATION ABOUT THE TRAINING PROGRAM

All requested information below must be provided.

B.	GENERAL INFORMATION ABOUT TRAINING PROGRAM		
1.	Funding dollars requested ($): **$15,000**	2.	Total project cost: **$20,870**
3.	Educational institution or college training program and address (street address, city, state, zip, and phone number): **Natural Gas Vehicle Institute** **3120 S. Durango Drive, Stuite 304** **Las Vegas, NV 89117** **(702) 254-4180**		
4.	Course training topics and description: **The light-Duty NGV Maintenance and Diagnostics Training course prepares technicians to understand the operation, maintenance, diagnosis and repair of light and medium duty natural gas vehicles, including passenger cars, pick-up trucks, delivery trucks and box vans. Emphasis is placed on safety and repair practices required for NGV technicians. The course covers multiple manufacturers' systems, focusing on both common components and operational designs specific to a given manufacturer.** **The course includes operational theory with hands-on exercises, use of DMMs, scan tools and other diagnostic equipment. The course will prepare technicians for the ASE F1 exam.**		
5.	Training coordinator contact information (street address, city, state, zip, and phone number) such as course instructors and/or program director: **Sabrina Dodd, Customer Solutions Manager** **3120 S. Durango Drive, Suite 304** **Las Vegas, NV 89117** **(702) 254-4180 ext. 21 sdodd@ngvi.com**		
4.	Total number of technicians to be trained: **10**	5.	Cost per technician (student) to be trained: **$2,087**
6.	Provide the address location (street address, city, state, zip, and phone number) for the training and identify if the course will be conducted from on-site business operations or from educational facility: **The course will be conducted on-site at the City's fleet facility located at:** **1030 S. Gateway Drive** **Madera, CA 93637** **(559) 662-4923**		

Exhibit A

7.	Date of the scheduled course and the duration of the training (workshop days or semester): **January 13-15, 2015 or January 27-29, 2015 Course duration: 3 days**
8.	Additional funding sources solicited and amounts, if available: **A combination of LTF and FTA funds.**

C.	INFORMATION OF THE FLEET AND INFRASTRUCTURE
1.	Number and description of alternative fuel vehicles currently in the fleet: **See Attachment.**
2.	Proposed expansion or modification to the current alternative fuel fleet: **See Attachment.**
3.	Description of current alternative fuel infrastructure: **See Attachment.**

Exhibit A

4.	Proposed expansion or modification to the current alternative fuels infrastructure: **See Attachment.**

Exhibit A

ALTERNATIVE FUEL MECHANIC TRAINING COMPONENT
REMOVE II PROGRAM

C. INFORMATION OF THE FLEET AND INFRASTRUCTURE

1. Number and description of alternative fuel vehicles currently in the fleet:

The City has one Ford Fusion Hybrid, plus the following CNG vehicles:

- 2 – 1 ton flatbed trucks
- 3 – 1 ton utility trucks
- 17 – ½ ton pickups
- 4 – 10-yd dump trucks
- 4 – ¾ ton crew cab pickups
- 1 – ¾ ton utility truck
- 3 – 5-yd dump trucks
- 1 – aerial B/lift
- 1 – aero-elite
- 2 – cargo vans
- 8 – Honda Civics
- 4 – Ford Elkharts
- 7 – Ford Starcrafts
- 2 – Tymco Sweepers

2. Proposed expansion or modification to the current alternative fuel fleet:

The City would like to replace existing vehicles with alternative fuel vehicles such as CNG, hybrid and pure electric vehicles. We are currently applying for a grant to purchase five CNG Honda Civics which will replace five gas vehicles. In 2013 the City purchased a hybrid solid waste vehicle and would like to purchase more. We are also planning on purchasing 3 CNG transit buses within the next two years.

3. Description of current alternative fuel infrastructure:

The City currently purchases CNG from Tessi Petroleum and Madera Unified School District who we have a joint use agreement with. The fleet facility is located at one central location at the Public Works yard. It consists of approximately five bays for light duty repair, one bay for medium duty, and two bays for transit and heavy duty repairs, as well as one welding/fabrication bay. The technicians maintain a fleet of over 250 pieces of equipment of which approximately 59 are CNG. Everything from basic and routine service to engine and transmission rebuilds are done in-house.

Exhibit A

4. Proposed expansion or modification to the current alternative fuels infrastructure:

In order to support hybrid and pure electric vehicles, the City is in the process of approving a proposal from Connor Energy and ConEdison to install a 200kw solar photovoltaic system consisting of solar carports and rooftop solar along with two charging stations at City Hall. We are also in the process of installing a new compressor at Madera Unified School District in accordance with our existing joint use agreement. Finally, the City is planning on adding a charging station to the new administration and maintenance facility for transit that is in the planning stage of construction. We are also considering installing a CNG fill station at that new facility.

GUIDELINE REQUIREMENTS:

DESCRIBE THE CURRENT SKILLS AND TECHNICAL BACKGROUND OF THE TECHNICIANS AND RELATED PERSONNEL:

The training and experience of our technicians and staff is varied. All technicians have at least a working knowledge of CNG with some working almost exclusively on CNG and others very little.

DESCRIBE DEFICIENCIES IN THE MAINTENANCE OR TECHNICAL SKILLS OF STAFF:

The technicians need formal CNG training along with an overview of CNG properties, proper repair techniques and procedures, emergency procedures, diagnostic and troubleshooting methods, and basic safety.

DESCRIBE ANY SPECIALIZED TRAINING YOUR TECHNICIANS MAY HAVE REGARDING ALTERNATIVE FUEL VEHICLES OR FUELING INFRASTRUCTURE TECHNOLOGY:

Our technicians have minimal alternative fuel training. Two have no formal CNG training at all. The rest have had "CNG Fuel System Inspector Training" of which half are certified and the other half are "qualified only". This training has enabled us to do the federally mandated CNG tank inspections at the required 3 year or 36,000 miles mark. Two technicians have had NGV Technician and Fleet Operation Safety Training from NGVI.

DESCRIBE THE TRAINING NEEDS TO IMPROVE THE PROFICIENCY OF THE OPERATIONAL OR MAINTENANCE TECHNICIANS AND RELATED PERSONNEL IN ALTERNATIVE FUEL TECHNOLOGY:

As the City of Madera continues to purchase and maintain CNG units and other alternative vehicles, our mechanics require continuing education on new systems. We currently have an aging fleet and have difficulty keeping many of the older vehicles running due to issues with fuel injectors, high pressure regulators, incorrect timing, and various codes which we are unable to diagnose. This has resulted in significant downtime in research and troubleshooting and we often end up having the repairs completed by the manufacturer. This is not only time consuming, but expensive. Advanced training on troubleshooting is needed, especially for common problems in older units, solutions for aging components, engine codes, fuel delivery systems, and electrical problems associated with CNG units.

DESCRIBE THE SPECIFIC FUNCTION FOR WHICH THE TRAINING WILL BE UTILIZED:

The training will be for our fleet technicians to better educate them regarding the maintenance and operation of CNG vehicles including safety aspects.

DESCRIBE HOW THE PROPOSED TRAINING WILL CONTRIBUTE TO THE DEVELOPMENT AND TRANSITION TO ALTERNATIVE FUELS TECHNOLOGY IN THE FLEET OR INFRASTRUCTURE OPERATIONS:

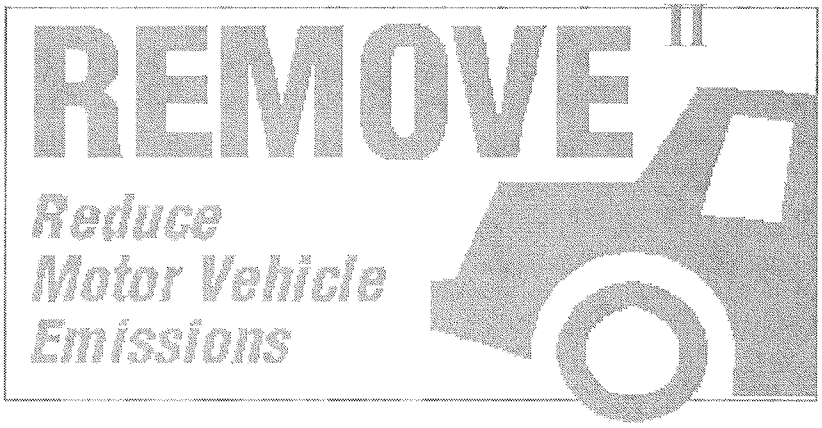
With a successful award of this grant, the City of Madera would be able save money by maintaining our existing fleet in-house rather than outsourcing the work. Additionally, we would save diagnostic and troubleshooting time. In doing so, the funds we would save could be used to help the City transition to the incorporation of additional alternative fuel technology in our fleet or infrastructure operations.

Exhibit A

San Joaquin Valley
Air Pollution
Control District

REMOVE II Program Project Guidance Document

Alternative Fuel Mechanics Training Component



Approximately one year after grant funds have been issued, you may receive a 1099.

For information regarding the tax implications on grant funds, please consult your tax advisor. The SJVAPCD does not provide tax advice.

EXHIBIT C

REMOVE II Program
Project Guidance

Introduction

The REMOVE (***RE***duce ***MO***tor ***V***ehicle ***E***missions) II Program is an innovative program that allocates fees received from motor vehicle registrations for local projects that reduce emissions from motor vehicles. The San Joaquin Valley Air Pollution Control District (SJVAPCD) Board approved the changes to implement the REMOVE II Program. The SJVAPCD makes a final funding determination based upon approved program guidelines and makes funds available to Participants.

This guidance document is designed to provide REMOVE II Program Participants with the required instructions and guidance for the successful completion of their grant.

Purpose

Upon execution of a agreement with the SJVAPCD, all Participants will receive this guidance document with a copy of a signed agreement. The Participant will have one year from the agreement execution date to complete the grant. This document has two components: Project Administration and Project Compliance. The project administration section describes the functions of grant documentation and reimbursement procedures. The project compliance section describes the functions of monitoring and grant closeout.

SJVAPCD staff is available to answer questions and to provide assistance to Participants regarding these procedures. Please read the entire document and enclosed agreement in order to fully understand the requirements. Any and all questions should be directed to:

Charlene Cano
SJVAPCD
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Phone (559) 230-5800
FAX (559) 230-6111
E-mail: charlene.cano@valleyair.org

PROJECT ADMINISTRATION

GRANT DOCUMENTATION

The Participant shall retain documents for three (3) years after the final payment or termination of the agreement. Pertinent documents will include copies of invoices, checks, final reports and any other documents related to the verification or cost of the project. In addition, the following information must be provided prior to receiving any reimbursements from the SJVAPCD:

PROOF OF INSURANCE

The agreement (Section 11) specifies the level and amount of insurance the SJVAPCD will require. All insurance requirements must be met before any reimbursements will be made by the SJVAPCD. Please submit an updated copy of your certificate of insurance along with any claims for payment.

REIMBURSEMENT

The Participant shall be reimbursed as per agreement, after receipt and verification of a properly supported financial claim and inspection by SJVAPCD staff. Any compensation that is not expended by the Participant pursuant to the terms and conditions of the agreement shall revert to the SJVAPCD.

PAYMENT

The SJVAPCD will not provide advances or progress payments to Participants. Participants must submit request for payment on the SJVAPCD *Claim for Payment* form only. Included in this guidance document is the SJVAPCD *Claim for Payment* form for your use. All claims must be signed and dated by the appropriate signing authority or they will be returned to the applicant. All claims for payment must adhere to the specified line item budgets identified in your agreement. Concurrent with the submission of any claim for payment, Participant shall provide invoices, checks, receipts and the like to indicate that work has been completed.

PROJECT COMPLIANCE

SITE VISIT

Depending on the type of grant and the necessity, Participants may be scheduled for a site visit by SJVAPCD staff. The purpose of the visit is to ensure that projects are complete and operational. The ultimate goal is to share project successes with other agencies throughout the SJVAPCD and the state. SJVAPCD staff may request to take photographs and videotapes of projects.

EXTENSIONS

All activities must be completed within the time specified in their agreement. Agreement extensions will not be granted without reasonable justification and written approval from the SJVAPCD.

GRANT CLOSEOUT

Participants shall, per agreement (Section 3c), submit all final claims and reports within 60 sixty days following the final month of activities for which payment is claimed. No action will be taken on claims submitted beyond the 60-day closeout period without reasonable justification and written approval from the SJVAPCD.

SUMMARY REPORT

The summary report must be submitted to the SJVAPCD after project completion. The summary report is used to verify potential project emission reductions and to identify potential problems and to measure project effectiveness. Included in this guidance is a summary report form for your use. Each Participant will have executed an agreement on a different date; therefore, Participants must indicate their agreement execution date and also indicate which annual report is being submitted.

AUDIT

The SJVAPCD may audit the Participant, which should make available all of its records and data with respect to the project. As per agreement (Section 12) Participant shall be subject to an audit by the SJVAPCD to determine if the revenues received by Participant utilized as provided by law.

San Joaquin Valley
Air Pollution Control
District

REMOVE II
Reduce
Motor Vehicle
Emissions

REMOVE II Program Summary Report

Each applicant must fill out this form each year after reimbursement.

YEAR: **Date:** _____

PROJECT #: _____

AGENCY: _____

CONTACT: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

TELEPHONE: _____

CONTRACT DATE: _____

Grant Information

1. **Total grant amount:** $ _____

2. **Provide a brief summary detailing the course training:**

_____
_____
_____
_____

3. **Describe the technicians who attended the training and how they benefited directly:**

_____
_____
_____
_____

4. **Describe how the training will enhance your organization's alternative fuels program:**

_____
_____
_____
_____

San Joaquin Valley Air Pollution Control District

REMOVE II - Claim for Payment

Project Number: _____

Payee : _____

Address : _____

_____

_____

Please check one of the following :

- ☐ Individual/Sole Proprietor
- ☐ C Corporation
- ☐ S Corporation
- ☐ Partnership
- ☐ Trust/Estate
- ☐ Government
- ☐ Limited Liability Company (C Corporation, S Corporation, Partnership)

Federal Tax I.D. # : _____

Social Security # : _____

Telephone # : _____

Fax # : _____

Date	Description	Amount Paid	Grant Amount

Total Claim _____

_____

Signature of Program Applicant Date

For District Use Only

For District Use Only

SJVUAPCD Approval Date

Administrative Services Use Only

_____ _____

Audited By Date

_____ _____

Reviewed By Date

Object	Fund	Year	Dept	Sub-Dept	Type	Program	Phase	Entity	Amount	1099 Code
		1	90	92	-					
					-					
					-					
Stipend					-					
Expense					-					
Table					-					

Vendor Number : _____ **Total** $ _____

ALTERNATIVE FUEL MECHANIC TRAINING COMPONENT
REMOVE II PROGRAM
GUIDELINES, POLICIES, AND PROCEDURES

SECTION I INTRODUCTION

The San Joaquin Valley Air Pollution Control District (SJVAPCD) is seeking applications for incentive funds for the education or training in the mechanics, operational safety and maintenance of alternative fuel vehicle technology and alternative fuel infrastructure technology according to the terms and conditions described in these guidelines.

The purpose of the Alternative Fuel Mechanic Training Incentive Component is to encourage the development and transition to alternative fuel technology by public and private fleet operators and infrastructure managers. Qualifying applicants are those currently utilizing an alternative fuels program, servicing an alternative fuels system or incorporating alternative fuels technology to assist the SJVAPCD in attaining federal and state air quality standards. The availability of trained alternative fuel technicians supports the successful integration and stable transition for alternative fuels technology applications in fleet or infrastructure operations resulting in the improvement of air quality.

The SJVAPCD is providing incentives to fleet operators and infrastructure managers of government agencies, private companies and public educational institutions interested in the specific training of alternative fuel systems and related technology:

- Alternative Fuel Engines
- Fueling Practices and Vehicle Fuel Systems
- Fuel Station Components
- Operational Safety and Procedures
- Technical Training or Mechanic Training
- Alternative Fuel Technology Overview

Funds are available for applicants that meet specific program criteria on a first-come, first-serve basis until the program funds are exhausted. These guidelines describe the policies and procedures of the Alternative Fuel Mechanic Training Incentive Component of the REMOVE II Program. For additional copies of the Guidelines, Policies, and Procedures document or for further information contact:

(559) 230-5858

For further information please contact:

San Joaquin Valley Air Pollution Control District
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
(559) 230–5800

www.valleyair.org

SECTION II BACKGROUND

The SJVAPCD is comprised of eight counties: San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the San Joaquin Valley portion of Kern. The SJVAPCD does not meet the health based National Ambient Air Quality Standards (NAAQS) for ozone and particulate matter ten (10) microns or less in diameter (PM10), and is required to implement strategies that will result in emissions reductions. Reactive organic gases (ROG) and nitrogen oxides (NOx) are precursors that react in sunlight to form ozone. NOx is also important in the formation of secondary PM10. Internal combustion engines are a significant source category that provides an opportunity to pursue substantial emission reductions.

SECTION III ELIGIBLE PARTICIPANTS AND TRAINING

Any individual, private company, or public agency may apply to receive an incentive under this program.

The criteria for **eligible educational or training course programs** are as follows:

- The educational or training course programs must specifically provide training in the mechanics, operational safety and maintenance of alternative fuel vehicle technology or alternative fuel infrastructure technology systems:
    - Compressed Natural Gas (CNG)
    - Liquid Natural Gas (LNG)
    - Hybrid Vehicle (Heavy-Duty)
    - Hydrogen Fuel Cell (HFC) Technology
    - Alternative Fuel Infrastructure (Fueling Station, Storage Systems, Delivery Systems, Facility Operations, etc.)
    - Other (on case-by-case basis)

- The maximum incentive for any eligible organization is $15,000 per fiscal year for the education or training of technicians in alternative fuel technology and related systems. Other topics not listed above will be evaluated on a case-by-case basis.

- Funds will be awarded on a first-come, first-served basis to all applications that meet the criteria and requirements, while program funds are available. In the event that the proposals are submitted on the same day, proposals will be funded in the order of the best overall cost effectiveness until funds are exhausted.

- Program funds should not be used for projects that would have proceeded without SJVAPCD assistance. In addition, projects with large cost savings to the system operator would not be eligible, since they should be considered an investment by the agency/organization. Projects where all cost savings accrue to the public users of the system would be eligible.

- Applicants must provide information of all funding sources that have been solicited to fund a project or program. Established SJVAPCD Governing Board guidelines require that applicants shall not use SJVAPCD program funds to supplant other existing potential funding sources.

- Additional funding sources are not a requirement for participation in the Alternative Fuel Mechanic Training Component. Other co-funding is encouraged, and may be useful to cover ineligible portions of the project cost, but is not a requirement. State of California incentives, state and federal tax credits may be available.

- SJVAPCD funds may not be utilized for administrative or operational costs. The program will not allow funds to be used to reimburse an applicant for the cost of preparing/submitting an application or for the administration of a project including indirect costs for research foundations and educational institutions.

- Individuals to be trained may include vehicle fleet or infrastructure mechanics or technicians who will utilize the education of alternative fuels technology in their operations such as vehicle fuelers, drivers, maintenance technicians, facility engineers, department managers, trainers and related personnel.

- Other topics of alternative fuel mechanics training proposed in an application and not listed above will be evaluated on a case-by-case basis.

- Applicants may seek out training programs that provide the in-house training site option (operator's site) or the college/institutional training site option. This is mainly dependent on the number of individuals in the proposed training group and the technical equipment required for the training. The most economically feasible and accessible option must be pursued.

- The training may be obtained at educational facilities and institutions located outside the SJVAPCD geographic parameters, however, organizations seeking program funds must be operating within the boundaries of the SJVAPCD.

- The determination for program qualification will be based on the training course proposal and the applicant's objectives to incorporate alternative fuel technology into the vehicle fleet or infrastructure operations.

- The training program duration is generally limited to ten (10) days for workshop courses, however, semester long courses may be eligible and will be evaluated on a case-by-case basis.

- The SJVAPCD will restrict funding to instructional materials, training course fees or tuition costs. The SJVAPCD will not provide funds for transportation, meals or lodging.

SECTION IV PROGRAM REQUIREMENTS

In addition to the above criteria, the following elements are set forth as program requirements:

- The organization or agency to receive the alternative fuels technology training shall be based within the geographic area of the SJVAPCD. (See map in Section VIII).

- The operational activities of the vehicle fleet or fueling infrastructure must be within the boundaries of the SJVAPCD.

- The applicant must disclose the number of individuals to be trained and their specific role in the vehicle fleet or fueling infrastructure operations.

- The application proposal for the Alternative Fuels Mechanics Training Program must include:

    1. A detailed course training description outlined by the institutional training coordinator.

    2. A description of the training background of the technicians and staff.

    3. Current composition of the organization's alternative fuel vehicle fleet or fueling infrastructure.

    4. A detailed description of the current training needs for the fleet or infrastructure operational members.

    5. A detailed description of how the proposed training will contribute to the development and transition to alternative fuels technology in the fleet or infrastructure operations.

- The alternative fuels vehicle or infrastructure training course must be completed entirely by the trainees within one year of contract execution.

- Verification of training completion is required and most training course programs provide a certificate of completion.
- For approved application proposals, the SJVAPCD will disperse one-half (1/2) of the fees or costs for the alternative fuel training forty-five (45) days after contract execution to the applicant. The remainder will be dispersed forty-five (45) days after the successful completion of the course and the appropriate verification.

- If the alternative fuel vehicle or infrastructure training course program is not completed within the minimum one (1) year term set forth in this program, the funds must be returned to the SJVAPCD.

- The SJVAPCD will not fund course programs initiated prior to the application process.

- Applicant agrees that any emission reductions associated with this program will be claimed and retired by the SJVAPCD in the interest of air quality improvement for the residents of the San Joaquin Valley. Applicant waives, for all time, the right to claim emission reduction credits which may accrue at any time as a result of this program, and agrees not to apply to the SJVAPCD or any other agency for such credits.

- The primary evaluation criteria will be based on the degree of advancement or improvement in the fleet or infrastructure operations for the development and transition to alternative fuel technology:

  1. The SJVAPCD will evaluate the organization's efforts to establish its first major transitional action for the incorporation of alternative fuel technology into the fleet or infrastructure operations. This may include the first time purchase of alternative fuel vehicles for the fleet or modification of the fueling infrastructure system to accommodate alternative fuel services.

  2. For organizations that have established an alternative fuels technology component in their fleet or infrastructure operations, the SJVAPCD will evaluate the organization's objectives to incorporate further development. The SJVAPCD will examine the progress for a substantial incremental change to increase or significantly expand the alternative fuel technology. Assessment in the level of improvement of the fleet or infrastructure system by the acquisition of additional alternative fuel vehicles, modification or retrofit technology, procurement of infrastructure equipment or components, etc.

Criteria and requirements may be reviewed, as new information becomes available, and can be revised at the discretion of the Executive Director/Air Pollution Control Officer as needed.

The SJVAPCD reserves the right to deny any applicant an incentive in which the staff concludes does not meet the general criteria or requirements described in the general guidelines for this grant program.

Determination of funding is at the full discretion of the SJVAPCD.

SECTION V APPLICATION/ PROGRAM PROCESS

The application and program participation process is as follows:

1. Select a training coordinator to provide the necessary training program for your operational needs in alternative fuels vehicle or infrastructure technology. A list of suggested educational programs is available in this guidance document.

2. You may contact the SJVAPCD to ensure the selected educational course is eligible for participation in the program. Training programs not listed may be added or considered on a case-by-case basis.

3. Include a Cost Analysis List with the application identifying the breakdown of fees for the course program, instructional materials, required equipment or facility, and include the general cost relative to the number of individuals in the training group (cost/training student).

4. Once the training objectives are assessed and the appropriate educational program is determined, apply to the SJVAPCD to receive an incentive. After the application is approved, the SJVAPCD will set aside funds for your incentive provided the training program meets all the eligibility criteria set forth in this document. Training acquired prior to application submission will not be eligible for incentive funding.

5. Sign simple contract with the SJVAPCD verifying that the fleet or infrastructure operations are conducted within the San Joaquin Valley and to have appropriate insurance coverage.

6. Submit a copy of invoice, SJVAPCD Claim(s) For Payment Form, evidence of insurance coverage, and other required information to the SJVAPCD.

7. SJVAPCD reviews information and processes payment.

Timeframe Goals:

The SJVAPCD will make every effort to process applications quickly. If numerous applications are received, it may not be possible to meet the processing goals listed below.

1. The SJVAPCD staff will review the application for completeness within thirty (30) working days of receipt of the application. If the application is incomplete, it will be returned to the applicant with a description of areas in which the application is inadequate. Any revised application that is not returned by the applicant with the requested information within fourteen (14) calendar days is rendered null and void, and resubmittal is required.

2. An evaluation period of approximately thirty (30) working days will follow for staff to assess the emission reductions, cost effectiveness, and validate the project proposal and application meets all the criteria established for the program component.

3. Upon approval of the application, the SJVAPCD will prepare a standard contract for signature by the applicant and the SJVAPCD. The contract process may take a minimum of eight (8) weeks to complete.

4. Applicant submits instructional program invoices, receipts, and the SJVAPCD Claim(s) For Payment Form. The SJVAPCD will issue one-half (1/2) of the payment forty-five (45) days after contract execution, and the remainder half of the payment will be issued after verification of the course completion by all members.

The SJVAPCD maintains the right to monitor the project periodically to ensure that the training is appropriate for the purpose of this program and to follow the training progress.

SECTION VI INFORMATION NEEDED FOR APPLICATION

The applicant must provide information on the items listed in this section. Additional information may be requested during the review process if needed.

Applicant Information

- Organization name, address, contact name, person with contract signing authority, phone, fax and email.
- The geographic area where the vehicle fleet or fueling infrastructure will be operated. The organization's operational activities must occur within the SJVAPCD boundaries.

Training Course Information

- The training course description or outline provided by the educational institution.
- The date the training program is to be conducted and the duration of the training.
- The location(s) where the training will take place.
- The description of the vehicle fleet or fueling infrastructure operations of the organization.
- The current skills and technical background of the technicians and related personnel.
- The composition of the organization's alternative fuel technology in the fleet or infrastructure. Describe the alternative fuel technology currently utilized in the daily operations.
- The training needs to improve the proficiency of the operational or maintenance technicians and related personnel in alternative fuels technology.

- The specific function for which the training will be utilized (mechanics, maintenance, safety, operational, management, etc.).
- Describe how the proposed training will contribute to the development and transition to alternative fuels technology in the fleet or infrastructure operations.
- The training cost components (Cost Analysis List).

Maintenance Of Alternative Fuel Systems

- Describe your maintenance facility and practices. Include any specialized training your technicians may have received in the past for alternative fuel vehicles or fueling infrastructure technology.
- Describe deficiencies in the maintenance or technical skills of staff that prompts your organization to seek additional training in alternative fuels technology.
- Describe the common problems your organization experiences in the maintenance and mechanics of alternative fuel vehicles or infrastructure systems.

SECTION VII CONTRACT REQUIREMENTS

Those applicants that receive funding must enter into explicit contracts with the SJVAPCD setting forth specific performance criteria to ensure compliance with statute and audit requirements.

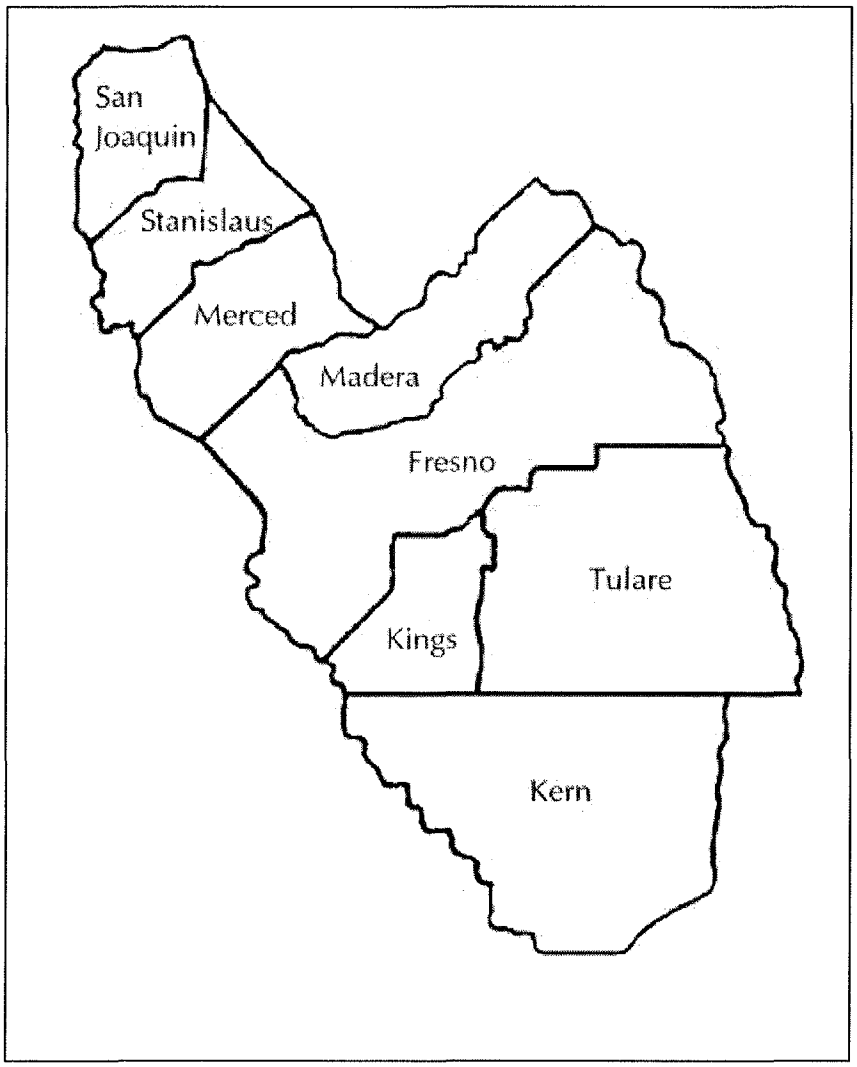
Contract preparation will begin immediately upon SJVAPCD approval of an application. The alternative fuel training must be completed within one (1) year from the date of contract signature. All projects will be funded by one-half (1/2) the training cost after contract execution and the remainder one–half (1/2) following the completion of training and verification by SJVAPCD staff.

Prior to receiving any funds, the grantee must provide the SJVAPCD with the following documents:

1. **SJVAPCD Claim(s) for Payment** with copies of itemized invoices and receipts from the educational college or institution.
2. **Verification of appropriate signing authority** – The signing authority must be the person authorized in the contract as the person who can act on all fiscal matters on behalf of the funded agency or entity. This may be accomplished by resolution, or the like.
3. **Verification of all Insurance requirements identified in the contract** - If self-insured, a letter from a risk manager or the like will be acceptable.

- The contract will require the applicant to perform adequate record keeping for the SJVAPCD to verify the appropriate use of government funds. It will also include a certificate of completion reporting requirements by the applicant (certificate of course completion signed by the instructor). Contract monitoring will be performed by SJVAPCD staff on a periodic basis. Additionally, the SJVAPCD reserves the right to conduct a fiscal audit to ensure appropriate expenditure of funds. .

SECTION VIII MAP OF THE SJVAPCD



San Joaquin Valley
AIR POLLUTION CONTROL DISTRICT

HEALTHY AIR LIVING™

November 20, 2014

Gina Daniels
City of Madera
205 W. Fourth St.
Madera, CA 93637

RE: REMOVE II Program Application for **Project # C-33033-A: Natural Gas Vehicle Maintenance and Diagnostics Training by the National Gas Vehicle Institute for approximately ten (10) technicians**

Dear Gina Daniels:

Congratulations, the San Joaquin Valley Air Pollution Control District (SJVAPCD) has awarded **$15,000** of REMOVE (***RE***duce ***MO***tor ***V***ehicle ***E***missions) II Program funds to **City of Madera.** Enclosed is a draft contract from the **Alt Fuel/Hybrid Vehicle Rebate** component of the REMOVE II Program. Please verify that the information included is accurate, sign, and return the contract by **Return Date**, in order to expedite its completion.

Please do not date or place any stamps on the contract. Contracts will not be officially executed until signatures from all parties involved (Applicants and SJVAPCD) have been obtained. The contract will be dated when the final signature is received.

Please return the contract to the SJVAPCD Central Region Office only.

Reimbursement procedures and a copy of the contract will be provided to all applicants after the contract has been fully signed and executed.

Please note: Once a contract is executed it becomes public record and may be accessed by anyone submitting an official request. Engine dealers, representatives from product manufacturers, lending institutions, and the media have requested copies of executed contracts from SJVAPCD incentive programs. The SJVAPCD does not endorse anyone who contacts you regarding product sales or financing opportunities.

If you have any questions, please contact me at (559) 230-5800.

Sincerely,

REMOVE II Staff
San Joaquin Valley Air District

Enclosure

Seyed Sadredin
Executive Director/Air Pollution Control Officer

Northern Region
4800 Enterprise Way
Modesto, CA 95356-8718
Tel: (209) 557-6400 FAX: (209) 557-6475

Central Region (Main Office)
1990 E. Gettysburg Avenue
Fresno, CA 93726-0244
Tel: (559) 230-6000 FAX: (559) 230-6061

Southern Region
34946 Flyover Court
Bakersfield, CA 93308-9725
Tel: 661-392-5500 FAX: 661-392-5585

www.valleyair.org www.healthyairliving.com

Printed on recycled paper.

Return to Agenda

REPORT TO CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER B-11

APPROVED BY:

Mary Anne Seay, Director
Parks Department

David R. Tooley, City Administrator

SUBJECT: **CONSIDERATION OF A RESOLUTION REAPPOINTING RAE GOMES TO THE CITY OF MADERA BEAUTIFICATION COMMITTEE**

RECOMMENDATION:

Staff recommends that the Council adopt a resolution reappointing Rae Gomes to the City of Madera Beautification Committee.

DISCUSSION:

The City of Madera Beautification Committee is a Council appointed advisory body that focuses on efforts to enhance the aesthetic appearance of the Madera community. The Committee supports and encourages public participation with regard to beautification, and serves as an advocate for ongoing beautification activities throughout the City. The seven-member volunteer, uncompensated panel has been active in drafting and reviewing landscape design standards, engaging in landscape award programs and special projects such as Love Madera and other community-wide days of service.

The Committee currently has four vacancies, one for each of the three newly elected Council-members and one vacancy exists as a result of a recent resignation from District 4. Committee members serve four-year terms coinciding with the term of the Mayor or Council Person who put their name forward for consideration.

Councilwoman Bomprezzi has indicated that she would like to reappoint Rae Gomes to the committee. In addition to being a proud Maderan with many civic ties, Ms. Gomes has served successfully on the Beautification Committee in previous terms and brings experience and a breadth of understanding on local beatification efforts. The existing Committee is made up of the following residents:

Mayor (Poythress)	Rosanne Bonilla
District 1 (Bomprezzi)	Rae Gomes (pending approval)
District 2 (Medellin)	Kristy Anderson
District 3 (Oliver)	Vacant
District 4 (Robinson)	Ron Quinonez (voluntarily resigned January 6, 2015)
District 5 (Rigby)	Vacant (Karen Brown was Gary Svanda's appointment)
District 6 (Holley)	Maxine Barnett

Staff is in the process of facilitating the filling of the vacancies in Districts 3, 4 and 5. Once Mayor Pro-Tem Oliver, Councilman Robinson and Councilman Rigby have had time to review options and make their recommended appointments, Staff will come back to Council to seek approval for those appointments.

FINANCIAL IMPACT:

There are no General Fund impacts from the recommended actions.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

Many elements in the adopted vision and action plans represent an effort to beautify Madera. Consequently the recommended actions support and facilitate Vision Madera 2025. Specific elements of the Committee's efforts are closely linked to the following vision plan strategies and actions:

Strategy 413 – Develop volunteer opportunities to help maintain and enhance community spaces.

Action 134.1 – Consider establishment of design/landscape standards for neighborhoods and business construction.

Action 126.2 – Analyze best practices for street and median island beautification program.

Action 134.2 – Consider establishment of Tree Canopy Standards and shading requirements.

Action 401.2 – Develop Master Tree Plan to include city-approved tree list.

RESOLUTION NO. 15 - _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, REAPPOINTING RAE GOMES TO THE CITY OF MADERA BEAUTIFICATION COMMITTEE

WHEREAS, a vacancy exists in the City of Madera Beautification Committee for the office of Council Member Bomprezzi; and

WHEREAS, Council in previous action has adopted an Ordinance that specifies nomination and appointment procedures, and terms of office for members of City Boards and Commissions; and

WHEREAS, Rae Gomes has been duly nominated by Council Member Bomprezzi to fill the vacancy; and

WHEREAS, the nominee has the requisite experience and desire to fulfill the responsibilities of the post.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA does hereby resolve, find and order as follows:

1. The recitals listed above are true and correct.

2. Rae Gomes is hereby appointed to the Beautification Committee of the City of Madera for the term prescribed by Ordinance.

3. This resolution is effective immediately upon adoption.

* * * * * * *

Return to Agenda

REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF:
January 21, 2015

AGENDA ITEM NUMBER:
B-12

Approved By:

Community Development Director

City Administrator

SUBJECT:

Consideration of a Resolution Approving an Agreement With Love's Travel Stops and Country Stores For Funding of an Environmental Impact Report Relating to the Development of the Love's Travel Center and Authorizing the Mayor to Execute the Agreement on Behalf of the City.

RECOMMENDATION:

It is recommended that the City Council adopt a resolution approving and authorizing the Mayor to execute the agreement with Love's addressing funding of an environmental impact report for the Love's Travel Center.

SUMMARY:

The City is in need of professional environmental planning services in the preparation of an environmental impact report that would facilitate the development of the 25 acre travel center site located on the southeast corner of Avenue 17 and State Route 99. The firm of Quad Knopf was selected because consulting group prepared an earlier environmental impact report for a planned shopping center on the site and was best suited to undertake the required scope of work under an expedited schedule.

Applicants are required by the City's fee structure to pay for the cost of preparing environmental impact reports. Specifically, in this instance the applicant must pay for the cost of the report ($229,091) plus an administrative fee of 10% to cover the City's cost to oversee, review, and process the report ($22,909.) Any additional costs that may arise are also paid by the applicant. This agreement memorializes these provisions, and specifies that the applicant will indemnify and defend the City against challenges related to the project.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

The recommended agreement is a required part of the review and approval process for a proposed commercial development project. Approval of the agreement is consistent with the City's vision statement for "good jobs and economic opportunity".

FISCAL IMPACT:

The cost for preparing the environmental impact report and the City's administrative costs are born by the applicant. Hence, there is no fiscal impact associated with the recommended action.

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, APPROVING AN AGREEMENT WITH LOVE'S TRAVEL STOPS AND COUNTRY STORES FOR FUNDING FOR THE PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT RELATING TO THE LOVES TRAVEL CENTER PROJECT AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT ON BEHALF OF THE CITY

WHEREAS, The City is processing applications from Love's Travel Stops and Country Stores for a development project commonly referred to as the Love's Travel Center (the "Project"); and

WHEREAS, the City is in need of environmental planning services in connection with its efforts to prepare an environmental impact report for the Project; and

WHEREAS, Quad Knopf is a firm that is qualified to provide professional environmental planning services (the "Services"); and

WHEREAS, City has prepared an agreement with Quad Knopf for the Services and such agreement is on file in the office of the City Clerk and referred to for full particulars.

WHEREAS, the applicant Love's Travel Stops and Country Stores is responsible for the costs incurred by the City in preparing and processing the environmental impact report for the project.

WHEREAS, City has prepared an agreement with Love's Travel Stops and Country Stores for funding the Services needed in preparation of the environmental impact report (the "Agreement") and such Agreement is on file in the office of the City Clerk and referred to for full particulars.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA hereby finds, determines, resolves and orders as follows:

1. The recitals listed above are true and correct.

2. The Agreement with Love's Travel Stops and Country Stores for funding of the preparation of an EIR, a copy of which is on file in the office of the City Clerk and referred to for particulars, is hereby approved.

3. The Mayor is authorized to execute the Agreement on behalf of the City.

4. This resolution is effective immediately upon adoption.

* * * * * * * * * * *

AGREEMENT FOR THE FUNDING OF AN ENVIRONMENTAL IMPACT REPORT FOR THE LOVES TRAVEL CENTER

THIS AGREEMENT is made and entered into this _____ day of _____, 2015, between the CITY OF MADERA, a municipal corporation, hereinafter referred to as the "CITY," and Love's Travel Stops and Country Stores, Inc., hereinafter referred to as the "APPLICANT."

RECITALS

WHEREAS, APPLICANT has filed with the CITY various applications allowing for the development of approximately 25 acres of land, generally known as the Love's Travel Center ("the Project"). The project is located on the southeast corner of Avenue 17 and State Route 99; and

WHEREAS, APPLICANT and CITY have agreed that an environmental impact report (hereinafter, "EIR") will be prepared prior to consideration of the Project; and

WHEREAS, CITY has determined that it must engage the services of a qualified consultant, at APPLICANT's expense, to perform the necessary work in the preparation of such an EIR for the proposed Project; and

WHEREAS, it is understood by the APPLICANT that the Project is subject to review and decision after completion of the EIR, as prescribed by existing regulations and statutes; that staff's recommendations are independent of the conclusions reached in the EIR; that the nature of the factors to be considered by staff in its review is such that recommendations to the decision-makers cannot be formalized until just prior to the point of decision-making and may in fact be different from the conclusions reached in the EIR; and that the final decision on the Project will be made by the entity charged with such decision making authority.

AGREEMENT

NOW, THEREFORE, for the good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and the APPLICANT agree as follows:

1. Consultant

CITY shall engage the firm of Quad Knopf, Inc., a California Corporation, identified herein as "EIR CONSULTANT," to perform the necessary work in the preparation of an EIR for the Project, pursuant to the terms of a contract entitled "AGREEMENT FOR ENVIRONMENTAL PLANNING SERVICES TO THE CITY OF MADERA IN PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE LOVE'S TRAVEL CENTER" (hereinafter, "Consultant Agreement"). The necessary work for the project is more particularly described in Exhibit "A" which is attached hereto and incorporated herein by reference.

2. Effective Date

This Agreement shall become effective upon its execution by the parties hereto and shall terminate upon expiration of any and all legal challenge periods which may apply to CITY's final decision regarding certification of the EIR and approval of the project. Should a challenge to City's final decision be made, APPLICANT shall indemnify, defend, and hold harmless the CITY pursuant to Section 6 of this agreement until such challenge is fully resolved.

3. Payments to CITY for CONSULTANT Services

A. Under the terms of the Consultant Agreement, the EIR CONSULTANT will be paid a sum not to exceed Two Hundred Twenty Nine Thousand Ninety One Dollars ($229,091) for its services. APPLICANT shall deposit this amount with CITY within 5 days of the execution of this agreement. No increase in the above amount will be required except by a written modification to this Agreement, signed by the APPLICANT and the CITY as set forth in Paragraph 9 below. Any amount not paid to EIR CONSULTANT from this deposit shall be returned to APPLICANT upon completion of the EIR CONSULTANT'S scope of services or termination of Consultant Agreement, whichever comes first.

4. Payments to CITY for CITY's Services

In addition to the APPLICANT's payments to CITY for the EIR CONSULTANT's services, the APPLICANT shall pay to CITY for the costs and expenses incurred by CITY in processing, reviewing, and managing the preparation of the EIR, a fee consisting of ten percent (10%) of the cost of all consulting services and studies, being Twenty Two Thousand Nine Hundred Nine Dollars ($22,909).

5. Independent Contractor

It is understood that the CONSULTANT shall be an independent contractor of CITY. The APPLICANT agrees to allow, or to gain authorization allowing, the CONSULTANT to enter upon the Project property and to perform all work thereon as the CONSULTANT deems necessary to complete the EIR. It is agreed that the APPLICANT will not interfere with the CONSULTANT in the performance of such work or attempt to influence such CONSULTANT during the course of its work. APPLICANT acknowledges and agrees that the determination of the adequacy of the CONSULTANT's performance and the extent of payment to the CONSULTANT, are within the sole discretion of CITY. APPLICANT acknowledges and agrees that the final responsibility and final authority as to the quality and the contents of the EIR lies in the sole discretion of CITY.

6. Hold Harmless

The APPLICANT hereby agrees to indemnify, defend, and hold CITY, its officers, agents, employees and volunteers harmless from any and all claims, demands, losses, costs, expenses (including attorneys' fees), damages, recoveries, deficiencies or liabilities that may arise, result from, or be attributable to, or in any way be connected with the Project.

7. Governing Law

Any controversy or claim arising out of or relating to this Agreement which cannot be amicably settled without court action shall be litigated either in the Madera Superior Court, Madera, California, or in the U.S. District Court for the Eastern District of California located in Fresno, California.

The rights and obligations of the parties and all interpretations and performance of this Agreement shall be governed in all respects by the laws of the State of California.

8. Assignment

Neither party shall assign, transfer or sub-contract this Agreement nor their rights or duties under this Agreement without the prior written consent of the other party.

9. Amendments

Any changes to this Agreement requested either by CITY or APPLICANT may only be effected if mutually agreed upon in writing by duly authorized representatives of the parties hereto. This Agreement shall not be modified or amended, or any rights of a party to it waived, except as set forth above.

10. Binding Upon Successors

This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors in interest, assigns, legal representatives, and heirs.

11. No Third-Party Beneficiary Rights

The parties agree that no provision of the Consultant Agreement shall in any way inure to the benefit of any third-party so as to render any such person a third-party beneficiary of said Agreement or of any one or more of the terms thereof, or otherwise give rise to any cause of action in any person not a party thereto.

12. Entire Agreement

This Agreement constitutes the entire Agreement between the APPLICANT and CITY with respect to the subject matter hereof and supersedes all previous negotiations, proposals, commitments, writings, advertisements, publications, and understandings of any nature whatsoever unless expressly included in this Agreement.

13. Applicant's Legal Authority

Each individual executing or attesting this Agreement on behalf of APPLICANT hereby covenants, warrants, and represents: (i) that he or she is duly authorized to execute or attest and deliver this Agreement on behalf of APPLICANT; and (ii) that this Agreement is binding upon APPLICANT.

14. Termination of Agreement.

APPLICANT may terminate this Agreement at any time by giving written notice to CITY and withdrawing its application for the Project. CITY may terminate this agreement at any time by giving written notice to APPLICANT and rejecting its application for the project. If APPLICANT or CITY so terminates this Agreement, then CITY shall immediately terminate the Consultant Agreement in accordance with its terms. If either party breaches a material provision of this Agreement, then the other party may, at its option, immediately terminate this Agreement by giving written notice to the breaching party of such termination and specifying the reasons therefore. If this Agreement is terminated for any reason APPLICANT shall continue to be liable to CITY for the cost of work of the CONSULTANT satisfactorily performed to the date of termination and for any additional work of the CONSULTANT expressly requested by CITY's Planning Director as necessary to wind up the work performed up to the date of termination.

15. This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

* * * * * * * * * * * * * * * * * * * *

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.

CITY OF MADERA

By_____

Robert L. Poythress, Mayor

Attest:

_____

Sonia Alvarez, City Clerk

APPLICANT

Greg Love

Love's Travel Stops and Country Stores, Inc.

CEO/President

Title

Approved as to Legal Form:

By _____

Brent Richardson, City Attorney

PROPOSAL

This proposal describes Quad Knopf's understanding of the proposed Project and approach to preparing a thorough and legally defensible EIR, including tasks, schedule, and budget. If accepted, this proposal would become an attachment to Quad Knopf's agreement for professional services with the City of Madera.

Also, as an Appendix to this proposal, we've included a statement of qualifications, including an overview description of the Quad Knopf team, teaming partners, and key personnel.

Project Understanding

The following is a preliminary description of the proposed Project. Additional details, including a site plan and formal City of Madera applications, are expected to be provided by the Project proponent before work on the EIR begins. The proposed Project is a travel center that is primarily intended to serve a wide range of travel needs of motorists travelling on State Route (SR) 99. It is assumed that a large percentage of the daily traffic will be semi-trucks (i.e., tractor trailers). It is also assumed that the travel center will operate 24 hours per day, seven days per week, and 365 days per year.

The undeveloped, proposed Project site consists of 49 acres (Assessor's Parcel 038-040-002) within the city limits of Madera. The site abuts SR 99 on the west and Avenue 17 on the north. Land north of Avenue 17 is undeveloped and designated for heavy commercial use. Land immediately to the east is developed with rural residential dwellings. Land to the south is undeveloped and designated for industrial use.

Project Components – Provided by Project Proponent

- Travel Center: Approximately 10,200 square feet in size, which consists of convenience store, restrooms, truck wash, and attached restaurant, on approximately 10 acres.
- Restaurant: Proposed tenant will be a Carl's Jr., with seating for approximately 50 people.
- Tire Care: Approximately 12,000 square feet with two bay doors and inside tire storage.
- Hotel: Proposed Sleep Inn with 80 rooms, on one acre.
- RV/Boat/Self storage: Approximately 50,000 square feet under roof, on five to seven acres.
- Estimated vehicles per day: 2,000 cars and 600 semi-trucks.

City Entitlements – Generated by City Based on Project Components

- Site Plan Review – Overall site.
- Truck Stop – Conditional Use Permit (This will include tire shop, truck wash, and related facilities).
- Hotel – Conditional Use Permit.

- Mini-Storage – Conditional Use Permit.
- Drive-through Restaurant – Conditional Use Permit (probable, not confirmed).
- Outdoor Seating – Conditional Use Permit (potentially, not confirmed).
- Alcohol Sales in Restaurant/Convenience Store – Conditional Use Permit (probable, not confirmed).
- Possible – Variance and Conditional Use Permit for sign that exceeds height and size limits.
- Probable – Development Agreement for overall development.

In conjunction with the formal submittal of applications, the City will confirm a precise set of entitlements that will be required to support Project components.

Project Approach

In 2007, Quad Knopf prepared an EIR for a project on this site, referred to as Gateway Galleria (SCH #2006061106). The Draft EIR is dated April 2007 and the Certified Final EIR is dated June 2007. The project description included prezoning in support of annexation to the City of Madera and a two-phase, retail and commercial development totaling 452,499 square feet. Due to the age of the previous EIR and the change in the project description, the proposed EIR will not be tiered from that document, and the impact analyses of the proposed Project will be entirely new.

While the proposed Project has changed, Quad Knopf proposes to use as much of the data and information from the previous 2007 EIR as possible, with the full understanding that certain background information and analyses will need to be revisited due to age, changes in the physical environment, changes in regulations, changes in the proposed land uses, or changes in the *CEQA Statutes* and/or *Guidelines*. By using as much of the existing information as possible, we can provide an efficient and cost effective method of achieving CEQA compliance.

We anticipate that a full-scope EIR will be warranted; however, certain environmental topics may be scoped out (i.e., dismissed from analysis) as a result of public scoping process described in Task 4.

The expedited schedule for completion of the EIR process contained in this proposal will require close coordination and commitment to schedule by Quad Knopf, the City of Madera staff and decision makers, and the Project proponent.

The following is a listing of the environmental topics that will be addressed in the EIR. As noted in the Scope of Work, some topics may not need to be discussed in detail in the EIR and may be dismissed from detailed analysis. The Scope of Work (Tasks 5 and 7) also describes how environmental studies conducted for the 2007 EIR will be used, where updates to previous studies can be used, and where entirely new studies are warranted due to one or more changed circumstances.

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils and Seismicity
- Greenhouse Gases

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources *(potentially scoped out)*
- Noise
- Population and Housing *(potentially scoped out)*
- Public Services
- Recreation *(potentially scoped out)*
- Transportation, Traffic and Circulation
- Utilities and Service Systems

Scope of Work

Based on our knowledge of the City's requirements and the preliminary Project description provided to us, we have developed the following scope of work for completion of the EIR process. The tasks include completion of a public scoping process (Notice of Preparation and Scoping Meeting), Administrative and Draft Environmental Impact Reports, Administrative and Final Environmental Impact Reports, Mitigation Monitoring and Reporting Program, and Findings and Statement of Overriding Considerations.

Task 1 – Project Initiation

Quad Knopf will meet with City staff and the Project proponent to review the scope of work, details of the proposed Project, and the proposed schedule. Alternatives to the proposed Project, including alternative sites previously identified and rejected, may also be discussed. Lines of communication and communication protocols will be established and a detailed schedule developed.

Deliverables:

- *Project initiation meeting (1)*
- *Agenda (1)*
- *Action agenda from meeting (1)*

Task 2 – Field Reconnaissance and Review of Existing Information

Under this task, the Quad Knopf team will visit the site in order to observe existing site conditions (i.e., the baseline condition) and take photographs in order to gain a thorough understanding of the Project site, surrounding areas, and sensitive nearby land uses. Also, as part of this task, the Quad Knopf team will collect and review all available background materials, in order to become fully familiar with the Project and key issues.

Task 3 – Project Description and Project Objectives

Based on the results of the project initiation meeting and the Project description materials provided by the Project proponent, as well as the Quad Knopf team's review of other relevant information, we will prepare a draft Project description for the City staff and Project proponent review and approval. As specified in the State *CEQA Guidelines*, Section 15124, the EIR will include a detailed Project description using text and graphics inclusive of the City's regional and local setting and the Project's history, past ownerships and land uses. The Project description will also include the Project's objectives (from the perspectives of both the City and the Project proponent), characteristics, phasing, and important features. A single set of carefully crafted Project objectives reflecting both the City and Project proponent's interests will be instrumental in assessing alternatives to the proposed Project, as described at the end of Task 7.

Due to the importance of a complete, accurate, and stable project description, we will request that the City and Project proponent review and approve the Project description before impact analyses commences.

Task 4 – Public Scoping Process / Notice of Preparation

Quad Knopf will conduct the public scoping process and will prepare a Notice of Preparation (NOP), incorporating the finalized Project description and supporting graphics. The NOP will be noticed, published, and circulated to applicable local and State agencies pursuant to the *CEQA Guidelines*. Quad Knopf's Project manager will coordinate with City staff in conducting a Scoping Meeting, which will be held to solicit input as to the scope and content of the EIR. (Details are provided below.)

As permitted by the *CEQA Guidelines*, an Initial Study will not be prepared prior to preparation of the Draft EIR.

Subtask 4.1 Prepare Notice of Preparation

Quad Knopf will prepare a Notice of Preparation (NOP) consistent with the City's approved format. The NOP will contain all statutory requirements, including the Project description developed in Task 3 above.

Deliverables:

- *Notice of Preparation (10 hard copies + digital files + 15 hard copies hand delivered to State Clearinghouse)*

Subtask 4.2 Scoping Meeting

Quad Knopf will participate in a scoping meeting to be conducted during the 30-day NOP public review period. Quad Knopf will prepare appropriate graphics/visual displays (in PowerPoint format) and/or handouts, as directed by City staff. City staff will be responsible for coordinating the meeting setup and location. Quad Knopf's Project Manager will coordinate with City staff relative to details of running the meeting (presentation of the Project, preparing handouts, answering questions, etc.).

Deliverables:

- *PowerPoint slide presentation*
- *Board-mounted graphics*

Task 5 – Early Consultation and Technical Studies

Quad Knopf anticipates that the proposed Project will require the following technical studies, as further described below. Since most of these topics were addressed in studies prepared for the 2007 Gateway Galleria EIR, in many instances the work effort will be focused on simply updating the previously prepared reports to reflect changed conditions on the ground, changes in applicable regulations, and changes in the proposed Project description.

- Air Quality and Greenhouse Gas Report (OB-1 Air Analysis)
- Biological Survey Report (Quad Knopf)
- Cultural Resources Report (Ric Windmiller, Archaeologist)
- Health Risk Assessment (Vista Environmental)
- Noise Study (j.c. brennan & associates)
- Phase I Environmental Site Assessment (Geocon)
- Traffic Impact Study and Caltrans Consultation (VRPA Technologies)

The technical reports will be used to prepare the associated topic sections of the EIR further described in Task 7.

Subtask 5.1 Air Quality and Greenhouse Gas Report

Under contract to Quad Knopf, OB-1 Air Analyses (OB-1) will prepare an Air Quality and Greenhouse Gas (GHG) Study for the proposed Project including evaluation of construction emissions, off-site vehicle emissions, on-site mobile and stationary equipment emissions, and GHG emissions. The Study, which will support separate Air Quality and GHG sections of the EIR, will also analyze the off-site CO hotspots and odors and include, as needed, a preparation of viable air quality mitigation measures. The Study will comply with the latest Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). In addition OB-1 will provide environmental compliance services and coordination with the San Joaquin Valley Air Pollution

Control District (SJVAPCD) to comply with SJVAPCD Rule 9510 (ISR). Compliance with Rule 9510 will require the completion of an Air Impact Assessment (AIA) Application.

Air Quality and GHG Study

Collect Air Quality Setting Information: OB-1 will review the federal, State, and local rules and regulations regarding criteria pollutants and GHGs; local ambient air quality conditions; meteorological and topological influences of local climate; and existing nearby emission sources. OB-1 will analyze the Madera General Plan and other regional planning documents, rules, and legislation for goals and policies that may relate to the proposed Project. OB-1 will also briefly describe the global warming concept and the science that supports it. OB-1 will work closely with the traffic engineer, VRPA to ensure that the trip generation rate used in the analysis accurately accounts for efficiencies afforded the Project through design. The Study will also include descriptions of applicable federal and State climate change legislation.

Determine Emission Estimates: Construction and operational emissions will be estimated using emission factors and methodologies developed by the California Air Resources Board (CARB), SJVAPCD, the U.S. Environmental Protection Agency (EPA), and other agencies. The air quality analysis will assess construction and operational emission factors using the air quality model (CalEEMod™), which has been adopted by the SJVAPCD. Operational analyses will quantitatively or qualitatively account for Project design features that positively affect air quality.

GHGs primarily quantified will be carbon dioxide, methane, and nitrous oxides — other Kyoto Protocol GHGs will be primarily addressed qualitatively — and will be normalized to a consistent metric using appropriate global warming potential to produce all emissions in carbon dioxide equivalents. Primary sources that will be quantified will be vehicular; energy consumption (both direct and indirect) and energy used for water delivery. Estimated GHG reductions from the replacement of grid energy by solar power from the proposed Project will be evaluated. GHG gas pollutants will include all appropriate Kyoto Protocol gases: carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The regional impact assessment will calculate emissions associated with construction and long term operational activities for the proposed Project.

Cumulative Air Quality Impact Analysis: With respect to cumulative air quality impacts, the GAMAQI provides that any proposed Project that would individually have a significant air quality impact (i.e., exceed significance thresholds for pollutants such as ROG, NO_X, PM_{10}, or $PM_{2.5}$) would also be considered to have a significant cumulative impact. Although the GAMAQI does not provide guidance for evaluating cumulative air quality impacts in instances where Project-specific emissions of criteria pollutants do not exceed the air district's significance thresholds, it does state: "[a]ll but the largest individual sources emit ROG and NOx in amounts too small to have a measurable effect on ambient ozone concentrations by themselves."

Based on the above, for purposes of this Study, the proposed Project is considered to result in a cumulatively considerable air quality impact if the Project emissions exceed the SJVAPCD significance thresholds or the Project is not consistent with the regional clean air plan.

Determine Other Impacts: OB-1 will perform an odor analysis to determine if any sensitive receptors would potentially be affected my significant odor emissions. OB-1 will also provide a qualitative discussion of air toxics, including diesel particulate matter.

OB-1 will utilize Caltrans' CO Protocol and data supplied by the Traffic Study to determine the potential for exceedance of the CO ambient air quality standards. If preliminary screening indicates that potential exists for a CO hot spot, a minimum of three intersections will be evaluated. The intersections with the highest potential for congestion would be modeled using the California Department of Transportation CALINE4 model and EMFAC2011 emission factors.

Significance Determination: Construction and operational emission estimates will be compared with the SJVAPCD significance thresholds. If the proposed Project is determined to exceed the thresholds, the Study will propose mitigation measures for air quality impacts. Mitigation measures would be evaluated on the basis of emissions reductions and cost. Where quantification methodologies are available, mitigation measures will be quantified. The Study will then assess the impact significance after the application of mitigation.

For GHGs, OB-1 will assess the proposed Project's implementation of SJVAPCD best performance measures current California GHG emission reduction strategies, including applicable solutions contained in the latest State-issued documents. If necessary, design features and mitigation measures will be identified that would reduce GHG emissions.

Indirect Source Review Compliance

Identification of Mitigation Measures: OB-1 will consult with the Project proponent on measures and features being proposed for the Project and research the Project's design features and environmental setting to document measures that will reduce the Project's emissions.

Air Quality Analysis, Off-site Fee Estimate, and Fee Deferral Application: OB-1 will model construction, area, and operational emissions for the proposed Project using the current approved CalEEMod™. The results from the modeling will be used to generate off-site fee estimates using the SJVAPCD Fee Estimator Calculator. A Fee Deferral Application will be prepared, so that the Project proponent is not unnecessarily burdened by the entire mitigation costs up front. Payments for the construction and operational phases must be made prior to generating emissions for each phase. The Project proponent will provide a tentative construction/operation schedule and a schedule of fee payments (if applicable) for this task to be completed successfully.

Report Preparation: OB-1 will complete the SJVAPCD Air Impact Assessment Application Form and Supplemental Forms for mitigation credit being claimed. Appropriate documentation of the application contents, including relevant maps, City and County Bicycle Plans, City and County General Plan exhibits, emission modeling, and fee estimates will be supplied as needed for the AIA application.

Subtask 5.2 Biological Survey Report

Quad Knopf's biological resource specialists will prepare a biological report, as described below.

Database and Literature Search: The California Natural Diversity Database, California Native Plant Society Database, United States Fish and Wildlife Service lists, and California Department of Fish and Wildlife lists, and National Wetlands Inventory will be searched to identify special-status species, sensitive natural communities, and wetlands that are of local, regional, and national concern and which may impose constraints on the development potential of the Project site. Spatial data and maps of critical habitat for federally-listed species that may occur in the region will be obtained and reviewed. Relevant published and non-published literature, including Recovery Plans, Habitat Conservation Plans, General Plans, Specific Plans, and technical reports and studies will also be reviewed. The cumulative data set compiled from these sources will provide the basis of this investigation.

Reconnaissance-Level Site Survey: A reconnaissance-level site survey of the Project site will be conducted. Efforts will be focused on identifying areas that support, or potentially support, sensitive biological species or habitats. The distribution of vegetative communities will be identified, and the locations of unique or important biological resources will be mapped. Special-status species and/or their signs will be documented. An inventory of the plant and wildlife species observed during the survey will also be generated.

Data Analysis and Reporting: All information obtained during the database search and site survey will be analyzed to identify the presence and extent of important biological resources occurring, or potentially occurring, on the Project site; development constraints that may be imposed by biological resources; regulatory requirements that must be considered prior to proceeding with development; and additional studies that would be needed to meet regulatory requirements. These issues will be evaluated in the context of the California Environmental Quality Act (CEQA), and will be presented in a Biological Analysis Report that will include the methods used, results of database searches and field investigations, location maps, recommendations, and conclusions. This task includes peer review and QA/QC by a senior biologist.

Subtask 5.3 Cultural Resources Report

Quad Knopf's subconsultant, Ric Windmiller, Consulting Archaeologist, will prepare a cultural report for the Project, as described below.

Mr. Windmiller conducted an archaeological resources inventory of the subject property in 2005. The study included a records search by the Southern San Joaquin Valley Information Center, a sacred lands file search by the Native American Heritage Commission, contacts with the sole Native American listed by the commission, contact with the Madera County Historical Society, a field inspection and a technical report following California Office of Historic Preservation guidelines. At the time, the property was occupied by a heavy equipment supply business. Field inspection was hampered in the respect that an estimated 10 percent of the subject property was occupied by heavy equipment and parts inventory. The remainder was largely exposed ground, which was examined along transects 15-25 meters apart. No archaeological resources were identified during the study.

Nine years have elapsed since the above study was completed. Recent satellite imagery shows that a significant portion of stockpiled equipment and parts has been removed from the site exposing ground that could not be adequately inspected in 2005. The records search and Native American and Madera County Museum contacts are out of date.

This scope of work provides for an updated records search by the Southern San Joaquin Valley Information Center, an updated sacred lands file search and list of Native American contacts from the Native American Heritage Commission, renewed contact with Native Americans listed by the Commission and the Madera County Historical Society, and field inspection of areas formerly covered by equipment and parts. CEQA Guidelines, Appendix G checklist classifies unique paleontological resources as "cultural resources." Therefore, this scope of work includes a paleontological database search and analysis to determine if the subject property is sensitive for paleontological resources (fossils).

The technical report will draw from the 2005 study with updated information as a result of recent archaeological research, the updated records search and Native American file search, as well as contacts with Native Americans listed by the Commission and the local historical society. A cultural resources inventory also includes a search of the University of California Museum of Paleontology database search and report by a qualified professional paleontologist. A field inspection by a qualified professional archaeologist meeting the Secretary of the Interior's professional qualifications standards in prehistoric and historical archaeology will focus on those areas of the Project site not previously available for inspection due to the presence of equipment and parts stockpiles.

Subtask 5.4 Health Risk Assessment

Under contract to Quad Knopf, Vista Environmental will prepare a Health Risk Assessment for inclusion in the Air Quality section of the EIR, as described below. The HRA will analyze both: (1) the cancer and non-cancer (acute and chronic) health impacts from toxic air contaminants (TACs) created by the proposed project; and (2) the localized criteria pollutants that are not in attainment (PM10, PM2.5, and

the ozone precursors of VOC and NOx) concentrations at the nearby homes and associated health impacts. The localized criteria pollutant analysis has been included in order to address the additional analysis requirements detailed in *Sierra Club v. County of Fresno* (2014) (226 Cal.App.4th 704).

Preparation of Health Risk Assessment of Diesel Particulate Matter (DPM)

- Provide a description of the proposed project and detail the location of the proposed project.
- Identify applicable SJVAPCD rules and regulations.
- Identify health risk standards and acceptable cancer and non-cancer risk thresholds from diesel emissions.
- Obtain the proposed project's onsite truck trips from the applicant or traffic study. Calculate the emission rates for idling and truck travel for diesel particulate matter (DPM) and volatile organic compounds (VOC) emissions through use of the EMFAC2011 model.
- Obtain the estimated percentage of trucks that would have an operational transport refrigeration unit (TRU) from the applicant or from statewide averages. Calculate the DPM and VOC emissions rates from TRUs through use of the OFFROAD2007 model.
- Obtain the estimated percentage of truck that park onsite over night that would have operational auxiliary power system (APS) from the applicant. Calculate the DPM and VOC emissions rates from the APS through use of the OFFROAD2007 model. If the applicant is going to provide electrical hookups for each overnight truck parking space, then a qualitative analysis will be provided that details why APS would not be operated on the project site.
- Obtain the estimated gasoline and diesel throughput of the proposed gasoline and diesel dispensing facilities as well as the location and number of onsite fuel tanks from the applicant. Calculate the VOC emissions rates through use of the methodology provided in *Guidance for Air Dispersion Modeling San Joaquin Valley Air Pollution Control District,* (HRA Guidelines) and from *Gasoline Service Station Industrywide Risk Assessment Guidelines*, prepares by CAPCOA, November 1997.
- Calculate the DPM and VOC concentrations at the nearby sensitive receptors associated with the on-going operation of the proposed project through utilization of the AERMOD model, the emissions rates provided in the previous steps and the methodology described in HRA Guidelines.
- Utilize the prior task's calculated DPM and VOC concentrations, to calculate the cancer risk and the chronic and acute non-cancer health impacts at the nearby residential uses from the on-going operation of the proposed project.
- Prepare an HRA report documenting the results of the study. The report will summarize the results of the previous work tasks.

Preparation of Health Risk Assessment of PM10, PM2.5, VOC and NOx emissions

- Summarize the court opinion for *Sierra Club v. County of Fresno* (2014) and develop a strategy to analyze the potential health impacts at the nearby sensitive receptors from the proposed project's emissions of PM10, PM2.5, VOC, and NOx.
- Review the Air Quality Analysis prepared for the proposed project and reference the total PM10, PM2.5, VOC, and NOx emissions created from the proposed project as detailed in the Air Quality Analysis.
- Reference the most current concentrations of PM10, PM2.5, VOC, and NOx in the project study area as detailed in the Air Quality Analysis.

- Perform air quality modeling of the proposed project's total PM10, PM2.5, VOC, and NOx emissions through use of either the AERMOD, CMAQ, and/or BenMap Models.
- Document the technical approach, the model used and the results of the analysis.
- Incorporate the results of the previous work tasks into the HRA report.

Subtask 5.5 Noise Study

Under contract to Quad Knopf, j.c. brennan & associates will prepare a noise study, as described below.

Evaluation of Existing Noise Levels: Since the previous study was conducted nine years ago, j.c. brennan & associates, Inc. will conduct background noise level measurements on, and in the vicinity of the Project site. Their staff will conduct two sets of continuous 24-hour noise measurements and two sets of short-term noise measurements. The intent of the noise level measurements is to quantify existing background noise levels for comparison to the predicted Project noise levels. The comparison of the measured noise levels to the predicted noise levels will be critical to determine if the Project will create noise levels which will be discernable from the roadway traffic noise. The 24-hour measurements will also provide an accurate day/night traffic split for SR 99, and will be used as a direct input to the traffic noise modeling.

Analysis of Existing and Future Traffic Noise Levels: Based upon traffic data provided by the traffic consultant, j.c. brennan & associates will utilize the Federal Highway Administration (FHWA RD-77-108) traffic noise prediction model to determine existing and future traffic noise levels at the Project site and adjacent uses. Particular attention will be given to the truck traffic noise levels.

Analysis of On-Site Activities: On-site activities due to the Project are expected to include truck circulation, truck idling, truck wash facilities, and truck maintenance activities. j.c. brennan will collect noise level data associated with a current Love's Travel Center. Preliminary review indicates that the Love's Travel Center near Corning, California is similar in configuration to the proposed site.

Analysis of Construction Noise: j.c. brennan will evaluate construction noise impacts associated with the Project.

Report Preparation: A written report will be prepared which details our analytical approach and findings. The report will comply with the requirements of the Madera General Plan Noise Element and CEQA. The report will address all noise sources described above. In addition, mitigation measures will be proposed where required, and the resulting noise levels will be analyzed.

Subtask 5.6 Phase I Environmental Site Assessment

Under contract to Quad Knopf, Geocon will prepare a Phase I Environmental Site Assessment (ESA), as described below.

The requested ESA would be performed in general accordance with the American Society for Testing and Materials (ASTM) *Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*. The Phase I ESA would also be conducted in accordance with the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries* (AAI), as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of conducting an AAI-compliant investigation into the previous ownership and uses of a property is to meet the provisions necessary for the landowner, contiguous property owner, and/or bona fide prospective purchaser to qualify for certain landowner liability protections under CERCLA.

In order to perform the Phase I ESA in accordance with ASTM and AAI guidelines, we request that, if possible, the current site owner provide the following information:

- Permission to enter the site
- Names and telephone numbers of persons familiar with the site
- A description of the planned use of the site
- Any specialized knowledge regarding the site
- Any commonly known or reasonably ascertainable information regarding the site
- Any site-related documents
- An historical chain-of-title report from a title company (as an alternative, we can order an environmental lien report for an additional fee)

Based on the above information, Geocon will perform research to estimate the potential for hazardous substances or petroleum impacts (i.e., levels warranting regulatory cleanup action) to the site. For the purposes of this Phase I ESA, the "vicinity" of the site is defined as properties located within ¼ mile of the site.

The scope of services for the Phase I ESA is presented as follows:

- Perform a reconnaissance of the site to assess for the presence, or make visual observations of indicators of the potential existing presence, of hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the site. These indicators include 55-gallon drums, underground and aboveground storage tanks, chemical containers, waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. If access is unavailable to any portions of the site, our ability to complete the assessment described herein may be hindered. Provisions for a survey of wetlands delineation, asbestos, lead-based paint, lead in drinking water, radon and methane gas are not provided in the ESA scope of services.

- Perform a visual survey of the adjacent properties from the site and from public thoroughfares to observe general types of land use surrounding the site.

- Review the *Standard Environmental Records Sources: Federal and State* referenced in ASTM *Designation E 1527-05* and 40 CFR Part 312 to obtain information regarding the potential presence of hazardous substances/petroleum hydrocarbons on the site or on properties located within the approximate minimum search distance specified for each source. The records searched will include registries or publicly available lists of recorded engineering and institutional controls, and recorded land use restrictions that may impact the site.

- Review reasonably-ascertainable regulatory agency files for the site and/or properties in the vicinity of the site whose environmental conditions might potentially impact the Site. The sources for these files could include the Madera County Environmental Health Department, the California Regional Water Quality Control Board (RWQCB), and the California Department of Toxic Substances Control.

- Contact local public agencies by telephone or in writing to obtain readily-ascertainable information regarding underground storage tank permits, agriculture-related permits and violations, air emission permits and violations and electrical transformers. The information would be obtained for the site and adjacent properties. The agencies contacted may include the building department, air pollution control agency (i.e., SJVAPCD), agriculture department, and gas and/or electric utility companies.

- Review and interpret reasonably-ascertainable aerial photographs to obtain information concerning the historical use of the site and adjacent properties.

- Review EDR Sanborn, Inc. Fire Insurance Maps for the site (if available). The EDR Sanborn Fire Insurance Maps would be reviewed to obtain information concerning the historical uses of the site and the potential presence of underground storage tanks on the site.

- Review pertinent and reasonably ascertainable information sources to evaluate physiographic, geologic, and hydrogeologic conditions in the vicinity of the site.

- Review documents provided by the Client, at its discretion. Potentially useful documents may include geotechnical, geologic, and environmental reports, site plans, plot plans, and correspondence with regulatory agencies.

- Review United States Geological Survey (USGS) topographic maps to obtain information relative to the topography of the site and previous development and uses of the site and properties located in the vicinity of the site.

- Review the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) records to obtain information regarding the locations of potential oil and gas wells on the site and site vicinity.

- If requested, review recorded land title records for the site in accordance with the requirements identified in 40 CFR Part 312. The purpose of obtaining a chain-of-title report is to assess whether any requirements regarding engineering and institutional controls have been recorded for the site, and whether any land use restrictions and/or environmental cleanup liens are associated with the site. As an alternative, we can order an environmental lien report for the Site for an additional fee.

- Conduct interviews by telephone or in writing with present and past tenants/owners of the site to evaluate if present or past occupants have used, generated, stored, or disposed of hazardous materials/wastes onsite.

- Prepare a report summarizing the findings of the Phase I ESA and qualitatively describing the potential for environmental impairment of the site. If necessary, we will also provide recommendations for additional environmental services in the report.

Subtask 5.7 Traffic Impact Study

Under contract to Quad Knopf, VRPA Technologies, Inc. will prepare a traffic impact study (TIS) report that will identify the anticipated effect of the proposed development on the existing and planned road network and will recommend mitigations required to maintain City of Madera standards. Included is early consultation with Caltrans. Tasks required to complete the traffic report are described below.

Project Management/Kick-off Meeting: Meet with appropriate City staff and the Project team to discuss the scope of the TIS. The kick-off meeting will assist in confirming the Project description and any potential issues/concerns anticipated by the City and the Project team.

Caltrans Consultation: VRPA will prepare an Administrative Draft Assumptions Memo based upon a scope of work that includes more detail regarding analysis methodologies, parameters, and inputs. These will be based on VRPA's experience preparing traffic studies in the San Joaquin Valley, as well as standard engineering practice and guidelines. This Memo will be submitted to the City for review. VRPA will then prepare a Draft Assumptions Memo based on comments from the City which will again be submitted to the City and also to Caltrans.

VRPA will then meet with appropriate City and Caltrans staff to discuss the scope of the TIS and the Draft Assumptions Memo. Based upon additional comments received from the City and Caltrans, VRPA will finalize the Assumptions Memo and submit to the City and Caltrans for formal approval prior to development of the TIS. This task also assumes ongoing coordination with Caltrans for the duration of the Project.

Scoping Meeting: Meet with appropriate City staff and the Project team to discuss the scope of the TIS. The scoping meeting will set the stage for development of the TIS including an understanding of the Project and its components; the freeway, highway, street and road segments and intersections that should be included in the TIS; analyses conducted for the City of Madera; associated environmental documents; issues related to trip generation and distribution; near-term development projects in the Study Area that may affect opening day traffic volumes and level of service (LOS); future year forecasting methods including use of the Madera County Transportation Commission (MCTC) regional traffic model; and mitigation strategies. It would be most useful to conduct this meeting following the formal approval of the Assumptions Memo by the City and Caltrans.

Existing Conditions: Development and analysis of existing traffic/circulation conditions for the following list of intersections and street segments. Note: This list of segments and intersections may change following the completion of the above tasks.

Intersections:

- Avenue 17 WB to SR 99 SB On Ramp
- Avenue 17 EB to SR 99 SB On Ramp
- Avenue 17 / SR 99 SB Off Ramp
- Avenue 17 / SR 99 NB Ramps
- Avenue 17 / Walden Drive
- Avenue 17 / Airport Drive and Golden State Blvd
- Avenue 17 / Sharon Boulevard (future intersection)
- Sharon Boulevard / Access Driveway #1 (future intersection)
- Sharon Boulevard / Access Driveway #2 (future intersection)

Additional intersections and access driveways can be added to the TIS scope for an additional cost of $4,000 per location.

Roadway Segments: For all connecting roadway segments:

- Gather/Conduct Traffic Counts. Gather existing traffic counts (less than one year old) from the City of Madera and Caltrans, if available. Where such counts are not available, VRPA will conduct new traffic counts consistent with City and Caltrans District 6 Traffic Impact Study Guidelines.

- Identify Existing Traffic Impacts. Based upon data gathered, identify existing traffic impacts along each specified highway and street/road facility (segments) and at intersections specified above. Results of the analysis will provide LOS estimates considering existing traffic conditions. Existing LOS for each intersection will be determined using Synchro Software.

  The results of each of these technical analyses will include AM and PM peak hour intersection LOS estimates, and left turn pocket warrants along each segment and at each Study Area intersection, as appropriate.

  The Modified HCM LOS Tables will be applied for segment LOS to determine segment LOS along all connecting facility segments including Congestion Management Program (CMP) facilities. Signal warrants for each unsignalized intersection studied will be conducted using the California MUTCD methodology.

The results of each of these technical analyses will include AM and PM peak hour highway, street/road, and intersection LOS estimates, signal (if appropriate) and 4-way stop warrants, and left turn pocket warrants along each segment and at each Study Area intersection, as appropriate.

VRPA will also provide a quantitative assessment of pavement conditions using the Traffic Index (TI) calculations.

- Identify Short- and Long-term Improvement Projects. In consultation with the City of Madera, identify short- and long-term planned/programmed highway and street/road improvements along the facilities specified above referencing the General Plan, Circulation Element, and Capital Improvement Programs (CIPs). Short–term highway and street/road improvement projects are improvements that will be constructed within one to three (1-3) years of "opening day" of the Project. Such improvement projects may provide relief or enhance traffic impacts associated with the Project or other near-term or cumulative projects. Long-term highway and street/road improvement projects, such as those identified in the Madera Town Center Project, will be identified and considered during the future year impact analysis.

Estimate Project Trip Generation: Estimate AM and PM peak hour trip generation associated with the Project (passenger vehicle and truck trips) using information provided by the Project Applicant or City of Madera specific to the Project. If reliable information is unavailable, VRPA will estimate trip generation based on the ITE Trip Generation Manual, Fontana Truck Trip Generation Study, and available point-of-sales data for other similar travel centers.

Estimate Project Trip Distribution: Estimate Project trip distribution based on input provided by the City of Madera, Caltrans, the Project team, and VRPA's knowledge of the Study Area and trucking patterns.

Existing Plus Project Impacts: Identify existing conditions plus Project traffic impacts on the existing specified highway and street/road facilities, and intersections in the Study Area. LOS and other necessary evaluations will then be conducted considering methodologies specified.

Near-Term Impacts: Identify Existing plus Near-Term development Project traffic, plus identify other near-term cumulative traffic plus Project traffic impacts on the existing specified highway and street/road facilities and intersections in the Study Area. If there are no near-term projects in the vicinity, this task will include only existing traffic plus near-term cumulative traffic plus traffic generated by the Project.

Identify Near-term Development Project Trip Generation and Impacts. Estimate AM and PM peak hour trip generation associated with near-term projects plus near-term cumulative traffic plus Project traffic using the latest Institute of Traffic Engineers (ITE) Trip Generation Manual formula(s). Resulting trips will be distributed and added to existing traffic.

LOS and other necessary evaluations will then be conducted considering methodologies specified.

Cumulative 2040 No Project Impacts: Identify future year 2040 traffic impacts on the planned highway and street/road segments, as well as other major planned facilities that do not currently exist, if applicable.

Facilitate Future Traffic Modeling without Project and Identify Impacts. Review future year peak hour and ADT traffic projections from available sources including the MCTC Regional Traffic Model. Model projections are based upon the adopted Land Use and Circulation Elements of local agencies. The traffic

model will be applied to assign trips associated with future year growth and development to the street and highway network in the Study Area.

The results will identify AM and PM peak hour LOS estimates along each planned highway and street/road segment and intersection specified above, as appropriate, considering future year traffic without the Project.

Cumulative 2040 Plus Project Impacts: Identify future year 2040 traffic impacts with the Project on the planned highway and street/road system.

Facilitate Future Traffic Analysis with Project and Identify Impacts. Considering Project trips generated, either using the MCTC Regional Traffic Model or engineering judgment considering Project-specific travel characteristics, distribute AM and PM peak hour Project trips to the planned highway and street/road system.

It should be noted that Caltrans is in the process of redesigning the SR 99 interchange at Avenue 17. VRPA will consult with Caltrans to determine the protocol for analyzing the future configuration of the interchange. The SR 99 at Avenue 17 interchange intersections identified above covers the necessary analysis that will be required for the future interchange configuration.

The results will identify AM and PM peak hour LOS estimates, along each planned highway and street/road segment and intersection specified above, as appropriate, considering future year traffic with the Project.

Mitigation Measures: Where LOS estimates exceed minimum LOS standards, develop appropriate mitigation measures. Such measures may include, but are not limited to roadway/highway widening, traffic controls, turn pockets, alignment improvements, and any other improvements that would solve potential traffic problems. This task will include determining the required storage and deceleration length of intersection turn lanes.

This task will include determining the required storage length of intersection turn lanes and the required deceleration length based on Caltrans' Highway Design Manual Methodologies. Roadway configurations identified and approved for the Madera Town Center Project will be identified and incorporated into the development of appropriate mitigation measures.

For Caltrans intersections where mitigation is recommended, an Intersection Control Evaluation (ICE) analysis will be prepared. This will include a brief analysis to determine whether the most appropriate traffic control for the intersection is unsignalized, signalized, or a roundabout.

LOS Following Mitigation: Identify the resultant LOS for each intersection considering implementation of required mitigation measures to determine whether mitigation measure will be effective.

Implementation Program: Identify the cost associated with mitigation measures, appropriate methods to implement such measures, and implement phasing plan/schedule and development of a mitigation monitoring program. Development of this task would also include the identification of an alternative form of mitigation through development of a Trip End (TE) generated fee formula for the implementation of transportation control measures (TCMs) and other measures.

Preparation of Administrative Draft Traffic Study: Based on the analysis described above an Administrative Draft Traffic Study will be prepared and submitted to the Project team and City of Madera staff for review and comment.

Preparation of Draft Traffic Study: Revise the Administrative Draft Traffic analysis considering comments resulting from City and Project team, and prepare a Draft Traffic analysis. VRPA will provide the Draft to the Project team, City of Madera, and Caltrans staff for review and comment.

Preparation of Final Traffic Study: Revise the Draft Traffic analysis considering agency comments and prepare a Final Traffic analysis. The Final Traffic analysis will be provided to the Project team and City of Madera for incorporation into the Environmental Impact Report (EIR).

Qualitative Analysis of EIR Project Alternatives: VRPA will prepare a qualitative analysis of up to three (3) project alternatives.

Assistance with Response to Comments: Assist the Project team and the City of Madera in responding to comments received on the Draft EIR related to traffic/circulation, as necessary.

Task 6 – Graphics / GIS

Quad Knopf will prepare various maps and exhibits for the NOP, EIR, and technical studies. We will utilize GIS to create base maps from which to create the required maps. We will also obtain and adapt maps and plans obtained from the Project proponent and the City.

Task 7 – Administrative Draft EIR

Utilizing the approved Project description, technical studies, results of the Public Scoping process, and other sources, Quad Knopf will prepare the Administrative Draft EIR consistent with the requirements of CEQA, relevant case law, and specifications of the City of Madera. The Administrative and Draft EIRs will include the following information:

Project Objectives

A narrative will be provided describing the objectives of the proposed Project.

Executive Summary

Pursuant to Section 15123 of the *CEQA Guidelines*, Quad Knopf will prepare an Executive Summary of the Draft EIR including the following:

- Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;
- Areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and
- Issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

Descriptions of Project alternatives and conclusions regarding the environmental superiority of alternatives will also be summarized.

Introduction

The Introduction chapter will provide the basic, non-technical explanation of the Draft EIR, as well as additional information relevant to the reading and understanding of the document.

Project Description

This chapter will be prepared using the Project description developed in Task 3. A list of the discretionary actions required by the City of Madera, other agency approvals required to proceed with implementation of the proposed Project, and a list of responsible and other agencies expected to use the EIR in their decision-making will also be included.

Environmental Setting, Impacts and Mitigation Measures

As required by §15125 of the *CEQA Guidelines*, the Environmental Setting portion of the EIR will contain a "description of the environment in the vicinity of the Project, as it exists before the commencement of the Project, from both the local and regional perspective." The setting discussions will also include a brief statement of the pertinent regulatory setting.

Impact evaluation criteria or thresholds for determining the significance of impacts will be described for each environmental impact topic. The significance of Project-related impacts will then be determined for each topical area. The analysis will focus on issues identified by responsible and trustee agencies, local agencies and other interested parties in response to the NOP. Impacts found to be less than significant will be described. Impacts that cannot be mitigated below the level of significance will be identified, and the extent to which those impacts could be mitigated through Project alternatives or changes will be demonstrated. Impacts will be quantified to the extent possible. Mitigation measures will be listed and numbered, and cross-referenced to applicable impacts.

Specific environmental topics to be addressed in the Environmental Setting, Impacts, and Mitigation Measures section of the EIR are listed and discussed further below. These topics are subject to modification following completion of the Public Scoping process.

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils and Seismicity
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources *(potentially scoped out)*
- Noise
- Population and Housing *(potentially scoped out)*
- Public Services
- Recreation *(potentially scoped out)*
- Transportation, Traffic and Circulation
- Utilities and Service Systems

The environmental topics to be analyzed in the EIR are described below:

Aesthetics/Visual Resources

The potential aesthetics-related impacts of the proposed Project will be qualitatively evaluated using ground-level photographs taken at key vantage points by Quad Knopf staff and assessing any site plans, elevations, and renderings that may be provided by the Project proponent. If building elevations are not

available, we may take photos of a representative example of a travel center in operation elsewhere in order to assess potential visual impacts. Impacts will be assessed in terms of visibility of the proposed travel center, alteration of the visual setting by grading and structures, and sensitivity of viewpoints. We assume the travel center will be operated on a 24 hours a day/7 days a week basis. Accordingly, both the aesthetic and light and glare impacts will be assessed in terms of visibility of the Project and its components. Mitigation measures will be recommended, if necessary, to reduce any significant impacts. This analysis does not include the use of computer-based visual simulations beyond elevations and renderings provided by the Project proponent. If determined necessary, computer-based visual simulations can be prepared by Quad Knopf with an augmentation of the scope and budget.

Agricultural and Forestry Resources

The EIR will provide a discussion of important farmlands classifications (e.g., prime farmland, farmland of statewide importance, unique farmland) described in the NRCS website, the soil characteristics, the agricultural industry, the regional agricultural economy, Williamson Act contracts within the planning area, the agricultural character of the area, an impact analysis, and recommendations for mitigating potentially significant impacts. Forestry resources are not present in the Project vicinity.

Air Quality

The Air Quality technical report and HRA report prepared by OB-1 Air Analyses as part of Task 5 will be used to complete this section of the EIR.

Biological Resources

The project-level biological resources assessment prepared by Quad Knopf's biologists as part of Task 5 will be used to complete this section of the EIR.

Cultural Resources

The project-level cultural and paleontological resources assessment prepared by Ric Windmiller as part of Task 5 will be used to complete this section of the EIR.

Geology, Soils, and Seismicity

Quad Knopf will address impacts related to soils, geologic hazards, and seismic safety based on public literature. We will analyze effects associated with erosion, deposition, displacement, compaction or coverage of soils, alteration of topography, and geologic hazards. Potential impacts will be assessed and mitigation measures included if necessary.

Greenhouse Gases

The Greenhouse Gas technical report prepared OB-1 Air Analyses as part of Task 5 will be used to complete this section of the EIR.

Hazards and Hazardous Materials

This section will be completed based on a Phase I ESA prepared by Geocon as part of Task 5.

Hydrology and Water Quality

Quad Knopf will summarize existing hydrological conditions in the Project area watershed and groundwater basin using existing published documentation. Potential effects of Project development will

be described. The analysis will consider on-site runoff and the exposure of the Project site to potential flood hazards. The State Water Resources Control Board (SWRCB) and the RWQCB, Central Valley Region, have established water quality standards required by Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The hydrology and water quality analysis will address the Project's compliance with the State's construction stormwater regulations. Compliance with the requirements of the NPDES will also be addressed.

Land Use and Planning

While the Project site and lands to the north and west are zoned C-2 Heavy Commercial, land immediately to the east and south in unincorporated Madera County is zoned Rural Residential Single Family. As such, there is a potential for land use incompatibility issues to occur as a result of both Project design and operations. Many of these potential impacts, such as noise, lighting, traffic, air quality, will be addressed in other sections of the EIR. Quad Knopf will analyze the proposed Project's impacts in terms of compatibility with existing land uses and land use designations in the Madera Zoning Ordinance and General Plan.

Quad Knopf will determine whether the Project would physically divide an established community, result in conflicts with City policies adopted to reduce environmental effects, or would conflict with any adopted habitat conservation plans. Quad Knopf will also discuss potential policy conflicts between the proposed Project and proposed and existing developments.

Mineral Resources

The EIR will include an analysis of published documents, including the 2007 Gateway Galleria EIR, that address the potential for mineral resources, such as gravel, to be found at the Project site. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Noise

The Noise technical report prepared by j.c. brennan & associates in Task 5 will be used to complete this section of the EIR.

Population and Housing

Quad Knopf will describe population and housing impacts of the proposed Project. The potential for the proposed Project to induce growth in the area will be assessed. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Public Services

Quad Knopf will interview service providers and use the most recent data available to assess existing community services, including police and fire protection, and schools. The discussion regarding potential impacts to schools may be scoped out because the proposed project will not generate students that would attend area schools. We will provide a description of potential impacts to existing services resulting from the construction and operation of the proposed Project.

Recreation

This section of the EIR will address potential impacts to City recreation facilities as a result of the proposed Project. This will include an inventory of existing facilities and an analysis of the proposed projects impact on those facilities. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Transportation, Traffic, and Circulation

The Traffic Impact Study prepared by VRPA Technologies as detailed in Task 5 will be used to complete this section of the EIR.

Utilities and Service Systems

This section of the EIR will address potential effects related to the availability and capacity of utilities and services, such as water, wastewater, electricity, natural gas, solid waste disposal, and telecommunications. This section will discuss whether any of these services or facilities is below adopted standards, or near or beyond its capacity to adequately serve the proposed Project. The analysis will be based on interviews with service providers and review of published reports. A water supply assessment, as described in Section 15155 of the *CEQA Guidelines*, is not warranted and is not proposed. However, in light of the prolonged drought conditions affecting the Central Valley, the analysis will provide a thorough description of Project water demand and available supply.

Cumulative Impacts

Quad Knopf will discuss the incremental contribution of the proposed Project to cumulative effects of other past, current, and planned or reasonably foreseeable projects in the vicinity. Quad Knopf will work with City planning staff to compile an updated list of cumulative projects.

Alternatives

An analysis of a reasonable range of alternatives to the proposed Project will be conducted according to Section 15126(f) of the *CEQA Guidelines*. A "No Project" alternative will be discussed per requirements of the *CEQA Guidelines*. Section 15126(f) limits the alternatives analysis to alternatives that will avoid or substantially lessen any of the significant effects of the proposed Project (i.e., preferred alternative). In addition to the No Project alternative, Quad Knopf proposes to evaluate three alternatives to the proposed Project. Currently, an off-site alternative is not anticipated in the primary analysis, but could be addressed in the discussion of "alternatives considered but rejected from further analysis".. These alternatives will be developed in close consultation with City staff and could include an alternative site that meets all or most of the Project objectives. Quad Knopf will develop reasonably detailed analyses of impacts associated with these alternatives, by topic, in comparison with the proposed Project.

As required by Section 15126(f), the Draft EIR will identify the environmentally superior alternative and, if that is the "No Project" alternative, the environmentally superior alternative among the remaining alternatives.

Other CEQA Sections

Quad Knopf will prepare the remaining CEQA-mandated sections (i.e., growth inducing impacts, energy, impacts that cannot be avoided, and mitigation monitoring program). With regard to the energy analysis required by Appendix F of the *CEQA Guidelines*, Quad Knopf will follow the guidance provided by the Third Appellate District Court in *California Clean Energy Committee vs. City of Woodland,* published April 1, 2014. The analysis will address electricity and natural gas use expected to occur during construction and operation of the Travel Center. The possible use of alternative energy (e.g., photovoltaic) will also be addressed. With regard to the analysis of vehicle fuel expected to be used during operation of the facility, it should be noted that the facility will attract vehicles currently traveling on SR 99, and is not expected to generate new trips, except for those involved in exiting and re-entering SR 99 after using the services at the Travel Center.

Quad Knopf will prepare and submit the Administrative Draft EIR to the City for review.

Deliverables:

- *Administrative Draft EIR to City (5 hard copies + digital files)*

Task 8 – Screencheck and Public Draft EIR

Upon receipt of comments from the City and Applicant, Quad Knopf will make necessary revisions and prepare the Screencheck and Public Draft EIR for submittal to the City. This scope of work assumes a maximum of one review cycle with compiled comments from City staff on the Administrative Draft EIR. Quad Knopf will prepare the Notice of Availability (NOA) and the State Clearinghouse (NOC) form. The City will be responsible for distribution of the NOA to any interested organizations or individuals, as well as an announcement of the public review period in a local newspaper, or mailings to property owners, or posting on and off site, as required under Section 15087 of CEQA. The period for public review must be at least 45 days. Quad Knopf will hand deliver the Draft EIR and NOC to the State Clearinghouse.

Deliverables:

- *Screencheck Draft EIR to City (5 hard copies)*
- *Draft EIR to City (20 hard copies + digital files)*
- *Draft EIR to State Clearinghouse (15 CDs)*
- *Notice of Completion to State Clearinghouse (1)*
- *Notice of Availability (1 digital file)*

Task 9 – Administrative and Final EIR

Pursuant to Section 15088 of the *CEQA Guidelines*, the Final EIR must respond in writing to each oral and written comment on the Draft EIR made by individuals, agencies, and organizations that review it. Additional research and analysis will be undertaken by Quad Knopf as necessary to effectively respond to comments. Comments regarding the sections or technical reports prepared by subconsultants will be routed to them for review and comment, with Quad Knopf responsible for final review for consistency and compilation of the final responses.

The document will incorporate written comments received and response to comments. Along with the comments and responses, a list will be compiled of all persons, organizations, and agencies commenting on the Draft EIR. The Final EIR will include revisions to the EIR text and summary table, as necessitated by comments. Comments, responses to comments, and the list of all persons, organizations, and agencies commenting on the Draft EIR will be included. Also included are errata and other information, which when combined with the Draft EIR, will constitute a Final EIR.

A cost estimate is provided herein which we believe will be adequate for the task. As a basis for cost estimating, Quad Knopf assumes that 100 individual responses (not letters) will be required for the EIR. In our experience, it takes an average of one hour to respond satisfactorily to each comment. We believe that this estimate will be adequate for the task. If the level of response exceeds the expectation described above, Quad Knopf will respond to those comments that are above and beyond the threshold for an additional fee on a time-and-materials basis, or another mutually agreeable formula.

The Final EIR will reflect direction received from City staff as contained in one set of unified comments.

Deliverables:

- *Administrative Final EIR (5 hard copies)*
- *Final EIR (30 hard copies + digital files)*

Task 10 – Mitigation Monitoring and Reporting Program (MMRP)

Quad Knopf will prepare the Mitigation Monitoring and Reporting Program (MMRP), formatted in accordance with City standards.

Deliverables:

- *Administrative MMRP (1 hard copy + digital file)*
- *Final MMRP (1 hard copy + digital file)*

Task 11 – Findings and Statement of Overriding Considerations

Using the analyses contained in the EIR, Quad Knopf will prepare draft Findings and Statement of Overriding Considerations (if warranted) for consideration and review by the City Attorney and the decision making body. The Findings will be formatted in accordance with City standards.

Deliverables:

- *Draft Findings and Statement of Overriding Considerations (1 hard copy + digital file)*
- *Final Findings and Statement of Overriding Considerations (1 hard copy + digital file)*

Task 12 – CEQA Notices

Quad Knopf will be responsible for preparing all required CEQA notices, including Notice of Completion, NOP, and Notice of Determination (NOD). Details of each notice are described in the relevant task sections. Quad Knopf will prepare and deliver the NOD to the County Clerk and State Clearinghouse within five (5) days of City Council approval of the Project. All filing fees that must accompany notices will be paid by the City.

Deliverables:

- *Notice of Determination (1 hard copy)*
- *See details of other CEQA notices (i.e., NOC and NOP) in relevant task descriptions.*

Task 13 – Meetings/Public Hearings/Project Management

Quad Knopf's Project Manager will attend public meetings, including the scoping meeting and two public hearings (one Planning Commission and one City Council) on the Draft EIR. Our Project Manager will respond to comments and questions, and make presentations, as requested by the City. Monthly status reporting via a combination of telephone conference calls and e-mails between the Quad Knopf's Project Manager and City staff are anticipated through the duration of the Project. This task also consists of those management activities that ensure Quad Knopf's ability to keep all work tasks running smoothly, on time, and within budget. As the liaison between the Quad Knopf team and the City's staff, our Project Manager will ensure information is distributed appropriately, comments regarding Project-related issues are communicated effectively and efficiently, and financial performance is tracked regularly. Additional meetings may be attended on a time-and-materials basis.

This task also includes Quad Knopf's critically important internal Quality Assurance/Quality Management process. This means that every product deliverable is subjected to a peer-level review before it is provided to the City.

Deliverables:

- *See details of meeting attendance in relevant task descriptions.*

Schedule

Task	Target Date/ Duration	Activity
Task 1 – PROJECT INITIATION		
	1/22/15	Contract executed/Notice to Proceed
	1/22/15	Project Proponent provides complete project description to QK **(All dates below are keyed to this date, except as noted.)**
Task 2 – FIELD RECONNAISSANCE AND REVIEW OF EXISTING INFORMATION		
	1/29/15 (7 days)	
Task 3 – PROJECT DESCRIPTION AND PROJECT OBJECTIVES		
	1/26/15 (4 days)	Complete and expanded project description completed
Task 4 – PUBLIC SCOPING / NOTICE OF PREPARATION		
	1/30/15 (8 days)	NOP Completed and Released
	Date TBD	Public scoping meeting at Madera City Hall
	3/2/15 (30 days)	30-day scoping period ends
Task 5 – EARLY CONSULTATION AND TECHNICAL STUDIES		
Subtask 5.1	3/9/15 (14 days)	Air Quality Report and HRA **(date follows receipt of traffic output data)**
Subtask 5.2	2/22/15 (30 days)	Biological Survey Report
Subtask 5.3	2/22/15 (30 days)	Cultural Resources Report
Subtask 5.4	3/5/15 (10 days)	Greenhouse Gas Report **(date follows receipt of traffic output data)**
Subtask 5.5	3/5/15 (10 days)	Health Risk Assessment **(date follows receipt of traffic output data)**
Subtask 5.6	3/5/15 (10 days)	Noise Study **(date follows receipt of traffic output data)**
Subtask 5.7	2/5/15 (14 days)	Phase I ESA
Subtask 5.8	2/23/15 (30 days) 3/5/15 (40 days)	Traffic Impact Study (output data, only) Traffic Impact Study (complete report)
Task 6 – GRAPHICS/GIS		
Task 7 – ADMINISTRATIVE DRAFT EIR		
	3/23/15 (8 weeks)	QK submits Admin Draft EIR to City for review
	3/30/15 (7 days)	City completes review of Admin Draft EIR
	4/6/15 (7 days)	QK makes revisions and submits Screencheck Draft
	4/13/15 (7 days)	City completes review of Screencheck Draft EIR
Task 8 – SCREENCHECK AND DRAFT EIR		
	4/14/15	QK submits Public Review Draft EIR to City and State Clearinghouse for start of 45-day public review
	5/28/15	End of 45-day public review period
Task 9 – ADMINISTRATIVE AND FINAL EIR		
	6/4/15 (7 days)	QK submits Admin Final EIR to City for review
	6/11/15 (7 days)	City completes review of Admin Final EIR
	6/18/15 (7 days)	QK makes revisions / Final EIR ready for Planning

Task	Target Date/ Duration	Activity
		Commission hearing
Task 10 – MITIGATION MONITORING AND REPORTING PROGRAM		
		MMRP provided in draft form to City
Task 11 – FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS		
		Findings and SOC provided in draft form to City
Task 12 – CEQA NOTICES		
		At various tasks.
Task 13 – MEETINGS / HEARINGS / PROJECT MANAGEMENT		
	Ongoing	Attendance at specified meetings and hearing; ongoing communications; ongoing project management
	7/2/15	Planning Commission hearing (10 days or later following distribution of Final EIR)
	7/8/15	City Council hearing

Schedule Assumptions:

1. The integrity of the timeline is maintained only if each event is accomplished without additional delays which could be caused by events such as the discovery of an issue or concern that warrants additional work, changes to the project, agency review time, etc.

2. A complete and stable project description is essential for this schedule to be maintained. Impact analyses will not begin until the City and Project proponent accept the project description.

3. The schedule for completion of the Final EIR will be determined in consultation with the City, depending on the volume of comments received.

4. Add dates are keyed to a Notice to Proceed date of January 22, 2015, except as noted otherwise.

5. All dates and durations are calendar days.

Cost Proposal

The fixed-fee cost estimate on the following page is preliminary and subject to change after review of additional project description information provided by the applicant and the City, completion of the Public Scoping process (Task 4), and further consultation with City of Madera staff.

Love's Travel Center EIR Cost Breakdown

	Quad Knopf										Direct Expenses				
	Project Manager	QA/QC	Senior Planner	Senior Associate Planner	Associate Biologist	Senior Associate Biologist	Associate Planner	GIS Analyst	Project Administrator	QUAD KNOPF TOTAL	DIRECT EXPENSES	REPRO	SUB-CONTRACTORS	SUBTOTAL	TASK TOTALS
	Hours @	Hours @	Hours @	Hours @	Hours @	Hours @	Hours @	Hours @	Hours @	$	@	Copies @	$	$	$
	Chaffin	White	Keene/ Johnston	Hall	Schade	Glass	Perea	Ying	Lee						
Phase/Task	$157	$142	$142	$121	$97	$121	$97	$93	$88		$1	$0.21	$1		
TASK 1 - PROJECT INITIATION	18	4	4	2	2	2	2	2	2	$5,176				$0	$5,176
TASK 2 - FIELD RECON AND REVIEW EXISTING INFO	8		16	12	12	4	6			$7,210				$0	$7,210
TASK 3 - PROJECT DESCRIPTION AND OBJECTIVES	18	2	6					8	6	$4,988				$0	$4,988
TASK 4 - PUBLIC SCOPING / NOTICE OF PREP										$0				$0	$0
Subtask 4.1 Notice of Preparation	4	1	4	2			12	2	6	$3,438		36		$9	$3,447
Subtask 4.2 Scoping Meeting	8		6					2		$2,274	200			$230	$2,504
TASK 5 - EARLY CONSULT. AND TECH. STUDIES										$0				$0	$0
Subtask 5.1 Air Quality and GHG Report (OB-1)										$0			$19,950	$22,943	$22,943
Subtask 5.2 Biological Survey Report *(Quad Knopf - See Task 7)*										$0				$0	$0
Subtask 5.3 Cultural Resources Report (Windmiller)										$0			$3,668	$4,218	$4,218
Subtask 5.4 Health Risk Assessment Report (Vista Env)										$0			$9,200	$10,580	$10,580
Subtask 5.5 Noise Study (JC Brennan)										$0			$7,678	$8,830	$8,830
Subtask 5.6 Phase I ESA (Geocon)										$0			$4,000	$4,600	$4,600
Subtask 5.7 Traffic Study and Caltrans Consultation (VRPA)										$0			$36,670	$42,171	$42,171
TASK 6 - GRAPHICS / GIS								24		$1,992				$0	$1,992
TASK 7 - ADMIN DRAFT EIR										$0		900		$217	$217
Aesthetics	2	1					24	6	1	$3,370				$0	$3,370
Agriculture and Forestry Resouces	2		2				20	4	1	$2,958				$0	$2,958
Air Quality	2	1		6				1	1	$1,353				$0	$1,353
Biological Resources (include Biological Report)	2	2			60	16		2	2	$8,696				$0	$8,696
Cultural Resources	2	1		6				1	1	$1,353				$0	$1,353
Geology and Soils	1	1					12	1	1	$1,634				$0	$1,634
Greenhouse Gas Emissions	2	2		6				1	1	$1,495				$0	$1,495
Hazards and Hazardous Materials	2	1	8					1	1	$1,763				$0	$1,763
Hydrology and Water Quality	2	1		24				2	1	$3,614				$0	$3,614
Land Use and Planning	2	1	24					4	1	$4,264				$0	$4,264
Mineral Resources (potentially scoped out)										$0				$0	$0
Noise	2	1		6				2	1	$1,436				$0	$1,436
Population and Housing (potentially scoped out)										$0				$0	$0
Public Services	4	1					36	1	1	$4,433				$0	$4,433
Recreation (potentially scoped out)										$0				$0	$0
Transportation and Traffic	4	1		6				2	1	$1,750				$0	$1,750
Utilities and Services Systems	2	1	24					2	1	$4,118				$0	$4,118
Cumulative Impacts	4	1	4	2	2	2	4		1	$2,492				$0	$2,492
Project Alternatives	24	1	4	2			2	4	1	$5,334				$0	$5,334
Growth Inducing Impacts	2	1	1	2			2		1	$1,122				$0	$1,122
Effects Found Not to Be Significant	4	1	1	1			1		1	$1,218				$0	$1,218
Additional CEQA Required Sections	8	1	2	8	2	2	4	2	1	$3,728				$0	$3,728
Executive Summary	6	1	1	1	1	1	1		6	$2,190				$0	$2,190
TASK 8 - SCREENCHECK AND PUBLIC DRAFT EIR	20	4	16	16	8	8	16	6	10	$12,590		6,200		$1,497	$14,087
TASK 9 - ADMINISTRATIVE AND FINAL EIR	18	4	24	24	8	6	16	2	8	$13,630		3,600		$869	$14,499
TASK 10 - MITIGATION MONITORING AND REPORTING	4	2	2						2	$1,372				$0	$1,372
TASK 11 - FINDINGS AND SOC	4	2	6						2	$1,940				$0	$1,940
TASK 12 - MEETINGS / HEARINGS / MANAGEMENT	120		8							$19,976				$0	$19,976
TOTAL	301	40	163	126	95	41	159	80	62	$132,927	$200	10,736	$81,166	$96,164	$229,091

*Please note that cost for Final EIR responses to comments is an estimate only. The balance of the projected costs are fixed fee. The actual cost of responses to comments will be determined once letters have been received and evaluated.

Return to Agenda

REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF:
January 21, 2015

AGENDA ITEM NUMBER:
B-13

Approved By:

Community Development Director

City Administrator

SUBJECT:

Consideration of a Resolution Approving an Agreement with Quad Knopf for Preparation of an Environmental Impact Report Relating to the Development of the Love's Travel Center and Authorizing the Mayor to Execute the Agreement on Behalf of the City.

RECOMMENDATION:

It is recommended that the City Council adopt a resolution approving and authorizing the mayor to sign an agreement with Quad Knopf for preparation of an environmental impact report relating to the development of the Love's Travel Center.

SUMMARY:

The City is in need of professional environmental planning services in the preparation of an environmental impact report that would facilitate the development of the 25 acre travel center site located on the southeast corner of Avenue 17 and State Route 99. The firm of Quad Knopf was selected because consulting group prepared an earlier environmental impact report for a planned shopping center on the site and was best suited to undertake the required scope of work under an expedited schedule.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

The recommended agreement is a required part of the review and approval process for a proposed commercial development project. At such, the approval of the agreement is consistent with the City's vision statement for "good jobs and economic opportunity".

FISCAL IMPACT:

The cost for preparing the environmental impact report ($229, 091) is born by the applicant. A parallel agenda item proposes an agreement where the applicant will fully fund the associated costs of the environmental work. Hence, there is no fiscal impact to the City in engaging the consultant to work on the project. The City's costs for administration and review of the work is also covered by the owner.

RESOLUTION NO. _____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, APPROVING AN AGREEMENT WITH QUAD KNOPF FOR ENVIRONMENTAL PLANNING SERVICES RELATING TO THE LOVE'S TRAVEL CENTER PROJECT AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT ON BEHALF OF THE CITY

WHEREAS, The City is processing applications for a development project commonly referred to as the Love's Travel Center (the "Project"); and

WHEREAS, the City is in need of environmental planning services in connection with its efforts to prepare an environmental impact report for the Project; and

WHEREAS, Quad Knopf is a firm that is qualified to provide professional environmental planning services (the "Services"); and

WHEREAS, City has prepared an Agreement for services with Quad Knopf ("Agreement") and such Agreement is on file in the office of the City Clerk and referred to for full particulars.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA hereby finds, determines, resolves and orders as follows:

1. The recitals listed above are true and correct.

2. The Agreement with Quad Knopf, Inc. for environmental planning services related to the Love's Travel Center, a copy of which is on file in the office of the City Clerk and referred to for particulars, is hereby approved.

3. The Mayor is authorized to execute the Agreement on behalf of the City.

4. This resolution is effective immediately upon adoption.

* * * * * * * * * * *

AGREEMENT FOR ENVIRONMENTAL PLANNING SERVICES TO THE CITY OF MADERA IN PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR THE LOVE'S TRAVEL CENTER

This Agreement made and entered into this ____ day of _____, 2015, between the City of Madera, hereinafter called "City," and the consulting firm of Quad Knopf, Inc., hereinafter called "Consultant."

RECITALS

A. In an effort to process applications for development of approximately 25 acres of land on the southeast corner of Avenue 17 and State Route 99 in Madera, California, the City has requested a proposal for environmental planning services in connection with the proposed development referred to as the LOVE'S Travel Center ("the Project").

B. City requires environmental planning services of qualified professional planners in connection with preparation of an environmental impact report for the Project.

C. City has determined that Consultant is a firm having the necessary experience and qualifications to provide the desired environmental planning services to assist the City in the Project.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the City and Consultant agree as follows:

1.0 Services. The City hereby employs Consultant to perform the environmental planning services herein set forth at the compensation and upon the terms and conditions herein expressed, and Consultant hereby agrees to perform such services for said compensation, and upon said terms and conditions. Said services to be performed pursuant to this Agreement are more particularly described in Section 2.0.

2.0 Obligations, Duties and Responsibilities of Consultant. It shall be the duty, obligation and responsibility of the Consultant, in a skilled and professional manner, to perform, furnish and supply to the City the environmental planning services for the Project (the "Services") further described in the Scope of Work, attached hereto as "Exhibit A" and incorporated herein as though fully set forth.

2.1 Progress Reports. Consultant shall communicate and meet with City staff at Project progress meetings at intervals mutually agreed to between City and Consultant to verify, refine and complete Project requirements and review the progress of the Project. Consultant shall coordinate Project with City staff and prepare the necessary maps, documents and reports needed to proceed through completion of the Project. Consultant shall meet with City staff at the request of the City.

2.2 Use of Project Plans. All plans and specifications prepared by the Consultant, whether written or oral, and all opinions rendered by Consultant are for the sole use of City. They shall not be provided to any other person or entity without the express written consent and authorization of City.

2.3 Confidentiality. Documents, plans, disclosures and other information of any nature and description which City supplies to or makes available to Consultant or which Consultant discovers or develops in performance of the services under this Agreement shall be deemed confidential. Consultant shall not disclose same without City's written authorization, except to the extent that information is in the public domain or is required by law or under Consultant's professional obligations to be disclosed.

3.0 Consultant's Fees and Compensation / Amount / How and When Payable.

3.1 Fees - For all the work and services, including supplies and equipment, pertaining to the Project and required to be furnished by the Consultant to the City, CITY agrees to pay Consultant in accordance with the Line Item Budget as set forth in Exhibit 'A', attached hereto and incorporated herein by reference. The total fee for these services shall not exceed Two Hundred Twenty Nine Thousand Ninety One Dollars ($229,091).

3.2 Monthly Progress Billings - Consultant shall furnish City with itemized monthly progress billings for all services rendered and supplies furnished pursuant to Paragraph 2.0 hereof pertaining to services. Such payments shall be due and payable by City to Consultant within thirty (30) days after presentation of approved invoices to City.

4.0 Audits and Inspections Access. Consultant shall, upon reasonable notice and at any time during regular business hours, and as often as City may deem necessary, make available to City or its authorized representative for examination, all of its records and data with respect to matters

covered by this Agreement. Consultant shall permit City to audit and inspect all invoices, materials, payrolls, records of personnel, conditions of employment, and other data relating to matters pertaining to this Agreement.

5.0 Time of Completion. City and Consultant agree that time is of the essence in each and every term of this Agreement, and the Project will be completed in conformance with the schedule outlined in the scope of work "Exhibit A". Consultant shall not be responsible for any delay caused or created by failure on the part of the City or Project proponent to conform to those elements of the schedule for which those parties are responsible, or for providing timely responses to requests for information which may be generated by Consultant from time to time. Consultant shall, in conjunction with the progress reports specified in Section 2.1 of this agreement, provide updates as to the project's conformance with the schedule outlined in Exhibit A, and shall identify any items which require action on the part of the City or Project proponent to maintain the schedule. Any change or update in the schedule shall be made in writing and agreed to by the City.

6.0 Compliance with Laws. Consultant shall comply with all federal, state and local laws, ordinances, regulations and provisions applicable in the performance of Consultant's services hereunder.

Wherever reference is made in this Agreement to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards or codes current on the effective date of this Agreement shall apply, unless otherwise expressly stated.

7.0 Ownership of Documents.

7.1. Upon Termination - If the Agreement is terminated at any time during the employment of Consultant, all source documents, and all products and deliverables, regardless of their state of completion, shall be submitted to, and will become the sole property of City. The Consultant shall not be liable for any claims, damages, losses, and expense (including reasonable attorney's fees) arising out of or resulting from reuse or modification of said documents by City.

7.2. Upon Completion - All documents, including calculations, required in performing services under this Agreement shall be submitted to, and remain the sole property of City. The Consultant shall not be liable for any claims, damages, losses, and expense (including reasonable attorney's fees) arising out of or resulting from reuse or modification of said documents by City.

8.0 Insurance. Consultant shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Consultant, his/her agents, representatives, or employees.

8.1. Minimum Scope and Limits of Insurance. Consultant shall maintain limits no less than:

A. $1,000,000 General Liability (including operations, products and completed operations) per occurrence for bodily injury, personal injury and property damage at least as broad as Insurance Services Office (ISO) Commercial General Liability coverage (occurrence Form CG 00 01).

B. $1,000,000 Automobile Liability per accident for bodily injury or property damage at lease as broad as ISO Form CA 00 01 covering Automobile Liability, code 1 (any auto).

C. Worker's Compensation as required by the State of California.

D. $1,000,000 Employer's Liability per accident for bodily injury or disease.

E. $1,000,000 Errors & Omissions Liability appropriate to the Consultant's profession. Architect's and Engineer's coverage is to be endorsed to include contractual liability.

If Consultant maintains higher limits than the minimums required above, the entity shall be entitled to coverage at the higher limits maintained by Consultant.

8.2. Deductibles and Self-Insured Retentions. Any deductibles or self-insured retentions must be declared to and approved by the entity.

8.3. Other Insurance Provisions. The general liability policy and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

A. The entity, its officers, officials, employees, and volunteers are to be covered as insureds with respect to liability arising out of automobiles owned, leased, hired or borrowed by or on behalf of the Consultant; and with respect to liability arising out of work or operations performed by or on behalf of the Consultant. For any claims related to this project, the Consultant's insurance coverage shall be primary insurance as respects the entity, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the entity, its officers, officials, employees or volunteers shall be excess of the Consultant's insurance and shall not

contribute with it.

B. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the entity.

C. Coverage shall not extend to any indemnity coverage for the active negligence of the additional insured in any case where an agreement to indemnify the additional insured would be invalid under Subdivision (b) of Section 2782 of the Civil Code.

8.4. Acceptability of Insurers. Insurance is to be placed with California admitted insurers with a current AM Best's rating of no less than A:VII, unless otherwise acceptable to the entity.

8.5. Verification of Coverage. Consultant shall furnish the entity with copies of original certificates and endorsements, including amendatory endorsements, effecting coverage required by this clause. All certificates and endorsements are to be received and approved by the entity before work commences; however, failure to do so shall not operate as a waiver of these insurance requirements. The entity reserves the right to require complete, certified copies of all required insurance policies, including endorsements effecting the coverage required by these specifications at any time.

8.6. Subcontractors. Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each sub-consultant. All coverages for sub-consultants shall be subject to all of the requirements stated herein.

9.0 Independent Consultant. In performance of the work, duties, and obligations assumed by Consultant under this Agreement, it is mutually understood and agreed that Consultant, including any and all of Consultant's officers, agents and employees will, at all times, be acting and performing as an independent Consultant, and shall act in an independent capacity and not as an officer, agent, servant, employee, joint venturer, partner, or associate of City. Furthermore, City shall have no right to control or supervise or direct the manner or method by which Consultant shall perform its work and functions. However, City shall retain the right to administer this Agreement so as to verify that Consultant is performing its obligations in accordance with the terms and conditions hereof.

Consultant and City shall comply with all applicable provisions of law and the rules and regulations, if any, of governmental authorities having jurisdiction over the subject matter hereof.

Because of its status as an independent Consultant, Consultant shall have absolutely no right to employment rights and benefits available to City employees. Consultant shall be solely liable and responsible for providing to, or on behalf of, its employees all legally required employee benefits. In addition, Consultant shall be solely responsible and hold City harmless from all matters relating to payment of Consultant's employees, including compliance with Social Security, withholding and all other regulations governing such matters. It is acknowledged that during the term of this Agreement, Consultant may be providing services to others unrelated to City or to this Agreement.

10.0 Hold Harmless. Consultant shall hold harmless City, its Council, officers, volunteers, and employees, and shall indemnify and defend such Council, officers, volunteers, and employees from any and all costs, expenses (including reasonable attorney's fees and court costs), damages, claims, causes of action, losses or any other liabilities arising out of the negligent or wrongful acts, errors or omissions of Consultant, its officers, subcontractors, agents, employees or Consultants in performing or failing to perform any work, services, or functions under this Agreement, except for those arising from the sole negligence or intentional acts of the City.

11.0 Attorney's Fees/Venue. In the event that any action is brought to enforce the terms of this Agreement, the party found by the court to be in default shall pay reasonable attorney's fees to the successful party in an amount to be fixed by the Court. The venue for any claim being brought for breach of this Agreement shall be in Madera County California or as appropriate in the U.S. District Court for the Eastern District of California, located in Fresno County.

12.0 Governing Law. The laws of the State of California shall govern the rights and obligations of the parties under the Agreement, including the interpretation of the Agreement. If any part of the Agreement is adjudged to be invalid or unenforceable, such invalidity shall not affect the full force and effect of the remainder of the Agreement.

13.0 Amendments. Any changes to this Agreement requested by either City or Consultant may only be effected if mutually agreed upon in writing by duly authorized representatives of the parties hereto. This Agreement shall not be modified or amended or any rights of a party to it waived except by such a writing.

14.0 Termination. This Agreement may be terminated by mutual agreement or it may be terminated by the City upon giving fifteen (15) days written notice of intent to terminate the contract. If, in the opinion of the Consultant, any requirement of the City under terms of this Agreement is unsound from a planning standpoint, Consultant may terminate this Agreement upon fifteen (15) days written notice to the City.

Notice of termination shall be mailed to the City:

Chris Boyle
Planning Manager
205 W. Fourth Street
Madera, CA 93637

To the Consultant:

Amber Adams
Quad Knopf, Inc.
6051 N Fresno Suite 200
Fresno, CA 93710

In the event of such termination, Consultant shall be paid for work completed to date of termination, and any such work shall become the property of the City.

15.0 Assignment. Neither the City nor Consultant will assign its interest in this Agreement without the written consent of the other.

16.0 Notices. All notices and communications from the City shall be to Consultant's designated Project Manager or Principal-In-Charge. Oral communications shall be confirmed in writing. All written notices shall be provided and addressed as indicated in Paragraph 14.0 hereof.

17.0 Complete Agreement of Parties. This Agreement, including attachments incorporated herein by reference, represents the entire Agreement and understanding between the parties. Any modifications to this Agreement shall be in writing and signed by authorized representatives of the parties. One or more waivers of any term, condition or covenant by either party shall not be construed as a waiver of any other term, condition or covenant.

18.0 Consultant's Authority. Each individual executing or attesting to this Agreement on behalf of Consultant hereby covenants and represents: (i) that he or she is duly authorized to execute or attest and deliver this Agreement on behalf of such corporation in accordance with a duly adopted

resolution of the corporation's articles of incorporation or charter and bylaws; (ii) that this Agreement is binding upon such corporation; and (iii) that Consultant is a duly organized and legally existing corporation in good standing in the State of California.

19.0 Sole Agreement. This instrument constitutes the sole and only Agreement between Consultant and City respecting the Project and correctly sets forth the obligations of Consultant and City to each other as of its date.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the day and year first above written.

* * * * * * * * * *

City of Madera

By: _____

Robert L. Poythress, Mayor

Quad Knopf, Inc.

By: _____

Title CFO

APPROVED AS TO FORM:

By: _____

Brent Richardson, City Attorney

ATTEST:

By: _____

Sonia Alvarez, City Clerk

PROPOSAL

This proposal describes Quad Knopf's understanding of the proposed Project and approach to preparing a thorough and legally defensible EIR, including tasks, schedule, and budget. If accepted, this proposal would become an attachment to Quad Knopf's agreement for professional services with the City of Madera.

Also, as an Appendix to this proposal, we've included a statement of qualifications, including an overview description of the Quad Knopf team, teaming partners, and key personnel.

Project Understanding

The following is a preliminary description of the proposed Project. Additional details, including a site plan and formal City of Madera applications, are expected to be provided by the Project proponent before work on the EIR begins. The proposed Project is a travel center that is primarily intended to serve a wide range of travel needs of motorists travelling on State Route (SR) 99. It is assumed that a large percentage of the daily traffic will be semi-trucks (i.e., tractor trailers). It is also assumed that the travel center will operate 24 hours per day, seven days per week, and 365 days per year.

The undeveloped, proposed Project site consists of 49 acres (Assessor's Parcel 038-040-002) within the city limits of Madera. The site abuts SR 99 on the west and Avenue 17 on the north. Land north of Avenue 17 is undeveloped and designated for heavy commercial use. Land immediately to the east is developed with rural residential dwellings. Land to the south is undeveloped and designated for industrial use.

Project Components – Provided by Project Proponent

- Travel Center: Approximately 10,200 square feet in size, which consists of convenience store, restrooms, truck wash, and attached restaurant, on approximately 10 acres.
- Restaurant: Proposed tenant will be a Carl's Jr., with seating for approximately 50 people.
- Tire Care: Approximately 12,000 square feet with two bay doors and inside tire storage.
- Hotel: Proposed Sleep Inn with 80 rooms, on one acre.
- RV/Boat/Self storage: Approximately 50,000 square feet under roof, on five to seven acres.
- Estimated vehicles per day: 2,000 cars and 600 semi-trucks.

City Entitlements – Generated by City Based on Project Components

- Site Plan Review – Overall site.
- Truck Stop – Conditional Use Permit (This will include tire shop, truck wash, and related facilities).
- Hotel – Conditional Use Permit.

- Mini-Storage – Conditional Use Permit.
- Drive-through Restaurant – Conditional Use Permit (probable, not confirmed).
- Outdoor Seating – Conditional Use Permit (potentially, not confirmed).
- Alcohol Sales in Restaurant/Convenience Store – Conditional Use Permit (probable, not confirmed).
- Possible – Variance and Conditional Use Permit for sign that exceeds height and size limits.
- Probable – Development Agreement for overall development.

In conjunction with the formal submittal of applications, the City will confirm a precise set of entitlements that will be required to support Project components.

Project Approach

In 2007, Quad Knopf prepared an EIR for a project on this site, referred to as Gateway Galleria (SCH #2006061106). The Draft EIR is dated April 2007 and the Certified Final EIR is dated June 2007. The project description included prezoning in support of annexation to the City of Madera and a two-phase, retail and commercial development totaling 452,499 square feet. Due to the age of the previous EIR and the change in the project description, the proposed EIR will not be tiered from that document, and the impact analyses of the proposed Project will be entirely new.

While the proposed Project has changed, Quad Knopf proposes to use as much of the data and information from the previous 2007 EIR as possible, with the full understanding that certain background information and analyses will need to be revisited due to age, changes in the physical environment, changes in regulations, changes in the proposed land uses, or changes in the *CEQA Statutes* and/or *Guidelines*. By using as much of the existing information as possible, we can provide an efficient and cost effective method of achieving CEQA compliance.

We anticipate that a full-scope EIR will be warranted; however, certain environmental topics may be scoped out (i.e., dismissed from analysis) as a result of public scoping process described in Task 4.

The expedited schedule for completion of the EIR process contained in this proposal will require close coordination and commitment to schedule by Quad Knopf, the City of Madera staff and decision makers, and the Project proponent.

The following is a listing of the environmental topics that will be addressed in the EIR. As noted in the Scope of Work, some topics may not need to be discussed in detail in the EIR and may be dismissed from detailed analysis. The Scope of Work (Tasks 5 and 7) also describes how environmental studies conducted for the 2007 EIR will be used, where updates to previous studies can be used, and where entirely new studies are warranted due to one or more changed circumstances.

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils and Seismicity
- Greenhouse Gases

- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources *(potentially scoped out)*
- Noise
- Population and Housing *(potentially scoped out)*
- Public Services
- Recreation *(potentially scoped out)*
- Transportation, Traffic and Circulation
- Utilities and Service Systems

Scope of Work

Based on our knowledge of the City's requirements and the preliminary Project description provided to us, we have developed the following scope of work for completion of the EIR process. The tasks include completion of a public scoping process (Notice of Preparation and Scoping Meeting), Administrative and Draft Environmental Impact Reports, Administrative and Final Environmental Impact Reports, Mitigation Monitoring and Reporting Program, and Findings and Statement of Overriding Considerations.

Task 1 – Project Initiation

Quad Knopf will meet with City staff and the Project proponent to review the scope of work, details of the proposed Project, and the proposed schedule. Alternatives to the proposed Project, including alternative sites previously identified and rejected, may also be discussed. Lines of communication and communication protocols will be established and a detailed schedule developed.

Deliverables:

- *Project initiation meeting (1)*
- *Agenda (1)*
- *Action agenda from meeting (1)*

Task 2 – Field Reconnaissance and Review of Existing Information

Under this task, the Quad Knopf team will visit the site in order to observe existing site conditions (i.e., the baseline condition) and take photographs in order to gain a thorough understanding of the Project site, surrounding areas, and sensitive nearby land uses. Also, as part of this task, the Quad Knopf team will collect and review all available background materials, in order to become fully familiar with the Project and key issues.

Task 3 – Project Description and Project Objectives

Based on the results of the project initiation meeting and the Project description materials provided by the Project proponent, as well as the Quad Knopf team's review of other relevant information, we will prepare a draft Project description for the City staff and Project proponent review and approval. As specified in the State *CEQA Guidelines*, Section 15124, the EIR will include a detailed Project description using text and graphics inclusive of the City's regional and local setting and the Project's history, past ownerships and land uses. The Project description will also include the Project's objectives (from the perspectives of both the City and the Project proponent), characteristics, phasing, and important features. A single set of carefully crafted Project objectives reflecting both the City and Project proponent's interests will be instrumental in assessing alternatives to the proposed Project, as described at the end of Task 7.

Due to the importance of a complete, accurate, and stable project description, we will request that the City and Project proponent review and approve the Project description before impact analyses commences.

Task 4 – Public Scoping Process / Notice of Preparation

Quad Knopf will conduct the public scoping process and will prepare a Notice of Preparation (NOP), incorporating the finalized Project description and supporting graphics. The NOP will be noticed, published, and circulated to applicable local and State agencies pursuant to the *CEQA Guidelines*. Quad Knopf's Project manager will coordinate with City staff in conducting a Scoping Meeting, which will be held to solicit input as to the scope and content of the EIR. (Details are provided below.)

As permitted by the *CEQA Guidelines*, an Initial Study will not be prepared prior to preparation of the Draft EIR.

Subtask 4.1 Prepare Notice of Preparation

Quad Knopf will prepare a Notice of Preparation (NOP) consistent with the City's approved format. The NOP will contain all statutory requirements, including the Project description developed in Task 3 above.

Deliverables:

- *Notice of Preparation (10 hard copies + digital files + 15 hard copies hand delivered to State Clearinghouse)*

Subtask 4.2 Scoping Meeting

Quad Knopf will participate in a scoping meeting to be conducted during the 30-day NOP public review period. Quad Knopf will prepare appropriate graphics/visual displays (in PowerPoint format) and/or handouts, as directed by City staff. City staff will be responsible for coordinating the meeting setup and location. Quad Knopf's Project Manager will coordinate with City staff relative to details of running the meeting (presentation of the Project, preparing handouts, answering questions, etc.).

Deliverables:

- *PowerPoint slide presentation*
- *Board-mounted graphics*

Task 5 – Early Consultation and Technical Studies

Quad Knopf anticipates that the proposed Project will require the following technical studies, as further described below. Since most of these topics were addressed in studies prepared for the 2007 Gateway Galleria EIR, in many instances the work effort will be focused on simply updating the previously prepared reports to reflect changed conditions on the ground, changes in applicable regulations, and changes in the proposed Project description.

- Air Quality and Greenhouse Gas Report (OB-1 Air Analysis)
- Biological Survey Report (Quad Knopf)
- Cultural Resources Report (Ric Windmiller, Archaeologist)
- Health Risk Assessment (Vista Environmental)
- Noise Study (j.c. brennan & associates)
- Phase I Environmental Site Assessment (Geocon)
- Traffic Impact Study and Caltrans Consultation (VRPA Technologies)

The technical reports will be used to prepare the associated topic sections of the EIR further described in Task 7.

Subtask 5.1 Air Quality and Greenhouse Gas Report

Under contract to Quad Knopf, OB-1 Air Analyses (OB-1) will prepare an Air Quality and Greenhouse Gas (GHG) Study for the proposed Project including evaluation of construction emissions, off-site vehicle emissions, on-site mobile and stationary equipment emissions, and GHG emissions. The Study, which will support separate Air Quality and GHG sections of the EIR, will also analyze the off-site CO hotspots and odors and include, as needed, a preparation of viable air quality mitigation measures. The Study will comply with the latest Guide for Assessing and Mitigating Air Quality Impacts (GAMAQI). In addition OB-1 will provide environmental compliance services and coordination with the San Joaquin Valley Air Pollution

Control District (SJVAPCD) to comply with SJVAPCD Rule 9510 (ISR). Compliance with Rule 9510 will require the completion of an Air Impact Assessment (AIA) Application.

Air Quality and GHG Study

Collect Air Quality Setting Information: OB-1 will review the federal, State, and local rules and regulations regarding criteria pollutants and GHGs; local ambient air quality conditions; meteorological and topological influences of local climate; and existing nearby emission sources. OB-1 will analyze the Madera General Plan and other regional planning documents, rules, and legislation for goals and policies that may relate to the proposed Project. OB-1 will also briefly describe the global warming concept and the science that supports it. OB-1 will work closely with the traffic engineer, VRPA to ensure that the trip generation rate used in the analysis accurately accounts for efficiencies afforded the Project through design. The Study will also include descriptions of applicable federal and State climate change legislation.

Determine Emission Estimates: Construction and operational emissions will be estimated using emission factors and methodologies developed by the California Air Resources Board (CARB), SJVAPCD, the U.S. Environmental Protection Agency (EPA), and other agencies. The air quality analysis will assess construction and operational emission factors using the air quality model (CalEEMod™), which has been adopted by the SJVAPCD. Operational analyses will quantitatively or qualitatively account for Project design features that positively affect air quality.

GHGs primarily quantified will be carbon dioxide, methane, and nitrous oxides — other Kyoto Protocol GHGs will be primarily addressed qualitatively — and will be normalized to a consistent metric using appropriate global warming potential to produce all emissions in carbon dioxide equivalents. Primary sources that will be quantified will be vehicular; energy consumption (both direct and indirect) and energy used for water delivery. Estimated GHG reductions from the replacement of grid energy by solar power from the proposed Project will be evaluated. GHG gas pollutants will include all appropriate Kyoto Protocol gases: carbon dioxide, methane, nitrous oxide, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. The regional impact assessment will calculate emissions associated with construction and long term operational activities for the proposed Project.

Cumulative Air Quality Impact Analysis: With respect to cumulative air quality impacts, the GAMAQI provides that any proposed Project that would individually have a significant air quality impact (i.e., exceed significance thresholds for pollutants such as ROG, NO_X, PM_{10}, or $PM_{2.5}$) would also be considered to have a significant cumulative impact. Although the GAMAQI does not provide guidance for evaluating cumulative air quality impacts in instances where Project-specific emissions of criteria pollutants do not exceed the air district's significance thresholds, it does state: "[a]ll but the largest individual sources emit ROG and NOx in amounts too small to have a measurable effect on ambient ozone concentrations by themselves."

Based on the above, for purposes of this Study, the proposed Project is considered to result in a cumulatively considerable air quality impact if the Project emissions exceed the SJVAPCD significance thresholds or the Project is not consistent with the regional clean air plan.

Determine Other Impacts: OB-1 will perform an odor analysis to determine if any sensitive receptors would potentially be affected my significant odor emissions. OB-1 will also provide a qualitative discussion of air toxics, including diesel particulate matter.

OB-1 will utilize Caltrans' CO Protocol and data supplied by the Traffic Study to determine the potential for exceedance of the CO ambient air quality standards. If preliminary screening indicates that potential exists for a CO hot spot, a minimum of three intersections will be evaluated. The intersections with the highest potential for congestion would be modeled using the California Department of Transportation CALINE4 model and EMFAC2011 emission factors.

Significance Determination: Construction and operational emission estimates will be compared with the SJVAPCD significance thresholds. If the proposed Project is determined to exceed the thresholds, the Study will propose mitigation measures for air quality impacts. Mitigation measures would be evaluated on the basis of emissions reductions and cost. Where quantification methodologies are available, mitigation measures will be quantified. The Study will then assess the impact significance after the application of mitigation.

For GHGs, OB-1 will assess the proposed Project's implementation of SJVAPCD best performance measures current California GHG emission reduction strategies, including applicable solutions contained in the latest State-issued documents. If necessary, design features and mitigation measures will be identified that would reduce GHG emissions.

Indirect Source Review Compliance

Identification of Mitigation Measures: OB-1 will consult with the Project proponent on measures and features being proposed for the Project and research the Project's design features and environmental setting to document measures that will reduce the Project's emissions.

Air Quality Analysis, Off-site Fee Estimate, and Fee Deferral Application: OB-1 will model construction, area, and operational emissions for the proposed Project using the current approved CalEEMod™. The results from the modeling will be used to generate off-site fee estimates using the SJVAPCD Fee Estimator Calculator. A Fee Deferral Application will be prepared, so that the Project proponent is not unnecessarily burdened by the entire mitigation costs up front. Payments for the construction and operational phases must be made prior to generating emissions for each phase. The Project proponent will provide a tentative construction/operation schedule and a schedule of fee payments (if applicable) for this task to be completed successfully.

Report Preparation: OB-1 will complete the SJVAPCD Air Impact Assessment Application Form and Supplemental Forms for mitigation credit being claimed. Appropriate documentation of the application contents, including relevant maps, City and County Bicycle Plans, City and County General Plan exhibits, emission modeling, and fee estimates will be supplied as needed for the AIA application.

Subtask 5.2 Biological Survey Report

Quad Knopf's biological resource specialists will prepare a biological report, as described below.

Database and Literature Search: The California Natural Diversity Database, California Native Plant Society Database, United States Fish and Wildlife Service lists, and California Department of Fish and Wildlife lists, and National Wetlands Inventory will be searched to identify special-status species, sensitive natural communities, and wetlands that are of local, regional, and national concern and which may impose constraints on the development potential of the Project site. Spatial data and maps of critical habitat for federally-listed species that may occur in the region will be obtained and reviewed. Relevant published and non-published literature, including Recovery Plans, Habitat Conservation Plans, General Plans, Specific Plans, and technical reports and studies will also be reviewed. The cumulative data set compiled from these sources will provide the basis of this investigation.

Reconnaissance-Level Site Survey: A reconnaissance-level site survey of the Project site will be conducted. Efforts will be focused on identifying areas that support, or potentially support, sensitive biological species or habitats. The distribution of vegetative communities will be identified, and the locations of unique or important biological resources will be mapped. Special-status species and/or their signs will be documented. An inventory of the plant and wildlife species observed during the survey will also be generated.

Data Analysis and Reporting: All information obtained during the database search and site survey will be analyzed to identify the presence and extent of important biological resources occurring, or potentially occurring, on the Project site; development constraints that may be imposed by biological resources; regulatory requirements that must be considered prior to proceeding with development; and additional studies that would be needed to meet regulatory requirements. These issues will be evaluated in the context of the California Environmental Quality Act (CEQA), and will be presented in a Biological Analysis Report that will include the methods used, results of database searches and field investigations, location maps, recommendations, and conclusions. This task includes peer review and QA/QC by a senior biologist.

Subtask 5.3 Cultural Resources Report

Quad Knopf's subconsultant, Ric Windmiller, Consulting Archaeologist, will prepare a cultural report for the Project, as described below.

Mr. Windmiller conducted an archaeological resources inventory of the subject property in 2005. The study included a records search by the Southern San Joaquin Valley Information Center, a sacred lands file search by the Native American Heritage Commission, contacts with the sole Native American listed by the commission, contact with the Madera County Historical Society, a field inspection and a technical report following California Office of Historic Preservation guidelines. At the time, the property was occupied by a heavy equipment supply business. Field inspection was hampered in the respect that an estimated 10 percent of the subject property was occupied by heavy equipment and parts inventory. The remainder was largely exposed ground, which was examined along transects 15-25 meters apart. No archaeological resources were identified during the study.

Nine years have elapsed since the above study was completed. Recent satellite imagery shows that a significant portion of stockpiled equipment and parts has been removed from the site exposing ground that could not be adequately inspected in 2005. The records search and Native American and Madera County Museum contacts are out of date.

This scope of work provides for an updated records search by the Southern San Joaquin Valley Information Center, an updated sacred lands file search and list of Native American contacts from the Native American Heritage Commission, renewed contact with Native Americans listed by the Commission and the Madera County Historical Society, and field inspection of areas formerly covered by equipment and parts. CEQA Guidelines, Appendix G checklist classifies unique paleontological resources as "cultural resources." Therefore, this scope of work includes a paleontological database search and analysis to determine if the subject property is sensitive for paleontological resources (fossils).

The technical report will draw from the 2005 study with updated information as a result of recent archaeological research, the updated records search and Native American file search, as well as contacts with Native Americans listed by the Commission and the local historical society. A cultural resources inventory also includes a search of the University of California Museum of Paleontology database search and report by a qualified professional paleontologist. A field inspection by a qualified professional archaeologist meeting the Secretary of the Interior's professional qualifications standards in prehistoric and historical archaeology will focus on those areas of the Project site not previously available for inspection due to the presence of equipment and parts stockpiles.

Subtask 5.4 Health Risk Assessment

Under contract to Quad Knopf, Vista Environmental will prepare a Health Risk Assessment for inclusion in the Air Quality section of the EIR, as described below. The HRA will analyze both: (1) the cancer and non-cancer (acute and chronic) health impacts from toxic air contaminants (TACs) created by the proposed project; and (2) the localized criteria pollutants that are not in attainment (PM10, PM2.5, and

the ozone precursors of VOC and NOx) concentrations at the nearby homes and associated health impacts. The localized criteria pollutant analysis has been included in order to address the additional analysis requirements detailed in *Sierra Club v. County of Fresno* (2014) (226 Cal.App.4th 704).

Preparation of Health Risk Assessment of Diesel Particulate Matter (DPM)

- Provide a description of the proposed project and detail the location of the proposed project.
- Identify applicable SJVAPCD rules and regulations.
- Identify health risk standards and acceptable cancer and non-cancer risk thresholds from diesel emissions.
- Obtain the proposed project's onsite truck trips from the applicant or traffic study. Calculate the emission rates for idling and truck travel for diesel particulate matter (DPM) and volatile organic compounds (VOC) emissions through use of the EMFAC2011 model.
- Obtain the estimated percentage of trucks that would have an operational transport refrigeration unit (TRU) from the applicant or from statewide averages. Calculate the DPM and VOC emissions rates from TRUs through use of the OFFROAD2007 model.
- Obtain the estimated percentage of truck that park onsite over night that would have operational auxiliary power system (APS) from the applicant. Calculate the DPM and VOC emissions rates from the APS through use of the OFFROAD2007 model. If the applicant is going to provide electrical hookups for each overnight truck parking space, then a qualitative analysis will be provided that details why APS would not be operated on the project site.
- Obtain the estimated gasoline and diesel throughput of the proposed gasoline and diesel dispensing facilities as well as the location and number of onsite fuel tanks from the applicant. Calculate the VOC emissions rates through use of the methodology provided in *Guidance for Air Dispersion Modeling San Joaquin Valley Air Pollution Control District,* (HRA Guidelines) and from *Gasoline Service Station Industrywide Risk Assessment Guidelines*, prepares by CAPCOA, November 1997.
- Calculate the DPM and VOC concentrations at the nearby sensitive receptors associated with the on-going operation of the proposed project through utilization of the AERMOD model, the emissions rates provided in the previous steps and the methodology described in HRA Guidelines.
- Utilize the prior task's calculated DPM and VOC concentrations, to calculate the cancer risk and the chronic and acute non-cancer health impacts at the nearby residential uses from the on-going operation of the proposed project.
- Prepare an HRA report documenting the results of the study. The report will summarize the results of the previous work tasks.

Preparation of Health Risk Assessment of PM10, PM2.5, VOC and NOx emissions

- Summarize the court opinion for *Sierra Club v. County of Fresno* (2014) and develop a strategy to analyze the potential health impacts at the nearby sensitive receptors from the proposed project's emissions of PM10, PM2.5, VOC, and NOx.
- Review the Air Quality Analysis prepared for the proposed project and reference the total PM10, PM2.5, VOC, and NOx emissions created from the proposed project as detailed in the Air Quality Analysis.
- Reference the most current concentrations of PM10, PM2.5, VOC, and NOx in the project study area as detailed in the Air Quality Analysis.

- Perform air quality modeling of the proposed project's total PM10, PM2.5, VOC, and NOx emissions through use of either the AERMOD, CMAQ, and/or BenMap Models.
- Document the technical approach, the model used and the results of the analysis.
- Incorporate the results of the previous work tasks into the HRA report.

Subtask 5.5 Noise Study

Under contract to Quad Knopf, j.c. brennan & associates will prepare a noise study, as described below.

Evaluation of Existing Noise Levels: Since the previous study was conducted nine years ago, j.c. brennan & associates, Inc. will conduct background noise level measurements on, and in the vicinity of the Project site. Their staff will conduct two sets of continuous 24-hour noise measurements and two sets of short-term noise measurements. The intent of the noise level measurements is to quantify existing background noise levels for comparison to the predicted Project noise levels. The comparison of the measured noise levels to the predicted noise levels will be critical to determine if the Project will create noise levels which will be discernable from the roadway traffic noise. The 24-hour measurements will also provide an accurate day/night traffic split for SR 99, and will be used as a direct input to the traffic noise modeling.

Analysis of Existing and Future Traffic Noise Levels: Based upon traffic data provided by the traffic consultant, j.c. brennan & associates will utilize the Federal Highway Administration (FHWA RD-77-108) traffic noise prediction model to determine existing and future traffic noise levels at the Project site and adjacent uses. Particular attention will be given to the truck traffic noise levels.

Analysis of On-Site Activities: On-site activities due to the Project are expected to include truck circulation, truck idling, truck wash facilities, and truck maintenance activities. j.c. brennan will collect noise level data associated with a current Love's Travel Center. Preliminary review indicates that the Love's Travel Center near Corning, California is similar in configuration to the proposed site.

Analysis of Construction Noise: j.c. brennan will evaluate construction noise impacts associated with the Project.

Report Preparation: A written report will be prepared which details our analytical approach and findings. The report will comply with the requirements of the Madera General Plan Noise Element and CEQA. The report will address all noise sources described above. In addition, mitigation measures will be proposed where required, and the resulting noise levels will be analyzed.

Subtask 5.6 Phase I Environmental Site Assessment

Under contract to Quad Knopf, Geocon will prepare a Phase I Environmental Site Assessment (ESA), as described below.

The requested ESA would be performed in general accordance with the American Society for Testing and Materials (ASTM) *Designation E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* The Phase I ESA would also be conducted in accordance with the requirements of 40 Code of Federal Regulations (CFR) Part 312 titled *Standards and Practices for All Appropriate Inquiries* (AAI), as required under Sections 101(35)(B)(ii) and (iii) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The purpose of conducting an AAI-compliant investigation into the previous ownership and uses of a property is to meet the provisions necessary for the landowner, contiguous property owner, and/or bona fide prospective purchaser to qualify for certain landowner liability protections under CERCLA.

In order to perform the Phase I ESA in accordance with ASTM and AAI guidelines, we request that, if possible, the current site owner provide the following information:

- Permission to enter the site
- Names and telephone numbers of persons familiar with the site
- A description of the planned use of the site
- Any specialized knowledge regarding the site
- Any commonly known or reasonably ascertainable information regarding the site
- Any site-related documents
- An historical chain-of-title report from a title company (as an alternative, we can order an environmental lien report for an additional fee)

Based on the above information, Geocon will perform research to estimate the potential for hazardous substances or petroleum impacts (i.e., levels warranting regulatory cleanup action) to the site. For the purposes of this Phase I ESA, the "vicinity" of the site is defined as properties located within ¼ mile of the site.

The scope of services for the Phase I ESA is presented as follows:

- Perform a reconnaissance of the site to assess for the presence, or make visual observations of indicators of the potential existing presence, of hazardous materials, hazardous wastes, or soil and/or groundwater impacts on the site. These indicators include 55-gallon drums, underground and aboveground storage tanks, chemical containers, waste storage and disposal areas, industrial facilities, discolored surficial soils, electrical transformers that may contain polychlorinated biphenyls (PCBs), and areas conspicuously absent of vegetation. If access is unavailable to any portions of the site, our ability to complete the assessment described herein may be hindered. Provisions for a survey of wetlands delineation, asbestos, lead-based paint, lead in drinking water, radon and methane gas are not provided in the ESA scope of services.

- Perform a visual survey of the adjacent properties from the site and from public thoroughfares to observe general types of land use surrounding the site.

- Review the *Standard Environmental Records Sources: Federal and State* referenced in ASTM *Designation E 1527-05* and 40 CFR Part 312 to obtain information regarding the potential presence of hazardous substances/petroleum hydrocarbons on the site or on properties located within the approximate minimum search distance specified for each source. The records searched will include registries or publicly available lists of recorded engineering and institutional controls, and recorded land use restrictions that may impact the site.

- Review reasonably-ascertainable regulatory agency files for the site and/or properties in the vicinity of the site whose environmental conditions might potentially impact the Site. The sources for these files could include the Madera County Environmental Health Department, the California Regional Water Quality Control Board (RWQCB), and the California Department of Toxic Substances Control.

- Contact local public agencies by telephone or in writing to obtain readily-ascertainable information regarding underground storage tank permits, agriculture-related permits and violations, air emission permits and violations and electrical transformers. The information would be obtained for the site and adjacent properties. The agencies contacted may include the building department, air pollution control agency (i.e., SJVAPCD), agriculture department, and gas and/or electric utility companies.

- Review and interpret reasonably-ascertainable aerial photographs to obtain information concerning the historical use of the site and adjacent properties.

- Review EDR Sanborn, Inc. Fire Insurance Maps for the site (if available). The EDR Sanborn Fire Insurance Maps would be reviewed to obtain information concerning the historical uses of the site and the potential presence of underground storage tanks on the site.

- Review pertinent and reasonably ascertainable information sources to evaluate physiographic, geologic, and hydrogeologic conditions in the vicinity of the site.

- Review documents provided by the Client, at its discretion. Potentially useful documents may include geotechnical, geologic, and environmental reports, site plans, plot plans, and correspondence with regulatory agencies.

- Review United States Geological Survey (USGS) topographic maps to obtain information relative to the topography of the site and previous development and uses of the site and properties located in the vicinity of the site.

- Review the California Department of Conservation, Division of Oil, Gas, and Geothermal Resources (DOGGR) records to obtain information regarding the locations of potential oil and gas wells on the site and site vicinity.

- If requested, review recorded land title records for the site in accordance with the requirements identified in 40 CFR Part 312. The purpose of obtaining a chain-of-title report is to assess whether any requirements regarding engineering and institutional controls have been recorded for the site, and whether any land use restrictions and/or environmental cleanup liens are associated with the site. As an alternative, we can order an environmental lien report for the Site for an additional fee.

- Conduct interviews by telephone or in writing with present and past tenants/owners of the site to evaluate if present or past occupants have used, generated, stored, or disposed of hazardous materials/wastes onsite.

- Prepare a report summarizing the findings of the Phase I ESA and qualitatively describing the potential for environmental impairment of the site. If necessary, we will also provide recommendations for additional environmental services in the report.

Subtask 5.7 Traffic Impact Study

Under contract to Quad Knopf, VRPA Technologies, Inc. will prepare a traffic impact study (TIS) report that will identify the anticipated effect of the proposed development on the existing and planned road network and will recommend mitigations required to maintain City of Madera standards. Included is early consultation with Caltrans. Tasks required to complete the traffic report are described below.

Project Management/Kick-off Meeting: Meet with appropriate City staff and the Project team to discuss the scope of the TIS. The kick-off meeting will assist in confirming the Project description and any potential issues/concerns anticipated by the City and the Project team.

Caltrans Consultation: VRPA will prepare an Administrative Draft Assumptions Memo based upon a scope of work that includes more detail regarding analysis methodologies, parameters, and inputs. These will be based on VRPA's experience preparing traffic studies in the San Joaquin Valley, as well as standard engineering practice and guidelines. This Memo will be submitted to the City for review. VRPA will then prepare a Draft Assumptions Memo based on comments from the City which will again be submitted to the City and also to Caltrans.

VRPA will then meet with appropriate City and Caltrans staff to discuss the scope of the TIS and the Draft Assumptions Memo. Based upon additional comments received from the City and Caltrans, VRPA will finalize the Assumptions Memo and submit to the City and Caltrans for formal approval prior to development of the TIS. This task also assumes ongoing coordination with Caltrans for the duration of the Project.

Scoping Meeting: Meet with appropriate City staff and the Project team to discuss the scope of the TIS. The scoping meeting will set the stage for development of the TIS including an understanding of the Project and its components; the freeway, highway, street and road segments and intersections that should be included in the TIS; analyses conducted for the City of Madera; associated environmental documents; issues related to trip generation and distribution; near-term development projects in the Study Area that may affect opening day traffic volumes and level of service (LOS); future year forecasting methods including use of the Madera County Transportation Commission (MCTC) regional traffic model; and mitigation strategies. It would be most useful to conduct this meeting following the formal approval of the Assumptions Memo by the City and Caltrans.

Existing Conditions: Development and analysis of existing traffic/circulation conditions for the following list of intersections and street segments. Note: This list of segments and intersections may change following the completion of the above tasks.

Intersections:

- Avenue 17 WB to SR 99 SB On Ramp
- Avenue 17 EB to SR 99 SB On Ramp
- Avenue 17 / SR 99 SB Off Ramp
- Avenue 17 / SR 99 NB Ramps
- Avenue 17 / Walden Drive
- Avenue 17 / Airport Drive and Golden State Blvd
- Avenue 17 / Sharon Boulevard (future intersection)
- Sharon Boulevard / Access Driveway #1 (future intersection)
- Sharon Boulevard / Access Driveway #2 (future intersection)

Additional intersections and access driveways can be added to the TIS scope for an additional cost of $4,000 per location.

Roadway Segments: For all connecting roadway segments:

- Gather/Conduct Traffic Counts. Gather existing traffic counts (less than one year old) from the City of Madera and Caltrans, if available. Where such counts are not available, VRPA will conduct new traffic counts consistent with City and Caltrans District 6 Traffic Impact Study Guidelines.

- Identify Existing Traffic Impacts. Based upon data gathered, identify existing traffic impacts along each specified highway and street/road facility (segments) and at intersections specified above. Results of the analysis will provide LOS estimates considering existing traffic conditions. Existing LOS for each intersection will be determined using Synchro Software.

  The results of each of these technical analyses will include AM and PM peak hour intersection LOS estimates, and left turn pocket warrants along each segment and at each Study Area intersection, as appropriate.

  The Modified HCM LOS Tables will be applied for segment LOS to determine segment LOS along all connecting facility segments including Congestion Management Program (CMP) facilities. Signal warrants for each unsignalized intersection studied will be conducted using the California MUTCD methodology.

The results of each of these technical analyses will include AM and PM peak hour highway, street/road, and intersection LOS estimates, signal (if appropriate) and 4-way stop warrants, and left turn pocket warrants along each segment and at each Study Area intersection, as appropriate.

VRPA will also provide a quantitative assessment of pavement conditions using the Traffic Index (TI) calculations.

- Identify Short- and Long-term Improvement Projects. In consultation with the City of Madera, identify short- and long-term planned/programmed highway and street/road improvements along the facilities specified above referencing the General Plan, Circulation Element, and Capital Improvement Programs (CIPs). Short–term highway and street/road improvement projects are improvements that will be constructed within one to three (1-3) years of "opening day" of the Project. Such improvement projects may provide relief or enhance traffic impacts associated with the Project or other near-term or cumulative projects. Long-term highway and street/road improvement projects, such as those identified in the Madera Town Center Project, will be identified and considered during the future year impact analysis.

Estimate Project Trip Generation: Estimate AM and PM peak hour trip generation associated with the Project (passenger vehicle and truck trips) using information provided by the Project Applicant or City of Madera specific to the Project. If reliable information is unavailable, VRPA will estimate trip generation based on the ITE Trip Generation Manual, Fontana Truck Trip Generation Study, and available point-of-sales data for other similar travel centers.

Estimate Project Trip Distribution: Estimate Project trip distribution based on input provided by the City of Madera, Caltrans, the Project team, and VRPA's knowledge of the Study Area and trucking patterns.

Existing Plus Project Impacts: Identify existing conditions plus Project traffic impacts on the existing specified highway and street/road facilities, and intersections in the Study Area. LOS and other necessary evaluations will then be conducted considering methodologies specified.

Near-Term Impacts: Identify Existing plus Near-Term development Project traffic, plus identify other near-term cumulative traffic plus Project traffic impacts on the existing specified highway and street/road facilities and intersections in the Study Area. If there are no near-term projects in the vicinity, this task will include only existing traffic plus near-term cumulative traffic plus traffic generated by the Project.

Identify Near-term Development Project Trip Generation and Impacts. Estimate AM and PM peak hour trip generation associated with near-term projects plus near-term cumulative traffic plus Project traffic using the latest Institute of Traffic Engineers (ITE) Trip Generation Manual formula(s). Resulting trips will be distributed and added to existing traffic.

LOS and other necessary evaluations will then be conducted considering methodologies specified.

Cumulative 2040 No Project Impacts: Identify future year 2040 traffic impacts on the planned highway and street/road segments, as well as other major planned facilities that do not currently exist, if applicable.

Facilitate Future Traffic Modeling without Project and Identify Impacts. Review future year peak hour and ADT traffic projections from available sources including the MCTC Regional Traffic Model. Model projections are based upon the adopted Land Use and Circulation Elements of local agencies. The traffic

model will be applied to assign trips associated with future year growth and development to the street and highway network in the Study Area.

The results will identify AM and PM peak hour LOS estimates along each planned highway and street/road segment and intersection specified above, as appropriate, considering future year traffic without the Project.

Cumulative 2040 Plus Project Impacts: Identify future year 2040 traffic impacts with the Project on the planned highway and street/road system.

Facilitate Future Traffic Analysis with Project and Identify Impacts. Considering Project trips generated, either using the MCTC Regional Traffic Model or engineering judgment considering Project-specific travel characteristics, distribute AM and PM peak hour Project trips to the planned highway and street/road system.

It should be noted that Caltrans is in the process of redesigning the SR 99 interchange at Avenue 17. VRPA will consult with Caltrans to determine the protocol for analyzing the future configuration of the interchange. The SR 99 at Avenue 17 interchange intersections identified above covers the necessary analysis that will be required for the future interchange configuration.

The results will identify AM and PM peak hour LOS estimates, along each planned highway and street/road segment and intersection specified above, as appropriate, considering future year traffic with the Project.

Mitigation Measures: Where LOS estimates exceed minimum LOS standards, develop appropriate mitigation measures. Such measures may include, but are not limited to roadway/highway widening, traffic controls, turn pockets, alignment improvements, and any other improvements that would solve potential traffic problems. This task will include determining the required storage and deceleration length of intersection turn lanes.

This task will include determining the required storage length of intersection turn lanes and the required deceleration length based on Caltrans' Highway Design Manual Methodologies. Roadway configurations identified and approved for the Madera Town Center Project will be identified and incorporated into the development of appropriate mitigation measures.

For Caltrans intersections where mitigation is recommended, an Intersection Control Evaluation (ICE) analysis will be prepared. This will include a brief analysis to determine whether the most appropriate traffic control for the intersection is unsignalized, signalized, or a roundabout.

LOS Following Mitigation: Identify the resultant LOS for each intersection considering implementation of required mitigation measures to determine whether mitigation measure will be effective.

Implementation Program: Identify the cost associated with mitigation measures, appropriate methods to implement such measures, and implement phasing plan/schedule and development of a mitigation monitoring program. Development of this task would also include the identification of an alternative form of mitigation through development of a Trip End (TE) generated fee formula for the implementation of transportation control measures (TCMs) and other measures.

Preparation of Administrative Draft Traffic Study: Based on the analysis described above an Administrative Draft Traffic Study will be prepared and submitted to the Project team and City of Madera staff for review and comment.

Preparation of Draft Traffic Study: Revise the Administrative Draft Traffic analysis considering comments resulting from City and Project team, and prepare a Draft Traffic analysis. VRPA will provide the Draft to the Project team, City of Madera, and Caltrans staff for review and comment.

Preparation of Final Traffic Study: Revise the Draft Traffic analysis considering agency comments and prepare a Final Traffic analysis. The Final Traffic analysis will be provided to the Project team and City of Madera for incorporation into the Environmental Impact Report (EIR).

Qualitative Analysis of EIR Project Alternatives: VRPA will prepare a qualitative analysis of up to three (3) project alternatives.

Assistance with Response to Comments: Assist the Project team and the City of Madera in responding to comments received on the Draft EIR related to traffic/circulation, as necessary.

Task 6 – Graphics / GIS

Quad Knopf will prepare various maps and exhibits for the NOP, EIR, and technical studies. We will utilize GIS to create base maps from which to create the required maps. We will also obtain and adapt maps and plans obtained from the Project proponent and the City.

Task 7 – Administrative Draft EIR

Utilizing the approved Project description, technical studies, results of the Public Scoping process, and other sources, Quad Knopf will prepare the Administrative Draft EIR consistent with the requirements of CEQA, relevant case law, and specifications of the City of Madera. The Administrative and Draft EIRs will include the following information:

Project Objectives

A narrative will be provided describing the objectives of the proposed Project.

Executive Summary

Pursuant to Section 15123 of the *CEQA Guidelines*, Quad Knopf will prepare an Executive Summary of the Draft EIR including the following:

- Each significant effect with proposed mitigation measures and alternatives that would reduce or avoid that effect;
- Areas of controversy known to the Lead Agency, including issues raised by agencies and the public; and
- Issues to be resolved, including the choice among alternatives and whether or how to mitigate the significant effects.

Descriptions of Project alternatives and conclusions regarding the environmental superiority of alternatives will also be summarized.

Introduction

The Introduction chapter will provide the basic, non-technical explanation of the Draft EIR, as well as additional information relevant to the reading and understanding of the document.

Project Description

This chapter will be prepared using the Project description developed in Task 3. A list of the discretionary actions required by the City of Madera, other agency approvals required to proceed with implementation of the proposed Project, and a list of responsible and other agencies expected to use the EIR in their decision-making will also be included.

Environmental Setting, Impacts and Mitigation Measures

As required by §15125 of the *CEQA Guidelines*, the Environmental Setting portion of the EIR will contain a "description of the environment in the vicinity of the Project, as it exists before the commencement of the Project, from both the local and regional perspective." The setting discussions will also include a brief statement of the pertinent regulatory setting.

Impact evaluation criteria or thresholds for determining the significance of impacts will be described for each environmental impact topic. The significance of Project-related impacts will then be determined for each topical area. The analysis will focus on issues identified by responsible and trustee agencies, local agencies and other interested parties in response to the NOP. Impacts found to be less than significant will be described. Impacts that cannot be mitigated below the level of significance will be identified, and the extent to which those impacts could be mitigated through Project alternatives or changes will be demonstrated. Impacts will be quantified to the extent possible. Mitigation measures will be listed and numbered, and cross-referenced to applicable impacts.

Specific environmental topics to be addressed in the Environmental Setting, Impacts, and Mitigation Measures section of the EIR are listed and discussed further below. These topics are subject to modification following completion of the Public Scoping process.

- Aesthetics
- Agricultural and Forestry Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology, Soils and Seismicity
- Greenhouse Gases
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Mineral Resources *(potentially scoped out)*
- Noise
- Population and Housing *(potentially scoped out)*
- Public Services
- Recreation *(potentially scoped out)*
- Transportation, Traffic and Circulation
- Utilities and Service Systems

The environmental topics to be analyzed in the EIR are described below:

Aesthetics/Visual Resources

The potential aesthetics-related impacts of the proposed Project will be qualitatively evaluated using ground-level photographs taken at key vantage points by Quad Knopf staff and assessing any site plans, elevations, and renderings that may be provided by the Project proponent. If building elevations are not

available, we may take photos of a representative example of a travel center in operation elsewhere in order to assess potential visual impacts. Impacts will be assessed in terms of visibility of the proposed travel center, alteration of the visual setting by grading and structures, and sensitivity of viewpoints. We assume the travel center will be operated on a 24 hours a day/7 days a week basis. Accordingly, both the aesthetic and light and glare impacts will be assessed in terms of visibility of the Project and its components. Mitigation measures will be recommended, if necessary, to reduce any significant impacts. This analysis does not include the use of computer-based visual simulations beyond elevations and renderings provided by the Project proponent. If determined necessary, computer-based visual simulations can be prepared by Quad Knopf with an augmentation of the scope and budget.

Agricultural and Forestry Resources

The EIR will provide a discussion of important farmlands classifications (e.g., prime farmland, farmland of statewide importance, unique farmland) described in the NRCS website, the soil characteristics, the agricultural industry, the regional agricultural economy, Williamson Act contracts within the planning area, the agricultural character of the area, an impact analysis, and recommendations for mitigating potentially significant impacts. Forestry resources are not present in the Project vicinity.

Air Quality

The Air Quality technical report and HRA report prepared by OB-1 Air Analyses as part of Task 5 will be used to complete this section of the EIR.

Biological Resources

The project-level biological resources assessment prepared by Quad Knopf's biologists as part of Task 5 will be used to complete this section of the EIR.

Cultural Resources

The project-level cultural and paleontological resources assessment prepared by Ric Windmiller as part of Task 5 will be used to complete this section of the EIR.

Geology, Soils, and Seismicity

Quad Knopf will address impacts related to soils, geologic hazards, and seismic safety based on public literature. We will analyze effects associated with erosion, deposition, displacement, compaction or coverage of soils, alteration of topography, and geologic hazards. Potential impacts will be assessed and mitigation measures included if necessary.

Greenhouse Gases

The Greenhouse Gas technical report prepared OB-1 Air Analyses as part of Task 5 will be used to complete this section of the EIR.

Hazards and Hazardous Materials

This section will be completed based on a Phase I ESA prepared by Geocon as part of Task 5.

Hydrology and Water Quality

Quad Knopf will summarize existing hydrological conditions in the Project area watershed and groundwater basin using existing published documentation. Potential effects of Project development will

be described. The analysis will consider on-site runoff and the exposure of the Project site to potential flood hazards. The State Water Resources Control Board (SWRCB) and the RWQCB, Central Valley Region, have established water quality standards required by Section 303 of the Clean Water Act and the Porter-Cologne Water Quality Control Act. The hydrology and water quality analysis will address the Project's compliance with the State's construction stormwater regulations. Compliance with the requirements of the NPDES will also be addressed.

Land Use and Planning

While the Project site and lands to the north and west are zoned C-2 Heavy Commercial, land immediately to the east and south in unincorporated Madera County is zoned Rural Residential Single Family. As such, there is a potential for land use incompatibility issues to occur as a result of both Project design and operations. Many of these potential impacts, such as noise, lighting, traffic, air quality, will be addressed in other sections of the EIR. Quad Knopf will analyze the proposed Project's impacts in terms of compatibility with existing land uses and land use designations in the Madera Zoning Ordinance and General Plan.

Quad Knopf will determine whether the Project would physically divide an established community, result in conflicts with City policies adopted to reduce environmental effects, or would conflict with any adopted habitat conservation plans. Quad Knopf will also discuss potential policy conflicts between the proposed Project and proposed and existing developments.

Mineral Resources

The EIR will include an analysis of published documents, including the 2007 Gateway Galleria EIR, that address the potential for mineral resources, such as gravel, to be found at the Project site. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Noise

The Noise technical report prepared by j.c. brennan & associates in Task 5 will be used to complete this section of the EIR.

Population and Housing

Quad Knopf will describe population and housing impacts of the proposed Project. The potential for the proposed Project to induce growth in the area will be assessed. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Public Services

Quad Knopf will interview service providers and use the most recent data available to assess existing community services, including police and fire protection, and schools. The discussion regarding potential impacts to schools may be scoped out because the proposed project will not generate students that would attend area schools. We will provide a description of potential impacts to existing services resulting from the construction and operation of the proposed Project.

Recreation

This section of the EIR will address potential impacts to City recreation facilities as a result of the proposed Project. This will include an inventory of existing facilities and an analysis of the proposed projects impact on those facilities. This topic may be scoped out of the EIR (i.e., dismissed) during the Scoping Process.

Transportation, Traffic, and Circulation

The Traffic Impact Study prepared by VRPA Technologies as detailed in Task 5 will be used to complete this section of the EIR.

Utilities and Service Systems

This section of the EIR will address potential effects related to the availability and capacity of utilities and services, such as water, wastewater, electricity, natural gas, solid waste disposal, and telecommunications. This section will discuss whether any of these services or facilities is below adopted standards, or near or beyond its capacity to adequately serve the proposed Project. The analysis will be based on interviews with service providers and review of published reports. A water supply assessment, as described in Section 15155 of the *CEQA Guidelines*, is not warranted and is not proposed. However, in light of the prolonged drought conditions affecting the Central Valley, the analysis will provide a thorough description of Project water demand and available supply.

Cumulative Impacts

Quad Knopf will discuss the incremental contribution of the proposed Project to cumulative effects of other past, current, and planned or reasonably foreseeable projects in the vicinity. Quad Knopf will work with City planning staff to compile an updated list of cumulative projects.

Alternatives

An analysis of a reasonable range of alternatives to the proposed Project will be conducted according to Section 15126(f) of the *CEQA Guidelines*. A "No Project" alternative will be discussed per requirements of the *CEQA Guidelines*. Section 15126(f) limits the alternatives analysis to alternatives that will avoid or substantially lessen any of the significant effects of the proposed Project (i.e., preferred alternative). In addition to the No Project alternative, Quad Knopf proposes to evaluate three alternatives to the proposed Project. Currently, an off-site alternative is not anticipated in the primary analysis, but could be addressed in the discussion of "alternatives considered but rejected from further analysis".. These alternatives will be developed in close consultation with City staff and could include an alternative site that meets all or most of the Project objectives. Quad Knopf will develop reasonably detailed analyses of impacts associated with these alternatives, by topic, in comparison with the proposed Project.

As required by Section 15126(f), the Draft EIR will identify the environmentally superior alternative and, if that is the "No Project" alternative, the environmentally superior alternative among the remaining alternatives.

Other CEQA Sections

Quad Knopf will prepare the remaining CEQA-mandated sections (i.e., growth inducing impacts, energy, impacts that cannot be avoided, and mitigation monitoring program). With regard to the energy analysis required by Appendix F of the *CEQA Guidelines*, Quad Knopf will follow the guidance provided by the Third Appellate District Court in *California Clean Energy Committee vs. City of Woodland,* published April 1, 2014. The analysis will address electricity and natural gas use expected to occur during construction and operation of the Travel Center. The possible use of alternative energy (e.g., photovoltaic) will also be addressed. With regard to the analysis of vehicle fuel expected to be used during operation of the facility, it should be noted that the facility will attract vehicles currently traveling on SR 99, and is not expected to generate new trips, except for those involved in exiting and re-entering SR 99 after using the services at the Travel Center.

Quad Knopf will prepare and submit the Administrative Draft EIR to the City for review.

Deliverables:

- *Administrative Draft EIR to City (5 hard copies + digital files)*

Task 8 – Screencheck and Public Draft EIR

Upon receipt of comments from the City and Applicant, Quad Knopf will make necessary revisions and prepare the Screencheck and Public Draft EIR for submittal to the City. This scope of work assumes a maximum of one review cycle with compiled comments from City staff on the Administrative Draft EIR. Quad Knopf will prepare the Notice of Availability (NOA) and the State Clearinghouse (NOC) form. The City will be responsible for distribution of the NOA to any interested organizations or individuals, as well as an announcement of the public review period in a local newspaper, or mailings to property owners, or posting on and off site, as required under Section 15087 of CEQA. The period for public review must be at least 45 days. Quad Knopf will hand deliver the Draft EIR and NOC to the State Clearinghouse.

Deliverables:

- *Screencheck Draft EIR to City (5 hard copies)*
- *Draft EIR to City (20 hard copies + digital files)*
- *Draft EIR to State Clearinghouse (15 CDs)*
- *Notice of Completion to State Clearinghouse (1)*
- *Notice of Availability (1 digital file)*

Task 9 – Administrative and Final EIR

Pursuant to Section 15088 of the *CEQA Guidelines*, the Final EIR must respond in writing to each oral and written comment on the Draft EIR made by individuals, agencies, and organizations that review it. Additional research and analysis will be undertaken by Quad Knopf as necessary to effectively respond to comments. Comments regarding the sections or technical reports prepared by subconsultants will be routed to them for review and comment, with Quad Knopf responsible for final review for consistency and compilation of the final responses.

The document will incorporate written comments received and response to comments. Along with the comments and responses, a list will be compiled of all persons, organizations, and agencies commenting on the Draft EIR. The Final EIR will include revisions to the EIR text and summary table, as necessitated by comments. Comments, responses to comments, and the list of all persons, organizations, and agencies commenting on the Draft EIR will be included. Also included are errata and other information, which when combined with the Draft EIR, will constitute a Final EIR.

A cost estimate is provided herein which we believe will be adequate for the task. As a basis for cost estimating, Quad Knopf assumes that 100 individual responses (not letters) will be required for the EIR. In our experience, it takes an average of one hour to respond satisfactorily to each comment. We believe that this estimate will be adequate for the task. If the level of response exceeds the expectation described above, Quad Knopf will respond to those comments that are above and beyond the threshold for an additional fee on a time-and-materials basis, or another mutually agreeable formula.

The Final EIR will reflect direction received from City staff as contained in one set of unified comments.

Deliverables:

- *Administrative Final EIR (5 hard copies)*
- *Final EIR (30 hard copies + digital files)*

Task 10 – Mitigation Monitoring and Reporting Program (MMRP)

Quad Knopf will prepare the Mitigation Monitoring and Reporting Program (MMRP), formatted in accordance with City standards.

Deliverables:

- *Administrative MMRP (1 hard copy + digital file)*
- *Final MMRP (1 hard copy + digital file)*

Task 11 – Findings and Statement of Overriding Considerations

Using the analyses contained in the EIR, Quad Knopf will prepare draft Findings and Statement of Overriding Considerations (if warranted) for consideration and review by the City Attorney and the decision making body. The Findings will be formatted in accordance with City standards.

Deliverables:

- *Draft Findings and Statement of Overriding Considerations (1 hard copy + digital file)*
- *Final Findings and Statement of Overriding Considerations (1 hard copy + digital file)*

Task 12 – CEQA Notices

Quad Knopf will be responsible for preparing all required CEQA notices, including Notice of Completion, NOP, and Notice of Determination (NOD). Details of each notice are described in the relevant task sections. Quad Knopf will prepare and deliver the NOD to the County Clerk and State Clearinghouse within five (5) days of City Council approval of the Project. All filing fees that must accompany notices will be paid by the City.

Deliverables:

- *Notice of Determination (1 hard copy)*
- *See details of other CEQA notices (i.e., NOC and NOP) in relevant task descriptions.*

Task 13 – Meetings/Public Hearings/Project Management

Quad Knopf's Project Manager will attend public meetings, including the scoping meeting and two public hearings (one Planning Commission and one City Council) on the Draft EIR. Our Project Manager will respond to comments and questions, and make presentations, as requested by the City. Monthly status reporting via a combination of telephone conference calls and e-mails between the Quad Knopf's Project Manager and City staff are anticipated through the duration of the Project. This task also consists of those management activities that ensure Quad Knopf's ability to keep all work tasks running smoothly, on time, and within budget. As the liaison between the Quad Knopf team and the City's staff, our Project Manager will ensure information is distributed appropriately, comments regarding Project-related issues are communicated effectively and efficiently, and financial performance is tracked regularly. Additional meetings may be attended on a time-and-materials basis.

This task also includes Quad Knopf's critically important internal Quality Assurance/Quality Management process. This means that every product deliverable is subjected to a peer-level review before it is provided to the City.

Deliverables:

- *See details of meeting attendance in relevant task descriptions.*

Schedule

Task	Target Date/ Duration	Activity
Task 1 – PROJECT INITIATION		
	1/22/15	Contract executed/Notice to Proceed
	1/22/15	Project Proponent provides complete project description to QK **(All dates below are keyed to this date, except as noted.)**
Task 2 – FIELD RECONNAISSANCE AND REVIEW OF EXISTING INFORMATION		
	1/29/15 (7 days)	
Task 3 – PROJECT DESCRIPTION AND PROJECT OBJECTIVES		
	1/26/15 (4 days)	Complete and expanded project description completed
Task 4 – PUBLIC SCOPING / NOTICE OF PREPARATION		
	1/30/15 (8 days)	NOP Completed and Released
	Date TBD	Public scoping meeting at Madera City Hall
	3/2/15 (30 days)	30-day scoping period ends
Task 5 – EARLY CONSULTATION AND TECHNICAL STUDIES		
Subtask 5.1	3/9/15 (14 days)	Air Quality Report and HRA **(date follows receipt of traffic output data)**
Subtask 5.2	2/22/15 (30 days)	Biological Survey Report
Subtask 5.3	2/22/15 (30 days)	Cultural Resources Report
Subtask 5.4	3/5/15 (10 days)	Greenhouse Gas Report **(date follows receipt of traffic output data)**
Subtask 5.5	3/5/15 (10 days)	Health Risk Assessment **(date follows receipt of traffic output data)**
Subtask 5.6	3/5/15 (10 days)	Noise Study **(date follows receipt of traffic output data)**
Subtask 5.7	2/5/15 (14 days)	Phase I ESA
Subtask 5.8	2/23/15 (30 days) 3/5/15 (40 days)	Traffic Impact Study (output data, only) Traffic Impact Study (complete report)
Task 6 – GRAPHICS/GIS		
Task 7 – ADMINISTRATIVE DRAFT EIR		
	3/23/15 (8 weeks)	QK submits Admin Draft EIR to City for review
	3/30/15 (7 days)	City completes review of Admin Draft EIR
	4/6/15 (7 days)	QK makes revisions and submits Screencheck Draft
	4/13/15 (7 days)	City completes review of Screencheck Draft EIR
Task 8 – SCREENCHECK AND DRAFT EIR		
	4/14/15	QK submits Public Review Draft EIR to City and State Clearinghouse for start of 45-day public review
	5/28/15	End of 45-day public review period
Task 9 – ADMINISTRATIVE AND FINAL EIR		
	6/4/15 (7 days)	QK submits Admin Final EIR to City for review
	6/11/15 (7 days)	City completes review of Admin Final EIR
	6/18/15 (7 days)	QK makes revisions / Final EIR ready for Planning

Task	Target Date/ Duration	Activity
		Commission hearing
Task 10 – MITIGATION MONITORING AND REPORTING PROGRAM		
		MMRP provided in draft form to City
Task 11 – FINDINGS AND STATEMENT OF OVERRIDING CONSIDERATIONS		
		Findings and SOC provided in draft form to City
Task 12 – CEQA NOTICES		
		At various tasks.
Task 13 – MEETINGS / HEARINGS / PROJECT MANAGEMENT		
	Ongoing	Attendance at specified meetings and hearing; ongoing communications; ongoing project management
	7/2/15	Planning Commission hearing (10 days or later following distribution of Final EIR)
	7/8/15	City Council hearing

Schedule Assumptions:

1. The integrity of the timeline is maintained only if each event is accomplished without additional delays which could be caused by events such as the discovery of an issue or concern that warrants additional work, changes to the project, agency review time, etc.

2. A complete and stable project description is essential for this schedule to be maintained. Impact analyses will not begin until the City and Project proponent accept the project description.

3. The schedule for completion of the Final EIR will be determined in consultation with the City, depending on the volume of comments received.

4. Add dates are keyed to a Notice to Proceed date of January 22, 2015, except as noted otherwise.

5. All dates and durations are calendar days.

Cost Proposal

The fixed-fee cost estimate on the following page is preliminary and subject to change after review of additional project description information provided by the applicant and the City, completion of the Public Scoping process (Task 4), and further consultation with City of Madera staff.

Love's Travel Center EIR Cost Breakdown

	Quad Knopf										Direct Expenses				
Phase/Task	Project Manager Hours @ Chaffin $157	QA/QC Hours @ White $142	Senior Planner Hours @ Keene/ Johnston $142	Senior Associate Planner Hours @ Hall $121	Associate Biologist Hours @ Schade $97	Senior Associate Biologist Hours @ Glass $121	Associate Planner Hours @ Perea $97	GIS Analyst Hours @ Ying $83	Project Administrator Hours @ Lee $88	QUAD KNOPF TOTAL $	DIRECT EXPENSES @ $1	REPRO Copies @ $0.21	SUB-CONTRACTORS $ $1	SUBTOTAL $	TASK TOTALS $
TASK 1 - PROJECT INITIATION	18	4	4	2	2	2	2	2	2	$5,176				$0	$5,176
TASK 2 - FIELD RECON AND REVIEW EXISTING INFO	8		16	12	12	4	6			$7,210				$0	$7,210
TASK 3 - PROJECT DESCRIPTION AND OBJECTIVES	18	2	6					8	8	$4,988				$0	$4,988
TASK 4 - PUBLIC SCOPING / NOTICE OF PREP										$0				$0	$0
Subtask 4.1 Notice of Preparation	4	1	4	2			12	2	6	$3,438		36		$9	$3,447
Subtask 4.2 Scoping Meeting	8		6					2		$2,274	200			$230	$2,504
TASK 5 - EARLY CONSULT. AND TECH. STUDIES										$0				$0	$0
Subtask 5.1 Air Quality and GHG Report (OB-1)										$0			$19,950	$22,943	$22,943
Subtask 5.2 Biological Survey Report *(Quad Knopf - See Task 7)*										$0				$0	$0
Subtask 5.3 Cultural Resources Report (Windmiller)										$0			$3,668	$4,218	$4,218
Subtask 5.4 Health Risk Assessment Report (Vista Env)										$0			$9,200	$10,580	$10,580
Subtask 5.5 Noise Study (JC Brennan)										$0			$7,678	$8,830	$8,830
Subtask 5.6 Phase I ESA (Geocon)										$0			$4,000	$4,600	$4,600
Subtask 5.7 Traffic Study and Caltrans Consultation (VRPA)										$0			$36,670	$42,171	$42,171
TASK 6 - GRAPHICS / GIS								24		$1,992				$0	$1,992
TASK 7 - ADMIN DRAFT EIR										$0		900		$217	$217
Aesthetics	2	1					24	6	1	$3,370				$0	$3,370
Agriculture and Forestry Resouces	2		2				20	4	1	$2,958				$0	$2,958
Air Quality	2	1		6				1	1	$1,353				$0	$1,353
Biological Resources (include Biological Report)	2	2			60	16		2	2	$8,696				$0	$8,696
Cultural Resources	2	1		6				1	1	$1,353				$0	$1,353
Geology and Soils	1	1					12	1	1	$1,634				$0	$1,634
Greenhouse Gas Emissions	2	2		6				1	1	$1,495				$0	$1,495
Hazards and Hazardous Materials	2	1	6					1	1	$1,763				$0	$1,763
Hydrology and Water Quality	2	1		24				2	1	$3,614				$0	$3,614
Land Use and Planning	2	1	24					4	1	$4,284				$0	$4,284
Mineral Resources (potentially scoped out)										$0				$0	$0
Noise	2	1		6				2	1	$1,436				$0	$1,436
Population and Housing (potentially scoped out)										$0				$0	$0
Public Services	4	1					36	1	1	$4,433				$0	$4,433
Recreation (potentially scoped out)										$0				$0	$0
Transportation and Traffic	4	1		6				2	1	$1,750				$0	$1,750
Utilities and Services Systems	2	1	24					2	1	$4,118				$0	$4,118
Cumulative Impacts	4	1	4	2	2	2	4		1	$2,492				$0	$2,492
Project Alternatives	24	1	4	2			2	4	1	$5,334				$0	$5,334
Growth Inducing Impacts	2	1	1	2			2		1	$1,122				$0	$1,122
Effects Found Not to Be Significant	4	1	1	1			1		1	$1,218				$0	$1,218
Additional CEQA Required Sections	8	1	2	8	2	2	4	2	1	$3,728				$0	$3,728
Executive Summary	6	1	1	1	1	1	1		6	$2,190				$0	$2,190
TASK 8 - SCREENCHECK AND PUBLIC DRAFT EIR	20	4	16	16	8	8	16	6	10	$12,590		6,200		$1,497	$14,087
TASK 9 - ADMINISTRATIVE AND FINAL EIR	18	4	24	24	8	6	16	2	8	$13,630		3,600		$869	$14,499
TASK 10 - MITIGATION MONITORING AND REPORTING	4	2	2						2	$1,372				$0	$1,372
TASK 11 - FINDINGS AND SOC	4	2	6						2	$1,940				$0	$1,940
TASK 12 - MEETINGS / HEARINGS / MANAGEMENT	120		8							$19,976				$0	$19,976
TOTAL	301	40	163	126	95	41	158	80	62	$132,927	$200	10,736	$81,166	$96,164	$229,091

*Please note that cost for Final EIR responses to comments is an estimate only. The balance of the projected costs are fixed fee. The actual cost of responses to comments will be determined once letters have been received and evaluated.

Return to Agenda

REPORT TO CITY COUNCIL

Approved by:

Department Director

City Administrator

Council Meeting of: January 21, 2015

Agenda Number: B-14

SUBJECT: Consideration of a Resolution Approving a Subscription Agreement with Nichols Consulting for SB90 State Mandated Cost Reimbursement Claim Preparation Services

RECOMMENDATION: Staff recommends the Council approve the attached resolution authorizing the Mayor to sign a subscription agreement with Nichols Consulting.

DISCUSSION: The City of Madera has worked with Nichols Consulting for such services in the past. For whatever reason, City staff let their contract expire and we have not been requesting SB90 reimbursements for the past year to two. In order to capture these reimbursements that are available to the City for state mandated costs, we have requested quotes from three firms, and Nichols came in with the lowest of the three quotes. Their quote is for $4,800 and includes billing for the fiscal year 2013 and fiscal year 2014. Although we are never quite sure when or how much we will receive from the State of California for mandated cost reimbursements, staff anticipates that the reimbursements we will receive for these claims will well-exceed the costs related to this contract.

FINANCIAL IMPACT: The fiscal impact of this agreement will be $4,800 for services relating to fiscal years 2013 and 2014 SB90 claims. This cost will be charged to the Finance Department's Contract Services budget line item.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN: Approval of this item is consistent with Strategy 115 of the Vision Plan - Economic Resource Provision: Ensure sufficient economic resources to provide adequate City services and prepare for future growth.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, APPROVING A SPECIAL SERVICES AGREEMENT BETWEEN THE CITY OF MADERA AND NICHOLS CONSULTING AND AUTHORIZING THE MAYOR TO EXECUTE THE AGREEMENT

WHEREAS, the City of Madera (the "City") is eligible to be reimbursed for certain state mandated costs in accordance with Senate Bill 90 (SB90); and

WHEREAS, the City of Madera has not submitted claims for such reimbursements for the past two fiscal years; and

WHEREAS, the City of Madera would like to obtain consulting services for the completion and filing of SB90 state mandated cost reimbursement claims related to fiscal years 2012/2013 and 2013/2014; and

WHEREAS, City staff has requested pricing from three (3) different vendors and obtained the lowest quote from Nichols Consulting for the amount of $4,800.00.

NOW THEREFORE, THE COUNCIL OF THE CITY OF MADERA does hereby resolve, find and order as follows:

1. The Special Services Agreement between the City of Madera and Nichols Consulting in an amount not to exceed $4,800, a copy of which is on file in the office of the City Clerk and referred to for particulars, is hereby approved.
2. The Mayor is hereby authorized to execute the Special Services Agreement with Nichols Consulting.
3. The resolution is effective immediately upon adoption.

****

Nichols Consulting

CONTRACT FOR PROFESSIONAL SERVICES

This Contract is made and entered into this_____of _____ 2015, by and between the **City of Madera,** a city under the laws of the State of California (hereinafter referred to as "City") and Nichols Consulting, a sole-proprietor (hereinafter referred to as "Consultant").

RECITALS

A. City has the authority to seek reimbursement for certain costs from the State of California pursuant to California Government Code Section 17550 et seq.

B. City has the authority to contract for the preparation of said Claims through a designated individual or entity.

C. Consultant is qualified to provide the service of preparing said Claims in consideration for the fees, expenses, and costs stipulated in this Contract.

Therefore, the parties to this Contract agree as follows:

I. CONSULTANT'S RESPONSIBILITIES

A. Consultant shall review all eligible claiming opportunities and prepare all Claims whose State-imposed timely and late deadlines, for reimbursement, fall between the time of execution of this Contract and June 30, 2015. Consultant shall collect, document and process the information necessary for Consultant to file the claims on behalf of the City.

B. Consultant will provide City with a copy of Claims and supporting documentation prepared pursuant to this Contract. The copy will be provided following the state imposed deadline for said Claims.

C. Consultant shall implement a Claims monitoring and documentation process in the course of Consultant's duties.

D. Consultant agrees not to exceed the amount of the fee proposal set forth in Appendix A to this Contract without prior written authorization of the City.

E. Consultant will make good faith effort to file Claims in accordance with existing laws, regulations and applicable written guidelines but does not warrant the reimbursable nature or likelihood of success of reimbursement of any particular Claim.

F. Consultant shall advise City of all official action which is necessary under applicable federal and state constitutional provisions, state statutes and regulations, and any other applicable provisions, in order that City may fulfill its responsibilities as set forth in Section II, paragraph C of this Contract for Services.

II. CITY'S RESPONSIBILITIES

A. City will provide Consultant with all the documents, records and information necessary to prepare Claims in a timely manner.

B. City agrees to pay Consultant, a fee of $4,800 for services rendered. Consultant's fee is due and payable in three (3) separate and equal installments of $1,600.00. The dates of these installment payments are: January 31, 2015, March 31, 2015 and May 31, 2015. Consultant's fee is not-to-exceed $4,800.00, unless approved by City in writing. The payment of Consultant fee is not dependent on the amount of Claims ultimately reimbursed by the State of California.

C. City agrees to take that official action which is necessary under applicable federal and state constitutional provisions, state statutes and regulations, and any other applicable provisions, to perform its obligations under this Contract in a timely manner.

III. MODIFICATIONS

This Contract may be modified only by a written amendment to this Contract, executed by both parties.

IV. TERMINATION OF CONTRACT

This Contract may be terminated by mutual written consent or by either party, provided that the terminating party gives ninety (90) days written notice to the other party, without cause. Upon receipt of a Notification of Termination, Consultant shall promptly discontinue all services affected. Consultant shall provide the City with all work products completed up to the date of termination. In the event of termination, City shall reimburse Consultant for all direct service hours on work-in-process at $125.00 per hour. However, in no event shall City be obligated to pay more than the total amount of the Contract.

Fixed Fee - $4,800

V. ATTORNEY'S FEES AND COSTS

In any litigation, arbitration or other proceeding by which one party either seeks to enforce its rights under this Contract (whether in contract, tort, or both) or seeks a declaration of any rights or obligations under this Contract, each party shall bear its own attorney fees, together with any costs and expenses to resolve the dispute and to enforce the final judgment.

VI. SEVERABILITY

If any term of this contract is held by a court of competent jurisdiction to be void or unenforceable, the remainder of this Contract shall remain in full force and effect and shall not be affected.

VII. NOTICES

All notices that are required to be given by one party to the other under this Contract shall be in writing and shall be deemed to have been given if delivered personally or enclosed in a properly addressed envelope postage prepaid and deposited with an overnight delivery service or with a United States Post Office for delivery by first class and certified mail addressed to the parties at the following addresses, unless such addresses are changed by notice, in writing, to the other party.

City of Madera
Attn: Financial Services Manager
205 West Fourth Street
Madera, CA 93637

Nichols Consulting
1857 44th Street
Sacramento, CA 95819

VIII. AUTHORITY

The individuals executing this Contract represent and warrant that they have the legal power and authority to this contract and to contractually bind their respective entities.

IX. GOVERNING LAW

The validity of this Contract and each of its terms and provisions, as well as the rights and duties of the parties under this Contract, shall be construed pursuant to and in accordance with the laws of the State of California.

Fixed Fee - $4,800

X. ENTIRE AGREEMENT

This Contract, which includes the "Proposal for Contract for Professional Services" set forth as Appendix A, supersedes any and all other agreements, whether oral or in writing, between the parties with respect to the subject of this Contract. This Contract contains all of the covenants and agreements between the parties with respect to the subject of this Contract, and each party acknowledges that no representatives, inducements, promises, or agreements embodied in this Contract. No agreement, statement, or promise not contained in this Contract shall be valid or binding on the parties with respect to the subject of this Contract.

Executed at _____, California, on the day and year set forth above.

_____, **President**
F. Andy Nichols

Nichols Consulting
1857 44th Street
Sacramento, CA 95819

_____, **Title** _____

_____ **Print Name**

City of Madera
205 West Fourth Street
Madera, CA 93637

APPENDIX A

PROPOSAL FOR CONTRACT FOR SERVICES

This proposal for the **City of Madera** is to provide the services set forth under Paragraph I of the Contract for Professional Services relating to the preparation of Claims for reimbursement pursuant to California Government Code Section 17550 et seq.

Consultant's fee shall be $4,800.00, for claims prepared on behalf of the City beginning with the time of execution of this Contract and ending June 30, 2015. Consultant's fee is due and payable in three (3) separate and equal installments of $1,600.00. The dates of these installment payments are: January 31, 2015, March 31, 2015 and May 31, 2015.

This Proposal is **valid until January 31, 2015** unless extended in writing by Consultant.

January 14, 2015

_____, **President**
F. Andy Nichols

Nichols Consulting
1857 44th Street
Sacramento, CA 95819

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REPORT TO CITY COUNCIL

Council Meeting of January 21, 2015
Agenda Item Number B-15

Approved by

Department Director

City Administrator

SUBJECT: CONSIDERATION OF A RESOLUTION GRANTING AN EASEMENT TO MADERA IRRIGATION DISTRICT FOR AN IRRIGATION PIPELINE LOCATED ON PARCELS OWNED BY THE CITY OF MADERA IN INDUSTRIAL SUBDIVISION 2014-S-01, PECAN AVENUE AND PINE STREET

RECOMMENDATION:

That City Council approve Resolution No. 15- _____:

1. Granting an Easement Deed to the Madera Irrigation District for the purpose of owning, operating, and maintaining a pipeline through City-owned Parcels 11, 14, 15 and 16 in Industrial Subdivision 2014-S-01, as shown in Exhibits "A", "B", "C", "D", "E", and "F", attached hereto.

2. Authorizing the Mayor to execute the Easement Deed.

SUMMARY:

As part of the development of Freedom Industrial Park subdivision, it is necessary to relocate irrigation facilities belonging to the Madera Irrigation District (MID). This relocation involves four parcels owned by the City. City Council action is needed to grant easements to MID to own, operate and maintain the relocated pipelines.

DISCUSSION:

The proposed action will expand an existing easement. Originally 10 feet wide, it was expanded to 15 feet by dedication from Subdivision Map 2014-S-01, on June 18, 2014. This currently proposed action will expand the easement width to 20 feet.

FISCAL IMPACT:

There will be no financial impact to the City by granting the proposed easements.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN:

The proposed action falls generally in the category of Strategy 101.6:
Ensure infrastructure can sustain population growth in the development of the General Plan.

RESOLUTION NO. 15 - ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, GRANTING AN EASEMENT TO MADERA IRRIGATION DISTRICT FOR AN IRRIGATION PIPELINE LOCATED ON PARCELS OWNED BY THE CITY OF MADERA IN INDUSTRIAL SUBDIVISION 2014-S-01, PECAN AVENUE AND PINE STREET

WHEREAS, it was necessary to relocate existing irrigation pipelines owned by the Madera Irrigation District running through Parcels 11, 14, 15 and 16 of Industrial Subdivision 2014-S-01 to facilitate the development of the new subdivision.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF MADERA hereby resolves, finds, determines and orders as follows:

1. The above recitals are true and correct.

2. The City of Madera grants easements to Madera Irrigation District to own, operate and maintain underground pipelines through Parcels 11, 14, 15 and 16 of Industrial Subdivision 2014-S-01 as described in the Easement Deed, a copy of which is on file in the Office of the City Clerk.

3. The Mayor is authorized to execute the Easement Deed as approved.

4. This resolution is effective immediately upon adoption.

Recording Requested By:
Madera Irrigation District
12152 Road 28 1/4
Madera, CA 93637

When Recorded, Mail to:
Madera Irrigation District
12152 Road 28 1/4
Madera, CA 93637

Space above this line for the recorder's use

GRANT OF EASEMENT

I, CITY OF MADERA, A MUNICIPAL CORPORATION, grant to the Madera Irrigation District an easement in gross for a right of way over, under, along and across the real property herein described as Exhibits "A", "B", "C", "D", "E" & "F" for the installation, operation, repair and maintenance of a pipeline and appurtenances with the right to flow water therein of whatever nature and from whatever source, together with the right to enter upon said real property with men and equipment for the purpose of operating, repairing, and maintaining and improving the said facilities. Grantor(s) shall have the right to make use of the surface in the easement area so long as said use does not interfere with the rights herein granted. No permanent structures, permanent crops, trees or landscaping with invasive roots shall be allowed within the easement area. Operation, repair or maintenance of the District's pipeline could disturb or damage surface improvements within the easement. The District will attempt to minimize any impact to surface improvements but would not be responsible for repair or replacement of same. The District shall not be responsible, nor incur any costs associated with maintaining, repairing, improving or replacing anything within the easement surface area. This conveyance is binding on heirs, executors, administrators, assigns, transferees and successors of the parties and is made and accepted upon the following additional terms:

See attached EXHIBITS "A", "B", "C", "D", "E" & "F" incorporated herein by reference.

CITY OF MADERA, A MUNICIPAL CORPORATION

BY: _____ Date : _____ 2015

EXHIBIT "A"

LEGAL DESCRIPTION

COMMENCING AT THE NORTHWEST CORNER OF PARCEL 11 PER SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS;

THENCE SOUTH 00°08'53" WEST ALONG THE WEST LINE OF SAID PARCEL 11, A DISTANCE OF 371.05 FEET TO **THE POINT OF BEGINNING;**

THENCE NORTH 82°38'13" EAST, A DISTANCE OF 42.11 FEET;

THENCE SOUTH 06°57'36" EAST, A DISTANCE OF 50.00 FEET;

THENCE SOUTH 82°38'13" WEST, A DISTANCE OF 48.35 FEET, TO A POINT LYING ON THE WEST LINE OF SAID PARCEL 11;

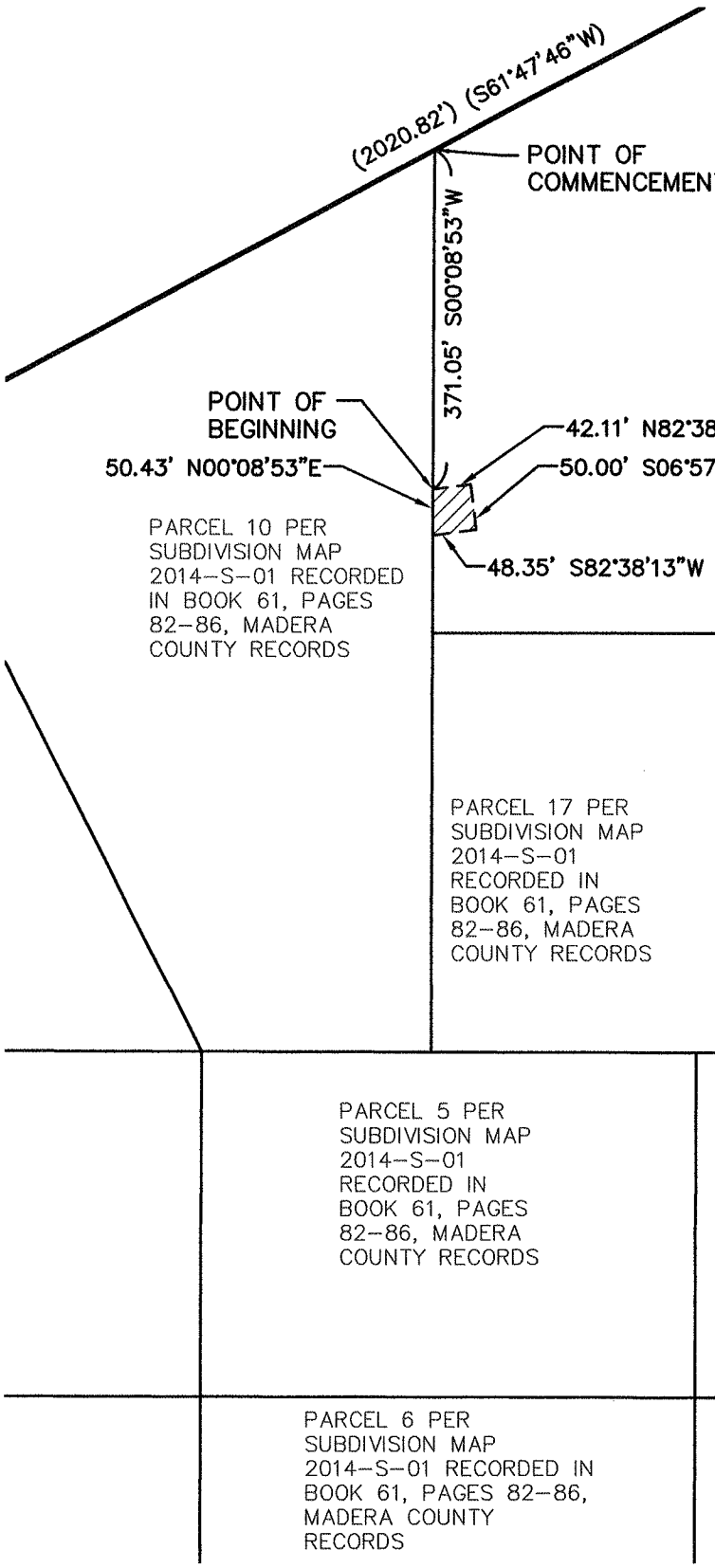
THENCE NORTH 00°08'53" EAST, ALONG THE WEST LINE OF SAID PARCEL 11, A DISTANCE OF 50.43 FEET;

CONTAINS AN AREA OF APPROXIMATELY 2,261 SF

PREPARED BY:

Dale H. Winn 1-13-15

DALE H. WINN RCE 23273 EXP: 12/31/2015



LEGEND

———	EXISTING LOT LINE
▨	PROPOSED MID EASEMENT
(S89°50'35")	RECORDED BEARING AS PER SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS
(123.45')	RECORDED DISTANCE AS PER SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS

REGISTERED PROFESSIONAL ENGINEER
DALE H. WINN
No. 23273
Exp: 12/31/2015
1-13-15
CIVIL
STATE OF CALIFORNIA

NORTH

SCALE
1 INCH = 200 FEET

EXHIBIT "B"
MID EASEMENT

HARBISON INTERNATIONAL INC.,
ENGINEERS – SURVEYORS – PLANNERS
2755 E. SHAW AVE., SUITE 101, FRESNO, CA 93710
PHONE: (559) 294-7485 FAX: (559) 294-7481

EXHIBIT "C"
MADERA IRRIGATION DISTRICT EASEMENT
LEGAL DESCRIPTION

A PORTION OF LAND LOCATED WITHIN PARCELS 11, 14, 15 AND 16 OF SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS;

A STRIP OF LAND, 5 FEET IN WIDTH, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF PARCEL 11 OF SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS; THENCE SOUTH 89°50'53" EAST, ALONG THE SOUTH LINE OF PARCEL 11, A DISTANCE OF 344.46 FEET, TO THE SOUTHEAST CORNER OF THAT 15 FOOT WIDE MADERA IRRIGATION DISTRICT EASEMENT RECORDED ON SAID SUBDIVISION MAP 2014-S-01, SAID POINT BEING **THE POINT OF BEGINNING;**

THENCE NORTH 00°13'10" EAST, ALONG THE EAST LINE OF SAID MADERA IRRIGATION DISTRICT EASEMENT, A DISTANCE OF 16.01 FEET;

THENCE CONTINUING ALONG THE EAST LINE OF SAID MADERA IRRIGATION DISTRICT EASEMENT, NORTH 09°50'28" WEST, A DISTANCE OF 175.29 FEET TO THE NORTHEAST CORNER OF SAID EASEMENT; SAID POINT ALSO LIES ON THE SOUTH LINE OF THAT PIPELINE AND CANAL EASEMENT RECORDED IN BOOK 816, PGS 555-557, MADERA COUNTY RECORDS;

THENCE NORTH 77°34'00" EAST, ALONG THE SOUTH LINE OF SAID CANAL EASEMENT, A DISTANCE OF 5.01 FEET;

THENCE SOUTH 09°50'28" EAST, PARALLEL WITH, AND 5 FEET EAST OF, SAID 15 FOOT WIDE MADERA IRRIGATION DISTRICT EASEMENT, A DISTANCE OF 175.95 FEET;

THENCE SOUTH 00°13'10" WEST, PARALLEL WITH, AND 5 FEET EAST OF, SAID MADERA IRRIGATION DISTRICT EASEMENT, A DISTANCE OF 16.44 FEET, TO A POINT LYING ON THE SOUTH LINE OF SAID PARCEL 11;

THENCE NORTH 89°50'53" WEST, ALONG THE SOUTH LINE OF SAID PARCEL 11, A DISTANCE OF 5.00 FEET, **TO THE POINT OF BEGINNING.**

AREA CONTAINS APPROXIMATELY 959 SF

PREPARED BY:

1-13-15
DALE H. WINN RCE 23273 EXP: 12/31/15

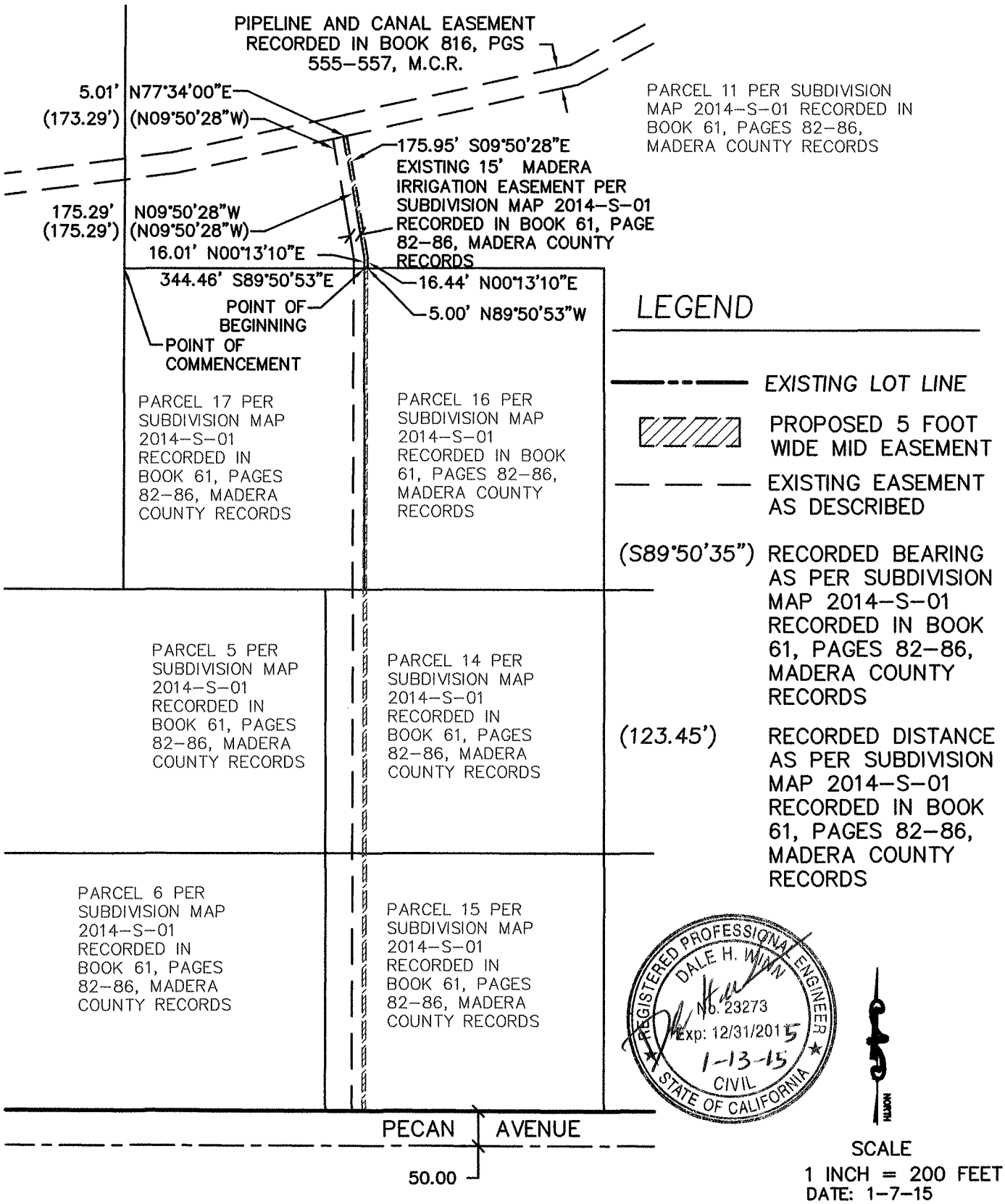


EXHIBIT "D"

MID EASEMENT

HARBISON INTERNATIONAL INC.,
ENGINEERS – SURVEYORS – PLANNERS
2755 E. SHAW AVE., SUITE 101, FRESNO, CA 93710
PHONE: (559) 294–7485 FAX: (559) 294–7481

EXHIBIT "E"
MADERA IRRIGATION DISTRICT EASEMENT
LEGAL DESCRIPTION

A PORTION OF LAND LOCATED WITHIN PARCELS 11, 14, 15 AND 16 OF SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS;

A STRIP OF LAND, 5 FEET IN WIDTH, MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF PARCEL 15 OF SUBDIVISION MAP 2014-S-01 RECORDED IN BOOK 61, PAGES 82-86, MADERA COUNTY RECORDS; THENCE SOUTH 89°42'32" EAST, ALONG THE SOUTH LINE OF PARCEL 15, A DISTANCE OF 52.96 FEET, TO THE SOUTHEAST CORNER OF THAT 15 FOOT WIDE MADERA IRRIGATION DISTRICT EASEMENT RECORDED ON SAID SUBDIVISION MAP 2014-S-01, SAID POINT BEING **THE POINT OF BEGINNING;**

THENCE NORTH 00°13'10" EAST, ALONG THE EAST LINE OF SAID MADERA IRRIGATION DISTRICT EASEMENT, A DISTANCE OF 1206.61 FEET;

THENCE CONTINUING ALONG THE NORTH LINE OF PARCEL 16 OF SAID SUBDIVISION MAP 2014-S-01, SOUTH 89°50'53" EAST, A DISTANCE OF 5.00 FEET;

THENCE SOUTH 00°13'10" WEST, PARALLEL WITH, AND 5 FEET EAST OF, SAID 15 FOOT WIDE MADERA IRRIGATION DISTRICT EASEMENT, A DISTANCE OF 1206.62 FEET;

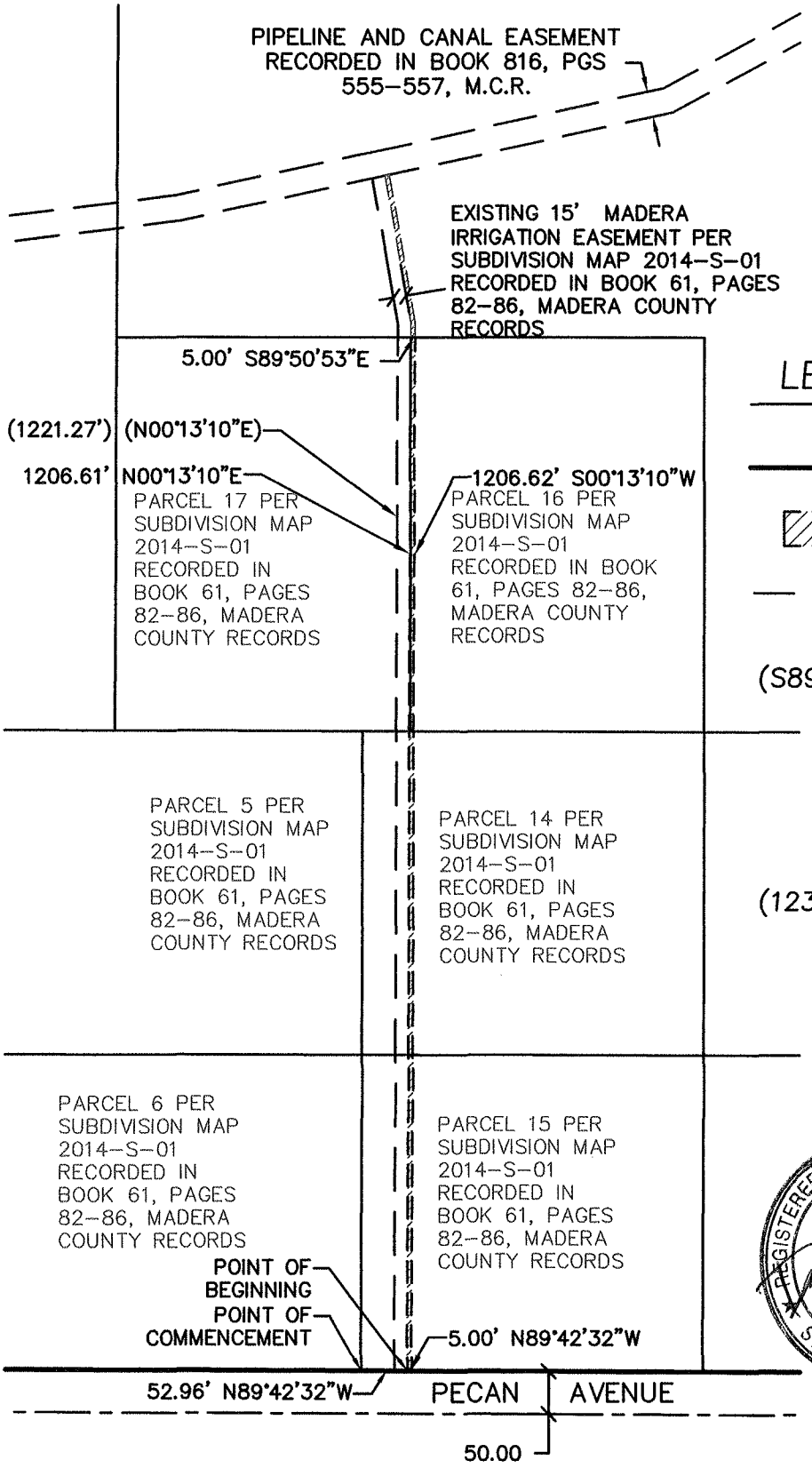
THENCE NORTH 89°42'32" WEST, ALONG THE SOUTH LINE OF SAID PARCEL 15, A DISTANCE OF 5.00 FEET, **TO THE POINT OF BEGINNING.**

AREA CONTAINS APPROXIMATELY 6,033 SF

PREPARED BY:

1-13-15

DALE H. WINN RCE 23273 EXP: 12/31/15



LEGEND

——— - ———	EXISTING LOT LINE
▨	PROPOSED 5 FOOT WIDE MID EASEMENT
— — —	EXISTING EASEMENT AS DESCRIBED
(S89°50'35")	RECORDED BEARING AS PER SUBDIVISION MAP 2014–S–01 RECORDED IN BOOK 61, PAGES 82–86, MADERA COUNTY RECORDS
(123.45')	RECORDED DISTANCE AS PER SUBDIVISION MAP 2014–S–01 RECORDED IN BOOK 61, PAGES 82–86, MADERA COUNTY RECORDS

REGISTERED PROFESSIONAL ENGINEER
DALE H. WINN
No. 23273
Exp: 12/31/2015
1-13-15
CIVIL
STATE OF CALIFORNIA

NORTH

SCALE
1 INCH = 200 FEET
DATE: 1–7–15

EXHIBIT "F"
MID EASEMENT

HARBISON INTERNATIONAL INC.,
ENGINEERS – SURVEYORS – PLANNERS
2755 E. SHAW AVE., SUITE 101, FRESNO, CA 93710
PHONE: (559) 294–7485 FAX: (559) 294–7481

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REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF:
January 21, 2015

AGENDA ITEM NUMBER:
C-1

Approved By:

PLANNING MANAGER

CITY ADMINISTRATOR

Subject: A Public Hearing to Consider an Appeal by Mr. Ajit Gill of Planning Commission Conditions of Approval for Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39 and Consideration of a Resolution of Determination on Appeal.

RECOMMENDATION

Staff recommends the City Council adopt a resolution of determination after an appeal hearing, affirming and upholding the Planning Commission's decision pertaining to the imposition of conditions of approval on Mr. Gill's Site Plan Review and Conditional Use Permit.

BACKGROUND

On December 9, 2014, the Planning Commission approved Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39, subject to required findings and conditions of approval. The use permit allowed for the sale of beer and wine, the variance allowed for specific embellishments to signage, and the site plan review guided the reestablishment of a gas station and convenience store use and confirmed compliance with current City standards.

Although the subject property had been closed for over one year and had lost its status as a "grandfathered" use, the re-establishment of the gas station/convenience store remains consistent with the purpose and intent of the Zoning Ordinance and compatible with the surrounding uses. In that no compelling reason exists to deny the re-establishment of alcoholic beverage sales in conjunction with the gas station mini-mart and findings of support can be made in support of a variance from the height requirements of the Sign Regulations, the Planning Commission approved the requested entitlements, subject to acceptance of conditions of approval.

The applicant, Mr. Ajit Gill, filed an appeal to the conditions of approval on December 10, 2014. The appeal contests two specific conditions; Condition Nos. 35 and 40. They read as follows:

35. Prior to issuance of a business license, an Irrevocable Offer of Dedication shall be made to dedicate a 10-foot wide strip of land for street purposes on Madera Avenue along the entire parcel frontage.

40. Prior to issuance of a business license, the Developer shall relocate all private improvements from the proposed 10-foot irrevocable offer of dedication. In-lieu of relocated improvements at this time, developer shall enter into a deferral agreement with the City to relocate private improvements at a future date as determined by the City Engineer or Caltrans, and shall bear all costs related to relocation of said improvements. The Developer shall pay all associated fees with the processing and approval of the deferral agreement.

The applicant does not wish to dedicate right-of-way, now or in the future, without compensation for the land and the improvements therein.

ANALYSIS

Whenever a discretionary permit is required, Zoning Ordinance requires that a site plan review be completed in order that the affected property maintains compliance with the provisions of the City Municipal Code. Since both a conditional use permit and variance were requirements necessary to re-establish the gas station use, site plan review was completed on the site. Typical improvements required as part of site plan review often include installation of water meters, construction of trash enclosures and, when necessary, dedications of right-of-way along project frontages in order to accommodate future widening of streets.

Such is the case with Mr. Gill's gas station property. Improvements commensurate with re-establishing the gas station/convenience store have been incorporated into the conditions of approval. A trash enclosure is to be constructed to meet current City standards for commercial development A ten foot irrevocable offer of dedication is required along the project site's frontage to the Madera Avenue right-of-way. This requirement allows for the future expansion of Madera Avenue to a full arterial street segment. A deferral agreement is required so as to allow improvements currently located in the ten-foot dedication to remain until such time as the street is expanded. Compliance with the Americans with Disabilities Act is also required for both on and off-site improvements. Because of the required offer of dedication, certain improvements to landscaping and screening walls were not incorporated into the conditions.

The General Plan includes a policy (Policy CI-5) that requires that all necessary rights-of-way for arterial and collector streets be dedicated at the earliest opportunity. The site plan review, required as a part of the use permit and variance request, is the earliest opportunity to require the dedication to occur.

Staff has crafted conditions of approval which provide as much latitude as is possible within ordinance. Instead of requiring dedication of right-of-way now, conditions defer dedication of right-of-way until such time as is necessary. Instead of requiring that improvements be relocated now, conditions allow improvements to remain in right-of-way until such time as construction occurs. These conditions reserve the land for City street purposes but allow the applicant the use of the land until the City requires it for street purposes. No reimbursement by the City is required. It is the applicant's development proposal that has initiated the requirement for dedication.

No timeline for a street widening project exists, though it is estimated that the City (or Caltrans) would not widen the Madera Avenue street section and exercise the irrevocable offer of dedication for as long as twenty years. Staff has provided as much leeway as is prudent to allow the applicant utilization of the property while upholding ordinance requirements for dedications of right-of-way.

It is important to note that, prior to filing the application for use permit, variance and site plan review, the applicant had been made aware that the site plan review application could prompt a requirement for dedication of right-of-way. The applicant was further advised that if no use permit and variance were requested, the requirement for site plan review would have been removed and no dedication would be triggered. The applicant moved forward fully understanding that a dedication would be a component of any request to reestablish alcohol sales via approval of a use permit and/or vary from the sign ordinance through the variance process.
To remove or alter Condition Nos. 35 or 40 would be contrary to ordinance, inconsistent with the policies of the General Plan and would set a dangerous precedent which could seriously impact the application of the General Plan and the subsequent provision of suitable streets that provide for safe driving within the City.

Procedurally, in the event of an appeal of a decision of the Planning Commission, the Madera Municipal Code provides at section 10-3.1310(D) that the City Council may, by resolution, affirm, reverse or modify the decision of the Planning Commission. That section also requires that, in the event it decides to reverse the decision of the Planning Commission, it must make a written finding of fact setting forth where the Planning Commission decision was in error.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

The vision plan supports "increased retail outlets" and promotes "Shop Madera" and "encourages viable economic development," all goals realized within the approval of Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39. Moreover, the vision plan provides opportunities for public/private collaborations in order to enhance the community's ability to accomplish goals, but the vision can only be achieved with investment of the community and commitment of those willing to take the lead. The appeal of required conditions of approval is not consistent with achieving the Vision for Madera.

SUMMARY OF RECOMMENDATIONS

The conditions of approval are consistent with Zoning Ordinance and the General Plan. To alter the conditions of approval would set a dangerous precedent. Staff recommends the City Council adopt a resolution affirming the decision of the planning Commission which imposed the conditions of approval.

FISCAL IMPACT

The fee assessed for processing an appeal request assists the City in recovering the costs expended in bringing the appeal request to the City Council.

ATTACHMENTS

Appellant Submittals

RESOLUTION NO. ____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA, MAKING A DETERMINATION AFTER HEARING ON APPEAL OF THE PLANNING COMMISSION DECISION APPROVING CONDITIONAL USE PERMIT 2014-26, VARIANCE 2014-06 AND SITE PLAN REVIEW 2014-39

WHEREAS, the Planning Commission for the City of Madera approved Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39 pertaining to a commercial development proposed by the property owner, Mr. Ajit Gill; and

WHEREAS, Mr. Gill has filed an appeal to the City Council challenging two of the conditions of approval for the above referenced entitlements, specifically conditions 35 and 40 imposing the dedication of public right-of-way and requiring removal of improvements from said right-of-way; and

WHEREAS, the Madera Municipal Code provides at section 10-3.1310(D) that the City Council may, by resolution, affirm, reverse or modify the decision of the Planning Commission.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY FINDS, ORDERS AND RESOLVES AS FOLLOWS:

1. The above recitals are true and correct.

2. After duly conducting a public hearing on January 21, 2015, to hear the appeal by Mr. Ajit Gill of the Planning Commission Decision approving Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39, and after considering all of the evidence before it, the City Council hereby makes the following decision on said appeal:

   _____ The Decision of the Madera Planning Commission approving Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39 is affirmed.

   (or)

   _____ The Decision of the Madera Planning Commission approving Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39 is reversed based on the following findings of error by the Planning Commission:

   _____

   _____

   _____

   (or)

_____ The Decision of the Madera Planning Commission approving Conditional Use Permit 2014-26, Variance 2014-06 and Site Plan Review 2014-39 is modified in following aspects:

_____

_____

_____

3. This Resolution is effective immediately upon adoption.

APPLICATION FOR APPEAL OF ADMINISTRATIVE DECISION

FINANCE DEPARTMENT DEC 10 2014 RECEIVED CITY REGISTER

APPLICANT NAME AJIT S. GILL HANDISTOP8@yahoo.com

ADDRESS 530 W. Floral AVE

CITY FRESNO CA 93706 PHONE 559-906-3076

AN APPEAL CANNOT BE ACCEPTED FOR PROCESSING WITHOUT A FULL EXPLANATION OF THE CIRCUMSTANCES SURROUNDING THE ACTION, AND THE GROUNDS FOR THE APPEAL THEREOF. (USE ADDITIONAL SHEETS IF NECESSARY.)

I AM HEREBY APPEALING THE DECISION OF (NAME) AJIT S. GILL ON (date) 12-9-14 PERTAINING TO ACTION RELATING TO MY PROPERTY LOCATED AT 211 S. MADERA AVE MADERA 93637 AND FURTHER IDENTIFIED AS ASSESSOR'S PARCEL NUMBER 011-071-007. THIS APPEAL IS BASED ON (GIVE A FULL EXPLANATION)

Condition #35 DADICATION of 10' strip on Madera AVE
& Condition #40 Relocating canopy, underground Tank (GAS)
above ground Envoirlment vepor Recovery, PRICE Sign
and 1 MPD

This will Distroy my whole Bussines
I cannot Afford To Relocate and No Place to
Locate either. I am Accepting All other Conditions
Please Look situation. Thanks
I attached 2 copies of inf.

D.

Ajit S. Gill
Signature

THE SUBMISSION OF THIS FORM, COMPLETED AS REQUIRED, AND ACCOMPANIED BY THE APPLICATION FEE AS DETERMINED BY THE CITY COUNCIL, ENTITLES THE APPLICANT TO A HEARING BEFORE THE CITY COUNCIL OF THE CITY OF MADERA AT THE NEXT AVAILABLE PUBLIC HEARING, UNLESS DELAYED AT REQUEST OF THE APPLICANT OR DUE TO CIRCUMSTANCES BEYOND THE CONTROL OF STAFF OR THE CITY COUNCIL OF THE CITY OF MADERA.

RECEIVED

DATE FILED 12/10/14 S. Alvarez of Madera City Clerk

DATE ACCEPTED _____ By: _____

Date: _____

APPLICATION FEE:
Administrative $1,204.00
Project Approvals $ 605.00
#1990-8249

Subject: CUP

From: aaja05@yahoo.com (aaja05@yahoo.com)

To: handistop8@yahoo.com;

Date: Friday, December 5, 2014 11:17 AM

The dedication of the 10 foot strip to Caltrans is not possible or practicable and will destroy a business tha has been in existence on this location since 1975.

Part of the gas tanks are under the land to be dedicated and part of the canopy is above it there is not enough room to put the tanks anywhere else and move the canopy.

There is no other place to move these too and even if there was, it would cost in excess o a million dollars do it. That is more than double what I bought the gas stations for.

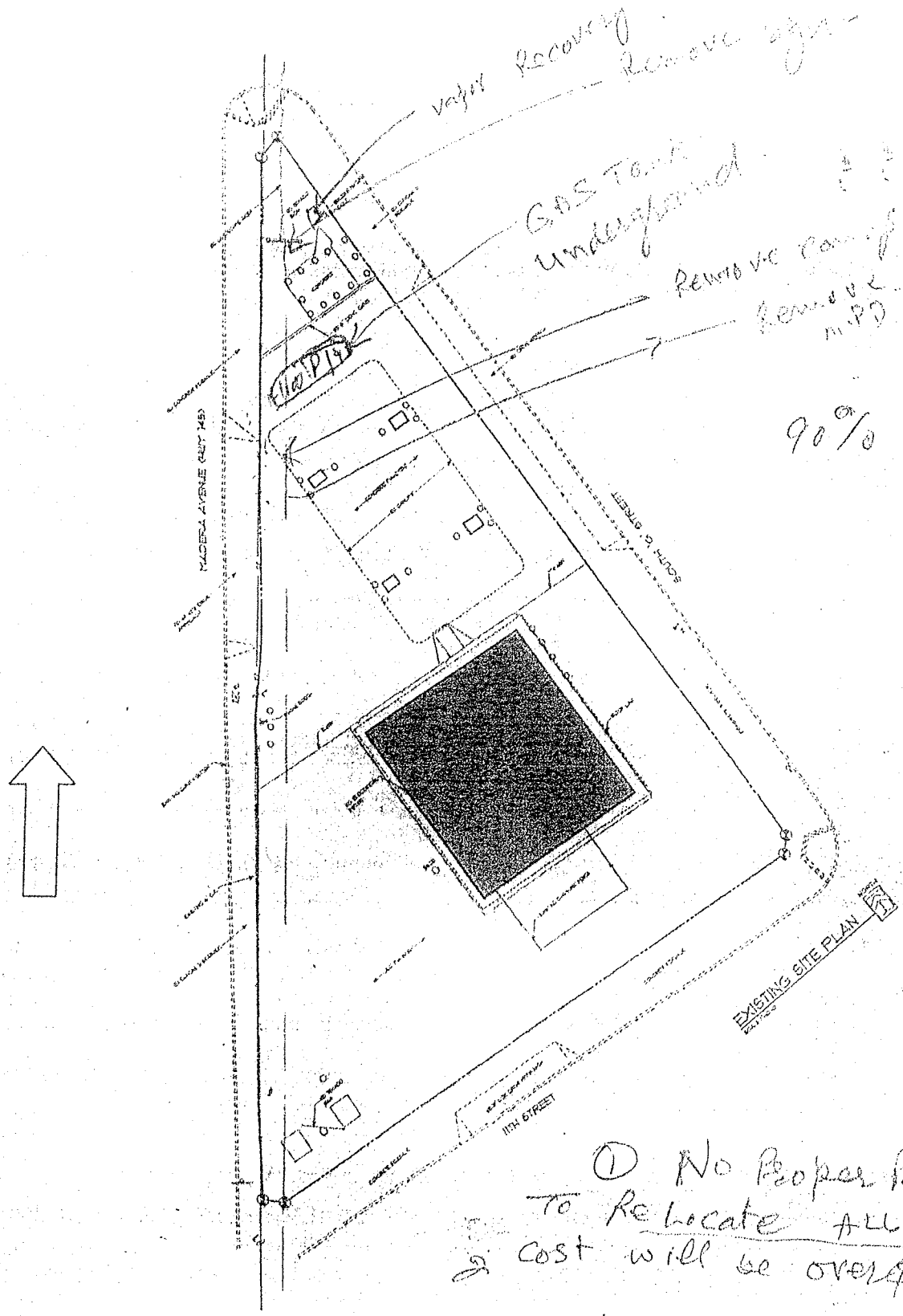
There is also electrical poles along the street that would have to be removed and that is not feasible.

The laws of eminent domain dictate that government can take an individuals property if it is necessary for good of the community as a whole but the owner must be fairly compensated. A partial taking (or dedicat that will render the property unusable cannot be done without taking the whole property and compensatin the property owner fairly.

The 10 foot dedication cannot be dedicated without the destroying the very essence of this gas station b interupting its ability to dispense gas. I therefore request a variance of this dedication or a complete buyo of my business at fair market value by Caltrans.

Agnes Zell

Site Plan


MADERA AVENUE (HWY 145)
SOUTH G STREET
11TH STREET
EXISTING SITE PLAN

Streets

35. Prior to issuance of a business license, an Irrevocable Offer of Dedication shall be made to dedicate a 10-foot wide strip of land for street purposes on Madera Avenue along the entire parcel frontage.

36. The developer shall construct an ADA path of travel across existing driveway approaches located on Madera Avenue, G Street and 11th Street. Sidewalk shall be constructed per current ADA and City standards with an unimpeded ADA path of travel a maximum 2% cross slope.

37. The developer shall reconstruct existing handicap access ramps located at the intersection of Madera Avenue and G Street and G Street and 11th Street. Access ramps shall meet current ADA and City standards.

38. Substandard and damaged sidewalk and curb and gutter shall be removed and replaced to current City Standards. Developer shall coordinate with City Inspector to establish the limits of the repairs.

39. The extent of improvements along Madera Avenue shall be determined by Caltrans as Madera Avenue is a State Highway.

40. Prior to issuance of a business license, the Developer shall relocate all private improvements from the proposed 10-foot irrevocable offer of dedication. In-lieu of relocated improvements at this time, developer shall enter into a deferral agreement with the City to relocate private improvements at a future date as determined by the City Engineer or Caltrans, and shall bear all costs related to relocation of said improvements. The Developer shall pay all associated fees with the processing and approval of the deferral agreement.

Water

41. The existing water service connection shall be upgraded to current City Standards including water meter located within city right-of-way and shall read in cubic feet and a backflow prevention device located within private property.

42. A separate water meter and backflow prevention device will be required for landscape consumption.

Sewer

43. Existing sewer service connection shall be upgraded to current city standards.

Police Department

44. Signage shall be installed per the approval of the Police Department informing patrons that no alcoholic beverages are to be consumed on the premises.

45. Signage shall be installed per the approval of the Police Department informing patrons that no loitering is allowed on the premises.

Return to Agenda

REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF:
January 21, 2015

AGENDA ITEM NUMBER:
C-2

Approved By:

COMMUNITY DEVELOPMENT DIRECTOR

CITY ADMINISTRATOR

Subject: **Public Hearing and Consideration of a Resolution Adopting the Madera County Integrated Regional Water Management Plan**

RECOMMENDATION:

Staff recommends that the City Council conduct a public hearing and then adopt a resolution adopting the Madera County Integrated Regional Water Management Plan.

SUMMARY:

The City of Madera is a member of the Regional Water Management Group (RWMG), a voluntary association of local stakeholders formed to facilitate coordination and collaboration regarding the management of water resources in the Madera Region. The RWMG is responsible for preparing and updating the Integrated Regional Water Management Plan (IRWMP). The first IRWMP was completed in 2008. An updated plan, prepared in accordance with all of the current requirements, was completed by the RWMG in December of 2014. The individual member-agencies of the RWMG are now considering the adoption of the updated Plan.

DISCUSSION

A Regional Water Management Group (RWMG) is a group of three or more local agencies who agree to participate in integrated regional water management planning by means of a joint powers agreement, memorandum of understanding (MOU), or other written agreement, as appropriate, that is approved by the each agency's governing body. The Group is responsible for preparing an maintaining the Integrated Regional Water Management Plan, and for identifying and ranking projects that may receive grant funding through the Department of Water Resources. The City of Madera adopted the 2008 IRWMP and became a member of the Regional Water Management Group in April of 2014.

Integrated Regional Water Management (IRWM) Planning is the primary function of the Regional Water Management Group. An IRWM Plan, or IRWMP, is a voluntary and comprehensive non-regulatory planning document prepared on a region-wide scale that identifies broadly-supported priority water resources projects and programs with multiple benefits. The process of creating an IRWM Plan is locally-driven and includes input from many diverse stakeholders. An IRWM Plan investigates a broad spectrum of water resources issues including water supply, flood management, water quality, environmental restoration, recreation, land use, environmental justice, stakeholder involvement, and

far reaching community and statewide interests. Tens of Millions of dollars in grant funding have been awarded to projects identified in IRWM Plans and prioritized for funding through Regional Water Management Groups. Grants are awarded through the California Department of Water Resources (DWR).

The Madera Regional Water Management Group completed the process of updating the original Plan in order to comply with all applicable requirements and to reflect current conditions. This will allow agencies within the region to become eligible for upcoming grant funding. The heart of the Plan is its goals and objectives. Chapter 5 of the document outlines the regional goals and measurable objectives, which will become the point of focus of future planning efforts. Achieving groundwater sustainability by 2024 is a critical goal. (See Page 5-3 for a summary of all goals and objectives). The Plan also identifies management strategies and a list of potential projects which will help achieve the goals and objectives. Like other water management initiatives the City has participated in, the IRWMP focuses on information and identification of tools and strategies, and does not, in and of itself, result in new requirements.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN:

The recommended action supports the Well Planned Community Vision Statement. "Sound planning helps Madera celebrate its past, balance its present with available resources and infrastructure and anticipate its future with coordinated planning and interagency cooperation guided by a shared vision." Strategy 434 is directly related: Ensure continued water supplies to meet the demands of all Maderans through innovative reclamation, conservation and education on water-use.

FISCAL IMPACTS

If the City pursues grant funding through the RWMG and the IRWMP, it may be responsible for any applicable matching funds or other project-related expenses that are of specific benefit to the City. No other fiscal impacts have been identified.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA ADOPTING THE MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

WHEREAS, an Integrated Regional Water Management Plan is a voluntary and comprehensive non-regulatory planning document prepared on a region-wide scale that identifies broadly-supported priority water resources projects and programs with multiple benefits; and

WHEREAS, the City of Madera adopted the 2008 Madera County Integrated Regional Water Management Plan on April 2, 2014; and

WHEREAS, the Madera Regional Water Management Group, of which the City of Madera is a member, completed an update of the Integrated Regional Water Management Plan in December of 2014 to conform with current requirements for such plans; and

WHEREAS, the City Council conducted a public hearing on January 21, 2014 to review and take public input regarding the Updated Madera County Integrated Regional Water Management Plan and the City's potential adoption of the Plan; and

WHEREAS, the City of Madera desires to adopt the December 2014 Madera County Integrated Regional Water Management Plan and to participate in its implementation to further collaborative, region wide planning efforts regarding water resources.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.

2. The December 2014 Madera Integrated Regional Water Management Plan, a copy of which is on the file with the office of the City Clerk, is hereby adopted.

3. The City's designated representative to the Madera Regional Water Management Group is hereby authorized and directed to vote in support of the Regional Water Management Group's adoption of the Plan.

4. This resolution is effective immediately upon adoption.

* *

MADERA

Integrated Regional Water Management

PLAN

December 2014

Madera Integrated Regional Water Management Plan

December 2014

Prepared by:

Provost & Pritchard Consulting Group

Funded Partially by:

A Grant from the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 (Proposition 84)

Madera Regional Water Management Group
Memorandum of Understanding Signatories

Chowchilla Red Top Resource Conservation District
Chowchilla Water District
City of Chowchilla
City of Madera
Coarsegold Resource Conservation District
Fairmead Community and Friends
Gravelly Ford Water District
Madera County
Madera County Special Districts
Madera Irrigation District
Madera Valley Water Company
Madera Water District
North Fork – Mono Rancheria
Root Creek Water District
Self Help Enterprises
SEMCU - Southeast Madera County United - Madera Ranchos
Yosemite/Sequoia Resource Conservation and Development Council

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ABBREVIATIONS

µg/L	Micrograms per liter
µmhos/cm	Micromhos per centimeter
µS/cm	Microsiemens per centimeter
AF	acre-feet
AWMP	Agricultural Water Management Plan
BMP	Best Management Practices
CALFED	CALFED Bay Delta Program
CAS	California Aquifer Susceptibility
CASGEM	California State Groundwater Elevation Monitoring
CCID	Central California Irrigation District
CDEC	California Data Exchange Center
CDPH	California Department of Public Health
CEDEN	California Environmental Data Exchange Network
CEIC	California Environmental Information Clearinghouse
CEQA	California Environmental Quality Act
CERES	California Environmental Resources Evaluation System
CHSC	California Health and Safety Code
CII	commercial, industrial and institutional
CIMIS	California Irrigation Management Information System
CIWQS	California Integrated Water Quality System
CNRA	California National Resources Agency
CSA	County Service Area
CTS	California Tiger Salamander
CV-SALTS	Central Valley Salts Coalition
CVP	Central Valley Project

CWAP	California Water Action Plan
CWC	California Water Code
CWI	California Water Institute
CWP	California Water Plan
CZO	Critical Zone Observatory
DAC	Disadvantaged Community
DDW	State Water Resources Control Board, Division of Drinking Water
DFW	Department of Fish and Wildlife
DMM	Demand Management Measures
DWR	Department of Water Resources
EA	Environmental Assessment
EC	Electrical Conductance
ET	Evapotranspiration
EWMP	Efficient Water Management Practices
GAMA	Groundwater Ambient Monitoring and Assessment
GHG	Greenhouse Gas
GMP	Groundwater Management Plan
I&M	Inventory and Monitoring
Index	Chronological Reconstructed Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices
IRWM	Integrated Regional Water Management
IRWMP	Integrated Regional Water Management Plan
IWRIS	Integrated Water Resource Information System
JPA	Joint Powers Authority
KDSA	Kenneth D. Schmidt and Associates
KRCD	Kings River Conservation District
KREW	Kings River Experimental Watershed
KRFMP	Kings River Fisheries Management Program
KRWA	Kings River Water Association
LAFCO	Local Agency Formation Commissions
mAF	million acre feet
MCL	Maximum Contaminant Level
MD	Maintenance District
MHI	Median Household Income
MOU	Memorandum of Understanding
MSL	mean sea level
MSR	Municipal Service Review
mya	Million Years Ago
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NPDES	National Pollution Discharge Elimination System
NRCS	Natural Resources Conservation Service

O&M	Operation and Maintenance
RNHA	Regional Housing Needs Allocation
RWMG	Regional Water Management Group
RWQCB	Regional Water Quality Control Board
SFPUD	Sierra Foothills Public Utility District
SIEN	Sierra Nevada Network
SJER	San Joaquin Experimental Range
SLDMWA	San Luis & Delta Mendota Water Authority
SNAMP	Sierra Nevada Adaptive Management Project
SWAMP	Surface Water Ambient Monitoring Program
SWRCB	State Water Recourse Control Board
SWFM	Stormwater Flood Management
SWWG	Sierra Water Workgroup
TMF	Technical, Managerial and Financial
USBR	United States Bureau of Reclamation
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VA	Vulnerability Assessment
WDL	Water Data Library
WSJV	Western San Joaquin Valley
WWTF	Waste Water Treatment Facility

EXECUTIVE SUMMARY

The Madera Integrated Regional Water Management Plan (IRWMP) is a collaborative effort among the 17 public, private and not-for-profit groups and agencies which are signatory to the Memorandum of Understanding (MOU) which formed the Madera Regional Water Management Group (RWMG), along with other interested groups and agencies who have participated in the process and are not signatory to the agreement, but who share an interest in managing water resources throughout Madera County and its watersheds.

The Region's initial IRWMP, approved in 2008, was developed to improve coordination and collaboration between these agencies and stakeholders, and to serve as a basis for pursuing funding to accomplish the goals set forth in the IRWMP. This update revises, reformats and adds to the original IRWMP content to conform to the updated State requirements set forth in Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006.

This Report is organized in the order set forth in the Department of Water Resources Guidelines for Integrated Regional Water Management Plans. The content of the 16 chapters is summarized below.

Introduction

CHAPTER 1 provides an introduction to the Madera Regional Water Management Group, the body responsible for preparing this report, selecting and prioritizing goals, objectives, resources management strategies and projects, and for coordinating the applications for implementation funding on behalf of the various Member Agencies. This Chapter also describes the purpose of the IRWMP.

Governance Structure

CHAPTER 2 describes the governance structure of the RWMG, along with some history on how it formed, how public outreach is accomplished and how others can participate in the RWMG. It is important to note that the RWMG is a fully-independent entity and is not subordinate to any other government subdivision or district within the Madera IRWMP area.

The governance structure adopted is very simple, with the Members of the RWMG operating as the decision-making body on most matters. The MOU allows for creation of subcommittees "for addressing issues affecting particular areas of the Madera Region or for certain issues within the general jurisdiction of the RWMG" but does not create any standing committees.

Any stakeholder organization with an interest or role in water management in the IRWMP area may become a Member of the RWMG. Stakeholders could include such organizations as water

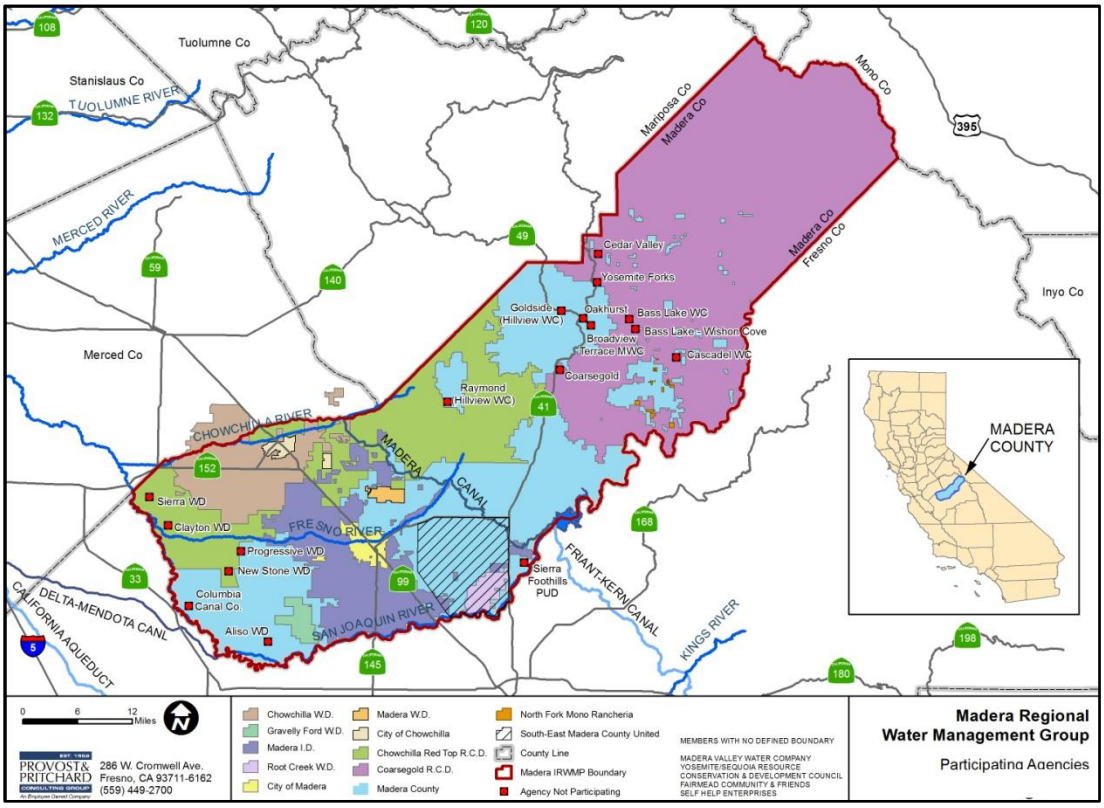
agencies, conservation groups, agriculture representatives, tribal groups, land use entities, local, state, and federal agencies, and private entities.

Organizations can become members by signing a Memorandum of Understanding, adopting the IRWMP, submitting a signed resolution from the organization's governing body, and in some cases paying annual dues. Each of the Member Agencies has an equal voice in the RWMG, while the Disadvantaged Community (DACs) Members, who are exempt from dues, are granted a unified single vote. The DACs select their voting representative themselves. A full list of the Member Agencies is included in the chapter. Non members, also called interested parties, are also welcomed and encouraged to participate in RWMG efforts.

The RWMG makes consistent efforts to include more interest groups and the public in this process. Meeting agendas and minutes are circulated to a broad and inclusive group of interests including members and interested parties. Meeting notices, agendas and minutes will be posted at the RWMG web page beginning in late 2014: http://www.madera-id.org/index.php/rwmg.

Region Description

CHAPTER 3 is a description of the region and discusses a wide variety of topics. It opens with discussions of regional geography, hydrogeology, natural water resources, potential climate change impacts on water supplies, geology, geomorphology and soils, and the Region's experience with land subsidence due to unsustainable and significant groundwater pumping.



The Madera Region is located in the geographic center of the California, in the San Joaquin Valley and extending to the crest of the Sierra Nevada mountains. The Region includes all lands within Madera County. The borders of the Region are generally defined by the crest of the Sierras to the east, the San Joaquin River on the south and west, and the Chowchilla River on the north. The Region includes two cities, numerous special districts, state and federally controlled lands, and unincorporated County lands that are not under the jurisdiction of any City, active water district or irrigation district. The Region was accepted as a RWMG by the California Department of Water Resources because its borders have a strong political and hydrologic basis.

The climate of the Valley portion of the Region is characterized by mild winters and hot, dry summers. Temperatures in the summer often exceed 100 degrees. Fog is often experienced for long periods in the winter, with low temperatures in the mid-30s. Average annual precipitation is about 10 inches, with 80 percent of the rainfall occurring in the winter months.

Climate in the foothill and mountain portion of the Region varies substantially with elevation. While all areas are characterized by warm, dry summers, peak summer temperatures decline with increasing elevation to as low as the mid-80s near the crest of the Sierras. Winter conditions transition with elevation as well. Precipitation typically increases with elevation, as does snow accumulation. Areas above 7,000 feet elevation typically see accumulating snow

throughout the winter, with peak accumulations near April 1. Water contained in that snowpack makes up the spring and summer runoff which provides surface water supplies to the Region and which replenishes regional groundwater aquifers.

Water supplies can vary substantially year to year due to wide variations in precipitation in the Region and its upper watersheds. Water supplies in 2012, 2013 and 2014 have been less than one-half of the average. Groundwater serves an important reserve supply to supplement surface water deliveries. Over the past 30 years, groundwater levels in the Region have experienced significant declines due to overdraft. In general, average annual declines are greater on the eastern side of the valley portion of the Region, at up to five (5) feet or even more in the southeast and northeast. Increased agricultural demands, particularly due to the conversion of native grasslands to permanent crops, has increased the rate of decline in the eastern portion of the Valley. A detailed water budget is not currently available for Madera County, but is critically needed and a high priority for the region.

There is a brief discussion in the chapter on significant biological species. Some of the primary species of concern include California tiger salamander, vernal pool fairy shrimp and San Joaquin Valley kit fox. Other sections of the chapter describe ecological processes and environmental resources, groundwater elevations and flow directions (including groundwater contour maps) and the geologic potential for groundwater recharge within the Region.

The Valley portion of the Region is underlain by the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin covers a vast area and encompasses the alluvial deposits under the valley floor. The San Joaquin Valley Groundwater Basin covers approximately 13,900 square miles and has been divided into 16 subbasins. The Madera Region is also within the San Joaquin River Hydrologic Region and is underlain by three groundwater subbasins as defined by the California Department of Water Resources (DWR) in "*California's Groundwater, Bulletin 118 – Update 2003*". These are the Chowchilla, Madera, and Delta-Mendota subbasins.

Land subsidence in the Valley portion of the Region is caused by pumping groundwater from the deeper confined aquifer that is separated from the shallower unconfined aquifer by the Corcoran Clay. The area of greatest land subsidence in the Region coincides with the area underlain by the Corcoran Clay, in western Madera County, particularly along the Eastside Bypass. Land subsidence in the Region is of historic and ongoing significance. Between 1926 and 1972, subsidence resulted in between 1.0 and 4.0 feet of ground surface elevation drop within the western half of the Valley portion of the Region. The majority of the subsidence has occurred since 1940, when large turbine pumps came into widespread use for extracting water from the deeper confined aquifer. Availability of surface water from the Delta Mendota Canal and the California Aqueduct resulted in decreased groundwater demand, stabilization of groundwater levels and a reduced rate of subsidence. Drought and regulatory reductions in surface water deliveries (especially from the San Joaquin River Restoration) from 2007 through

2014 have brought about unprecedented withdrawals of water from the deeper confined aquifer to meet local water demand, and a return to high subsidence rates.

Domestic water demands in the Valley are at least 24,000 AF/year. Agricultural water demands total slightly over 1,000,000 AF/year. Groundwater quality within the Valley portion of the Region is generally good for both domestic supply and agricultural use. However, variations in groundwater quality mean some groundwater within the Region is unacceptable for domestic and even agricultural uses without treatment. Groundwater contamination can be a result of naturally occurring point source contamination, and/or regional contamination. Some common elements of concern include dissolved salts (as measured by the specific conductance or electrical conductance [EC]), boron, manganese, arsenic, iron, hexavalent chromium, bacteria, uranium, and methane.

The chapter concludes with summary discussions of the social and cultural makeup of the Region, the major water-related objectives and conflicts that have been identified, how the Regional boundary was determined and defined, ways in which the RWMG has been interacting and working with other adjacent and nearby Integrated Regional Water Management (IRWM) groups, and a notation that the Region does not make use of Delta water.

Disadvantaged Communities

CHAPTER 4 discusses the identified Disadvantaged Communities (DACs) in the Region, as measured by those residential, mobile home park and group home communities where Median Household Income falls below 80% of the state average. The chapter discusses the social and cultural values and makeup of the Region, and how some of these have contributed to the less-affluent nature of the Region's communities. The two federally-recognized Native American tribes within the Region are discussed, as are the economic trends and conditions, including jobs, housing and unemployment, which have been observed. The chapter tabulates the 29 identified DAC communities, and further identifies the Small and Severely Disadvantaged Communities (SDACs). DACs and SDACs have disadvantages in terms of their ability to prepare competitive grant applications, participate in regional efforts, and stay apprised of technology and regulations.

Because of their oftentimes very limited resources, DACs may have trouble regularly participating in forums such as the RWMG. The chapter looks at those challenges in detail, and describes the proactive steps the RWMG took to ensure inclusion of the DACs' needs and interests in the planning process of the IRWMP and in the identification of potential regional projects. The DACs have several significant obstacles to surmount in order to obtain sustainable safe drinking water supplies, provide sewer services and plan for flooding/stormwater related issues. Those obstacles include water quality, Technical, Managerial and Financial (TMF) Capacity, economies of scale, aging or inadequate infrastructure, and geographical location. The chapter deals with each of these issues in turn.

Finally, the chapter discusses methodologies and strategies the Region will implement to overcome barriers and promote increased DAC involvement in the RWMG.

Goals and Objectives

CHAPTER 5, the heart of this Plan, sets forth the RWMG's adopted regional goals and measurable objectives, which will become the point of focus of future planning efforts. Separate goals and objectives are presented for the Valley area and the Foothill/Mountain area of the Region, given the widely-varying geography, climate and hydrogeological conditions.

The chapter provides a discussion of how goals and objectives were selected, and how progress toward objectives will be measured over time. The objectives were also ranked using a stakeholder survey. Groundwater recharge, improving water reliability, and stakeholder education were some of the higher ranking objectives.

Resource Management Strategies

CHAPTER 6 deals with Resource Management Strategies, the next level of planning detail beyond setting objectives. Where the Plan's goals are the over-arching themes for the report and the objectives are designed to measure quantifiable progress toward reaching those goals, resource management strategies describe how the Region will work toward reaching the objectives themselves.

In the 2013 California Water Plan Update, the Department of Water Resources describes 36 different resource management strategies necessary to help achieve a wide variety of water-related objectives. The chapter reviews all 36 of these, and finds 32 of them to be applicable to the Region's objectives in some way. The Region added an additional strategy on Drought Planning. Each of the 33 strategies is tabulated and then discussed in more detail.

Project Review Process

CHAPTER 7 describes the process developed and adopted by the RWMG to review, select and prioritize projects submitted both by Member Agencies and others within the Region, for inclusion on the RWMG's list of projects. The projects listed are those identified as working toward accomplishment of resource management strategies and measurable goals, but also for inclusion in specific funding solicitations as those may become available.

The chapter also includes a suggested process and schedule for completing the project solicitation and grant application process. Appendices include a list of implementation projects, the adopted Project Description Form, a Pre-Application Outline, and a sample Pre-Application.

Impacts and Benefits of Plan Implementation

CHAPTER 8, Impacts and Benefits, lays out the overall benefits and some specific impacts of creating an IRWMP, including some benefits and impacts that may be unique to the Madera Region. The chapter is limited to higher-level and less-detailed analysis, with more-detailed analysis reserved to the environmental review that will occur more appropriately at the time of specific project development.

Later sections of the chapter set forth the anticipated impacts and benefits of the 33 identified resource management strategies. Many times lost in the focus on impacts and benefits to the immediate or regional area is the reality that many strategies will have consequences, both positive and negative, outside of the region itself. When considering project benefits and impacts, it is easy for project proponents to focus on the immediate project area. However, the nature of water management projects means that benefits and impacts are often much more widespread. Complete analysis of every project's benefits and costs is an integral part of the CEQA work needed prior to project implementation and is essential to understanding regional water management.

In addition, the chapter discusses specific impacts and benefits that may accrue to surrounding IRWM groups as a result of the Madera Region pursuing its objectives and implementing its adopted resource management strategies. Almost every action benefitting the Madera Region can be construed as having an equivalent, offsetting and sometimes negative impact on the adjacent or collaborating IRWM regions. This effect is outlined in the chapter but more detailed analysis will be done as individual projects are developed. The chapter also looks at impacts and benefits to the various Member Agencies and to the included DACs. In these cases it appears the benefits will substantially outweigh any potential for adverse impacts.

Plan Performance and Monitoring Standards

CHAPTER 9 sets forth plan performance and monitoring standards. Monitoring performance and progress toward measurable objectives is essential to understanding the effectiveness of the IRWMP, and useful in reporting that progress to the public and to regulatory officials. This chapter describes existing monitoring programs in the Madera Region, and discusses planned monitoring programs that will result from implementation of resource management strategies and projects in the region. It also discusses guidelines for preparing project-specific monitoring and reporting plans, and monitoring progress in meeting the goals of the IRWMP.

Data Management

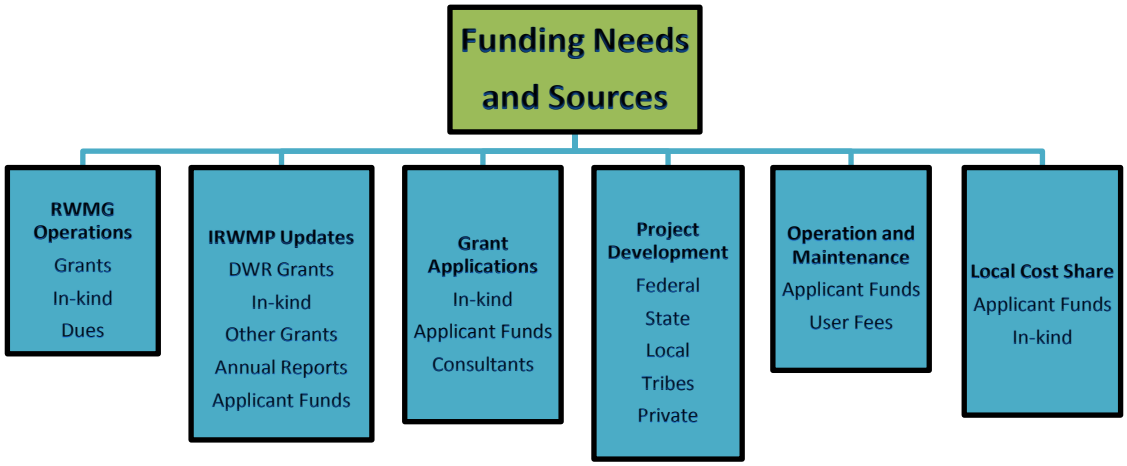
CHAPTER 10 describes the collection, storage, management and dissemination of data to RWMG participants, stakeholders, the public and the State. Beginning with a discussion of data needs within the Region, the chapter discusses data collection techniques, contribution of existing and ongoing data from member agencies, and data management responsibilities of the RWMG and the member agencies.

The RWMG will be maintaining a website, which will be used as a clearinghouse for links to regional data stored on the servers of member agencies, state and federal agencies, and other stakeholders. Data will be shared and distributed to local stakeholders and government organizations that maintain databases by RWMG and the associated entities.

The chapter concludes with a listing and discussion of other state and local databases that contain water management information relevant to regional stakeholders.

Financing

CHAPTER 11 provides information on existing and potential sources of on-going and capital project funding for the Region and the member agencies. The chapter notes that the RWMG requires a stable source of on-going funding to allow for its operational needs, while the preponderance of project funding may come from one-time sources.



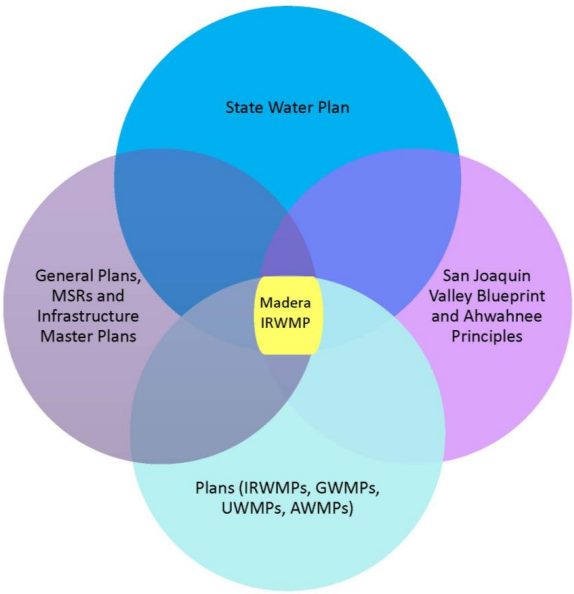
Other options for project funding may include State and federal grants, direct assistance through the legislative bodies, special assessment funding approved by local residents, and even private commercial funding. Opportunities will be sought to pursue Public-Private partnerships where they make sense.

Technical Analysis

CHAPTER 12 enumerates the technical analyses that were relied upon during the preparation of the Plan. The chapter lists and describes the documents from which the Plan draws. It notes that very little analysis was done directly for the Plan, but that the Plan makes use of other analyses done for documents that have already been published.

Relationship to Current Land Use and Water Planning

CHAPTER 13 discusses the relationship between the DWR Integrated Regional Water Management Plan (IRWMP) process and current adopted local land use and water planning efforts for the Madera County area, as well as future plans to further a collaborative, proactive relationship between land use planners and water mangers.



It includes an extensive listing of available and recently-completed land use planning documents within the Region, most but not all of which were prepared by Madera County. Also inventoried are Urban Water Management Plans, Water, Wastewater and Stormwater Master Plans, Groundwater Management Plans, Agricultural Water Management Plans and Water Management Plans that have been prepared within the Region.

The chapter describes how the Madera RWMG will coordinate its water management planning activities with other groups, both those of Member Agencies and those of non-allied stakeholders.

Stakeholder Involvement

CHAPTER 14 describes the practices and policies developed by the RWMG to help assure stakeholder involvement in the IRWM process. The chapter discusses a public outreach

strategy, stakeholder recruitment, outreach performed to update the IRWMP, and future plans for public outreach. Any stakeholder organization with an interest or role in water management in the IRWMP area may join the RWMG as a formal member or interested party.

The RWMG represents a broad range of interests including water supply, water quality, environment/habitat, recreation, agriculture, resource management, hydropower, sanitation, Disadvantaged Communities, non-profit organizations, tribal governments, and local and state agencies. The Interested Parties, who participate but are not formal members, include a similar range of interests. A stakeholder organization who wants to join the Madera RWMG should notify the RWMG and sign the MOU to signify their good faith effort to join.

As part of this update, the RWMG openly discussed which stakeholders were not involved in the IRWMP and should be directly contacted. As a result, the outreach coordinator directly contacted DACs, local water companies, prisons and Native American Tribes to encourage their participation.

The chapter describes the public outreach process used during the preparation of the 2014 IRWMP update, including announcements, public noticing, public meetings at a variety of locations and venues, solicitation of verbal and written comments on the draft chapters and the final draft document. The RWMG has also developed policies to involve stakeholders that choose not be become full members, including Affiliate (non-paying, non-voting) membership, DAC membership (no dues, voting limited to a single combined vote for all participating DACs via a selected representative), and Interested Party status, which confers no voting benefits but places an agency on the RWMG mailing list. All Interested Parties are welcome to attend meetings.

Coordination and Integration

CHAPTER 15 describes coordination and integration of the IRWMP and the work of the RWMG to bring stakeholders together as a unified group and help assure that all projects are coordinated to create a seamless holistic effort without unnecessary duplications. The chapter gives a summary of historical coordination efforts within the Region, and discusses the beneficial and synergistic impacts that coordination can have on both the natural and constructed resources within the Region.

The chapter also discusses coordination efforts with neighboring IRWM regions, including email lists, start up assistance, MOUs, and attendance at other IRWM meetings. Coordination with DACs and Native American tribes is discussed, as well as coordination with state and federal agencies.

Climate Change

Climate change is a long-term alteration of temperature, precipitation and other measures of climate, and is accompanied by changes in shorter-term weather patterns. Climate change can have both natural (e.g. influences from the Earth's natural orbital cycle) and anthropogenic (resulting from the influence of humans) causes. California is expected to experience dramatically warmer temperatures during this century, 2-5^{o}F by 2035-64 and 5-9^{o}F by 2070-99 (California Energy Commission, 2012). Climate-change impacts projected to affect the Madera Region, associated with these magnitudes of warming, include: i) more critically-dry periods, including multi-year droughts, ii) increasing demand from a growing population as temperatures rise, iii) earlier snowmelt and runoff, iv) and increased competition for water among urban and agricultural water users and environmental needs.

CHAPTER 16 brings together and summarizes work done by numerous researchers, particularly some at the University of California, Merced, who have focused on the impacts of potential climate change on the rainfall, snowpack and runoff characteristics of the Central Sierras. The chapter discusses potential general impacts from climate change on the Madera Region, concluding that while the magnitudes of specific impacts are uncertain, warmer average temperatures will result in a number of impacts on precipitation, hydrology, agriculture, water demand, and ecosystems. Higher elevations of the Madera Region are especially sensitive to the effects of a warmer climate. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. The Madera Region water delivery system in the lower elevations is designed for a specific historic climate, and warmer temperatures will generally be detrimental since they will increase water demands and reduce snowpack storage in a water-short area.

The climate change chapter also includes a vulnerability assessment that investigated potential impacts to water demand, water supply, water quality, flooding, ecosystems and habitats, and hydropower. Conclusions from the assessment indicate a need for more backup water supplies, more water storage, investigations into climate sensitive crops, and improved flood control measures.

Madera Regional Water Management Group

The Madera Regional Water Management Group encourages participation from all stakeholders in Madera County that have an interest in regional water management. Please contact Jeannie Habben at info@cfwatershed.org or visit their website at http://www.madera-id.org/index.php/rwmg for more information.

Funding for updating this IRWMP was partially provided by the California Department of Water Resources through a Proposition 84 IRWM Planning Grant.

CHAPTER 1- INTRODUCTION

This Madera Integrated Regional Water Management Plan (IRWMP) Update was developed to improve coordination and collaboration on regional water management in Madera County for the watersheds of all the streams which flow through the County. The idea of integrated regional water management first surfaced in the state of California in Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, Water Code Section 79500, et seq., which was passed by California voters in the November 2002 general election. In response to this substantial new challenge and opportunity from the State, Madera County solicited a planning grant to prepare the region's initial Integrated Regional Water Management Plan (IRWMP), which was adopted in 2008. Madera County was the lead agency for the initial IRWMP, but they soon began to contact and engage other agencies and organizations. The County Plan was approved by DWR, and as the idea of integrated planning gained traction in the region, the Madera Regional Water Management Group (RWMG) Formation Committee was formed to develop and implement a governance structure for a RWMG. The RWMG grew and evolved to include a more diverse group of stakeholders who formally organized under a Memorandum of Understanding in 2010.

The RWMG is made up of agencies and other stakeholders who share an interest in managing water resources throughout Madera County and its watersheds and to serve as a lead for pursuing funding to accomplish the goals set forth in the IRWMP. This update revises, reformats and adds to the original IRWMP content to conform to the DWR 2012 Guidelines regarding current State requirements set forth in Proposition 84, the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006 and in the related Stormwater Flood Management (SWFM) Grant Program, funded by Proposition 1E, The Disaster Preparedness and Flood Prevention Bond Act of 2006.

1.1 - Background

The Madera Region is located in Central California, spanning from the westerly edge of the San Joaquin Valley on the west to the crest of the Sierra Nevada Mountains on the east and encompassing all of Madera County. The Valley portion of the Region is primarily agricultural in nature, making extensive use of both surface water runoff and pumped groundwater for irrigation. The Foothill/Mountain area, on the other hand, is primarily open space and is primarily public lands, with the majority of the acreage owned and controlled either by the State of California, the National Forest Service or the National Park Service. Primary surface water supplies in the Region include the San Joaquin River and its tributaries, the Fresno River and its tributaries, the Chowchilla River, and a portion of the Merced River.

These surface supplies do not begin to meet the water demand in the Region, so in addition to managing those surface supplies through a combination of surface storage and canal distribution, the water agencies within the Region manage a large number of groundwater

wells. Much of the land in the Valley area is supplied via conjunctive use, or the combination of groundwater and surface water supplies to maximize the productive use of both. Even so, demands have outstripped the combined available supplies and the Region has been operating at a groundwater deficit for many years. This deficit, or overdraft, was estimated in the recently-completed Madera Regional Groundwater Management Plan to be on the order of 250,000 acre-feet per year. (Provost & Pritchard, 2014.) Overdraft, as used in this document, means that on an average annual basis more water is pumped from the groundwater aquifer than is naturally and artificially replaced. This has resulted in substantial declines in the groundwater table all throughout the Valley area. The groundwater deficit has been exacerbated by San Joaquin River Restoration Settlement, which results in lower surface water deliveries to several agencies in the County, while slightly increasing groundwater inflow from the river channel. This is a new and permanent contributor to the overdraft problems of the Madera and Chowchilla groundwater sub-basins. Due to the low storage capacity of the hard rock aquifers in the foothills and mountains, those areas have a similar shortage of groundwater.

Groundwater demand has increased significantly over the past 10 years as strong prices for tree crops such as almonds, pistachios, mandarins and pomegranates have driven expansion of the acreages planted in these and similar crops. Not only has this planting increased the overall water demand, but it has "hardened" the demand as well. Where the historical annual and row crop acreage could be varied and reduced in drier years to match with reduced water supply availability, tree crops must receive water every year in order for the trees to survive. This change in the nature of the demand has meant that groundwater demands in drier years are distinctly higher than they have been historically. Managing these increased and more firm demands requires improved cooperation and collaboration among all the affected water agencies and stakeholders; water in the underground does not respect political boundaries and subdivisions and decisions made by one agency affect water users all across the basin.

Final approval of the RWMG's organizational structure and operating rules by the Member Agencies came in 2009 and 2010. Since that time, additional Member Agencies have signed on, as have a number of Disadvantaged Communities (DACs). The DACs are not required to pay the Member Agency's annual financial contribution, and are allowed a single bloc vote through a selected representative on RWMG business matters.

During the years when the RWMG was working out its organizational and government details, it sought and was awarded a planning grant for preparation of its initial IRWMP, which was completed and adopted in 2008. This IRWMP update was also partially funded by a grant from the California Department of Water Resources (DWR).

This Region covers all of Madera County. The boundaries of the RWMG service area as well as its neighboring IRWMPs are shown on **Figure 1-1**. The IRWMP planning process included the County of Madera government, the Cities of Madera and Chowchilla (the only two city governments in the Region), irrigation and water districts, sewer districts, storm drainage

districts, maintenance districts, County Service Areas, non-governmental organizations and other stakeholders. This diverse range of perspectives has been valuable in developing a consensus and selecting water management strategies for inclusion in the IRWMP that have a broad array of support.

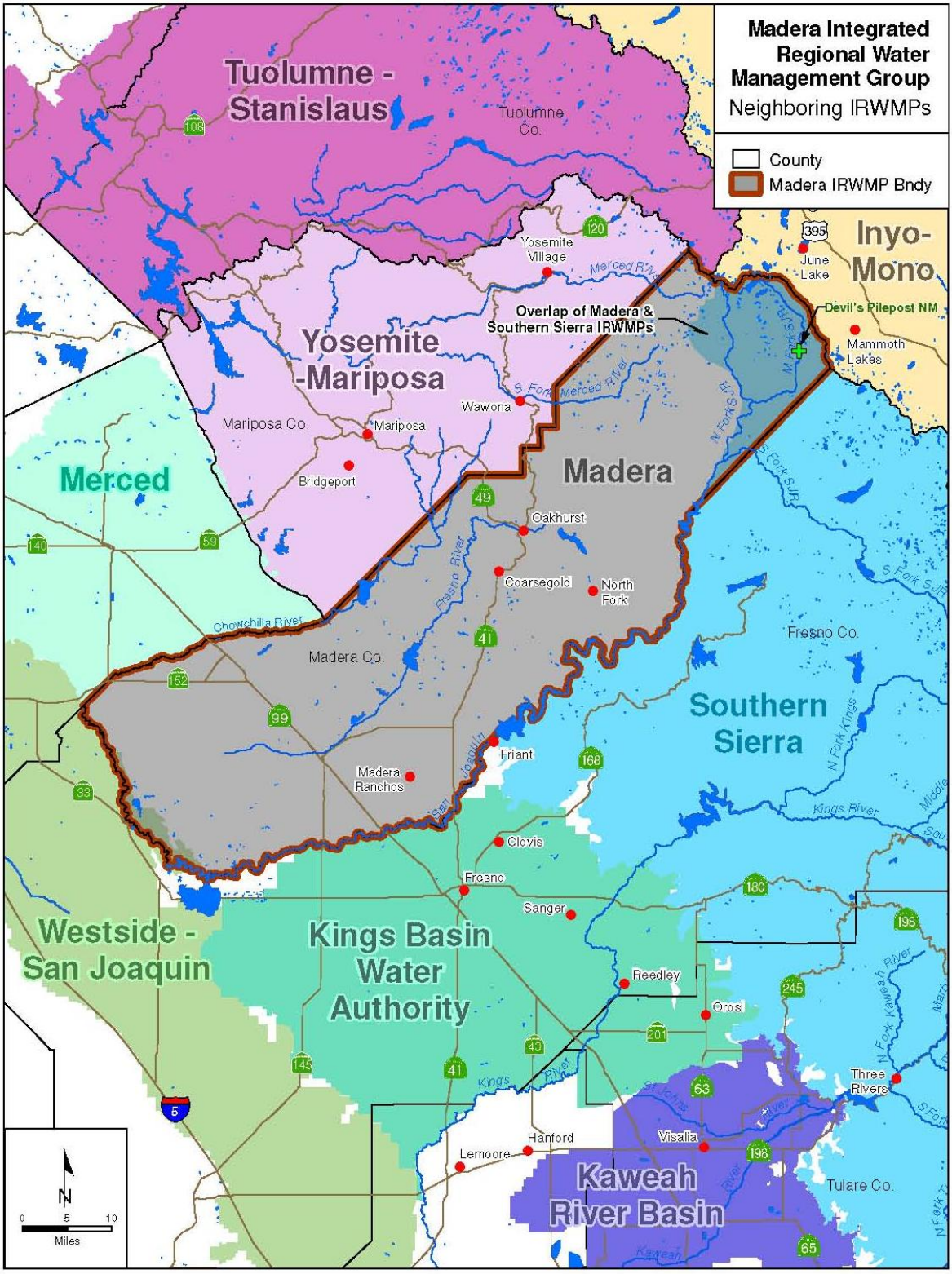


Figure 1-1 – Madera and Neighboring IRWMPs

1.2 - Mission of the RWMG

The RWMG adopted a mission statement as part of its organizational work in 2010, which guides the selection of goals and objectives within the Region as well as informing the collaborative planning and decision-making process. The IRWMP defines issues, guiding principles, regional goals, objectives, strategies, actions, and projects to enhance the beneficial uses of water for the Madera Region and to help ensure the sustainability of the water supply.

Madera RWMG Mission Statement

"The mission of the Regional Water Management Group (RWMG) will facilitate future coordination, collaboration, and communication for comprehensive management of water resources in the Madera Region. Through the mutual understanding among entities in the Madera Region regarding their joint efforts toward Integrated Regional Water management governance, development, planning, funding, and implementation to ensure that clean, adequate and affordable water supplies are available now and in the future to sustain this region and its responsible growth."

The RWMG represents the most broad and long-lasting collaborative water planning effort seen to date in Madera County. Relationships developed through the group have led to increased willingness to share information and efforts. This is partly illustrated by the recent Madera Regional Groundwater Plan, which was commissioned by a subset of RWMG membership and takes a broad, long-lens look at the status and future of groundwater in the Valley area of the Region.

The RWMG has recognized that all of the stakeholders in the region, whether public agencies or non-governmental organizations, have unique perspectives and that all of the individual interests need to be recognized if the IRWMP is to be successful. In order to realize the full benefit of collaboration, participating entities must continue to support the concept that regional integration will enhance their ability to manage their operations and collective resources, will increase their water supply reliability, and will provide a framework to improve water management across the region. More importantly, all participating entities must have confidence that by participating in an Integrated Regional Water Management (IRWM) program they will not lose the ability to control their own future, nor will they lose their autonomy. Regional integration does not seek to diminish the individual agency's decision-making power nor local government's police and discretionary powers. Rather, it seeks to enhance the collective power of the local entities and increase their overall ability to manage their collected resources. Participating entities would also be able to address water management issues more effectively on a much larger scale through an integrated planning framework, rather than on an individual basis.

By working with a range of stakeholders and their agendas, the IRWMP planning process has opened the doors for partnerships, funding opportunities, operational connectivity, and increased awareness of planning efforts, projects and opportunities. Implementation of these collaborative goals has only begun, but will continue as funding becomes available in the future.

In developing regional plans and prioritizing multi-benefit projects, it is important not only to coordinate efforts with other planning agencies within the region, but also to coordinate across regional boundaries. The RWMG is working to build bridges with surrounding IRWM efforts, and has identified Resource Management Strategies, including acquiring surface water supplies from outside the Region, that would require such collaboration.

For this IRWMP update, the RWMG has brought together a significant amount of data and communication concerning complex and controversial issues and has developed wide-ranging goals to address water supply and water quality issues in the region. The RWMG is prepared to address the continuing challenges related to coordinating groups with widely differing missions, agendas, and interests. Implementation of the IRWMP cannot succeed without continuous review and modification to meet new and unanticipated challenges.

The RWMG is pleased to have been part of the collaborative efforts, both within the Region and with neighboring RWMGs, that have already begun, and is proud of its role in creating a forum for communication, collaboration and data-sharing for the Madera Region.

1.3 - Purpose, Need and Common Understanding for the IRWMP

Historically, water management in the Madera Region has been limited to independent operations by the two cities, the County and its numerous special districts, the water agencies and all of the individual landowners who have private wells. In other words, there had been no overall coordinated management. With the creation and establishment of the RWMG as a consolidation of stakeholders, the Region now has a vehicle to improve communication, collaboration, and cooperation; to develop a consensus on the regional problems and solutions; and to resolve or proactively avoid conflicts. A general consensus has been achieved concerning the purpose of the Madera IRWMP, which includes:

- Documentation of how the RWMG worked through a collaborative process to identify issues, goals, and objectives for water resources management in the Region;
- Improve water management, reduce conflicts, protect water quality, and ensure sustainable water resources management through regional cooperation;
- Identify water related vulnerabilities and deficiencies
- Identify and define different water management scenarios for the Region, evaluate alternatives to reduce groundwater overdraft in the Valley area, determine the most economical projects and programs to manage, and develop the surface and groundwater supplies in a sustainable manner;
- Prioritize immediate, near-term, mid-term, and long-term investments
- Define program priorities, institutional approaches and engineering solutions to implement the IRWMP; and
- Provide a roadmap to work together within the Region and surrounding regions to further develop and manage the available water supplies.

The need for and value of the IRWMP update is clear. Continued groundwater overdraft, particularly at the rates identified in the Regional Groundwater Management Plan, is not sustainable. Rapid expansion of the agricultural industry coupled with planned urban growth in the region mandate improved water resources management in the Madera Region.

1.4 - IRWMP Development

The Madera Region's initial IRWMP, adopted in 2008, was the outcome of a collaborative planning process that included compilation of data from a wide range of technical studies, public meetings, workshops to facilitate stakeholder involvements and numerous meetings among various work groups and participants. The local funding for these efforts was supplemented by a Proposition 50 Planning Grant from DWR.

The Region has been working since 2011 to get the IRWMP updated, for several reasons:

- To comply with new IRWMP standards set forth in Proposition 84
- To complete and include information on the newly-adopted governance structure
- To document changes in policies and procedures
- To add information regarding the large number of Disadvantaged Communities, new members and interested parties which have joined the RWMG since the original report was published
- To incorporate revised goals, objectives and resource management strategies which have come into focus since 2008
- To update the list of potential beneficial projects for which to pursue funding.

The RWMG, acting as a Committee of the Whole, took on the IRWMP update with assistance from Provost & Pritchard Consulting Group, who served as lead author. Each chapter was individually reviewed and discussed through an open and transparent process. The IRWMP follows the required standards documented in '*Proposition 84 & Proposition 1E Integrated Regional Water Management Guidelines*' (DWR, 2010). Funding for the IRWMP update was provided by a Proposition 84 IRWMP Planning Grant and in-kind support from the representatives of each of the Member Agencies.

1.5 - Planning Horizon

The IRWMP planning horizon extends 20 years or more into the future - through 2034 and in some cases beyond. This is consistent with the standard 20-year planning horizon for IRWMPs. Long-term projections for groundwater overdraft and climate change go beyond that horizon.

1.6 - Organization of the Report

This report is organized according to the sixteen IRWM Plan Standards listed by the Department of Water Resources in its 2012 Guidelines. A few standards have been combined, but most are addressed in their own chapter. The IRWMP also includes an additional chapter dedicated to Disadvantaged Communities due to their socio-demographic importance to the region's predominantly agricultural way of life and unique economic needs. A brief summary of this report's organization and descriptions of each chapter follows in **Table 1.1**.

Table 1.1: Organization of the Report and Summary of Chapters

Chapter	Subject	Description
ES	Executive Summary	A brief summation of the entirety of this IRWMP Report.
1	Introduction	Provides background information on the Madera Region, explains the RWMG's mission for the Madera IRWMP, the purpose and need for the Plan, and the organizational structure of the RWMG.
2	Governance	Describes the history of the IRWM process in the County, the formation of the RWMG, the existing governance structure and decision making protocols, and the role of governance in implementing the IRWMP.
3	Region Description	Describes members and interested parties, local hydrology, geology, and physiography of the Region, the basis for the IRWMP boundary, and the local water infrastructure.
4	Disadvantaged Communities	Describes the geography, demographics, economic conditions, and water resources problems in DACs in the Region.
5	Goals and Objectives	Documents regional goals and objectives that were established to resolve identified issues. Includes results of a public survey to rank each objective in terms of greater and lesser importance as perceived by the Member Agencies.
6	Resource Management Strategies	Presents over 30 Resource Management Strategies (RMS) that the RWMG considers relevant in the Region, and describes their applicability and potential use.
7	Project Review Process	Describes the processes the RWMG will use to solicit and review projects for possible funding and for inclusion in specific grant applications.
8	Impacts and Benefits of Plan Implementation	Discusses the general benefits of regional water management, impacts and benefits of the adopted Resource Management Strategies, the potential impacts and benefits of these strategies to neighboring IRWM planning areas, DACs, and interested parties, and methodologies for evaluating impacts and benefits for specific projects.

Chapter	Subject	Description
9	Plan Performance and Monitoring	Identifies and describes several regional monitoring plans, describes the RWMG's plan to monitor progress in meeting IRWMP goals and implementing projects, presents reporting procedures and responsibilities and guidelines for project-specific monitoring, and discusses the content of periodic reports regarding RWMG projects.
10	Data Management	Describes the RWMG's existing data management operations and future plans for data collection, storage, and dissemination.
11	Financing	Provides a general overview of existing and potential funding sources for RWMG operations, IRWMP updates, regional studies, grant application preparation, project implementation, operation and maintenance.
12	Technical Analysis	Provides a compilation of the previously-published technical analyses relied upon in the IRWMP.
13	Relation to Local Water and Land-use Planning	Describes local water plans prepared by cities, the County, water agencies, and other special districts, and their relationship to the IRWMP, describes local land-use plans prepared by the cities and the County, their policies related to water management, the compatibility of the water management policies with the IRWMP, and possible future collaborations between land-use planners and water managers.
14	Stakeholder Involvement	Discusses public outreach efforts during the IRWMP update, and a plan for future public outreach.
15	Coordination and Integration	Discusses the RWMG's efforts to coordinate projects and activities with local agencies, stakeholders, neighboring IRWM groups, state agencies, and federal agencies.
16	Climate Change	Includes predicted impacts within the Region from climate change, a vulnerability assessment for the Region, proposed adaptation measures, plan for monitoring climate change, and a process for evaluating greenhouse gas emissions in project selection.
17	References	Lists the documents cited in the Madera IRWMP.

CHAPTER 2- GOVERNANCE

2.1 - Introduction

This chapter discusses the governance structure for the Madera Regional Water Management Group (RWMG). The RWMG is the governing body responsible for implementing the Madera Integrated Regional Water Management Plan (IRWMP). The Madera RWMG has developed a strong governance structure that provides equal opportunity for participation, enhances communications, and provides decision making protocols for the RWMG.

Below several terms are used including Members, Stakeholders and Interested Parties. Members are organizations that have signed the RWMG Memorandum of Understanding and are formally involved with the RWMG. Some Members pay annual dues, but disadvantaged community Members are exempt from the dues. Interested Parties refers to individuals and organizations that are not Members, but still have interest and may participate in the RWMG. Stakeholders is a collective term that includes both Members and Interested Parties.

2.2 - Description of Regional Water Management Group

The Madera Integrated Regional Water Management Planning effort was initiated through the ad hoc actions of Madera Irrigation District, Chowchilla Water District, Root Creek Water District, Gravelly Ford Water District and the County of Madera. Current signatory members are listed in Section 2.3 -below.

The early objective of the organizational phase was to establish a group that could make necessary decisions such as identifying and approving IRWMP boundaries, developing and approving a governance structure for the RWMG, identifying funding mechanisms, seeking and acquiring funding, and developing a public participation process. This ad hoc group worked to adopt a governance structure, through a consensus-based process documented in the Memorandum of Understanding (MOU) for Integrated Regional Water Management in the Madera Region. The MOU, originally adopted January 2, 2010, is included in **Appendix A.** Appendix A also includes the RWMG's current Bylaws and Ground Rules.

The Madera IRWMP effort has been carried out to this point with very limited fiscal resources supplied from local and regional sources, supplemented by a strong core of in-kind professional support from government and non-governmental organizations (NGOs), and technical support from state and federal agencies.

<u>Definition of Regional Water Management Group</u>
According to DWR, a regional water management group must include at least three members with two that have statutory authority for water management. The Madera RWMG has seventeen members, eight of whom have statutory authority for water management, and therefore meets the definition of a regional water management group.

IRWMP Boundaries

The RWMG covers a large geographic area (refer to **Figure 3-1**in the Region Description Chapter) including portions of the watersheds of the San Joaquin, Fresno and Chowchilla Rivers, in addition to several smaller stream watersheds. The IRWMP boundary contains lands representing several Native American Tribes, and jurisdictional areas for several Federal land agencies (National Forests, National Parks and National Monuments), State Parks and local agencies (Madera, Chowchilla, and many smaller communities). A list of the members and interested parties of the RWMG is provided below.

2.3 - Members

Stakeholders can become formal members of the RWMG by signing the MOU and adopting the IRWMP. The following organizations have signed the MOU as of September 2014:

Table 2.1: Memorandum of Understanding Signatories

MOU Members	Statutory Authority
Chowchilla Red Top Resource Conservation District	
Chowchilla Water District	X
City of Chowchilla	X
City of Madera	X
Coarsegold Resource Conservation District	
Fairmead Community and Friends	X
Gravelly Ford Water District	X
Madera County	X
Madera County Special Districts[1]	X
Madera Irrigation District	
Madera Valley Water Company	X
Madera Water District	
North Fork – Mono Rancheria	X
Root Creek Water District	
SEMCU - Southeast Madera County United - Madera Ranchos	
Self Help Enterprises	
Yosemite/Sequoia Resource Conservation and Development Council	

Note 1- Madera County special districts include: CSA 01: Indian Lakes, CSA 03: Parkdale, CSA 14, CSA 16, CSA 21, MD 1: Hidden Lakes, MD 5: Mountain Ranches, MD 6: Lakeshore, MD 7: Marina View, MD 8: North Fork,

MD 10A: Madera Ranchos, MD 19: Parkwood, MD 22A: Oakhurst Sewer, MD 24: Teaford, MD 28, MD 33: Fairmead, MD 36: Eastin Arcola, MD 37: La Vina, MD 40: Sunset Ridge, MD 42: Meadow View Drive, MD 43: Miami Creek Knolls, MD 46: Ahwahnee Country Club, MD 58: Sierra Highlands, MD 60: Dillon Estates, MD 63: Coarsegold South, Zone A, MD 73: Quartz Mountain, MD 85: Valeta, MD 95: Ranchos West.

Breadth of Membership

The current RWMG consists of seventeen organizations that represent a broad range of interests including: water supply, water quality, environment/habitat, recreation, agriculture, ranching, resource management, hydropower, sanitation, disadvantaged communities, non-profit organizations, and local, state and federal agencies. The Interested Parties, who participate but are not formal members, include a similar range of interests.

Statutory Authority for Water Management

Nine members of the RWMG are recognized by the State of California as having statutory authority for water management. These members include: Chowchilla Water District, City of Chowchilla, City of Madera, Gravelly Ford Water District, Madera County, Madera County Special Districts, Madera Irrigation District, Madera Water District, and Root Creek Water District.

2.4 - Governance Structure

The Governance structure is documented in an MOU, Bylaws and Ground Rules (**Appendix A**). The structure adopted is very simple, with the MOU signatories of the RWMG operating as a "committee of the whole" on most matters. The MOU allows creation of subcommittees "for addressing issues affecting particular areas of the Madera Region or for certain issues within the general jurisdiction of the RWMG" but does not create any standing committees.

The MOU creates categories of membership including MOU signatories (full members with all voting rights), Disadvantaged Community (DAC) Group Members (voting allowed by one selected representative on behalf of all DACs), and Affiliate Members (non voting).

The MOU also allows for Special Projects under certain conditions, which is defined as ". . . an activity undertaken by fewer than all the Parties in the RWMG. The activity must be consistent with the scope of the RWMG's efforts."

Memorandum of Understanding

The MOU is a statement of mutual understanding among the signatories on how the RWMG governs. Major topics addressed in the MOU include RWMG membership, geographic boundaries, committees, responsibilities, public outreach, and decision making. These topics are discussed throughout this chapter. Since originally adopted in 2010, the MOU has been signed by seventeen organizations.

Regional Water Management Group

The Regional Water Management Group (RWMG) is the primary governing and decision making body of the group. Any qualifying entity which signs the MOU and pays the necessary dues will become a full Member of the RWMG.

Madera Region The RWMG generally meets every month, depending on their workload. Each member organization must identify their lead representative for the RWMG, who must make their best effort to attend RWMG meetings. Member organizations may also identify additional representatives, but only the lead representative is eligible to vote on behalf of the member organization. Stakeholders are also expected to regularly attend meetings, and can have their membership revoked if they miss more than three consecutive meetings.

Any stakeholder organization with an interest or role in water management in the Region may join the RWMG. Stakeholders could include, but are not limited to, such organizations as water agencies, conservation groups, agriculture representatives, businesses, tribal groups, land use entities, local, state, and federal agencies and private entities. A group which wants to join the Madera RWMG should notify the RWMG and sign the MOU to signify their good faith effort to join, adopt the IRWMP, submit a resolution of its governing board stating an intention to join, in some cases pay dues, and be approved by the existing RWMG members. An organization must have a governing body to become a formal member. Any entity which would like to discontinue their participation may do so at any time. The MOU is non-binding and non-regulatory.

The benefits of signing the MOU and becoming a dues-paying Member of the RWMG include:

1. Right to vote on decisions, including setting regional goals and which projects are included in grant applications
2. Greater influence on consensus based decisions
3. Proof of a good faith effort to improve local water management
4. Larger public benefit to the region by having more entities involved

Subcommittees

As provided for in the MOU, the RWMG may choose to create subcommittees to advance specific tasks addressing issues affecting particular areas of the Madera Region or for certain issues within the general jurisdiction of the RWMG. These tasks would be undertaken outside of regular RWMG meetings. The RWMG will specify a clear purpose for any subcommittees including expected work products and completion dates. All subcommittees will provide a status update on their activities at the regular RWMG meetings. All work products will be submitted in draft to the RWMG for revisions and/or adoption. While the subcommittees may make day-to-day decisions to advance their assigned efforts, the subcommittees are entirely advisory to the RWMG and thus have no final decision-making authority. Subcommittees will

consist of volunteers from the RWMG and Interested Parties.

Stakeholder Interface
Stakeholders can interface with the RWMG and any active subcommittees at regular RWMG meetings. Work products will also be posted on the RWMG website for public review.

2.5 - Public Outreach Process

Public outreach is one of the great strengths of this RWMG. Since its initial session in 2009, the RWMG has maintained a regular monthly meeting schedule, rotating the meeting location among three locations around the Region (Madera, Oakhurst and Chowchilla) in order to equalize the various members' travel times. Members have encouraged public involvement, and all the meetings have been open to the public. All attendees are allowed to participate in discussions.

The RWMG makes consistent efforts to include more interest groups and the public in this process. Additionally, meeting agendas and minutes are circulated (via email and by paper copies to those without email access) to a broad and inclusive group of interests including members and interested parties. Meeting notices, agendas and minutes will also be posted at the RWMG web page, beginning in late 2014: http://www.madera-id.org/index.php/rwmg, and at the MID office two weeks in advance of each meeting.

While stakeholder participation can always be increased, the RWMG is confident they have made contact with the vast majority of the relevant stakeholders in this region The RWMG used lists of interested parties from past water resource projects, as well as recommendations from other agencies, the public and NGOs, to solicit interest. Every attempt was made to facilitate stakeholder participation. These stakeholders have been informed about the process and given an opportunity to participate. No entity has been shut out of the process and at this time the RWMG is unaware of any entities that are purposefully boycotting the process or have serious concerns about the actions and decisions made by the RWMG to date.

The RWMG also maintains a list of other important stakeholders that have been contacted but are not currently involved. The Interested Parties and other stakeholders listed in CHAPTER 14 have been contacted regularly by email and other forms of outreach to inform them of meetings and workshops. The public outreach process is described in more detail in CHAPTER 14– Stakeholder Involvement.

2.6 - Decision Making

The members of the RWMG serve as the decision-making body. The ad hoc subcommittees, which can be created by the overall group can give input and recommendations to the RWMG, but are not allowed decision-making authority. The RWMG strives for consensus among participants in all of its decision-making. In reaching consensus, some RWMG members may

strongly endorse a proposal, others may accept it as 'workable', and others may not support it yet allow it to proceed if it does not compromise their own interests. Any of these positions is still considered to be consensus.

The MOU also includes a non-traditional voting process to assess preliminary support for issues prior to formal voting. From the MOU:

6.2.2. Non-Binding Poll of All Meeting Participants: The RWMG will use polling to assess the degree of preliminary support for an idea before it is submitted as a formal proposal for a vote. The poll results will potentially indicate the need for subsequent work to revise the text of a recommendation and to prepare it for a vote. The RWMG will use the following three levels to indicate a degree of approval & support for a proposal or being considered.

6.2.2.1. Thumbs Down / I do not agree with the proposal. I feel the need to block its adaptation and propose an alternative.

6.2.2.2. Thumbs Sideways / I can accept the proposal although I do not necessarily support it.

6.2.2.3. Thumbs Up / I think this proposal is the best choice of the options available to us.

6.2.2.3.1. The RWMG will strive to have participants in the 'Thumbs Up' or 'Thumbs Sideways' indicators of support on a given proposal. If a participant is at a 'Thumbs Down' level, that person should provide a counter proposal that legitimately attempts to achieve his/her interests and the interests of all the RWMG members. The RWMG will evaluate how best to proceed when a counterproposal is presented.

6.2.2.3.2. 'Thumbs Down' viewpoints will be documented in the meeting minutes. If a participant would also like to document their alternate view, the said participant may submit a write up to the RWMG Administrative Assistant within one week of the meeting in which the discussion took place. The write up will be attached to the meeting minutes. The write up should be expressed in the following manner: a) Outlines the key concern from an organizational or interest-based stance. b) Provides a recommendation for improving the decision/product in question.

Only MOU signatories and the single DAC Member representative can participate in the voting process. Refer to the MOU for more details on the definition of regular Members, Affiliate Members and DAC Members.

Information for decision making can be gathered by subcommittee and then presented to the RWMG. Issues for decision can be brought to the RWMG by any member or by the RWMG staff. They must be included on a meeting agenda in order to be considered as an 'action item'. Non-dues paying members such as "stakeholder" and "affiliate" level members (except the selected DAC representative) are not entitled to vote on decisions, but are free to voice opinions, recommendations and concerns.

2.7 - Opportunity for Participation

The governance structure provides equal opportunities for participation and helps ensure a balanced group of members through the following policies and procedures.

Regional Water Management Group. Regular membership in the RWMG is open to any agency, organization, or company which signs the MOU, adopts the IRWMP, submits a resolution from its governing board with an intention to join, pays the dues (if applicable), and is approved by existing RWMG members. The right to become a member is based primarily on having a local presence in the IRWMP area and an interest in water resources management. The type and size of an organization are not factors. Each regular member of the RWMG is given one vote. Voting power is not weighted based on size, area or financial status.

Organizations not willing or able to pay the per-member dues are invited to join the RWMG as Affiliate Members. An Affiliate Member may fully participate in all RWMG meetings and projects, but may not vote in either the informal polls described above or in the formal policy decisions. There are no dues associated with becoming an Affiliate Member.

Qualified Disadvantaged Communities (DACs) may join the RWMG as DAC members. As with the Affiliate Members, there is no limitation on participation by DAC members. Voting by DAC members is limited to a single vote on behalf of all the DAC members, by a representative selected from among the several DAC members as the official DAC Representative.

General Public. The general public is welcome to attend RWMG meetings or contact the Administrative Assistant directly with contact information via the IRWMP website (http://www.madera-id.org/index.php/rwmg). Private individuals may not become formal members of the RWMG, but may be added to the list of Interested Parties. Interested parties are put on email and/or mail lists to receive information on RWMG activities. Input from any member of the general public is considered regardless of their associations or history.

Official Positions

Official positions within the RWMG include Chairperson, Chair Pro Tem, Lead Agency, Administrative Assistant, and Fiscal Agent/Agency Sponsor/Grantee. The positions have no governance authority and therefore are not shown in the organization chart. Their roles are related to managing RWMG meetings, stakeholder outreach and grant contracts.

Chairperson. The Chairperson is elected by the RWMG in March of each year. The person holding the chair position must have participated as a representative for a RWMG member for one year. The chairperson does not have to be a representative of the Lead Agency. The Chairperson is the presiding officer of the RWMG and as such, has the following duties:

- In coordination with the RWMG Administrative Assistant set meeting agendas.
- Convene the meeting and call the RWMG to order at the time at which the RWMG is to meet, when a quorum is present, or when there is no prospect of there being a quorum.
- Announce the business before the RWMG in the order in which it is to be acted upon.
- Conduct public hearings as provided.
- State and put to vote all motions which are regularly made, or necessarily arise in the course of the meeting, and announce the result of the vote.
- Expedite business in every way compatible with the lawful conducting of business.
- Enforce on all occasions the observance of order and decorum among members and the public.
- Decide all questions of order and procedure, subject, however, to an appeal to the RWMG as a whole. In the event of an appeal, the decision of the majority of the members present at the meeting shall decide questions of order and procedure.
- Gather the information/topics from the group and create the agenda for each meeting.
- If the Administrative Assistant is unable to attend a meeting, the chair will appoint a temporary note taker for that meeting.

Chair Pro Tem. The Chair Pro Tem is elected in the same manner and at the same time as the Chairperson, and has all the rights, powers and responsibilities of the Chairperson, in the absence of the Chairperson.

Lead Agency. The MOU states that the RWMG must mutually agree upon a designated signatory Local Agency to facilitate IRWMP implementation and coordinate RWMG activities in furtherance of the MOU. The Lead Agency serves at the pleasure of the RWMG. Unless otherwise designated as the Grant Administrator responsible for funding or the Project proponent for an individual Project pursuant to the MOU, the Lead Agency is not responsible for any Project, including completion, funding, or environmental review thereof.

Administrative Assistant. The Administrative Assistant provides notice of all meetings as required by law; prepares, keeps and maintain the files, minutes, findings, resolutions, orders, and all other documents and papers relative to those items of business which are or have been

before the RWMG; and attends each meeting and records each item of business. This person may be a designee from one of the MOU signatory entities.

Fiscal Agent/Agency Sponsor/Grantee. The Fiscal Agent/Sponsor is designated as the Project Manager and Grant Administrator for any Planning grants as well as Grant Administrator for any Implementation Grants received. They are charged with completing the reporting, invoicing, and contracting with funding agencies and consultants or employees to manage projects and provide administrative support.

2.8 - Effective Communication

Internal Communication

Two-way communication is available in many forms, including opportunities to speak at meetings or directly contacting RWMG staff. The governance structure also helps to foster communication primarily through the subcommittees and an open door policy to the general public. The subcommittees allow stakeholders to provide detailed input on RWMG projects and policies, which are directly relayed to the decision-making board, the RWMG. The RWMG has an open door policy and any agency, organization, company or individual is free to attend RWMG meetings or directly contact the Chairman.

External Communication

External communication is with other IRWMPs, the media and the general public. The Chairperson or other designated representatives may make public statements on behalf of the Madera RWMG as an entity.

2.9 - Long-Term Implementation of IRWMP

The Madera RWMG is relatively new and has only been formally organized since 2010. The group was established for many reasons including to share information, share ideas, seek grant funds, collaborate on projects, educate the public, and promote better water management. A major motivation for forming the group was to secure IRWM Grants. It is recognized that these funds may be available for only a limited time, or there may be a long hiatus in their availability. In addition, grant applications submitted for these funds may not be successful. The group is committed to staying active even in the absence of state funding. The group survived several years with no funding and above all has shown the importance of patience, perseverance, and the power of maintaining strong relationships among water interests in the region. The group is also active in seeking other funding sources besides DWR grants (see Chapter 11 – Finance).

The planning and implementation horizon for the RWMG is approximately twenty years into the future, into 2034. However, many discussions and actions will be guided by horizons of up to fifty years into the future.

2.10 - Coordination with Neighboring IRWMPs

The RWMG takes several active steps to coordinate with neighboring IRWMPs including participation in IRWMP 'Round Table of Regions' meetings. The Roundtable of Regions is an ad hoc group of representatives from IRWMP regions around the State. The group provides a forum for IRWMP practitioners (people working on IRWM planning and implementation) to discuss their interests, share information, and provide recommendations to the Department of Water Resources on the IRWM grant program. This group holds regular conference calls and occasional face-to-face summits.

The RWMG has also worked successfully with the neighboring IRWMPs to mutually develop reasonable and logical IRWMP boundaries. Chapter 15 – Coordination and Integration includes more information on work with neighboring IRWMPs.

2.11 - Coordination with State and Federal Agencies

Internal rules at many State and Federal agencies prevent them from signing the MOU and paying dues, but they can participate as Interested Parties.

State Agencies

The RWMG has also worked closely with the Department of Water Resources (DWR) since the group began informal meetings in 2007. DWR has played an important role in helping the group form, identify funding opportunities, and collect data. The RWMG considers DWR a strong ally and hopes to continue their partnership with DWR as the RWMG matures.

Federal Agencies

One federal agency, the Sierra National Forest, has signed the Madera RWMG MOU. The Forest Service is an important participant since they cover a large portion of the IRWMP area. They have also been active participants at RWMG meetings. The RWMG would like to increase coordination with the Natural Resources Conservation Service.

2.12 - Collaborative Process to Establish Objectives

The IRWMP goals and objectives were established through a collaborative process including numerous public meetings and workshops, and recommendations from the Regional Water Management Group, Interested Parties, consultants, general public and DWR. The process followed is documented below.

1. Input was solicited on goals, objectives and priorities at several public meetings between 2013 and early 2014.
2. The goals were summarized in a Draft IRWMP chapter prepared by consultants.
3. The RWMG approved the draft list of goals and objectives.

4. The objectives were ranked by the RWMG members and interested party using an on-line survey. The results are presented in Chapter 5 – Goals and Objectives.
5. The Draft IRWMP was released for public input.
6. The final goals and objectives were adopted when the RWMG adopted the Final IRWMP.

2.13 - IRWMP Updates

The RWMG has established a goal of updating the IRWMP as needed to update information and regional goals, or to satisfy new IRWMP standards established by DWR. (This update is driven by the need to conform to the current requirements as set forth in DWR's 2012 Proposition 84/1E Guidelines, versus the structure given in the Proposition 50 Guidelines.) To document on-going progress, the RWMG plans to periodically prepare a report which will include an updated project list, progress on current projects, changes to policies and procedures, and other relevant information that should be included in an IRWMP. These annual reports will be considered attachments to the current IRWMP and the information will be formally incorporated when the IRWMP is updated. This will help to formally archive important information each year and reduce the concentrated effort needed to accomplish the IRWMP updates.

2.14 - Public Noticing and Plan Adoption

The IRWMP was updated and adopted through a formal public noticing process according to California Government Code §6066. This included notices in local newspapers declaring 'Intent to update the IRWMP', and 'Intent to Adopt the Updated IRWMP'. This procedure is documented in more detail in **CHAPTER 14- STAKEHOLDER INVOLVEMENT**, and the public notices are included in **Appendix J – Public Notices**.

The IRWMP was formally adopted by the RWMG on ____ ___, 2014. **Appendix B – Resolution Adoption** includes a copy of the RWMG resolution adopting the IRWMP. Member agencies are required to adopt this IRWMP through separate action by their local governing bodies and provide the RWMG with proof of adoption.

CHAPTER 3- REGION DESCRIPTION

This chapter provides information about the Madera Region in terms of its geography, natural water supply, climate, land uses and other characteristics. Information provided herein is intentionally regional in nature and not specific to individual agencies, districts or other entities.

3.1 - Geographic Location

The Madera Integrated Regional Water Management Plan (IRWMP) includes all the lands within Madera County. Hereafter, this area will be called the Madera Region or Region. The Madera Region is located in the geographic center of California, in the San Joaquin Valley and extending into the Sierra Nevada mountains. The borders of the Region are generally defined by the crest of the Sierras to the east, the San Joaquin River on the south and west, and the Chowchilla River on the north. The Region includes the incorporated areas of the City of Madera and City of Chowchilla, and all County lands, water districts, irrigation districts, or similar municipal services districts that are not under the jurisdiction of any City, State or Federal agency.

Within the RWMG boundaries are the Participating Agencies, as shown on **Figure 3-1**. The County of Madera is a participating agency, and it oversees numerous Maintenance Districts and County Service Areas in both the Valley floor and foothill and mountain portions of the region. The western districts (primarily on the valley floor) are illustrated in **Figure 3-2** and the eastern districts (primarily in foothills and mountains) appear in **Figure 3-3**.

3.2 - Climate

The climate of the Valley portion of the Region is characterized by hot, dry summers and cool, mild winters. Temperatures in the summer often exceed 100 degrees Fahrenheit. Fog can be experienced for long periods in the winter, with low temperatures typically in the mid-30s and occasionally dropping into the 20s. Average annual precipitation is about 10 inches, with 80 percent of the rainfall occurring in the winter months. The frost-free growing season averages around 250 days per year.

Climate in the foothill and mountain portion of the Region varies substantially with elevation. While all areas are characterized by warm, dry summers, peak temperatures decline with increasing elevation to as low as the mid-80s near the crest of the Sierras. Winter conditions transition with elevation as well. Areas above 1,500 feet elevation are generally fog-free. Precipitation typically increases with elevation, as does snow accumulation. Areas above 7,000 feet elevation typically see accumulating snow throughout the winter, to a peak near April 1. Water contained in that snowpack makes up the spring and summer runoff which provides surface water supplies to the Region, and which replenishes a portion of the regional groundwater aquifers.

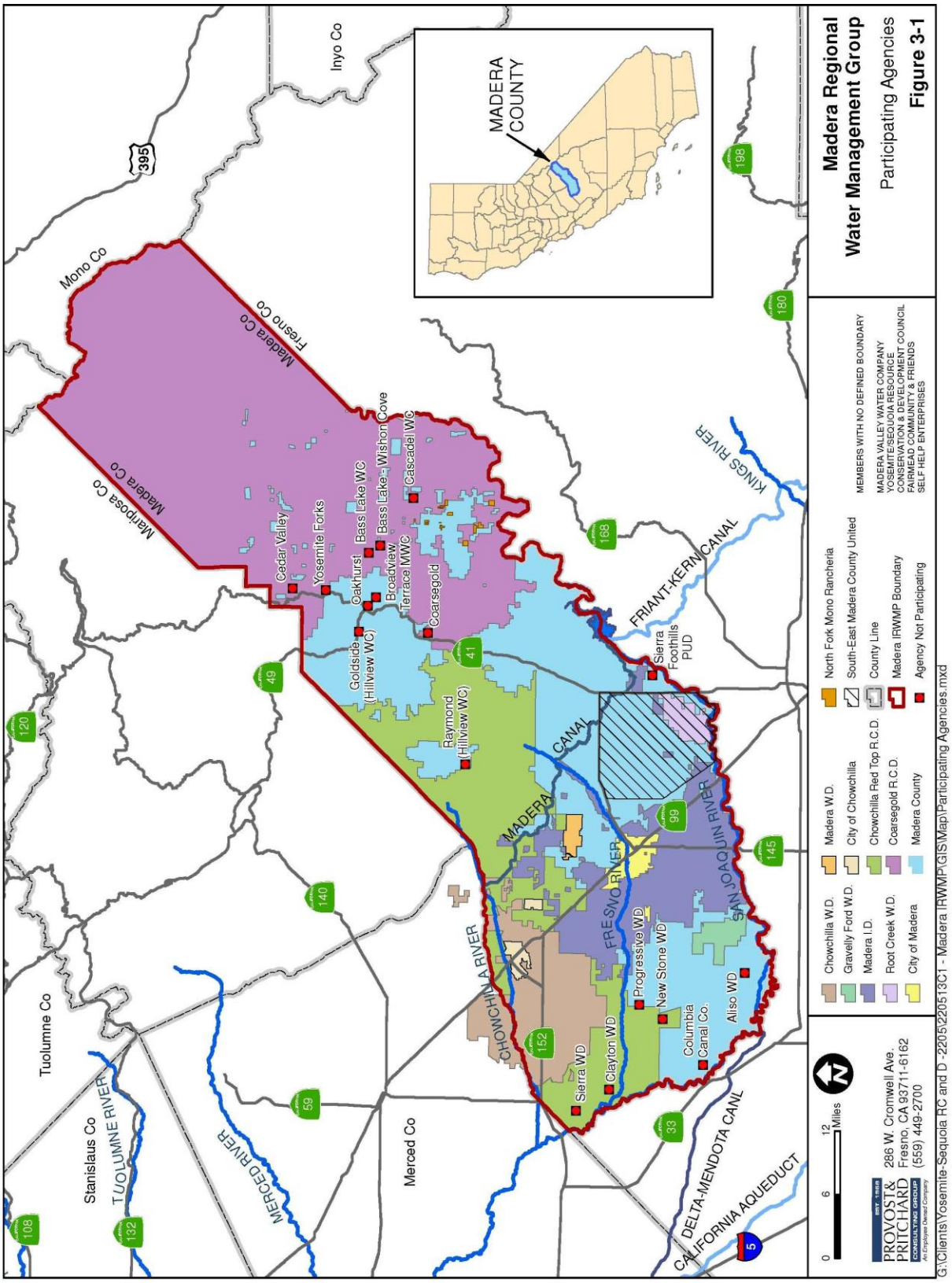


Figure 3-1 – Participating Agencies

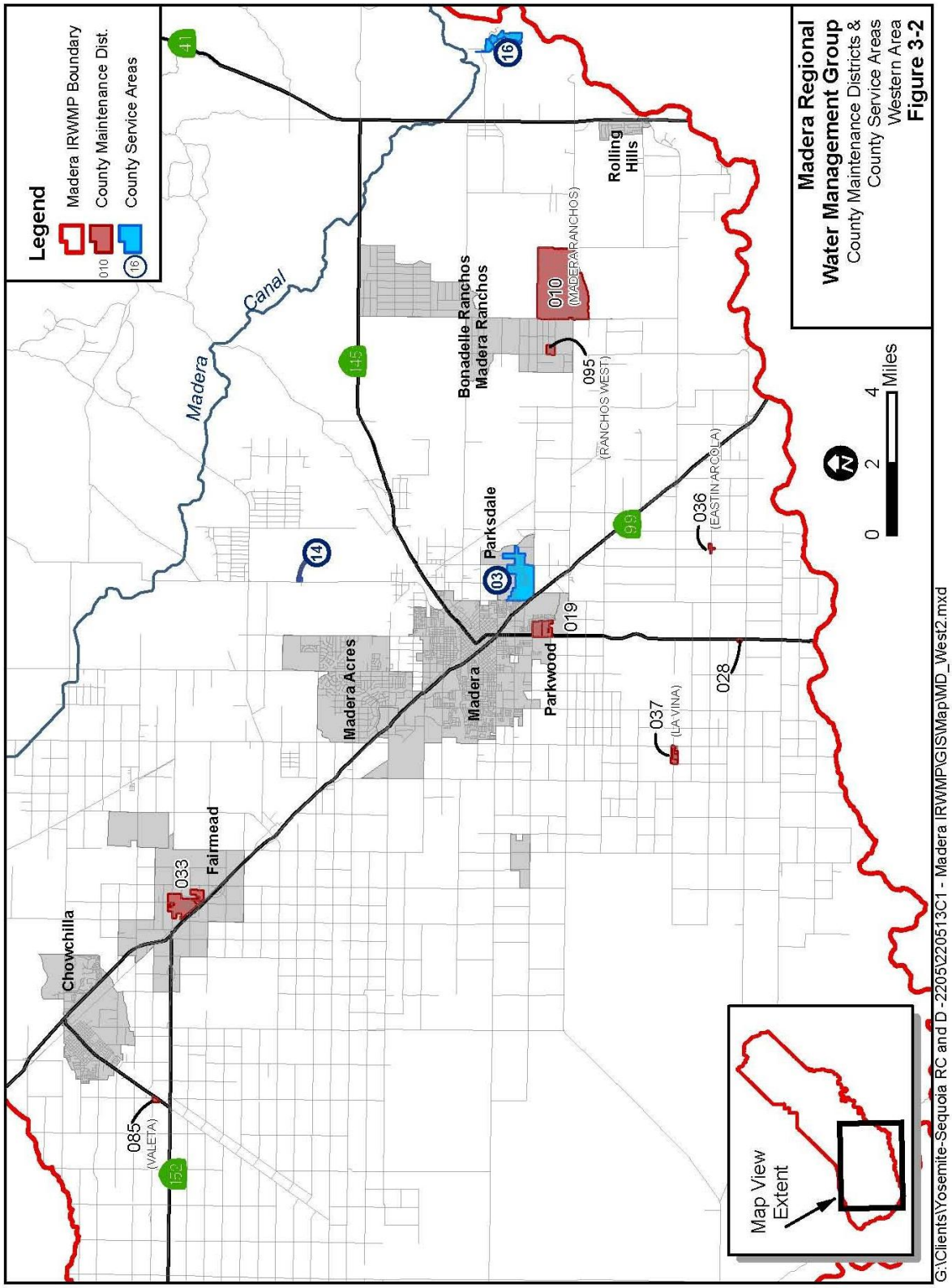


Figure 3-2 – County Maintenance Districts & County Service Areas - Western Area

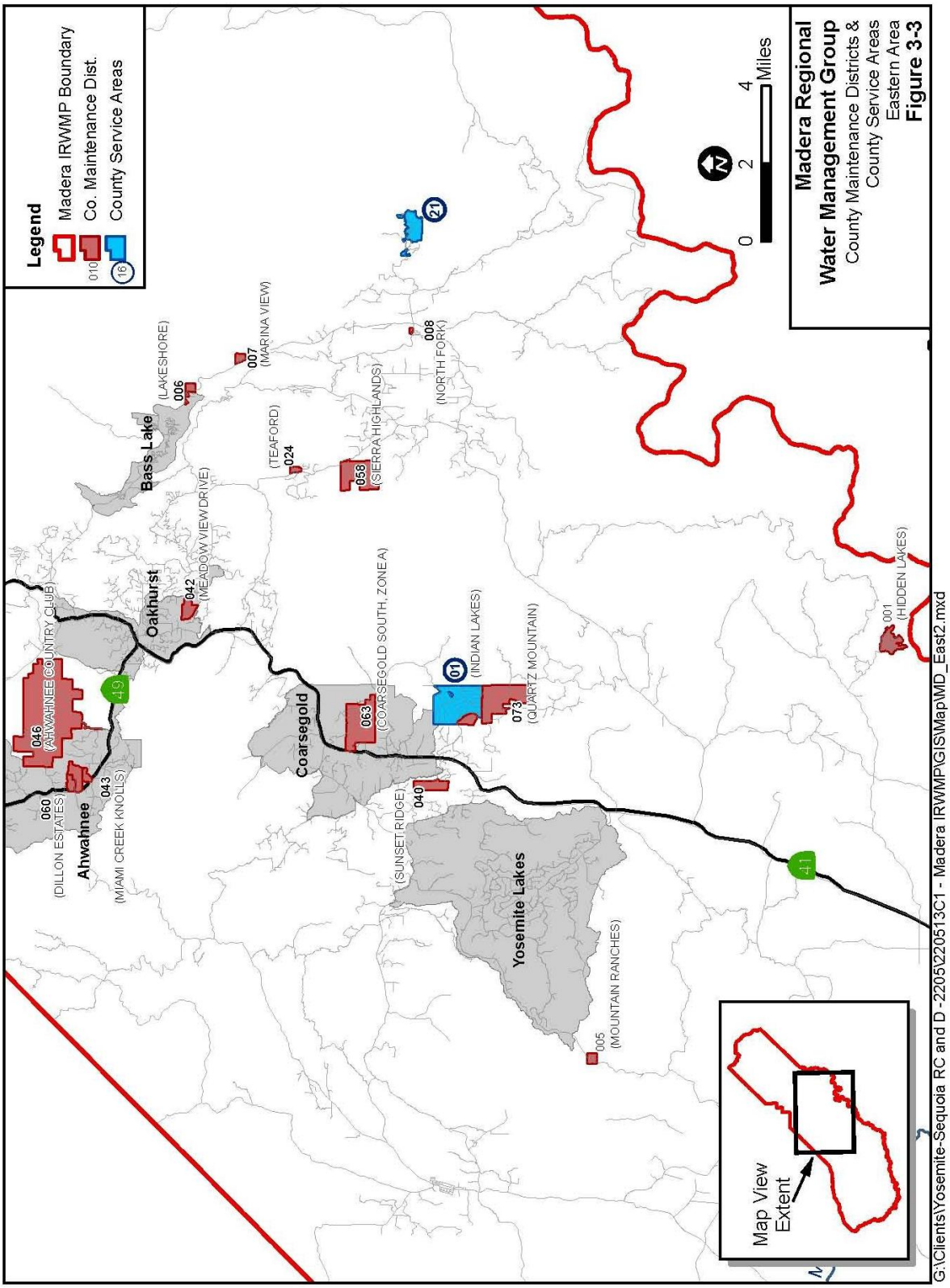


Figure 3-3 – County Maintenance Districts & County Service Areas - Eastern Area

Areas below 7,000 feet elevation do not typically accumulate snowpack through the winter, although they do experience snowfall occasionally to frequently depending upon elevation and the number and type of storms passing through during the winter months. Minimum snow elevations are usually around 3,000 feet, though colder storms can on rare occasions bring snow levels down to near the Valley floor.

Evapotranspiration (ET) rates for the Madera Region and the rest of California are provided by the California Irrigation Management Information System: (http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg).
The valley portion of Madera County has moderately high ET rates compared to the rest of California, resulting in relatively-large water demands for crops and landscaping.

Water supplies can vary substantially year to year due to wide variations in precipitation in the Region and its upper watersheds. The California Department of Water Resources created an index that provides a comparison of normal, single dry and multiple dry years in the San Joaquin Valley. The data are presented as the Chronological Reconstructed Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices (Index)[1], and cover the period from 1901 to 2013. The index is based on a formula that considers the current year's and previous year's runoff and is intended to reflect the soil moisture and surface water supply conditions. DWR has defined certain base years as average, single dry and multiple dry. These are presented in **Table 3.1** with the estimated unimpaired runoff each year.

Table 3.1: Comparison of Unimpaired Runoff in Normal and Dry Years

Description	Base Year	Runoff (mAF)	Percentage of Average Year	Water Supply Index
Average Water Year	1921	5.90	100%	3.23
Single Dry Water Year	1977	1.05	18%	0.84
Multiple Dry Water Years	1929-1931	2.58[1]	44%	1.74[2]
Single Dry Year	2012	2.76	47%	2.18
Single Dry Year	2013	3.05	52%	1.76
Single Dry Year	2014	--	<40%[3]	<1.5[3]

Notes: [1] **Average annual runoff over 3-year period.**
[2] **Average annual index over 3-year period**
[3] **DWR estimates as of 5/1/14 that 2014 will be the driest year of the three recent dry years.**

As indicated by the Water Supply Index in Table 3-1, the water supplies can be substantially lower than average in dry years, and, in the case of 1929-1931, less than half of average for at least three consecutive years. As well, to illustrate the most current condition in the region,

[1] http://cdec.water.ca.gov/cgi-progs/iodir/wsihist

water supplies in 2012, 2013 and 2014 have collectively been about 56% of the long-term average. Absent greatly increased rainfall and snowpack, it is possible that due to a lack of storage in the watershed (i.e. lack of natural recharge, soil moisture and minimal snow pack), that 2015 may be another year with below-average water supply.

3.3 - Hydrologic Features

The major hydrologic features in the Region, including reservoirs, rivers, streams, flood bypass channels, and canals are shown schematically in **Figure 3-4**. Major rivers in the Region include the San Joaquin, Fresno and Chowchilla. **Figure 3-5** illustrates the watersheds and the sub-watersheds that come together to form each of the major rivers within the region.

No substantial flood control or irrigation facilities exist to serve the foothill or mountain areas. The Region is home to several reservoirs which provide both irrigation water and flood protection to the Valley area. Hidden Lake (Hensley Lake) is on the Fresno River. The Fresno River watershed is detailed on **Figure 3-6**.

Eastman Lake, operated by the US Army Corps of Engineers, is in the foothills on the Chowchilla River. The Chowchilla River watershed is detailed on **Figure 3-7**. Bass Lake, operated by Pacific Gas & Electric, is impounded by Crane Valley Dam, and is located in the foothills on Willow Creek, which flows into the San Joaquin River above Millerton Lake. Millerton Lake, behind Friant Dam, operated by the United States Bureau of Reclamation , is on the San Joaquin River in the foothills at the eastern edge of the Valley. Mammoth Pool and Dam 6 Lake are each located along the San Joaquin River above Millerton Lake and are operated by Southern California Edison. The San Joaquin River watershed above Friant Dam is shown on **Figure 3-8**.

The Eastside Bypass and the Chowchilla Bypass are the backbone of the flood control conveyance facilities in the Valley, providing additional flow capacity above and beyond that available in the San Joaquin River channel below Friant Dam. The San Joaquin River watershed below Friant Dam is shown on **Figure 3-9**. Madera Irrigation District and Chowchilla Water District have extensive irrigation canal systems supplied with water primarily from the San Joaquin, Chowchilla and Fresno Rivers.

A portion of the Merced River watershed lies within the Region, although it drains into the Merced IRWM planning area to the north, and the Merced River comes together with the San Joaquin River in Merced County, north of the Region boundary. The Merced River watershed is shown on **Figure 3-10**.

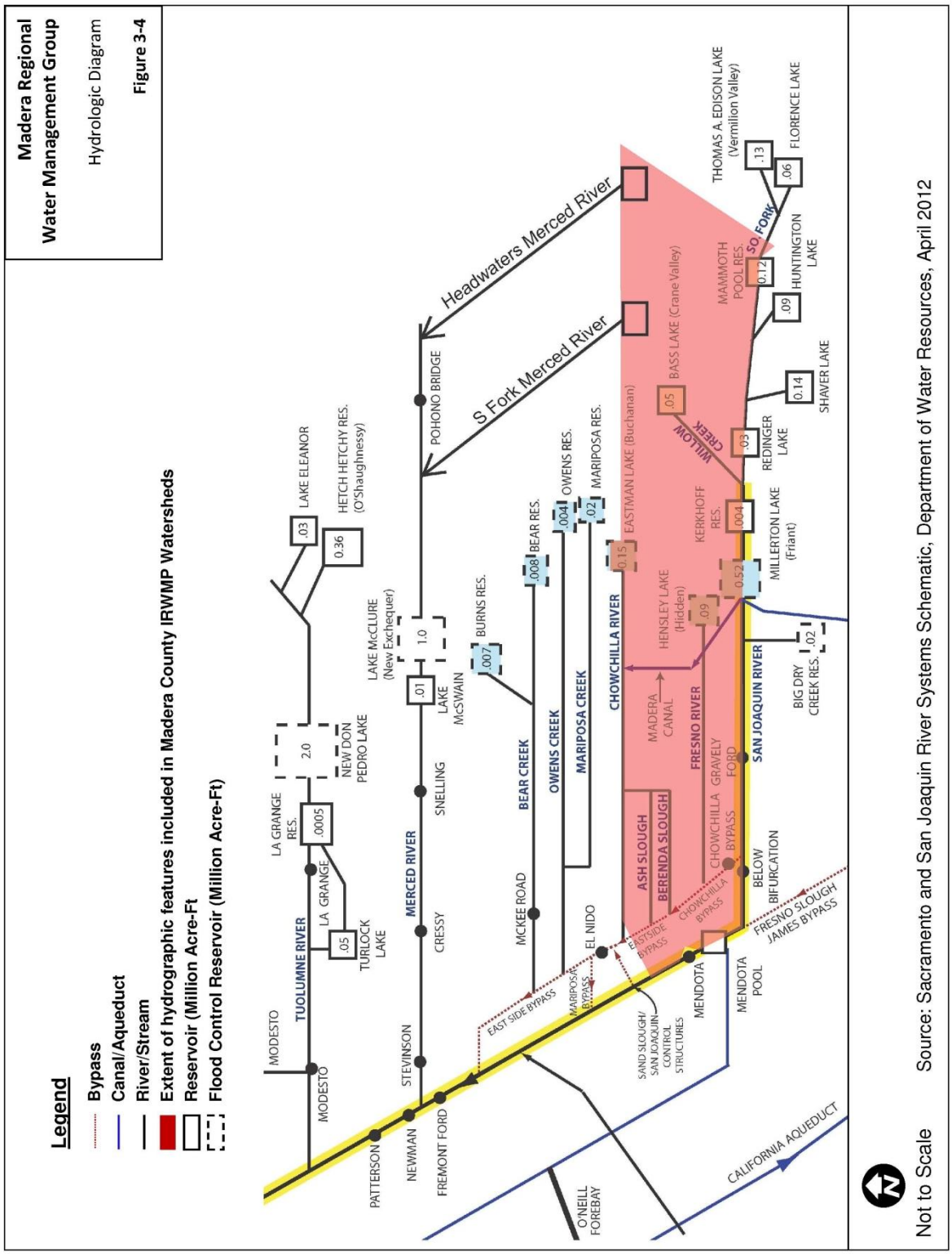


Figure 3-4 – Hydrologic Diagram

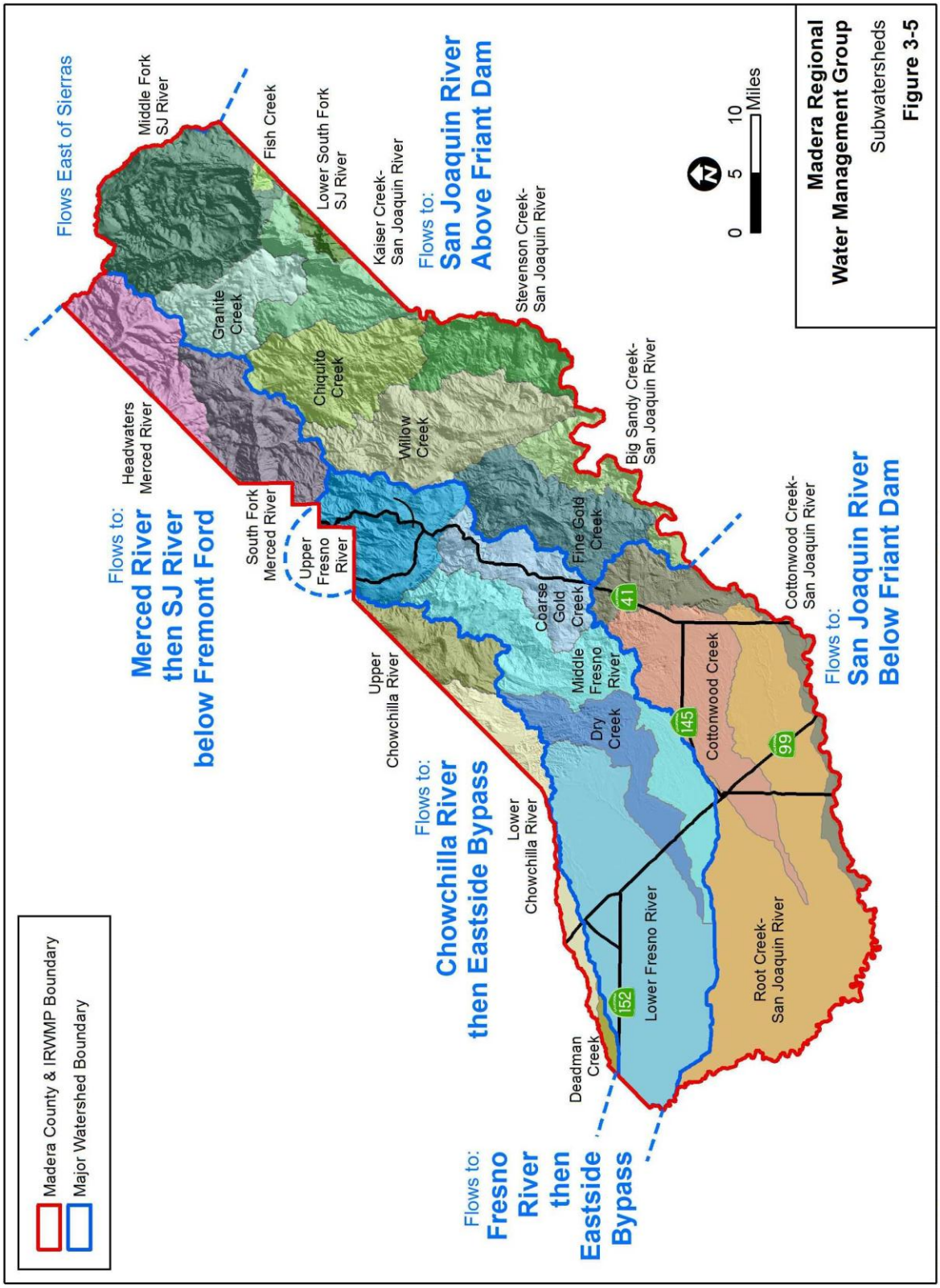


Figure 3-5 – Sub-watersheds

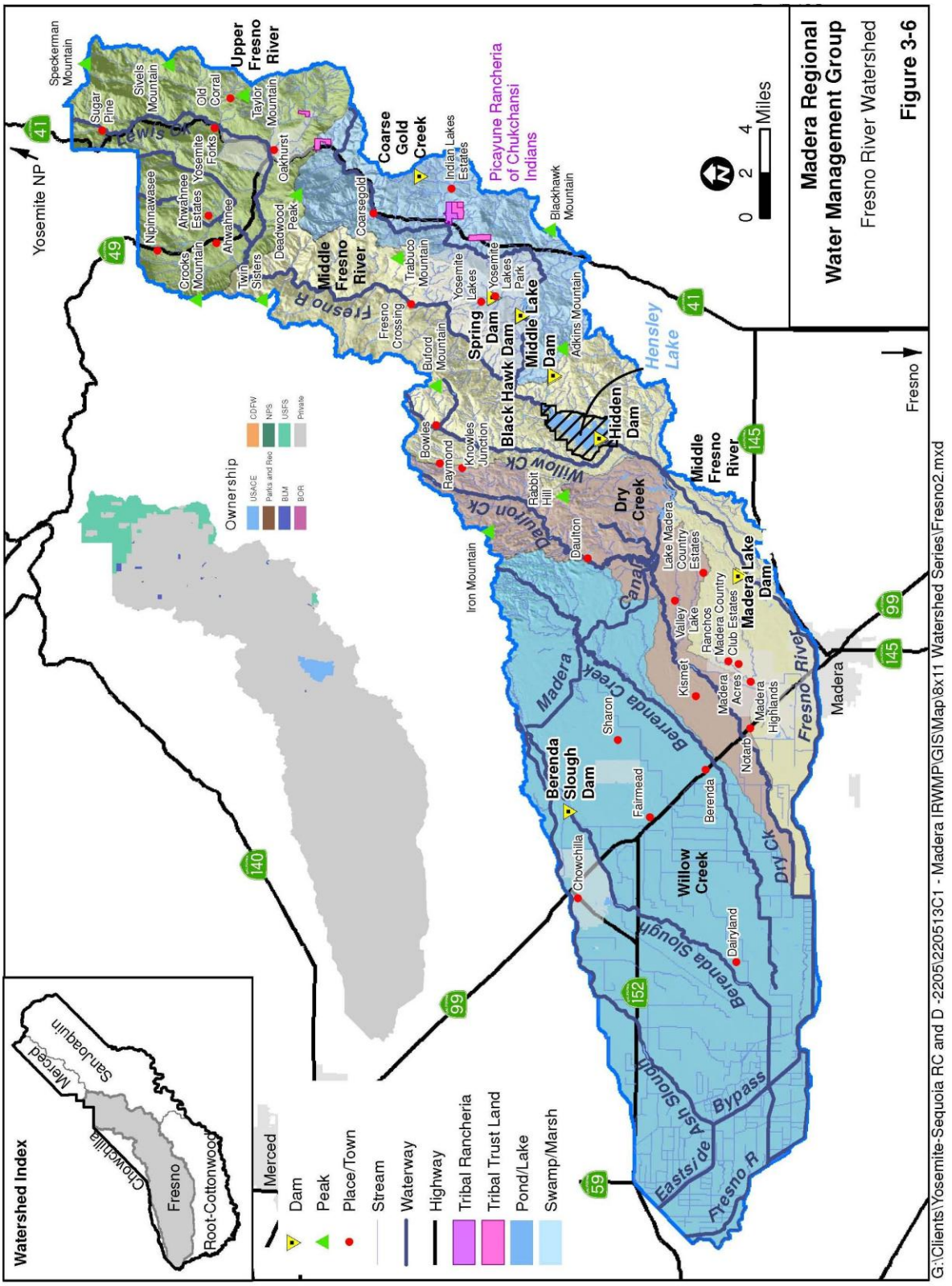


Figure 3-6 – Fresno River Watershed

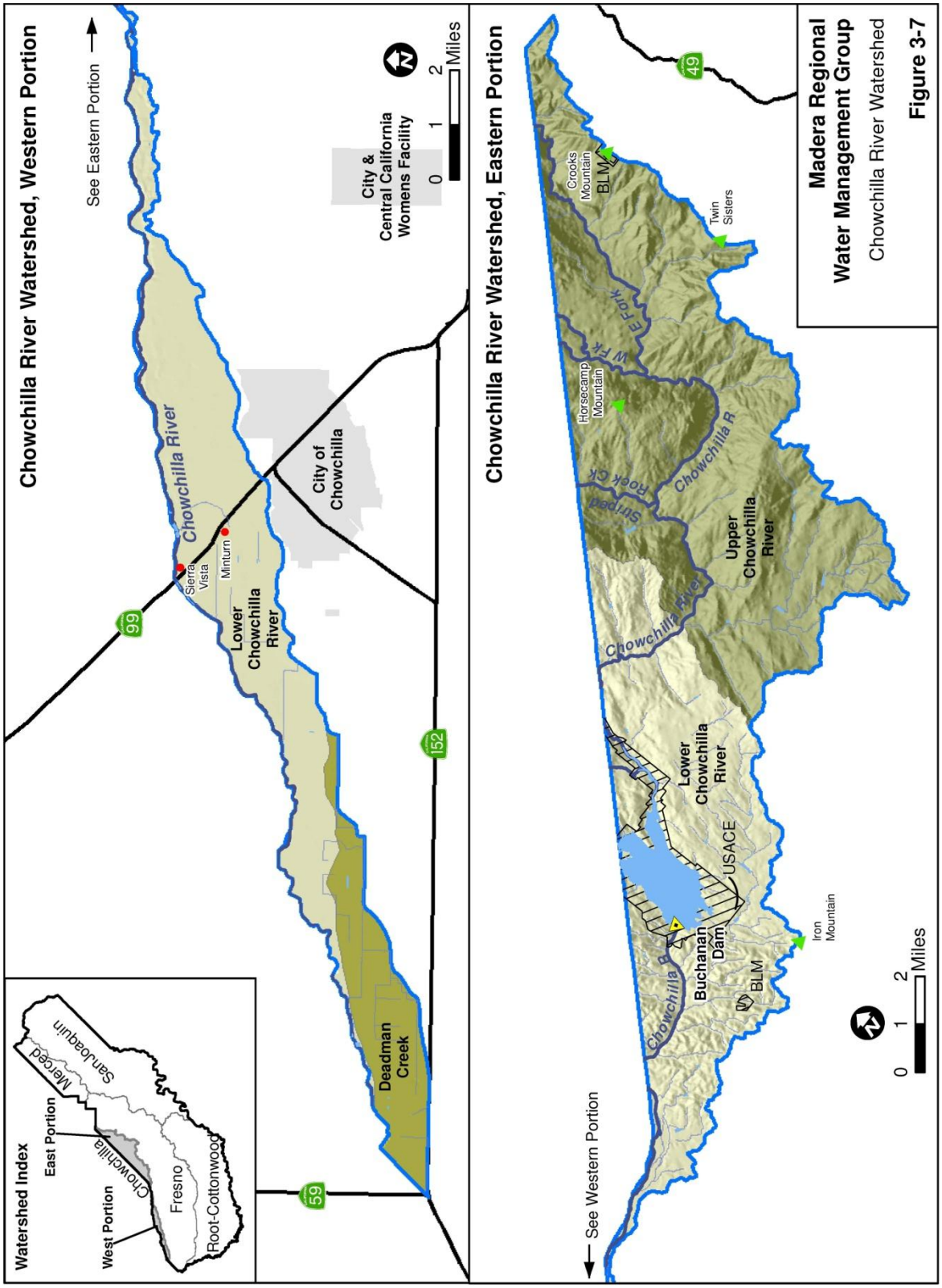


Figure 3-7 – Chowchilla River Watershed

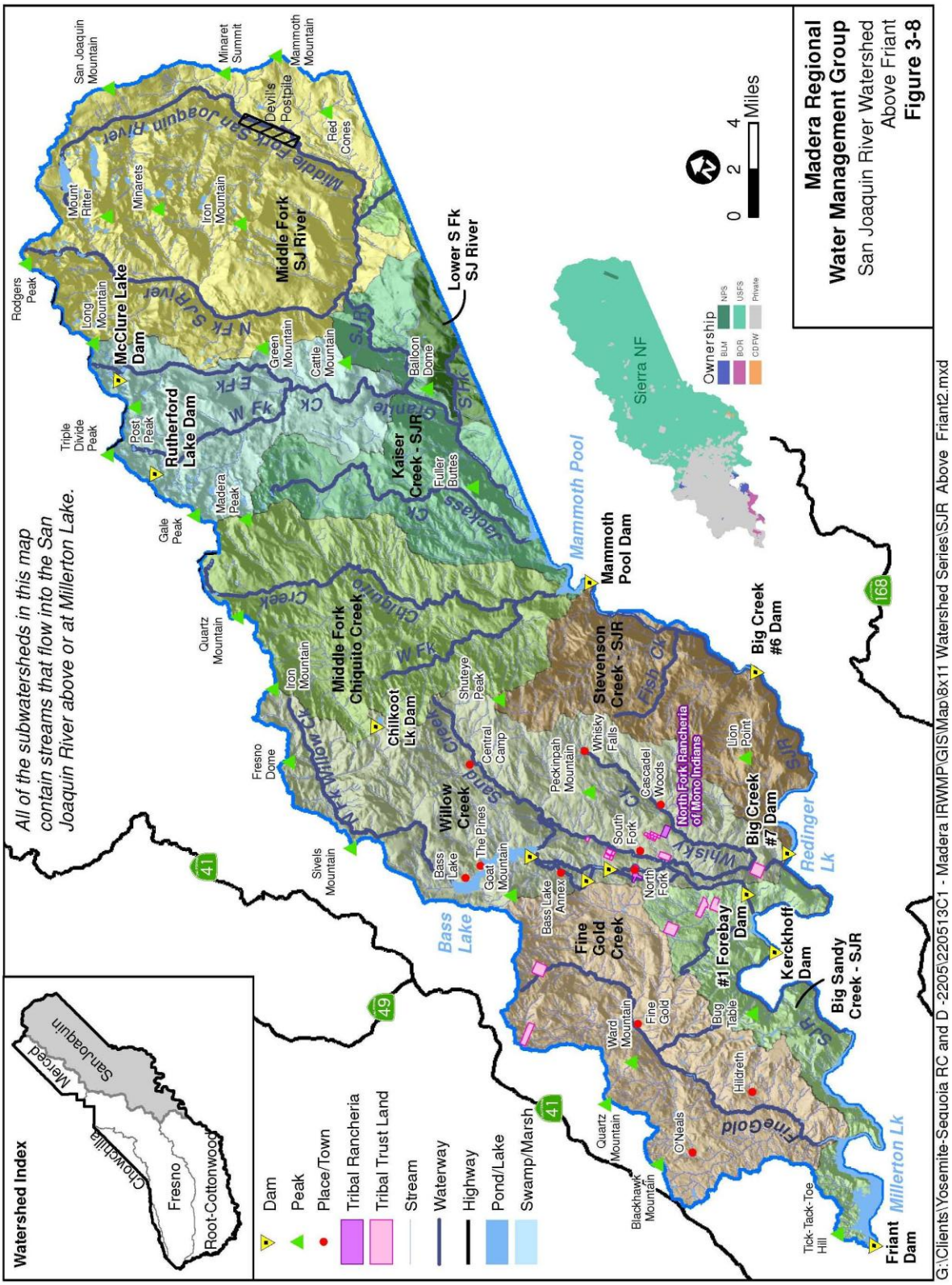


Figure 3-8 – San Joaquin River Watershed Above Friant

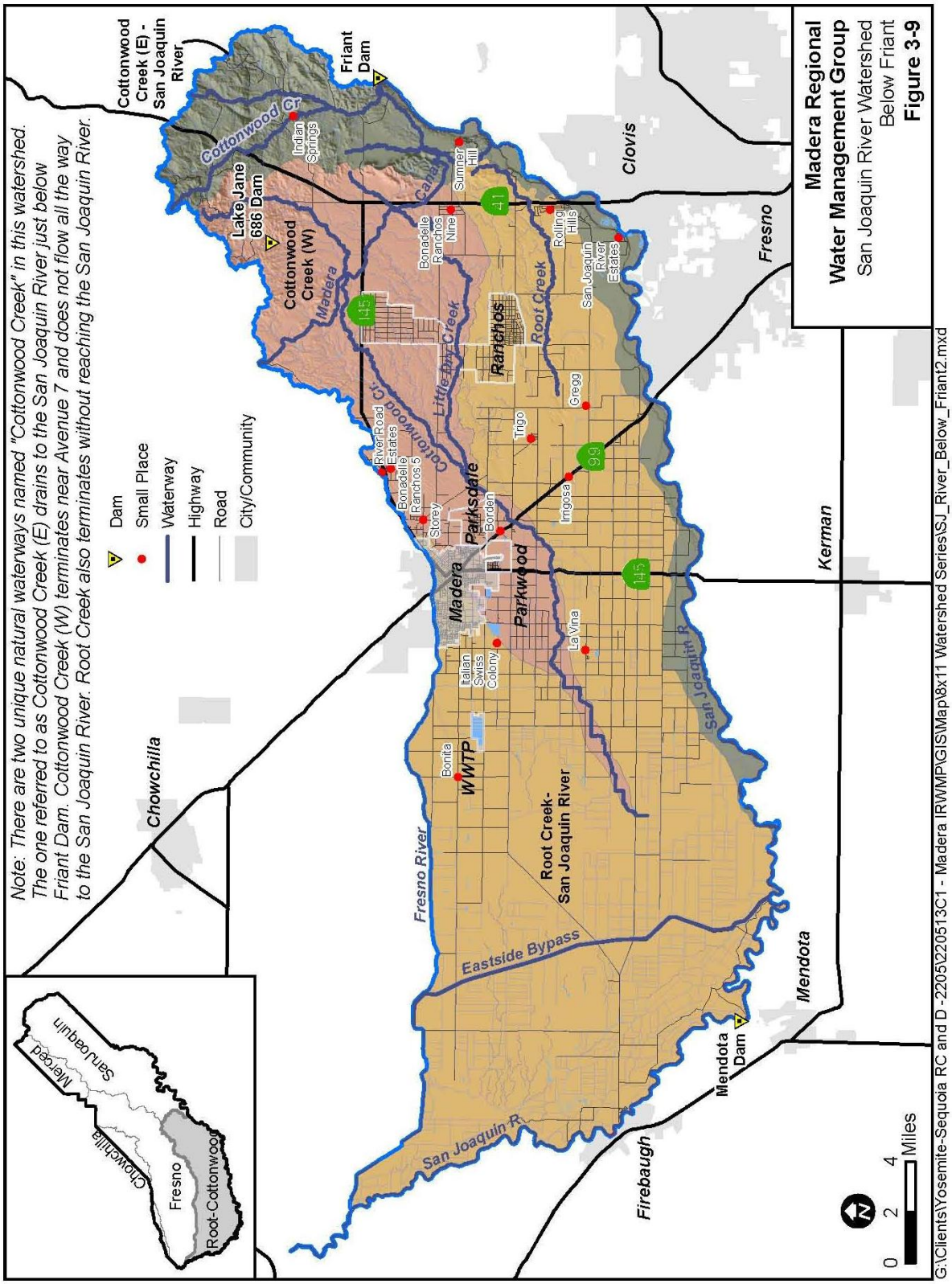


Figure 3-9 – San Joaquin River Watershed Below Friant

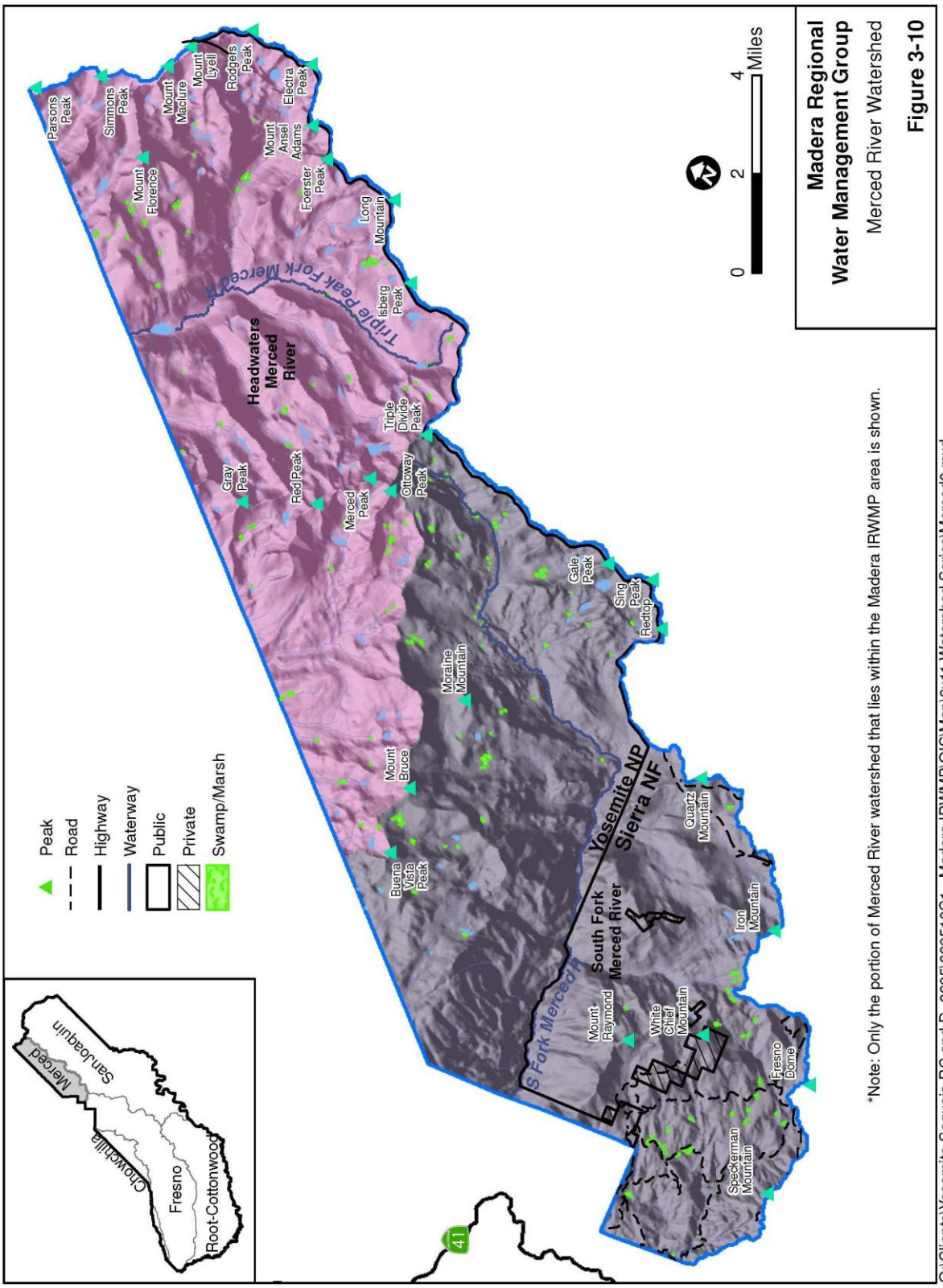


Figure 3-10 – Merced River Watershed

3.4 - Groundwater Supplies

All of the local water agencies use groundwater to meet at least a portion of their water demands. Groundwater serves an important reserve supply to supplement surface water deliveries. **Table 3.2** is a summary of groundwater usage for ***some*** of the primary groundwater users in the valley. The data does not include all of the agencies in the Valley, but only those that had readily-available data compiled for the 2014 Madera Regional Groundwater Management Plan. The data includes groundwater used directly by the agency and groundwater pumped from private wells within the agency boundaries. Table 3.2 does not include all of the groundwater demands in the Madera Region.

Table 3.2: Estimated Average Annual Groundwater Pumped (2004-2013)

Agency	Agency Groundwater Pumping (AF)	Private Groundwater Pumping (AF)	Total Pumping (AF)
Chowchilla Water District	0	118,600	118,600
City of Chowchilla	4,100	2,600	6,700
City of Madera	12,700	600	13,300
County of Madera	3,700	398,800	402,500
Gravelly Ford Water District	0	16,300	16,300
Madera Irrigation District	0	185,000	185,000
Total	20,500	721,900	742,400

Notes:
1. Values are total groundwater pumping. Net pumping is less due to deep percolation of irrigation and percolation of wastewaters.
2. These are historical values. Future pumping will likely increase due to surface water reductions for the San Joaquin River restoration.
3. Values are estimates provided in the Draft Madera Regional Groundwater Management Plan (P&P, 2014)

Average Annual Groundwater Level Decline

Over the past 30 years, groundwater levels in the Region have experienced significant declines due to overdraft. In general, average annual declines are greater on the eastern side of the valley portion of the Region, at up to five (5) feet or even more in the southeast and northeast. Increased agricultural demands, particularly the conversion of native grasslands to permanent crops, has increased the rate of decline in the eastern portion of the Region.

There have been virtually no groundwater-level declines during the past three decades near the San Joaquin River downstream of Mendota Pool. There is insufficient long-term data to make

the same conclusion upstream of Mendota Pool along the San Joaquin River. Rates of groundwater-level decline generally increase with distance from the Chowchilla River, Fresno River and San Joaquin River, confirming the importance of recharge from river seepage. For example, near the Fresno River east of the City of Madera, the average groundwater-level decline has been less than one foot per year.

A major impact on groundwater levels has been increased and intensified agricultural development. Since 2003, about 80,000 acres of new orchards have been developed. A substantial percentage of these new plantings occurred along the western edge of the Valley floor. Some orchards replaced existing annual crops, but many were planted on previously fallow land. While the trees have a lower irrigation demand than annual crops when they are immature, water use from those orchards will continue to increase over the next few years as the trees grow to maturity. That means that even absent additional plantings in coming years, agricultural water demands in those areas of new plantings will increase from the present rate and peak around the year 2017. Insufficient data are available on the maturity of existing tree crops to estimate the current demand versus the anticipated demand in 2017. Another major impact on groundwater levels has been the San Joaquin River Restoration Settlement, which has substantially reduced surface water deliveries to several agencies in Madera County.

Groundwater Resources in the Foothills and Mountains

Groundwater resources in foothill and mountain areas are generally developed in hard rock aquifers. In these situations traditional groundwater contours cannot be accurately developed and groundwater storage is difficult to assess. In 2002, Todd Engineers prepared a report entitled "*Draft Technical Memorandum – Groundwater Conditions in Eastern Madera County*". The report addresses groundwater in the foothill and mountain regions east of the alluvial groundwater basins. Topics addressed include the regional geology, groundwater occurrence, groundwater use, groundwater quality, and groundwater quantity. In addition,, Kenneth D. Schmidt & Associates performed groundwater evaluations for several foothill/mountain communities in 2007 including Oakhurst, North Fork, Coarsegold, and Raymond and Daulton Ranch-Hensley Lake Areas. These are the most comprehensive evaluations in those areas and provide significant information on water supplies and water quality issues.

Specific yield is the quantity of water which a unit volume of aquifer, after being saturated, will yield by gravity. In other words it is a measure of the water available to wells. Specific yields in the Valley were estimated to be 12-13% in the Draft Madera Regional Groundwater Management Plan. In contrast, the Department of Water Resources publication "*Water Facts – Ground Water in Fractured Hard Rock*" states that the specific yield of fractured hard rock is estimated to be less than two percent. This emphasizes the groundwater challenges in the mountain areas with aquifers that have very limited ability to store water.

Groundwater Budget

A detailed water budget for Madera County is not available, but is critically needed and a high priority for the Region. Some components of a water budget were recently calculated for the

2014 Draft Madera Regional Groundwater Management Plan (GMP), and some of those data are summarized in this IRWMP. The work performed for the GMP only covered certain portions of the Valley, and did not cover the foothills or mountains. The water budget was also preliminary in nature and some forms of data were lacking, such as groundwater level data and transmissivity values in certain areas, making a detailed water budget analysis unfeasible. A more detailed water balance study is needed to verify and refine the calculations in the GMP.

Partial water budget numbers are available in **Table 3.1** through **Table 3.4**. However, the reader is cautioned that these are preliminary numbers. A preliminary estimate of 250,000 AF/year for future groundwater overdraft is also available (Provost & Pritchard 2014). More detailed analyses can help to complete this data set and provide a better picture of the regional water budget.

When completed, the 2013 Draft California Water Plan Update may have useful information related to water budgets and regional groundwater supplies.

3.5 - Surface Water Supplies

Madera Irrigation District, Chowchilla Water District and Gravelly Ford Water District each meet significant portions of their water demands with surface water. The County of Madera provides a small amount of surface water to Hidden Lakes, a County Service Area located on the shore on Millerton Lake. In addition, an estimated 10,000 AF/year of riparian water (legacy water right based on having land adjacent to a waterway) is delivered to other private lands in unincorporated areas of Madera County. Surface water is primarily provided through water rights and water contracts on the San Joaquin River, Fresno River and Chowchilla River and a few small streams and creeks.

The Cities of Madera and Chowchilla do not have surface water rights or contracts. However, within the limits of each City there are cropped lands that receive some surface water from local water or irrigation districts. Owners of those parcels pay assessments to the districts, and as a result partially fund the importation of surface water to the area. In 2009, the City of Madera purchased 300 AF of floodwater from Madera Irrigation District (MID) as a pilot study on groundwater recharge. For general awareness, **Table 3.3** summarizes the historical surface water deliveries for most of the major valley water users.

Table 3.3: Historical Surface Water Supplies

Agency	Average Annual Supplies (2004-2013)	Notes
Chowchilla Water District	135,000	Excludes Chowchilla Water District lands in City of Chowchilla
City of Chowchilla	1,400	Chowchilla Water District water delivered to cropped land within the City limits
City of Madera	1,900	MID water delivered to cropped land within the City limits
County of Madera	20,000	Sumner Hills Service Area, riparian agricultural water, some MID water
Gravelly Ford Water District	10,500	
Madera Irrigation District	178,000	Excludes MID lands within the City of Madera boundaries
Total	**346,800**	

Notes:
1. Values include surface water that is delivered directly to growers and recharge basins, and lost as canal seepage.
2. Values are estimates provided in the Draft Madera Regional Groundwater Management Plan (P&P, 2014)

In the past, a significant percentage of water demand has been met with surface water. However, that percentage has lately decreased due to impacts from the San Joaquin River Restoration Settlement. For example, Gravelly Ford Water District now only expects to receive Friant CVP water in one of every three years, greatly increasing reliance on groundwater within the District.

3.6 - Reclaimed and Recycled Water

The term "recycled water" refers to wastewater effluent that has been treated to California's Title 22 standards and can be reused for irrigation and recreational purposes almost without limit. There is currently no recycled water available within the Region since there are no wastewater treatment plants producing that level of effluent. However, wastewater effluent treated to less stringent levels does get reused for certain irrigation purposes. Both the Cities of Chowchilla and Madera deliver their secondary effluent to recharge basins where it percolates into the groundwater aquifer. Also, the County-operated WWTF at Goldside, five miles west of Oakhurst, produces disinfected secondary effluent which is used for irrigation of the local golf course in lieu of potable water. This plant has an operating capacity of approximately 100,000 gallons per day, or 112 AF/year. The Oakhurst wastewater treatment plant (WWTF) has a single purple pipe distribution line running from the WWTF to the

community, but it is not in use since the plant is not yet equipped with the tertiary-level filters necessary to make Title 22-compliant effluent. Other WWTFs within the region discharge effluent to local sprayfields or to percolation ponds. Many residents use septic systems that return wastewater to the groundwater through leach fields.

3.7 - Water Demands for Environmental Needs

Over the past 80 years, surface water on the San Joaquin has been managed by the US Bureau of Reclamation (USBR) primarily for the benefit of landowners, irrigation districts and municipalities in the San Joaquin Valley who have contracts for San Joaquin River water with the USBR. In 2008, that began to change with the San Joaquin River Restoration settlement agreement, which pledges up to 400,000 AF/year of the river's flow to the river channel itself, with the intention of restoring spring- and even fall-run salmon to the lower San Joaquin River.

Implementation of the settlement agreement is progressing slowly, as restoration of the river channel has proven difficult, time-consuming and more expensive than estimated. Much of the lower river channel has not actually been used for water flows in several decades. River levees are not adequate to protect abutting lands and there are numerous other issues and challenges to be resolved before perennial restoration flows become normal.

The impact of the Restoration agreement has been a loss of water to all the various agricultural users dependent upon USBR contracts. Provisions in the settlement agreement limit restoration flows in the lowest water years, and in high water years it is anticipated that restoration flows can be at least partially supplied by water that would otherwise be lost to flood releases. However, the difficulty and expense of managing restoration flows has added burdens to the agricultural users and all are looking for ways to make up the lost water supplies.

The San Joaquin River Restoration project has a goal of a 1:1 return on water lost to Friant CVP contractors, although that goal is not stated in the San Joaquin River Restoration Settlement Agreement. Friant contractors plan to track progress in meeting that goal. The goal can be met in many ways, including funding for recharge basins, expanding the Madera Canal to allow greater deliveries in wet years, and recirculating San Joaquin River water back to the Friant contractors.

The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized

3.8 - Climate Change Impacts on Water Supplies

California is projected to experience dramatically warmer temperatures during this century, with some estimates of 2-5^{o}F by 2035-64 and 5-9^{o}F by 2070-99. Climate-change impacts projected to affect the Region, associated with these magnitudes of warming, include:

- More critically dry periods, including multi-year droughts;
- Increasing demand from a growing population as temperatures rise;
- Earlier snowmelt and runoff; and
- Increased competition for water among urban and agricultural water users and environmental needs.

Climate projections provide a range for future increases in temperature, and even the lowest estimates would have serious impacts. Thus, while it is widely recognized that projections of warming and climate-change impacts are not precise, water managers should prepare to adapt to greater uncertainties in the water-planning process, including regulatory, environmental, economic, social and other conditions affecting water utilities.

The general strategy to plan for climate change in the Region includes:

1) Identify vulnerabilities (to specific water users, aquatic species, and ecosystems that impact water supply and quality);
2) Implement adaptation measures on two levels—no-regret strategies and higher-level planning and implementation strategies; and
3) Monitor for climate-change impacts.

A more-detailed discussion of climate change and potential impacts appears in Chapter 15.

3.9 - Impaired Water Bodies

Both Eastman Lake on the Chowchilla River and Hensley Lake on the Fresno River have been determined by the Regional Water Quality Control Board to be impaired water bodies for nitrate as listed in the 2010 Integrated Report (Clean Water Act Section 303(d) List / 305(b) Report), published by the Regional Water Quality Control Board.

3.10 - Geology

The Valley portion of the Region encompasses the majority of the Madera Groundwater Subbasin, and portions of the Chowchilla and Delta Mendota Groundwater Subbasins. These subbasins are defined by the California Department of Water Resources Bulletin 118-03 and are within both the San Joaquin Valley Groundwater Basin and the San Joaquin Basin Hydrologic Study area.

3.11 - Geology and Hydrogeology

The Valley portion of the Region is underlain by the San Joaquin Valley Groundwater Basin. The San Joaquin Valley Groundwater Basin covers a vast area and encompasses the alluvial deposits under the valley floor from the Sierra Nevada Mountains to the east, the Coast Range mountains to the west, the Sacramento Valley and Delta to the north, and the San Emigdio and Tehachapi mountains to the south. The San Joaquin Valley Groundwater Basin lies within the San Joaquin River and Tulare Lake Hydrologic Regions and covers approximately 13,900 square miles. It has been divided into 16 subbasins. The Madera Region is within the San Joaquin River Hydrologic Region and is underlain by three groundwater subbasins as defined by the California Department of Water Resources (DWR) in "*California's Groundwater, Bulletin 118 – Update 2003*". These are the Chowchilla, Madera, and Delta-Mendota Subbasins. A subbasin is defined as follows:

> *"A groundwater basin is defined as an alluvial aquifer or a stacked series of alluvial aquifers with reasonably well-defined […] features that significantly impede groundwater flow such as rock or sediments with very low permeability or a geologic structure such as a fault. […]*
>
> *"A subbasin is created by dividing a groundwater basin into smaller units using geologic and hydrologic barriers or, more commonly, institutional boundaries […]. These subbasins are created for the purpose of collecting and analyzing data, managing water resources, and managing adjudicated basins."*

DWR was directed by legislation to define critical overdraft in 1978 and report which subbasins were in critical overdraft. The *California Water Plan Update* of 2009 states that the eastern San Joaquin (County), Chowchilla, and Madera Subbasins are in critical overdraft. However, a comprehensive assessment of overdraft in California's subbasins has not been completed since DWR's issuance of Bulletin 118-80 in 1980.

Bulletin 118-80 stated:

> *"A basin is subject to critical conditions of overdraft when the present water management practices would probably result in significant adverse overdraft-related environmental, social, or economic impacts."*

Chowchilla Subbasin

The Chowchilla Subbasin is shown in **Figure 3-11**, and is identified as Basin 5-22.05 by DWR in Bulletin 118. The Subbasin covers an area of 248 square miles and is located in Madera County with a small portion in Merced County. The Subbasin is bounded by the Columbia Canal Company Service Area and San Joaquin River on the west. To the north, the Chowchilla Subbasin is bound by the southern portion of the Merced Subbasin. The southern boundary consists of an irregular pattern and borders the northern portion of the Madera Subbasin. Groundwater recharge is primarily from deep percolation of applied irrigation water.

Madera Subbasin

The Madera Subbasin is shown in **Figure 3-12** and is identified as Basin 5-22.06 by DWR. The Subbasin covers an area of 614 square miles and is located entirely within Madera County. It is bounded on the south by the San Joaquin River, on the west by the eastern line of the Columbia Canal Service Area, on the north by the south line of the Chowchilla Subbasin, and on the east by the crystalline basement bedrock of the Sierra Nevada foothills.

Delta-Mendota Subbasin

The Delta-Mendota Subbasin is shown in **Figure 3-13** and is identified as Basin 5-22.07 by DWR. The Subbasin covers an area of 1,170 square miles. It lies largely in Fresno County along with portions of Madera, Stanislaus and Merced counties. It is bounded on the west by the Coast Range mountains, on the north by the Stanislaus/San Joaquin county line, and on the east generally by the San Joaquin River. The southern boundary is irregular and consists of portions of the western Kings Subbasin and the Westside Subbasin. DWR Bulletin 118 states that groundwater levels within the Delta-Mendota Subbasin have been relatively stable and this Subbasin is not considered to be in overdraft.

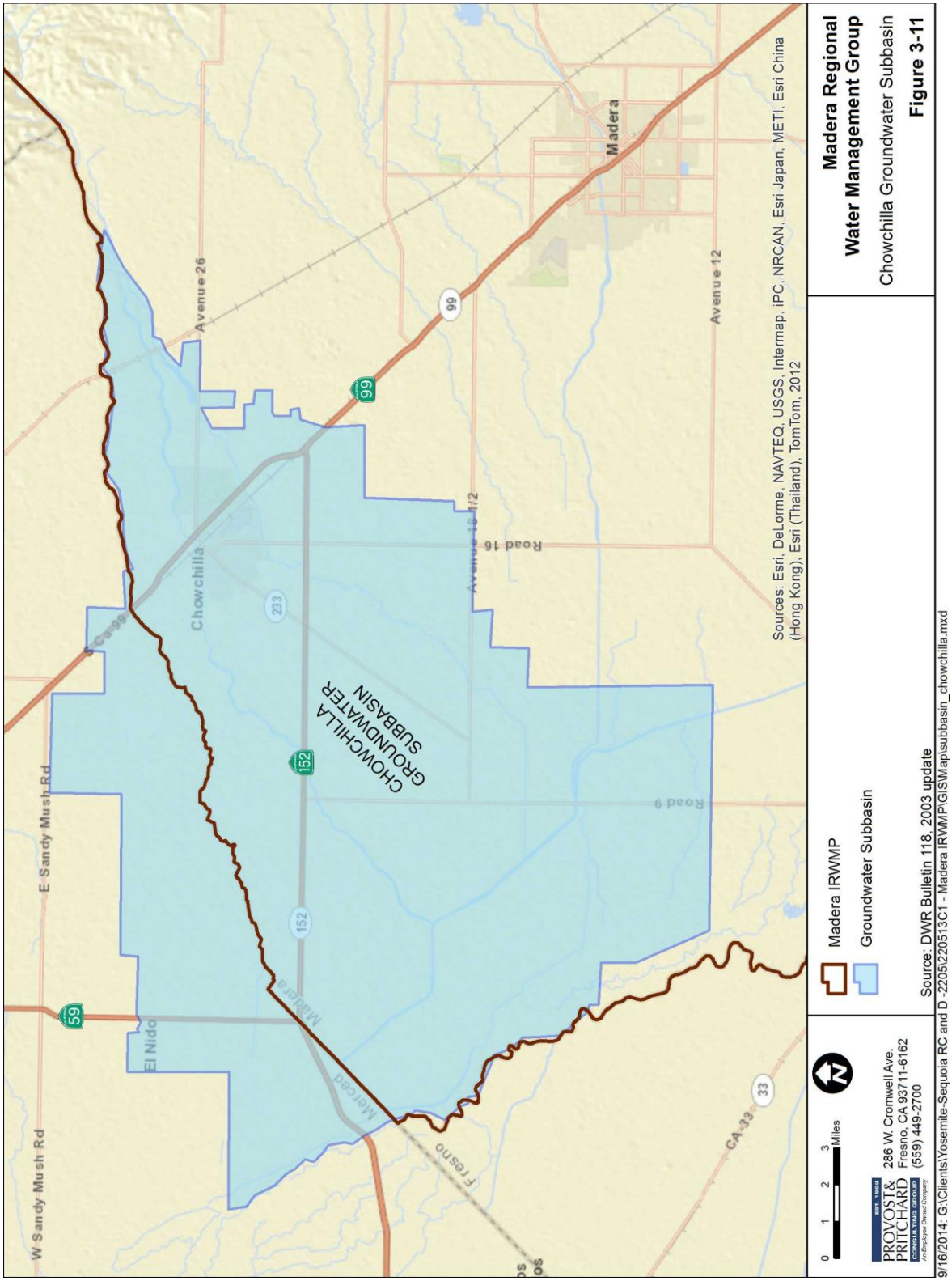


Figure 3-11 – Chowchilla Groundwater Subbasin

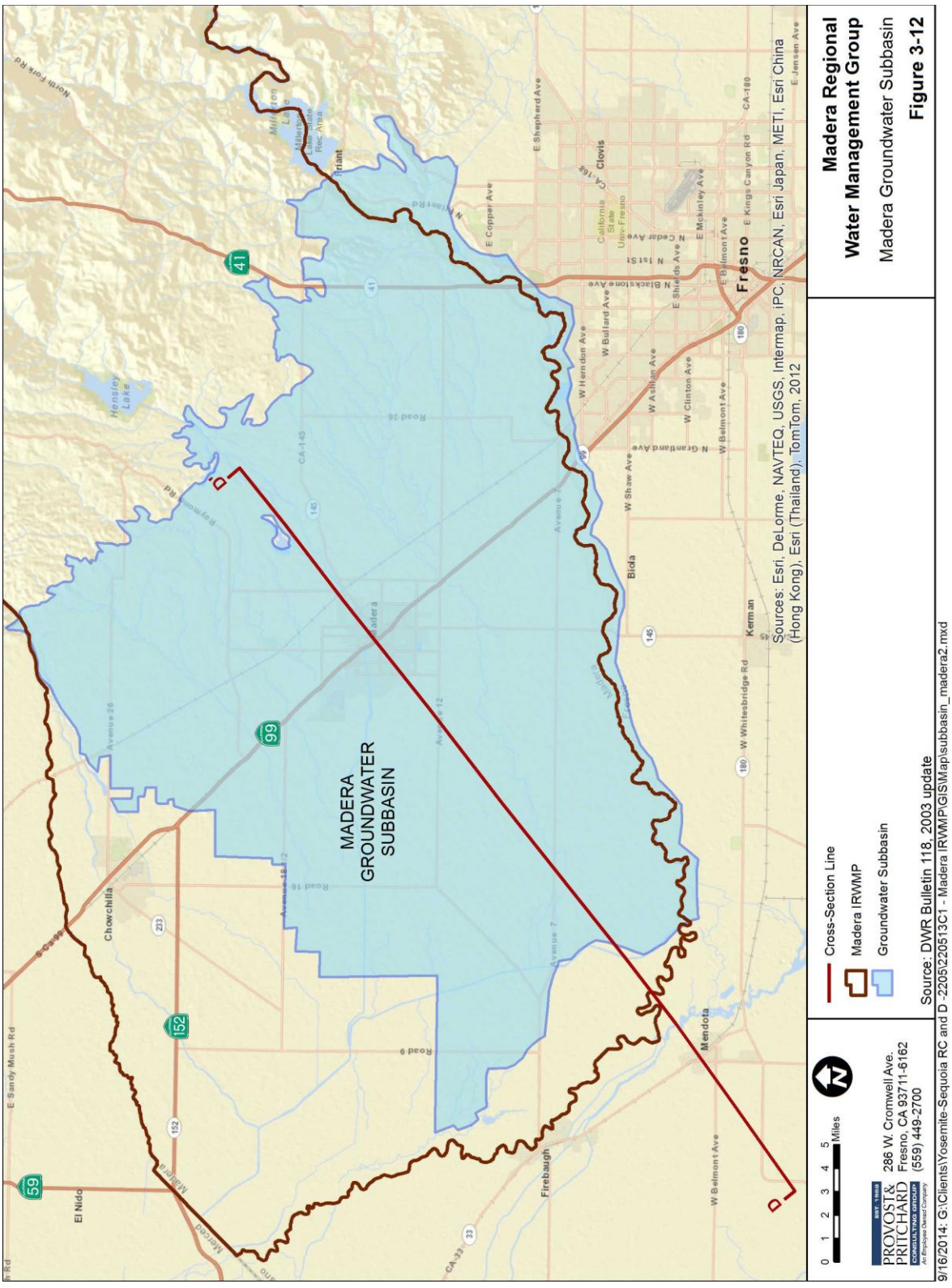


Figure 3-12 – Madera Groundwater Subbasin

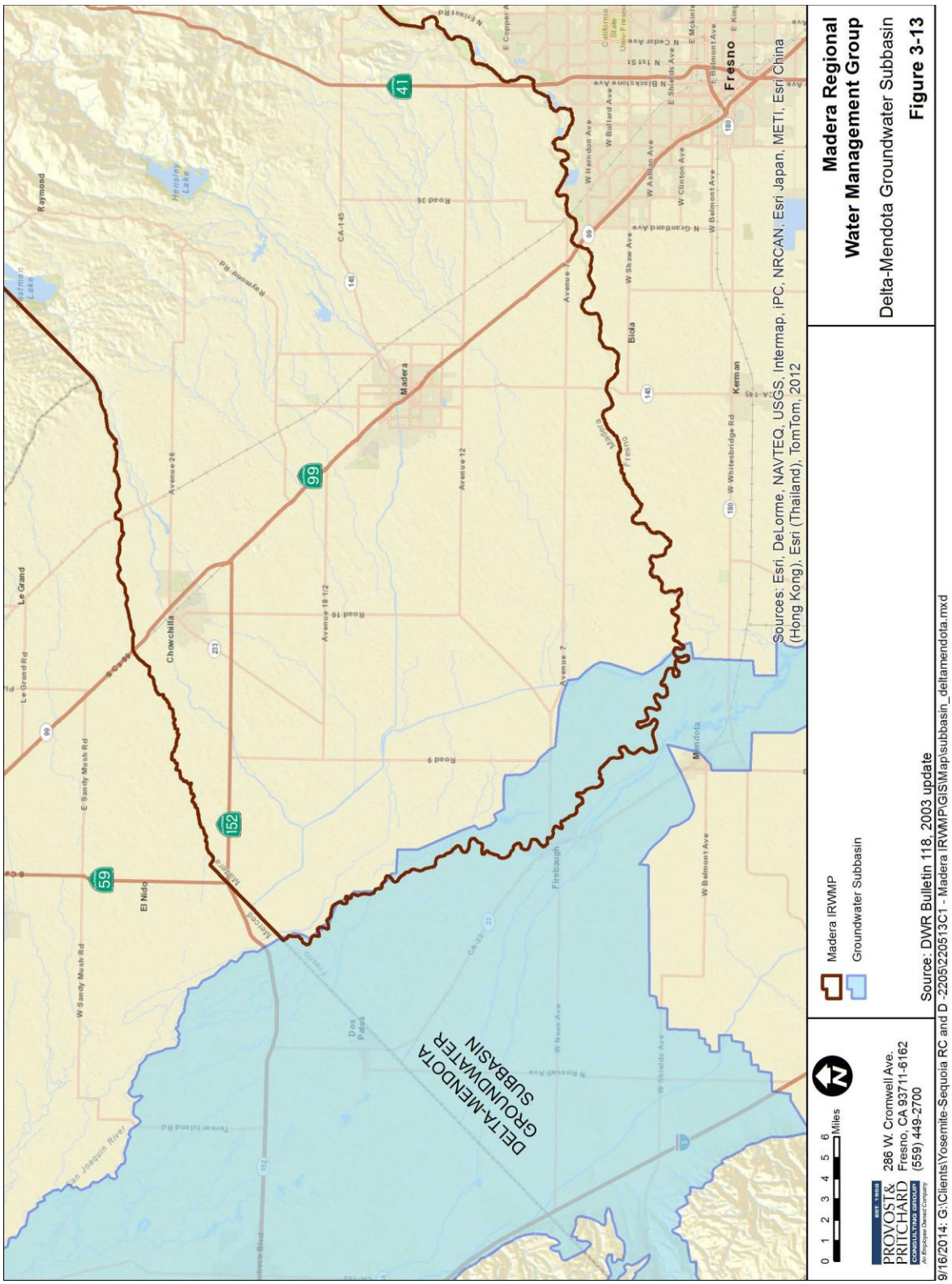


Figure 3-13 – Delta-Mendota Groundwater Subbasin

3.12 - Geomorphology, Statigraphy and Soils

The Great Valley of California is an asymmetrical structural trough filled with Mesozoic (deposited between 248 million years ago [mya] and 99 mya) and Cenozoic (65 mya to present) sediments that reach a thickness of approximately 30,000 feet. The Great Valley consists of the Sacramento Valley in the north and the larger San Joaquin Valley in the south. The San Joaquin Valley represents the lower two-thirds of the Great Valley of California. It is approximately 200 miles long and up to 70 miles wide, bounded on the north by the Sacramento-San Joaquin Delta, the Sierra Nevada Mountains on the east, the Coast Range Mountains on the west, and the Tehachapi and San Emigdio Mountains to the south.

The freshwater aquifer systems underlying the Region consist of the younger alluvium and older alluvium and are contained in the Late Tertiary and Quaternary continental deposits. These deposits increase with thickness from north to south and are up to 3,000 feet thick in the Valley portion of the Region. Sediments generally are coarser at the edges of the alluvial fans, closest to the Sierra Nevada Mountains, and become finer towards the center of the valley. The Valley portion of the Region consists of generally flat agricultural land, sloping to the San Joaquin River towards the west, with the Sierra Nevada Mountains rising to the east. Fluvial and alluvial processes have formed the landforms within the Valley portion of the Region.

Precipitation in the Sierra Nevada Mountains in the Region drains westward and has deposited sediments into the San Joaquin Valley, creating the dominant geomorphic features in the valley. Three major drainages developed east of the Madera area, the Chowchilla, Fresno, and San Joaquin Rivers. Each stream transported sediment out and onto the valley floor, developing overlapping alluvial fans. The alluvial fan size appears to increase to the south. In cross section, alluvial fans are wedge-shaped or lens-shaped. Sediments in alluvial fans decrease in grain size with increasing distance from the source.

The Chowchilla River flows west along the northern portion of Madera County and spills into the Berenda and Ash Sloughs. The Fresno River flows west through the central portion of the county where it joins the San Joaquin River in the west. The San Joaquin River flows west along the southern boundary of Madera County before turning north along the western boundary of the county. Each river deposited sediments on the valley floor. There tends to be a larger amount of coarse-grained sediments near the valley margin and more fine-grained sediments downstream. As flood events occurred, the streams have overbanked their channels and deposited fine-grained sediments to the north and south of each river channel. Alluvial fans have formed multiple stream channels which overlap with other alluvial fans.

The flood plain deposits of each of the major alluvial fans increase in size from north to south. The flood plain of the Chowchilla River is a half-mile wide and less than five (5) miles long. The flood plain of the Fresno River is near one-mile wide and 10 miles long. The flood plain of the San Joaquin River is the largest with a maximum width of about two miles and extends 25 miles below Friant Dam.

The Madera and Chowchilla Subbasins are considered to be "critically overdrafted" by the California Department of Water Resources. Groundwater levels in the Valley portion of the Region have gradually declined over time. The Corcoran Clay, a major confining bed in the San Joaquin Valley, is present in the western portion of the Region.

Stratigraphy

A cross section showing the local stratigraphy in a generally east-west direction through the City of Madera is illustrated in **Figure 3-14**. The location of the cross secton (D-D') is shown on Figure 3-12. The cross section was prepared by the David et al. (1959). Mitten, LeBlanc, and Bertoldi (1970) characterized the subsurface geology underlying the valley portion of Madera County. The geologic units, from deep to shallow (oldest to youngest), consist of crystalline basement rock, marine sediments, marine and undifferentiated continental sediments, consolidated continental sediments (including the Ione Formation and Mehrten Formation), and unconsolidated sediments. The stratigraphic succession of deposits in the valley include, from oldest to youngest: crystalline basement rock, marine and continental sedimentary rocks, Ione Formation, Mehrten Formation, continental deposits of tertiary and quaternary age, and continental deposits of quaternary age. The youngest formation is further divided into the Older Alluvium and the Younger Alluvium.

Crystalline Basement Rock

The basement complex consists of mostly granitic and metamorphic rocks. The basement complex outcrops east of the older alluvium. The crystalline basement rock underlies the entire GMP plan area at depth and is comprised of the Sierra Nevada batholith and partly the western metamorphic belts. This formation likely contains small amounts of groundwater in fractures.

Marine and Continental Sedimentary Rocks

The marine and continental rocks overlie the basement complex and underlie the western part of the Madera area. The formations do not outcrop in the area, but can be tracked in the subsurface. These rocks consist mostly of sandstone, claystone, siltsone, and shale. The marine sedimentary rocks most likely contain connate saline water and do not provide useable groundwater to the area.

Ione Formation

The Ione Formation outcrops in the eastern portion of the valley and caps many of the hills northwest of Friant Dam. The Ione Formation is sedimentary and was deposited in both marine and non-marine environments. The Eocene Ione Formation outcrops discontinuously along the western margin of the Central Valley and consists of sandstone and conglomerates. The Ione Formation does not provide groundwater to the Region. This is significant because the Ione formation has good recharge potential but cannot contribute groundwater to the area due to its absence.

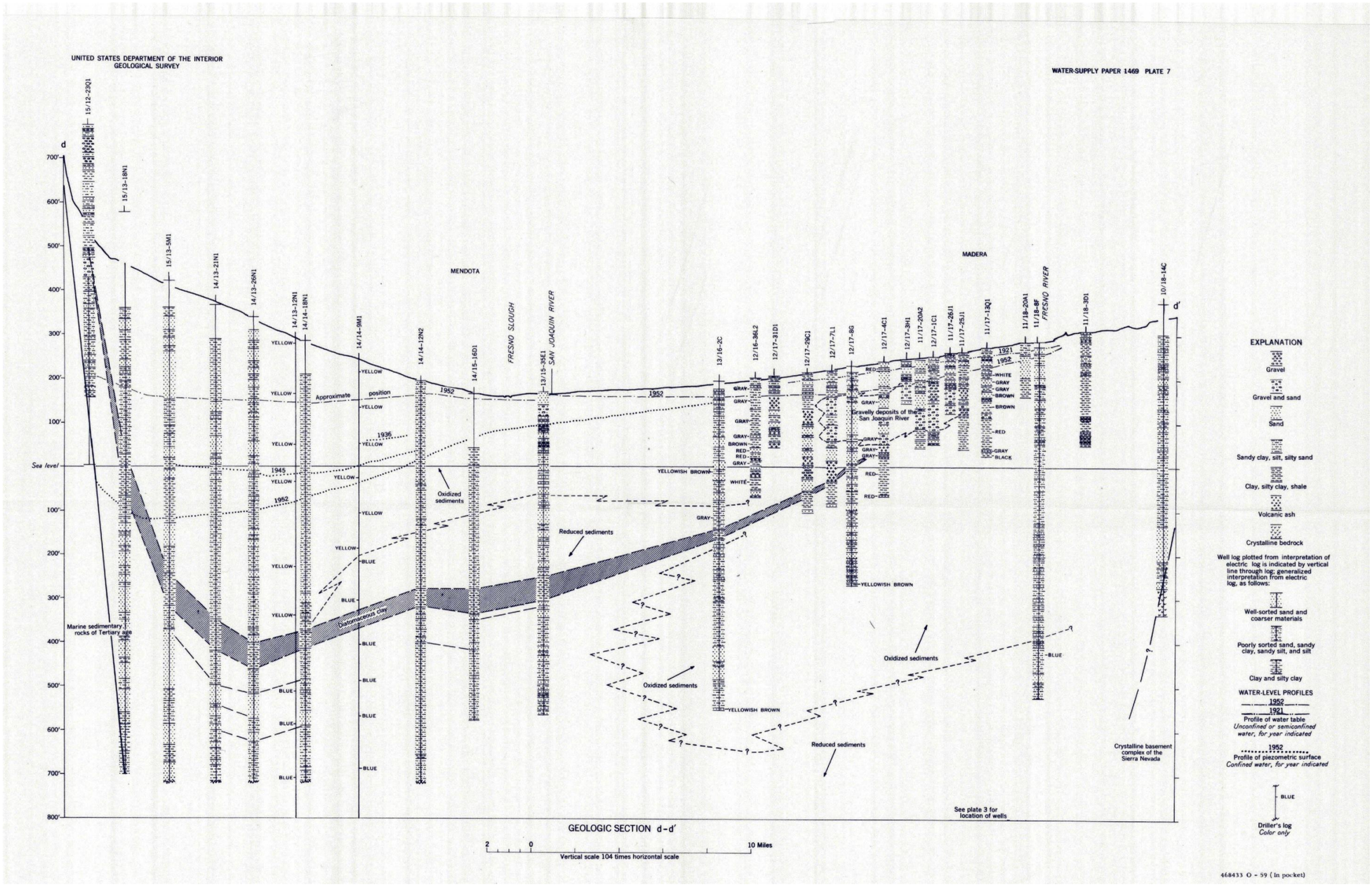


Figure 3-14 Geologic Cross Section

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Mehrten Formation

The Mehrten Formation is a significant geologic formation within the San Joaquin Valley. It consists of a sequence of volcaniclastic and volcanic rocks. The Mehrten Formation unconformably overlies the Ione Formation. It is comprised of two distinct geologic units. The first consists of sediments deposited under alluvial and fluvial conditions which are made up of gravel, sand, silt, and clay size sediments. The second unit consists of dense volcanic flows of tuff breccia with some interbedded conglomerates and sandstones. The Formation outcrops north of the Region and is not present in Madera County.

The Formation is an important aquifer that stretches from Merced County north to Sutter County. The fact that it is not present in the eastern Valley portion of the Region is a significant reason that groundwater recharge does not occur at a rate as it does in the subbasins north of the Madera County.

Continental Deposits of Tertiary and Quaternary Age

The continental deposits of Tertiary and Quaternary age underlie most of Madera County, but do not crop out at the surface. The formation dips gently southwest and overlies the marine and continental rocks. The deposit consists of interbedded, poorly-sorted sand, silt, clay and conglomerate, with layers of hardpan. The deposits become finer grained with depth and distance from the foothills. The lower part of the deposits contains blue and green clays and the upper portion contains red, yellow, and brown clays, which are interpreted to have been deposited under reducing and oxidizing conditions, respectively.

In the past, few water wells penetrated the continental deposits. The water bearing capacity of this formation is unclear at this time; however, many new agricultural wells are drilling deeper into this formation to produce additional groundwater. As these wells are put into production over the next several years, additional information with regard to well yields, water quality, and aquifer recharge will become available.

Continental Deposits of Quaternary Age (Older Alluvium)

The older alluvium of Pleistocene and Holocene age underlies most of the Valley portion of the Region. The older alluvium outcrops south of the San Joaquin River and north of the Chowchilla River. It dips gently southwest and ranges in thickness from zero to about 1,000 feet, overlying the continental deposits of Tertiary and Quaternary age and overlapping the Ione Formation (where present) and the basement complex. The older alluvium consists mostly of interbedded lenses of clay, silt, sand, and some gravel, decreasing in grain size with depth and grades into the underlying fine-grained continental deposits of Tertiary and Quaternary age. Cemented hardpan occurs throughout the area near the ground surface.

Mitten et al. (1970) summarized aquifer characteristics based on aquifer tests made by the USGS in the late 1960s and reported aquifer transmissivity values ranging from 18,000 to 99,000 gallons per day per foot of drawdown (gpd/ft) in the Madera area. Based on multiple well tests throughout the Madera area, transmissivities of deposits above a depth of 500 feet

(with significant coarse-grained deposits) range in transmissivities from 50,000 to 250,000 gpd/ft of drawdown. The transmissivities in the underlying continental deposits normally range from about 10,000 to 30,000 gpd/ft of drawdown (Boyle, 2008).

Continental Deposits of Quaternary Age (Younger Alluvium)

The younger alluvium is a well-sorted sedimentary formation and overlies the older alluvium, covering a significant portion of the valley area in Madera County. It does not contain cemented hard pan, which differentiates it from the older alluvium. It is indistinguishable from the older alluvium in the subsurface. The estimated thickness ranges from zero to fifty feet and is generally not unsaturated, though saturated areas exist near streams and channels.

Corcoran Clay (E Clay)

To better depict the aquitards in the southern San Joaquin Valley, Croft (1972) identified several extensive clay layers in the subsurface that he designated, youngest to oldest, by letters A through F. That study informs the discussion in this section. The A and E clays are the most significant clay layers in the vicinity of the valley area, but only the E clay is present in the Region, based on Croft's mapping. The E clay is the thickest and most laterally extensive of the clay layers identified and mapped by Croft. The A clay has been mapped locally at shallow depths southwest of the Region at depths of 10 to 60 feet and is generally less than 60 feet thick.

The E Clay, which includes the Corcoran Clay Member of the Tulare Formation, is a regional confining layer and underlies approximately 3,500 square miles in the San Joaquin Valley. Within the upper portion of the Older Alluvium, the Corcoran Clay divides the San Joaquin Valley freshwater aquifer system into an unconfined to semi-confined upper system and a largely confined lower system. The Corcoran Clay has been identified in the subsurface in the western portion of the RWMG area, ranging in depth between 80 and 350 feet.

In contrast to other clays in the subsurface, the Corcoran Clay appears gray, greenish gray or bluish gray. Water well drillers commonly referred to this clay as the "blue clay."

Portions of the Corcoran Clay consist of a matrix of diatomaceous clays, which are compressible when the pore pressure is reduced by dewatering. The compression of the diatom rich matrix is thought to be the main reason for the extreme inelastic compression and the associated land subsidence overlying the Corcoran Clay.

3.13 - Land Subsidence

Land subsidence occurs when groundwater levels in confined aquifers decline due to excessive withdrawals of water. This results in compaction of fine-grained sediments (clays) above and within the aquifer system as water is removed from pores between the grains of the sediments. Over time, as more water is removed from the area, the ground level sinks. Land subsidence can lead to reduced conveyance capacity in canals, and damage to structures such as canals,

levees, buildings and wells. Subsidence can also cause flooding by creating low spots or reducing gradients in natural channels.

Cause of Local Land Subsidence

Land subsidence in the Valley portion of the Region is caused by pumping groundwater from the deeper confined aquifer that is separated from the shallower unconfined aquifer by the Corcoran Clay. The Corcoran Clay is the regional aquitard throughout the San Joaquin Valley, and is prevalent throughout the western half of the valley area. The area of greatest land subsidence in the Region coincides with the area underlain by the Corcoran Clay, in western Madera County, particularly along the Eastside Bypass.

History of Land Subsidence in Area

Land subsidence in the Region is of historic and ongoing significance. Between 1926 and 1972, subsidence resulted in between 1.0 and 4.0 feet of ground surface elevation drop within the western half of the Valley portion of the Madera Region. The area of greatest subsidence occurred roughly along the path of the East Side Bypass flood control structure of the San Joaquin River (Bull, 1975).

The majority of the subsidence has occurred since 1940, when large turbine pumps came into widespread use for extracting water from the deeper confined aquifer. Availability of surface water from the Delta-Mendota Canal and the California Aqueduct resulted in decreased groundwater demand, stabilization of groundwater levels and a reduced rate of subsidence. Drought conditions during 1976-1977 and 1987-1992 restricted surface water deliveries, resulting in increased demand for groundwater supply and increased subsidence rates. Drought and regulatory reductions in surface water deliveries (especially the San Joaquin River Restoration) from 2007 through 2014 have brought about unprecedented withdrawals of water from the deeper confined aquifer to meet local water demand.

Loss of Storage Due to Subsidence

According to a 1995 USGS report, the primary cause of land subsidence in the Valley has been the compaction of fine-grained silt and clay sediments in the aquifer system following extensive long-term withdrawal of groundwater in excess of recharge. This subsidence, due to compaction of fine-grained sediments, began in the 1920s. As groundwater levels declined severely during the 1960s, fine-grained sediments lost water from pore spaces and became compacted from the weight of the overlying soil. When withdrawal rates decreased and water levels were allowed to recover, compaction rates slowed significantly.

Increased groundwater pumping during the 1976-77 drought increased the rate of subsidence, some of which even resulted from compaction of coarse-grained sediments. When groundwater levels recovered in 1978 following the end of the drought years, the compacted coarse-grained sediments regained some of their original volume when the former or near former pore pressure was attained and the land surface rebounded. However, the fine-grained sediments remained compacted and will never recover.

The fine grained portions of the aquifer are not typically considered water producing portions. The minimal amount of storage loss in the coarser grained sediments, the usable part of the aquifer, is for the most part recoverable and is not considered an appreciable loss of storage space in the usable parts of the aquifer.

Recent Land Subsidence Impacts

Groundwater pumping that results in renewed compaction and land subsidence in the Valley could cause serious operational, maintenance, and construction-design problems for the California Aqueduct, the San Luis & Delta-Mendota canals, and other water-delivery and flood-control canals in the San Joaquin Valley. Subsidence has reduced the flow capacity of several canals that deliver irrigation water to farmers and transport floodwater out of the valley. Several canals managed by the San Luis & Delta-Mendota Water Authority (SLDMWA) and the Central California Irrigation District (CCID) have had reduced freeboard and structural damages that have already required millions of dollars worth of repairs, and more repairs are expected in the future (Sneed, et al. 2013). These instances of land subsidence are not in the Region but are adjacent to the westerly portions of the area in the vicinity of the San Joaquin River, and indicate that subsidence is occurring in broad area of the central part of the San Joaquin Valley. Within the Region, subsidence in the vicinity of the San Joaquin River and its flood control structures may cause flooding of Highway 152 and a local grade school, threaten valuable farmland and dairies, and jeopardize the San Joaquin River Restoration Program.

Recent work by the USGS, USBR, DWR and Kenneth D. Schmidt and Associates (KDSA) indicates that the greatest amount of subsidence in the Region is in the area of the East Side Bypass. This is also referred to as the Red-Top Area, which is located in the west-northwest portion of the Region near the axis of the valley where the majority of the historic land subsidence has been documented. The maximum subsidence near the Eastside Bypass has amounted to approximately seven (7) feet.

3.14 - Groundwater Elevations and Flow Direction

This section discusses the available groundwater level data, recent groundwater elevation contours, groundwater flow direction and existing cones of depression. Existing groundwater level data is limited and recommendations are given for improving monitoring.

Groundwater Levels

Recent and readily available groundwater level data was obtained from several agencies within the Region as part of the preparation of the Madera Regional Groundwater Management Plan. Fall 2013 data was used because it provides the most recent data and illustrates the condition of the aquifer after a summer of groundwater withdrawals. Groundwater elevation contours were estimated based on the data provided. The following should be noted concerning the data sources used for the groundwater level information:

- Chowchilla Water District monitors 142 wells, of which 79 have fall 2013 water level data.

- Madera Irrigation District monitors 161 wells, of which 85 have fall 2013 water level data.
- Root Creek Water District – water level data available for 22 wells.
- Madera County supplied information from eight wells in valley-floor Maintenance Districts and Service Areas.
- The City of Madera and City of Chowchilla monitor groundwater levels, but the data was not readily available for the analysis.
- No fall 2013 groundwater level data was collected for the Western Madera County Subsidence Study. The participants in the study only measure groundwater levels in the spring.
- The California Department of Water Resources no longer measures wells in Madera County (personal communication with DWR staff, March 2014).
- The USBR reports their water level data to the DWR, and data was only found for eight of those wells.
- No readily available data in the un-districted areas of the county, except for data from Madera County.

Groundwater Monitoring

The majority of the water level data available falls within Madera Irrigation District (MID) and Chowchilla Water District (CWD). Outside of the districted areas readily available water level data is sparse. Water level monitoring programs in the un-districted areas, or areas that receive little or no surface water, are as a whole deficient. Fewer water level measurements are available in the east part of the valley floor, where the greatest water level declines are occurring.

The State of California stores groundwater level data in their Water Data Library (WDL) and in a database for the California Statewide Groundwater Elevation Monitoring (CASGEM) program. Both can be accessed on the DWR website. The WDL contains historical information, and CASGEM includes recent information submitted by regional CASGEM groups. The two systems are likely to be merged in the future.

Derivation of Groundwater Elevation Contours

Groundwater elevation contours were estimated from available water level data. As **Figure 3-15** shows, wells in relatively close proximity to one another can have significantly different water elevations. This is likely caused by several factors: 1) groundwater elevations in wells across the study area appear to be affected to varying degrees by confining conditions, 2) water level measurements are taken with different types of measuring devices, and 3) water levels taken within a season may actually be taken several months apart.

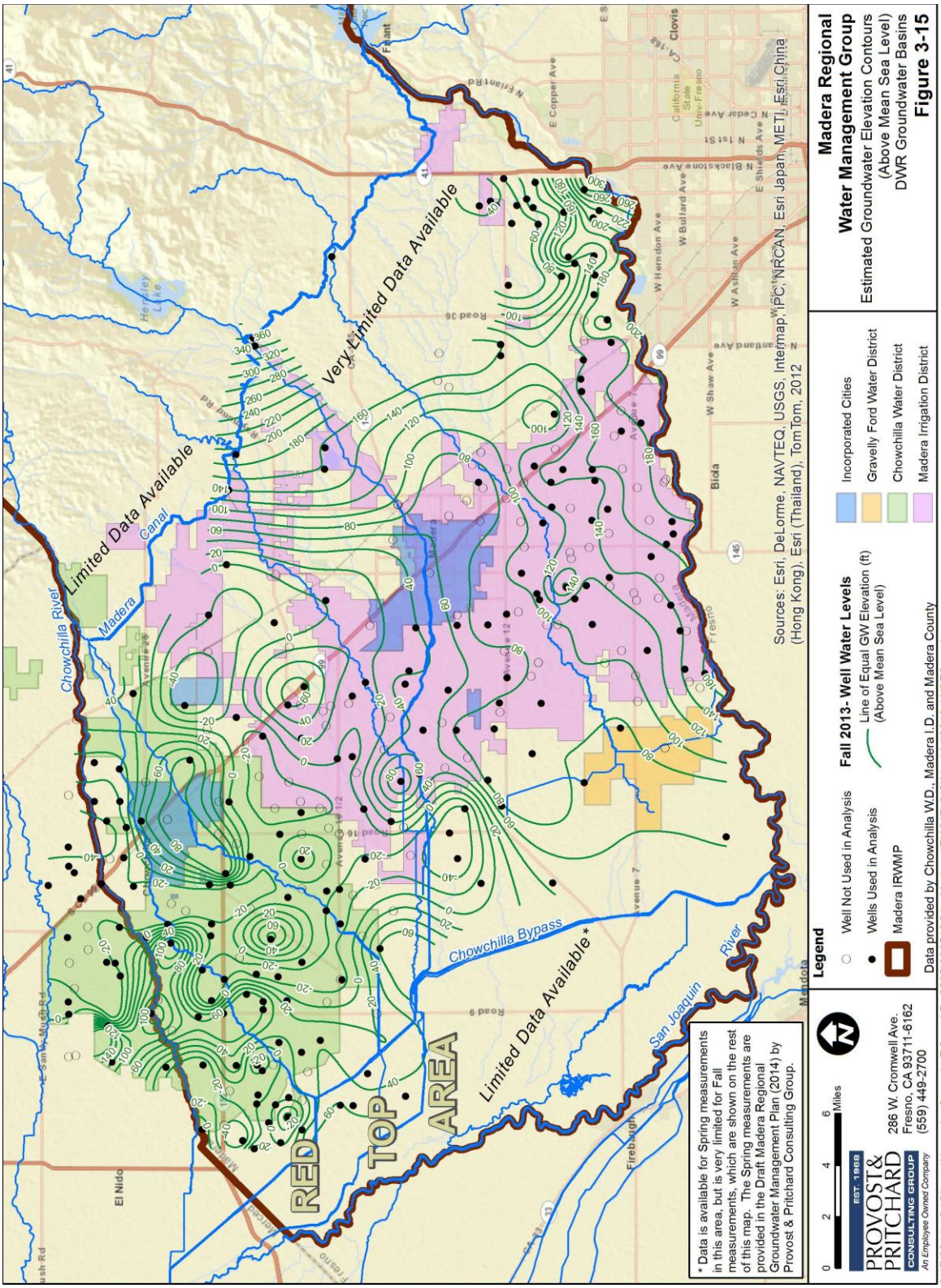

Figure 3-15 – Estimated Groundwater Elevation Contours

Groundwater Flow and Cones of Depression

The most consistent and reliable groundwater elevation contours are found along the San Joaquin River from the Root Creek area to about 5 miles west of Highway 145. Through this area groundwater flows northwest into the region due to recharge from the San Joaquin River. Generally flow is west to southwest across the study area with numerous groundwater mounds and depressions indicating that groundwater can locally flow in any direction - either towards a depression or away from a mound.

Past groundwater contour maps indicate that one of the largest groundwater depressions in the area is south of Highway 145 northeast of the Santa Fe Railroad. This depression coincides with a large area with limited surface water. This groundwater depression is not evident on **Figure 3-15** due to a lack of recent data in this area. Another groundwater depression is evident in the area east of Fairmead, which also coincides with an area with limited groundwater supplies (MID annexed lands and two prisons in Chowchilla: Central California Women's Correctional Facility and the Valley State Prison). Several additional groundwater depressions were present on historic DWR groundwater elevation contour maps of the un-districted areas west of MID and CWD. These depressions are not evident on **Figure 3-15** due to lack of recent data for this area.

Estimating the volume of groundwater resources in Madera County is not currently feasible. The depth to saline groundwater has not been estimated on a regional basis since 1973 when USGS performed a study (Page, 1973). The depth to saline water varies throughout the County, forming an irregular lower limit for the fresh water aquifer. Other constituents, such as arsenic, also impact the depth to usable water. In many areas, no detailed delineation of water quality is available. Other factors, such as the economics of drilling and operating deep wells, also impact the available groundwater supply. A spatial evaluation of total groundwater supplies is necessary to calculate the overall volume of available and useful groundwater, and is considered a high priority goal for the Madera Region.

3.15 - Geologic Potential for Groundwater Recharge

Groundwater recharge is the process by which groundwater is replenished. The geologic formations that comprise the aquifer system underlying Madera County extend well beyond the local agencies' jurisdictional boundaries. Several processes are responsible for natural recharge of the groundwater basin. On a regional scale, surface water flowing over the surface expression of the geologic formations (surface outcrops) allows for direct infiltration into the hydrogeologic system. Locally, groundwater recharge occurs where surface water flows over permeable sediment (gravels and sand) in the river channels, allowing for direct infiltration of surface water. Deep percolation of applied irrigation water also recharges the groundwater basin in areas where impermeable formations do not exist.

The quantity of groundwater that can be recharged is dependent on the available storage space within the aquifer(s). Depending on the relative elevation of the bottom of the river or stream and that of the groundwater, streams can either "lose" water into the underlying aquifer(s) or "gain" water from the aquifer. Where groundwater levels are at or above the elevation of the surface water, groundwater will flow into the stream (gaining stream). Where the groundwater surface elevation is below that of the surface water, water flowing downstream will recharge into the groundwater basin (losing stream). Conversely, if groundwater levels are at the land surface, there will be refusal of any "new" water in the subsurface. All streams in the Region are currently losing streams.

DWR groundwater contour maps indicate that the groundwater basins underlying the Region received recharge through under-seepage from the San Joaquin and Fresno Rivers. Local agricultural interests are increasingly implementing groundwater recharge programs using both percolation basins and in-lieu recharge. Due to the hardpan and low infiltration rates in the eastern portion of the County within the Valley portion of the Region, the majority of surface runoff during storm events flows overland and most water does not percolate into the subsurface.

Those areas conducive to recharge, i.e. underlain by soils with moderate to high infiltration rates, are mainly found west to southwest of the Cities of Madera and Chowchilla. Other areas with soils of high infiltration rates are intermittently found as stream or river deposits radiating from the San Joaquin River and to a lesser extent the Chowchilla River. Along the major rivers and streams areas with the potential for recharge exists as relatively narrow outcrops of soils with moderate infiltration rates that extend easterly to the edge of the groundwater basin. From a regional groundwater recharge perspective, these areas should be the focus of future recharge programs. Since these areas are primarily up gradient from the valley floor area, water recharge in the eastern portions of the major stream and rivers will eventually flow down gradient and recharge the aquifer to the west.

3.16 - Domestic Water Demand

Domestic water demands are defined as water used for domestic (indoor and landscape) purposes in urban and rural areas. The Cities directly provide water to their residents, and the County provides water to residents of the 12 Maintenance Districts and Service Areas in the Madera Region. Rural residents living in the irrigation districts, water districts and other unincorporated areas also pump domestic water from their private wells. **Table 3.4** summarizes domestic water demands for some of the major water users based on the most recent statistics. Table 3.5 is not a summary of all domestic water demands in the Madera Region.

Table 3.4: Domestic Water Demands

Area	Per Capita Usage (gal/day)	Annual Demand (AF/year)
City of Chowchilla	311	3,500
City of Madera	195	12,700
County Maintenance Districts and Service Areas	168	3,700
Unincorporated County Lands	168	1,400
Madera Irrigation District	168	2,200
Chowchilla Water District	168	600
Gravelly Ford Water District	168	20
	Total	24,100

The per-capita water usage values were obtained from the cities' Urban Water Management Plans, the 2008 Madera County IRWMP, and current water use and population statistics.

3.17 - Agricultural Water Demands

Cropping Data

Agricultural cropping data was collected to estimate agricultural water demands in the Region. The RWMG does not directly collect cropping data, but relies on data collected by other agencies. Cropping data was generally only available for the valley portion of Madera County, and cropping in the foothills and mountains is largely excluded from the data presented below. Several sources of cropping data were found including:

1. California Department of Water Resources (DWR) - Land Use Data
2. California Department of Conservation – Farmland Mapping and Monitoring Data
3. Madera County Agricultural Commissioner's office
4. USDA CropScape
5. Local Irrigation and Water District cropping records

The DWR Land Use Data is generally considered the most accurate and reliable source because the data are collected by trained staff who use a combination of aerial photographs and field verification. However, DWR surveys are only performed in each County about once every six years, and the most recent survey was performed in 2011. DWR data were also used in crop demand estimates in the 2008 IRWMP and can provide a meaningful comparison to changes

since that time. As a result, the 2011 DWR data were projected to 2013 based on historical cropping changes since 2003.

The Madera County Agricultural Commissioner's Office had 2013 cropping data, which are based on pesticide permit applications. These data are not field-verified, but are the most recent information available. The data do not include records for organic farms which do not require pesticide permits, but those cover a relatively small part of the County. Nevertheless, the larger organic farms and dairies were identified, and cropping was assumed to be similar to the year before they converted to organic operations.

Crop Water Demands in the Region

General land use in the Region is shown in **Figure 3-16**. The cropping data for this Figure was acquired from the Madera County Agricultural Commissioner's Office **(Appendix C)** and shows that almost 54% of the land is planted in permanent crops, while a total of 69% of the land is cropped. There is potential for further agricultural development since 21% of the land has not been developed at all.

Countywide cropping data for several years are shown in **Table 3.5**. DWR cropping data from 2011 were projected to 2013 based on average annual historical changes between 2003 and 2011. The estimated water demands correlate within 0.5% of those estimated using the 2013 data from the Madera County Agricultural Commissioner's Office.

Table 3.5: County-wide Cropping and Agricultural Water Demands

Year	Cropping Data Source	Acreage	Applied Water Demands (AF/year)
2003	DWR	314,800	1,010,000
2011	DWR	360,900	1,022,000
2013	DWR (projected)	372,600	1,050,000
2013	County Agricultural Commissioner's Office	357,700	1,044,000

The results show about a 5% increase in agricultural water demands from 2003 to 2013. The estimate uses the best available data on cropping and crop water demands.

The projected DWR data and the data from the County Agricultural Commissioner's Office show similar applied water demands, but the total acreage varies by approximately 4%. A review of the data shows that 2013 included a reduction in low-water-use crops, such as grains, and an increase in medium- and high-water use crops, including corn and truck crops, thus explaining the discrepancy.

Agricultural plantings have increased substantially in recent years. Much of the plantings have been tree crops that cannot be fallowed in dry years. In addition, the demand for certain crops, such as almonds, is very strong and may encourage planting of additional acreage.

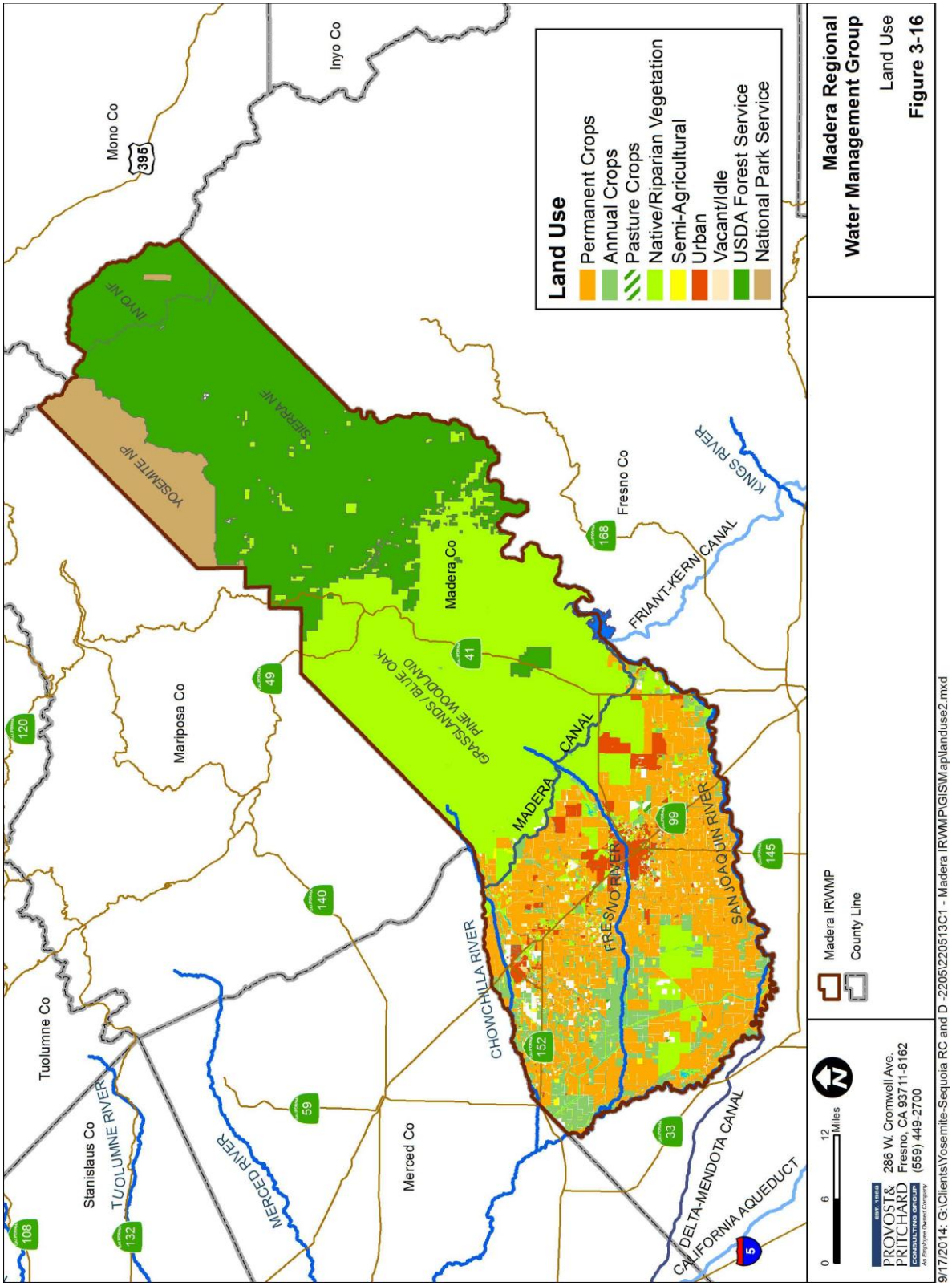

Figure 3-16 – Land Use

3.18 - Groundwater Quality

Groundwater quality within the Valley portion of the Region is generally good for both domestic supply and agricultural use. However, variations in groundwater quality mean some groundwater within the Region is unacceptable for domestic and even agricultural uses without treatment. Groundwater contamination can be a result of naturally occurring, point source contamination, and/or regional contamination. Some common elements of concern include dissolved salts (as measured by the specific conductance or electrical conductance [EC]), boron, manganese, arsenic, iron, hexavalent chromium, bacteria, uranium, and methane. In many cases, these are naturally occurring, but contamination could also be related to regional or point sources. Typical sources of anthropogenic contamination originate from gas stations, dry cleaners, high-density animal enclosures, applied fertilizers, leaky sewer lines, wastewater treatment plants, and septic systems.

Groundwater in the foothill and mountain portion of the Region is also of generally-acceptable quality for domestic and municipal uses without treatment, though many wells do require wellhead treatment to remove naturally-occurring iron, manganese, arsenic and uranium (gross alpha radiation) resulting from granitic decay.

Groundwater quality in the Madera, Chowchilla, and Delta-Mendota Subbasins were investigated as part of the Groundwater Ambient Monitoring and Assessment (GAMA) Priority Basin Project Program. The primary objective of the Priority Basin Project within the Madera-Chowchilla and the Western San Joaquin Valley (WSJV) study units, which included the Delta-Mendota and Westside subbasin, was to provide an assessment of water quality in the primary aquifer system. The assessments conducted in the Madera-Chowchilla and WSJV study relied on water-quality and ancillary data collected by the USGS from 35 wells during April–May 2008 for the Madera-Chowchilla study unit, 58 wells during March to July 2010 for the WSJV study unit, and water quality data reported in the the State's Division of Drinking Water (DDW) database (USGS, 2013). Analysis of the water quality data from these wells was used to characterize both spatial and depth dependent water quality trends.

Below is a general description of the water quality parameters selected for the characterization of the groundwater basins underlying the Region and in the hard rock wells of the foothill and mountain area. The selected constituents include arsenic, boron, specific conductance, manganese, and nitrate (as NO3).

Arsenic

Arsenic is a naturally occurring element commonly found in groundwater. Its presence in groundwater is a result of the dissolution of the element in sediments containing minerals containing arsenic. Exposure to arsenic above the DDW maximum contaminant level (MCL) can cause both short and long-term health effects. Long-term exposure to arsenic has been linked to cancer, while short-term exposure to high doses of arsenic can cause other adverse health

effects. The DDW has established a primary MCL of 10 micrograms per liter (µg/L) for arsenic, which was reduced from 50 µg/L in 2008.

Arsenic is found in numerous Valley areas. In addition, six districts in the mountains have water that exceeds the MCL, including MD6, Lakeshore; MD7, Marina View; MD8A, North Fork; MD 24, Teaford Meadows; MD43, Still Meadows; and MD46, Miami Creek Estates.

Boron

Boron is a necessary element for agriculture, but may become toxic to very sensitive crops in concentrations above 500 µg/L. For public drinking water systems, the DDW has established a notification level of 1,000 µg/L for boron.

Boron is found in some Valley areas, particularly to the west of the San Joaquin River, but has not yet been a constituent of concern in foothill and mountain wells.

Specific Conductance

Specific conductance is a measure of how effectively water will conduct electricity in units of both micromhos per centimeter (µmhos/cm) and microsiemens (µS/cm) per centimeter (which are analogous), and provides for the indirect measurement of the amount of dissolved salts in groundwater. Lower specific conductance values indicates less salt, while higher specific conductance values indicates more salt.

Applied irrigation water containing certain fertilizers, as well as water discharged from salt-regenerated water softeners, add salts to the hydrogeologic system, which increases the specific conductance of the groundwater. Elevated specific conductance values can also be attributed to naturally occurring brackish or saline water, such as geologic formations which are directly connected to a salt water body or where geologic formations were deposited under marine (salt water) conditions.

Elevated specific conductance levels are not present in the foothill and mountain wells but are relatively common around the Valley portion of the Region, particularly in areas where there have been long-term agricultural operations.

Manganese

Manganese is a naturally-occurring element found in rocks and minerals. Its presence in groundwater is a result of the dissolution of the naturally occurring element. In lower concentrations (below the secondary DDW MCL of 50 µg/L), manganese may cause aesthetic problems (odor or staining) for domestic and municipal uses, particularly in the presence of iron, but generally would not pose a health risk.

Elevated manganese levels have been observed in all areas of the Region, including wells in the foothills and mountains.

Nitrate (as NO3)

Nitrate (as NO3) is a contaminant which does not naturally occur in the subsurface. Elevated concentrations of nitrate are widespread in the San Joaquin Valley and have also been observed in wells in the foothill and mountain areas. The most common source of nitrate contamination is from improperly-operating septic systems and leach fields where inadequately-treated effluent is seeping into the shallow groundwater which is then pumped by wells which do not have adequate seals against shallow contamination. Other sources can include applied fertilizer, leaky sewer systems (including collection lines, storage ponds, and wastewater treatment plants) and high-density animal enclosures such as dairies.

The DDW has established a primary MCL of 45 mg/L for nitrate as NO3.

California Assembly Bill 1249

AB 1249, currently undergoing committee hearings in the California Legislature, would add to the requirements pertaining to water quality analysis in IRWMPs by adding the following:

> *If an area within the boundaries of an integrated regional water management plan has nitrate, arsenic, perchlorate, or hexavalent chromium contamination, the bill would require that the plan include a description of (1) the location and extent of that contamination in the region, (2) the impacts caused by the contamination to communities within the region, (3) existing efforts being undertaken in the region to address the impacts, and (4) any additional efforts needed to address the impacts.*

While this bill is not yet law and its requirements do not bind the Region in the preparation of this plan update, there are areas within the Region boundaries where these conditions exist, and these are addressed below to the extent information is available.

Nitrate contamination, at levels above or slightly below the MCL, has been observed in certain water wells in County Maintenance District 10A (MD 10A - Madera Ranchos). Nitrate is not currently a problem in MD 33 – Fairmead, but a current sewer feasibility study is being prepared as a proactive measure. In both cases, the water system consists of wells located within a relatively-densely populated area served by individual septic systems of unknown quality and specification. In both districts, nitrate levels have become higher over the past decade and are expected to continue to increase unless and until community sewers are installed.

Fairmead is currently conducting a feasibility study considering how they might either construct a local WWTF or construct a sewer collection system to connect to the existing WWTF in Chowchilla, five miles to the northwest. Once the study is complete and a recommended alternative selected, the district plans to apply for grant funds either through the IRWM program or another funding program to prepare plans and specifications for the preferred alternative and then to construct that project. Madera Ranchos is not currently taking any action to change their situation but is considering funding a feasibility study regarding a local

sewer collection system and WWTF. There is no other alternative of a nearby existing WWTF available to them.

3.19 - Species of Biological Significance

Numerous Environmental Impact Reports have been prepared within the Region, and all contain evaluations of sensitive biological species. In cases of projects in non-urban areas in the Valley, and in Foothill or mountain areas, the number of both flora and fauna species of concern often runs to the dozens. Not every project area has all the same species, so the total list of species of concern within the Region cannot be determined without a biological evaluation that is beyond the scope of this Report.

In terms of species commonly found which have had significant project impacts, the list is more compact. The following , while not exhaustive, is illustrative of the typical species encountered in the Region.

Table 3.6: Significant Biological Species

Common Name of Species	Notes
Valley elderberry longhorn beetle (VELB)	Found along waterways at elevations up to 1,800 feet MSL. Presence or potential presence requires protection of elderberry bushes, which provide the only known habitat for the VELB.
California tiger salamander (CTS)	CTS live near streams and waterways in the lower elevations, but are believed to hibernate over-winter (aestivate) at distances as great as 0.75 miles from their active habitat. Avoidance of active and aestivation habitats is the only acceptable mitigation of potential impacts.
Vernal Pool fairy shrimp	These small creatures inhabit ephemeral vernal pools and other stagnant waters within wetland habitats. Avoidance of habitat is the preferred mitigation, however some limited habitat creation has been permitted by the Army Corps of Engineers, the primary regulatory agency for this species.
San Joaquin kit fox	The current range of San Joaquin kit fox in Madera County includes an area North of Firebaugh and the Buttonwillow Slough. There have been a few scattered occurrences in other parts of Madera County on the valley floor. Generally San Joaquin kit fox use grasslands or open areas with scattered shrubs. They require friable, sandy soils for burrowing and a nearby prey base.

3.20 - Ecological Processes and Environmental Resources

The region is a complex ecological system, with many inter-related processes and significant resources. An important realization is that the forests and meadows of the mountain areas are significant and major contributors to both the surface- and ground-water resources in the valley area of the Region.

The higher-elevation mountain areas, particularly those above 8,000 feet mean sea level (MSL), store the vast majority of the snowpack that falls each year. The spring and summer snowmelt

feeds the rivers that run through the Region, and water percolating from the snowmelt feeds both the hard-rock aquifers that supply the foothill and mountain communities as well as the regional aquifers which underlie the Valley portion of the Region.

Regional Goal 8, Improve Watershed Management, deals directly with this important relationship. This goal includes promoting best management practices for range, forest and alpine lands to protect ecosystems thereby improving water supplies and water quality. It also includes preserving open space and natural habitats that protect and enhance water resources and native species. Identified objectives include managing forest density to increase surface runoff, managing vegetation to reduce fire risk, reducing erosion and sedimentation, and promoting natural water storage through meadow, stream, wetlands and floodplain restoration.

3.21 - Social and Cultural Makeup of the Region

Since the Region boundaries conform to the boundaries of Madera County, a discussion of the County's demographics provides an accurate representation of the Region as well. Located in the heart of the Central Valley, Madera County shares the low average household income and high unemployment rate characteristic of all Valley counties. Where 2010 Median Household income (MHI) in California was $60,772, in Madera County it was $41,976. The County has a poverty rate of over 23 percent, and the entire county, in addition to both cities and several unincorporated communities and Native American tribes are all designated as Disadvantaged Communities (DACs). Details of the Region's DACs are presented in Chapter 4 of this Report.

Madera County has a distinctive culture and social fabric apart from the DACs. Largely a rural area, it includes only two cities. Its economy is centered on agriculture, from farming and ranching in the Valley to open-range grazing and herding in the higher elevations. The County maintains a Right-to-Farm ordinance to protect legacy agricultural land uses from the impingement of development.

The mountain and foothill areas are equally rural, but are a culture separate from the Valley area. Mountain communities such as Coarsegold, Oakhurst, North Fork, Raymond and Ahwahnee are staunchly proud of their ability to survive in the face of difficult economic conditions and continue to protect their autonomy.

3.22 - Major Water-Related Objectives and Conflicts

The RWMG has established and prioritized water-related goals and objectives for the Region as part of preparation of this Plan update. These goals and objectives are set forth and discussed in detail in Chapter 5 of this Report. Nine goals are identified along with numerous supporting objectives, however the primary goals can be summarized.

For the Valley area, achievement of groundwater sustainability by 2024 is the overarching goal. It is the first goal listed in Chapter 5, and all the other listed goals will help achieve this most important goal of all. Achievement of this goal will be very challenging, since groundwater in the Valley portion of the Region is overdrafted by more than 200,000 AF/year according to the 2014 Madera Regional Groundwater Management Plan. No single stakeholder is likely to be unaffected by measures taken to secure this goal. Water use must be reduced all around the Region, and additional water supplies must be acquired. Both of these measures come with substantial costs that will be borne by all.

Foothill and mountain area goals are listed separately, with the first being to create practical, enforceable policies resulting in sustainable groundwater management. The challenge will be to bring together the separate, independently-minded communities of the foothills and mountains in a coordinated effort to improve water security for all. Again, this effort will come with costs that will have to be borne by the citizens of the Region. Developing and implementing effective and affordable measures acceptable to the majority will be key.

3.23 - Determination of Regional Boundary

The Madera Regional Water Management Group boundary was determined in accordance with the goal of creating agencies focused on water planning that would be beneficial throughout watersheds, across political boundaries, and in ways that previous planning efforts had not.

The RWMG boundary is the same as the boundary of Madera County. This boundary is obviously influenced by political borders, but is also logical because of its strong hydrologic basis, including the crest of the Sierras and major rivers forming most of the border.

The Madera RWMG takes in the watershed of the North Fork and Middle Fork of the San Joaquin River to the crest of the Sierra Nevada Mountains on the east (where a portion of the Region overlaps with the South Sierra RWMG planning area). It includes the watershed of the Fresno River, a major downstream tributary to the San Joaquin River, which joins the San Joaquin River on the Valley Floor in Madera County, a portion of the watershed of the Merced River, which joins the San Joaquin River on the Valley Floor in Merced County north of the Region, and a portion of the watershed of the Chowchilla River, which forms the northern boundary of the Region. Thus virtually all of the foothill and mountain area that drains to the Valley portion of Madera County is included within the RWMG boundary.

The Valley-area boundaries extend to the San Joaquin River on the south and west. The San Joaquin is unique in that the lands which drain to the river on the Valley floor are almost exclusively north of the river, in Madera County. There is a high bluff along most of the southerly edge of the river (the Fresno County side), substantial enough to direct drainage from the bluff top south into the Tulare Lake Basin. The San Joaquin River along the reach from Friant Dam to Mendota is therefore a natural boundary between RWMG areas, and not a central feature of a single area.

This boundary offers the opportunity for the RWMG to plan for improvements in water supply, storage and quality in the foothill and mountain areas which are the primary sources of water supply for the Valley portion of the region, allowing for application of resources from those most likely to benefit from improvements upstream to projects that would otherwise be outside of their reach were it not for the collaborative approach encouraged within the IRWMP program. As well, the RWMG brings together several agencies on the Valley floor who share a common interest in the quantity and quality of groundwater available within the local groundwater basin. Understanding that all such groundwater efforts should be coordinated between all interested stakeholders, the RWMG provides an effective vehicle for joint project efforts that would be impractical without it.

3.24 - Identification of Neighboring IRWM Efforts

Figure 3-17 shows the relationship of the Madera RWMG to its seven IRWM neighbors. Note that with the exception of approximately seven miles downstream of Friant Dam and fifteen miles centered on Mendota Pool, the entire RWMG boundary is contiguous with other IRWM efforts. The Madera RWMG boundary includes lands between the north edge of the watershed of the North Fork of the San Joaquin River and the Madera County line that are also included in the Southern Sierra IRWM planning area.

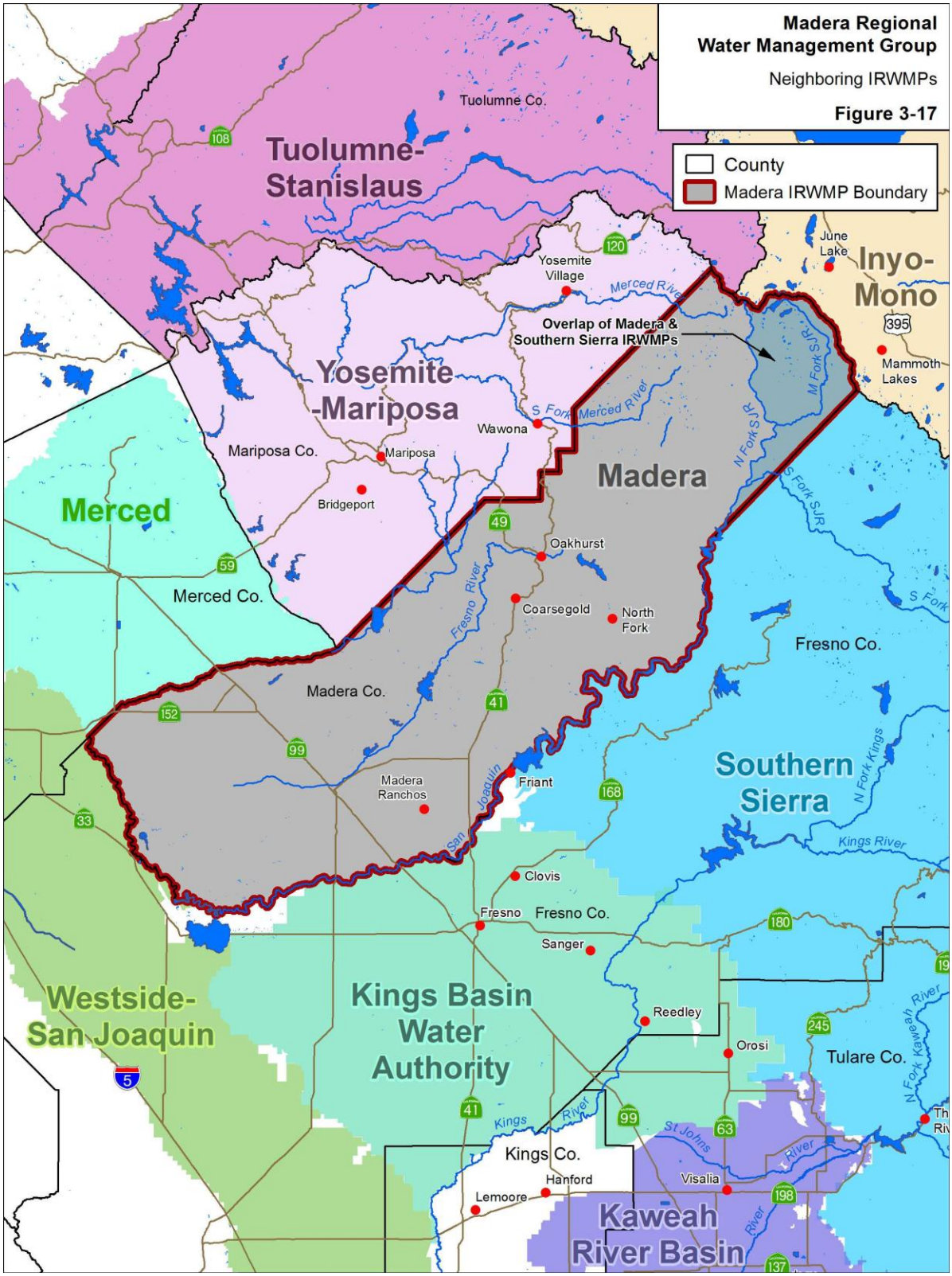

Figure 3-17 – Neighboring IRWMPs

The goals of coordinating with neighboring IRWMPs include the following:

- Reduce current and future conflicts among stakeholders
- Identify opportunities for regional or multi-agency projects
- Increase awareness of adjacent IRWMPs and their efforts
- Improve awareness of tribal, state and federal agency resources, plans and projects
- Effectively use regional technical expertise and knowledge
- Provide opportunities to advance public education

The various RWMG groups have made efforts to coordinate their boundaries as much as possible, and coordinate on water management planning. Inter-RWMG coordination efforts have included:

1. Email Lists. The Madera RWMG and all neighboring RWMGs are on each other's email distribution lists.
2. Start-up Assistance. The Madera RWMG assisted the other RWMGs in getting established, wrote letters of support, and provided copies of work performed to date so they could avoid 'reinventing the wheel'.
3. Letters of Agreement with neighboring RWMGs include:
    - Letter of Agreement on Region's Common Shared Areas – Southern Sierra RWMG
    - Letter of Agreement for Region's Common Boundary and Overall Cooperation and Collaboration – Merced RWMG
    - Letter of Agreement on Coordination and Communication between Regions – Yosemite-Mariposa RWMG
    - Letter of Agreement on Communication between Regions – Kings Basin Water Authority
    - Letter of Agreement – Devil's Postpile National Monument and Mammoth Mountain Ski Area – Inyo-Mono RWMG, Madera RWMG and Southern Sierra RWMG
    - MOU Regarding Coordination among Participants in the Sierra Nevada Water Workgroup
4. Representatives from the Madera RWMG frequently attend meetings for neighboring RWMGs
5. Roundtable of Regions. The Roundtable of Regions is an ad-hoc group of representatives from RWMG regions around the State. This group holds regular conference calls and occasional face-to-face summits.

6. Sierra Water Workgroup. The Sierra Water Workgroup (SWWG) helps coordinate and facilitate the efforts of 12 RWMG areas in the Sierra Nevada Mountains. Its mission is to assist regional efforts to protect and enhance water quality, water supply, and watershed health; to develop cooperative regional responses; and to facilitate investment in watersheds and water resources by all beneficiaries.

Chapter 15 of this Report further discusses coordination efforts with neighboring IRWM groups and their hydrological connections.

3.25 - Reliance on Delta Waters

The Region does not make use of Delta waters at this time, and none of the goals and objectives would change that status.

3.26 - Opportunities for Integration of Water Management Activities

The Region has numerous opportunities for integrating water management activities, as evidenced by the RWMG membership, existing infrastructure, and hydrologic basis for the RWMG boundaries. The RWMG includes most of the major water users in Madera County and is comprised of a diverse group of interests. This helps ensure that different types of projects will be integrated and developed. Existing infrastructure, such as flood bypass channels, major canals and monitoring systems, can help multi-agency projects to be realized. The Region especially benefits from including both the upper and lower watersheds for the three major rivers that provide water to the Valley. There are numerous opportunities to mitigate the upper watershed through projects that will improve forest health while also increasing water supplies and improving water quality for the downstream water users.

CHAPTER 4- DISADVANTAGED COMMUNITIES

4.1 - Introduction

Disadvantaged communities[1] are prevalent in the Madera Region and due to their economic disadvantages have many critical and unique water supply, water quality and wastewater issues and needs. The purpose of this chapter is to identify the Disadvantaged Communities in the Madera Region and highlight their needs. Specific topics that are discussed in this chapter include:

- Important Cultural/Social Values of the Region
- Tribal Government Involvement and Collaboration
- Economic Conditions/Trends of the Region
- Disadvantaged Communities within the Region
- Disadvantaged Community Issues & Barriers to Participation and Building Trusting Relationships
- Strategies to overcome barriers and promote increased involvement

4.2 - Important Cultural/Social Values of the Region

Like the rest of the San Joaquin Valley of California (Central Valley) the Madera Region is a predominantly agricultural area. The relatively less expensive land cost in the Central Valley contributes to it being one of the fastest growing areas in the State. Perpetual population growth in California and rising percentage of that growth occurring in the Central Valley is expected to make this region a leader in the growth rate over the next 20 years. This growth will test an already challenged region that is home to many of California's poorest communities.

Chronic high and seasonal unemployment has plagued Central Valley counties for more than three decades. Low per capita income and isolation from the economic engines of the coastal metropolitan areas between San Francisco Bay Area and San Diego have led to clusters of poverty in many of the smaller incorporated and unincorporated communities in the Central Valley, qualifying them as Disadvantaged Communities.

In these Disadvantaged Communities (while comprised typically of hard-working people, labor leaders, business leaders, and entrepreneurs collaborating to bring about change for the betterment of the region) economic advancements are often hampered by language barriers and limited levels of education. According to the 2010 census, between 20% and 25% of those

[1] The California Water Code (CWC) §79505.5(a) defines a Disadvantaged Community as being "a community with an annual median household income (MHI) that is less than 80 percent of the statewide annual MHI".

residing in the Central Valley counties were foreign-born compared to roughly 12.9% of all U.S. residents. Language barriers are also prevalent in this region. More than 40% of the people in this region speak a language in their home that is other than English, compared to approximately 20% nationwide. Relevant social and economic data is presented below in **Table 4.1**.

Table 4.1: Socio-Economic Information for Madera Region IRWMP

	Madera County	City of Madera	City of Chowchilla+
Population 2000	123,109	43,207	11,127
Population 2000 (Adjusted in 2010)	123,179	43,959	13,932
Population 2010 (July 1)	151,178	61,571	18,673
Population 2012 (July1)	152,235	62,575	18,044
Population Estimate 2013 (January 1)*	152,525	62,960	17,446
Population Estimate 2014 (January 1)*	153,897	63,008	18,971
Percent Population Growth 2013-2014*	0.9%	0.1%	8.7%
Median Age	33.2	27.2	36.3
Median Household Income (MHI)**	$47,937	$43,240	$41,373
MHI as % of State MHI ($ 61,400)**	78%	70%	67%
% of Total Workers Employed in Agriculture	38%	na	na

Sources: 2000, 2010, 2012 Census Data

* California Department of Finance County Population Estimates

** 2012 American Community Survey, U.S. Census. These incomes do not include prisoners or inhabitants of other group quarters such as nursing homes because they are not considered "households."

+ Population numbers for Chowchilla include populations at Valley State Prison (3,291) and Central California Women's Prison (3,651) facilities per Californian Department of Corrections data, 2012.[1]

4.3 - Tribal Government Involvement and Collaboration

Within the Madera IRWM Plan boundary there are two Federally recognized Native American tribes: the Picayune Band of the Chukchansi Indian Tribe and the North Fork Rancheria of Mono Indians. The North Fork Rancheria of Mono Indians is a signatory member of the RWMG.

[1] Offender Information Services Branch, Estimates and Statistical Analysis Section, Data Analysis Unit. Prison Census Data, As of December 31, 2012. Department of Corrections and Rehabilitation, Sacramento, California February 2013. Reference Number CENSUS1. Website accessed July, 2014: http://www.cdcr.ca.gov/Reports_Research/Offender_Information_Services_Branch/Annual/Census/CENSUSd1212.pdf

Income data for these Indian Tribes is not readily available from US Census or CA Department of Finance or other publicly available data bases. Nonetheless, the Tribes were included in this IRWMP's Disadvantaged Community Outreach Program.

4.4 - Economic Conditions/Trends of the Region

The economy of the Madera Region and Central Valley has been largely driven by agriculture and residential development since the second half of the twentieth century. Despite the relative success of the agricultural economies and urban growth, the Region's unemployment rate has remained among the highest in California. As noted previously, average wage levels are low due to the predominantly seasonal nature and low educational criteria of agricultural industry as a whole.

A stable and reliable long term water supply of appropriate quality in the region will need to be sustained into the future in order to allow the agricultural economy to continue to thrive and to invigorate more economic diversity. Water supply reliability and water quality are critical to maintaining the local economy in three primary sectors: jobs creation, economic diversification, and housing. Water districts, counties, cities, private sector, and other organizations will need to create good jobs at a faster rate than population growth and at proportionately higher average wage levels than in the past in order to help the region recover from the past mid-century and early current century recessions.

Jobs

Madera County, the City of Chowchilla and the City of Madera are working to create jobs, expand and diversify the economic base, and prepare the labor force for the changing global economy. Because there are often few non-agricultural employment opportunities in rural areas, proportionally higher income levels for agricultural employment is essential to reducing the economic disadvantages of the Central Valley communities. Therefore, one of the regional priorities is to strengthen the area's historical economic base of agriculture by expanding the region's job base supporting the agricultural industry. It is essential for the region's agricultural economy to remain at the cutting edge in crop selection, growing, packaging and processing practices and this will require adequate water supply and quality. Likewise communities in the foothill and mountain areas are also trying to develop the agricultural, tourism and natural resources economies.

Value-added food processing can become a much stronger industrial sector in the region, creating an increased number of well-paying jobs, but this can only occur with a sustainable supply of good quality water. Advances in harvesting and processing technology, disease and pest control, and marketing strategies have opened up new global markets for the Region's produce. At the same time, shifts in cropping patterns can have very positive impacts for employment opportunities. Shifts in consumer preferences have also created many new economic opportunities in agriculture. Demand for crops well beyond the current production levels is anticipated for the future.

Diversified Economic Base

As noted above, stable and reliable water supply is needed to improve economic stability, accelerate the pace of job growth, maintain the quality of life for residents in the region, and diversify the job base. Opportunities for diversification exist not only in the agricultural sector, but in both old and new industrial sectors. Industries such as metal fabrication and machinery that have emerged from the Region's historical agricultural economy are now heavily engaged in production of a wide range of components for the consumer economy. Newer business opportunities in areas such as information technology have also gained a foothold in the region. Further, as the content, volume and variety of agricultural output increases, opportunities for industries supporting agriculture also increase for everything from baling wire, to motorized vehicles and equipment, to packaging products and related manufacturing.

A diversified economy is critical in supporting the upward mobility of each successive generation. Historically, it has been the more recent immigrants to the region (whether from the Chinese in the 1880s and 90s, from the post-Civil War South in the 1900s, from Europe and the American Midwest in the 1930s, from Southeast Asia in the 1960s and 70s, or from Latin America over several decades) who have performed the field work that is so fundamental to the region's agricultural economy. Over time, each wave of immigrants is gradually replaced by the next, as second-generation immigrants find work in other sectors, or in different parts of the agricultural sector.

Every year, the Region plays hosts to millions of visitors, more than half of which come for recreation on public lands and waterways. As the region's economy diversifies, demand for business- and recreation- related travel will increase, with the need to develop more and better accommodations, amenities, and services.

Housing

Local governments must commit to providing appropriate programs to promote a variety of housing opportunities for all income groups, which is required to be codified in the Housing Element of their General Plan. This plan must contain policy to accommodate the Regional Housing Needs Allocation (RHNA) that is formulated at the state level, and distributed to the Council of Governments for local allocation.

Essential components of housing affordability in the Madera Region and thus, the ability of the County of Madera and Cities of Chowchilla and Madera to meet targeted RHNAs, are providing not only suitable quantity of water but also healthy quality of water. Development Impact Fees and monthly user fees are commonly the primary means of funding treatment and delivery/usage of suitable domestic water supplies by public or private water purveyors.

These water delivery and usage costs commonly constitute a higher percentage of the Disadvantaged Community household incomes and budgets. As a consequence the ability of local governments to meet their housing goals is directly affected. Often times the local government must subsidize the delivery/usage costs with local money or grant funds which are

generally not permanent. This problem is exacerbated in those Disadvantaged Communities who do not have community water systems and must rely on private wells. When groundwater supplies are, or become contaminated, homeowners are then compelled to spend money on bottled water or household treatment, due to the inability to afford to drill deeper wells to reach clean water. This brings the sum total of water expenses to levels exceeding $200 per month in some case in the Madera Region. Some Disadvantaged Communities are unable to afford alternatives to drinking contaminated water.

4.5 - Disadvantaged Communities within the Region

The California Water Code (CWC) §79505.5(a) defines a Disadvantaged Community as being "a community with an annual median household income (MHI) that is less than 80 percent of the statewide annual MHI". Relying on this definition and the most recently available Census data indicating the statewide annual MHI to be $57,385 means communities with MHI of less than $47,908 are considered a Disadvantaged Community.

Severely Disadvantaged Communities are defined in the California Water Code §13476(j) as those communities with a MHI less than 60% of the statewide MHI. Based upon the census numbers noted above, the threshold income to qualify for *Severely Disadvantaged Community* designation for the Madera Region is $34,431.

Table 4.2 lists the County Maintenance Districts, County Service Areas, City, and Private (DDW regulated) water, sewer, and/or storm drain service Districts that fall under the DWR definition of Disadvantaged Community or Severely Disadvantaged Community within the region. The table includes population and income data. **Figure 4-1** shows the general locations of these Disadvantaged Communities within the Madera IRWMP region.

Table 4.2: Madera Region Disadvantaged Communities

Location	Population	Median Household Income (MHI)*, **	% of State MHI*
State			
California	37,707,477	$57,385	100.0%
County			
Madera	153,025	$46,181	80.5%
Cities**			
Chowchilla+	18,044	$41,373	67.4%
Madera	62,575	$43,240	70.4%
County Service Areas (CSAs)			
CSA 1: Indian Lakes	1,175	$44,777	78.0%
CSA 3: Parksdale	1,188	$33,366	58.1%
CSA 5: Eastside Acres	297	$38,457	67.0%
CSA 21: Cascadel Woods (serves recreational facility only)	-	-	0.0%
County Maintenance Districts			

Location	Population	Median Household Income (MHI)*, **	% of State MHI*
No. 006: Lakeshore Park	130	$45,867	79.9%
No. 007: Marina View Heights	200	$45,867	79.9%
No. 008: Zone B: North Fork	264	$44,254	77.1%
No. 019A & B: Parkwood	1,240	$39,823	69.4%
No. 027: Gold Side Estates (sewer only)	334	$45,385	79.1%
No. 028: Ripperdan Self Help	48	$41,115	71.6%
No. 033: Fairmead District	568	$35,589	62.0%
No. 036: Eastin Arcola	150	$43,719	76.2%
No. 037A & B: La Vina	350	$36,571	63.7%
No: 046: Ahwahnee Country Club	300	$45,385	79.1%
No. 73A: Quartz Mountain	375	$44,777	78.0%
CPDH Regulated Water Systems			
Central Camp Water Company	176	$45,867	79.9%
Beashore Meadows	100	$45,867	79.9%
Mammoth Pool Mobile Home Park	60	$44,254	77.1%
Two Twenty Four Mobile Home Park	30	$44,254	77.1%
Minarets Work Center (Group Home)	30	$45,867	79.9%
John Hovannisian Water System	80	$44,254	77.1%
South Fork Mobile Home Park	50	$44,254	77.1%
Pomona Ranch Housing Center (Group Home)	361	$43,719	76.2%
Valley Teen Ranch (Group Home)	50	$43,719	76.2%
Rollin Wagon Trailer Club (MHP)	30	$37,118	64.7%
Hillview Water Co., Coarsegold	66	$44,777	78.0%
MUTUAL WATER COMPANIES			
Cascadel	300	$44,254	77%
Pike Ranch	75	$45,385	79%

* State MHI of $57,385 was derived from ESRI 2012 estimates to match all the Block Group Level data for each DAC listed, to determine percent of State MHI, except at the City level, which was not available from ESRI.

** Therefore, for the two Cities, the Census Bureau's American Community Survey 2012 estimate of $61,400 was used to calculate a percentage of State MHI. These incomes do not include prisoners or inhabitants of other group quarters such as nursing homes because they are not considered "households."

\+ Population numbers for Chowchilla include populations at Valley State Prison (3,291) and Central California Women's Prison (3,651) facilities per Californian Department of Corrections data, 2012.[1]

Severely Disadvantaged Community

[1] Offender Information Services Branch, Estimates and Statistical Analysis Section, Data Analysis Unit. Prison Census Data, As of December 31, 2012. Department of Corrections and Rehabilitation, Sacramento, California February 2013. Reference Number CENSUS1. Website accessed July, 2014: http://www.cdcr.ca.gov/Reports_Research/Offender_Information_Services_Branch/Annual/Census/CENSUSd1212.pdf

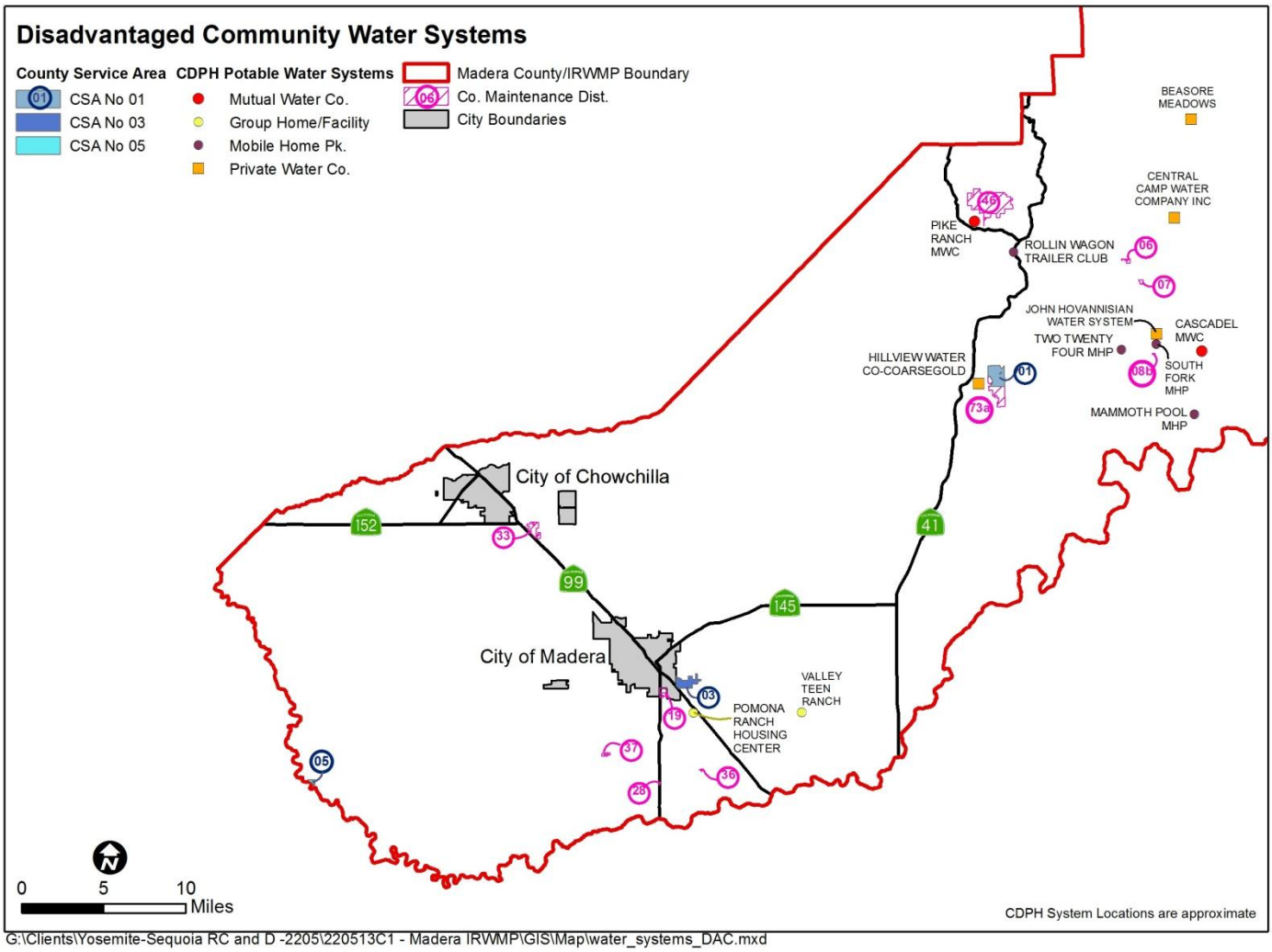

Figure 4-1 – Location of Identified Disadvantaged Community Water Service Systems

Small and Severely Disadvantaged Communities

Due to the lower income levels generally found in the San Joaquin Valley and the Madera Region, most communities meet the definition of a Disadvantaged Community. However, there is a significant difference in capacity between a large Disadvantaged Community such as the City of Madera with approximately 62,575 people and a small or severely disadvantaged community such as Fairmead or Parkwood (population of a few hundred). All disadvantaged communities have needs that should be recognized, but smaller communities may have greater disadvantages in terms of their ability to prepare competitive grant applications, participate in regional efforts, and stay apprised of technology and regulations.

The San Joaquin Valley is traditionally rural by nature, and although Valley cities are growing, the agricultural nature of the region ensures that much of the population remains dispersed throughout the vast expanse of the Valley. The region is peppered with tiny towns, often founded and still populated by farm workers, which can only continue to exist if their basic

infrastructure needs can continue to be met. Water is the most essential, and the most local, of these needs. The entities that provide domestic water service to rural towns (usually small special districts or mutual water companies) have very limited capacity. Operating a well and maintaining a simple distribution system is one thing, but when water treatment plants or other sophisticated improvements are needed, these systems' small size is crippling. They lack the economy of scale to spread costs over many users, and they often lack commercial or industrial users who could contribute revenues.

In addition to economy of scale, other unique challenges faced by small Disadvantaged Communities and Severely Disadvantaged Communities include:

- Geographic isolation, making consolidation challenging
- Low revenues and high delinquency rates
- Small or nonexistent reserve funds
- Dependence on a sole source of water
- Small pools of interested, informed individuals who can run the water systems and governing boards
- Lack of equipment and other resources
- Lack of access to technology in an increasingly technological world
- Limited ability to hire paid staff or consultants
- Isolation or exclusion from regional or state dialogue around water policy
- Lack of office space and record storage

Participation and Involvement of Disadvantaged Communities in IRWMP

The purpose of this section is to describe the involvement of the Disadvantaged Communities in the Madera Region IRWM planning process.

The Madera RWMG undertook proactive steps to ensure inclusion of the Disadvantaged Communities' needs and interests in the planning process of the IRWMP and in the regional project definitions. After the Disadvantaged Community representatives were identified, the Madera RWMG extended invitations to attend the RWMG meetings. Meeting minutes and educational materials were made available to the member representatives to help them become familiar with the Madera RWMG's efforts in developing the IRWMP. The opportunity to join the RWMG was also extended to interested Disadvantaged Communities. Because many Disadvantaged Communities did not have the ability to contribute monetary dues to the RWMG, a process was developed and adopted by the RWMG to encourage participation through a "DAC Group" (Disadvantaged Community Group) that was not asked to pay the standard RWMG annual dues.

To be a member of the DAC Group, the applying organization must, at minimum, adopt a "resolution of support" of the IRWMP. The resolution must be formally adopted by the

governing body or equivalent. (e.g., by a board of directors, or other management entity authorized to bind the entity). The Disadvantaged Community Group is recognized as a single voting entity for the purpose of governance of the full Madera RWMG. The DAC Group has one representative and one alternate representative on the RWMG.

The Madera RWMG utilized the services of a staff person from the Center for Collaborative Policy housed at California State University, Sacramento, to conduct outreach in several Disadvantaged Communities, to educate community members about the purpose of the IRWM process and importance of the Disadvantaged Communities' role in that process. Madera IRWMP Educational and Outreach meetings were held with: the Central Sierra Watershed Council in Oakhurst, with Fairmead Community & Friends, in Fairmead, and the City of Madera through a public study session with the Madera City Council. A copy of the presentation used is found in **Appendix D**.

At these meetings, attendees were canvassed as to their concerns and their opinions regarding issues faced by Disadvantaged Communities. Specifically, questions focused on adequate water availability and quality in Disadvantaged Communities, and participants were also asked to list projects that would be beneficial for their community to allay these concerns. These project ideas are listed in Section 4.3 - below.

Issues and Concerns Expressed at the Central Sierra Watershed Council Meeting:

1) DAC outreach requires time, persistence, creativity, and community specific knowledge
2) The RWMG should utilize unlikely outreach venues
3) There should be further research into alternative definitions of DACs
4) The below median-CA annual income does not always work in an area like ours
5) Promote DAC water system training, technical assistance, and capacity building – from state and local entities.
6) Create different grant proposal and grant administration requirements for the DACs
7) Investigate possibilities for water system consolidation
8) Develop realistic and adequate rate structures
9) The grant system under the IRWM program just does not work for DACs. Make it possible to create a separate grant system where DACs compete with each other, not with the larger areas and water systems.

Issues and Concerns Expressed at the Fairmead Community & Friends Meeting:

1) A second well to help keep the tank for the MD #33 full at all times (lately it's been running very low they said because the current well isn't producing like it used to).
2) Connection to a community sewer system (e.g. Chowchilla).
3) Recharge basin for co-use as a community park; also use for flood control for a portion of the community that has flood issues (with a curb and gutter project).
4) Conservation project: Low-flow fixture retrofits.
5) Extend MD#33 to include all of Fairmead.
6) Wells are running dry now.

From the Madera City Council Meeting:

1) Provide more education about personal water conservation practices and fixtures.
2) Continue to be as inclusive as possible.

Several Disadvantaged Communities have now joined the Madera RWMG. Additional organizations are continually being encouraged to join. The Disadvantaged Communities, as members of the RWMG, participated in the development of the Goals and Objectives for the IRWMP. Additional outreach efforts targeted under-represented communities that were unincorporated and included outreach to the two tribal nations.

4.6 - Disadvantaged Community Issues & Barriers to Participation

Aside from income level, the Disadvantaged Communities of the Madera Region have several significant obstacles to surmount in order to obtain sustainable safe drinking water supplies, provide sewer services and plan for flooding/stormwater related issues. Those obstacles include water quality, Technical, Managerial and Financial (TMF) Capacity, economies of scale, aging or inadequate infrastructure, and geographical location. Informal canvassing of Disadvantaged Community members also revealed the following concerns affecting participation in the IRWM process:

1.) Lack of computer technology to receive info. Disadvantaged Communities often prefer direct mailings and postings at Churches, Community Centers (Self Help has some at their multi-family developments, for example) and printed messages coming home with their kids from school. Those that have access to the internet will commonly spread information they receive by word of mouth.

2.) Method of presentation of information. Print material should not be overly technical, or overly wordy…keep it simple, use lay terms and graphical illustrations to help convey

essential message. Notices should be colorful or in other ways "attention grabbing". Water related notices, surveys, etc. should state boldly the material is IMPORTANT INFORMATION ABOUT WATER. Encouragement in the printed materials and verbal prompts from kids should read "Important: be sure and read!" (Otherwise they won't read it or will just throw it away.)

3.) Meetings are preferable following notices. Residents of Disadvantaged Communities prefer face-to-face contact rather than more impersonal written material. They prefer to attend meetings to ask questions and get additional detail. Being able to meet and build relationships with regulators and consultants face-to-face also builds more trust and helps them to feel less disenfranchised.

4.) Need known points of contact. Residents of Disadvantaged Communities like to have identified community leaders or agency representatives to whom they can express concerns, issues and questions about water by phone or personal contact; not by email, and from whom they can receive regular updates or information from.

5.) There's a lack of meaningful information on the drought reaching the Disadvantaged Communities. Residents of Disadvantaged Communities hear there's a drought, but they don't really understand what that means to them or how or in what ways it may be actually affecting their little community, and more importantly what can or will be done about it to help them. Good imagery that tells the story of how much groundwater levels are dropping, specifically in their community, not just averages county- or state-wide is more useful to them than lots of numbers or statistics. They are hungry to be educated but not with too much technical-speak that is over their heads.

6.) Not as concerned about quality as for availability of water. They know they should be concerned about quality if they get a notice that their water is bad or bordering bad. But they're not sure what to do when they experience declining quantities.

7.) Borderline Disadvantaged Communities still need help. There are many foothill communities in the Madera IRWM Region where average incomes are just above the threshold to be designated as DACs, but who need help with water issues nonetheless.

Water Quality

Occasionally, Disadvantaged Communities are issued "unsafe to drink" or "boil water" orders requiring the use of bottled water exclusively for consumption purposes. Many Disadvantaged Communities with small water supply systems in the region have a long and documented history of water quality issues including nitrate, uranium, arsenic, volatile organics and a variety of other constituents.

Some of the origins of contamination are naturally occurring, such as arsenic or uranium, which are common by-products related to the geology of the area. In other cases, origins of the contaminants are related to land use: point source and nonpoint source discharges from agricultural operations, food processing, dairies, and human wastes from failing or improperly maintained septic systems. The potential solutions are as varied as the contamination sources, and are difficult to standardize across multiple communities due to variables such as geographic location, local hydrologic conditions and chemistry, water system size, water source, and local preference. Solutions often include the following: drilling new or deeper wells, or modifying existing wells to access different parts of the aquifer; treatment facilities; source blending; consolidation in a variety of forms; or conversions to either community water or sewer services. Occasionally, cease-and-desist orders may be issued to individual polluters, but typically this is not an immediate solution since many types of pollution tends to persist long after the discharge stops.

Consumer Confidence Reports for County-operated drinking water systems (Maintenance Districts and Service Areas) are available at the County of Madera website[1]. Complete assessments for these systems can be found at the Division of Drinking Water web site.[2] These reports contain data from sampling results for detection of coliform bacteria, lead, copper, sodium and hardness, and contaminates with a *primary* drinking water standard and with a *secondary* drinking water standard. Some of the Consumer Confidence Reports indicate that while no contaminants exceeding current Maximum Contaminant Levels (MCLs) set by the State were found, the detailed assessments indicate potential for outside contamination sources most often related to local/nearby septic systems, sewer lines or wastewater treatment plants, agricultural chemical use or nearby land uses (e.g. automobile gas stations, landfills).

Technical, Managerial and Financial Capacity & Economies of Scale

Technical, Managerial, and Financial (TMF) capacity is an obstacle that Disadvantaged Communities across the country struggle with on a continual basis. TMF refers to the ability of a community to have Board leadership and personnel with the necessary technical and managerial skills to run the facilities, as well as community-wide financial wherewithal to afford the necessary steps required to obtain safe drinking water, provide sewer service or prevent flooding.

Due to financial constraints, it is often difficult, if not impossible, for a Disadvantaged Community to offer the competitive salaries required to maintain a skilled staff. However, due to the income levels within a Disadvantaged Community, water providers are extremely restricted in their ability to raise rates in order to provide for higher salaries. The result is a perpetual downward spiral where the Disadvantaged Community citizens continue to pay for

1 http://www.madera-county.com/index.php/maintenance-districts-and-service-areas-listing/annual-consumer-confidence-reports

2 http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/publicwatersystems.shtml.

services that can be substandard or virtually non-existent, and the water provider struggles to meet basic expenses; systems go into disrepair, often, ultimately failing, and then requiring an even greater magnitude of financial assistance to restore.

Economies of scale refer to the cost advantages that an enterprise obtains due to its relatively large size. Small Disadvantaged Communities often come out on the losing side of the economy of scale ratio. They shoulder many of the same costs for maintenance, permitting, pumping and staffing as any other water system would, but with a smaller, poorer customer base over which to spread the cost. In this situation, the smaller Disadvantaged Communities would often benefit from operating jointly with one or more other small Disadvantaged Communities or being absorbed into a larger nearby purveyor. Each Disadvantaged Community would then only be responsible for a smaller pro-rata portion of the staffs' salaries, operating costs, consultants cost, etc. By consolidating with other nearby Disadvantaged Communities or non-Disadvantaged Communities, they could potentially hire more skilled staff and solve a portion of the TMF capacity deficiencies.

Other TMF challenges for Disadvantaged Communities can include the inability to afford to hire an adequately skilled manager. Consequently system management often falls by default to volunteer Board members, or to an administrative person that lacks proper technical training or experience. Staff turnover, poor management and technical deficiencies can result from this situation. A small rate base also makes accumulation of reserves difficult. Small water systems often find themselves stuck in a "reactionary" operations cycle, continually focused on crises and putting out fires rather than planning ahead for capital improvements to the system. Some systems operate on a month-to-month basis like a family living from paycheck to paycheck.

These are only a few examples of the TMF challenges that Disadvantaged Communities cope with. Closer scrutiny of individual communities reveals unique situations that carry unique problems and unique solutions.

Geographical Location

As discussed previously, several of the issues associated with the Disadvantaged Communities can be solved by collaboration or consolidation with other nearby communities. However, many of the Disadvantaged Communities are geographically isolated or lack the "political mass" to negotiate with a larger nearby communities. There needs to be a motivation for collaboration or consolidation with all parties.

The efforts of the Madera RWMG are intended to provide a forum where Disadvantaged Communities and non-Disadvantaged Communities can come together to seek solutions to the regional water supply and quality issues, regardless of geography.

Aging or Inadequate Infrastructure

The water and wastewater infrastructure of many Disadvantaged Communities is substandard or aging. The communities often lack public drinking water infrastructure and rely on shallow,

inadequately constructed or sealed private wells or have old and severely leaking distribution systems that result in poor water pressure, bacterial contamination, and other drinking water challenges. Frequently, small Disadvantaged Communities lack meters and are therefore unable to monitor water use or implement conservation policies effectively. Many small Disadvantaged Communities also have inadequate or failing septic systems.

Summary of Issues in County Districts

This chapter does not provide details on each DAC in the region, but **Table 4.2** lists the issues at several of the County Districts. These serve as examples of common problems in local DACs.

Table 4.2 – Water Supply Issues in County Districts

		Number of Connections		Water Quality		Water Supply Issues		
District	Name	Existing	Ultimate	Primary MCLs	Contaminant	Max Daily Demand	Fire Flow	Single Source
MD-8A	North Fork	155	200	1	Arsenic	Yes	Yes	Yes
MD-19A	Parkwood	263	263			No	No	Yes
MD-19B	Parkwood	346	346			No	No	Yes
MD-24	Teaford	62	72	1	Arsenic	Yes	No	No
MD-28	Ripperdan	16	16			Yes	No	Yes
MD-33	Fairmead	168	237			No	No	Yes
MD-36	Eastin Arcola	20	22			No	No	Yes
MD-37	La Vina	172	174			Yes	No	No
MD-43	Miami Crk Knolls	27	27	1	Nitrate	Yes	No	No
MD-85	Valeta	19	20			No	No	Yes
CSA-03	Parksdale	510	556			Yes	Yes	No
CSA-3B	Parksdale	51	128			Yes	Yes	No
CSA-14	Chuckchanse	32	32			No	No	Yes

4.7 - Strategies to Overcome Barriers and Promote Increased Involvement

The Madera RWMG and Madera Region IRWMP plans to focus on continued outreach to the Disadvantaged Communities and encourage participation in the IRWM process, as well as support project development and implementation to accomplish water quality Goals and Objectives as part of the Madera Region plan. The Madera RWMG will produce an annual report, when deemed necessary, with an updated list of proposed projects in the region, which will include Disadvantaged Community projects that meet regional Goals and Objectives. To support this goal the Madera RWMG will be committed to continuing to encourage them to join the RWMG, fostering relationships with the Disadvantaged Communities, and maintaining an

updated list of the Disadvantaged Communities within the region and their primary contact information.

CHAPTER 5- GOALS AND OBJECTIVES

5.1 - Introduction

The Madera Regional Water Management Group (RWMG) has developed regional goals and measurable objectives to provide focus to their planning efforts. This chapter describes the adopted goals and objectives, the process for their development, methods of measuring success, and how the Region ranked and prioritized the goals. **Figure 5-1** illustrates the hierarchal relationship between a regional mission, goals, objectives, strategies, projects and funding.

Figure 5-1 – Goals and Objectives Hierarchy

Below are definitions of the terms found in **Figure 5-1.**

Regional Mission: Image or understanding of what the RWMG and its Participant Agencies will accomplish and what conditions in the IRWMP area will be like after all goals have been reached. The RWMG's Mission Statement is provided in Section 1.2 -.

Regional Goals: Desired outcomes on specific issues that support the Regional Mission. To the greatest extent practical, these goals should be specific, measurable, attainable, relevant and should have timelines attached. When goals are stated in this fashion, it is possible to know

when they have been reached. That is important so that the RWMG can accountably report progress toward achieving its Regional Mission.

Measureable Objectives: Measurable actions and methods for achieving the goals. A measurable objective can apply to more than one goal, and usually several objectives must be completed in order to fully realize a Regional Goal.

Resource Management Strategies: Land and water management strategies for achieving the Measurable Objectives and Regional Goals.

Project and Programs: Projects and programs that fit within the identified Resource Management Strategies and provide progress toward achieving one or more Measureable Objectives.

Funding: Internal and external funding to implement projects and programs.

This chapter discusses the Regional Goals and Measurable Objectives. Resource Management Strategies are discussed in Chapter 6 - Resource Management Strategies, proposed projects are discussed in CHAPTER 7 - Project Review Process, and funding alternatives are described in CHAPTER 11 - Financing.

5.2 - Goals and Objectives

The Regional Goals and Measurable Objectives for the Madera RWMG are summarized in **Table 5.1**, and are discussed in detail below. Goals are numbered in the table, and objectives are lettered below each goal. The goals and objectives are not listed in any specific sequence or priority in this table. Prioritization was addressed through a public survey that ranked the importance of each measurable objective.

The RWMG set separate goals and objectives for the Valley area and for the Foothill/Mountain area due to the distinct differences both in water sources and in felt needs. Some of the priorities of the Valley area are not as important in the mountain communities, and vice-versa. Rather than try to pit one sub-region against the other and create a Plan that is less than satisfactory to either, the Plan spells out the needs and perceived priorities of each sub-region. Doing so has allowed goals to be more fully realized and objectives made specific to each group, resulting in a Plan that is more clear and better suited to achieving the overall vision of the Madera RWMG.

Table 5.1: Summary of Goals and Objectives

Valley Goals

1 - Achieve groundwater sustainability by 2024 a. Increase regional capacity for direct recharge by 50,000 AF/Year b. Integrate flood/storm water conveyance infrastructure and regional irrigation system c. Expand CASGEM groundwater monitoring network to semi-annually measure regional groundwater on a per-aquifer basis d. Improve water reliability e. Expand water conservation efforts	**2 - Create independent local organization to manage groundwater resources** a. Determine most desirable form of organization and achieve buy-in from RWMG member agencies. b. Identify sources for ongoing operational funding for the independent local organization. c. Seek special legislation as required to create the chosen special district
3 - Expand Stakeholder Education a. Community education on water issues	**4 - Assure groundwater quality meets drinking and irrigation water quality standards** a. Identify problem areas b. Identify strategies to address chemical Constituents of Concern c. Propose projects to address waters which do not meet State Public Health Goals or irrigation standards
5 – Improve Flood Control and Protection a. Improve flood conveyance capacity b. Improve water storage capacity	

Foothill/Mountain Goals

6 - Create practical, enforceable policies resulting in sustainable groundwater management a. Determine strategies to enhance sustainability in foothill and mountain water supplies b. Develop policies to improve hard rock well sustainability and quantity c. Develop sources of surface water supply d. Implement water conservation policies to achieve the State's "20 x 2020" goal e. Fully utilize recycled wastewater from County-maintained districts and urban areas f. Develop and implement a comprehensive groundwater monitoring program by 2020	**7 - Improve water quality** a. Promote community awareness of potential water quality issues b. Protect source water areas

Proposed Foothill/Mountain Goals, continued

8 – Improve Watershed Management a. Manage forest density to increase surface runoff b. Manage vegetation to reduce fire risk and attempt to keep fires within their natural range of variability. c. Reduce erosion and sedimentation. d. Promote natural water storage through meadow, stream, wetlands and floodplain restoration.	**9 - Expand Stakeholder Education** a. Community education on water issues

Valley Goals

Goal No. 1: Achieve groundwater sustainability by 2024

This is really the over-arching goal of the entire IRWMP process. Madera County as a whole experiences groundwater overdraft currently calculated to be approximately 250,000 AF/year. This is calculated from the recently-approved Madera Regional Groundwater Plan (Provost & Pritchard, 2014) and the Root Creek Water District Groundwater Management Plan (Provost & Pritchard, 2012). All stakeholders recognize that this is not sustainable and equally recognize that the problem is of such magnitude that effective and lasting changes cannot be instantly implemented.

Achieving groundwater sustainability, which this report defines as limiting net groundwater use to not more than the natural recharge of the underlying aquifers, will require a coordinated and ongoing effort. The objectives are presented in order of desired implementation.

Objective 1a: Increase regional capacity for direct recharge by a minimum of 50,000 AF/Year. Current direct recharge capacity within the RWMG boundaries is limited to losses within canals and river channels and a number of basins operated by local water and irrigation districts. Several studies by members and stakeholders over the past decade have identified areas where direct recharge could be effectively used to replenish the deep aquifer, but to date funding limitations have precluded construction of any of these major facilities.

Land and facilities are only a part of the recharge challenge. Without water supplies, there is no recharge, so also included in this objective is expansion of the variety and volume of water supplies available to the Group members for recharge use. As a practical matter, firm water supplies are expensive and difficult to secure, so it is expected that this effort will focus on increasing the capacity to convey and retain high-flow supplies in the years when those are available.

Funding for both facilities and water supplies may come from grants, local operational funds, property assessments or other mechanisms selected by the Members and as discussed in more detail in the Chapter 11 - Finance. Local funding will be focused on a sub-regional basis on projects benefitting those supplying the funds.

Groundwater recharge will be an important part of achieving the goal of groundwater sustainability. Under this objective, the RWMG will identify potential sites for recharge facilities, water supplies that can be used for recharge, and funding opportunities.

Objective 1b: Integrate flood/storm water conveyance infrastructure and regional irrigation system.

Storm water remains an under-utilized resource within the RWMG area. The RWMG plans to develop the means and facilities to capture, retain and make beneficial use of storm water flowing through the region which is now lost to evaporation because it is impounded in areas with impermeable soils and does not effectively percolate to the groundwater. This may include construction of new retention/percolation basins sited in areas where percolation can reach the aquifer.

This objective may also include strategies to convey flood water into public irrigation canals to supplement surface water delivered from the San Joaquin River. All strategies will require compliance with NPDES regulations for storm water management.

Objective 1c: Expand CASGEM groundwater monitoring network to semi-annually measure regional groundwater on a per-aquifer basis.

Several of the RWMG members have been collaborating on an area-wide groundwater monitoring program since 2011. Known as the California State Groundwater Elevation Monitoring program, or CASGEM, this program was developed first in response to the requirements of SB 7x-7. The program is a solid start toward developing a more regional knowledge of groundwater conditions and has already generated useful data for the participating agencies.

There is, however, a need for greater data precision and integration as the RWMG moves toward management of the groundwater aquifer throughout the region. Semi-annual well monitoring will enhance the understanding of aquifer variations resulting from rainfall and irrigation pumping throughout the year. Integrating data on a per-aquifer and sub-regional basis will aid in creating specific sustainability parameters in each area of the RWMG's boundaries in a manner that is most equitable for all stakeholders. The regional monitoring program could be expanded to include additional agencies and monitoring entities.

Objective 1d: Improve Water Reliability.

Water is necessary for human consumption, personal hygiene and many economic activities in Madera County. Improved water reliability can allow agencies to meet peak demands, provide water supplies during power outages, maintenance and facility malfunctions, and provide minimum water supplies during droughts. This can be achieved by developing new water supplies, establishing a diverse portfolio of water supply options, securing outside water agreements to import water to the RWMG area, making greater use of floodwater supplies through surface and subsurface storage projects, and increasing redundancy in water systems.

Objective 1e: Expand Water Conservation Efforts.

There are limited water supplies in Madera County and stretching the existing water supplies is important. This can be achieved through water conservation by urban, industrial, commercial, landscape, municipal and agricultural water users. Urban water conservation can include many methods such as metering, public education, low-flow devices, ordinances, etc. Numerous methods are also available for agricultural water conservation such as tailwater recovery, spill prevention, metering, etc. The ultimate goal is to reduce consumption on a per capita or per acre water basis and achieve more with the same water supplies.

Goal No. 2: Create an independent local organization to manage groundwater resources

Several agencies within the RWMG area have legislative authority to regulate groundwater use within their boundaries, as a result of those agencies having adopted Groundwater Management Plans pursuant to AB 3030. The RWMG believes that the interests of all the members and stakeholders would be best served by creating a more regional, independent local organization vested with the power and resources to regulate groundwater resources within the RWMG boundaries.

This is a step short of actually adjudicating the basin. There are 22 adjudicated basins in California, where the courts has been asked to settle disputes over how much groundwater can rightfully be extracted. The courts have then determined an equitable distribution of water that will be available for extraction each year. In these adjudicated groundwater basins, the courts typically appoint a Watermaster to administer the court judgment. The RWMG is not in favor of pursuing adjudication of the basin at this time.

Objective 2a: Determine most desirable form of organization and achieve buy-in from RWMG member agencies.

This organization could take a number of forms, from a Joint Powers Authority (JPA) to several types of special districts formed under state law. The most obvious is a Groundwater Management District, which can be formed in non-adjudicated groundwater basins in California pursuant to special legislation. Currently there are 12 special districts in California charged with management of their local groundwater resources. Currently, a JPA Formation Committee has

been formed and is preparing a report on organizational options. The RWMG would like to be engaged by this Committee to offer input on the formation of a new organization.

Members have looked at several alternative organizational structures and are at this time most favorable to a Joint Powers Authority (JPA) for its ease and simplicity of creation and adequacy of authority. Numerous JPAs have been created for groundwater management within the State of California and the organizational agreements for those agencies will guide the RWMG in creating an amenable and effective agreement for use within this region.

Objective 2b: Identify sources for ongoing operational funding for the independent local organization.

Funding above and beyond what is currently available for the RWMG will be required to create and operate an independent groundwater management organization. While creation funding can come from one-time sources such as contributions and grants, operational funding will require on-going revenue streams that are secure and not subject to the votes of future agency boards of directors.

There is precedent in the RWMG for solicitation of one-time funds from member agencies. The RWMG itself is funded by the membership fees paid by the member agencies. It is possible that the member agencies would be willing and able to assess themselves again to finance the formation of an independent district. Work must still be done to create a budget for such activity, and at that time the feasibility of internally funding the creation can be better evaluated. Grant funding, however, is not sustainable or guaranteed and other funding sources will need to be developed.

Another revenue source for creation of the independent agency may be grant funding. This activity may be eligible under the Program Guidelines for the third round of Implementation Funding for the IRWM program, or from other funding sources yet to be identified. If that is the case, consideration will be given to including this project in any funding application the RWMG makes for those grants. Other grant funding sources will be explored as well, both as stand-alone funding and as potential matching funds for the IRWM implementation grants. Grant funding, however, is not sustainable or reliable, but can be effective for organization start-up or specific projects.

On-going funding might come from agency contributions or direct assessments on property owners within the independent agency's boundary. Ensuring the long-term sustainability of RWMG member contributions would be problematic given restrictions on binding future boards and councils to decisions made today. Imposition of property-based taxes or assessments would require compliance with state law and Proposition 218 requirements for elections and so would take effort to put in place as well, but would be a much more secure source of operational funding over the long term.

Objective 2c: Seek special legislation as required to create the chosen special district.

While this would be unnecessary if the RWMG chooses to create a JPA, if the group chooses to pursue a groundwater management district instead, that requires specific approval by the Legislature, which typically takes the form of special legislation carried by a local Assemblyman or state Senator. No work would be done toward this objective until a final decision is made to seek formation of a groundwater management district.

Goal No. 3: Expand Stakeholder Education

Implement strategies to raise stakeholder and citizen awareness of groundwater management issues including the magnitude of the challenge, potential mitigations, feasible projects, funding options, and consequences for failure to take effective action. This objective is critical to the success of other objectives, for many of the objectives require the support or at least the consent of the stakeholders and citizens throughout the RWMG plan area to be implemented.

Objective 3a: Community education on water issues.

Develop programs and resources for use by members in a variety of public educational settings. Subjects to be addressed will include description of the regional water situation, the seriousness and urgency of the problem at hand, how and why the situation has developed over time, how other areas within California have addressed similar situations, options for mitigation that have been identified locally, options for financing those mitigations, and potential consequences of failing to take timely and effective action. A focus of these efforts will be reaching out to the thirty disadvantaged communities identified in Madera County (see **Section 4.5**).

Numerous venues are available for public education. These may include:

- Presentations to agencies and organizations
- Service club and interest-group presentations
- Flyers and informational handouts
- Public Service Announcements to be released on radio, television or in the press
- Development of educational websites to be linked to member and other agency sites
- Other public outreach methods described in CHAPTER 14 – Stakeholder Involvement

Goal No. 4: Assure groundwater quality meets drinking and irrigation water quality standards

Certain areas within the RWMG boundaries, including both municipal and agricultural users, face water quality issues. These issues range from excessive TDS that makes irrigation less effective, to levels of contamination that exceed State Public Health Goals and Maximum Contaminant Levels for a variety of constituents of concern. Within the RWMG area, certain wells have needed treatment for nitrates, iron, manganese, arsenic, and high heterotrophic plate count (which leads to a “blue slime” in the water).

Objective 4a: Identify problem areas.
Map areas of the RWMG boundaries where quality issues have been identified. These maps will include extent of contaminant, the depth range where the contaminant has been found, and typical concentrations that have been found in groundwater.

Objective 4b: Identify Strategies to address chemical Constituents of Concern.
Once the extent of each contaminant is identified, the RWMG members will work together to identify common solutions for each constituent of concern, looking for ways to apply a common solution to a problem that may affect more than one member agency. Such solutions may include wellhead treatment, blending to improve quality, centralized treatment, and zone selection for new wells to avoid contaminated water altogether.

Objective 4c: Propose projects to address waters which do not meet State Public Health Goals or irrigation standards.
Improvement projects will be conceived to address problematic waters. These will include treatment projects but could also include alternatives for supplies that would eliminate the need to use a contaminated supply. These projects will be formalized and considered by the RWMG for including in future funding applications.

Goal No. 5: Improve Flood Control and Protection

Much of the valley is relatively flat and susceptible to flooding from various creek, sloughs and rivers. Recent history has shown that flooding can cause major damage in Madera County. Flood control and protection can be enhanced with building ordinances, water storage and flood conveyance. Climate change could also alter the timing, frequency and magnitude of flooding. A range of future conditions needs to be identified and new policies, programs and projects developed to accommodate the anticipated changes in flooding.

Objective 5a: Improve flood conveyance capacity.
Many sloughs, streams, flood bypass channels, irrigation canals and rivers convey flood flows in Madera County. Maintaining or increasing the capacity of these channels will allow some flood waters to pass through the County without causing flooding or damage. Greater capacity could also increase the ability to convey and deliver water to flood control and recharge basins. Land subsidence is believed to have reduced the capacity of some facilities. In addition, vegetation such as Arundo Donax has clogged some sloughs and reduced their conveyance capacity. Vegetation removal and eradication is a viable alternative to restore these facilities.

Objective 5b: Improve water storage capacity.
Increasing storage capacity can provide better re-regulation of water supplies and also conserve water for later use. Storage can be increased with new dams, raising existing dams, off-channel reservoirs, and groundwater recharge basins. Raising existing dams provides the greatest potential benefits in the IRWMP area. Recharge basins have lower ability to quickly capture flood flows, but are still considered effective and an important part of the overall strategy.

Foothill and Mountain Goals

Goal No. 6: Create practical, enforceable policies resulting in sustainable groundwater management

This is a task that will fall primarily to the County of Madera since there are no irrigation districts or other water management agencies with service areas extending into the foothill and mountain areas. While the County should take a lead role in tasks such as organizing stakeholder meetings and outreach into the communities, final decisions on policies will be brought back to the RWMG for discussion and approval in order to keep decision-making on policies affecting the region under a single body.

Objective 6a: Determine strategies to enhance sustainability in foothill and mountain water supplies.

In contrast to the large aquifer underlying the Valley portion of the RWMG area, water supplies for foothill and mountain users come almost exclusively from hard-rock wells. Nearly all stream and river supplies are controlled by Valley water interests who established appropriative water rights over a century ago. As a result, water management options in the foothill and mountain area are limited. Many actions that come to mind (i.e. forest thinning) would primarily enhance surface supplies rather than hard-rock supplies and would benefit Valley appropriators but not local users. Under this objective the members will work to identify viable and beneficial strategies to stabilize and enhance supplies from hard rock wells.

Objective 6b: Develop policies to improve hard rock well sustainability and quantity.

These policies may include enhancing supply to the hard rock aquifers, managing the number and size of extractions and other measures.

Objective 6c: Develop sources of surface water supply.

As discussed above, virtually all surface water in the area is controlled by long-time riparian and appropriative rights-holders. Actions under this objective must include a dual-pronged approach to possibilities for increasing surface runoff while at the same time negotiating with existing rights-holders to allow increases in surface water runoff, as a result of new practices, to be diverted by foothill and mountain users, so that those increases do not automatically accrue to the existing rights-holders.

Objective 6d: Implement water conservation policies to achieve the State's 20x2020 goal

SB7x-7, also known as the Water Conservation Act of 2009, set a goal of reducing per-capita water use by 20% by 2020. This is known as the State's 20x2020 goal. As with the Valley, achieving sustainability is a balance between increasing supply while reducing demand. This objective addresses the latter. Because of the nature of foothill and mountain development, characterized by native landscapes with little need for irrigation, the indoor/outdoor water demand balance in the foothill/mountain area is skewed farther to the indoor side. As a result,

implementation of effective indoor demand reduction measures will have a proportionally-greater impact on demand reduction here. Concerted efforts to replace traditional indoor water fixtures and older appliances with water-conserving fixtures and appliances conforming to the latest standards will be an effective tool for achieving demand reduction goals.

Objective 6e: Fully utilize recycled wastewater from County-maintained districts and urban areas.

In areas such as Oakhurst, where municipal wastewater treatment is available, the potential exists to make and utilize recycled water for outdoor irrigation of public spaces and landscaping. Doing so will require construction of additional WWTF facilities to treat at least a portion of effluent to Title 22 standards and construction of sufficient "purple pipe" recycled water distribution systems to serve eligible public spaces and landscape areas in these communities.

Objective 6f: Develop and implement a comprehensive groundwater monitoring program by 2020.

Groundwater monitoring is an effective tool to understand the change in underground storage of water, as well as gaining information about sources and flow directions of the underground. Groundwater monitoring is difficult in hard-rock aquifers, but understanding the current conditions as well as possible is important.

Goal No. 7: Improve Water Quality

Existing issues include certain wells with levels of arsenic, iron, manganese, nitrate, gross alpha radiation and uranium in excess of DDW Maximum Contaminant Levels. Each of these is a naturally-occurring substance, characteristic of water stored in decomposing granite aquifers. As a result, prevention of these contaminants is not possible. Objectives under this goal must focus on treatment and mitigation of these natural effects.

Objective 7a: Promote community awareness of potential water quality issues.

Since many wells in the foothill and mountain areas are private and serve only the property owner, quality testing requirements are less rigorous than those imposed on public water systems. Strategies under this objective should focus on the need for regular water testing and on the symptoms of contamination where those are observable by the user.

Objective 7b: Protect Source Water areas.

Identify source water areas for the local aquifers and determine feasible means to protect water supplies from contamination before the water enters the underground.

Goal No. 8: Improve Watershed Management

A large portion of the Madera IRWMP area includes wild watershed lands that hold the source waters used in large quantities for agricultural, urban, and environmental uses. This goal includes promoting best management practices for range, forest and alpine lands to protect ecosystems thereby improving water supplies and water quality. It also includes preserving open space and natural habitats that protect and enhance water resources and native species.

Objective 8a: Manage forest density to increase surface runoff.

Many forests in the IRWMP area have been modified from natural conditions. Lack of old growth trees allows greater sunlight and precipitation to reach the forest floor resulting in more dense forests. Thinning forests to reduce tree density and underbrush can increase runoff while having the ancillary benefit of reducing fire risks. Removal of exotic vegetation, that has higher water use than native vegetation, can also improve water supplies.

Objective 8b: Manage vegetation to reduce fire risk and attempt to keep fires within their natural range of variability.

Forest and brush fires can lead to erosive conditions that contribute soil, nutrients, debris and ash to water supplies. Local landowners can be educated and encouraged to reduce fire risk by using fire resistant and retardant landscaping. Land managers can reduce fire risk by creating strategic fuel breaks, conducting fuel treatments and forest restoration, thinning underbrush, and allowing low-intensity fires to consume accumulated fuel.

Objective 8c: Reduce erosion and sedimentation.

Excessive erosion and sedimentation can negatively impact wetlands, water courses and storage capacity of reservoirs. Several measures can be taken to reduce erosion and sedimentation including slope stabilization, road maintenance and decommissioning, grading and drainage improvements, and best management practices during construction.

Objective 8d: Promote natural water storage through meadow, stream, wetlands and floodplain restoration.

Natural features such as streams, meadows, wetlands and floodplains have been impacted and their ability to store water has been reduced. Restoration projects can help restore the natural habitat conditions, while simultaneously restoring natural hydrologic functions. Restoring these features can help to regulate water and reduce peak flows.

Goal No. 9: Expand Stakeholder Education

Implement strategies to raise stakeholder and citizen awareness of groundwater management issues including the magnitude of the challenge, potential mitigations, and consequences for failure to take effective action.

Objective 9a: Community education on water issues.
See Objective 3a under Valley Goals. Similar objectives and strategies will apply in the Foothill/Mountain area.

5.3 - Process to Develop Goals and Objectives

Water is used by a diverse group of stakeholders in the Madera Region for a variety of needs including municipal and industrial, agriculture, hydropower, and environmental flows. Water management issues for the region are broad and include water supply, water quality, flood management, environmental stewardship, regional self-sufficiency, and infrastructure development. This wide spectrum of water users and issues challenges water managers in the region. The regional goals expressed in this Plan were created to address the entirety of the Region's water management needs, issues and conflicts.

The regional goals and measurable objectives were established through a collaborative process that included meetings, stakeholder surveys, public workshops, and open discussions. This process included several iterations from 2006 through 2014. The groups involved included the Regional Water Management Group and the general public. The process produced several lists of issues, conflicts, potential goals and objectives in the region. The information in **Chapter 3- Region Description** and **Chapter 6 – Resource Management Strategies** was used extensively in developing the Goals and Objectives. These were combined into the final list of regional goals and measurable objectives found in this Plan. The final list was reviewed and approved by the RWMG in the form of a Draft Goals and Objectives Chapter and then subsequently with approval of the IRWMP.

5.4 - Methods for Measuring Objectives

The guidelines set forth by DWR require that each objective supporting a regional goal include success measures, which may either be qualitative or quantitative depending upon the nature of the goal itself. Success measures will be used to help determine if objectives are achieved. These monitoring activities will be used for the following purposes:

1. Document success in RWMG annual reports
2. Document information needed in progress reports for implementation grants
3. Document overall success of the RWMG in efforts to secure additional grant funds
4. Provide information to RWMG members for evaluating progress and priorities to achieving regional goals

Table 5.2 summarizes how objectives will be measured. These are merely suggestions for RWMG stakeholders. Actual monitoring metrics will need to be determined for specific projects when they are implemented.

Table 5.2: Measurement Criteria for the Objectives of the MIRWM Plan.

No.	Objective	Methods for Measurement
1a	Increase regional capacity for direct recharge by a minimum of 50,000 AF/Year	• Number of groundwater recharge facilities in operation • Number of acres developed for intentional recharge • Number of acre-feet of water available for recharge use • Number of acre-fee of water actually diverted for recharge use • Quantity of groundwater irrigation replaced by imported surface water irrigation (in-lieu recharge) • Quantity of potential recharge water lost to evaporation in recharge facilities
1b	Integrate flood/storm water conveyance infrastructure and regional irrigation system	• Number of projects integrating flood/storm and irrigation system conveyance completed • On-going evaluation of remaining opportunities to integrate flood/storm and irrigation system conveyance
1c	Expand CASGEM groundwater monitoring network to semi-annually measure regional groundwater on a per-aquifer basis	• Number of monitoring well sites in operation • Number of monitoring wells for which a well log is available • Number of member and affiliate agencies participating in the monitoring program • Number of wells being monitored and reported twice annually
1d	Improve water reliability	• Number of water reliability projects implemented • Increase in dry year water supply in acre-feet • Number of acres/people with improved water reliability
1e	Expand water conservation efforts	• Number of acre-feet of water conserved • Number of water conservation projects implemented
2a	Determine most desirable form of organization and achieve buy-in from RWMG member agencies	• Completion of internal report on available organizational options • Completion of member vote on most desirable form of organization
2b	Identify sources for ongoing operational funding for the independent local organization	• Report to IRWMG summarizing funding options for the independent local organization
2c	Seek special legislation as required to create the chosen special district	• Identify local Assemblyman • Complete Special Legislation bill • Assemblyman introduces special legislation in the Assembly
3a, 9a	Community education on water issues	• Number of new programs • Number of days of educational activity provided • New materials and dissemination
4a	Identify problem areas	• Number of water quality studies • Number of problem areas identified and characterized

No.	Objective	Methods for Measurement
4b	Identify strategies to address chemical constituents of concern	• Number of water quality studies • Number of projects implemented to improve water quality
4c	Propose projects to address waters which do not meet State Public Health Goals or irrigation standards.	• Number of projects implemented • Number of projects completed that mitigate water quality violations
5a	Improve flood conveyance capacity	• Number of projects completed • Miles of channels improved • Total increase in conveyance capacity in cfs
5b	Improve water storage capacity	• Number of storage projects completed • Additional acre-feet of storage capacity developed
6a	Determine strategies to enhance sustainability in foothill and mountain water supplies	• Number of local stakeholder meetings to discuss strategies and recommend to IRWMG • IRWMG adopts foothill/mountain water supply sustainability strategies
6b	Develop policies to improve hard rock well sustainability and quantity	• Number of local stakeholder meetings to discuss strategies and recommend to IRWMG • IRWMG adopts foothill/mountain hard rock well sustainability strategies
6c	Develop sources of surface water supply	• Number of meetings with Valley-based water rights-holders • Number of local stakeholder meetings to discuss strategies and recommend to IRWMG • IRWMG adopts foothill/mountain surface water enhancement strategies
6d	Implement water conservation policies to achieve the State's 20x2020 goal	• Number of local stakeholder meetings to discuss strategies and recommend to RWMG • Number of outreach meetings with foothill/ mountain water purveyors • IRWMG adopts foothill/mountain water conservation policies
6e	Fully utilize recycled wastewater from County-maintained districts and urban areas	• Identify and contact foothill/mountain Publicly Owned Treatment Works operators • Number of outreach meetings with identified POTW operators • Number of potential recycled water projects identified • Quantity of potential recycled water to be produced in identified projects

No.	Objective	Methods for Measurement
6f	Develop and implement a comprehensive groundwater monitoring program by 2020	• Number of local stakeholder meetings to discuss strategies and recommend to RWMG • Number of potential groundwater monitor wells identified • Percentage of identified wells committed to a monitoring program • Number of semi-annual monitoring reports prepared
7a	Promote community awareness of potential water quality issues	• Number of new programs • Number of days of educational activity provided • New materials and dissemination
7b	Protect Source Water areas	• Number of local stakeholder meetings to discuss strategies and recommend to IRWMG Number of source water areas identified • Percentage of source water identified • Number of source water protection projects and programs identified
8a	Manage forest density to increase surface runoff	• Area of forest thinned • Estimated volume of increased runoff
8b	Manage vegetation to reduce fire risk and attempt to keep fires within their natural range of variability.	• Number of projects completed • Area of land managed to reduce unnaturally large fires • Number of acres of fuel breaks
8c	Reduce erosion and sedimentation	• Amount of development that is relocated away from sensitive areas • Acreage of protected lands • Number of properly employed sediment/erosion BMPs • Number of studies evaluating land use and erosion/sedimentation
8d	Promote natural water storage through meadow, stream, wetlands and floodplain restoration.	• Number of meadows, wetlands, streams or floodplains restored • Number of acres/miles of areas restored. • Water temperatures pre-and post restoration • Groundwater level change • Number of special status species' habitat improved in restored areas • Number of acre-feet stored or delayed in runoff

5.5 - Goal and Objective Ranking

The regional objectives under each goal were ranked according to a survey of local stakeholders. The nine broad regional goals were not ranked and are considered co-equal by the RWMG.

The survey was sent to the RWMG members and all 85 contacts on the RWMG's email list. Respondents were asked to rank each objective as Low (1), Medium (2) or High (3) importance. Specific definitions for these categories were not provided because they are already basic and descriptive. The results of the survey are shown in **Table 5.3.** Detailed results are provided in **Appendix E**.

The survey was completed by twelve stakeholders and included a diverse range of participants including local farmers, concerned citizens, watershed groups, Native American tribes, non-profit organizations, disadvantaged communities, water districts, irrigation districts, and County government. Three participants did not state their affiliation. Some stakeholders only completed a portion of the survey, typically just the Valley goals or just the Foothill/Mountain goals

The sample size is not considered large enough to form strong conclusions but the results are still useful. The average importance for 26 out of 27 goals fell within Medium and High importance (2 to 3), indicating that almost all the objectives are considered important. Out of all the individual votes, 92% were Medium or High importance

The highest priority objectives relate to groundwater recharge, water reliability and stakeholder education. These survey results are provided for informational purposes and to help set focus and goals. The results may or may not be used in selecting which projects should be included in grant applications or supported by the RWMG.

Table 5.3: Results of Survey - Ranking Regional Objectives

No.	Objective	Low	Medium	High	Ave
1a	Increase regional capacity for direct recharge by 50,000 AF/Year	0	2	12	2.86
3a	Community education on water issues (Valley)	0	3	11	2.79
1d	Improve water reliability	0	3	11	2.79
9a	Community education on water issues (Foothills and Mountains)	0	3	9	2.75
2a	Determine most desirable form of groundwater mang. org. and achieve buy-in from RWMG	1	2	11	2.71
5b	Improve water storage capacity	1	2	11	2.71
7b	Protect source water areas	0	4	8	2.67
1e	Expand water conservation efforts	0	5	9	2.64
6c	Develop sources of surface water supply	0	5	7	2.58
6f	Develop and implement a comprehensive groundwater monitoring program by 2020	0	5	7	2.58
4a	Identify (water quality) problem areas	2	2	10	2.57
2b	Identify sources for ongoing operational funding for the independent local organization.	0	6	8	2.57
8a	Manage forest density to increase surface runoff	1	4	7	2.50
7a	Promote community awareness of potential water quality issues	0	6	6	2.50
8d	Promote natural water storage through meadow, stream, wetlands and floodplain restoration.	1	4	7	2.50
4b	Identify strategies to address chemical Constituents of Concern	1	6	7	2.43
8b	Manage vegetation to reduce fire risk and keep fires within natural range of variability	2	3	7	2.42
6a	Determine strategies to enhance sustainability in foothill and mountain water supplies	1	6	6	2.38
1c	Expand CASGEM groundwater monitoring network	1	7	6	2.36
6d	Implement water conservation policies to achieve the State's 20x2020 goal	1	6	5	2.33
4c	Propose projects to address waters which do not meet State Public Health Goals	2	6	6	2.29
5a	Improve flood conveyance capacity	2	7	5	2.21
1b	Integrate flood/storm water conveyance infrastructure and regional irrigation system	2	7	5	2.21
6b	Develop policies to improve hard rock well sustainability and quantity	2	6	4	2.17
6e	Fully utilize recycled wastewater from County-maintained districts and urban areas	3	4	5	2.17
8c	Reduce erosion and sedimentation.	3	6	3	2.00
2c	Seek special legislation as required to create the chosen special groundwater management district	4	6	3	1.92
	Total	**30**	**126**	**196**	
	Percent	**8%**	**36%**	**56%**	

Notes: Valley objectives are numbered 1 to 5 and shown in green text; foothill/mountain objectives are numbered 6 to 9 and shown in brown text

CHAPTER 6- RESOURCE MANAGEMENT STRATEGIES

6.1 - Introduction

A resource management strategy (strategy) is defined as a project, program, or policy that helps local agencies and governments manage their water and related resources (DWR, 2013 California Water Plan Update). Resource management strategies include structural and non-structural solutions. Structural solutions involve development of capital facilities such as conveyance structures (pipelines or canals), recharge ponds, and water treatment plants. Non-structural solutions are programmatic or policy solutions, such as drought response plans or water conservation ordinances.

The 2013 California Water Plan Update describes 36 different resource management strategies. The State does not expect that all strategies be practiced in every region, but encourages water managers to employ as many strategies as practical to diversify their water management portfolio. This Integrated Regional Water Management Plan (IRWMP) evaluates all 36 strategies listed in the 2013 California Water Plan Update, including a strategy on Drought Planning added by the Madera Regional Water Management Group. The evaluations include the following:

- Description of the strategy
- Discussion of current use in the Madera Region
- Evaluation of applicability in the Madera Region
- Constraints the strategy may place on development
- Impacts of climate change on the effectiveness of the strategy
- Potential flexibility of strategy applications to adapt to climate change

The 37 State strategies were evaluated through an open and transparent process by the RWMG and interested parties, in accordance with the criteria listed above.

Table 6.1 shows the evaluated strategies and their applicability to the Madera Region in the Valley area and the foothill/mountain area. Thirty three of the strategies are currently applicable to some portion of the IRWMP area. Those that are not currently applicable will be periodically re-evaluated as part of the IRWMP's adaptive management strategy.

Table 6.1: Resource Management Strategies

Category	Strategy	Applicable to Valley Area	Applicable to Foothill/ Mountain Area
Reduce Water Demand	Agricultural water use efficiency	X	
	Urban water use efficiency	X	X
Improve Operational Efficiency and Transfers	Conveyance — Delta		
	Conveyance — Regional/Local	X	
	System Reoperation		
	Water Transfers	X	
Increase Water Supply	Conjunctive Mang. & Groundwater Storage	X	
	Desalination (Brackish and Sea Water)	X	
	Precipitation Enhancement		X
	Recycled Municipal Water	X	
	Surface Storage — CALFED		X
	Surface Storage — Regional/Local	X	X
Improve Flood Management	Flood Management	X	
Improve Water Quality	Drinking Water Treatment and Distribution	X	X
	Groundwater/Aquifer Remediation	X	
	Matching Water Quality to Use	X	X
	Pollution Prevention	X	X
	Salt and Salinity Management	X	
	Urban Stormwater Runoff Management	X	
Practice Resource Stewardship	Agricultural Land Stewardship	X	
	Ecosystem Restoration	X	X
	Forest Management		X
	Land Use Planning and Management	X	X
	Recharge Area Protection	X	
	Sediment Management	X	X
	Watershed Management		X
People and Water	Economic Incentives	X	X
	Outreach and Engagement	X	X
	Water and Culture		X
	Water-Dependent Recreation	X	X
Other	Crop Idling for Water Transfers	X	
	Dewvaporation & Atmospheric Pressure Desal.	X	
	Fog Collection		
	Irrigated Land Retirement	X	
	Rain-fed Agriculture	X	
	Waterbag Transport/Storage Technology		
	Drought Planning	X	X

Following is a general description of each strategy and its use in the Madera Region. Refer to the draft 2013 California Water Plan Update for further detail on each strategy.

6.2 - Reduce Water Demand

Agricultural Water Use Efficiency

Agricultural water use efficiency has received a great deal of attention both by the County and the member irrigation/water districts as growers have been encouraged to move from flood irrigation to sprinklers and then to drip and micro-spray systems. Irrigation efficiency can be further improved through a variety of measures which can feasibly be taken by the governing irrigation or water district, and/or by local growers. The 2013 California Water Plan Update lists 16 Efficient Water Management Practices (EWMPs) including:

Critical EWMPs:

- Measure the volume of water delivered to customers with sufficient accuracy to comply with subdivision (a) of California Water Code Section 531.10 and to implement rates based on volume used.
- Adopt a pricing structure for water customers based at least in part on quantity delivered.

Other EWMPs:

- Facilitate alternative land use for lands with exceptionally high-water duties or whose irrigation contributes to significant problems including drainage.
- Facilitate use of available recycled water that otherwise would not be used beneficially, meet all health and safety criteria, and do not harm crops or soils.
- Facilitate the financing of capital improvements for on-farm irrigation systems.
- Implement an incentive pricing structure that promotes one or more of the following goals:
    a. More efficient water use at the farm level
    b. Conjunctive use of groundwater
    c. Appropriate increase of groundwater recharge
    d. Reduction in problem drainage
    e. Improved management of environmental resources
    f. Effective management of all water sources throughout the year by adjusting seasonal pricing structures based on current conditions
- Expand line or pipe distribution systems, and construct regulatory reservoirs to increase distribution system flexibility and capacity, decrease maintenance, and reduce seepage.
- Increase flexibility in water ordering by, and delivery to, water customers within operational limits.
- Construct and operate supplier spill and tail water recovery systems.

- Increase planned conjunctive use of surface water and groundwater within the supplier service area.
- Automate canal control structures.
- Facilitate or promote customer pump testing and evaluation.
- Designate a water conservation coordinator who will develop and implement the water management plan and prepare progress reports.
- Provide for the availability of water management services to water users. These services may include, but are not limited to, all of the following:
    A. On-farm irrigation and drainage system evaluations.
    B. Normal year and real-time irrigation scheduling and crop evapotranspiration information.
    C. Surface water, groundwater, and drainage water quantity and quality data.
    D. Agricultural water management educational programs and materials for farmers, staff, and the public.
- Evaluate the policies of agencies that provide the supplier with water to identify the potential for institutional changes to allow more flexible water deliveries and storage.
- Evaluate and improve the efficiencies of the supplier's pumps.

Regulated deficit irrigation can also help to reduce water demands, especially in years when water supply is limited. Regulated deficit irrigation requires intensive monitoring. More information is provided in the 2005 California Water Plan Update (pages 4-207 to 4-210).

Anti-transpirants (chemicals applied to foliage that reduce plan transpiration) may hold promise for conserving water in the future. Currently they are commercially available and used in gardens, nurseries, on cut flowers and on Christmas trees. Use on large-scale agriculture is still experimental and has several obstacles to overcome, including potential reduction in crop yields, high cost, and difficulty applying to large leaf/foliage areas of some crops.

California Senate Bill 7x-7 (SB7x-7) requires agricultural water suppliers to prepare an Agricultural Water Management Plan (AWMP) by the end of 2012, which addresses each of the aforementioned EWMPs. Agencies that do not complete an AWMP will not be eligible for certain State grants or loans. Water Management Plans prepared for the USBR will be considered suitable replacements for the State AWMP if they include some supplementary material.

Drip and micro-irrigation systems have been widely promoted as a method to reduce water demands. Some local irrigators and water managers have found that these systems do not conserve total water consumed over time, because they result in reduced deep percolation, and their precise water application paradoxically increases yields and thereby increases

evapotranspiration demands. These systems have also allowed sloped land that is unsuitable for flood or furrow irrigation to be developed, thus increasing water demands. In summary, these systems have helped to increase agricultural output, but have not likely reduced water consumption.

Some obstacles to implementing EWMPs include: lack of grower interest, funding and cost-effectiveness, high water-use efficiencies in some areas that reduce feasibility or urgency of further water conservation, and local conditions such as topography, micro-climates, etc., that make certain EWMPs impractical.

Urban Water Use Efficiency

Significant reductions in urban demands could make a measurable difference in overall water use. Since the overwhelming majority of urban water supplies are drawn from groundwater, these demand reductions would affect the current overdraft within the Region directly. In addition to the water supply benefits, certain Best Management Practices (BMPs) and Demand Management Measures (DMMs) discussed below will also benefit regional water quality. These BMPs are taken from the 2013 Water Plan issued by the Department of Water Resources and are updated and revised from the BMPs which appeared in earlier versions of the Water Plan.

Table 6.2: Best Management Practices

BMP No.	BMP Title	Description
1.1	Utility Operations Programs — Operations Practices	Designate a water conservation coordinator for the agency. Implement and maintain a water waste prohibition ordinance or regulation. Implement prohibitions on gutter flooding, single-pass cooling systems, and non-recirculating water. Monitor water softener efficiency and usage.
1.2	Utility Operations Programs — Water Loss Control	Implement a full-scale system water audit, maintain in-house records of audit results and completed American Water Works Association audit worksheets.
1.3	Utility Operations Programs — Metering	Install water meters for all new connections and bill by volume of use. Implement a program for retrofitting existing unmetered connections and bill by volume of use.
1.4	Utility Operations Programs — Pricing	Implement rate structures and volumetric rates for water service by customer class.
2.	Education Programs — Public Information Programs	Maintain an active public information program about water conservation. Implement a school education program to promote water conservation.
3.	Residential	Conduct indoor and outdoor residential water use surveys. Implement an enforceable ordinance or provide incentives to replace high-flow water use fixtures with low-flow counterparts. Offer rebates for high-efficiency washers. Offer rebates for high-efficiency, low-flow toilets.

BMP No.	BMP Title	Description
4.	Commercial, Industrial, and Institutional (CII)	Rank commercial, industrial, and institutional customers according to use. Implement either a CII b water use survey and customer incentives program or CII conservation program targets.
5.	Landscape	Develop marketing and targeting strategies for landscape surveys. Implement water use budgets for large landscapes.

Source: California Urban Water Conservation Council

Many of these BMPs are practiced in the Madera Region, but the level of practice varies by agency. Most of these BMPs are more oriented to municipal/industrial uses than to agriculture, and this is reflected in the number of these BMPs that are in use by each agency. For example, both cities and the County have implemented BMPs 1.1, 1.3 and 1.4 to one degree or another, and all three have residential water conservation ordinances (BMP 3) and landscape water use ordinances (BMP 5) in place.

SB7x-7, also known as the Water Conservation Act of 2009, set a goal of reducing per-capita water use by 20% by 2020. The 2013 CalGreen building code sets a goal of 20% reduction of indoor water use in new buildings. To meet these goals, some agencies will need to increase their urban water conservation efforts. Urban Water Management Plans are the primary document for recording urban water conservation measures. A list of agencies that have current Urban Water Management Plans (UWMPs) is provided in Chapter 13 – Relation to Local Water Planning.

Obstacles to implementing urban water use efficiency measures include funding, public acceptance, reduced revenue from lower water sales, and poor economics (other alternatives such as developing new water supplies may be less expensive).

6.3 - Improve Operational Efficiency and Transfers

Conveyance- Delta

None of the Madera member agencies receive water through the Delta, and accordingly there is no opportunity in the Region to implement projects, policies or procedures to impact the efficiency of Delta conveyance options.

Conveyance – Regional/Local

The strategy deals with improvements to facilities, practices and procedures relative to moving water into and through the region from the source to areas of use. It includes both natural channels and constructed facilities, such as canals, pipelines, pumping plants, and diversion structures, of all sizes from small, local end-user distribution systems to large systems that deliver water to and within each of the irrigation districts. Specific objectives for natural and managed water conveyance activities include enhancements to urban and agricultural water

deliveries, flood management, consumptive and non-consumptive environmental uses and recreational opportunities.

All conveyance facilities have maximum capacities. Depending upon the way the facility is used, these capacity limitations may come into play when managing flood releases, or when there are competing demands for conveyance during peak summer irrigation periods. The region can cite examples of effective cooperative use of conveyance facilities. For example, the two cities both allow recharge of irrigation district water in City storm drain basins during non-peak rainfall months, and likewise the irrigation districts allow the cities to use certain irrigation canals to convey storm water from City basins after rainfall events, to prepare the basins for the next event in a timely manner.

There is opportunity to improve overall system flexibility and capacity through implementation of more cooperative agreements as well as through installation of automation and control systems. Increased water brought into the region as a result of conveyance improvements may be used directly for irrigation or, following treatment, for delivery to municipal water users. It might also be used in an expanded direct recharge program benefitting both the irrigation districts and the cities, and potentially other member agencies who participate in the necessary facilities projects.

The need for increased conveyance to capture flood-related surface flows would be even more important if the predicted changes in precipitation timing and intensity due to climate change occur. In general, the consensus among climate scientists is that the local precipitation season will change over time to become heavier earlier in the water year, particularly in the fall months. While the overall quantity of precipitation has been forecasted to drop by about 5 percent over the next 50 years, models anticipate that precipitation will come increasingly as rainfall rather than as snowpack, meaning the annual stream runoff cycle would change, and more water would be expected early in the season. It is very possible this change would result in the current reservoir system becoming inadequate to regulate as great a percentage of the overall runoff as has happened historically and this will result in an increasing percentage of runoff becoming uncontrolled or “flood release.”

Increased storage capacity (on-stream or off-stream) as well as increased regional conveyance capacities may be needed to adequately deliver water during different times of the year, and to deliver higher volumes to recharge or off-stream storage facilities during the available short flow windows.

System Reoperation

System reoperation refers to changes to existing operational procedures of existing reservoirs and conveyance facilities, in an effort to increase water-related benefits. System reoperation can potentially improve the efficiency of existing water uses, and it may increase the use of one resource relative to another. In the largest sense, system reoperation could involve changing reservoir release schedules to improve fisheries or provide flood control. Reoperation may require additional facilities or permits, and is sometimes legally challenged.

In the case of the San Joaquin River, the USBR manages operation of Friant Dam and the rest of the Central Valley Project (CVP) Friant Division. As a Reclamation dam, the priority of Friant operations was originally provision of maximum irrigation water to the various contracted users. Subsequent court decisions and agreements have modified that strategy over the years, but the operation of the reservoir remains in the hands of the Bureau and modification by the member agencies is not considered feasible. Friant Dam is already being reoperated in attempt to meet river restoration demands at minimal cost to other water users. The US Army Corps of Engineers and large power companies operate other reservoirs in the region, and likewise there is little the RWMG can do change operations.

It is believed that the water supplies are likely being operated as efficiently as possible, within existing legal obligations. However, individual members, such as irrigation districts, may be able to adjust their own operations to reduce uncontrolled and flood releases. Changes in water demands and climate change could provide the need for the Bureau to consider re-operation of the dam.

Water Transfers

The California Water Code (CWC) defines water transfers as the temporary or long-term change in the point of diversion, place of use, or purpose of use as a result of a transfer or exchange of water or water rights. Water transfers have become a common part of the local water management landscape. Inbound transfers can help areas such as the region obtains new water supplies, increase supply reliability, reduce overdraft. Conversely, outbound transfers can and do generate substantial revenue that can be used for facility and operational improvements, or to offset operations and maintenance expenses that would otherwise be paid by user fees or assessments.

Constraints to water transfers in the region include: 1) consistency with Friant Division CVP regulations; 2) consistency with other local policies; 3) local and state political acceptability; 4) regulatory issues; 5) cost effectiveness; and 6) availability of facilities to facilitate the transfer.

Water transfers can be made either within the San Joaquin river basin (intra-basin) or between agencies located in different geographic areas (inter-basin). Intra-basin projects can be useful for conjunctive use projects, and to reduce the volume of water that flows out of the basin in wet years, but don't necessarily increase the total available water within the basin. Inter-basin transfers, on the other hand, can become a sustainable source of additional water supplies.

Depending upon the structure of the transfer agreement, these supplies may be available every year regardless of water conditions, or may be available only in high-flow water years. The latter are useful mainly for recharge and field irrigation projects, while the former can be the basis for long term irrigation plans for permanent crops or even for municipal and industrial supplies subject to water reliability requirements in the state Water Code.

Intra-basin transfer agreements are already in place between Root Creek Water District and both Madera Irrigation District and Chowchilla Water District, and between Chowchilla Water District and Merced Irrigation District. One inter-basin agreement already exists, between Root Creek Water District and Westside Mutual Water Company in Kern County, to supply water for both for recharge (direct recharge and by in-lieu recharge agreements with neighboring farmers) and municipal supply for the Riverstone development project.

6.4 - Increase Water Supply

Conjunctive Management and Groundwater Storage

Maximizing efficient use of both groundwater and surface water resources within the Region requires coordination and planned management of both. Sometimes called conjunctive use, or conjunctive management, these strategies of coordination can be used to improve overall water supply reliability, improve environmental habitats, reduce groundwater overdraft (and related impacts including land subsidence) and protect or improve water quality. Overdraft and its related consequences are already having profound impacts on water users within the Region, motivating the RWMG to seek out new conjunctive management strategies as part of the overall program of mitigation.

Overdraft causes conflicts between water users, economic losses to both urban and agricultural interests, as well as significant and sometimes permanent impacts to the environment. A conjunctive use strategy includes several parts, including both percolated and in-lieu recharge during high-flow years to build up aquifer storage, followed by groundwater pumping and use during dry periods, and a robust monitoring program to help prevent negative impacts and verify the quantity of water available in underground storage.

Conjunctive management has great potential to increase groundwater storage and water reserves. Millerton Lake, behind Friant Dam, can store up to 520,000 acre-feet (AF) of water. However, the San Joaquin watershed has an average runoff of over 1.5 million acre-feet per year. The almost-one-million acre-feet that cannot be captured and regulated by Friant Dam is potentially lost if it cannot be diverted and used in real time by the member agencies. Because the river flow often comes at a very high rate at a time of year when irrigation demands are less than peak, there is a limit to how much water can be beneficially used directly by agricultural interests. Conjunctive management opportunities also exist with water from the Fresno and Chowchilla Rivers. Construction of large and effective water sinking basins has the potential to add several hundreds of thousands of acre-feet of effective storage within the Region with a relatively low cost of water supply.

Water impounded in recharge and storm water basins can also be used to meet local demands. For example, the Fresno Metropolitan Flood Control District in the neighboring Upper Kings RWMG is now using surface water in many of its storm water retention basins as a source of landscaping irrigation within and around the basins.

The MID Water Supply Enhancement Project (Project), as proposed, is a major conjunctive use project that involves water-banking facilities to recharge groundwater for water supply enhancement. The Project is located on Madera Ranch and consists of approximately 13,646 acres, located in southwestern Madera County south of the Fresno River, approximately five miles southwest of the City of Madera. The water bank could ultimately have capacity to store up to 250,000 AF/year. The water will recharge the groundwater basin through natural swales (ancient creek beds) and with 323 acres of recharge basins. The Project aims to bank available surplus surface water in wet years for use in dry years. Currently, the Project is in the planning phase.

Constraints to developing conjunctive use facilities include:

- Access to prime recharge lands;
- Cost of purchasing land and developing recharge basins and recovery wells;
- Limitations in conveyance capacity to deliver large quantities of water to basins;
- High operational costs, especially if recharged water is not later recovered and sold;
- Risk that water stored cannot be extracted when needed because of infrastructure limitations, water quality or water level concerns, political obstacles, and institutional or contractual provisions;
- Lack of assurances to prevent third-party impacts and increase willingness of local citizens to participate;
- Potential for recharge to cause migration of known contaminants that would affect municipal or domestic supplies.

In the long term, the RWMG should seek opportunities for inter-basin conjunctive use programs that include water importation and groundwater banking involving member agencies and third parties, as long as these projects benefit the Region and appropriate safeguards are established.

Desalination – Brackish and Seawater

As in many other areas of the world, the shortage of water within the Region is really a shortage of fresh, usable water. A relatively large amount of salty or brackish water underlies most of the valley portion of the Region. Desalination is a water treatment process for the removal of salts from water to allow for beneficial use. Desalination is not only used on seawater, but also on lower-salinity (brackish) water from groundwater or other sources.

In California, reverse osmosis has been the principal method for desalination, though progress is being made with other processes including thermal distillation. Reverse osmosis, which is at its essence a form of extremely fine filtration, can also be used to remove other specific contaminants in water, such as trihalomethane precursors, volatile organic carbons, nitrates, and pathogens. The benefits of desalination include:

- Increased water supply;
- Reclamation and beneficial use of impaired waters;
- Increased water supply reliability during drought periods;
- Diversified water supply sources;
- Improved water quality; and
- Public health protection.

The constraints for desalination in the Region include capital cost for plant construction, operational expenses, and the necessity for brine disposal. These constraints limit the applicability of desalination within the Region to users which can support a water cost of approximately $1,000 per acre-foot. While some urban areas in the state pay that much for their water, all of the urban areas in the Region currently have less-expensive supplies available. As a result, there are no current opportunities for application of desalination within the Region and it is not considered a viable strategy at this time.

Precipitation Enhancement

Precipitation enhancement, more commonly called "cloud seeding," involves artificial stimulation of clouds by injecting into them seeding agents that enable snowflakes and raindrops to more easily form. This produces more rainfall and/or snowfall than would naturally occur. Precipitation enhancement is not a remedy for drought, since opportunities are generally fewer in dry years. Rather, it works better in combination with surface or groundwater storage to increase "average" supplies. Most enhancement projects suspend operations during very wet years once enough snow has accumulated to meet all reasonable water needs. The reality in the Region is that if more storage were available, more precipitation enhancement would make sense.

Analyses of the seeding effectiveness have been made at intervals throughout the project's history. A recent published estimation indicates a long-term average increase in Pine Flat Reservoir (in the neighboring Kings Basin IRWMP) inflow of about "5.1%, with 90% confidence that the true effect of seeding is somewhere between +1.5% and +8.8%" (Silverman, 2007). Recent estimations using April 1 snowpack data indicate that, over the full seeded history of that project, an average increase of approximately 4% to 6% has occurred. These numbers fall within the typical 2 to 15 percent range of increase cited by the 2009 California Water Plan Update for other successful cloud seeding programs.

Silver iodide is the most-commonly-used seeding agent. There is no clear consensus on the environmental impacts of silver iodide, in the concentrations introduced during cloud seeding, on aquatic habitat and wildlife – some studies suggest impacts and other do not. It continues to be used as a cloud seeding agent, however, research into new and alternative cloud seeding agents is on-going.

Climate change could impact the timing and nature of precipitation events, making it more challenging to operate cloud seeding operations since past weather may not be a good indicator of future weather patterns. However, in the snow zone, cloud seeding could offset some of the loss in snowpack expected from global warming. The 2009 California Water Plan Update recommends that the State support research on potential new seeding agents, particularly ones that work at higher (above freezing) temperatures. Global warming may limit the effectiveness of silver iodide, which requires cloud temperatures well below freezing, around -5°C, to be effective.

Recycled Municipal Water

Recycled water, which is defined in Title 22 of the State Public Health Code as being wastewater which has been aerated, clarified, denitrified, filtered and disinfected to meet certain maximum constituent limits, can be used for a wide variety of agricultural, horticultural and recreational purposes. Some of these uses include crop irrigation, freeway and roadway landscaping, groundwater recharge, public open space, park and schoolyard landscape irrigation, water features and industrial processes. Often called "tertiary treatment," the level of treatment required to achieve Title 22 requirements for recycled water is the highest level of treatment commonly applied to municipal wastewater. Wastewater treated to lesser levels (reclaimed wastewater) can still be used for certain agricultural and horticultural applications, under the authority of the State Water Resources Control Board, Regional Water Quality Control Boards and Division of Drinking Water.

The State is supporting the use of recycled water, as documented in the State Water Plan and the recommendations of California's Recycled Water Task Force (DWR, 2003). DDW (formerly California Department of Public Health) publishes "The Purple Book," which contains health laws related to reuse of recycled water (CDPH, 2001). DDW defines the appropriate legal uses based on the level of treatment (primary, secondary, or tertiary). One of the most common uses for recycled water is groundwater recharge. However, groundwater recharge projects that use recycled water or reclaimed wastewater require DDW and Regional Water Quality Control Board (RWQCB) approvals based on effluent quality and quantity, spreading area operations, soil characteristics, hydrogeology, residence time, and distance to withdrawal.

Within the Region most wastewater is percolated to the groundwater (often via private septic systems) or evaporated. This includes effluent from both the City of Madera and the City of Chowchilla. To increase direct use of recycled water the Region would need to make substantial investments in new treatment and distribution infrastructure. Obstacles to using

recycled water include high cost, lack of water supply benefits when recycled water is already being recharged, regulatory issues, public acceptance, and marketability of recycled water.

The Region recognizes that some recycled water supplies are an untapped source, and they will gradually be developed as demands increase. This will occur particularly in new Greenfield residential and mixed-use developments which are being entitled within the southeast portion of the County. There, two developments which will combine for over 11,000 residential units have been approved, and more applications are in process with the County. Each of these developments relies on construction of Title 22 wastewater treatment facilities which will make recycled water available to offset potable water use within these planned communities. In addition, reclaimed water will be utilized in areas within the Rio Mesa area plan.

Surface Storage – CALFED

In 2009, the Delta Stewardship Council replaced the CALFED Bay-Delta Program, also known as CALFED, as a department within the State government. Its mission is to focus on interrelated water problems in the Sacramento-San Joaquin River Delta. "CALFED Surface Storage" is the legacy name for a resource management strategy to improve surface storage while simultaneously improving water conditions in the Delta. The strategy includes potential creation of five surface storage reservoirs in California, including one on the upper reaches of the San Joaquin River. This reservoir could provide water supply benefits to Friant CVP contractors in the Region including Madera Irrigation District, Chowchilla Water District, Gravelly Ford Water District and Root Creek Water District.

Surface Storage – Regional/local

Surface water storage, primarily in Millerton Lake behind Friant Dam on the San Joaquin River, has played an important role in the Region. Storage is especially important in the arid West region of the United States where the pattern and timing of water use does not match the natural runoff pattern. Since its completion in the late 1930s, Millerton Lake has provided benefits in the areas of conjunctive management and flood control. The US Bureau of Reclamation manages Millerton Lake and upstream reservoirs (including Shaver Lake, Huntington Lake, Bass Lake behind Crane Valley Dam, Mammoth Pool, Kerckhoff Reservoir and Reddinger Lake) to provide water to the various water agencies and districts who hold contracts for water supply.

Building large-scale surface storage in California, and the nation as a whole, is difficult because many of the prime sites already have been dammed, and the regulatory, political, and economic constraints make planning for and construction of dams extremely time-consuming. Small-scale reservoir projects may hold more promise due to the relatively-lower regulatory and environmental burdens those projects may face compared with large-scale dams. Off-channel reservoirs have been successfully developed by irrigation and water districts in the San Joaquin Valley, and offer potential to some local agencies with suitable lands available in proximity to the San Joaquin River.

In the future, if changing climate patterns result in reduced snow pack and increased fall and winter runoff, the priority for surface storage for water supply and flood control purposes could foreseeably increase.

6.5 - Improve Flood Management

Flood Management

The water management benefits that accrue to landholders and communities along major rivers and streams are countered to some extent with the challenges of managing flooding risk to those lands when streams and rivers run uncommonly high.

Flood risk management is a strategy to assist individuals and communities in managing irregular flood flows by preparing for, responding to, and helping recover from the effects of a major flood. Some examples of this strategy include construction of levees, floodwalls, and other water-management infrastructure; floodplain zoning and land use regulation; floodplain function restoration; disaster preparedness; and flood emergency response.

The San Joaquin River is the major flood risk in the Region. Lesser risks include the Fresno River, Chowchilla River, and several smaller streams, creeks and sloughs which are tributary to the San Joaquin. There are several existing flood management strategies in place in the Region. An existing levee system, maintained by the Lower San Joaquin River Levee Protection District, protects primarily rural agricultural lands along the river. Other flood protection strategies with both flood control and water supply benefits include recharge basins, off-channel reservoirs, and flood control basins. Examples of these facilities are operated by several member agencies including Madera Irrigation District, Chowchilla Water District, the cities of Madera and Chowchilla, and the County. Gravelly Ford Water District has an off-stream pond that is used to divert flood flows for recharge. The District also diverts floodwater from Cottonwood Creek into the Gravelly Ford Canal for recharge. Root Creek Water District is currently planning an off-stream recharge facility that would take peak flows from Root Creek, providing a flood protection benefit.

Predicted climate change could increase the severity and intensity of seasonal flooding, particularly in the fall and winter, by shifting precipitation to earlier in the water year and bringing an increased portion of normal precipitation in the form of rainfall. This would increase the need for containment in surface reservoirs as opposed to snowpack requiring no storage until the melt season when irrigation demands are typically peaking. This would

necessitate prudent monitoring of changes in runoff to evaluate changes in flood risk and anticipate the need for new flood protection infrastructure.

6.6 - Improve Water Quality

Drinking Water Treatment and Distribution

The primary goal of municipal water systems is providing an adequate and reliable supply of safe, healthful, drinking water. Achievement of this goal requires adequate water resources, water treatment and distribution facilities. All water delivered to municipal customers must meet State and Federal drinking water standards. In the Region, not all municipal water purveyors meet every part of those tests. While there is not a public agency in the Region that regularly supplies water out of compliance with water quality requirements, there are numerous systems, both in the Valley and in the Foothill/mountain areas, which face serious challenges with water supply quantity, reliability, storage and peak delivery capacity.

Key constraints to developing water treatment and distribution systems include capital cost, high operations and maintenance costs, and citizen opposition to higher water rates. These constraints are in tension with the direction of both State and Federal regulations, which are consistently being drawn tighter and resulting in the need for treatment systems for newly-regulated chemicals and constituents where historically none has been required.

Predicted climate change could impact water quality and impact the need for or type of water treatment provided, in ways that may not at first be obvious. For instance, more intense precipitation could increase turbidity of surface waters for longer periods each year. This would result in the need for added raw water coagulation and sedimentation treatment for those water systems using surface water. Also, higher ambient air temperatures may lead to eutrophic conditions in enclosed water storage tanks.

The two cities in the Region, Madera and Chowchilla, rely exclusively on groundwater to meet municipal needs. This is true of the overwhelming majority of the County's municipal water systems as well. There are two small exceptions.

County Service Area No. 1 serves the Hidden Lakes subdivision on the western shore of Millerton Lake, and draws surface water directly from the Millerton Lake pool. Madera County MD 16A, serving the Sumner Hill development, takes its water supply directly from the San Joaquin River under the authority of a Holding Contract issued by the US Bureau of Reclamation, in exchange for any and all water rights which the then-owners of the Sumner Hill property may have acquired up to the time of the Holding Contract.

Use of surface water in-lieu of groundwater helps reduce groundwater overdraft, leaving water in storage in the groundwater basin for use in dry years when surface supplies may be less-widely available. If the Region can acquire reliable surface water supplies suitable for municipal use, construction of regional water treatment plants, shared by multiple agencies, could be

very attractive and would be more economical than constructing separate treatment plants for each agency.

Groundwater Remediation/Aquifer Remediation

Groundwater remediation involves extracting contaminated groundwater from the aquifer, treating it, and either discharging it to a water course, using it for some other purpose, or injecting it back into the aquifer for later use. Contaminated groundwater can result from a multitude of both naturally-occurring and anthropogenic sources. Remediation results in enhancement of a water source and making it available to users who would not be suitable without remediation. Constraints include the fact that groundwater treatment is typically very expensive (on the order of several hundred dollars per acre-foot of water pumped and treated), numerous regulatory agencies are involved in permitting such a project, the timeline to the start of project operations is several years at minimum, and additional years or decades may be required to remediate contaminated groundwater sites.

Groundwater in the Region is remediated in a number of specific locations under the jurisdiction of regulatory programs. These projects typically address specific contaminant plumes and are not widely beneficial to the aquifer. Groundwater quality in the Region varies dramatically with location and depth. Remediation is not considered to be a broadly-applicable strategy within the Region.

Matching Water Quality to Intended Use

Within the Region, groundwater users have widely-varying needs for groundwater quality in order to meet the needs of their particular uses. Water which may be perfectly suitable for irrigation purposes may require expensive well-head treatment to remove chemicals such as iron, manganese or arsenic to be suitable for municipal use. Matching water quality to intended use is a strategy to avoid using high quality water for uses that do not require it.

In the Region, providing treated surface water to municipalities rather than groundwater can implement this strategy since groundwater underlying many municipal areas requires treatment. This approach also helps mitigate groundwater overdraft. After replacement with surface water, the lower-quality groundwater can then be used for other applications, such as agricultural or open-space irrigation.

Making use of recycled water, as discussed in Section 6.4 -above, is another way to match water quality to its intended use. Recycled water is very high-quality and can be used for a broad variety of purposes, but it cannot currently be made potable. Making maximum use of recycled water in place of potable water reduces overall treatment costs and conserves high-quality water resources, thereby implementing this strategy. Other uses of lower-quality reclaimed wastewater, and using non-potable raw surface water for open-space irrigation, are also examples of this strategy.

Potential obstacles to matching quality to use are public acceptance of using lower quality water (even if it is acceptable to all regulatory agencies for the intended use), and the geographical distribution of the water supplies with different qualities, which may not be in or near places they can be beneficially used.

Pollution Prevention

Certain areas within the Region are affected by pollution of otherwise-usable groundwater resources. In the vast majority of cases, pollution prevention is simpler and less expensive than pollution remediation. However, because of the nature and sources of some contaminants, a pollution prevention approach may not always be possible, cost-effective, or desirable

In the Region, pollution prevention is practiced primarily through regulatory programs for irrigation, confined animal facilities, urban activities, wastewater disposal, and industrial activities. Pollution prevention also overlaps with the Forest Management and Watershed Management strategies that aim to reduce eroded sediment and pollution from entering water sources.

Salt and Salinity Management

A major consequence of the long-term irrigation and cultivation of the Valley soils within the region has been the build-up of salts within the upper soil profile. Historically salt buildup was managed by growers by over-irrigation from time to time, which in most situations would flush salts from the root zones and deeper into the soils profile. An unfortunate consequence was the transport of salts into the freshwater aquifer. While the quantity of salts is relatively small in comparison with the volume of water in the aquifer, the increase in TDS in the aquifer has been measurable.

In other locations, the soil profile was relatively impermeable and did not allow for flushing of the root zone. This has created some areas which are no longer able to support agriculture due to high salt content in the soil. Neither of these situations is sustainable over the long term, and the current strategy of salt and salinity management is intended to address both issues.

Salt and salinity management includes efforts to limit buildup of salts in the soil and water, and mitigate lands currently impacted by salts. The Region is participating in several programs to manage salinity and limit salt buildup in the soil, wastewater and groundwater. These measures include:

1. Participation in the Irrigated Lands Regulatory Program, which monitors salt contents in water supplies;
2. Encourage growers to use surface water in preference to groundwater whenever it is available; and
3. Participation in the Central Valley Salts Coalition (CV-SALTS).

Urban Stormwater Runoff Management

For many years and in most of the country, stormwater was treated as a waste product rather than a resource. The 1991 National Pollution Discharge Elimination System (NPDES) created by Congress pursuant to the Clean Water Act has changed much of that attitude. Under the latest round of regulations and guidelines promulgated by the EPA, urban stormwater runoff management is a broad series of activities intended to manage both stormwater and dry weather runoff into waters of the United States.

Dry weather runoff occurs when, for example, excess landscape irrigation water flows to the storm drain. Urban runoff management has as its primary goal prevention of pollution of waters of the United States, but also focuses on prevention of damage from stormwater or urban water used, and considers multiple purposes such as water supply and habitat enhancement.

Increased urbanization usually has resulted in increased paved areas and runoff, changing local conditions and potentially affecting percolation of natural precipitation into the groundwater. Newer drainage management strategies such as Low Impact Development (developed in Maryland in 1999 under a contract with the EPA and now widely adopted nationwide) have now raised awareness of the desirability of not simply transporting storm water down the line as discharge. Consequently, including groundwater recharge as part of stormwater management is considered very important in the Region.

The two cities provide urban runoff management within the Region. Typically, each captures stormwater through collection facilities where it is piped to basins which provide detention or retention and some level of groundwater recharge. Some joint-use facilities, designed for both flood control and groundwater recharge, are operated in both Madera (along with Madera Irrigation District) and Chowchilla (along with Chowchilla Water District). Some recharge/retention ponds also provide recreational benefits.
Climate change could alter precipitation patterns and the intensity of precipitation events. This may require re-evaluating, re-designing or re-operating stormwater systems.

6.7 - Practice Resource Stewardship

Agricultural Lands Stewardship

Agricultural lands stewardship broadly means the conservation of natural resources and protection of the environment on agricultural land. Because Madera County is a Right-to-Farm county, the on-going stewardship of agricultural lands is an intrinsic value. Land managers can practice stewardship by improving land cultivation practices for food, fiber and bio-fuel production, as well as conserving open lands to provide watershed functions, soil, air, energy, plant and animal and other conservation purposes.

Agricultural land stewardship also protects open space and the traditional characteristics of rural communities. As more land becomes developed in the Region, there will be increasing

pressure on agricultural land to help provide flood control, water conservation, habitat preservation, and carbon sequestration, while maintaining ongoing production of crops. Some agricultural land stewardship examples include wind breaks, noxious weed control, riparian buffers, cover crops, composting, fish friendly farming, and creation of wetland reserves.

Constraints to developing land stewardship projects within the Region include funding, financial incentives for landowners, landowner interest and recognition of benefits, and regulatory barriers.

Ecosystem Restoration

Over 100 years of development and activity within the Region have made indelible marks on the local environment. Along with the development of communities collectively supporting over 100,000 residents and extensive agricultural lands which contribute a significant portion of the crops used in California, the nation and the world, there have been changes forced on the ecosystem, resulting in a local environment really quite different from what existed in the region 200 or even 100 years ago.

Local Wildlife

Ecosystem restoration focuses on restoration of aquatic, riparian and floodplain ecosystems, which are the natural systems most directly affected by water and flood management actions, and the ones most likely to be affected by climate change. Examples of ecosystem restoration include curtailing waste flows into natural water bodies, reducing barriers to fish migration, meadow restoration, native plant preservation, forest restoration and wetland restoration. Ecosystem restoration can also be directly incorporated into engineered projects, such as groundwater recharge basins. These types of projects are often carried out in collaboration with government agencies or non-governmental organizations.

The RWMG recognizes the importance of ecosystem restoration to protection of water rights, improvement of regional water quality, provision of flood protection, and gaining public support for water projects. An example of ecosystem restoration in the region is the Root Creek restoration project that is an integral component of the Riverstone development project in southeastern Madera County. Constraints to developing ecosystem restoration projects include funding, high land costs in some areas, feasibility of integrating restoration elements into proposed projects, regulatory constraints, political acceptance, weed control when near agricultural lands, and concerns for spillover of endangered species onto adjoining lands.

Forest Management

The RWMG has long recognized the importance of proper forest management to sustainability and even increase of water resources within the Region. Forests in the region contribute to

sustainable production of resources such as water, timber, native vegetation, fish, wildlife, and livestock, as well as offering extensive outdoor recreational opportunities. Amidst all that activity, the economic value of water produced by forests equals or exceeds that of any other forest resource (CWP 2009 update). Nearly every forest management activity can affect water quantity and quality. This strategy focuses on those forest management activities that are designed to improve the availability and quality of water for downstream users. These strategies can include meadow restoration to regulate stream flows, forest fire management, and ecosystem restoration.

Sierra National Forest

Much of the eastern half of the Region, including most of the San Joaquin river watershed in the Foothill and Mountain area, is forested. Most of that forest land is managed by the US Forest Service or National Park Service. The RWMG therefore is not directly involved in forest management, but can assist and facilitate these efforts through: 1) Communications with local watershed organizations; 2) Letters of support for forest management projects; and 3) Collaboration with neighboring IRWM Groups in the Sierra Nevada Mountains.

Dr. Roger Bales, UC Merced, presented to the RWMG his observations regarding Sierra Nevada conditions, and indicated that forest-thinning prescriptions for fuels reduction and decreasing the risk of catastrophic wildfire are similar to those for enhancing water yield. More-active forest vegetation management may thus be a “no-regret” strategy to develop more water supplies. Dr. Bales and colleagues hypothesize that across the Sierra Nevada, runoff yield can increase by approximately 9% with a 40% reduction in forest density (Bales et al., 2011).

Much of the forested watershed within the Region could benefit from forest thinning both to reduce the risk of catastrophic forest fires and to increase water yield. Expenses associated with forest thinning can vary from low hundreds of dollars to a thousand or more dollars per acre for “first entry” (to achieve sustainability). “Second entry” costs would be those related to long term maintenance. Expenses would be dependent on a variety of site-specific conditions, including: how much thinning is needed, the appropriate method of thinning and maintenance to be used, whether follow-up work is needed, access conditions, topography of the area being cleared, equipment/worker mobilization, what types of trees and undergrowth are in the grove already, and current health and size of the trees being removed. Frequency would be on a case-by-case basis depending on the growth characteristics of the grove.

Expenses could conceivably be offset by revenues potentially derived as a result of the thinning project; that is, considerations for values of usable timber and lumber, biomass energy generated, contributions from headwater protection agencies, or others.

Climate change could have significant impacts to forest health, snow accumulation and ultimately the quality and quantity of water that flows to the Valley. Many forest management activities, such as forest thinning, can help to adapt to these changes.

Land Use Planning and Management

The patterns and types of land use, transportation and level of intensity designated for geographic areas ends up having a direct effect upon the water supply, water quality, flood management, and other water issues faced by an area. Integrating land use planning and water management requires planning for the housing and economic development needs of a growing population, while providing for the efficient use of water resources and preservation of water quality.

Areas being planned for intensive uses such as housing, commercial or industrial developments must have access to adequate, reliable and healthful water resources. Since 2001, the State Water Code has mandated such water supply planning for larger developments. This takes the form of a Water Supply Assessment, which must be prepared by the proposed water purveyor prior to preparation of the environmental review of, or approval of, any land use entitlement for a project of 500 homes or equivalent size of commerce or industrial development. The Assessment must evaluate the proposed water supply and determine if it is adequate to meet the projected water demands of a project in normal, dry and multiple-dry water years over a 20-year planning horizon. In reality, the 20 year horizon does not fully address the need, for once approved, most developments will be in place for much more than 20 years and some reviewing agencies are looking for even greater assurances of stable water supplies prior to project approvals.

Apart from planning the water supply, land use planners can impose restrictions on land uses aimed at reducing overall project consumption. For example, regulations could require xeriscape to reduce water demands, or permeable pavement to reduce storm drainage runoff while potentially enhancing the groundwater aquifer.

In the past, planning for land use and water supplies has been conducted by different agencies, at different times, for different planning horizons, often using different methodologies, assumptions, and data. This has resulted in inconsistencies in the plans, poor coordination of public investments, and has subjected agencies to legal challenges. Some local land use plans do not address, or merely acknowledge, regional water issues such as overdraft. Consequently, integrating land and water use planning is an important goal in the Region.

Planning for adequate water quality is equally important. In 1996, the federal Safe Drinking Water Act included a requirement for states to develop Technical, Managerial and Financial (TMF) capacity requirements for public water system operations to ensure sustainability and long-term compliance with drinking water standards. California put forth Section 116540 of the California Health and Safety Code (CHSC) in response to the federal requirements, which

applies TMF criteria to community water systems, as well as non-community water systems and water systems changing ownership or seeking funding from the State.

DDW has a sample TMF criteria document and assessment form available on their website, which local land use agencies are able to use to facilitate compliance with TMF requirements for new water systems or those undergoing facility improvements.

California Senate Bill 375, The Sustainable Communities and Climate Protection Act of 2008, is an important bill related to land use planning. The bill encourages more-dense developments to reduce transportation, air pollution and water consumption.

The IRWMP process provides an ideal opportunity to integrate land and water supply planning. Relationships to local water planning and land-use planning are discussed in more detail in CHAPTER 13.

Recharge Area Protection

As much as increased groundwater recharge has the potential to benefit the Region's groundwater balance, the reality is that Madera County's underlying soil profile is not optimally suited to facilitating efficient or high-rate recharge to the groundwater aquifer except in limited areas. There are extensive areas of low-permeability soils either at the surface or in lenses ranging from 35 to 100 feet or more below ground surface. Accordingly, the Madera Region is generally lacking large areas suitable for groundwater recharge (Provost & Pritchard, 2014). These limitations make it all the more important that the Region prioritize protection of potentially-suitable recharge areas from a variety of threats.

Protection of recharge areas is based on two primary goals: 1) ensure that areas suitable for recharge are protected from development into urban infrastructure; and 2) preventing pollutants from entering groundwater to avoid expensive treatment that may be needed prior to potable, agricultural, or industrial uses. Local city and county land use agencies can apply their land use authorities to develop policies to protect recharge areas, or require mitigation for groundwater impacts associated with new development. Agencies can also develop cash reserves or other means to acquire prime prospective recharge lands quickly from willing sellers when those lands come onto the market.

Constraints to protecting prime recharge areas include high land costs, lack of readily available capital, and inability to rapidly act when land is on the market. Detailed local studies are also needed in the County, City and special district lands to identify prime recharge areas. These studies could include a review of soils maps, geologic maps, and site investigations (drilling, soil sampling, etc.)

Climate change impacts could reduce surface water supplies or increase the frequency of flooding or both. This would increase the demand for recharge projects, and increases in high flows would also make them more beneficial and economical projects.

Sediment Management

Sediment transport is the process by which organic and inorganic materials carried in surface water by sheet flow, streams, and rivers are eventually deposited in low velocity environments (e.g. recharge basins, reservoirs and river sand bars). Sediment and sediment transport are critical to healthy aquatic ecosystems. In the wrong quality, type and time of season sediments can cause significant damage to those systems. In addition, sediments carrying contaminants not indigenous to an area, or in extreme concentrations, can have long lasting effects that may require costly and long-term human intervention (e.g. oil spills, heavy metals from mining operations).

Several impacts associated with excessive sediment loading include reduction in water clarity, reduction in available oxygen, excessive stream and lake-bottom loading, reduced recharge capacity, and altering of the physical aquatic habitat. Each of these impacts have many resulting implications for aquatic habitats and the flora and fauna that occupy them, human use of the water for recreation and consumption, and long term alteration of the habitat.

Sediment management can be divided into several keys areas: Source Management, Transport Management and Deposition Management. Each of these areas has unique aspects, management strategies and BMPs. Proper sediment management also has significant implications on other Resource Management Strategies in the Madera IRWMP area including: Ecosystems Restoration, Flood Management, Forest Management, Urban Storm-water Management, Water Dependent Recreation, and Watershed Management.

Many state and federal agencies are involved in the management of sediment loading including the RWQCB for course-grained sediment to the coast (i.e. San Joaquin River), the USEPA, State Lands Commission, the NRCS, and others. Each agency has authority for aspects of sediment management respective to its own jurisdiction.

Sediment management is important to reduce sedimentation in reservoirs and preserve their storage capacity. Comprehensive watershed management plans using a variety of practices are needed to achieve this. In addition, preventing or reducing wildfires can help reduce sedimentation into reservoirs. Sediment management is also important in recharge facilities, including streams, recharge basins and stormwater basins. These types of sediment can be managed through periodic removal, disking or ripping. This is especially important if streams are used for intentional recharge so that the natural habitat is preserved.

Climate change could have very significant impacts on sediment management. If certain predictions concerning the increase in warm weather and higher intensity and duration rain events are realized, then it can be expected that short duration sediment loading will increase.

Watershed Management

Watershed management is the process of evaluating, planning, managing, restoring, and organizing land and other resource uses within an area of land that has a single common

drainage point. The Madera IRWMP area is unique compared to neighboring IRWMPs in that it includes valley, foothill and mountain lands. The seven neighboring IRWMPs are focused either on valley lands, or foothill/mountain lands. As a result, the Madera RWMG can focus on comprehensive watershed management including the upper and lower watersheds of the San Joaquin, Fresno and Chowchilla Rivers. Watershed management is important to maintain surface water quality, adequate water supply and a healthy ecosystem in the mountains, foothills, and where most of the water is beneficially used in the valley. Methods of watershed management are diverse and include forest-fire fuel reduction, sediment management, vegetation management, abandoned mine reclamation, pollution prevention, management of new developments, and many others. Watershed management is performed by numerous organizations in the region including the National Forest Service, National Park Service and Bureau of Land Management.

Climate change could significantly alter watershed conditions through changes in precipitation, temperatures, flooding and snowpack. This would require an adaptive management strategy to help maintain healthy watersheds.

6.8 - People and Water

Economic Incentives (Loans, Grants and Water Pricing)

Economic incentives include financial assistance, water pricing, and water market policies intended to influence water management. Examples of economic incentives include low interest loans, grants, free services, rebates, and water rate structures. Economic incentives can influence the amount of use, time of use, wastewater volume, and source of supply. Economic incentives can also produce environmental and social benefits, and avoid or delay construction of new facilities.

Economic incentives are prevalent throughout the Madera IRWMP area, although they vary by agency. Some specific incentives include: tiered pricing, metering, and rebate programs for installing conservation devices.

Grants and loans are also an important incentive for some agencies. Numerous grants are available to the region and are listed in Chapter 11 – Financing. Major funding sources include the United States Bureau of Reclamation, Department of Water Resources and State Water Resources Control Board (SWRCB). The Madera RWMG has secured funding for implementation projects and preparing and updating their IRWMP through the States IRWM funding program. The IRWM grants present a significant and major source of funding for the group.

Climate change will not impact the efficacy of economic incentives. These incentives can be effective in conserving water, and could be important adaptation tools if climate change reduces water supplies.

Outreach and Engagement

The Madera RWMG and its stakeholders already perform a wide range of public outreach and engagement. CHAPTER 14 – Stakeholder Involvement describes past, present and planned future outreach in the area. Extensive outreach was performed during the development of the initial IRWMP in 2006-2008 and has continued through efforts of RWMG participants. Many local agencies also have their own outreach and educational programs. Outreach efforts have included: special events, field trips, workshops, flyers, websites, educational materials, RWMG meetings, email lists, and sundry other methods.

Outreach and education are important to address the major water resources issues in the region, namely groundwater overdraft, land subsidence, and surface water curtailments due to the San Joaquin River restoration. Other issues such as water quality and flood control also require some outreach. Educating the general public, politicians and other agencies about these issues is important to gain support for new projects or funding sources.

Constraints to outreach and engagement include the large area covered by the Madera IRWMP, which includes many remote and sparsely populated areas in the mountains.

Outreach and engagement is considered an important component of climate change mitigation and adaptation. Most of the general public lacks the education and training to have a comprehensive understanding climate change, and the reliability of existing data and predictions.

Water and Culture

The Water and Culture Resource Management Strategy relates to the importance of water in the culture of Native American tribes. The Department of Water Resource (2014) provides the following statement on the importance of cultural recognition and preservation in water management:

> *"Water and culture are connected in a myriad of ways, with subtle and complex implications for water management in California. Some cultural relationships to water are so pervasive, they may be easy to overlook. Other cultural considerations are less apparent and may be difficult to recognize. Increasing the awareness of how cultural values, uses, and practices are affected by water management, and how these have an effect on water management as well, such information will help inform policies and decisions*."

The Madera RWMG area includes two federally recognized tribes (North Fork Rancheria of Mono Indians and Picayune Rancheria of Chukchansi Indians). Native American cultural activities related to water resources include hunting, fishing, food gathering, recreation, religious and spiritual practices, and historical preservation. Preserving water quality and the natural hydrology are important to maintain these activities. Native American tribes can also

contribute to water resources management through unique ideas, tribal ecological knowledge, and through the water management authorities they have on their tribal lands.

Cultural connections to the land and water can involve a wide range of places, activities and norms. Maintaining natural flows and qualities are a critical portion of preserving the ability for groups to continue to experience these water dependent cultural connections. Understanding the cultural histories, perspectives and activities is important for proper decision making by water managers.

Climate change is and will continue to play an important role in the ability to manage water for many historic and cultural activities and needs. Native plants and animals may become scarce or migrate to changing belts. Water itself may be less available in certain areas. Attention to these issues will be critical for continued connections to cultural practices, documenting histories and protecting future uses.

Water-Dependent Recreation

Recreation and public access include the management of lands and water resources by local, city, state, and federal public agencies under an implied principle of public trust responsibility. As trustee to public resources, the state and federal agencies must consider the benefit and use of land and water resources for recreational opportunities. Natural resource values often define the character and aesthetic appeal of water-dependent recreation, making it desirable and interesting to visitors. However, poorly planned use, misuse, or overuse of any recreation resource can degrade natural resource values and recreational experiences.

Providing public recreation benefits, and planning to integrate benefits into water projects, may increase public approval for them. In other words, if a project provides recreational opportunities, the public may be more supportive of the project overall thus helping to protect its water supply benefits. Climate change could modify hydrologic patterns and impact existing recreational opportunities. An adaptive management philosophy is needed by recreational facility managers so that opportunities remain available.

Recreational opportunities are provided throughout the Madera IRWMP area including reservoirs, rivers, streams, snow sports, and others. Where cost effective and feasible, recreational elements should be included in new facilities in order to provide multiple benefits. Cost, timing, liability, and other issues may constrain the ability to integrate recreational benefits into water resources projects.

6.9 - Other Strategies

Crop Idling for Water Transfers

Crop idling for water transfers is removal of lands from irrigation so the water supply can be transferred to other lands. The strategy is a temporary measure and the idled land would be returned to irrigation at a later time. Crop idling is not the same as idling lands with the intent

to improve soil and crop sustainability and productivity (i.e. crop rotation). Permanent agricultural land retirement is discussed in a later Chapter.

This strategy would involve idling crops in Madera County to transfer the water to other lands within the County. Transferring the water outside of the County would worsen the local water conditions. This strategy could also include implementing crop idling in parts of the state with surplus water, and transfer of that water to Madera County.

Benefits from crop idling include payment to farmers who sell their water supply, and redistribution of water to another area that needs it. The payments could be used for on farm-related investments, or to develop water conservation measures. Costs include loss of crop production and annual costs to manage the land to avoid negative impacts, such as weed spreading. Loss of crop production can have numerous socio-economic impacts on local communities. Crop idling is not feasible with permanent crops, which comprises 78 percent of the cropped area in the valley portion of Madera County (Provost & Pritchard, 2014).

Crop idling is sometimes practiced within irrigation and water districts. Some districts allow growers to fallow their land for a season and sell the water to another grower in the same district. Crop idling is not currently performed on a regional scale between different water agencies due to legal issues regarding water transfers, and some public opposition to transferring water out of their service area. However, this strategy could have some benefit in the region if these obstacles can be overcome.

Dewvaporation or Atmospheric Pressure Desalination

Dewvaporation is a specific process of humidification-dehumidification desalination. Brackish water is evaporated by heated air, which deposits fresh water as dew on the opposite side of a heat transfer wall. This process may be applicable to areas that have saline perched water, or for treatment of deep connate water that has high salinity.

Fog Collection

Fog collection involves collecting fog on a fine mesh or array of parallel wires that drips into collection containers. There has been some interest in fog collection for domestic water supply in dry coastal areas that have frequent fog. Because of its relatively small production, fog collection is limited to producing domestic water where little other viable water sources are available. Fog collection has not yet been used as a water source in California. Some areas in the Madera IRWMP area, especially in the Valley, experience dense fog during the winter months. However, the fog is sporadic and typically occurs at a time of year when water demands are low, and more often in wet years when the need for such marginal strategies is at a low. Therefore, this strategy is not considered applicable to the Region.

Irrigated Land Retirement

Irrigated land retirement is the removal of farmland from irrigated agriculture to provide water supplies elsewhere and/or take unproductive land out of production. Land retirement can enhance water reliability by making water available for redistribution. Land use changes from land retirement can impact neighboring lands, such as through the spread of weeds or wildlife. In addition, retiring land can have large socioeconomic impacts on local community including loss of jobs and income. However, retired land can be converted to other uses with low water demands such as grazing, solar farms, wildlife habitat, hunting preserves, etc., which could offset some of the socioeconomic impacts. Costs for retiring land include the price of land and the annual cost of managing the land to avoid environmental impacts. Land retirement should only be performed on a voluntary basis. When retiring lands, the highest priority should be given to lands of poor quality, low productivity, and with land management problems, such as poor drainage of irrigation waters.

No permanent land retirement has been performed in the Madera IRWMP area. However, permanent land retirement has been successfully implemented in the neighboring Westlands Water District, located west of the Madera IRWMP. Most of the retired lands had serious drainage problems. The Westlands program was implemented to address chronic water shortage and drainage problems, but it has successfully retired thousands of acres and resulted in increased water reliability for other landowners. Other similar programs have allowed small water usage on the retired land so other uses, such as grazing, are still feasible.

The RWMG believes that land retirement can be an effective method to reduce water demands and increase water reliability for other uses. Lands that may be candidates for retirement are those with little to no surface water supply entitlement, no infrastructure to use surface water, or which are experiencing significant land subsidence. However, it is considered a measure of last resort and the other resource management strategies, especially floodwater capture, should be further developed before land retirement is considered.

The County or other special districts could buy and retire agricultural land from willing sellers. Also, some state and federal agencies will pay landowners to convert land to conservation easements, which are reserved for habitat protection or soil conservation. These programs also help to reduce water demands. Some examples include the California Department of Fish and Wildlife Permanent Wetland Easement Program, and the United Stated Department of Agriculture Conservation Reserve Program.

The following policies are recommended regarding irrigated land retirement:

- As long as the demand for farm commodities remains relatively high, the retirement of irrigated lands in one location may naturally lead to the conversion of other native or non-irrigated agricultural lands in another location. For this reason, a program focusing on irrigated land retirement may be less effective at achieving conservation goals within

the Region without a limitation on the conversion of other lands to uses that require an increase in water consumption.

- Should the Region look to a land retirement as a tool to reduce overall consumption or to facilitate water balance on a project or sub-regional level, a program should be developed to encourage consistency regarding key elements such as mechanisms that that can be used to enforce land retirement; methodology for calculating net reductions in water usage; and subsequent uses of the properties after they have been retired.

Climate change may reduce surface water supplies or increase water demands, resulting in a greater need to retire lands. Climate change could also impact water quality, leading to increased salinity buildup in certain lands and providing a higher incentive to retire the lands. Land retirement would still be a suitable alternative if the climate changes, but some impacts, such as wildlife or weed spreading, may differ from historical retirement programs.

Rainfed Agriculture

Rainfed agriculture is the practice of providing all crop consumptive use directly by rainfall. Due to the unpredictability of rainfall frequency, duration and amount, there is significant uncertainty and risk in relying solely on rainfed agriculture. However, rainfed agriculture is practiced to a limited extent in the Madera IRWMP area.

Some growers plant crops such as winter wheat and safflower that can be watered entirely by rainfall during the rainy season. However, some winter crops have been planted and subsequently lost during dry years. Rainfed agriculture is less risky if the growers have the option to apply irrigation water as an emergency measure. Due to the inherent risks with rainfed agriculture, there is likely only a small potential for increased implementation of this strategy.

Climate change has the potential to change precipitation patterns, which may benefit or adversely impact rainfed agriculture. According to the 2013 California Water Plan update, water supply improvements using rainfed agriculture will require development of new varieties of plants, and new and innovative soil and water management techniques.

Waterbag Transport/Storage Technology

Waterbag transport/technology involves diverting water from areas that have unallocated freshwater supplies, storing the water in large inflatable bladders, and towing them to an alternate coastal region. This strategy is not currently being used in California and would likely have high costs and extensive permitting requirements in multiple jurisdictions.

The Madera IRWMP area is roughly 100 miles from the coast. Any water delivered by waterbags would need to be conveyed directly to the Region by means that do not currently exist, or delivered indirectly through complex exchanges with water agencies located more conveniently to the coast.

Transporting the bladders by rail has also been proposed, but this would also be costly and only limited quantities could be transported on a bladder that fits on rail cars. Due to its high cost, difficulty in permitting, and difficulty conveying the water to the Region, this alternative is not considered feasible.

Drought Planning

The Department of Water Resources (DWR) list of resource management strategies did not include drought planning. In recognition that drought is a regular occurrence in the Madera Region, the RWMG decided to include drought planning as a resource management strategy. The Valley portion of the Madera Region has a productive, but declining, groundwater aquifer that can be used as a reserve supply in droughts. During droughts, impacts from higher water costs, accelerated groundwater level declines and higher groundwater pumping costs are all experienced throughout the Region. In prolonged droughts, some wells can and do go permanently dry. Despite these groundwater impacts, water users that rely primarily or solely on surface water are the most impacted in droughts because the supply can be reduced to zero under the most severe conditions, such as those being experienced in 2014.

Water supplies can vary substantially year to year due to wide variations in precipitation in the IRWMP area. Chapter 3 – Region Description discusses a hydrologic index for the San Joaquin Valley presented as the Chronological Reconstructed Sacramento and San Joaquin Valley Water Year Hydrologic Classification Indices (Index), and covers the period from 1901 to 2013. The data shows that water supplies can be substantially lower than average in dry years, and less than half of normal for as many as three consecutive years. As well, to illustrate the current condition in the region, water supplies in 2012 and 2013 have been about one-half of the average runoff, and it is likely that due to a lack of storage in the watershed, in terms of lack of soil moisture and minimal snow pack, that 2014 may be as dry a year as 1977, which had runoff only 18% of the long-term average.

In the Madera Region, the most appropriate response to drought planning is to develop conjunctive use and groundwater banking projects that reduce overdraft, and capture wet year water for storage in the groundwater basin. Water conservation measures are also effective as responses to droughts.

Some local agencies have drought response plans. However, the Madera IRWMP area does not have a regional drought response plan that can guide a coordinated, regional response effort. Such a plan should identify participants and their responsibilities, develop a drought monitoring plan, and develop drought response measures. A regional drought response plan would help to better characterize drought conditions, allow water users to pool and share their water resources, and help to minimize regional impacts during the most severe events.

CHAPTER 7 - PROJECT REVIEW PROCESS

This chapter documents the procedures and processes the Madera RWMG has developed to identify projects for inclusion in the IRWMP, and then to select projects from the list for inclusion in specific funding applications. Projects selected for inclusion in the Plan will meet the RWMG's goals and objectives and will be responsive to the funding criteria for the identified funding opportunities. The process includes the gathering of certain basic project information so that the proposed projects will be in the "inventory" of the RWMG. Later, more-detailed project pre-applications can be prepared when target funding sources are identified. Projects can be selected from the inventory based upon a combination of priority to the RWMG and "fit" with the funding opportunity goals and priorities.

This process is intended to be flexible, transparent and easily understood by all stakeholders. The proposed project documentation is designed to facilitate cost-effective project preparation, with information requested only as it is required. Initially, project proponents are only required to submit brief Project Description Forms, but more extensive Pre-Applications are recommended for screening projects for grant applications.

The result of the project review process is the production of a list of implementation projects, along with enough supplemental information to allow later prioritization for specific funding opportunities.

The adopted project review process accomplishes four key objectives identified in the IRWMP Guidelines:

1. Project Identification and Solicitation: The adopted process allows the RWMG to solicit, and the Partners to identify, proposed projects which have the potential to meet the IRWMP goals and objectives.

2. Project Selection: The adopted process allows the RWMG to review and select projects from the proposals made by the Members and to list those selected projects in the IRWMP.

3. Publishing the Project List: The adopted process allows the RWMG to communicate the list of projects in the IRWMP to stakeholders and the public.

4. Matching Projects to Funding Opportunities: The adopted process further allows the RWMG to rank and select the most promising projects to include in specific grant applications, based upon the funding program's published scoring and ranking criteria, thereby increasing the chances that the RWMG's grant application will be favorably reviewed, scored and funded.

Figure 7-1 is a flowchart illustrating the process of creating a project list. This process is described in Section 7.1 below.

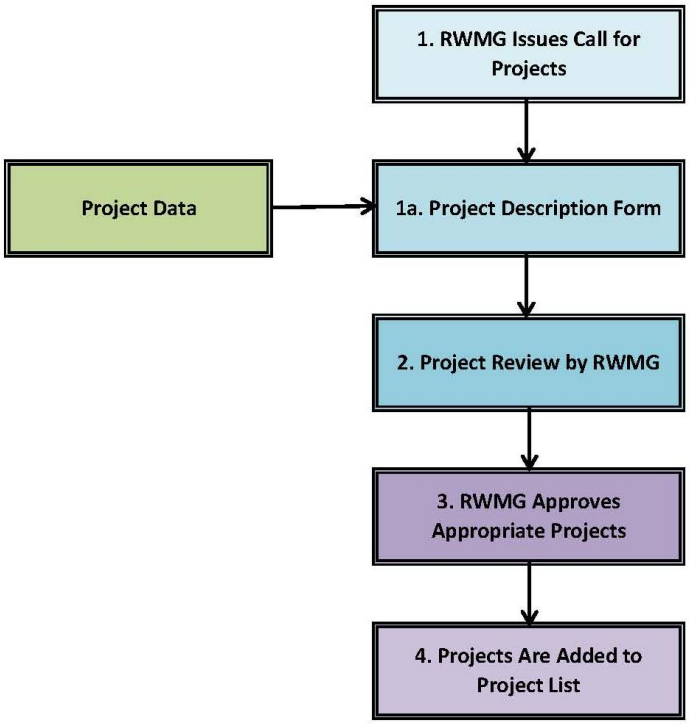

Figure 7-1 – Project Solicitation and Review Process

Because there are continual efforts by Members and interested stakeholders to develop new and improve existing projects, the list of projects included in this chapter is not intended to be final or exhaustive. As additional project proposals are received, they will be considered as discussed below, and an updated list of projects will be made available on the RWMG's website at http://madera-id.org/index.php/rwmg. The project list will be updated at least semi-annually, in accordance with the RWMG by-laws.

7.1 - Inclusion of Projects in the IRWMP

The RWMG regularly accepts new project applications from Members; this subject is discussed at most RWMG monthly meetings and will continue on a regular basis, with the RWMG staff circulating information about upcoming funding opportunities to Members as it becomes available. Specific calls for projects are made when funding opportunities become known. Since each funding opportunity is unique, the specific goals and scoring criteria for new funding opportunities are expected to encourage Members to submit additional potential projects intended to both accomplish IRWMP goals and objectives and to match well with funding opportunity scoring criteria.

The RWMG has identified potential projects from past solicitation efforts. These projects form the current project list (**Appendix F**). The RWMG will encourage all types of projects and programs, provided each addresses at least one of the IRWMP's regional goals and/or measurable objectives. As indicated in Chapter 5, the regional goals are broad statements of the purpose of the IRWMP. These goals and their underlying objectives are intended to address water management and ecosystem problems and conflicts in the region. Projects addressing any of the goals or objectives are accepted for consideration.

RWMG policy and IRWM program requirements both dictate that projects be submitted and accepted to the project list before they can be considered for inclusion in a grant application. This policy encourages Members to carefully plan and document their projects in advance, and discourages including projects in grant applications that have not been properly developed and supported by factual information.

The following process has been developed for solicitation and identification of projects for inclusion in the IRWMP. The following steps are intended to standardize information submitted to the RWMG for project consideration and allow for efficient review.

1) RWMG Issues a Call for Projects
2) Submitted Projects are Reviewed by the RWMG
3) Appropriate Projects are Approved by the RWMG
4) Projects are added to the IRWMP Project List.

The Project List is updated at least semi-annually, as required.

Step 1 RWMG Issues a Call for Projects

The RWMG will, from time to time, issue a Call for Projects. Calls for projects will be made when specific grant programs are announced, in order to assure that the highest-priority, best-fitting projects are included in every grant application. Calls may also be issued when revised RWMG goals or objectives are published. These calls will be made in several contexts including:

- Announcements will be made at regularly-scheduled RWMG meetings
- Announcements will be made at Members' and stakeholders' agency board and management meetings
- E-mails will be sent to stakeholders and interested parties
- The Call for Projects will be posted on the RWMG website

Projects must be submitted by a Member or official interested party. The project selection process is open for consideration of all projects, regardless of the current project development status. Projects at the conceptual level are encouraged and may be added to the list for broader

awareness, to prevent duplication of effort and to facilitate project integration and development. It is hoped that awareness of one Member's early project concepts may stimulate interest in joining the project among other members and stakeholders.

Project proponents will be asked to complete a standardized Project Description Form (see sample in **Appendix G**). The form asks for basic information that might appear on a State or federal grant application, including:

- Project name
- Project proponent(s)
- Location
- Size (defined in terms relevant to the project itself)
- Development status (conceptual, planning, feasibility study, preliminary design)
- Background description (or project need of concept)
- Regional Goals and Objectives addressed
- Resources Management Strategies addressed
- Estimated budget
- Estimated time to construction

This information will be sufficient to select and prioritize projects for consideration in grant application packages as funding opportunities arise. Since each grant has its own goals and selection priorities, additional information will be required for each project once the program requirements for the funding opportunity are known. The proponents of those projects selected for consideration in the grant application will then be asked to provide additional information necessary to respond directly to grant selection criteria in a customized pre-application.

The RWMG may add to or modify the Project Description Form in the future. The most-current version of the form will be available at the RWMG website at http://madera-id.org/index.php/rwmg. Instructions for submittal of the completed form are included.

Step 2 Submitted Projects are Reviewed by the RWMG

The RWMG will receive each Project Description Form and review each for content and consistency. If necessary, the RWMG will request additional information from the project proponents if needed for clear understanding of the proposal. In addition, the review will evaluate the following criteria. Each criterion will be given a rating as shown, to assist the RWMG in selecting and ranking projects for funding opportunities.

- Does the project effectively address Regional Goals, Measurable Objectives and Resource Management Strategies? (One, Two, Three or more)
- What is the project's status, and how long would it require to develop to the point of grant-readiness? (Conceptual, Preliminary Design, Ready to Construct)

Projects that are determined to meet the necessary criteria will be considered by the RWMG for addition to the IRWMP Projects List.

Step 3 Appropriate Projects are Approved by the RWMG

The RWMG, at one of its regular meetings, will consider recommended projects and will vote to add them to the Project List. This project list will not be ranked. Project ranking will be based upon funding criteria as discussed in Section 7.2.

Step 4 Projects are Added to the Project List.

The project list will then be generated or updated including projects added in the steps above. An initial list of projects is provided in **Appendix F**.

7.2 - Selecting and Prioritizing Projects for Specific Funding Opportunities

As discussed above, each funding program has its own goals and scoring criteria, and not every project considered important or urgent by the RWMG will be equally responsive to those varying criteria. In order to maximize the chances of being selected to receive funding, it will be important to objectively evaluate, rank and select listed projects for inclusion in a particular funding application. This is particularly necessary for certain grants, including the DWR IRWMP Implementation Grant program, which score applications based on the collective merit of all proposed projects included in the application, and do not fund projects individually. The RWMG has developed the following five-step process for project prioritization based on funding opportunities. A flowchart of this grant-specific process is shown in **Figure 7-2.**

Presentation of Funding Opportunity Information

Funding opportunity information is brought to the RWMG by Members, interested parties, consultants and other stakeholders. These opportunities come from a variety of sources for a wide range of projects and programs, and when these opportunities arise, it is important that all Members and stakeholders gain a basic understanding of the opportunity, project eligibility and selection criteria. The RWMG, through its regular meetings and pro-active communications, provides a clearinghouse for information regarding such opportunities.

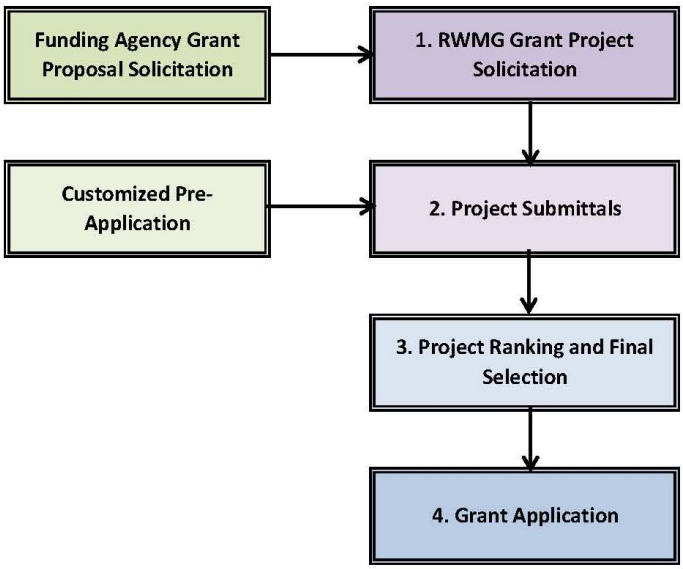

Figure 7-2 – Grant Project Solicitation and Prioritization Process

Establish Project Selection Criteria

Upon the decision to consider specific funding opportunities which require project prioritization, the RWMG will develop custom-tailored Scoring Criteria in the form of a Pre-Application based on the goals, objectives and scoring criteria of the specific funding opportunity. The Pre-Application will match that of the funding opportunity, and may include additional other information and categories considered for prioritization. A Pre-Application outline and sample Pre-Application are included in **Appendix G**. In addition to the Project Description Form already on file, information requested in a Pre-Application may include some or all of the following. Some of these categories are duplicated from the Project Description Form, because information may have changed since the project was first submitted for inclusion on the IRWMP projects list:

- Grant-Specific Requirements
- Project Sponsor(s)
- Measurable Objective(s) addressed, how the project addresses the Objective(s), and a description or estimate of the benefits to be received
- Current Project Status
- Detailed Timeline for Completion
- Work Plan
- Demonstration of Technical Feasibility
- Demonstration of Economic feasibility including Benefit/Cost Ratio
- Funding of Local Cost Share (if required)
- Environmental Justice Concerns

- Climate Change and Greenhouse Gas (GHG) reduction considerations

Organizations that propose projects for grant applications must have also adopted the IRWMP prior to preparing a grant application. The lands within the Region do not receive Delta water, so impacts to reducing dependence on the Delta are not considered in project evaluations.

Pre-Application Request

The RWMG will request that Sponsors of the projects being considered for inclusion in the funding package submit Pre-Applications, as described above. Sponsors will be asked to make efforts to keep the Pre-application length between 5 and 15 pages, excluding attachments and appendices. The Pre-Applications can be submitted by email, mail, hand delivered, or through the RWMG web site. Pre-Applications will be used to:

1) Verify that the project is suited to the grant application at hand;
2) Demonstrate commitment on part of the Sponsor;
3) Help the Sponsor(s) further evaluate the proposed project and determine if they can prepare a competitive grant application within the available timeframe; and
4) Develop information that can be re-used in the grant application

Final Project Scoring and Selection

Once Pre-Applications are received, the RWMG will score each project in accordance with the funding opportunity criteria, and will select a final prioritized list of projects for consideration for inclusion in the final grant application.

The prioritized project list may include more projects or funding requested than is eligible or reasonable to submit for the specific funding opportunity. The RWMG will choose a recommended short list of projects based on the prioritized scoring to be included in the funding application request and the estimated total amount of funds available.

It is possible that a highly prioritized project may not be ready to proceed to application or feasibly be completed within the required timeframe. As part of this step, the RWMG will solicit confirmation from each of the recommended project proponents to ensure that they are prepared to proceed with additional efforts required to prepare the full application, and discuss possible mechanisms to assist with application preparation. An agreement for funding of the application process, contract legal review of funding master agreement and sub-agreements, and funding agreement between Member sponsors for interested parties (if necessary), will be developed amongst the applicants and included in the RWMG's final recommendation.

Funding Application Development and Submission

Following approval by the RWMG, the project Sponsors will complete the necessary information for the funding application preparation and submittal.

Conceptual Grant Application Schedule

An important step in preparing a successful IRWMP grant application is starting early. The DWR typically provides estimated deadlines and draft Proposal Solicitation Packages (PSP) six months before a final grant deadline. The RWMG should start the process as soon as preliminary information is available. **Table 7.1** shows a conceptual schedule for responding to a grant solicitation. This schedule is just a guide, but following it will provide sufficient time to select the best projects and prepare a competitive grant application. The time to combine multiple applications into a single document is often underestimated.

Table 7.1: Conceptual Schedule for Submitting IRWMP Grant Applications

Task	Days prior to Final Deadline
Review Draft PSP and identify potential projects	Before 90
Prepare and submit Project Description Forms	Before 90
RWMG reviews Project Descriptions and selects likely projects for Pre-Applications	90
Prepare Pre-Applications	90-60
RWMG reviews Pre-Applications and selects best projects	60
Complete individual grant applications	60-21
Combine individual grant applications into single application	21-0

CHAPTER 8 - IMPACTS AND BENEFITS

This chapter lays out the overall benefits and some specific impacts of creating an Integrated Regional Water Management Plan (IRWMP), including some benefits and impacts that may be unique to the Madera Region. The DWR IRWM Program Guidelines anticipate that participants will understand the likely benefits to be derived from development of a Plan, as well as some of the more negative effects that may occur. The Guidelines assume that while a general analysis of these benefits and impacts can be made during plan preparation, a more thorough and complete analysis would be part of environmental review at the time of specific project development. Accordingly, this chapter is limited to higher-level and less-detailed analysis.

Identifying the general impacts and benefits of implementing the IRWMP is important for three reasons:

1. The analysis of impacts and benefits of the program can help inform development of resource management strategies and selection of projects.
2. Analysis of potential negative impacts at this early stage is important to provide time to revise strategies and projects and/or create mitigation measures that will be effective in bringing project benefits with minimized negative impacts.
3. The benefit and impact analysis can form the basis of a monitoring program for each project that will be helpful in monitoring IRWMP performance and goal achievement.

8.1 - General Benefits of Regional Water Management

The history of water rights and water management in California is unique among Western states in that rights are vested in the individual or local agency water user rather than commonly in the State. This system has applied both to riparian and correlative rights regarding surface water diversion as well as to the rights of overlying landowners to make beneficial use of the groundwater they are able to pump from beneath their lands. This system worked well for many years, in particular so long as there was an abundance of water. However, there is now a shortage of both surface and groundwater resources within the Region (as well as within neighboring regions) which has led to substantial and damaging groundwater overdrafts and significant shortfalls of surface water.

Continued local and independent management of water resources will allow this competition and conflict to continue, with increasing incidences of water quality impairments, ground subsidence, increased overall pumping and delivery costs, litigation and long-term water resources loss. Regional management, as encouraged by the IRWMP program, will help bring cooperative and collaborative methods to solve what will otherwise be intractable problems. Some key benefits of regional management methods include the following:

- Management of water resources within a recognized hydrologic boundary rather than many isolated political boundaries
- Development of a common long-term vision for regional water management for water supply and water quality issues
- Establishment of common goals and policies for economical and efficient use of available water resources
- Shared development and use of the same hydrologic model and analytical tools for project evaluation
- Improvement in regional water supply reliability
- Increased operational flexibility of the water infrastructures in the region for common benefit
- Protection and improvement of groundwater quality and implementation of regional water management strategies to address drinking water issues
- Reduced cost of developing one regional plan versus individual agency plans
- Reduced cost of data collection, data sharing, and data management
- Increased political influence needed to protect and preserve water resources
- Reduced potential for conflicts and litigation
- Increased chances for obtaining state/federal grant funds as a region rather than as a local agency.

None of these benefits would accrue without the RWMG or some similar regional management structure, and none will continue if the actions taken by the RWMG, including preparation and maintenance of this IRWMP, are not continued through implementation of regional project and management strategies. Such discontinuance would lead to recurring and increasing impacts to water supplies, groundwater, and sensitive ecosystems, resulting in some or all of the following:

- Declining groundwater levels
- Increased pumping costs
- Increased capital costs to lower pumps, deepen wells or construct new wells
- Reduced supply reliability
- Potential conflicts between water users for available groundwater supplies
- Inability to respond to dry year or extended drought conditions
- Degraded ecosystems
- Loss of habitats
- Inability to address regional drinking water quality issues
- Loss of regional economic activity

8.2 - Impacts and Benefits of Resource Management Strategies

The screening level analysis of impacts and benefits from implementing 35 different resource management strategies are included in **Table 8.1**. These strategies come from a list of 37 resource management strategies listed in the California Water Plan Update (DWR, 2009) and

draft 2013 update. Thirty five of those 2013 strategies were deemed applicable to the Region and are discussed in detail in Chapter 5 (Resource Management Strategies).

The impacts and benefits of implementing these strategies broadly approximate the potential benefits and impacts of implementing the IRWMP. **Table 8.1** was developed through interactive discussions by the RWMG. **Table 8.1** presents many of the potential benefits and impacts on the Madera IRWM area and adjoining IRWMP areas, if a given management strategy is implemented.

Table 8.1: Benefits and Impacts of Resource Management Strategies

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Reduce Water Demand	Agricultural Water Efficiency	• Reduced water costs • More efficient use of chemicals • Reduced subsurface drainage • Protection of water quality	• Reduced groundwater recharge in some areas • Requires operational changes • Irrigation hardware needed • Hardware maintenance requirements • Irrigator training requirements	• More interregional basin • exchanges possible • Reduced subsurface • drainage	• Reduction in spills and off-site drainage
	Urban Water Efficiency	• Extend supply • Reduced cost • Reduced home chemical use • Delayed capital costs • Protection of water quality • Reduced energy use • Reduced groundwater (Fracture controlled) overdraft	• Causes operational changes • Lost revenue if usage based • Inconvenient watering times • Creates hard demand that reduces opportunities for drought response	• Possible increase in supply (if fractures traverse regions) • Reduced wastewater treatment • Stretch existing water supplies	• Reduced in spills and off-site drainage
Improve Operational Efficiency and Transfers	Conveyance - Delta	Not applicable in this Region	Not Applicable in this Region	Not Applicable in this Region	Not Applicable in this Region
	Conveyance - Regional/Local	• Maintain water rights • Revenue generation • Conjunctive use • Improved water quality • Increased flood control capabilities • Could deliver surface water to areas that use only groundwater	• Increased use of facilities • Shortened maintenance periods • Greater costs for larger facilities	Not Applicable	Not Applicable

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Improve Operational Efficiency and Transfers	System Reoperation	• Water quality improvements • Flood protection • Recreation benefits • Power generation • Ecosystem restoration	• Loss of historical supplies to other uses	• Temperature control for local fisheries • Flood protection • Ecosystem restoration • Litigation reduction	• Greater management requirements •
	Water Transfers	• Increase recharge options • Reduce groundwater pumping • Reduce overdraft • Expand irrigable acreage	• High capital cost • Potential high annual cost	• Raise capital for other water infrastructure projects • Equalize water supply and demand	• Potential to reduce water in other regions
Improve Flood Management	Flood Management	• Enhanced flood protection • Reduce risk to lives & property • Recharge possible if captured • Riparian habitat improvements • Possible floodplain restoration	• Structural approaches are costly • Permitting requirements involved • Long term ongoing maintenance costs • Emergency response planning required • Limit development in some areas	• Reduce downstream flood risk • Reduce flood recovery costs • Manage upstream water • Regional planning required	• Limit development in some areas • Revisions to flood insurance mapping • Multiple County communications system
Increase Water Supply	Conjunctive Management & Groundwater Storage	• Dry year supply • Extends use of existing basin • Overdraft reduction • Improved water supply reliability • Fracture controlled and Groundwater recharge • Better groundwater management	• Increased pumping costs compared to surface water • Litigation challenges • Increased data collection needs & costs • Uncertainty of impacts to facility neighbors • Facility capital costs • Land use changes for facilities	• Water quality improvement • Improved water supply reliability • Drought relief • Reduction in flood flows below reservoirs	• Water supply uncertainty if surplus flows diverted more frequently

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Increase Water Supply	Precipitation Enhancement	• Quick project development • Increase in water supply	• Accuracy of location & timing	Not Applicable	• Increase in supply in one area at the expense of downwind area • Added snow removal burden in some area • Public concern over accumulation of seeding agent
	Recycled Municipal Water	• Reliable supply • Improved water quality • Allows for development • Drought resistant supply	• Increased operations & maintenance cost • Public acceptance • Water quality concerns with microbial contaminants, salinity, heavy metals, and pharmaceuticals	• Interregional exchange	Not Applicable
	Surface Water Storage - CalFed	• Water supply reliability & augmentation • Flood control • Hydroelectric power generation • Recreation • Sediment transport management	• Permitting requirements • Environmental mitigation • Cost • Limited sites available • Failure impacts • Beneficiary determination • Property tax losses • Habitat losses • Operational control	None	• Reduction in downstream flows • Habitat migration

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Increase Water Supply	Surface Storage - Regional/local	• Water supply reliability & augmentation • Flood control • Hydroelectric power generation • Recreation • Sediment transport management	• Permitting requirements • Environmental mitigation • Cost • Limited sites available • Failure impacts • Beneficiary determination • Property tax losses • Habitat losses • Operational control	• Water transfers • Ecosystem management	• Reduction in downstream flows • Habitat migration
Improve Water Quality	Drinking Water Treatment & Distribution	• Protect public health • Maintain regulatory compliance	• Increased O&M costs • Increasingly stringent regulations • Trained operators • Facility security • Treatment residual disposal • Deteriorating infrastructure	None	None
Improve Water Quality	Groundwater Remediation/ Aquifer Remediation	• Protect public health • Maintain regulatory compliance • Avoided costs of purchasing additional supply	• Costly • Highly trained operations staff • Public perception/acceptance of treated water	• Contaminant plumes kept from spreading	None
	Matching Quality to Use	• Best use of available local water supplies • Most economical choice • Treatment avoided or limited	• Possible environmental impacts • Infrastructure costs • Conveyance costs	• Upstream and downstream partnerships	• Water quality degradation • Effluent dominated streams • Salinity increases
	Pollution Prevention	• Improved water quality • Consistent with anti-degradation policies • More cost effective than remediation or "end of the pipe" treatment	• Increased regulations • Increased costs • Increased management needs • Increased monitoring costs	• Protect water at source • Agriculture irrigation	• Difficult to distinguish between level of impacts of natural and introduced contaminants at times • Lack of access to some

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
					recreational areas
Improve Water Quality	Salt and Salinity Management	• Increase groundwater usefulness • Improve groundwater quality	• Increase costs for irrigation • Reduce irrigable land area	• Increase demand for surface water transfers	• Reduce surface water supply
	Urban Surface Water Runoff Management	• Water source for local recharge • Improve flood protection • Reduce surface water pollution • Minimize soil erosion & sedimentation problems • Local resource from waters historically lost to an area • Mimic natural hydrologic cycles	• Cost to treat and manage runoff • Increased cost to urban developments • Disease from standing water in basins	• Regional collaboration and coordination	• Possible groundwater contamination from recharged water
Practice Resources Stewardship	Agricultural Lands Stewardship	• Reduces pressure to agricultural lands from urban development • Increased economic viability for agricultural lands • Habitat improvement • Encourages agricultural practices which also benefit environmental and restoration concerns	• Conservation easement costs • Cost to implement BMPs	• Preservation of open spaces & agricultural land • Regional planning urban growth strategy • Flood impact reduction • Food security • Recreational opportunities	• Reduced tax base for county and state governments
	Ecosystem Restoration	• General quality of life increase • Protection and enhancement of meadows, fish & wildlife and water resources	• Increased short term costs • Water supply loss	• Increased recreational opportunities • Increase in native species • Water quality improvements • Sustainability to water and flood management projects	• Conflicting objectives in flood management • Opposition to conversion of farmland to habitat

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Practice Resources Stewardship	Forest Management	• Reduction in sedimentation in local rivers and streams • Water quality betterment • Reduced risk of fire • Reduction of carbon footprint	• Economic impacts to loggers and other forest users •	• Air quality protection • Water quality improvement • Winter snowpack improved • Recreational opportunities • Increased water storage • Protection of water supplies • Reduced risk of fire • Reduction of carbon footprint	None
Practice Resources Stewardship	Land Use Planning and Management	• Improved communication among different agencies • Proper planning helps ensure new developments have reliable and sufficient water supplies • Potential for reduced water demands based on development designs	• Difficulty in getting some land and water use planners to cooperate • Increased costs to coordinate efforts	• Potential for reduced inter-regional conflicts • Reduce flooding and increase recharge	• Financial savings • Economy of scale by avoiding conflict
	Recharge Area Protection	• Provide sustainable and reliable water supply of good quality • Removal of some microbes and contaminants during recharge • Flood protection	• Vectors and odors	• Reduces pollutants entering groundwater	None
	Sediment Management	• Reduces sediment loading in aquatic environments • Improves aquatic health • Reduction in erosion	• Economic impacts to loggers and other forest users if roads closed.	• Reduces sediments in lower reaches of rivers, lakes, and reservoirs. • Reduces contamination transport downstream.	None

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Practice Resources Stewardship	Watershed Management	• Community level solutions • Water quality improvement • Protection of local water rights • Flow attenuation	• Difficulty of diverse stakeholders working together	• Community collaboration • Flood mitigation • Quality of life • Habitat provision • Mineral/Nutrient cycling • Recreation opportunities	None
People and Water	Economic Incentives (Grant, Water Pricing)	• Decreased costs for grant recipients • Reduced wait for needed infrastructure • Reduction in water demand from water pricing structures • Reduces use through step charges • Extends supply • (See "Reduce Water Demand") • Provide Capital Funding	• Burdensome application processes • Increased federal or state directives in local issues • Increased administrative costs • Funding is intermittent • Impacts poor disproportionately • May require matching funds	• Local return from statewide obtained funds • Societal goals obtained	• Increase in State debt burden • Social inequities
	Outreach and Education	• More informed public are more engaged in decision making	None	None	None
	Water and Culture	• Raises awareness of cultural impacts on resources and the lack of resource on culture	None	None	None
	Water Dependant Recreation	• Positive agency public relations • Revenue generation • Quality of life benefits to health	• Increased liabilities • Water quality degradation • Addition facility O&M costs • Lack of funding	• Recreational opportunities for travelers	None

Strategy		Madera IRWM		Interregional	
		Benefits	Impacts	Benefits	Impacts
Other Strategies	Crop Idling for Water Transfers	• Drought water supply reliability • Stable farm income in water short years	• Introduction of wildlife, weeds, pests and trash dumping to the area • Changes to local community way of life	None	None
	Dewvaporation or Atmospheric Pressure Desalination	• Increased water supply • Remediation of saline water supplies	• Disposal of salts • Energy costs	None	None
	Irrigated Land Retirement	• Generation of stable water supplies • Reduction in agricultural drainage to an area	• Taxpayer burden of land cost • Increased management costs of government owned retired lands • Lower income and higher unemployment	None	• Possible growth inducement due to increased water supplies • Community and region may lose way of life, jobs • Local tax base losses • Changes in school populations
	Rainfed Agriculture	• Reduction in runoff with no-till systems	• Increased uncertainty of crop production • Low value of viable crops in historical irrigated agricultural areas • Increased runoff and erosion potential	None	None
	Drought Planning	• Improved water reliability	• Costs to develop and maintain drought response plan • Implementing plan may be unpopular • Lack of funds for additional storage	• Lower regional groundwater overdraft • Lower demand for dry year water supplies • Prevent loss of crops or crop idling	None

8.3 - Regional Benefits and Impacts

Many times lost in the focus on impacts and benefits to the immediate or regional area is the reality that many strategies will have consequences, both positive and negative, outside of the region itself. When considering project benefits and impacts, it is easy for project proponents to focus on the immediate project area. However, the nature of water management projects means that benefits and impacts are often much more widespread. Complete analysis of every project's benefits and costs is an integral part of the CEQA work needed prior to project implementation and is essential to understanding regional water management. Many projects within the region may affect surrounding areas. See **Figure 3-17** in Chapter 3 – Region Description for a map of the surrounding RWMG organizations.

The Madera RWMG is regionally unique in that it contains large areas of valley, foothill and mountain lands. As a result, the Madera RWMG covers much of the watershed that delivers water to the valley portion of Madera County. The Madera RWMG is also hydrologically connected to several neighboring RWMGs. These neighboring RWMGs are generally limited to just valley lands or just foothill/mountain areas.

Southern Sierra IRWM Region

The Madera IRWM Region is located north of the South Sierra IRWM Region. The South Sierra and Madera IRWM Regions are generally separated by the San Joaquin River, which creates a partial hydrological boundary, but the two regions are still hydrologically connected. Both Regions share an area south of the San Joaquin River and east of the South Fork of the San Joaquin containing the watershed of the Middle Fork of the San Joaquin River. Both regions would also be affected by projects that impact the flow rate or water quality in the San Joaquin River.

East–Inyo-Mono IRWM Region

The Inyo-Mono IRWM Region includes lands to the east of the Madera IRWM Region and is hydrologically disconnected. The topographic boundary between the two regions is the crest of the Sierra Nevada mountain range, which separates surface flows west and east. Direct benefits or impacts on the Inyo-Mono IRWM region are not anticipated from policies or actions in the Madera IRWM Region.

Kings Basin Water Authority IRWMP

The IRWMP for the Kings Basin Water Authority (also called the Upper Kings Basin Water Forum) lies to the southwest of the Madera IRWM Region boundaries. The two IRWM Regions share a common boundary along the San Joaquin River. This area receives most of their surface water from the Kings River and relies heavily on watershed management in the Southern Sierra to provide reliable and high quality surface waters. The area also relies on San Joaquin River water that originates in Madera County to meet some water demands. The Kings Basin Water

Authority region is experiencing groundwater overdraft, and water management strategies that address or exacerbate overdraft would affect the Kings Basin Water Authority region.

Merced IRWM Region

The Merced IRWM Region is located along the northwest border of the Madera Region. They share a common border along the Chowchilla River. As a result, projects that impact the Chowchilla River impact both IRWM Regions.

Tuolumne-Stanislaus IRWM Region

The Tuolumne-Stanislaus IRWM Region shares a small part of the border on the far eastern end of the Madera IRWM Region. The Tuolumne-Stanislaus IRWM Region is generally upstream of the Madera IRWM Region so projects in Madera would generally not impact them, but their projects could impact water resources in the Madera Region.

Yosemite-Mariposa IRWM Region

The Yosemite-Mariposa IRWM Region is located north of the eastern part of the Madera IRWM Region. Both IRWM Regions have portions of the upper watersheds of the Chowchilla, Fresno and Merced Rivers. The Yosemite-Mariposa IRWM Region consists mostly of mountain and foothill areas, and has similar physiography and climate to the eastern portion of Madera County. The two regions are hydrologically connected by rivers and streams, and projects in each IRWM Region could impact the other.

Westside-San Joaquin IRWM Region

The Westside San Joaquin IRWM Region is located west of the Madera IRWM Region and they share a common border along the San Joaquin River.

8.4 - Impacts and Benefits to Interested Parties and DACs

The Madera RWMG, during the preparation of this IRWMP update, has taken several steps to engage interested parties and Disadvantaged Communities (DACs) in the IRWMP development and implementation. Some local agencies, organizations and DACs are not full members of the Madera RWMG, but can participate in a meaningful way as Interested Parties. Implementation of the IRWMP is expected to have the following benefits to DACs and Interested Parties:

- Discussion Forum. Provide a forum and a voice for discussion of water management issues, concerns, and priorities, especially those important to DACs throughout the Madera Region.
- Information Dissemination. Share information to which DACs or Interested Parties may not normally have access. For instance, DACs and Interested Parties may not have the staff to regularly track Department of Water Resources (DWR) grant projects or attend other regional or statewide meetings. This is typically summarized for the benefit of all members and interested parties at regular RWMG meetings and in RWMG emails.

- Funding Opportunities. RWMG members can apply for a variety of grant programs from DWR, including some that are specifically for RWMG members and stakeholders.
- Special DAC Efforts. DACs can get greater recognition, publicity and input on their water resources issues through special DAC-benefitting projects.

DACs and Interested Parties are not expected to bear significant impacts from the IRWMP implementation, except local impacts that may occur from certain new projects. These impacts would require mitigation before the project is supported by the RWMG, as discussed below.

8.5 - Project Specific Impact/Benefit Analysis

In accordance with state law, the potential environmental impacts of all projects pursuant to the Madera IRWMP will be evaluated under the California Environmental Quality Act (CEQA). When funding requirements so dictate, additional environmental review will be done pursuant to the National Environmental Policy Act (NEPA).

As required under CEQA and NEPA, mitigation measures will be developed whenever feasible, for impacts which are determined to be significant. Project impacts and benefits must be described when projects are submitted to the Madera RWMG in the Project Information (Project Review Process) Form and prior to funding consideration. Grant Pre-applications must include thorough discussions of potential benefits and impacts, but will not require completion of CEQA. However, if an agency chose to complete CEQA review of a potential project, it could improve the chances of that project being recommended for inclusion in a funding application since there would be: 1) an increased certainty of the project's scope, benefits and impacts; and 2) a reduction in the time required to move the project to construction after approval of funding.

As a minimum, the benefit/impact analysis should address the topics found in a CEQA Environment Assessment (EA), including: aesthetics, air quality, biological resources, climate change, cultural resources, geology and soils, hydrology and water quality, land use and planning, noise, population and housing, public services and utilities, recreation, and transportation and circulation.

8.6 - Revisions and Updates to Benefits and Impacts

The evaluation of the overall impacts and benefits of IRWMP implementation will be revised according to the following guidelines:

- Impacts and benefits will be reviewed and revised whenever the IRWMP is updated or DWR establishes new guidelines for this standard, recognizing that as laws, regulations and even climate change that these impacts and benefits will require re-evaluation.
- Impacts and benefits will be revised, as appropriate, to reflect anticipated or observed changes in the regional climate.

- Impacts and benefits will be revised to reflect lessons learned, or new impacts or benefits identified during implementation of local or regional projects.

CHAPTER 9- PLAN PERFORMANCE AND MONITORING

Monitoring performance and progress toward measurable objectives is essential to understanding the effectiveness of the IRWMP, and useful in reporting that progress to the public and to regulatory officials. This chapter describes existing monitoring programs in the Madera Region, and discusses planned monitoring programs that will result from implementation of resource management strategies and projects in the region. It also discusses guidelines for preparing project-specific monitoring and reporting plans.

9.1 - Regional Monitoring Efforts

Following are descriptions of some of the major on-going monitoring programs in the region. Each of these programs monitors specific information in limited geographic areas within the Region.

California Department of Water Resources (DWR) Data Exchange Center – The California Data Exchange Center (CDEC) maintains and operates an extensive hydrologic data collection network, which includes automatic snow reporting gages for the Cooperative Snow Surveys Program and precipitation and river stage sensors for flood forecasting, including various locations within the Madera RWMG region. The CDEC website is located at http://cdec.water.ca.gov and can be accessed at any time. The mapping tool within the website at http://cdec.water.ca.gov/cgi-progs/mapper can be used to locate monitoring stations within a limited geographical area.

The California Department of Water Resources runs a comprehensive survey of snow depths throughout the Sierra Nevada Mountains, including the San Joaquin River watershed within the Madera RWMG region. Information on the snow survey program can be found at http://cdec.water.ca.gov/snow/. Active snow courses are highlighted at http://cdec.water.ca.gov/misc/SnowCourses.html, and are monitored by the National Park Service, Forest Service, Department of Water Resources, utility companies and water associations.

Sierra Nevada Adaptive Management Project (SNAMP) – SNAMP includes a team of university scientists that is monitoring the effects of vegetation management treatments in two Sierra Nevada locations: Sugar Pine and Last Chance (in the Tahoe National Forest). The SNAMP science teams are made up of researchers from various universities. The science teams study fire and forest health, wildlife (focusing on fish and spotted owl), water, and public participation. All science teams are supported by remote sensing, spatial analysis and Geographic Information Systems techniques. This is a seven-year project, ending in 2015, with on-going monitoring. For more information: http://snamp.cnr.berkeley.edu/ .

National Park Service, Sierra Nevada Inventory and Monitoring Program - The Sierra Nevada Network Inventory & Monitoring Program is one of 32 National Park Service Inventory &

Monitoring (I&M) networks across the country established to facilitate collaboration, information sharing, and economies of scale in natural resource monitoring. The Sierra Nevada Network (SIEN) comprises four national park units located on the west slope of the Sierra Nevada mountain range in California, including Yosemite National Park. Yosemite National Park works closely with each park's natural resources program to develop and implement long-term monitoring and provide sound scientific information to park managers. The river monitoring efforts for 2012 are summarized in the linked document: https://irma.nps.gov/App/Reference/DownloadDigitalFile?code=453888&file=SierraNevadaHydrology_Andrews_20120818.pdf. More information on the program can be found at the following website: http://science.nature.nps.gov/im/units/sien/index.cfm.

US Geological Survey (USGS) – The USGS monitors stream flow and surface water quality in multiple locations throughout California. California daily stream flow locations can be accessed here: http://waterdata.usgs.gov/ca/nwis/rt.

California Water Institute – The California Water Institute (CWI) was founded to be a forum for unbiased, open, collaborative discussion, research and education on water-related issues benefiting the entire state. Housed at California State University, Fresno, CWI serves as an independent center for research, education, planning, policy evaluation, and information transfer. Some of the specific functions within its mission statement include conducting watershed-based studies, developing monitoring and reporting modalities, develop water resources management strategies and maintaining databases. The Institute is lead by Dr. David Zoldoske, Director of the Institute. More information on current research available from CWI may be found at: http://www.californiawater.org/cwi/CurrentProjects.html

San Joaquin Experimental Range - The San Joaquin Experimental Range (SJER) is operated by the US Forest Service. It was established in 1934 and was California's first range research station. It was originally conceived as a cooperative interdisciplinary research center to identify cost-effect methods of commercial livestock production in the annual grass-oak pine woodlands, while maintaining the integrity of the ecosystem. The SJER performs research and monitors several parameters relevant to watershed management. More information on the SJER can be found on their website: http://www.fs.fed.us/psw/ef/san_joaquin/.

Southern Sierra Critical Zone Observatory – The Southern Sierra Critical Zone Observatory (CZO) is a platform and program for investigating how the water cycle drives Critical Zone processes, focusing on water balance, nutrient cycling, and weathering across the rain-snow transition. The Southern Sierra CZO was established in fall 2007, under a grant from the National Science Foundation. More information on the observatory can be found at http://criticalzone.org/sierra/.

Groundwater Monitoring - Root Creek Water District, Madera Irrigation District, Chowchilla Water District, Madera County (through its Maintenance Districts and Service Areas), Columbia

Canal Company, the City of Madera and the City of Chowchilla all monitor groundwater levels in their wells.

The County Districts and the cities monitor groundwater quality related to their drinking water supplies, and the cities monitor water quality and quantity related to their wastewater treatment and disposal. The data collected is localized within each agency's boundaries. Madera Irrigation District, Chowchilla Water District, Madera County, Root Creek Water District, and Gravelly Ford Water District are part of a regional monitoring effort under the California State Groundwater Elevation Monitoring (CASGEM) program.

Three additional programs provide active monitoring of the Kings River watershed (adjacent to the Madera Region, to the south). The data collected in these areas could be transferable to the Madera Region. These programs include:

Kings River Fisheries Management Program (KRFMP) - The Kings River Fisheries Management Program (KRFMP) partners include the Kings River Water Association, Kings River Conservation District, and California Department of Fish and Wildlife. For a number of years the program has been collecting information on the habitat conditions, stream flows, water quality, water temperature, hatchery planting programs and fisheries studies within the lower Kings River and the Pine Flat Reservoir (see http://www.krfmp.org/monitoring.html).

Monitoring activities include: Telemetry Studies, Water Quality Surveys, Population Surveys and Macro-invertebrates. Two monitoring sites are located downstream of Pine Flat Dam, one at the Army Corps of Engineer's bridge about one-half mile below the dam, and another on Mill Creek, upstream of its confluence with the Kings River. Initial monitoring activity was carried out by the Program itself, whereas more recent water monitoring has been conducted by staff from the Kings River Conservation District.

Kings River Water Association (KRWA) – KRWA is the agency that manages storage and release at Pine Flat Dam on behalf of the 37 member agencies and companies with water rights along the Kings River. KRWA reports daily water conditions on its website. These daily reports consist of information regarding water storage, natural and actual stream flows in the river and tributaries, dam releases, precipitation and other information (see http://www.kingsriverwater.org/water_conditions/hydro_data.php).

Kings River Experimental Watershed - The Kings River Experimental Watershed (KREW) is a watershed-level, integrated ecosystem project for headwater streams in the Sierra Nevada. Eight sub-watersheds have been chosen and fully instrumented to monitor ecosystem changes. The program is managed by the US Forest Service. More information can be found on the KREW website: http://www.fs.fed.us/psw/programs/snrc/water/kingsriver/.

9.2 - Monitoring IRWMP Objectives

On a regular basis, the RWMG will measure progress towards meeting the IRWMP objectives. In order to capture the full extent of work being accomplished within the region, this measurement will include both projects under the direction of the RWMG, and projects/programs being carried out by member agencies that were funded through RWMG grant efforts.

Each objective is listed in **Table 5.1** in Chapter 5 – Goals and Objectives, along with its metric and how it will be monitored. Informal progress reports will be prepared by the RWMG on a regular basis. These regular reports will be used to meet regulatory requirements, to report back to member agency decision-makers and to aid in preparation of future funding applications.

9.3 - Monitoring Progress in Implementing Projects

The RWMG will monitor progress in implementing projects which are funded through the efforts of the RWMG, with assistance from the RWMG, or are being implemented by other agencies throughout the Region, to keep an accurate tally of cumulative progress being made. Each year the following will be documented:

- List of projects submitted to the RWMG
- Projects included in grant applications sponsored by the RWMG
- Projects approved for funding
- Projects addressing Region goals and objectives which are underway or completed by other agencies within the Region
- Anticipated benefits of projects that are underway or completed.
- Summary of total Region-wide progress toward goals and objectives.

9.4 - Project-Specific Monitoring

Project monitoring is important to track the successes and benefits of a project, ensure it is being operated properly, comply with laws and regulations, and to monitor the IRWM process and benefits. Examples of project-specific monitoring can include monitoring water quality, groundwater depth, flood frequency, and effects a project may have on habitat or particular species. Project-specific monitoring is the responsibility of the agency(s) or group(s) that are implementing a project and expect to directly benefit from the project. These agency(s) are also responsible for developing project monitoring plans.

The RWMG will require draft monitoring plans for projects that are considered for funding. Final monitoring plans are prepared after final designs are completed, and are typically approved by regulatory or funding agencies. The RWMG will request copies in order to provide complete reporting within the RWMG.

Draft monitoring plans typically include the following information when applicable:

General Information

- Project description
- Describe what is being monitored (water quality, water flows, etc.).
- Need for monitoring

Monitoring Program Parameters

- Frequency and schedule
- Overall time period (e.g. 5 years, life of project, etc.)
- Locations
- Protocols
- Tools and equipment
- Pertinent laws and regulations
- Quality control procedures

Data Management Procedures

- Data storage and tracking
- Incorporation into Statewide databases
- Targets to be reached (if any)
- Measures to remedy or react to problems encountered during monitoring
- Reporting procedures

Other Topics

- Funding source for on-going monitoring
- Responsibility for on-going monitoring

An important component of monitoring and data management is qualitative or quantitative trend analysis. When relevant, appropriate trend analysis should be a part of project monitoring plans.

9.5 - Regional Water Management Group Summary Reports

From time to time, the RWMG will prepare annual summary progress reports. The report will document the aforementioned monitoring, give a current project list, discuss any proposed amendments to the IRWMP, and note changes in governance, policies, and membership.

Periodic summary reporting is considered important for the RWMG and will offer the following benefits:

1. Help to validate the RWMG by documenting successes and achievements.

2. Increase awareness of RWMG efforts with the members, stakeholders and general public. The annual report could be used for educational, informational and promotional purposes.
3. Serve as a reference document for RWMG administrators.
4. Document information that may be needed for future IRWMP updates.

The frequency, content and preparation of these summary reports will be determined by the RWMG. The detail needed in the reports will be assessed at the time of preparation, and may vary based on the needs and recent accomplishments of the RWMG and the member agencies.

CHAPTER 10- DATA MANAGEMENT

10.1 - Introduction

This chapter describes the collection, storage, management and dissemination of data to Regional Water Management Group (RWMG) participants, stakeholders, the public and the State. The Data Management Standard was developed for the IRWMP process to ensure the efficient use of available data, stakeholder access to data, and integration of the data collected through the IRWMP process into existing databases.

Coordination of data management within Madera RWMG has been limited up to this point. Madera RWMG contains numerous agencies, with no single lead agency charged with collecting, organizing and making accessible data for the region. Data that are collected are managed by multiple public agencies and private organizations. The following are members of the RWMG who maintain their own data, and will also be submitting information and data, when applicable, to the RWMG.

- Chowchilla Red Top Resource Conservation District
- Chowchilla Water District
- City of Chowchilla
- City of Madera
- Coarsegold Resource Conservation District
- Fairmead Community and Friends
- Gravelly Ford Water District
- Madera County
- Madera County Special Districts
- Madera Irrigation District
- Madera Valley Water Company
- Madera Water District
- North Fork – Mono Rancheria
- Root Creek Water District
- Self Help Enterprises
- SEMCU – South East Madera County United
- Yosemite/Sequoia Resource Conservation and Development Council

The Madera RWMG will utilize their website (http://www.madera-id.org/index.php/rwmg) as the main portal for storing and distributing data, and providing web links to where data can be found. RWMG does not have the resources necessary to build and maintain new databases, so existing databases managed by various public and private entities are utilized to provide the background for the data management plan while the website is used to aid in distributing the information to interested parties.

10.2 - Data Needs in the Madera Region

Data availability in the Madera Region varies depending on the location. The western third of the region consists of relatively flat land that is primarily used for agriculture, and the eastern two-thirds include foothill and mountain areas. These two areas have different data needs.

Valley Area

Local water resources information for this area is primarily available from Root Creek Water District, Madera Irrigation District, Chowchilla Water District, Madera County (through its Maintenance Districts and Service Areas), Columbia Canal Company, the City of Madera and the City of Chowchilla. Because of the development in this area, there is substantially more information available regarding groundwater and surface water than there is in the remainder of the area.

However, this area still needs better data on groundwater levels in most areas. Insufficient data is available to perform detailed water balances, provide reasonable estimates of groundwater, and prepare accurate groundwater contour maps. Provost & Pritchard (2014) identifies areas in better groundwater monitoring.

Foothill and Mountain Area

The eastern two-thirds of the area consist of foothills and mountainous regions. Due to the rugged terrain, poor accessibility and limited development in this area, limited water resources information is available. For instance, soil survey maps have not been developed for this area and groundwater elevation and water quality information for this area is sparse. Increased data collection, organization and analysis are needed to improve the ability of local and state agencies to make policy decisions and develop projects for the area. More specifically, information regarding the following water resources needs to be developed: 1) groundwater resources; 2) resource management strategy justification; 3) watershed management plans, and 4) stream monitoring.

Information regarding groundwater resources in the eastern portion of the RWMG is limited. Much of this area consists of fractured bedrock aquifers with unknown sustainable use rates. Groundwater provides the drinking water source for many communities, disadvantaged communities and individuals that reside in the region. Further development of the area requires that greater understanding of the region's aquifer is achieved through studies and data collection.

The IRWMP prepared for this region includes resource management strategies that could be further developed and justified if additional data regarding the region's water resources is collected. Understanding of the region's interrelationships between watershed management, surface water impacts and groundwater conditions will aid in the further development and implementation of management strategies.

Management of the watersheds located in the eastern portion of the RWMG plays a significant role in the region's water management strategies. However, further information regarding the watersheds and the proper management strategies for them is needed. Integration and implementation of the existing watershed management plans would improve the water management in the area. Potential teaming opportunities with agencies such as the National Forest Service, USGS and the US Army Corps of Engineers need to be further investigated.

In conjunction with the watershed management strategies, stream monitoring of the numerous small streams located in the region would improve knowledge of the water resources and how the watershed management strategies implemented are changing the stream conditions. Monitoring of hydrologic, chemical and biological parameters is needed for this area. In addition to the stream analysis, further development of the potential flood risk is needed. Although the area has limited flood potential, runoff from the region's streams can cause localized flooding.

A detailed inventory of all water resources infrastructure both in the valley and foothills/mountains would also assist with regional water management.

10.3 - Data Collection Techniques

Data collected for the RWMG needs to be consistent and compatible with existing databases. Additionally, where possible, data collected should be shared with State clearinghouses for incorporation into publically available databases. Incorporation into existing databases provides a cost effective method of ensuring that the information is readily available for future studies and for other interested parties.

10.4 - Stakeholder Contributions of Data

Data collected by stakeholders on RWMG sponsored projects is provided to the RWMG for storage and to facilitate cooperative efforts within the region. Additionally, stakeholders provide descriptions of proposed projects to the RWMG. This information helps facilitate multi-benefit and cooperative efforts while preventing duplicating efforts. The RWMG combines the project information submitted into a formal project list and stores the data on the RWMG website. See CHAPTER 7 – Project Review Process for more detail on this process and a current list of potential projects.

10.5 - Data Management Responsibilities

Data management by the RWMG will be primarily accomplished by publishing the data on the RWMG's website. Information from projects implemented by the RWMG or from projects funded through RWMG sponsored grant applications will be provided through the website.

The RWMG does not have the financial or staff resources available to develop and maintain databases specific for the area. Databases for the area could be developed through grant funding, however on-going maintenance of the databases would require a new funding source. Project specific data and reports prepared by the RWMG will be available to interested stakeholders on the RWMG website.

10.6 - Regional Water Management Group Website

Data and information transfer from the RWMG to interested stakeholders will be primarily accomplished through the RWMG's website. The website will be updated to include the following information or web links to the following information:

- Integrated Regional Water Management Plan
- Copies of studies, reports, designs and data for projects funded by RWMG applications
- Historical RWMG documents
- RWMG Annual reports
- Information on proposed, current and completed projects

10.7 - Quality Control and Quality Assurance Measures

Quality Control and Quality Assurance Measures ensure that data obtained from projects and entered into databases are accurate and reflect conditions within the RWMG. The RWMG will review relevant information pertaining to projects funded by the IRWMP process. When deemed necessary, the RWMG will form technical committees to review information submitted and oversee its use.

Additionally, projects funded through the IRWMP grant process must have Quality Control and Quality Assurance measures developed and submitted in the grant applications. Projects without fully developed Quality Control and Quality Assurance measures will not be included in grant applications sponsored by the RWMG.

10.8 - Data Sharing and Distribution

Data will be shared and distributed to local stakeholders and government organizations that maintain databases by RWMG and the associated entities.

Local stakeholders. Data will be shared with local stakeholders including RWMG members, stakeholders, local agencies and the general public through the following mechanisms:

1. Final reports for RWMG projects will be placed on the RWMG website

2. Annual reports identifying the data collected will be posted in the website
3. Public outreach efforts, such as website postings, RWMG meetings, public workshops, and targeted outreach will inform stakeholders of data that is or has been collected.
4. When appropriate, copies of reports and data will be sent to specific stakeholders that may have a high interest in the data.

State Databases. Data collected for RWMG projects will be forwarded to the appropriate State agency for inclusion in their databases. In general, State databases have specific requirements for data submittal (format and procedural) that will need to be followed. Grant applicants need to consider what State databases they may be contributing data to, because the legislation supporting a given grant program may specify a State database for data submittal. Following is a list of some state databases that may be applicable to future projects:

- *California Environmental Data Exchange Network (CEDEN)* – CEDEN is a system designed to facilitate integration and sharing of data collected by many different participants. The CEDEN data templates are available on the CEDEN website: http://www.ceden.org.
- *Water Data Library (WDL)* – DWR maintains the State's WDL which stores data from various monitoring stations, including groundwater level wells, water quality stations, surface water stage and flow sites, rainfall/climate observers, and well logs. Information regarding the WDL can be found at: http://wdl.water.ca.gov/.
- *California Statewide Groundwater Elevation Monitoring Program (CASGEM)* – CWC §10920 et seq. establishes a groundwater monitoring program designed to monitor and report groundwater elevations in all or part of a basin or subbasin. These requirements also limit counties and various entities (CWC §10927.(a)-(d), inclusive) ability to receive State grants or loans in the event that DWR is required to perform ground monitoring functions pursuant to CWC §10933.5. Requirements of the CASGEM Program can be found here: http://www.water.ca.gov/groundwater/casgem/.
- *Surface Water Ambient Monitoring Program (SWAMP)* – The SWRCB has developed required standards for SWAMP. Any group collecting or monitoring surface water quality data, using funds from Propositions 13, 40, 50, and 84 must provide such data to SWAMP. More information on SWAMP is available at: http://www.swrcb.ca.gov/water_issues/programs/swamp.
- *Groundwater Ambient Monitoring and Assessment Program (GAMA)* – GAMA provides a comprehensive assessment of water quality in water wells throughout the State. GAMA has two main components, the California Aquifer Susceptibility (CAS) assessment and the Voluntary Domestic Well Assessment Project. The CAS combines age dating of water and sampling for low-level volatile organic compounds to assess the relative susceptibility of public supply wells throughout the State. The Voluntary Domestic Well Assessment Project provides sampling of water quality in domestic wells, which will assist in assessing the relative susceptibility of California's groundwater to

contaminants. Because water quality in individual domestic wells is unregulated, the program is voluntary and will focus, as resources permit, on specific areas of the State. Constituents to be analyzed include nitrate, total and fecal coliform bacteria, methyl tert-butyl ether, and minerals. Additional information on the GAMA program is available at: http://www.swrcb.ca.gov/gama.

- *California Environmental Information Clearinghouse (CEIC)* – The California Natural Resources Agency (CNRA) maintains the CEIC, which is a statewide metadata clearinghouse for geospatial data. The CEIC is accessible at: http://ceic.resources.ca.gov/. The online directory is used for reporting and discovery of information resources for California. Participants include cities, counties, utilities, State and federal agencies, private businesses, and academic institutions that have spatial and other types of data resources.
- *Integrated Water Resources Information System (IWRIS)* – DWR maintains IWRIS, which is a data management tool for water resources data and not a database. IWRIS is a web based GIS application that allows entities to access, integrate, query, and visualize multiple sets of data simultaneously. Information on IWRIS is available at: http://www.water.ca.gov/iwris/
- *California Environmental Resources Evaluation System (CERES)* – CERES is an information system developed by CNRA to facilitate access to a variety of electronic data describing California's rich and diverse environments. The goal of CERES is to improve environmental analysis and planning by integrating natural and cultural resource information from multiple contributors and by making it available and useful to a wide variety of users.
- *California Integrated Water Quality System* (CIWQS) - CIWQS is a computer system used by the State and Regional Water Quality Control Boards to track information about places of environmental interest, manage permits and other orders, track inspections, and manage violations and enforcement activities. CIWQS also allows online submittal of information by permittees within certain programs and makes data available to the public through reports. The CIWQS database can be found at: http://www.waterboards.ca.gov/water_issues/programs/ciwqs/index.shtml

10.9 - Other Data Sources

Following is a list of other sources that contain important data on the region and its water resources:

- California Irrigation Management Information System (CIMIS) (http://wwwcimis.water.ca.gov/)
- California Water Plan (http://www.waterplan.water.ca.gov/)

- California Department of Fish and Wildlife – Numerous endangered species studies throughout the RWMG area
- US Fish and Wildlife Service - Landscape Conservation Cooperatives
- Sierra Nevada Conservancy - Geographic Information Systems data
- Geotracker database (environmental data for regulated facilities in California) - http://geotracker.waterboards.ca.gov/
- DWR Well completion reports for the Madera County
- National Park Service, Sierra Nevada Network Inventory and Monitoring Program; http://science.nature.nps.gov/IM/units/sien/index.cfm
- National Park Service Searchable Report Database; https://irma.nps.gov/App/
- Millerton Area Watershed Coalition; http://www.sierrafoothill.org/watershed/
- Upper Fresno River Watershed Portal; http://www.fresnoriver.org/ (contains copies of all known documents and records on the Upper Fresno River)
- Upper San Joaquin River Watershed Portal; www.usjrcouncil.org (contains copies of all known documents and records on the Upper San Joaquin River)
- Monitoring programs listed in Section 9.1 -Regional Monitoring Efforts

CHAPTER 11- FINANCING

The Madera Region Regional Water Management Group (RWMG) requires funding for on-going operations, updating the Integrated Regional Water Management Plan (IRWMP), preparing grant applications, project development (studies, design and construction), project operation and maintenance, and local cost share for grant funded projects. This Chapter provides a general overview of potential funding sources, programs, and project partnerships available from tribal, federal, state, local and private sources.

11.1 - Funding Sources

The primary sources of funding are illustrated in **Figure 11-1** and discussed below.

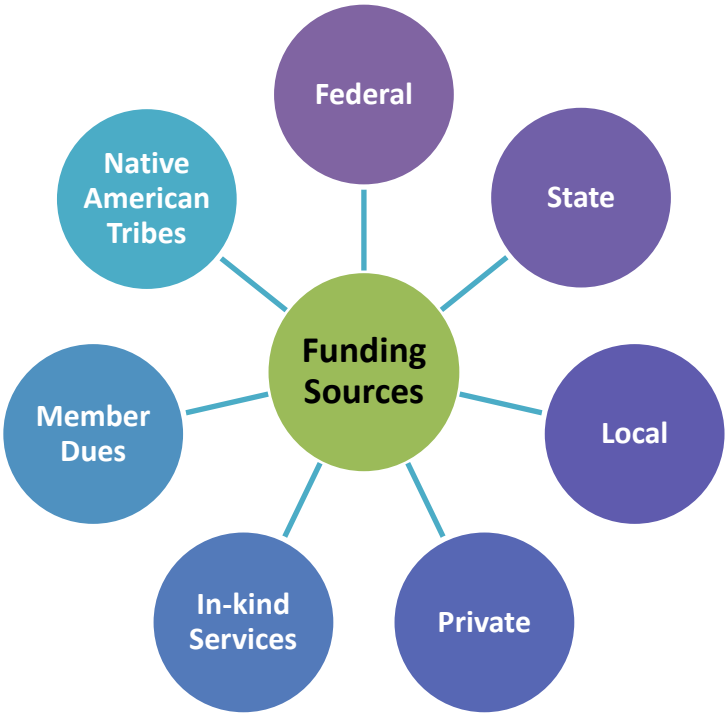

Figure 11-1 – Funding Sources

Professional In-Kind Services

Professional in-kind services include time donated by members and stakeholders to assist with RWMG efforts. Professional in-kind services have been an important part of the funding for the RWMG. In-kind services have helped with institutional development, RWMG operations, grant applications, public outreach, and the IRWMP update.

Member Dues

The current model for the Madera Region RWMG requires that voting members fund RWMG general administrative and operation costs through the collection of dues (set forth in the

Memorandum of Understanding and Bylaws). Members of the RWMG include dues paying members, disadvantaged community members, and affiliate members. Disadvantaged community members are not required to pay dues, nor are affiliate members. Affiliate members are agencies or organizations that are procedurally precluded from contributing monetary dues.

In July of each calendar year, an administrative operating budget is proposed for the August 1 to July 31 fiscal year. MOU signatories each pay an equal dues amount. However, members organizations that provide in-kind administrative support, may subtract from their dues the cost of providing administrative services for the year. For the 2013/2014 fiscal year, dues were $1,200 per member.

Native American Tribal Funding

Native American tribes can be a source of funding for water resources projects on reservations. Tribes also fund projects throughout the Madera Region that help to restore native habitats so they can perform traditional activities and customs, such as indigenous food gathering. Some project examples include exotic species removal and stream restoration. The Chukchansi Tribe also offers grants to certain public agencies and non-profit organizations in Madera County through a settlement program known as the Community Grant Program (see **Appendix H**).

Federal Funding

Federal funds are available through a variety of mechanisms, including legislative appropriations, federal agency interest, and federal assistance programs (grants and loans). Federal earmarks have largely disappeared during the last few years due to the poor economy, and local agencies must usually work with departments in the Federal government several years in advance to help secure funding. Examples of these funding mechanisms are described below.

Legislative Approach

Federal funding may be secured through the legislative process to directly fund an approved project. A public agency working with a local congressional representative can initiate this process. The project may require the establishment of federal interest through an act of Congress (authorization) and then be funded in subsequent years (appropriation). An appropriation can be made the same year if the project is consistent with the goals and objectives of an existing federal program. Competition for congressional funds is formidable and requires broad support of local, regional, and state interests for projects to be successful in obtaining funding.

Federal Agency Interest

Funding can also be secured directly from federal agencies. Local projects may be eligible for funds and in-kind services through directed actions and partnerships. Federal agencies commit to projects during their respective internal budgeting processes and have the flexibility to disperse funding over several years.

Federal Assistance Programs

A third federal option is to apply for project funding under an existing federal agency grant, loan, or assistance program. Potential grant programs funded by federal agencies are listed in **Appendix H**. Eligibility, cost sharing, and application requirements vary among the programs.

State Funding

State funds are similar to the federal funding mechanisms and include legislation, state agency interest and state assistance programs.

State Legislative Approach

Although the dollar amounts available from the state are usually not as substantial as federal funding opportunities, the state legislative process is somewhat more straightforward. Appropriating funds through the state legislature is extremely competitive and subject to the state budget conditions.

State Agency Interest

Discretionary funds may be available in the form of directed action assistance or in-kind services. Partnerships with agencies such as the DWR Division of Integrated Water Management, Department of Fish and Wildlife (DFW), and the State's Division of Drinking Water (DDW) may yield monies and services.

State Assistance Programs

A third option is to apply for project funding under an existing grant, low-interest loan, or assistance program administered by any of the various state agencies. In the past, Propositions 13, 204 and 50 have all provided substantial state-wide funds for water resources projects. Proposition 84 provided significant funds specifically for IRWMP updates and implementation projects and continues to be a source of funding through DWR. DWR anticipates that a third and final round of implementation funding will become available in late 2014 or early 2015. Additional propositions will be needed to maintain the current level of state IRWMP funding. **Appendix H** lists some of the major state grants that fund water resources projects.

Local Funding

Local funding will vary by source and agency authority. City and county government can generate local funding from a variety of sources including: general funds, water rates, development or impact fees, sales tax connection fees, capital improvement programs, revenue bonds, acreage or ad valorem assessments, user fees and sales taxes. Water and irrigation districts can generate local funds through benefits assessment, water standby and availability charges, sales taxes, water service fees, developer fees; or by generating revenue through water sales, groundwater banking, exchange, or transfer related contracts.

Increasing benefits assessments or fees by the overlying district or the land use agency may require studies and a special election and/or protest hearing pursuant to state laws including

Proposition 218. Local funding is often the funding source for grant cost sharing and project operation and maintenance.

Private Funding

Private funding can come from individuals, private foundations, development interests, corporations or non-governmental organizations. Private funding is an important source that is often overlooked by Regional Water Management Groups. Some organizations do not solicit applications but choose projects themselves. In these cases it is worthwhile to introduce the RWMG to the organization for future consideration of Public-Private partnerships and other funding opportunities that make sense to the private sector. Private organizations generally, but not always, provide smaller grants than state and federal programs. **Appendix H** lists some foundations, organizations and corporations that fund water-related projects.

11.2 - Funding Needs

Funding is needed for RWMG operations, IRWMP updates, grant applications, planning and project development, operation and maintenance, and local cost share for grant-funded projects. The various funding needs are shown in **Figure 11-2** along with potential funding sources for each need. The funding needs are described below in more detail.

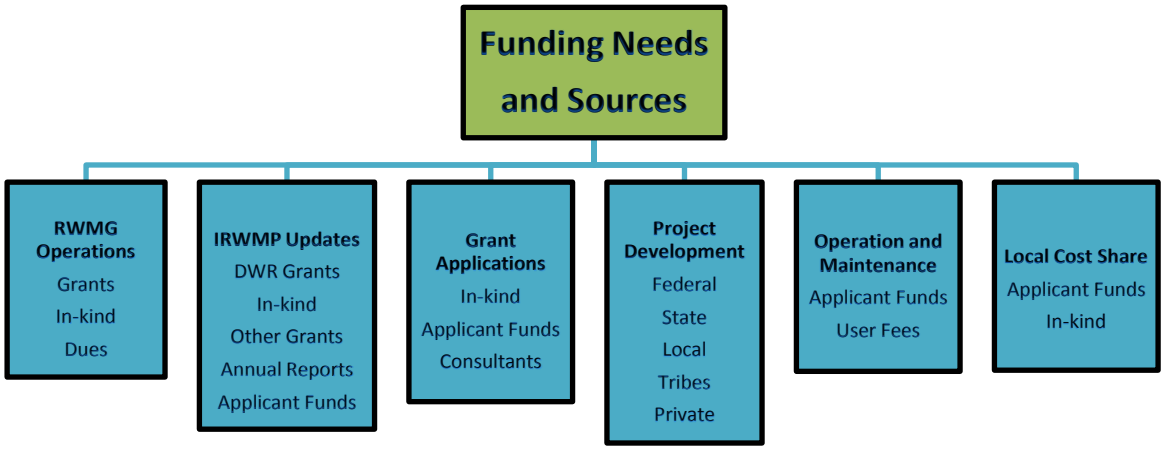

Figure 11-2 – Funding Needs and Sources

Regional Water Management Group Operations

Regional Water Management Group (RWMG) operations include administration, governance, public outreach, regular meetings and special workshops. Funding for the RWMG operations has come from annual membership dues and in-kind services. In-kind services from participants have also been used to organize and operate the RWMG since its inception.

Funding for Updating the IRWMP

The 2008 IRWMP was developed with in-kind professional services and work from two Department of Water Resource grants funded by AB303 and Proposition 50 respectively. The 2008 IRWMP was updated and expanded using a $271,438 grant from the California Department of Water Resources through a Proposition 84 Integrated Regional Water Management Planning Grant. The cost share for future IRWMP updates will be provided through professional in-kind salary costs for stakeholders. The RWMG will seek DWR funds for future IRWMP updates, but realizes that these funds may not be available, or that their timing may not coincide with the appropriate time for an update. If DWR funding is not available, updates could be funded through a combination of in-kind costs, fees collected from RWMG members, or other grant programs. **Appendix H** list numerous grant programs including some that fund water resources planning, and may fund updates to the Madera IRWMP. The RWMG also plans to periodically prepare a report, when deemed necessary, to document progress, data collected, changes to policies, and other pertinent information. These annual reports will become the basis for future plan updates, and will reduce the cost of such plan updates.

Funding for Grant Applications

The RWMG has submitted grant applications benefitting the entire RWMG area and others that directly benefit only one or more agency. Applications that benefit the entire RWMG, such as for an IRWMP update or regional study, will be funded by the RWMG. To date this has been performed with in-kind work from stakeholders and consultants. Applications for project funding that directly benefit only one or more agency will be funded by those agencies which would receive the benefits. Requiring members to fund their own applications helps to ensure that they are serious and committed to their projects. An IRWMP Implementation Grant application in 2011/2012 was funded with applicant funds and in-kind services from the applicants, and helped the RWMG to secure their first IRWMP implementation grant.

Funding for Project Development

Project development includes feasibility studies, design and construction. Federal, state, local, tribal and private funding are options for project development. **Appendix H** list potential funding programs from each of these sources. The list in **Appendix H** is not comprehensive, but includes well-known and likely sources of funding. The national grant database eCivis (http://www.ecivis.com), which is a subscription service, can provide a more comprehensive list of funding options.

The certainty and longevity of the funding sources is not well known. Grant programs are constantly evolving. Some are cancelled each year while new programs emerge. Funding generally waxes and wanes with the economy and government focus. Stakeholders need to stay constantly apprised of current opportunities. Chances for success are usually highest with new grant programs, before they becomes well known and receive a large number of applications. This emphasizes the importance of closely tracking grant opportunities. A major source of funding for project development are the IRWMP Implementation Grants funded by Proposition 84. The final round of applications for Prop 84-funded Implementation Grants is

expected to begin in mid-2015. Future funding rounds will be dependent on the passage of State Propositions. These Propositions can provide funding for periods lasting up to five to ten years. However, funding from state general funds is unlikely for the IRWMP Program, which will likely rely on State Propositions for the foreseeable future.

In 2012, the RWMG was granted full funding from the Round 1 Implementation Grant of $9,413,947 for four projects:

1. Ash Slough Arundo and Sediment Removal
2. Cottonwood Creek, Dry Creek, & Berenda Creek - Arundo and Sediment Removal
3. Root Creek Recharge Project
4. Fuel Reduction for Forest Health & Fire Safety in the Sierra National Forest (The first Forest Management Project funded as part of an IRWM which recognizes watershed health as a whole).

Operation and Maintenance Funding

Operation and maintenance (O&M) for infrastructure projects is generally funded by those agencies directly benefitting from the project. The RWMG is not responsible for project O&M expenses and grant and loan programs typically do not cover these expenses. Before undertaking a new project, a grant applicant must estimate the O&M expenses and define a secure long-term funding source. These typically come from applicant reserves, on-going revenue, or new fees. Projects should not be pursued if long-term O&M funding is uncertain.

Local Cost Share Funding

Many grant programs require applicants to pay a portion of the project cost, which is called the local cost share. Local cost shares vary but are commonly 25% or 50% of the project cost. These are typically funded with applicant reserves, on-going revenue, bond sales or new fees. They can also be funded with monies from another grant. Some grant programs have not required cost share for DAC projects, and they have been eligible for full grant funding. The RWMG has established the following guidelines regarding local cost share funding:

1. Local funding sources must be firmly defined for all projects requiring local funds.
2. Local funding match requirements are to be provided by the project stakeholder or stakeholders (partners) that are the direct beneficiaries as defined by engineering and economic evaluations.
3. Specific agreements between project partners must clearly define the mechanism for cost sharing and on-going project O&M.
4. All new projects not already covered by an existing funding mechanism will need to expeditiously engage their communities and obtain approvals for any new project funding, whether for capital construction or O&M costs.

5. User fees are appropriate for cost share where the beneficiaries are clearly defined and increases in fees are approved according to appropriate rules and regulations.

11.3 - Funding Opportunity Awareness

The RWMG members will track tribal, federal, state, local and private funding sources and keep the group apprised of opportunities for grants, loans or other forms of assistance. A standing agenda item on funding sources will be included in RWMG meetings to brief the community. Funding opportunities will also be listed on the RWMG website. The list of grant opportunities in **Appendix H** should be updated annually and a revised list distributed to RWMG members.

CHAPTER 12- TECHNICAL ANALYSIS

This chapter documents the technical information and data which inform various other chapters of this report. Very little original analysis was carried out in the process of this report update; rather, the report relies on other work accomplished in the Region which relates directly to the goals and objectives of this report.

Available analysis for some subjects is thorough and up to date. Data for other subjects is less complete, and the following identifies gaps that can and should be filled through additional analysis and/or data monitoring as funding is available. For the time being, the information used in the preparation of this report update is believed to be the best available.

12.1 - Chapter 1: Introduction

This chapter does not include technical analysis nor does it present data summaries.

12.2 - Chapter 2: Governance and Coordination

This chapter does not include technical analysis nor does it present data summaries.

12.3 - Chapter 3: Region Description

This chapter relies heavily on the recently-completed Madera Regional Groundwater Management Plan (GMP), July, 2014, prepared by Provost & Pritchard Consulting Group. In addition to its analysis of historic and current groundwater conditions in much of the Valley portion of the Region, this report provides extensive background information on the geology and hydrogeology of the Region, quantifies surface water supplies and current groundwater pumping, discusses current groundwater monitoring programs, sets forth land uses and cropping patterns and provides a discussion of land subsidence in the western portion of the Region. In addition to the original analysis contained in the GMP, it references related work completed by the USBR and the California Department of Water Resources.

The 2008 Madera IRWMP also includes some important water resources analysis and statistics that were referenced in this section. The appendices of the 2008 IRWMP includes groundwater evaluations for the Oakhurst area, North Fork area, Coarsegold area, and Raymond.

12.4 - Chapter 4: Disadvantaged Communities

This chapter relies on US Census and California Department of Finance data to identify qualifying Disadvantaged Communities within the Region. The available data was adequate for the purpose.

12.5 - Chapter 5: Goals and Objectives

This chapter relies on the 2014 GMP cited above to inform the groundwater-related goals and objectives, particularly in the Valley portion of the Region. A clear understanding of the current groundwater situation is necessary in order to establish sustainable, attainable, and realistic goals for the Region.

A weakness of the available data is pointed out in the GMP. While there is extensive groundwater monitoring data available across the Valley portion of the Region, not all of the monitoring wells are completely documented. This results in monitoring data that is ambiguous. The primary deficiency is in knowing exactly where monitor wells are perforated and sealed. Not knowing means that there is no way to determine if those ambiguous wells are monitoring water levels in the shallow or deep aquifers. This leads to limitations in understanding the actual groundwater contours. The GMP calls for an expanded effort, funded by the water users, to create monitor wells in both the shallow and deep aquifers, which would allow for improved data to be collected over time.

12.6 - Chapter 6: Resource Management Strategies

This chapter relies on the resource management strategies described in the 2013 California Water Plan Update. The report subjectively evaluates the potential of each of the 36 strategies named in the Update to benefit all or a portion of the Region.

This chapter also relies on climate change projections from numerous sources (cited in Chapter 15 of this report) to make certain conclusions about future climatic conditions and how those changes will affect water availability within the Region. Those conclusions are used to develop strategies to make the wisest use of the available resources in the future.

While the level of certainty regarding specific climate change predictions cannot be known at this time, there is a degree of consensus among the cited researchers that is adequate to allow for long-term strategic planning. The group has determined that they should prepare for climate change, even if the exact trajectory of impacts in unknown.

12.7 - Chapter 7: Project Review Process

This chapter is descriptive of the project review and selection process developed by the RWMG and does not rely on outside technical analysis or data.

12.8 - Chapter 8: Impacts and Benefits of Plan Implementation

This chapter analyzes the impacts and benefits of implementing the chosen resource management strategies, both to the Region itself and to surrounding regions that may also be involved in specific management strategies.

The level of analysis prepared for this report is qualitative and geared to understanding the potential environmental impacts of projects that would result from implementation of the proposed resource management strategies. No data was collected or relied upon and no technical analysis was carried out. The chapter notes that as individual projects are brought forward, additional environmental analysis under CEQA and/or NEPA may be required to satisfy funding agency requirements. Similarly, additional technical analysis of specific project benefits, costs and negative impacts may be required as well. Such higher levels of analysis are not appropriate for all the proposed projects at this time, until funding becomes available and proposed project timelines are understood.

12.9 - Chapter 9: Plan Performance and Monitoring

Chapter 9 does not so much provide analysis and data gathering as it describes how those activities will be carried out as the IRWMP moves forward in time, and specific projects are carried out to advance chosen goals and objectives.

12.10 - Chapter 10: Data Management

This chapter discusses the variety of methodologies used by the partner agencies to store data, and the unified portal set up by the RWMG to provide more streamlined access to data that will be shared between the partner agencies.

This chapter again discusses the Region's need for better and more thorough groundwater information, particularly in the Valley portion of the Region, and the Foothill/Mountain area's need for several kinds of monitoring and data including the following: 1) groundwater resources; 2) resource management strategy justification; 3) watershed management plans, and 4) stream monitoring.

The chapter identifies the Region's website as being a central repository of shared data and notes that data will be shared and distributed to local stakeholders and government organizations that maintain databases by RWMG and the associated entities.

The chapter also identifies a number of state databases that are expected to be useful in future activities, including the California Environmental Data Exchange Network, the DWR Water Data Library, the California Statewide Groundwater Elevation Monitoring Program, the Surface Water Ambient Monitoring Program, Groundwater Ambient Monitoring and Assessment Program, the California Environmental Information Clearinghouse, the Integrated Water Resources Information System, the California Environmental Resources Evaluation System and the California Integrated Water Quality System. Details of each database listed appear in CHAPTER 10.

Additional data sources beyond those listed above are also set forth in **Section 10.9 - Other Data Sources.**

12.11 - Chapter 11: Financing

This chapter includes a discussion of potential revenue sources for both capital projects and ongoing day-to-day operations for the RWMG. At this level, the report makes no effort to determine whether one funding source is more appropriate for or better suited to a project than any other. That level of analysis and determination is left to the time of individual grant program solicitations, when the specific goals and objectives of a grant program and funding agency can be matched to the goals and objectives met by particular projects.

12.12 - Chapter 12: Technical Analysis

Not an applicable discussion for this chapter. No technical analysis were performed for developing this chapter.

12.13 - Chapter 13: Relation to Local Water and Land Use Planning

This chapter discusses how the new IRWMP relates to existing water and land use plans. It recaps record information on available water and land use plans but does not provide any new analysis of data of any kind.

12.14 - Chapter 14: Stakeholder Involvement

This chapter sets forth information about plan stakeholders and the efforts to bring all stakeholders into the Plan update process, but does not provide any new analysis of data of any kind.

12.15 - Chapter 15: Coordination and Integration

This chapter does not include technical analysis nor does it present data summaries.

12.16 - Chapter 16: Climate Change

This chapter provides a review of contemporary scholarly papers and conclusions on climate change and discusses the effects of the predicted change on regional groundwater and surface water supplies. The chapter itself contains complete references to the sources used and they are not repeated here.

CHAPTER 13- RELATION TO LOCAL LAND USE & WATER PLANNING

13.1 - Introduction and Background

The IRWM process provides for many opportunities to collaborate and integrate with local land use and water planners at the city, county, and district agency and private and non-profit non-governmental (NGO) entity levels. Integration of city and county land use plans with water supply/demand plans and the water planning process is an important strategy for the Madera IRWMP. This chapter discusses the relationship between the DWR Integrated Regional Water Management Plan (IRWMP) process and current adopted local land use and water planning efforts for the Madera County area, as well as future plans to further a collaborative, proactive relationship between land use planners and water managers. This purpose of this Chapter therefore, is as follows:

1. To provide an inventory of local City and County land use planning general plan elements and other land use and water planning documents integral to the Madera IRWMP
2. Describe the relationship between this IRWMP and other local land use planning documents and programs, regional water issues and water management objectives
3. Describe the dynamics between the IRWMP and land use and water planning documents
4. Identify opportunities to enhance proactive collaboration between local land use and water planning efforts in order to avoid duplication and working at cross-purposes, and better coordinate and maintain consistency between the local land use and water planning efforts with the Madera IRWMP

13.2 - Land Use and Water Plans/Policies Integral to Madera IRWM

The Madera Regional Water Management Group (RWMG) membership includes representatives of the Madera County Board of Supervisors, Madera and Chowchilla City Councils, and these agencies' respective Planning and Public Works Departments (directors), who oversee their long-range General Plan land use planning policies and implementation of county water capital improvements. Inclusion of land use planning and public works personnel in the IRWMP process allows for more complete understanding of the regional County and City goals, policies, objectives, and implementation strategies to be and integrated into IRWMP project development. As well, representatives of local public and private water districts, irrigation districts and public utility districts can share and collaborate regarding their efforts on a different but not less important scale of service.

Various city, county, public and private agencies and organizations were consulted to determine General Plans, Community or Area Plans, Specific Plans, Municipal Service Reviews

(MSR), and Agricultural and Urban Water Management Plans pertinent to the IRWMP process. These documents and plans are catalogued in **Table 13.1** through **Table 13.6** below along with their adoption dates.

Table 13.1 - Land Use Planning Documents

Agency or Entity	Land Use Planning Documents
MADERA COUNTY	
APPROVED PLANS	
Madera County	General Plan - October 1995
O'Neals	Area Plan - April 1980
North Fork	Study Plan - May 1980
Gunner Ranch West	Area Plan - October 1994
Gunner Ranch West	Specific Plan - July 2014
Rio Mesa	Area Plan - March 1995
Northshore at Millerton Lake	Specific Plan - December 2009
Tesoro Viejo	Specific Plan - November 2012
State Center Community College	Specific Plan - July 1995
Ahwahnee	Area Plan - 1999
Oakhurst	Area Plan - 2005
Coarsegold	Area Plan - 2006
Gateway Village	Area Plan - September 2007
Gateway Village	Specific Plan - September 2007
Raymond	Area Plan - 2009
COUNTY INITIATED PLANS IN PROCESS	
Fairmead	Area Plan
Southeast Madera County	Area Plan
O'Neals	Area Plan
DEVELOPER INITIATED PLANS IN PROCESS	
Liberty Groves	Area Plan
Liberty Groves	Specific Plan
Castellina	Area Plan
Castellina	Specific Plan
San Joaquin River Ranch	Area Plan
San Joaquin River Ranch	Specific Plan

Agency or Entity	Land Use Planning Documents
Tatham	Area Plan
Tatham	Specific Plan
City of Chowchilla	General Plan - May 2011
City of Chowchilla	Municipal Service Review - September 2011
Rancho Calera (City of Chowchilla)	Specific Plan - April 2011
City of Madera	General Plan - October 2009
City of Madera	Climate Action Plan (in progress)
City of Madera	Municipal Source Review -
Madera State Center Community College	Specific Plan July 1995
Chowchilla Water District	Municipal Service Review - September 2011
Madera Irrigation District	Municipal Service Review (info is within the Eight Public Water Districts Document) October 2007
County Service Areas #1 & #2	Municipal Service Review - April 2008
LAFCO	Municipal Service Review (for eight public water districts) - October 2007
Oakhurst	This MSR covers five county service areas, sixteen maintenance districts, and two of the privately operating water companies, Hillview Water Company and Broadview Terrace Water Company. Water Service only • Hillview Water Company (a privately owned company) • Broadview Terrace Water Company (a privately owned company) • Water Service and Road Maintenance • Maintenance District 42 – Meadowview Drive • Sewer Collection and Disposal only • Maintenance District 22 – Oakhurst Sunnydale - July 2012
Greater Rio Mesa	This MSR is intended to cover five special districts and two maintenance districts that provide some level of urban services in what is known as the greater Rio Mesa area of Madera County. These seven districts are: • County Service Area 16 (CSA 16) • County Service Area 19 (CSA 19) • County Service Area 22 (CSA 22)

Agency or Entity	Land Use Planning Documents
	• Sierra Foothills Public Utility District (SFPUD) • Root Creek Water District (RCWD) • Maintenance District 14 (MD 14) • Maintenance District 57 (MD 57) • All of these districts are adjacent to, fully, or partially, within the boundaries of the Rio Mesa Area Plan adopted by Madera County - May 2010.

Table 13.2 - Urban Water Management Plans

Members & Interested Parties	Water Planning Documents
City of Chowchilla	Urban Water Management Plan - September 2008
City of Madera	Urban Water Management Plan - October 2011

Table 13.3 - Water, Wastewater and Stormwater Master Plans

Members & Interested Parties	Water Planning Documents
County of Madera	Storm Water Quality Management Program - January 2002
City of Madera	Storm Water Quality Management Program - June 2004

Table 13.4 - Groundwater Management Plans

Members & Interested Parties	Water Planning Documents
County of Madera	AB 3030 Ground Water Management Plan - January 2002
Root Creek Water District	AB 3030 Ground Water Management Plan - October 13, 1997
Gravelly Ford Water District	AB3030 Ground Water Management Plan – April 1998
City of Chowchilla, City of Madera, Madera County, Chowchilla Water District, Madera Irrigation District	Madera Regional Ground Water Management Plan (in progress)
Chowchilla-Red-Top-City Joint Powers Authority	AB3030 Ground Water Management Plan – October 1997
Aliso Water District	Ground Water Management Plan January 2002

Table 13.5 - Agricultural Water Management Plans

Members & Interested Parties	Water Planning Document
Gravelly Ford Water District	Agricultural Water Management Plan, December 2012 (2008 criteria)
Madera Irrigation District	Agricultural Water Management Plan

Table 13.6 - Water Management Plans

Agency or Entity	Water Planning Document
Chowchilla Water District	Water Management Plan (2008

criteria), 3-21-11

13.3 - Relationship Between IRWMP and Local Land Use/ Water Management Policies

In his Forward to the *2014 California Water Action Plan* (CWAP), Governor Brown succinctly stated the State's challenge regarding maintaining water for all, as follows:

> *Among all our uncertainties, weather is one of the most basic. We can't control it. We can only live with it, and now we have to live with a very serious drought of uncertain duration.*
>
> *Right now, it is imperative that we do everything possible to mitigate the effects of the drought. I have convened an Interagency Drought Task Force and declared a State of Emergency. We need everyone in every part of the state to conserve water. We need regulators to rebalance water rules and enable voluntary transfers of water and we must prepare for forest fires. As the State Water Action Plan lays out, water recycling, expanded storage and serious groundwater management must all be part of the mix. So too must be investments in safe drinking water, particularly in disadvantaged communities. We also need wetlands and watershed restoration and further progress on the Bay Delta Conservation Plan.*
> *It is a tall order.*
>
> *But it is what we must do to get through this drought and prepare for the next.*
>
> *Edmund G. Brown Jr.*
> *State of the State Speech*
> *January 22, 2014*

This statement captures the essence of the critical nature of integrating and coordinating land use planning not just for the transient term of our current drought but for the longer range growth and continuing economic vitality of the state with a careful understanding of how available water supplies can be enhanced, conserved, sustained and better managed to meet future demands

The California Water Plan, Update 2009 for Integrated Water Management[1] (CWP Update,) and accompanying *California Water Plan Highlights* brochure[2] describes the challenges for

[1] State of California, Natural Resources Agency and Department of Water Resources: *California Water Plan – Update 2009 for Integrated Water Management* (Bulletin 160-09, Volume 2 – Resource Management Strategies), December 2009

[2] www.waterplan.water.ca.gov/docs/cepu2009/0310final/highlights_cwp2009_spread.pdf

managing the state's water resources and identifies a diversified portfolio of six broad topical management objectives, summarized as follows *(Note to Reader: At the time of preparation of this Plan, the California Water Plan, Update 2013 was only available in draft and was not yet adopted. Consequently, this Plan only reflects the content of the most recently adopted Update 2009)*:

1. Reduce water demand
   - Maximizing both agricultural and urban water use efficiency
2. Improve Operational Efficiency and Transfers
   - Maximize utilization of statewide (Delta), regional and local conveyances, water transfers and system re-operations
3. Increase Water Supply
   - Maximize conjunctive management and water storage, desalinating brackish and sea water, recycling municipal water and pursuing CalFed and regional and local opportunities for surface water storage
4. Improve Water Quality
   - Improving drinking water treatment, distribution, salt, salinity and urban runoff management, maximize pollution prevention and groundwater/aquifer remediation, match water quality with appropriate use or re-use,
5. Practice Resources Stewardship
   - Maximize agricultural forest and land use planning stewardship and management, increase economic incentives for stewardship and recharge area protections, maximize watershed management, and pursue water-dependent recreation.
6. Improve Flood Management
   - Maximize pursuit of flood risk management.

To begin to meet the challenges associated with these six water management tools, the CWAP sets forth the following Actions that must be taken statewide by all water management and planning entities:

Actions

1. Make conservation a California way of life;
2. Increase regional self-reliance and integrated water management across all levels of government;
3. Achieve the co-equal goals for the Delta;

a. Providing a more reliable water supply for California , and

b. Protect, restore and enhance the Delta ecosystem

4. Protect and restore important ecosystems;
5. Manage and prepare for dry periods;
6. Expand water storage capacity and improve groundwater management;
7. Provide safe water for all communities;
8. Increase flood protection;
9. Increase operational and regulatory efficiency;
10. Identify sustainable and integrated financing opportunities.

These ten actions directly correlate to the six essential water management tools identified in the CWP Update. As well, the management tools cannot achieve effective results without taking the actions identified in the CWAP. To maximize results within the Madera Region, land use and water planners, managers, and decision makers must all share the strategic vision of the necessity to collaborate, coordinate and integrate plans to achieve maximum beneficial water management results within the Madera Region.

The Madera Region is home to two incorporated cities, Chowchilla and Madera, and numerous unincorporated communities within the County of Madera's jurisdiction as shown on several figures in CHAPTER 3. The land use and water planning representatives from the various urbanized communities, rural county areas and public and private water purveyors/districts serve as a link between the IRWMP and local land and water planning efforts and are encouraged to actively participate in Madera RWMG. Accordingly, many take advantage of the IRWM process to be involved in regional efforts. These representatives provide important data and information and provided critical guidance during the planning process. Further, the local agency members and interested parties individually adopt this IRWMP as a separate action by their respective Boards and Councils.

Jurisdictions of Local Plans

The local planning documents are confined to the area under the county, city, community or other local entity's purview. For the cities and communities, the jurisdiction is limited by the city limits or sphere of influence depending on the document. The county's jurisdiction is limited by the county limit lines and typically applies only to the unincorporated areas of the county. Special districts such as water, conservation, irrigation or flood control, community services and public utility districts will have an adopted district boundary which serves as the jurisdiction limit. Special districts may also have a Local Agency Formation Commission (LAFCO) approved spheres of influence.

Local Plan Updates

The majority of local planning documents are either mandated for periodic update or the local agency elects to update them for accuracy. To the extent feasible, the IRWMP will consider the most current documents during IRWMP Update processes but will not amend or update the IRWMP based solely on a local planning document update. Members and interested parties should refer to the IRWMP in their local plans where applicable.

Regional Efforts Lead to Local Efforts

The regional planning efforts are intended to serve as a base map or guideline for the entire region to follow in regards to water resources. The foundation of the IRWMP will continue to be the successful implementation of local projects and programs that help accomplish the region's Goals and Objectives. Local agencies without planning documents in place may elect to use the IRWMP in-lieu of or as a beginning point for their own local planning documents.

Planning Document Inconsistencies

Inconsistencies may occur occasionally between the regional and local planning documents. Some of these occurrences may be solved through discussion and collaboration between the local agency and the Madera RWMG. If it is determined the inconsistency is of vital significance to the IRWMP and out of sequence with a planned update, the Madera RWMG will incorporate updated information into an Annual Report or, if necessary, prepare a special update.

The link between IRWM and land use planning has a considerable number of common considerations, both providing an opportunity to garner important input on a multitude of issues. The key IRWM issues which could be affected by local planning policy include: the gamut of water resources management and land stewardship tools, such as flood management, groundwater recharge, conjunctive water use, water quality/treatment facilities, water conservation, municipal and recreational development, rural, urban and agricultural activities, conservation, and planning and development reviews and approvals.

Government sector and private water agencies and land owners can encourage local land use agencies to protect groundwater recharge areas; restrict and provide alternatives to development in floodplains; evaluate adequacy of water quality and septic system disposal for new developments; encourage conservation and development of local water, wastewater and storm drain projects to integrate and maximize the potential for meeting regional goals and measureable objectives.

DWR is recommending that land use planning be one of the water management strategies included in an IRWMP. A review of the existing City of Chowchilla, City of Madera, and County of Madera General Plans and Area/Specific Plans, Municipal Service Reviews, and various water planning documents listed in Section 13.2 - above was conducted. **Table 13.7** and **Table 13.8** below, are matrices showing columns for the following 6 essential (and one "other" category) water management attributes or tools defined in the California Water Plan - Update 2009 for Integrated Water Management:

- Reduce Water Demand
- Improve Operational Efficiency and Transfers
- Increase Water Supply
- Improve Water Quality
- Practice Resources Stewardship
- Improve Flood Management
- Other

Each existing land or water planning documents (shown in the rows) were reviewed to determine which water management attribute, if any, is addressed. Consequently, checkmarks were placed in the respective cells according to whether a policy was in place addressing the various attributes. Blank cells then become a quick way to identify where the agency/entity may be lacking a policy to address a particular attribute. The agency/entity can then determine whether it is appropriate they have a policy for that attribute or whether it's "not applicable" to their jurisdictional authorities or responsibilities. In this way the Matrix serves as a checklist showing what agencies/entities are implementing policies addressing what specific management attributes. So the Matrix can be used as a living tool -- amended as agencies adopt policies to fill the gaps, visually monitoring the collective efforts to be comprehensive in activating consistent water management activities. Some agencies may be implementing policies or strategies that aren't documented in formal planning documents. The Table therefore can help to identify which strategies may need to be specifically addressed in formal documents.

The purpose of the matrix was to distill into useable form the range of adopted Cities' of Chowchilla and Madera and County Madera General Plan goals, objectives, policies, and programs to show the extent to which they address or deal with essential water resources management tools. The review specifically evaluated how each general plan recognizes regional water resources issues; incorporates water management strategies; and how achievement of these goals could be supported by the IRWMP being developed by the Madera RWMG. The matrix was presented to the Madera RWMG as a way to summarize key local land use and water policies pertinent to water management. The matrix can serve to identify the policy "drivers" that provide a basis for integrating land use, water supply plans, and the planning process. To the extent plans or policies do not address a water management attributes indicates where future collaboration or attention is needed to assure efforts are being made on all fronts to implement the essential tools.

For example, some of plans are lacking policies directed to the Salt and Salinity Management tool under the "Improve Water Quality" attribute. This strategy is not applicable to all agencies, but is relevant to some in the Madera Region. While this may not necessarily reflect an inconsistency, it may represent an opportunity for coordination between the land use agencies and water management entity to collaborate on the development of reasonable

policies that could be developed in this area and that could be feasibly implemented by each agency or entity in a complimentary manner.

Table 13.7 - Water Management Attributes Employed by Local Planning Agencies

	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
Agencies/Organizations and Type of Plan	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional & local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
LAND USE PLANNING DOCUMENTS																												
City of Chowchilla (GP/EIR)	✓	✓		✓		✓	✓					✓	✓					✓		✓	✓		✓	✓	✓		✓	
City of Madera		✓				✓	✓			✓		✓	✓	✓	✓	✓		✓	✓	✓		✓	✓	✓			✓	
County of Madera		✓	✓							✓			✓			✓			✓	✓	✓	✓	✓		✓	✓	✓	
Ahwahnee Area Plan		✓																					✓					
Ahwahnee Comprehensive Rehabilitation Plan	No specific policies in the doc that apply.																											
Coarsegold Area Plan - Madera County	No specific policies in the doc that apply.																											
Fairmead Colony Area Plan		✓																✓					✓				✓	
Fairmead Neighborhood Mobility and Revitalization Strategy Theme																		✓										
Gunnar Ranch West Area Plan		✓																✓					✓				✓	
Madera State Center Community College-Specific Plan 1995	No specific policies in the doc that apply.																											

Agencies/Organizations and Type of Plan	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional & local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
LAND USE PLANNING DOCUMENTS																												
North Fork/South Fork Community Center Area Plan																							✓					
Oakhurst Area Plan		✓																✓	✓				✓					
Raymond Area Plan		✓																	✓				✓					
River West-Draft Madera Master Plan	No specific policies in the doc that apply.																											
Madera County Local Agency Formation Commission																												
Draft MSR for CSA #1 and CSA #21	No specific policies in the doc that apply.																											
Greater Rio Mesa Area MSR	No specific policies in the doc that apply.																											
Madera Ranchos MSR	No specific policies in the doc that apply.																											
Oakhurst MSR	No specific policies in the doc that apply.																											
MSR for EIGHT PUBLIC WATER DISTRICTS in MADERA COUNTY			✓									✓																
State of California																												
N/A																												

Agencies/Organizations and Type of Plan	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional & local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
LAND USE PLANNING DOCUMENTS																												
Federal																												
Sierra National Forest - Forrest Land and Resource Management Plan, 1991	No specific policies in the doc that apply.																											
Badger Pass Ski Lodge Rehabilitiation - FONSI		✓															✓											
Ansel Adams, John Muir, and Dinkey Lakes Wilderness																					✓							

Table 13.8 - Water Management Attributes Employed by Local Water Purveyors

Agencies/Organizations and Type of Plan	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional Local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
WATER PLANNING DOCUMENTS																												
County of Madera / Region																												
County of Madera: General Plan	✓	✓				✓	✓						✓	✓	✓		✓			✓	✓	✓	✓	✓	✓	✓		✓
County of Madera: AB 3030 Ground Water Management Plan		✓				✓	✓			✓		✓	✓	✓	✓	✓		✓	✓				✓	✓		✓		
County of Madera: Storm Water Quality Management Program							✓								✓	✓		✓						✓		✓		
Madera Regional Groundwater Management Plan, A partnership between: City of Chowchilla, Chowchilla Water District, City of Madera, Madera Irrigation District, South-East Madera County United	✓	✓		✓			✓					✓	✓	✓			✓	✓	✓	✓	✓			✓	✓	✓	✓	✓	
City of Chowchilla (GP/EIR)																												
City of Chowchilla: Draft 2008 Urban Water Management Plan		✓				✓	✓	✓		✓			✓			✓	✓							✓	✓		✓		

Agencies/Organizations and Type of Plan	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional Local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
WATER PLANNING DOCUMENTS																												
City of Madera																												
City of Madera 2010 Urban Water Management Plan		✓			✓	✓		✓				✓														✓		
City of Madera Storm Water Quality Management Program		✓		✓			✓									✓		✓										✓
Special Districts																												
Aliso Water District: Ground Water Management Plan (information not available)																												
Chowchilla-Red-Top-City Joint Powers Authority, AB 3030 Groundwater Management Plan (1997)	✓					✓	✓	✓				✓	✓	✓		✓	✓		✓				✓	✓		✓		
Chowchilla Water District, Water Management Plan Five Year Update (2008 Criteria)	✓					✓	✓												✓	✓			✓	✓		✓		
Gravelly Ford Water District: 2009 Water Management Plan	✓					✓	✓				✓			✓	✓	✓	✓							✓			✓	✓

Agencies/Organizations and Type of Plan	Reduce Water Use / Demand		Improve Operation Efficiency and Transfers				Increase Water Supply						Improve Water Quality						Practice Resources Stewardship								Improve Flood Management	Other
	Ag Water Use Efficiency	Urban Water use Efficiency	Conveyance - Delta	Conveyance - Regional Local	System Reoperation	Water Transfers	Conjunctive Management & Groundwater	Desalination	Precipitation Enhancement	Recycled Municipal Water	Surface Storage - CALFED	Surface Storage - Regional & Local	Drinking Water Treatment & Distribution	Ground Water & Aquifer Remediation	Matching Water Quality to Use	Pollution Prevention	Salt & Salinity Management	Urban Runoff Management	Ag Lands Stewardship	Economic Incentives (Loans, Grants, & Water Pricing)	Ecosystem Restoration	Forest Management	Land Use Planning & Management	Recharge Areas Protection	Water-dependent Recreation	Watershed Management	Flood Risk Management	Other Strategies
WATER PLANNING DOCUMENTS																												
Madera Irrigation District: (Agriculture) Water Management Plan, 5-year Update 2012	✓					✓																						
Root Creek Water District: AB 3030 Groundwater Management Plan, January 2012	✓				✓	✓	✓							✓											✓				
State of California																												
California Water Action Plan	✓	✓	✓		✓		✓	✓			✓								✓	✓	✓	✓			✓	✓		
Federal																												
Yosemite National Park - Wawona Water Conservation Plan		✓					✓												✓	✓								

13.4 - Dynamics Between IRWMP and Local Land Use/Water Planning Documents

The *San Joaquin Valley Blueprint* is a joint initiative of the San Joaquin Valley Councils of Governments engaging eight central Valley counties (including Madera) and 63 cities for the purpose of working together to convey a regional vision of land use and transportation that will be used to guide growth in the San Joaquin Valley over the next 50 years[1]. A major accomplishment of this group has been its endorsement of a preferred growth scenario in each county. The member counties and cities are in various stages of updating local plans to be consistent with this preferred growth scenario for the Valley.

The *Ahwahnee Principles* are a collection of development strategies written in 1991 by the Local Government Commission to help communities develop in a more resource-efficient manner.[2] Originally a list of 10 Principles, Economic Development and Water Principles have been added (in 1997 and 2005 respectively). The Ahwahnee Principles relate very closely to the statewide Actions discussed above.

The public agencies in Madera County are already using some of the Water Principles below to improve the vitality and prosperity of their communities.

Community Principles

1. Community design should be compact, mixed use, walkable and transit-oriented so that automobile-generated urban runoff pollutants are minimized and the open lands that absorb water are preserved to the maximum extent possible. (See the Ahwahnee Principles for Resource-Efficient Communities)
2. Natural resources such as wetlands, flood plains, recharge zones, riparian areas, open space, and native habitats should be identified, preserved and restored as valued assets for flood protection, water quality improvement, groundwater recharge, habitat, and overall long-term water resource sustainability.
3. Water holding areas such as creek beds, recessed athletic fields, ponds, cisterns, and other features that serve to recharge groundwater, reduce runoff, improve water quality and decrease flooding should be incorporated into the urban landscape.
4. All aspects of landscaping from the selection of plants to soil preparation and the installation of irrigation systems should be designed to reduce water demand, retain runoff, decrease flooding, and recharge groundwater.

[1] San Joaquin Valley Blueprint Planning Process, website http://www.valleyblueprint.org/about-us/faq.html#n588, (accessed 3-24-14), Frequently asked Questions about the SJVBP

[2] Local Government Commission, website http://www.lgc.org/ahwahnee/ahwahnee_principles.pdf accessed 3/24/14

5. Permeable surfaces should be used for hardscape. Impervious surfaces such as driveways, streets, and parking lots should be minimized so that land is available to absorb storm water, reduce polluted urban runoff, recharge groundwater and reduce flooding.
6. Dual plumbing that allows gray water from showers, sinks and washers to be reused for landscape irrigation should be included in the infrastructure of new development.
7. Community design should maximize the use of recycled water for appropriate applications including outdoor irrigation, toilet flushing, and commercial and industrial processes. Purple pipe should be installed in all new construction and remodeled buildings in anticipation of the future availability of recycled water.
8. Urban water conservation technologies such as low-flow toilets, efficient clothes washers, and more efficient water-using industrial equipment should be incorporated in all new construction and retrofitted in remodeled buildings.
9. Ground water treatment and brackish water desalination should be pursued when necessary to maximize locally available, drought-proof water supplies.

Implementation Principles

1. Water supply agencies should be consulted early in the land use decision-making process regarding technology, demographics and growth projections.
2. City and county officials, the watershed council, Local Agency Formation Commission (LAFCO), special districts and other stakeholders sharing watersheds should collaborate to take advantage of the benefits and synergies of water resource planning at a watershed level.
3. The best, multi-benefit and integrated strategies and projects should be identified and implemented before less integrated proposals, unless urgency demands otherwise.
4. From start to finish, projects and programs should involve the public, build relationships, and increase the sharing of and access to information.
5. Plans, programs, projects and policies should be monitored and evaluated to determine if the expected results are achieved and to improve future practices.

California state law requires each city and county to adopt a *general plan* "for the physical development of the county or city, and any land outside its boundaries which bears relation to its planning" (Government Code §65300). The California Supreme Court has called the general plan the "constitution for future development." The general plan expresses the community's unique development goals and embodies public policy relative to the distribution of future land uses, both public and private and well as the delivery of essential public services such as domestic water, water for agricultural purposes, sanitary sewer, wastewater treatment, drainage collection and dispersal, and water for sustaining natural resources.

As a result, land use, capital facility and water planning decision-making have a direct relationship to water demand and can have a direct impact on water supply. Some General Plans are more comprehensive than others in the degree to which they comprehensively integrate across the spectrum of land, water, and natural resources management elements.

The Madera IRWMP boundary is coterminous with the Madera County boundary. The incorporated cities, unincorporated communities, and county boundaries in the Madera Region are shown in CHAPTER 3. City and County planning or public works agency representatives, and special district staff, actively participated in the IRWM process. These representatives provide a conduit to the elected bodies through the planning and capital improvement processes. They also support collection of important data and information and provide critical guidance for planning purposes.

Figure 13-1 shows how local planning efforts in the Madera Region are integrated and how the IRWMP fits into larger scale efforts.

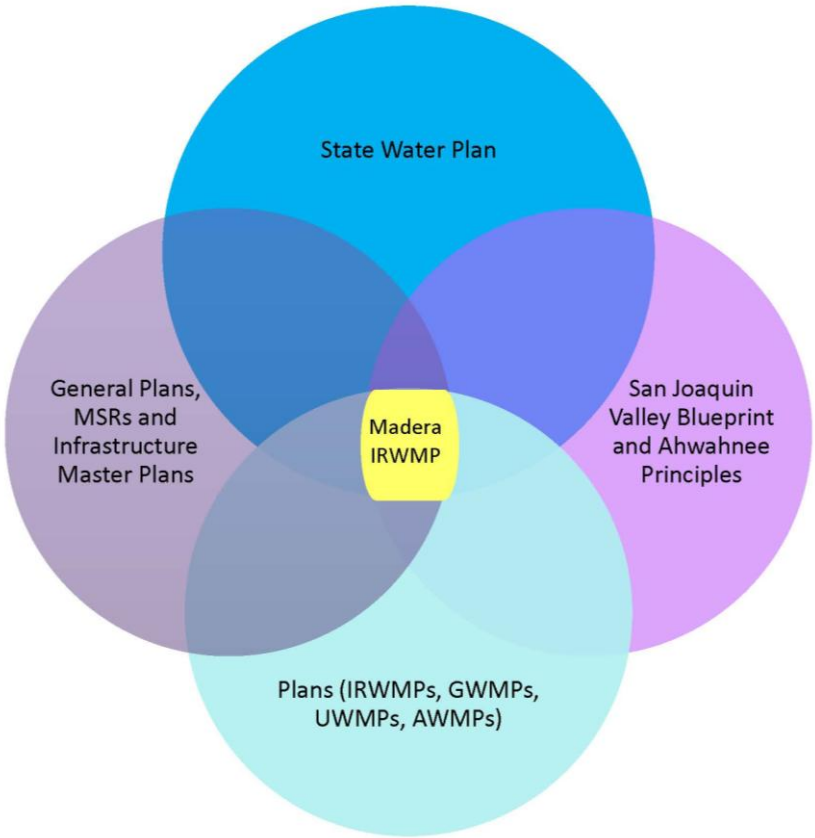

Figure 13-1 – IRWMP Relationship to Land Use and Water Planning

In the past, land use and water supply decisions were made independently; however, in recent years state legislation and court decisions have begun changing the planning process to require

a greater degree of integration between land use and its accompanying water needs. Two such pieces of legislation, SB610 and SB 221, are companion measures with the intent to promote collaborative planning between cities, counties and water suppliers. SB610 requires the preparation of Urban Water Management Plans and water supply assessments for larger development projects or land use plans. SB221 prohibits a land use agency from approving a subdivision map of more than 500 units without a letter of verification that sufficient and reliable water is available.

Similarly, Local Agency Formation Commissions (LAFCOs) are required to ensure water supplies are available before approving city or district boundary amendments. Additionally, they are responsible for approving a Municipal Service Review (MSR) prior to updating a sphere of influence, which must be updated every five years.

Updates to the General Plan Guidelines recommend that local agencies include a Water Element in their general plans with the intent that the general plans would incorporate the city or county's Urban Water Management Plan (UWMP) (if applicable) and codify requirements to comply with SB610/221.

The Madera IRWMP process included consideration of the existing land use plans and water planning documents to evaluate which statewide water planning challenges they address and the needed actions they intend to implement. As an umbrella document this IRWMP provides a means to: 1) coalesce all the activities of Madera regional land use planning agencies and water purveyors; 2) facilitate ways for them to collaborate to avoid potential for conflicts between the plans; and 3) work cooperatively to gain the maximum benefits region-wide to achieve sustainable water resources.

A review of the land-use planning and water planning documents identified in **Table 13.1** through **Table 13.6** showed the following primary characteristics:

- The Madera County General Plan is characteristically more regional in its viewpoint than the two City general plans.
- The Madera County General Plan identifies regional overdraft as a limiting factor to future land use development.
- The cities' general plans, to varying degrees, identify the significance of regional groundwater overdraft in general terms, and include policies that are intended to enhance the sustainability of their water supplies and minimize the factors contributing to overdraft within their respective jurisdictions.
- Water supply reliability and safety is discussed in the County and City general plans but in generalities; the plans could be more specific in directives toward how water supply shall be sustained and assured into the future, and how water quality will be monitored and maintained on an on-going basis.

- The more recent general plan updates focus on more regional efforts overall due in part to new requirements for general plans; however they still discuss water issues in generalities, not specifics.
- It is unknown whether new development proposals are reviewed for their consistency with or conflict with adopted Urban Water Management Plans.
- MSRs typically discuss general information regarding recharge and growth, without listing specific implementation plans needed to achieve these goals.

13.5 - Opportunities for Proactive Coordination and Collaboration between Land Use Planners and Water Managers

As previously discussed, cooperation between land planning and water agency representatives and the IRWM is critical to the successful and effective implementation of regional water management efforts. Establishing new and strengthening existing relationships will contribute to the Madera Region's water management success. Many of the land use and water planning documents acknowledge this already. But greater effort to carry this out is needed. There are several key approaches for facilitating the future relationships with local agencies:

1. Internal discussion within the Madera RWMG regarding inter-related land planning and water planning issues
2. Provide more detailed review of land use and water planning documents to continue to identify further potential inconsistencies with the purposes of the IRWMP, and provide recommendations for modified/new strategies to city and county and private/NGO planning and water policy decision makers.
3. Review and comment on major new land planning projects and policies of the agencies within the Region
4. Encourage land-use and water planners /engineers to attend regular RWMG meetings
5. Give presentation on the inter-relatedness of land use planning and water planning issues to City , County, private and NGO decision makers
6. Give presentations on water planning and IRWMPs at local chapters for land-use planning professional societies
7. Explore projects that will facilitate the modification of land planning policy to encourage implementation of region-wide beneficial water management
8. Conduct bi-annual meetings between the RWMG and local land planning representatives for the purposes of discussing upcoming policy changes or implementation of the IRWMP
9. Promote inter- and intra-agency communication between the land use planning and water management/infrastructure staff

10. Maintain a current list of key staff at all federal, state, regional and local government agencies and NGO entities that govern and serve to influence land use and water planning policy/projects, and assure they are invited to and made aware of the agenda topics at RWMG meetings.
11. The implementation measures of the Ahwahnee Principles discussed above also provide important guidance for collaboration that can be followed or adopted by the Madera RWMG.
12. Annual coordination review meetings pursuant to AB 3030 Groundwater Management Planning requirements should continue.

The RWMG is committed to maintaining open channels of communication and facilitating continued involvement of the land use and water planning community in the IRWMP process and implementation.

CHAPTER 14- STAKEHOLDER INVOLVEMENT

Stakeholder involvement, also called public outreach, includes efforts to recruit and engage a diverse group of stakeholders to participate in all aspects of the Madera Regional Water Management Group (RWMG). Stakeholder involvement is considered fundamental to the success of the RWMG. This chapter discusses a public outreach strategy, stakeholder recruitment, outreach performed to update the IRWMP, and future plans for public outreach. The goals of the public outreach efforts include:

1. Recruit members to participate
2. Inform public of water resources issues in the region
3. Solicit input for IRWMP development, project development and decision making

14.1 - Public Outreach Process

The public outreach process incorporates nine primary outreach methods, which are illustrated in **Figure 14-1:**

Figure 14-1 – Public Outreach Methods

Outreach Coordinator

The RWMG has a part-time Administrative Assistant who also serves as the lead outreach coordinator for the RWMG. Most of the work performed by the Administrative Assistant relates to public outreach, planning, and organization of the monthly RWMG meetings.

Meetings

The RWMG holds monthly meetings with the RWMG members and interested parties. The meetings are open to the public and include a public comment period when any individual or organization can speak. The meetings are rotated each month between three locations: Madera, Chowchilla, and Oakhurst. These locations are geographically spread out to reduce transportation time and costs for local residents and agencies. The meetings are announced by email and in local newspaper calendars (Madera Tribune, Chowchilla News and Sierra Star) each month.

The RWMG has also used professional meeting facilitators to help engage stakeholders and ensure their comments are heard. In 2012 and 2013, the RWMG received grants from the Department of Water Resources for meeting facilitation services from the Center for Collaborative Policy. The facilitator helped to further develop the governance structure, DAC policies and informational packets.

Printed Material

The RWMG developed a brochure to promote the updated IRWMP in 2013 and revised it in 2014 to promote the IRWMP update. A copy of the latest edition of the brochure can be found in **Appendix I**. The brochure is used to educate the public and recruit new members. The brochure is distributed at presentations and sent to parties expressing interest in the RWMG.

Focused Outreach

Focused outreach has been performed on specific groups, such as Disadvantaged Communities (DACs, see Section 4.5 -Disadvantaged Communities within the Region) and Native American tribes. The focused outreach typically includes directly contacting the stakeholders and making presentations to the groups.

Email List

The RWMG maintains an email list that receives announcements of all RWMG meetings, meeting agenda, meeting minutes, important water management news, grant opportunities, and other topics that may be of member interest. The email distribution list is comprised of MOU signatories and others that have expressed interest in the RWMG and IRWMP. In 2014, the email list included 85 contacts. Recipients include engineering consultants, community organizations, homeowner associations, non-governmental associations, water agencies, resource conservation districts, cities, counties, special districts, state agencies, neighboring IRWMP groups, watershed groups and power companies.

Articles

Newsletter articles, newspaper articles, letters to newspaper editors and press releases have been used to promote the RWMG and make important announcements. Three articles were prepared for the IRWMP update.

The first article announced the IRWMP update and invited stakeholders to participate. The article was given to the RWMG members to publish in their newsletters and websites. The article was printed in the Madera Irrigation District newsletter and posted on the RWMG website. A second article was published in the Sierra Star and Sierra Online news. Finally, the completion of the draft IRWMP was announced in a press release. Newspaper articles will continue to be an important form of outreach, especially to announce grant awards, projects underway, completed projects and other RWMG successes.

Presentations

The RWMG develops a live presentation each year to help educate the general public and encourage participation. **Appendix D – Public Outreach Presentations** includes two different presentations that have been recently used. Topics covered in the presentations have included RWMG history, on-going and completed projects, successes, future milestones/goals, and public outreach. Following is a list of some organizations that received presentations during 2013 and the first part of 2014:

- Madera County Water Advisory Commission – 1/17/13
- Central Sierra Watershed Committee – 2/27/13
- Madera Oversight Committee – 5/22/13
- Coarsegold Resource Conservation District – 6/27/13
- Oakhurst Kiwanis – 9/24/13
- Noon Rotary – 10/09/13
- Oakhurst Mountain Lions – 1/08/14
- Chowchilla Lions – 1/16/14
- Chamber of Commerce Women in Business – 2/13/14

The outreach coordinator also regularly attends meetings for the following local agencies. Presentations are given to these agencies every year:

- Central Sierra Watershed Committee
- Chowchilla Red-Top Resource Conservation District
- Coarsegold Resource Conservation District
- Madera Resource Conservation District
- Yosemite/Sequoia Resource Conservation and Development Council
- Sierra-San Joaquin Noxious Weed Alliance
- MD-221 – Oakhurst Sewer Advisory Committee

Lastly, presentations have been given to the Annual Conference of the Sierra Water Workgroup each of the past four years. The Sierra Water Workgroup is a collection of 12 IRWMP groups in the Sierra region and is described in more detail in Chapter 15 – Coordination and Integration.

Website

The Madera RWMG website is hosted on the Madera Irrigation District web server and can be found at: http://madera-id.org/index.php/rwmg. The RWMG website contains information on the RWMG, information on IRWMPs, a timeline of accomplishments, an RWMG meeting calendar, new member packet and a special DAC member application. The website also included an announcement that the IRWMP was being updated.

The New Member Packet includes most of the information a stakeholder will need to learn about the RWMG and the rules and commitments pertinent to joining the group. The packet includes contact information, MOU, Bylaws, Ground Rules, Mission Statement, web links to key reference materials, and a list of MOU signatories. Starting later in 2014, the website will post agenda and minutes for all RWMG meetings.

Local Agency Updates

Numerous local agencies are regularly updated regarding the RWMG and its activities. The RWMG Chairman updates the Madera County Water Advisory Commission monthly. The outreach coordinator also regularly attends meetings for the eight agencies listed above under 'Presentations' and provides regular updates. RWMG updates are a standing agenda item for several of these agencies. Many RWMG members also regularly update their governing bodies during Board and Council meetings.

Outreach and Coordination with Neighboring IRWMPs

Outreach and coordination is also performed with seven neighboring IRWMP groups. These efforts are described in Section 15.7 -Neighboring IRWMPs in the Coordination and Integration chapter. The outreach and coordination includes email lists, Letters of Agreement, and attending meetings and conferences.

14.2 - Stakeholder Identification and Recruitment

Stakeholders are necessary to implement the IRWMP and resource management strategies. Therefore, a strong list of members and interested parties is fundamental to the long-term success of the RWMG. Stakeholder identification and recruitment has taken place for several years and has helped to create a member and interested party list that includes a diverse range of interests.

Breadth of Membership

The current members (MOU signatories) include:

- Chowchilla Red-Top Resource Conservation District

- Chowchilla Water District
- City of Chowchilla
- City of Madera
- Coarsegold Resource Conservation District
- Fairmead Community & Friends
- Gravelly Ford Water District
- County of Madera
- Madera County Special Districts
- Madera Irrigation District
- Madera Valley Water Company
- Madera Water District
- North Fork – Mono Rancheria
- Root Creek Water District
- Self Help Enterprises
- SEMCU - Southeast Madera County United
- Yosemite/Sequoia Resource Conservation and Development Council

The RWMG list above represents a broad range of interests including: water supply, water quality, environment/habitat, recreation, agriculture, resource management, hydropower, sanitation, Disadvantaged Communities, cultural, non-profit organizations, and local and state agencies. The Interested Parties, who participate but are not formal members, include a similar range of interests.

Any stakeholder organization with an interest or role in water management in the IRWMP area may join the RWMG. A group who wants to join the Madera RWMG should notify the RWMG and sign the MOU to signify their good faith effort to join. Any entity who would like to discontinue their participation may do so at any time. The MOU is non-binding and non-regulatory.

The RWMG performed extensive outreach while preparing the 2008 IRWMP. On-going outreach efforts since then have attracted more stakeholders to participate. As a result, most of the major stakeholders in the region are actively participating in the IRWMP as Members or Interested Parties. However, a few are not involved either because they did not respond to previous outreach efforts, or in some cases were not directly contacted. As part of this update, the RWMG openly discussed which stakeholders were not involved in the IRWMP and should be directly contacted. As a result the outreach coordinator directly contacted DACs, local water companies, prisons, school districts, and Native American Tribes to encourage their participation.

14.3 - Stakeholder Involvement in IRWMP Development

Stakeholder involvement in IRWMP development began as early as 2006 when the original IRWMP was developed by Madera County. Five separate involvement groups were formed to discuss local issues. These groups included interests from the Valley, Raymond, Coarsegold, Oakhurst and North Fork. The efforts to develop the initial IRWMP, which was completed in 2008, are not discussed in detail here. More information can be found in the 2008 IRWMP and the RWMG's Regional Acceptance Process application. Since the 2008 IRWMP was developed, the current Regional Water Management Group was formed (see CHAPTER 2– Governance) and the list of formal members has grown to seventeen. The formal members, interested parties and general public are all necessary to implement the IRWMP goals, objectives and resource management strategies. The public agencies play a role developing and implementing projects, while special interest groups, landowners and citizens play an important role in helping to identify and prioritize issues and problems.

Public Outreach for 2014 IRWMP Update

The public outreach process for updating the IRWMP included the following:

- The intent to prepare an updated IRWMP was announced at a regularly scheduled RWMG meeting in mid-2013. The item was noted on an agenda that was publicly noticed.
- In compliance with the California Water Code, the RWMG published notices that the IRWMP was being updated, and that a draft was available for review and will be considered for adoption. Copies of the notices are included in **Appendix J**. The first notice was published in the Madera Tribune, which is the most widely circulated newspaper in Madera County. The notice, published on December 31, 2013 and January 7, 2014, informed the public that the RWMG was updating the IRWMP to address new IRWMP standards, and that the general public was invited to participate. A public notice was also posted on Sierra News Online, and a Letter to the Editor published in the Sierra Star to notify foothill and mountain communities of the IRWMP update. The second notice was published on July 31, 2014 in the Madera Tribune, Chowchilla News, Sierra Star and Sierra News On-line, to inform the public that the RWMG was intending to adopt the updated IRWMP and solicited public comments on the document
- Through a series of ten interactive meetings over a ten month period, the RWMG reviewed each proposed IRWMP standard and the content in the existing IRWMP. During these sessions, the stakeholders shared ideas and concerns, and came to consensus on the information to be included in the updated IRWMP.
- All nine of the public outreach methods listed in Section 14.1 -Public Outreach Process were used to inform the public about the IRWMP update and to solicit input.

- The public was notified that the revised IRWMP was available for review through a local newspaper notice, an announcement on the RWMG webpage, an email notification and verbally at a RWMG meeting. The draft IRWMP was placed on the RWMG and Madera County websites, and members each had hard copies available at their offices for the public to view. Stakeholders were provided 15 days to review the IRWMP and provide comments.
- 140 comments were received from the general public and RWMG members. A list of comments was developed and discussed at a regular RWMG meeting and incorporated into the IRWMP. These comments can be found in **Appendix L**.

14.4 - Equal Opportunity for Participation

The RWMG policies and governance structure provides equal opportunities for participation and helps ensure a balanced group of members. The RWMG has also developed policies to involve stakeholders that choose not be become full members. The following policies help to ensure balanced and fair participation for all stakeholders:

1. Regular membership in the RWMG is open to any agency, organization or company which signs the MOU, submits a resolution from its governing board with an intention to join, adopts the IRWMP, pays the dues (if applicable) and is approved by existing RWMG members. The right to become a member is based primarily on having a local presence in the IRWMP area and an interest in water resources management. The type and size of an organization are not factors. Each member of the RWMG is given one vote. Voting power is not weighted based on agency size, service area acreage or financial status.
2. Organizations not willing or able to pay the per-member dues are invited to join the RWMG as Affiliate Members. An Affiliate Member may fully participate in all RWMG meetings and projects, but may not vote in either the informal polls described above or in the formal policy decisions. There are no dues associated with becoming an Affiliate Member.
3. Qualified Disadvantaged Communities (DACs) may join the RWMG as DAC members. As with the Affiliate Members, there is no limitation on participation by DAC members. Voting for DAC members is limited to a single vote on behalf of all the DAC members, to be voted by a representative selected by the DACs from among the several DAC members.
4. Organizations that join as Interested Parties participate in the RWMG but choose not to sign the MOU or pay dues. They are free to attend meetings, voice opinions and recommendations, and can submit projects for grant applications. They are not given the right to vote in either the informal polls described above or on formal decisions.
5. The general public are welcome to attend RWMG meetings. Private individuals are not allowed to become formal members of the RWMG, but can be added to the list of

Interested Parties. Input from any member of the general public is considered regardless of their associations or history.

Technology and Information Access

Some stakeholders, especially DACs, may not have access to technology or transportation needed to participate in RWMG meetings and other activities. The RWMG has made several efforts to overcome these barriers:

1. Meetings are announced by email and on the RWMG website, but for those that lack access to computer technology, they are also announced in local newspaper calendars each month.
2. Meeting agenda, minutes and handouts are printed and mailed to some stakeholders that lack access to or knowledge of computers.
3. Meetings are rotated each month between Madera, Chowchilla and Oakhurst to reduce travel distances for local residents and agencies.

14.5 - Disadvantaged Communities

Critical water supply and water quality issues relevant to the Disadvantaged Communities (DACs) within the Region are important concerns for the Madera RWMG. Many communities within the RWMG boundaries meet the state definition of a disadvantaged community, which is having a median household income less than 80 percent of the statewide average.

The RWMG has developed policies which allow DACs to become members without paying dues. A special DAC Application Packet was also developed and can be found on the RWMG website. A special DAC Group was added to the by-laws. This group includes all of the member DACs and has a single vote in RWMG decisions. The vote is cast by a DAC representative, selected by the member DACs from their own ranks.

Special efforts have also been made to educate and engage DACs within the planning area, including targeted outreach with a professional meeting facilitator. These efforts are described in CHAPTER 4– Disadvantaged Communities. Chapter 4 also describes the social and cultural makeup of the region, the process for identifying DACs, and typical water resources problems and issues of concern to the communities.

14.6 - Native American Tribes

The IRWMP area includes two federally recognized sovereign Native American tribes (North Fork Rancheria of Mono Indians and Picayune Rancheria of Chukchansi Indians) as well as many unrecognized tribes. The outreach coordinator has reached out to the local Native American Tribes to encourage their participation and membership. This outreach was performed several

years ago and then again as part of this IRWMP update. The tribes are also on the email distribution list. One tribe, the North Fork Rancheria of Mono Indians, is an MOU signatory.

14.7 - Decision Making

The RWMG's decision-making process is transparent and all stakeholders are afforded the opportunity to provide input on decisions. The RWMG has a decision-making structure that requires the group to debate and discuss issues and document dissenting views. The MOU also includes a non-traditional voting process to assess preliminary support for issues prior to formal voting. Decisions are generally made by the formal members who are comprised of the MOU signatories. However, all stakeholders have opportunities to provide input, comments and recommendations on decisions at RWMG meetings or through participation in work groups and special committees. In addition, DAC members are collectively provided one vote in decisions even though they are exempt from the annual dues.

14.8 - Future Outreach

Future public outreach will follow the model developed during past outreach efforts. The future Public Outreach Plan will include the nine methods described in Section 14.1 -Public Outreach Process, with greater emphasis on publicizing the successes of the group. The Public Outreach Plan will be assessed annually and modified as deemed appropriate. Important topics for future educational efforts include groundwater overdraft, land subsidence, and the impacts from the San Joaquin River Restoration on water supplies.

Most organizational stakeholders in the region are already members or interested parties, but some have not actively participated. The RWMG recognizes that the opportunity for a stakeholder to become involved is not limited to the beginning stages of plan development. A stakeholder may become involved later as their awareness of IRWM increases or new issues or concerns develop. Consequently, the RWMG will continually recruit new stakeholders to further increase the depth and diversity of membership and participation.

CHAPTER 15- COORDINATION AND INTEGRATION

15.1 - Introduction

Coordination and integration are two closely related Integrated Regional Water Management Plan (IRWMP) standards intended to help ensure IRWMP members are working together. For the purposes of the IRWMP these two standards have been combined. This IRWMP describes a variety of processes for RWMG members and stakeholders to coordinate and integrate water management efforts. This chapter also references other chapters of the IRWMP where specific efforts are discussed in greater detail.

Coordination

Coordination involves public outreach and facilitation efforts to bring stakeholders together and work as a unified group. Coordination efforts can include specific tasks or implementation of on-going policies and procedures. The goals of coordination include the following:

- Reduce current and future conflicts among stakeholders
- Identify opportunities for regional or multi-agency projects
- Increase awareness of adjacent IRWMPs and their efforts
- Improve awareness of tribal, state and federal agency resources, plans and projects
- Effectively use regional technical expertise and knowledge
- Provide opportunities to advance public education
- Resource identification and pooling

Integration

Integration is defined as combining separate pieces into an efficient unified effort. The broad goal of regional water management is to integrate the stakeholders into a single entity for addressing water-related regional issues. The development and implementation of the IRWMP should demonstrate that the RWMG is forming, coordinating, and integrating separate efforts in order to function as a unified effort.

The Madera Regional Water Management Group (RWMG) was formed with the intent of establishing a foundation for coordination and integration within the region. This foundation includes the five main components shown in **Figure 15-1**. The central component is Project Selection and Implementation. Each of these components will be discussed in subsequent sections.

Figure 15-1 – Coordination and Integration Components

Coordination and integration efforts generally overlap, and therefore they are jointly discussed below. Coordination and integration are also covered in several other IRWMP chapters, so the discussions below are introductory and refer to other IRWMP Chapters for more details.

15.2 - History of Coordination and Integration

In 2006, the County of Madera obtained a Proposition 50 IRWM Planning grant and began the process of developing an IRWMP for managing and protecting its water resources. Coordination and integration efforts began immediately with this effort. This IRWM began with Madera County as the lead agency. The County then formed a RWMG Formation Committee to develop and implement a governance structure for a RWMG. The RWMG grew and evolved to include a more diverse group of stakeholders who formally organized under a Memorandum of Understanding in 2010. Prior to the RWMG, Madera County did not have comprehensive IRWM planning. Several efforts had been in place to coordinate efforts, such as watershed groups and multi-agency efforts, but the RWMG represented the first truly integrated planning effort. The lack of specific IRWM planning efforts does not mean planning has not taken place, however it had largely been done individually by agencies with responsibility over specific areas. Past efforts usually involved agencies meeting just to discuss certain projects, but there is now a desire to meet regularly to discuss policies, collaboration, and ways to prevent future conflicts.

15.3 - Stakeholders

The RWMG has established a governance structure that fosters both integration and coordination of stakeholders through the following:

1. The RWMG uses a variety of public outreach methods to inform stakeholders of their efforts and accomplishments, and solicit comments on projects and studies (see CHAPTER 14 – Stakeholder Involvement for details on past and future public outreach efforts).
2. Outreach to disadvantaged communities (DACs) is important since they have some of the greatest needs, are often underrepresented, and provide some of the best opportunities to receive grant funding. The RWMG will continue focused efforts to recruit more DACs to attend meetings and become formal members of the RWMG. Chapter 4 – Disadvantaged Communities provides details on DAC demographics, typical DAC issues and challenges, and outreach efforts to DACs, including special outreach efforts during the IRWMP update.
3. The members are organized under the RWMG Memorandum of Understanding (MOU) which provides a formal and structured organization to manage regional water resources (CHAPTER 2- Governance). All RWMG members are integrated through the Regional Water Management Group.
4. The governance structure allows any stakeholder to participate as an interested party. Interested parties do not need to sign the MOU; they can participate in all RWMG efforts but are not entitled to vote on decisions. The RWMG also has the authority to establish Work Groups that can provide stakeholders opportunities to provide input on specialized topics. Stakeholders participate primarily through monthly RWMG meetings.

15.4 - Natural and Constructed Resources

The watersheds of the Madera IRWMP include valuable natural resources and constructed water infrastructure. Several agencies working together can have significantly more natural/constructed resources than one working alone. Therefore, the integration of resources has the ability to enhance the outcome of any project. Resource integration can include sharing data, technical expertise or access to infrastructure. Resources integration is addressed as follows:

1. The IRWMP provides various details on the members, interested parties, water infrastructure, regional water supplies and other natural resources in the IRWMP region (CHAPTER 3– Region Description). This data informs stakeholders on the roles and responsibilities of other stakeholders, and the infrastructure and natural resources

within their area of responsibility (as appropriate). This ensures that stakeholders have the necessary background data to participate in regional planning and decision making.

2. This IRWMP includes a climate change vulnerability assessment in Section 16 – Climate Change. This is an integrated assessment for the watersheds of the Madera RWMG, and helps to show potential climate change impacts to the region as a whole.
3. The IRWMP area includes two federally recognized sovereign Native American tribes (North Fork Rancheria of Mono Indians and Picayune Rancheria of Chukchansi Indians) as well as many unrecognized tribes. These tribes have separate governance and land management structures than the local, state and federal agencies. Sharing data, technical expertise and infrastructure with the tribes can benefit both the tribes and other RWMG stakeholders.

15.5 - Project Selection and Implementation

The RWMG coordinates and integrates projects through the following policies and procedures:

1. The RWMG solicits and publishes a list of projects so each stakeholder is aware of proposed projects. This list can also help prevent duplication in new projects, or identify multi-agency projects. The list will be updated semi-annually and added to the RWMG website.
2. The RWMG uses an integrated process to solicit, review and recommend projects for funding based on the RWMG's goals and objectives (CHAPTER 7– Project Review Process). The process requires a pre-application and input from the RWMG.
3. The RWMG has listed the general benefits of regional water management (CHAPTER 8– Impacts and Benefits). The goal of this list is to inform stakeholders of the value of coordinating and cooperating on regional efforts.
4. The RWMG has identified the benefits and impacts of implementing different types of projects (Chapter 8 – Impacts and Benefits). This information is provided for stakeholders within the Madera Region and neighboring IRWMPs. The purpose of this list is to help improve coordination among parties benefiting and impacted by new projects.

15.6 - Data Management and Reporting

The RWMG has successfully developed several programs to coordinate and integrate data management among the different parties in the Madera RWMG. These programs include the following:

1. In each future year, the RWMG will evaluate whether there is merit in preparing an annual report. The decision will be based largely on accomplishments during the year, and the need for supplemental documentation. The annual report would evaluate

progress in meeting regional goals and objectives, document progress in implementing projects, and document proposed amendments to the IRWMP. The annual report will be useful for archiving important data, and could also be used for informational, educational and promotional purposes. In the past the RWMG has prepared a PowerPoint presentation and a brochure each year which have documented major accomplishments for the RWMG, and this has served as its annual report.

2. The RWMG website will be expanded to include links to important information relevant to regional water management, and data collected through RWMG supported projects.

15.7 - Neighboring IRWMPs

The Madera RWMG abuts seven different IRWM Regions as shown in **Figure 15-2.** Below is a discussion on these IRWM Regions and their similarities, differences and existing relationships with the Madera RWMG.

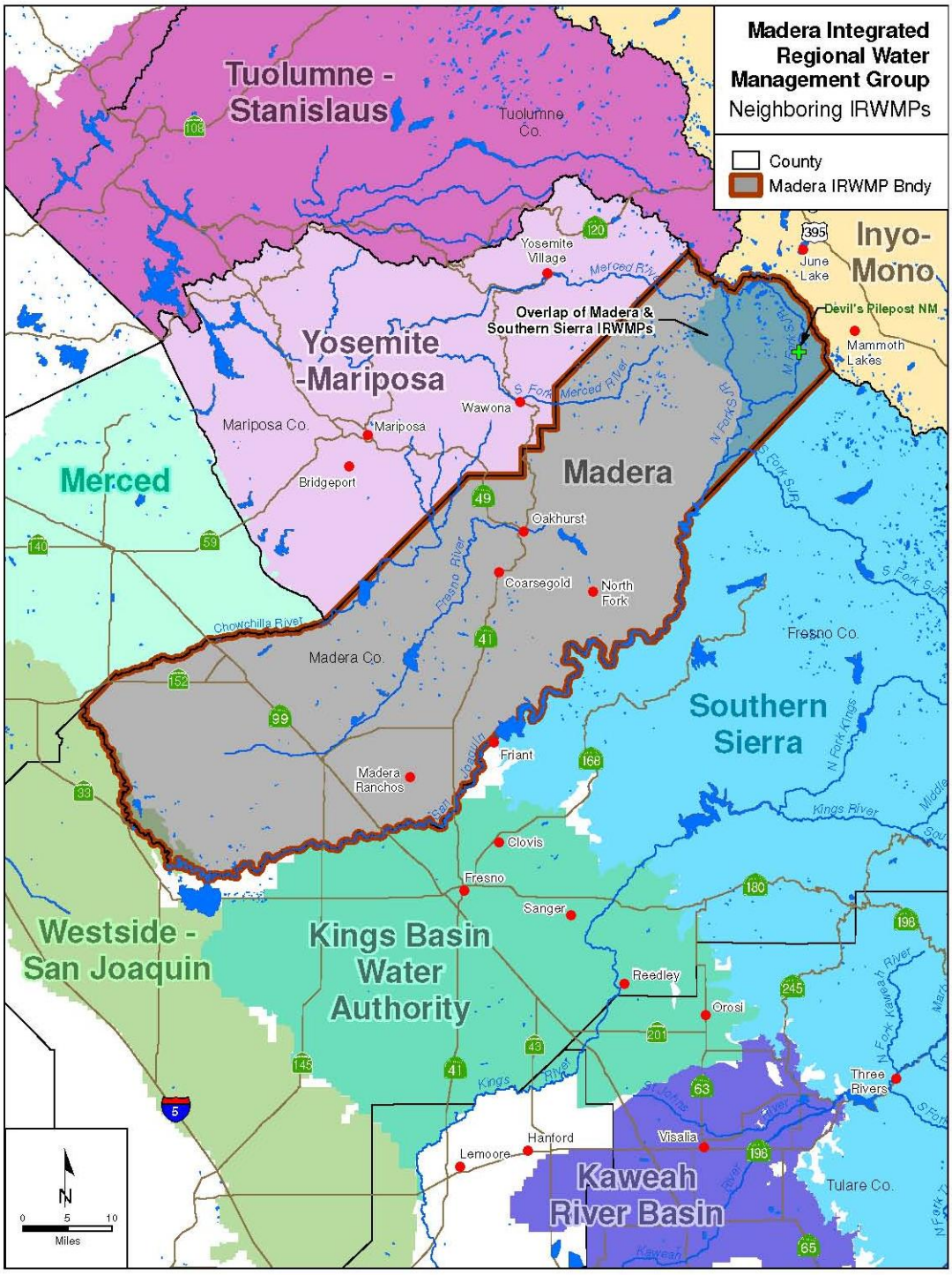

Figure 15-2 – Neighboring Regional Water Management Groups

The various IRWM Regions have made efforts to coordinate their boundaries as much as possible, and coordinate on water management planning. Inter-IRWM Region coordination efforts have included:

1. Email Lists. The Madera RWMG and all neighboring IRWM Regions are on each other's email distribution lists.
2. Start-up Assistance. The Madera RWMG began forming and writing an IRWMP before most other IRWM Regions. As a result, they assisted the other IRWM Regions in getting established, wrote letters of support, and provided copies of work performed to date so they could avoid 'reinventing the wheel.'
3. Letters of Agreement with neighboring IRWM Regions(see **Appendix K**) include:
    - Letter of Agreement on Region's Common Shared Areas – Southern Sierra IRWM Region
    - Letter of Agreement for Region's Common Boundary and Overall Cooperation and Collaboration – Merced IRWM Region
    - Letter of Agreement on Coordination and Communication between Regions – Yosemite-Mariposa IRWM Region
    - Letter of Agreement on Communication between Regions – Kings Basin Water Authority
    - Letter of Agreement – Devil's Postpile National Monument and Mammoth Mountain Ski Area – Inyo-Mono IRWM Region, Madera RWMG and Southern Sierra IRWM Region
    - MOU Regarding Coordination among Participants in the Sierra Nevada Water Workgroup
4. Representatives from the Madera RWMG frequently attend meetings for neighboring IRWM Regions
5. Roundtable of Regions. The Roundtable of Regions is an ad-hoc group of representatives from IRWM Regions around the State. The group was formed on the notion that each IRWM Region is unique but that all have many of the same interests. The group provides a forum for IRWM Region practitioners (people working on IRWM planning and implementation) to discuss their interests, share information, and provide recommendations to the Department of Water Resources on the IRWM grant program. This group holds regular conference calls and occasional face-to-face summits.
6. Sierra Water Workgroup. The Sierra Water Workgroup (SWWG) was formally organized in 2011 to help coordinate and facilitate the efforts of 12 IRWM Regions (covering 22 different counties) in the Sierra Nevada Mountains. The mission of the SWWG is to assist regional efforts to protect and enhance water quality, water supply, and watershed health; to develop cooperative regional responses; and to facilitate investment in watersheds and water resources by all beneficiaries. This is accomplished

through coordination, advocacy, and information exchange. A representative of the Madera RWMG attends an annual summit held by the SWWG. The Participating groups that neighbor the Madera RWMG include the Southern Sierra IRWM Region, Inyo-Mono IRWM Region, Yosemite-Mariposa IRWM Region and Tuolumne-Stanislaus IRWM Region. The Madera RWMG has signed the MOU Regarding Coordination among Participants in the Sierra Nevada Water Workgroup.

The Madera RWMG is regionally unique in that it contains large areas of valley, foothill and mountain lands. The seven neighboring IRWM Regions are limited, in general, to just valley lands or just foothill/mountain areas. The Madera RWMG therefore must manage and coordinate with a diverse range of internal stakeholders and neighbors. Following are discussions on each neighboring IRWM Region and their relation with the Madera RWMG. Copies of Letters of Agreements mentioned below can be found in **Appendix K**.

Southern Sierra IRWM Region. The Southern Sierra IRWM Region is located south of the eastern end of the Madera IRWM Region. The eastern portion of the Madera IRWM Region has many similarities to the Southern Sierra IRWM Region including large mountainous area, upper watersheds of major water systems, generally low, rural population centers that rely on hard rock wells, and high fire risks. The Southern Sierra IRWM Region desired to include the entire portion of the San Joaquin River watershed located west of the Sierra Nevada divide and south of the San Joaquin River. This has created a small overlap with the Madera IRWM Region (see **Figure 15-2**). The two IRWM Regions signed a *Letter of Agreement on Region's Common Shared Areas* in 2010. The overlap area is to facilitate holistic management of the Upper San Joaquin River watershed, which is almost entirely within the Sierra National Forest. Important issues related to the San Joaquin River include restoration efforts, watershed management, flooding in Madera County from river flows, and the importance of river supplies to meet valley water demands. The two IRWM Regions also share the area covered by the Devils Postpile National Monument and Mammoth Mountain Ski Area, which is documented in a letter from the National Park Service.

Inyo-Mono IRWM Region. The Inyo-Mono IRWM Region shares most of the eastern border of the Madera IRWM Region. The two IRWM Regions also share the area covered by the Devil's Postpile National Monument and Mammoth Mountain Ski Area, which is described in letters from the Inyo-Mono IRWM Region and National Park Service, both from 2010. This area has relatively small overlap, but was included due to issues of accessibility (the area is only accessible from the eastern side of the Sierra Nevada and cannot be directly accessed from the Madera IRWM Region.) The remainder of the borderline is the Sierra-Nevada divide so they do not share water resources, but have similar physical environments near the crest of the Sierras.

Kings Basin Water Authority. The Kings Basin Water Authority (also called the Upper Kings Basin Water Forum) IRWM Region lies directly south of the Madera IRWM Region. The two IRWM Regions are separated by the Madera County/Fresno County border, which is essentially

the San Joaquin River. The Kings Basin IRWM Region primarily covers the Valley floor. This area receives some of their water from the San Joaquin River and therefore relies partially on water management in some portions of the Madera IRWM Region. The two IRWM Regions signed a *Letter of Agreement on Communication between Regions*.

Yosemite-Mariposa IRWM Region. The Yosemite-Mariposa IRWM Region is located north of the eastern part of the Madera IRWM Region, and covers the exact borders of Mariposa County. Both IRWM Regions have portions of the upper watersheds of the Chowchilla, Fresno and Merced Rivers. The Yosemite-Mariposa IRWM Region consists mostly of mountain and foothill areas, and has similar physiography and climate to the eastern portion of Madera County. The two regions also signed a *Letter of Agreement on Coordination and Communication between Regions* in 2011.

Tuolumne-Stanislaus IRWM Region. The Tuolumne-Stanislaus IRWM Region is located north of the Madera IRWM Region and borders a small strip on the eastern end of the Madera IRWM Region. The Tuolumne-Stanislaus IRWM Region consists mostly of mountain and foothill areas, and has similar physiography and climate to the eastern portion of Madera County.

Merced IRWM Region. The Merced IRWM Region is located north of the western end of the Madera IRWM Region. Both IRWM Regions have land within the Chowchilla River watershed. The two IRWM Regions signed a *Letter of Agreement for Regions Common Boundary and Overall Cooperation and Collaboration* in 2011.

Westside-San Joaquin IRWM Region.
The Westside San Joaquin IRWM Region is located west of the Madera IRWM Region and they share a common border along the San Joaquin River.

The group will continue to coordinate with other IRWM Regions to help identify potential inter-regional projects. Unifying projects could include responses to a natural disaster, emergency preparedness, catastrophic wildfire management, and watershed management. In the past DWR has set aside some RWMG implementation funding specifically for inter-regional projects.

15.8 - Coordination with Native American Tribes

The IRWMP area includes two recognized tribes, North Fork Rancheria of Mono Indians and Picayune Rancheria of Chukchansi Indians, and numerous unrecognized tribes. Coordination with the tribes is important since they share many common goals with the other stakeholders, and they often bring unique ideas for project development. Outreach and communication will continue through focused efforts to encourage membership and participation in the RWMG governance and project development.

15.9 - Coordination with State and Federal Agencies

State Agencies

The California Department of Water Resources (DWR) has played an important role since efforts to develop an IRWMP begin in 2006. DWR has helped the group identify funding opportunities, develop an IRWMP, and provided funding for several projects under the Round 1 Implementation Grant program, and provided grants for professional facilitation services. The RWMG considers DWR a strong ally and hopes to continue their partnership with DWR as the RWMG matures. Other important State agencies include the California Department of Public Health, California Department of Conservation, and California Department of Fish and Wildlife. Coordination with experimental forests, watersheds and rangeland is also important, since these areas have valuable information for improving local water management. Some experimental lands in the IRWMP area include the National Science Foundation Sierra Nevada Critical Zone Observatory, and USFS San Joaquin Experimental Range (SJER). State agencies are encouraged to participate and attend monthly RWMG meetings.

In some cases, State agencies may play roles in providing regulatory approval for a project. This could occur if the project is on State-owned land, or if permits or approvals are required from one or more agencies. The California Department of Fish and Wildlife, Department of Conservation, and State Water Resources Control Board's Regional Water Quality Control Board and Division of Drinking Water all fall into these categories.

Federal Agencies

The Madera RWMG includes significant areas of land owned by Federal agencies, including the Sierra National Forest, Yosemite National Park, United State Army Corps of Engineers, US Fish and Wildlife Service, US Bureau of Land Management, US Bureau of Reclamation and small areas of land owned by several other Federal agencies. The Sierra National Forest was a grant recipient in the first Round of IRWMP Implementation Grant funding for a forest-fire fuels-reduction project. These federal agencies are considered important stakeholders and manage lands that are important to the supply and quality of water delivered to most of the RWMG area. They are encouraged to participate and attend monthly RWMG meetings.

The signatories to the San Joaquin River Restoration Settlement hope to coordinate and communicate more with the USBR on their monitoring of the Restoration Project. This would include updates on the success of the program, evaluation on how efficiently the environmental flows are being used, and progress toward meeting the goal of a 1:1 return of lost water supplies to the water contractors.

In some cases Federal agencies may play roles in providing regulatory approval for a project. This could occur if the project is on Federally-owned land, or if permits or approvals are required from one or more agencies. All of the agencies listed above, in addition to the Environmental Protection Agency, fall into these categories.

CHAPTER 16- CLIMATE CHANGE

16.1 - Introduction

Climate change is a long-term alteration of temperature, precipitation and other measures of climate, and is accompanied by changes in shorter-term weather patterns. Climate change can have both natural (e.g. influences from the Earth's natural orbital cycle) and anthropogenic (resulting from the influence of humans) causes. The recent and unprecedented rise in the Earth's temperature (1.4°F over the past century) is caused largely by increasing concentrations of greenhouse gases in the atmosphere. This global warming is causing climate and weather patterns to change. The international scientific community has stated that "It is *extremely likely* that human influence has been the dominant cause of the observed warming since the mid-20th century."[1] This consensus conclusion regarding the current global warming has been in place for over a decade. Further anthropogenic increases in greenhouse-gas concentrations, primarily carbon dioxide but also methane, nitrous oxide and other atmospheric constituents, will continue to drive global warming and changes in all components of the climate system.[1]

Paleoclimatic data, including ice cores, lake varves (annual layers of sediment), and tree rings show that the past century has been the most climatically stable period since the last ice age, with most periods showing strong decade-to-century variability in climate. Two climate extremes, droughts and floods, are of particular interest to California water managers and water users. While California has experienced multi-year droughts in the past century, including a 6-year drought in 1987-92, the paleoclimate record shows evidence of multi-decadal droughts during the past millennium.[2]

California is expected to experience dramatically warmer temperatures during this century, 2-5°F by 2035-64 and 5-9°F by 2070-99.[3] Climate-change impacts projected to affect the Madera Region, associated with these magnitudes of warming, include: i) more critically dry periods, including multi-year droughts, ii) increasing demand from a growing population as temperatures rise, iii) earlier snowmelt and runoff, and iv) increased competition for water among urban and agricultural water users and environmental needs. Climate projections provide a range for future increases in temperature, and even the lowest estimates would have serious impacts. Thus while it is widely recognized that projections of warming and climate-change impacts are not precise, the California Department of Water Resources (DWR) requires that climate-change planning be acknowledged and incorporated to the greatest degree

1 IPCC, 2013: Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Stocker, T.F., D. Qin, G.-K. Plattner, M. Tignor, S.K. Allen, J. Boschung, A. Nauels, Y. Xia, V. Bex and P.M. Midgley (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

2 DWR, 2014. D.M. Meko, C.A. Woodhouse, and R.Touchan. Klamath/San Joaquin/Sacramento Hydroclimatic Reconstructions from Tree Rings. Draft Final Report to California Department of Water Resources. February 7, 2014

3 CEC, 2012. S. Moser, J. Ekstrom, and G. Franco. Vulnerability & Adaptation to the Increasing Risks from Climate Change in California CEC-500-2012-007.

possible into Integrated Regional Water Management Plans (IRWMP). Further, due to the inherent uncertainty in projections, water managers should prepare to adapt to greater uncertainties in the water-planning process, including regulatory, environmental, economic, social and other conditions affecting water utilities.[1]

The general strategy to plan for climate change in the Madera Region includes: 1) identify vulnerabilities (to specific water users, aquatic species, and ecosystems that impact water supply and quality); 2) implement adaptation measures on two levels—no-regret strategies and higher-level planning and implementation strategies; and 3) monitor for climate-change impacts. This climate change planning process is shown in **Figure 16-1** below.

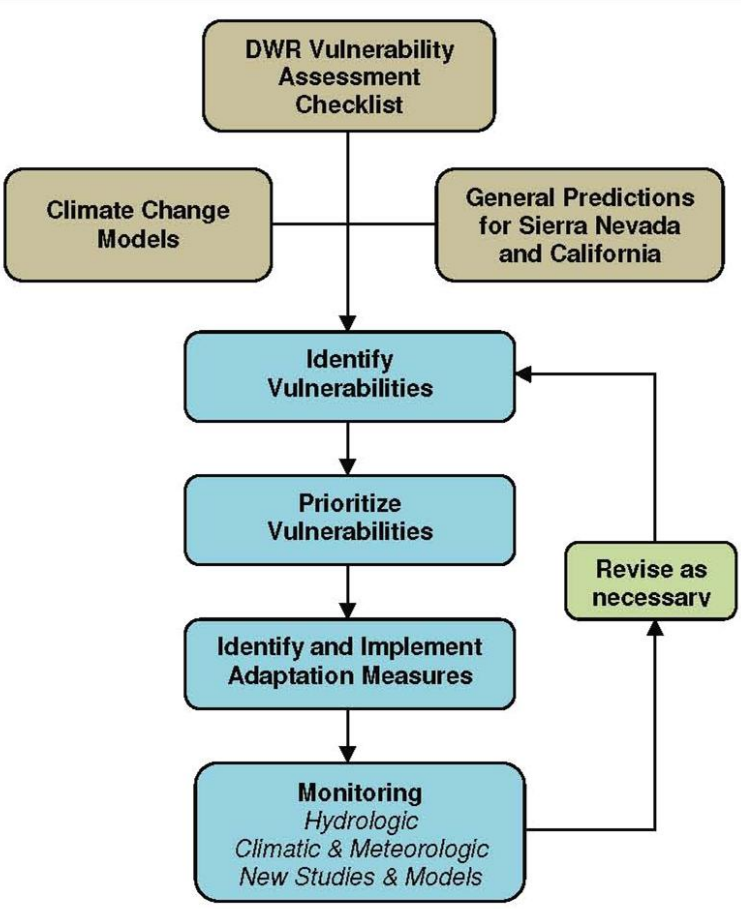

Figure 16-1 – Process for Climate Change Planning

Specific topics addressed in this chapter include: climate change literature, general impacts from climate change, a vulnerability assessment for the Madera IRWM area, Madera IRWM specific climate change modeling effects, adaptation and mitigation strategies, climate change monitoring, and consideration of greenhouse gas emissions in the project review process.

[1] Gary Pitzer. Water Education Foundation; *Linking Climate Change Science to Water Management Decisions*.

16.2 - Literature Sources

Multiple documents were used to evaluate climate change in the Madera Region. The primary document was the *Climate Change Handbook for Regional Water Planning*, (DWR and EPA, 2011). This handbook is the most recent and most practical climate change document published by the DWR, and provides some very basic tools for addressing climate change. This document is not required for preparing IRWMPs; however, DWR does recommend that it be used.

Other important Regional and Local climate change references included California Natural Resources Agency (2009), California State University at Fresno (2008), Conrad (2012), Climatewise (2010), DWR (October 2008), Hunsaker et al. (2012), and U.S. Global Change Research Program (2009). Other relevant documents include:

1. Guide to Climate-Smart Conservation
2. Vulnerability Assessment and Adaptation Strategies for Local Resources of the Sierra Nevada
3. Managing Resources in the Face of Rapid Change and an Uncertain Future, workshop; final Report and Presentations (hosted on http://climate.calcommons.org/).

Lastly, several reports that describe climate change modeling results were reviewed. These are discussed in Section 16.5 -Climate Change Projections.

Some local water and land use documents address climate change, including the City and County General Plans, the City of Madera Climate Action Plan, City of Madera Urban Water Management Plan, and the Environmental Impact Reports for the Gateway Village and Tesoro Viejo Specific Plans in unincorporated Madera County. To the extent that they are enumerated, the climate change goals and policies in these documents are consistent with this IRWMP. Typical climate change mitigation measures include energy efficiency requirements at new developments, compact urban development and promoting development of renewable energy. Climate change is missing from many older planning documents (pre-2000); however, it is being addressed in most new planning efforts.

16.3 - General Impacts from Climate Change

This section discusses potential general impacts from climate change on the Madera Region. While the magnitudes of specific impacts are uncertain, it is known that warmer average temperatures will result in a number of impacts on precipitation, hydrology, agriculture, water demand, and ecosystems. Some of the climate-change impacts listed by DWR (Oct. 2008), California Natural Resources Agency (2009) and the U.S. Global Change Research Program (June 2009) include:

Precipitation

- Changes in the seasonality of precipitation
- Increase in frequency and intensity of droughts
- A shift from snowfall to rainfall, resulting in less water stored in the snowpack
- Increased frequency of rain-on-snow events
- Changes in temperatures and cloud cover that inhibit or prevent cloud seeding
- Lower overall precipitation and increased aridity

Stream Flow

- Changes in the timing of spring runoff
- Lower summer base flow
- Increased flood risk, creating conflicts between water storage and flood control

Water Demands

- Higher temperatures leading to higher evapotranspiration rates from plants, and evaporation from soils and open water surfaces
- Extended growing seasons resulting in higher evapotranspiration for mountain forests, urban landscape and permanent crops

Water Quality

- Higher water temperatures leading to fish distress and algae growth
- Changes in erosion patterns resulting from changes in runoff and overland flow

Other

- Increased fire risk to rangeland and forests
- Potential for increase in diseases, pest invasions and weed invasions
- Heat waves and crop stress leading to lower crop yield
- Overall geographic changes in distribution of flora and fauna

The California water system is especially vulnerable to climate change due to its dependence on mountain snow accumulation and snowmelt runoff. Sierra Nevada snow is the largest water "reservoir" in California and snowpack storage is important for the state in general, for the downstream Madera Region, for other IRWM areas and for the entire interconnected San Joaquin Valley surface-water delivery system and users. Rising temperatures and changing precipitation patterns resulting in earlier peak runoff, more intense storms that quickly move through the hydrologic system, and reduced snowpack levels could all contribute to lower surface water availability, reduced groundwater recharge potential and thereby increased demand on already dropping groundwater levels.

Model projections for precipitation over California continue to show the Mediterranean pattern of wet winters and dry summers with seasonal, year-to-year, and decade-to-decade variability. However, several recent climate models shift toward drier conditions by the mid-to-late 21st century in Central and Southern California. This drying trend is caused by an apparent decline

in the frequency of rain and snowfall. Even in projections with relatively small or no declines in precipitation, central and southern parts of the state can be expected to be drier from the warming effects alone as the spring snowpack will melt sooner, and the moisture contained in soils will evaporate during long dry summer months. Both because uncertainty exists as to the magnitude of projected changes, and future climate will likely be more variable than in the past, water managers should plan for a range of new conditions.

Climate change could also have some positive impacts including less frost damage to crops, longer agricultural growing seasons, and less demand for winter heat. However, some crops need cold nighttime temperatures to germinate, cold nighttime temperatures also help control some pests, warmer temperatures affects pollinators, and earlier germination of some crops can affect productivity. Overall, agriculture will need to adopt several adaption measures to avoid declines in yield.

Higher elevations of the Madera Region are especially sensitive to the effects of a warmer climate. Earlier snowmelt, higher temperatures and longer dry periods over a longer fire season will directly increase wildfire risk. The Madera Region water delivery system in the lower elevations is designed for a specific historic climate, and warmer temperatures will generally be detrimental since they will increase water demands and reduce snowpack storage in a water-short area. The risks to the region from no action are clear and include a reduction in available water supply, greater groundwater overdraft, urban water shortages, higher water costs, and lower agricultural output.

16.4 - Vulnerability Assessment

The primary water features in the Madera Region include the San Joaquin and Fresno Rivers, Chowchilla River, Cottonwood Creek (east branch and west branch), Little Dry Creek, Ash Slough, Berenda Slough, Berenda Creek, Dry Creek, Root Creek, Madera Canal and Eastside Bypass. These rivers and creeks help define 5 watersheds within Madera County named: Lower San Joaquin, Upper San Joaquin, Fresno, Chowchilla and Merced (see **Figure 3-5 to Figure 3-10** in the Region Description Chapter). Two reservoirs and associated dams along the Fresno and Madera County boundaries are Mammoth Pool Reservoir (Mammoth Pool Dam) and Millerton Lake (Friant Dam).

A local vulnerability assessment (VA) was performed using the 'Vulnerability Assessment Checklist' found in the *Climate Change Handbook for Regional Water Planning* (DWR and EPA, 2011). This checklist, provided below, evaluates vulnerabilities to water demand, water supply, water quality, flooding, ecosystems and habitats, and hydropower from potential climate change.

1. Water Demand

1.a - Are there major industries that require cooling/process water in your planning region?

Yes. The region includes a large number of fruit, vegetable, and meat processing plants, but the temperature of the process water is not likely a major factor. No other major thermal power plants are located in the region.

1.b - Does water use vary by more than 50% seasonally in parts of your region?

Yes, seasonal water use varies substantially (greater than 50%) in the region. Much of water in the Madera Region is used by agricultural interests, with the remainder used by urban (residential, commercial and industrial) water systems. Nearly all agricultural water is used in spring and summer for crop irrigation. A large percentage of water is also used for environmental flows, including water for the San Joaquin River Restoration, in-stream flows, wildlife refuge water and other environmental flows. Urban and agricultural water demands are very low in the winter when much of the farmland is idle, most permanent crops are dormant, and effective precipitation provides most of the needed moisture. Approximately one-third of urban water demands occur in the winter with the other two-thirds in the summer.

1.c - Are crops grown in your region climate-sensitive? Would shifts in daily heat patterns, such as how long heat lingers before night-time cooling, be prohibitive for some crops?

Yes. The region experiences hot dry summers, and, as a result, most of the crops grown have relatively good heat resistance. Yes, changes in heat patterns would probably only impact crop yields if there is a significant increase in temperature. Changes in heat patterns could increase the demand for crop irrigation water. Although freezing temperatures do harm some crops, they are beneficial to some permanent crops that need a certain number of chilling hours below freezing for an effective dormancy. Freezing temperatures also kills some types of pests. Therefore, a reduction in the number of freezing days could negatively impact some crops.

1.d - Do groundwater supplies in your region lack resiliency after drought events?

Yes. Groundwater provides an important supplement to surface water in the Madera Region. Groundwater is used to meet demands not met by surface water, and the demand for groundwater increases during droughts. The region has experienced several severe droughts and the groundwater supply has proven important in providing a reserve supply, but groundwater levels are declining fairly rapidly. This decline is markedly worse in certain areas of the region than in others. With proper management groundwater supplies in the region can be resilient and go further toward meeting the needs of the region.

1.e - Are water use curtailment measures effective in your region?

Yes. Surface water curtailments include urban water conservation measures and reductions in surface water allocations within irrigation districts and agricultural water districts. Historically, water users have been able to supplement surface water supplies with groundwater, resulting in few water shortages. However, if groundwater levels continue to decline then groundwater will become less reliable as a backup supply. Demand within the region has "hardened" in recent years due to a large number of permanent plantings, so new water conservation programs may have to be implemented in the future if less surface water is available.

1.f - Are some in-stream flow requirements in your region either currently insufficient to support aquatic life, or occasionally unmet?

Historically, yes, the San Joaquin River has not flowed past Gravelly Ford during the driest parts of the year. However, pursuant to the San Joaquin River Restoration Agreement, minimum in-stream flow requirements have been instituted which provide for flows sufficient to support aquatic life all along the river to the Delta. These flows have one of the highest priorities for the surface waters, and flows are insufficient only in an extreme drought. The impacts from the San Joaquin River Restoration Settlement has been devastating to local water agencies that depend on San Joaquin River water.

2. Water Supply

2.a - Does a portion of the water supply in your region come from snowmelt?

Yes, much of the surface water in the San Joaquin River comes from snowmelt in the Sierra Nevada. Headwaters of the Fresno River and other lower-elevation streams receive less snow and more rain; but water yield is greater in snow-dominated elevations. This surface water is used throughout the region. Therefore, the Madera Region is vulnerable to potential climate change impacts on snow including earlier spring runoffs, less water storage as snowpack, and more frequent rain-on-snow events that could cause early or more prolonged flood releases out of reservoirs.

2.b - Does part of your region rely on water diverted from the Delta, imported from the Colorado River, or imported from other climate-sensitive systems outside your region?

No. Delta water is not used in Madera County.

2.c - Does part of your region rely on coastal aquifers? Has salt intrusion been a problem in the past?

No, the region does not rely on coastal aquifers.

2.d - Would your region have difficulty in storing carryover supply surpluses from year to year?

Typically, no, but sometimes yes. The local reservoirs have some capacity to store carryover water from year to year without encroaching on flood control space. The space to store the water, and ability to keep it in storage, depends on the hydrology of the particular year. In some years, agencies can carryover water and in other years the combination of rainfall, snow accumulation and previous year's carryover means they cannot. The USACE operates Hidden Dam on the Fresno River and has strictly adhered to its flood control criteria, making it very difficult to store any carryover water. Additional carryover storage capacity would be welcomed by the local water agencies. The region does have the potential to store very large quantities of runoff in sub-surface storage. New groundwater banks, including recovery wells and pumps, are needed to utilize this underground storage space to any great extent.

2.e - Has your region faced a drought in the past during which it failed to meet local water demands?

Yes. Some areas within the Region have only surface water supplies available, with no groundwater supplies available as backup. When surface water supplies are reduced during droughts, those lands have no supply and are forced to remain fallow or even take out permanent crops. In addition, the San Joaquin River Restoration will compound the problem during "normal" water years putting more pressure on groundwater demand. In most areas, groundwater is the primary or backup supply and groundwater is used to meet dry-year surface water shortfalls, in addition to some urban water conservation. As a result, most water demands have been met in past droughts. However, this has come at the cost of extensive groundwater overdraft and is not sustainable, and in the future groundwater may no longer be a reliable backup supply.

2.f - Does your region have invasive species management issues at your facilities, along conveyance structures, or in habitat areas?

Yes. Some invasive plant species can clog natural channels and canals if they are not properly managed, so most agencies include this as part of their maintenance activities. Arundo Donax (Arundo) has been a particular problem in sloughs and other flood conveyance channels. Agencies in the area have been alerted to the potential for invasive species such as quagga mussels and how to help prevent their spread.

3. Water Quality

3.a - Are increased wildfires a threat in your region? If so, does your region include reservoirs with fire-susceptible vegetation nearby which could pose a water quality concern from increased erosion?

Yes. Sierra Nevada forests are very susceptible to increased wildfire severity and frequency as climate warms. Several reservoirs are located in the Madera IRWMP area. Vegetation surrounds these reservoirs, but it is generally sparse in the immediate vicinity of the larger reservoirs and would not pose a large water quality concern from increased erosion.

3.b - Does part of your region rely on surface water bodies with current or recurrent water quality issues related to eutrophication, such as low dissolved oxygen or algal blooms? Are there other water quality constituents potentially exacerbated by climate change?

Generally no. Eutrophication is the process by which a body of water becomes rich in dissolved nutrients from fertilizers or sewage, thereby encouraging the growth and decomposition of oxygen-depleting plant life and resulting in harm to other organisms. Warmer water could cause conditions that lead to eutrophication. However, the surface waters in the region, including the San Joaquin River, Fresno River, Chowchilla River and numerous small creeks are derived from Sierra snowmelt and rain, and are cold and very pure. These waters have few nutrients that support algae growth and it is generally not a problem in these waterways. However, yes, algae can be a problem in irrigation canals and during very low flows at the distal end of the rivers.

3.c - Are seasonal low flows decreasing for some water bodies in your region? If so, are the reduced low flows limiting the water bodies' assimilative capacity?

No systemic decreases in low flows for the local water bodies have been observed, although no detailed analysis has been performed. Flows do vary dramatically from year to year depending on both precipitation and diversions. It is expected that low flows in some areas are decreasing, and such has been observed in other parts of the Sierra Nevada. Changes in annual low flows from climate change would be difficult to identify since low flows already vary due to management of reservoir releases and natural climate variations.

3.d - Are there beneficial uses designated for some water bodies in your region that cannot always be met due to water quality issues?

Yes. Local surface water supplies are able to meet all beneficial uses, which include recreation, hydropower, aquatic habitat, irrigation, and municipal water use. However, operational adjustments are often made to improve water quality for fish. Groundwater quality varies throughout the region and is not suitable for municipal use in some areas. Groundwater quality

may degrade further if groundwater levels continue to decline. It is also vulnerable to leaching of residuals from irrigation, industry and other sources.

3.e Does part of your region currently observe water quality shifts during rain events that impact treatment facility operation?

Yes, even though surface waters in the region generally have excellent water quality, storm activity can cause very high turbidity spikes that can affect the operation of surface water treatment facilities.

4. Sea Level Rise

The Valley portion of the Madera Region is at an average elevation of about 300 feet above mean sea level and is approximately 100 miles from the ocean and separated from the coastal area by the Coastal Range Mountains, with most peaks ranging from 3,800 feet to 6,000 feet. Therefore, sea level rise is not a threat to the region.

5. Flooding

5.a - Does critical infrastructure in your region lie within the 200-year floodplain? DWR's best available floodplain maps are available at: http://www.water.ca.gov/floodmgmt/lrafmo/fmb/fes/best_available_maps/.

Yes. While large areas of the region are within the 200-year floodplain of the San Joaquin River, most of the floodplain areas in the Madera Region are farmland. Some houses, roads, and water supply infrastructure (wells, canals, etc.) are located in the floodplains. Major flooding would not likely cause serious disruptions to essential emergency-response services.

5.b - Does part of your region lie within the Sacramento-San Joaquin Drainage District?

Yes.

5.c - Does aging critical flood protection infrastructure exist in your region?

No. Major flood control facilities include dams, levees and flood bypass channels. These facilities are all considered to be in good condition.

5.d - Have flood control facilities (such as impoundment structures) been insufficient in the past?

Yes, occasionally. Major flood control facilities including dams and levees have been provided significant flood protection, but in some years water had to be released from dams that flooded areas along waterways.

5.e - Are wildfires a concern in parts of your region?

Yes, wildfires are a significant concern in the foothill and mountain areas of the Madera Region. Wildfires can result in severe short-term erosion and water quality degradation of surface waters. Wildfire can also result in a shift in the timing and amount of runoff.

6. Ecosystem and Habitat Vulnerability

6.a - Does your region include inland or coastal aquatic habitats vulnerable to erosion and sedimentation issues?

No.

6.b - Does your region include estuarine habitats which rely on seasonal freshwater flow patterns?

No.

6.c - Do climate-sensitive fauna or flora populations live in your region?

Yes, a variety of native and imported flora and fauna live in the area and many are likely climate sensitive. Due to urban and agricultural development in the valley, some have limited ability to migrate as a means of adapting to climate change.

6.d - Do endangered or threatened species exist in your region? Are changes in species distribution already being observed in parts of your region?

Yes, several threatened and endangered species are found in the area. While general information on changes in species distribution in the Sierra Nevada and San Joaquin Valley is available in a number of references, site-specific information in the Madera Region is generally not available.

6.e - Does the region rely on aquatic or water-dependent habitats for recreation or other economic activities?

Yes, recreation is an important part of the local culture. These recreational opportunities also provide a moderate benefit to the local economy.

6.f - Are there rivers in your region with quantified environmental flow requirements or known water quality/quantity stressors to aquatic life?

Yes. The San Joaquin River has schedules for minimum environmental flows. These flows are the highest priority water uses, and are required to be met, except in exceptionally dry years when environmental flow requirements are moderated.

In 2007, the Natural Resources Defense Council published a document entitled "*In Hot Water – Water Management Strategies to Weather the Effects of Global Warming*". The document outlines potential affects to water supplies and wildlife from global warming, and provides the following conclusions regarding fisheries:

1. Higher temperatures (from climate change) will decrease salmon and other cold water fish habitat. According to studies by the Intergovernmental Panel on Climate Change, up to 38 percent of locations currently suitable for cold-water fish could become too warm to provide habitat by 2090.
2. As water temperatures rise, the percentage of dissolved oxygen (DO) in water drops. On the Lower San Joaquin River, reduced DO has caused fish kills and created temporary seasonal barriers to salmon migration
3. Adequate flows are essential to sustain aquatic ecosystems since higher flows and deeper water can reduce water temperatures. But non-flow actions such as removing migration barriers, improving water quality, and restoring habitat can significantly reduce the need for additional flows.

6.g - Do estuaries, coastal dunes, wetlands, marshes, or exposed beaches exist in your region? If so, are coastal storms possible/frequent in your region?

No.

6.h - Does your region include one or more of the habitats described in the Endangered Species Coalition's Top 10 habitats vulnerable to climate change (http://www.itsgettinghotoutthere.org/)?

Yes. The Madera Region includes a portion of the Sierra Nevada Mountains, which is provided in the list.

6.i - Are there areas of fragmented estuarine, aquatic, or wetland wildlife habitat within your region? Are there movement corridors for species to naturally migrate? Are there infrastructure projects planned that might preclude species movement?

Yes, due to the large amount of urban and agricultural development, prime wildlife habitat is generally fragmented in the valley portion of the Madera Region. However, wildlife could feasibly travel between prime habitat areas through agricultural land, or along the River corridors. In the foothills and forested areas east of the valley floor area, large wildland areas are found, and include numerous migration corridors for species including black bear, deer, and others. No planned infrastructure projects transect these migration corridors and so no additional inhibition of species movements is anticipated.

7. Hydropower

7.a - Is hydropower a source of electricity in your region?

Yes. Hydropower is generated on the San Joaquin River at powerhouses co-located with several of the storage dams, some of which are owned by Pacific Gas & Electric Company or by Sothern California Edison Company. The electricity generated by the power company is delivered to the electric grid, so it is not necessarily used directly in the Madera Region, but is a valuable resource.

7.b - Are energy needs in your region expected to increase in the future? If so, are there future plans for hydropower generation facilities or conditions for hydropower generation in your region?

Yes, energy demands are likely to increase in the region due to population growth, and to accommodate any climate change. No new major hydropower projects are planned for the area and are probably not likely to be pursued due to permitting difficulties. Some small hydropower projects are being considered along canals or at existing dams to utilize fish release flows. However, the energy generated from these projects would be small.

<u>Conclusions from Vulnerability Assessment</u>
Based on the analysis above the following vulnerabilities were identified for the Madera Region. These vulnerabilities are listed in their order of importance.

1. **Backup Water Supplies.** The region has a reliable water supply, largely because groundwater has been a dependable backup supply during droughts and the dry season. However, groundwater levels are declining and groundwater demands may increase if climate change reduces precipitation and water yield, or causes earlier spring runoff that cannot be stored. If groundwater levels decline too much then the groundwater will become a less reliable supply, and groundwater quality may decline. This

vulnerability can be measured by several metrics, including groundwater overdraft, groundwater level decline, groundwater remaining in storage, and changes in well yields.

2. **Inadequate Water Storage.** Storage facilities in the Madera Region include several surface reservoirs and subsurface groundwater storage. These facilities have been successful in helping the region regulate seasonal and year-to-year surface water flows; however, there is still demand for more storage. The current facilities may be inadequate if warming reduces annual seasonal water storage in the form of snow. Obtaining permits to construct new large dams is extremely difficult and time intensive, and, therefore, storage would have to be developed by raising existing dams, and constructing groundwater banks and off-channel reservoirs, each of which still require environmental analysis and impact mitigation. This vulnerability can be measured by the volume of new storage developed in acre-feet, and the need can be assessed by measuring the quantity of carryover water remaining in storage year to year, or quantity of carry-over water and floodwater lost to the Region.

3. **Climate Sensitive Crops.** Warmer average temperatures could reduce losses from winter freezes to some crops such as citrus, but other crops such as stone fruit and almonds depend on a required number of hours below a certain temperature each winter (known as "chilling hours") to kill pests or ensure an effective dormancy. Higher temperatures could result in lower yields for these crops. No adaptation measures are available for this impact, other than changing crop types, which is expensive and very slow if permanent plantings are impacted. This vulnerability can be measured with the number of chilling hours below freezing, and impacts to crop productivity each year.

4. **Flooding.** Flooding can be a problem in areas of the Valley portion of Madera County lying along the San Joaquin River. Increases in high flows could create future problems since it is unlikely that large new flood control dams can be constructed. Therefore, proper floodplain zoning and limiting high-value development on floodplains is crucial to preventing future problems. Increasing flood channel capacity and constructing additional storage facilities is also important. This vulnerability can be measured by the number of essential structures constructed in the 200-year floodplain.

These vulnerabilities will be re-evaluated at least every five years to reflect changes in local cropping, water demands, water supplies, new facilities, and climate change projections.

16.5 - Climate Change Projections

Climate models are numerical tools that can help identify a range of possible future climatic conditions or possible impacts from climate change. The Madera Regional Water Management Group (RWMG) did not analyze available results of climate modeling, primarily because several other organizations have assessed the available information for the area. The projections from

each climate model differ somewhat, due in part to different assumptions and different ways of mathematically representing the earth's processes and feedbacks. Taken as a group, however, climate models present a range of possible future conditions and potential impacts from climate change.

Several publications provide general information on projected climate change in California and the Sierra Nevada range. While these projections are not specific to the Madera Region, similar climate warming and hydrologic effects will be felt across the Sierra Nevada-Central Valley region. Thus they are useful for planning and developing the resiliency to adapt to a warmer climate. Some of the relevant publications and predictions are listed in **Table 16.1**.

Table 16.1: General Climate Change Projections

Source	Projection
Climate Change Adaptation Strategies for California's Water (DWR, 2008)	Water managers should use a drought component that assumes, until more accurate information is available, a 20- percent increase in the frequency and duration of future dry conditions.
	DWR projects that Sierra snowpack will experience a 25 to 40 percent reduction from its historic average by 2050.
Sierra Climate Change Toolkit, 2nd Edition (Sierra Nevada Alliance, 2007)	In most cases, total annual stream flow into major Sierra Nevada reservoirs is projected to drop about 10 to 20 percent before mid-century and 25 to 30 percent before the end of the century.
The Ahwahnee Principles for Climate Change (Local Government Commission, 2009)	The State's largest reservoir (snowpack) is projected to lessen by one third over the next 50 years and to half its historic size by the end of the century.
Vulnerability & Adaptation to the Increasing Risks from Climate Change in California (2012)	Provides temperature projections and multi-sector assessment of impacts, including water supplies, wildfire, energy, agriculture, ecosystems and is a synthesis of many more-detailed studies.

16.6 - Adaptation Measures

Climate change adaptation is one or a series of actions that seeks to reduce the severity of climate change impacts to human and natural systems. The adaptation measures identified below do not address a specific quantified impact, but rather focus on a range of potential measures to begin to adapt to reductions in snowpack, river flows, flooding, and sea levels, and maximize groundwater storage capabilities, water conservation and water re-use where appropriate. Since climate projections provide a range of possible outcomes rather than a single future scenario, flexibility and diversity in adaptation measures is fundamental. The adaptation measures will also help the region to improve resiliency to climate variability, where resiliency is defined as the ability to return to original conditions after a disturbance or impact.

The Department of Water Resources October 2008 publication "Managing an Uncertain Future: Climate Change Adaptation Strategies for California's Water", suggests there are multiple strategies that can help reduce the risks presented by climate change. To be successful, however, the report states these adaptation strategies must be well-coordinated at the state, regional and local levels in order to maximize their effect:

> "*No single project or strategy can adequately address the challenges California faces, and tradeoffs must be explicitly acknowledged and decided upon. That said, planning and investing now in a comprehensive set of actions that informs water managers and provides system diversity and resilience will help prepare California for future climate uncertainty*."

The report identified ten general strategies for climate change adaptation, which are shown in **Table 16.2**.

Table 16.2: Climate Change Adaptation Strategies for California's Water[1]

Investment Strategy	Strategy 1: Provide Sustainable Funding for Statewide and Integrated Regional Water Management
Regional Strategies	Strategy 2: Fully Develop the Potential of Integrated Regional Water Management
	Strategy 3: Aggressively Increase Water Use Efficiency
Statewide Strategies	Strategy 4: Practice and Promote Integrated Flood Management
	Strategy 5: Enhance and Sustain Ecosystems
	Strategy 6: Expand Water Storage and Conjunctive Management of Surface and Groundwater Resources
	Strategy 7: Fix Delta Water Supply, Quality and Ecosystem Conditions
Improving Management and Decision-Making Capacity Strategies	Strategy 8: Preserve, Upgrade and Increase Monitoring, Data Analysis and Management
	Strategy 9: Plan for and Adapt to Seal Level Rise
	Strategy 10: Identify and Fund Focused Climate Change Impacts and Adaptation Research and Analysis

Dr. Roger Bales, UC Merced, presented to the RWMG his observations regarding Sierra Nevada conditions, and indicated that forest-thinning prescriptions for fuels reduction and decreasing

[1] Department of Water Resources, "Managing an Uncertain Future: Climate Change Adaptation Strategies for California's Water", October 2008.

the risk of catastrophic wildfire are similar to those for enhancing water yield. More-active forest vegetation management may thus be a "no-regret" strategy to develop more water supplies. Dr. Bales and colleagues hypothesize that across the Sierra Nevada, runoff yield can increase by approximately 9% with a 40% reduction in forest density.[1] More detail on this strategy can be found in **Section 6.7 -**of the Resource Management Strategies chapter.

The DWR also defines 'no-regret' strategies as actions that provide measurable benefits today while also reducing vulnerability to climate change (DWR, 2011). In other words, they are strategies that provide benefits with or without climate change. As such, these are actions that can be taken within each IRWM planning area, independent of, but in furtherance of strategies, particularly Strategy 2, being pursued on a statewide level. For instance, constructing a water bank would provide needed water supply benefits in the present (Strategy 6), but could mitigate climate change impacts through floodwater capture (Strategy 4), increasing water storage, and enhancing wetland habitat (Strategy 7). The Water Education Foundation (2010) believes that planning for climatic uncertainty will also benefit planning for regulatory, environmental, economic, and social uncertainty.

A no-regret strategy that can be implemented through the current IRWM process, and provide a foundation for other measures, is Strategy 8 – Preserve, Upgrade and Increase Monitoring, Data Analysis and Management. In particular, upgrading and increasing monitoring and data analysis is essential if the region is to realize gains from enhanced water storage, resiliency in groundwater supplies, water conservation and new management options. Providing an accurate, timely and transparent water-accounting system is the first step in enhancing water infrastructure and developing management strategies that will meet future challenges. Some of the components of this system would include new measurements of precipitation, snowpack storage, soil moisture, stream flow and groundwater levels. An accounting system for groundwater withdrawals as well as levels could also help the region prepare for future statewide groundwater regulation and management. Recent technological advances provide more-accurate and lower-cost options for new water-measurement systems.

The Madera RWMG concluded that no-regret strategies should comprise the majority of adaptation measures. Most of the resource management strategies described in CHAPTER 5 would assist with climate change adaptation. The following strategies, including "no regret" management practices, are practical and effective for climate change adaptation in the Madera Region:

1. Improve urban and agricultural water efficiency
2. Increase use of recycled water (where energy efficient and/or where minimal greenhouse gases result)

[1] R.C. Bales, J.J. Battles, Y. Chen, M.H.. Conklin, E. Holst, K.L. O'Hara, P. Saksa, W. Stewart, Forests and Water in the Sierra Nevada: Sierra Nevada Watershed Ecosystem Enhancement Project, Sierra Nevada Research Institute report number 11.1, November 2011.

3. Revise land use planning policies to encourage conservation (e.g. low impact development or water efficiency and conservation standards)
4. Develop groundwater recharge and banking projects
5. Develop surface water storage projects inside and outside of the Madera Region
6. Increase ability to capture floodwater both for flood control and water supply
7. Encourage forest thinning, restoration of mountain meadows, wetlands, and riparian areas to regulate flows resulting in more summer runoff
8. Change to crop types that are drought tolerant or use less water to accommodate climate change
9. Continued investment in local water conservation programs and equipment;
10. Increasing water reuse and recycling;
11. Monitoring local and regional water use activities;
12. Tracking related legislation;
13. Investigating water supply/energy relationships and coordinating with larger water utilities; and
14. Following the State's required adaptation strategies and legislation.

Although 'no-regret" strategies provide benefits with or without climate change, the threat of climate change further justifies the need for many water management strategies already being used in the region. Furthermore, climate change adaptation is not in conflict with current Goals and Objectives of the region.

The overall theme with these strategies is to expand the tool box of accommodations and actions that can be taken to help the region adapt to extreme conditions (drought and floods) that climate change and increase of greenhouse gases may cause.

16.7 - Climate Change Monitoring

Climate change increases the importance of hydrologic and climatic monitoring, and having the necessary data is important to make decisions. Monitoring should include: 1) monitoring hydrologic and meteorological attributes for to enhance management decisions given climate change; and 2) monitoring climate-change science, legislation, adaptation challenges and mitigation opportunities.

The Madera Region already includes an operational network for monitoring the hydrology, meteorology, water demands, water use, crop yields and wildlife. As the pace of change increases and additional pressures from population growth and water demand also increase, strategic improvements could provide a sound basis for decision making, planning and public

education. The latter is particularly important, in that regional stakeholders need to understand the importance of adapting water infrastructure and operations to change.

Historically water projects have been designed and are operated on the assumption that future hydrology will mimic past hydrology. Climate change will alter future hydrology in unprecedented ways, making the past a poor guide to future decisions. While, the range and extent of changes to hydrology have a degree of uncertainty, the risks are real and adding resiliency to water systems is both prudent and timely. That is, future projects should be designed for a more-variable climate and hydrology than experienced in the past. Uncertainty will remain a hallmark of future climate and hydrology, and both infrastructure and institutions should build in the capacity to accommodate that uncertainty. Thus potential changes in hydrology provide the driving force behind adaptation measures which will be pursued by the RWMG.

The science of climate change, and the tools to mitigate and adapt to climate change, will continue to evolve, as will the knowledge base for efficient and timely responses. Note that strategy 10 in **Table 16.2** explicitly calls out the importance of building the knowledge base for adaptation through research and analysis. As a result, every five years as part of the California Water Plan Update process, DWR will provide revised estimates of changes to sea levels, droughts, and flooding that can be expected over the subsequent 25 years. The RWMG will also stay apprised of new studies, reports, literature, legislation, and climate change model runs that are pertinent to the area. When needed this literature will be shared with the RWMG members and interested parties, and incorporated into the IRWMP updates.

16.8 - Mitigation of Greenhouse Gas Emissions

Mitigation of climate change can be achieved by selecting and promoting projects that help to reduce greenhouse gas emissions (GHG) emissions. While the RWMG is not responsible for air quality management, and they can only have a small impact on global emissions, it is sensible to consider emissions in project selection in view of the negative impacts climate change may have on water resources. The RWMG is also dedicated to helping the State meet GHG emission reduction goals, when practical and economical. These goals, prescribed in the California Global Warming Solutions Act of 2006 (AB 32) and subsequent executive orders, include reaching 2000 emission levels by 2010, 1990 levels by 2020, and 80% below 1990 levels by 2050.

Most of the resource management strategies described in CHAPTER 6 can assist with climate change mitigation through reduction in energy demand, ecosystem enhancement, or carbon sequestration. For instance, water conservation can reduce energy demands to pump, convey, and treat water supplies. Another example is riparian area restoration, which can sequester carbon and create habitat for species impacted by climate change.

Projects are primarily ranked based on their water supply benefits, but GHG emissions and climate change adaptation should be secondary considerations. Specifically, the following questions should be asked when evaluating projects:

1. Will this project result in reduced greenhouse gas emissions? If yes, explain how and quantify.
2. Will this project increase greenhouse gas emissions? If yes, explain how and quantify.
3. Will this project contribute to adaptation strategies to respond to climate change impacts?

Beginning July 1, 2012, GHG emissions for California Environmental Quality Act (CEQA) studies are required to be calculated using the California Emissions Estimator Model (CalEEMod). CalEEMod quantifies potential criteria pollutant and GHG emissions from construction and operations for a variety projects. The RWMG will also require that this model be used on projects considered for funding.

16.9 - Climate Change in other IRWMP Sections

Climate change is discussed in several other IRWMP Chapters including:

- **CHAPTER 6- Resource Management Strategies –** This chapter discusses the impacts of climate change on the efficacy of different strategies, and the ability of strategies to help adapt to climate change.
- **CHAPTER 7 - Project Review Process –** The project review process includes new questions related to GHG emissions (**Section 7.2 -Selecting and Prioritizing Projects for Specific Funding Opportunities**)
- **CHAPTER 13- Relation to Local Land Use & Water Planning –** This chapter summarizes the climate change adaptation and mitigation strategies from local water plans, and evaluates their consistency with the goals of this IRWMP.

CHAPTER 17- REFERENCES

Note: This list of references does not include the numerous land and water planning documents discussed in Chapter 13 – Relation to Local Land Use Planning & Water Planning. Details of those documents are already provided in Chapter 13.

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Appendix A

Memorandum of Understanding, Bylaws and Ground Rules

MOU

Memorandum of Understanding for
Integrated Regional Water Management in the
Madera Region
[Initially Adopted January 2, 2010]

1. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to recognize a mutual understanding among entities in the greater Madera County area regarding their joint efforts toward Integrated Regional Water Management (IRWM) governance, development, planning, funding, and implementation. The mutual understanding of the signatories to this MOU (herein collectively referred to as the "Parties") will facilitate future coordination, collaboration, and communication for comprehensive management of water resources in the greater Madera County area.

2. RECITALS

2.1 The State of California desires to foster Integrated Regional Water Management (IRWM) planning and encourages local public, non-profit, and private entities to define planning regions appropriate for managing water resources and to integrate strategies within these planning regions.

2.2 A comprehensive group of stakeholders, including the Parties, developed an Integrated Regional Water Management Plan for the greater Madera County area (IRWMP), which also considers broader watershed issues.

2.3 The Madera County Board of Supervisors accepted the IRWMP on April 14, 2008. Prior to entering into this MOU, the respective decision making body of each Party adopted the IRWMP.

2.4 The IRWMP defines a water management planning region that takes into consideration jurisdictional limits, powers and responsibilities, and watershed and groundwater basin boundaries. For purposes of this MOU, "Region" refers to the IRWMP water management planning region as it may be amended from time to time through amendments to the IRWMP.

2.5 Water resources management authority in the Region is currently distributed among various public agencies with a range of legal powers and regulatory responsibilities. These public agencies have jurisdictional boundaries defined by political considerations rather than hydrologic conditions. Therefore, sensible water resources planning and management frequently requires coordinated actions by multiple jurisdictions. Private entities within the Region have considerable interests in cooperating with public entities to protect, manage, and enhance water resources within the Region.

2.6 By and through this MOU, various public entities and non-profit entities in the Region with responsibility and interests in management of water resources intend to form a regional water management group, pursuant to Water Code section 10539, for the purposes of governing, further developing, implementing, and funding the IRWMP, as well as cooperating with the stakeholders in shared watersheds, either through separate memorandums of understanding, joint powers agreements, and/or eventual inclusion of other adjoining areas into the Region by amendment of the IRWMP (e.g., the portions of the upper Chowchilla and San Joaquin river watersheds that lie outside of the Madera County boundaries).

2.7 The Parties desire to link and integrate efforts to jointly oversee the further development, implementation, funding, and governance of the IRWMP.

3. GOALS

The goals of the collaborative effort undertaken by the Parties pursuant to this MOU are:

3.1 To develop and implement a governance structure for the IRWMP for the Region that meets the requirements set forth in the Integrated Regional Water Management Planning Act of 2002, codified at Water Code sections 10530 et seq., the Water Security, Clean Drinking Water, Coastal and Beach Protection Fund of 2002, codified at Water Code sections 79500 et seq. (Proposition 50), and the Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006, codified at Public Resources Code section 75001 et seq. (Proposition 84).

3.2 To work together to develop updates, changes, amendments, additions and/or other modifications to the IRWMP to ensure that the plan continually utilizes the best science and data available to address the Region's changing conditions, needs and concerns, including but not limited to ecosystem restoration, environmental and habitat protection and improvement, water supply reliability, flood management, groundwater management, recreation and public access, storm water capture and management, water conservation, water quality protection and improvement, water recycling, wetlands enhancement and creation, imported water, land use planning, nonpoint source pollution control, surface storage, watershed planning, water and wastewater treatment, water transfers and water banking.

3.3 To improve and maximize cooperation among stakeholders and coordination of public, private, and non-profit agency plans, programs and projects for mutual benefit and optimal gain within the Region.

3.4 To help identify, develop, prioritize, and implement collaborative plans, programs, and projects that may be beyond the scope or capability of individual stakeholders, but which would be of mutual benefit if implemented in a cooperative manner.

3.5 To facilitate regional water management efforts that provide multiple benefits and include one or more of the following elements: water supply (including without limitation, banking, efficiency, conservation, and reliability), water quality, flood control, and environmental protection and enhancement objectives.

3.6 To foster coordination, collaboration, and communication between stakeholders, adjacent IRWM regions and other interested parties, to achieve greater efficiencies, enhance public services, and build public support for vital projects.

3.7 To realize regional water management objectives at the least cost possible through mutual cooperation, elimination of redundancy and to enhance regional competitiveness for State and Federal grant funding.

3.8 To identify disadvantaged communities in the Region and take the water-related needs of those communities into consideration.

4. DEFINITIONS

4.1 Integrated Regional Water Management Plan (IRWMP). Consistent with Water Code section 10534, IRWMP hereinafter refers to the comprehensive plan for the Region as described in the recitals above, including any amendments, revisions, or updates thereto.

4.2 Non-Profit Organization. Consistent with Water Code section 79505(g) and Public Resources Code section 75005(k), "Nonprofit Organization" as used herein means any nonprofit corporation qualified to do business in California, including a nonprofit corporation formed pursuant to the Nonprofit Public Benefit Corporation law (Corporations Code section 5000 et seq.) and qualified under Section 501(c)(3) of the United States Internal Revenue Code.

4.3 Project. An action or construction project that addresses a need identified within the IRWMP and Water Code section 10537.

4.4 Local Agency. Consistent with Water Code section 10535, "Local Agency" herein refers to any city, county, city and county, special district, joint powers authority, or other political subdivision of the state, a public utility as defined in Section 216 of the Public Utilities Code, or a mutual water company as defined in Section 2725 of the Public Utilities Code.

4.5 Regional Water Management Group (RWMG). Consistent with Water Code section 10539, RWMG generally refers to a group of three or more Local Agencies in the Region, at least two of which have statutory authority over water supply or water management, as well as those other entities in the Region that may be necessary for the further development and implementation of the IRWMP. As specifically used in this MOU, RWMG shall refer to the Parties to this MOU.

4.6 Stakeholder. An interested party, including without limitation a Non-Profit Organization, Local Agency, or private property owner that directly participates in or relies upon water management within the Region or that represents the interests of those (including flora and fauna) who do.

5. MUTUAL UNDERSTANDING

5.1 Additional Parties and RWMG Members. Each Party to this MOU must adopt the IRWMP prior to executing this MOU. For a Local Agency, adoption of the IRWMP is by formal resolution of the governing body or its equivalent (e.g., by a board of directors or other management entity). For any other entities, adoption by way of acknowledgement of acceptance of the IRWMP by the individual(s) authorized to bind the entity is required. Additional Local Agencies, Non-Profit Organizations, or other entities in the Region that desire to participate in the adoption, further development, funding, and implementation of the IRWMP may seek to join the RWMG at any time. To join the RWMG, an entity must submit a request to the RWMG. The RWMG shall determine whether the requesting party is a party qualified under Water Code section 10539 and this MOU to participate as a member of the RWMG. If so, the requesting party may join the RWMG by adopting the IRWMP and executing this MOU.

5.2 RWMG Governance. The RWMG will determine their governance structure and operating procedures.

5.3 Lead Agency. The RWMG shall mutually agree upon a designated signatory Local Agency to facilitate IRWMP implementation and coordinate RWMG activities in furtherance of this MOU (Lead Agency).

The Lead Agency will serve at the pleasure of the RWMG. Unless otherwise designated as the Grant Administrator responsible for funding or the Project proponent for an individual Project pursuant to this MOU, the Lead Agency shall not be responsible for any Project, including without limitation completion, funding, or environmental review thereof.

5.4 Technical Advisory Committee. The RWMG will organize a committee to advise the RWMG and other Stakeholders concerning implementation, funding, and further development of the IRWMP. The RWMG shall appoint individuals to the Technical Advisory Committee who have technical backgrounds in the fields of water, biology, ecology, geology, engineering, hydrogeology, planning, resource conservation, riparian systems, water conservation, and/or water quality. Appointees to the Technical Advisory Committee shall serve at the pleasure of the RWMG.

5.5 Approach to Implementing the IRWMP. Any Stakeholder may propose an implementation project (Project Proposal) to the RWMG at any time. Each Project Proposal shall include a funding component, including application and administration costs, in addition to direct Project costs. Each Project Proposal must meet the standards identified in the IRWMP or they will not qualify for additional consideration by the RWMG. The RWMG will review the Project Proposals for consistency with the IRWMP. The RWMG will hold two public hearings each year to allow Stakeholder comments on any Project Proposals. Notice of each hearing shall be made at least 30 days in advance to allow all Stakeholders ample time to prepare alternatives, or to compile data for presentation at the hearing. Public hearings shall be held at least twice per year, once in April and once in October, and other times as needed.

5.6 Prioritization of Projects. At least twice a year, the RWMG will generate and approve a list that prioritizes the Projects to be carried out within the Region. The final prioritized Project list will be approved by majority vote of the RWMG after receiving input from Stakeholders at a public hearing held consistent with section 5.5 above.

5.7 Amendment of IRWMP. The IRWMP may be amended from time to time by majority vote of the Parties at a meeting of the RWMG, open to all Stakeholders. Any member of the RWMG may request that the Lead Agency convene a meeting of the RWMG, open to all Stakeholders, to consider amendments to the IRWMP. Except in unusual circumstances, the IRWMP will be amended no more frequently than bi-annually in April and October. Any amendments to the IRWMP must be consistent with Water Code sections 10530 et seq. and any IRWM guidelines of the State Water Resources Control Board and California Department of Water Resources. The RWMG shall consider all public input and input from Stakeholders and shall adopt or reject proposed amendments by majority vote of the RWMG, after compliance with the publication and notice requirements set forth in Water Code section 10543.

5.8 Project Implementation. The individual Project proponent(s) will be responsible for completing their respective proposed Projects, complying with all applicable laws related thereto, conducting any necessary environmental review thereon, hiring any appropriate consultants to assist in administering their respective Projects, identifying funding for said Projects, and providing Project reports to the Lead Agency. The Parties will reasonably cooperate with the individual Project proponent(s) to support Projects approved by the RWMG.

5.9 Monitoring. The RWMG will be responsible for monitoring the implementation of the IRWMP. The Technical Advisory Committee will regularly report to the RWMG regarding progress on the development and implementation of the IRWMP. The Lead Agency will be responsible for coordinating

data collection among the Parties and dissemination to the RWMG. Unless specifically tasked therewith, the Lead Agency is not responsible for data production or collection.

5.10 Grant Applications. The RWMG will designate the appropriate Local Agency or Non-Profit Organization within the RWMG, or other appropriate third-party grant administrator, (hereafter referred to as a "Grant Administrator") to apply for grant funds and other potentially available funding. The Grant Administrator for each grant application should have a mission and expertise consistent with the purpose of the subject grant(s). The grant applications shall adhere to the Project prioritization identified by the RWMG. Funding for any grant application shall be provided for by the Local Agency(ies) that will benefit from the grant, as determined by the RWMG.

5.11 Grant Awards and Agreement. Unless otherwise designated by the RWMG, the Grant Administrator designated to apply for the identified grant funds pursuant to section 5.10 above will be the grantee and administer the grant on behalf of the RWMG and Stakeholders. The individual Project proponent will be responsible for compiling any and all documentation for the respective Project that may be required by the grantor or requested by the Grant Administrator. The individual Project proponent shall timely provide any such documentation to the Grant Administrator.

5.12 Withdrawal. A Party to this MOU may withdraw from participation upon 30 days advance notice to the other Parties. A withdrawing party will remain obligated for its proportionate share of any financial obligation incurred in furtherance of this MOU and/or implementation of the IRWMP prior to the effective date of withdrawal.

5.13 Personnel and Financial Resources. The general managers and/or other authorized officials of each Party will periodically meet to ensure that adequate resources are available to the RWMG to implement the MOU. In the event sufficient funding is not available to implement the MOU, the Parties agree to exercise in good faith all reasonable efforts to identify and provide for adequate funding to implement the MOU.

5.14 Other On-Going Regional Efforts. The IRWMP is separate from efforts of other organizations to develop water-related plans on a regional basis around Madera County. As the IRWMP is implemented, work products may be shared to provide other entities and groups with current information. The Parties agree to cooperate with the stakeholders in shared watersheds, either through separate memorandums of understanding, joint powers agreements, and/or eventual inclusion of other adjoining areas into the Region by amendment of the IRWMP (e.g., the upper Chowchilla and San Joaquin river watersheds outside of the Madera County boundaries).

5.15 Amendment of Memorandum of Understanding. This MOU may be amended only by a subsequent written agreement approved and executed by all of the Parties. If one or more of the Parties propose amendments to the MOU, the Lead Agency will convene a meeting to vote on the proposed amendments. If a majority of the RWMG votes in favor of the proposed amendments, the MOU as proposed for amendment shall be approved by the decision-making bodies of the Parties within 30 days of the affirmative vote. Any Parties not wishing to continue in the MOU due to the amendments or modifications will have no obligation to sign the amended MOU. The amendments will take effect 30 days after the affirmative vote of a majority of the RWMG so long as, by that time, at least three Local Agencies, at least two of which have authority over water supply or management, have signed the amended MOU.

5.16 Counterparts. This MOU may be signed in any number of counterparts by the Parties, each of which will be deemed to be an original, and all of which together will be deemed to be one and the same instrument.

5.17 Good Faith. Each Party shall use its best efforts to, in good faith, work towards completion of the objectives of this MOU and the satisfactory performance of its terms. The Parties will reasonably cooperate with each other to carry out the purpose and intent of this MOU.

5.18 Dispute Resolution. The Parties shall make reasonable efforts to resolve any disputes that may arise from this MOU in a prompt and timely manner. The Parties must apply the dispute resolution process set forth in this section to all disputes arising under this MOU. In the event of a dispute, the Party claiming a dispute shall give notice of the dispute to the Lead Agency. Such notice shall include a brief description of the matter in dispute and the relief sought. Upon receipt of the dispute notice, the Lead Agency shall immediately notify all Parties of the dispute and timely convene at least two RWMG meetings to resolve the dispute. If the dispute is not resolved in these meetings, the Parties shall consider terminating or amending this MOU. Prior to entering into any legal action arising out of this MOU, the Parties hereby commit to first pursue mediation. In such event, the Parties shall select a neutral mediator by majority vote. If the Parties cannot come to majority agreement, the Lead Agency will select a neutral mediator. Costs of the mediator shall be borne by the Parties in equal shares, with the Parties bearing their own costs of participation. The dispute resolution process called for in this section is binding on Parties to this MOU only to the extent of their mutual understanding herein and in no way affects the method by which Parties can lawfully resolve disputes concerning their legal or regulatory obligations arising under any other law, agreement, or contract.

5.19 Mutual Indemnification. This MOU shall not be construed to shift liability from any given Party to another for any actions taken in furtherance of this MOU. Each Party will remain wholly responsible for any actions it takes pursuant to this MOU. Each Party agrees, to the fullest extent permitted by law, to indemnify, defend, and hold all other Parties and any directors, officers, agents, employees, and insurers thereof from and against any and all claims, judgments, damages, penalties, costs, liabilities, and losses arising out of or related in any way to each Party's respective activities in furtherance of this MOU.

5.20 Effective Date; Term. This MOU shall take effect upon signature of three or more Local Agencies, at least two of which have statutory authority over water supply or water management, and shall thereafter continue so long as the criteria set forth in this section are met until terminated by mutual written agreement of the Parties.

6. SIGNATORIES TO THE MEMORANDUM OF UNDERSTANDING

We, the duly authorized undersigned representatives of our respective entities, acknowledge the above as our understanding of the intent to oversee the governance, funding, further development, and implementation of the Integrated Regional Water Management Plan for the Region.

REGIONAL WATER MANAGEMENT GROUP

[Signatories Follow on original document; see page _ for list of signatories]

_____ _____

Entity By

BYLAWS

Bylaws and Rules of Order
Of the
Madera Region
Regional Water Management Group (RWMG)
Adopted September 10, 2012

1. Authority

1.1. Authorization: These bylaws and rules are authorized by majority vote of the Madera Region Regional Water Management Group (RWMG) and shall apply to all meetings and proceedings of the RWMG.

1.2. Water Code Reference: Consistent with Water Code section 10539, a RWMG generally refers to a group of three or more Local Agencies in the Region, at least two of which have statutory authority over water supply or water management, as well as those other entities in the Region that may be necessary for the further development and implementation of the Integrated Regional Water Management Plan (IRWMP). As specifically used in these bylaws, RWMG shall refer to the Parties to the Memorandum of Understanding for Integrated Regional Water Management in the Madera Region (MOU).

2. Membership

2.1. Eligibility: Membership in the RWMG is open to local agencies, non-profit organizations, or other entities in the Region that desire to participate in the adoption, further development, funding, and implementation of the IRWMP. Interested parties may seek to join the RWMG at any time.

2.2. Dues Paying Members:

2.2.1. Adoption Procedure for Dues Paying Members: Each Party of the RWMG must adopt the Madera Region IRWMP prior to executing the MOU. For a Local Agency, adoption of the IRWMP is by formal resolution of the governing body or its equivalent (e.g., by a board of directors or other management entity). For any other entities, adoption by way of acknowledgement of acceptance of the IRWMP by the individual(s) authorized to bind the entity, is required. To join the RWMG, an entity must submit a request to the RWMG and become signatory on the MOU. The RWMG shall determine whether the requesting party is a party qualified under Water Code section 10539 and this MOU to participate as a member of the RWMG. If so, the requesting party may join the RWMG by adopting the IRWMP and executing the MOU.

2.3. Disadvantaged Community (DAC) Group Members:

2.3.1. Adoption Procedure for DAC Group Members: As the RWMG seeks the participation of disadvantaged communities, interested DACs that do not have the ability to contribute substantial financial resources are encouraged to become members of the DAC Group. DAC Group members are not required to contribute monetary dues. DACs desiring to become part of the DAC Group shall submit an application to the RWMG requesting DAC Group member status.

2.3.2. Selection of the voting representative and alternate representative to the RWMG from the DAC Group: The DAC Group is recognized as a single voting entity for the purpose of governance of the RWMG. The DAC Group shall be entitled to one representative and one alternate representative on the RWMG of its own selection (although all DAC Group members are encouraged to attend all meetings). Selection of the DAC Group representative and alternate shall be administered as follows: a letter soliciting nomination of a RWMG candidate to represent the DAC Group will be sent to each DAC within the Madera Region. From the responses received, a list of candidates will be complied and a ballot distributed to all DACs within the Madera Region; each DAC having one vote in the election. Upon receipt of all ballots within a stated time period, the individual with the most votes shall become the DAC Group representative and the individual with the second most votes shall be the alternate. Said representative and alternate shall serve a two-year term with no limit on the number of terms that an individual can serve.

2.4. Affiliate Members: The RWMG defines affiliate members as agencies or organizations procedurally precluded from contributing monetary dues. Entities that qualify to be Affiliate Members include, but are not limited to, California Department of Fish and Game, California Department of Forestry and Fire Protection, United States Forest Service, State Water Quality Control Board. Entities desiring to become Affiliate Members shall submit an application to the RWMG.

2.5. Active Membership: Each agency/signatory group must have representation at each meeting; if three consecutive meetings are missed, a notice will go to the agency/signatory group in regards to the absence with the option of ending their relationship with the RWMG.

2.6. Withdrawal: A member may withdraw from the RWMG upon 30 days advance notice to the other members. A withdrawing member will remain obligated for its proportionate share of any financial obligation incurred in furtherance of the MOU and/or implementation of the IRWMP prior to the effective date of the withdrawal.

3. Officers, Lead Agency, Fiscal Agent/Sponsor and Staff

3.1. Terms: Each officer will be elected at the first meeting; with one year terms for officers and no term limits. The RWMG shall have the following officers:

3.2. Officers:

3.2.1. Chairperson: The RWMG shall have a chairperson. The chairperson shall be elected by the RWMG in March of each year. The person holding the chair position must have participated as a representative for a RWMG member for one year. The chairperson does not have to be a representative of the Lead Agency.

3.2.1.1. Duties: The chairperson is the presiding officer of the RWMG and as such, shall have the following duties:

3.2.1.1.1. In coordination with the RWMG Administrative Assistant set meeting agendas.

3.2.1.1.2. Convene the meeting and call the RWMG to order at the time at which the RWMG is to meet, when a quorum is present, or when there is no prospect of there being a quorum.

3.2.1.1.3. Announce the business before the RWMG in the order in which it is to be acted upon.

3.2.1.1.4. Conduct public hearings as provided.
3.2.1.1.5. State and put to vote all motions which are regularly made, or necessarily arise in the course of the meeting, and announce the result of the vote.
3.2.1.1.6. Expedite business in every way compatible with the lawful conducting of business.
3.2.1.1.7. Enforce on all occasions the observance of order and decorum among members and the public.
3.2.1.1.8. Decide all questions of order and procedure, subject, however, to an appeal to the RWMG as a whole. In the event of an appeal, the decision of the majority of the members present at the meeting shall decide questions of order and procedure.
3.2.1.1.9. Gather the information/topics from the group and create the agenda for each meeting.
3.2.1.1.10. If the Administrative Assistant is unable to attend a meeting, the chair will appoint a temporary note taker for that meeting.

3.3. Chair Pro Tem: The RWMG shall have a chair pro tem, who shall be elected in the same manner, at the same time, and for the same term as the chair. The chair pro tem shall have and perform all powers and duties of the chair in the absence of the chair.

3.4. Lead Agency: The RWMG shall mutually agree upon a designated signatory Local Agency to facilitate IRWMP implementation and coordinate RWMG activities in furtherance of the MOU. The Lead Agency will serve at the pleasure of the RWMG. Unless otherwise designated as the Grant Administrator responsible for funding or the Project proponent for an individual Project pursuant to the MOU, the Lead Agency shall not be responsible for any Project, including without limitation completion, funding, or environmental review thereof.

3.5. Staff:

3.5.1. Administrative Assistant: The RWMG will have an Administrative Assistant. The Administrative Assistant provides notice of all meetings as required by law; prepares, keeps and maintain the files, minutes, findings, resolutions, orders, and all other documents and papers relative to those items of business which are or have been before the RWMG; and attends each meeting and records each item of business. This person may be a designee from one of the MOU signatory entities.

3.6. Fiscal Agent/ Agency Sponsor/Grantee:

3.6.1. The Fiscal Agent/Sponsor will be Project Manager and Grant Administrator for the Planning grant for the Region as well as Grant Administrator for the Implementation Grants that will be ran through the RWMG. They will complete the reporting, invoicing, and contracting with DWR and other funders for the planning stage and contract with consultants or employee to manage the IRWMP Project and provide administrative support or project assistance. They will have legal obligations for grants with DWR and other funders.

4. Meetings

Proposed agenda items and any corresponding supporting documents must be submitted to the Chairperson a minimum of two weeks prior to the scheduled meeting date. When a vote of the RWMG is needed for an action, the item will be designated as an action item on the agenda.

4.1. Regular Meetings:

4.1.1. Unless otherwise designated in the agenda, all regular meetings of the RWMG shall be held alternately in the following three locations: Madera, Chowchilla, and Oakhurst. Meetings will be held on the second Monday of each month at 1:30 pm.

4.2. Special Meetings:

4.2.1. Special meetings of the members shall be held at a time, place and frequency to be specified by a vote of the members. Special meetings shall conform with the noticing and conduct requirements of regular meetings.

4.3. Brown Act:

4.3.1. All regular and special meetings shall conform to the requirements of the Ralph M Brown Act (Government Code section 54950 et seq.) including the preparation and posting of agendas, providing notice, inspection of records, conducting of closed sessions, and the like.

4.4. Participation:

4.4.1. Members agree to work in good faith. Good faith implies an obligation to regularly attend and participate in meetings, to strive to understand all perspectives, to engage in dialogue and deliberation, and to earnestly work with fellow RWMG members.

5. Meeting Procedure

5.1. Quorum: A majority of the MOU Signatories (voting members) shall constitute a quorum. Except as may otherwise specifically be required by law or these Bylaws, every act or decision done or made by majority of the members present at a meeting duly held at which a quorum is present shall be regarded as the act and decision of the members.

5.2. Calling Meeting to Order: When a quorum is present or when there is no prospect of there being a quorum, the chair shall convene the meeting and call the RWMG to order.

5.3. In the absence of the Chair and Chair Pro Tem: The Administrative Assistant shall convene the meeting and call the RWMG to order, whereupon a temporary chair shall be elected by the members who are present. The temporary chair shall relinquish the chair upon arrival of the chair or chair pro tem and after the conclusion of the item of business then being considered.

5.4. Order of Business

5.4.1. Quorum not Present: If no quorum exists, only the following business may be transacted: taking measures to obtain a quorum, fixing the time to which to adjourn, the action to adjourn, to take a recess or to receive information.

5.4.2. When a quorum is present, business shall be conducted in the following order:

5.4.2.1. Reading or waiver of reading, and approval of the minutes of the previous meeting;

5.4.2.2. A period, not to exceed 15 minutes, to allow public comment on matters within the jurisdiction of the members that are not on the current meeting's agenda, with each

speaker to give his or her name and address for the record and not to speak in excess of three minutes;

5.4.2.3. Review of agenda items. For agenda items that are informational only the chair will call the item and facilitate discussion as appropriate. For decisional agenda items the chair will call the item and follow the procedure outlined under '6 Decision Making' below.

5.4.2.4. Setting the next meeting date.

5.4.2.5. Adjournment

6. Decision Making

6.1. Administrative Decisions: Administrative decisions are about the logistical activities of the RWMG (including but not limited to: meeting dates and times, agenda revisions, and schedules) All administrative decisions will be made on a simple majority vote of all Dues Paying members, the DAC Group, and Affiliate Members present. Upon request of a Dues Paying member a prospective decision shall be treated as a Substantive Decision.

6.2. Substantive Decisions: All other decisions (including but not limited to updates to the MOU or By-Laws, IRWM Plan adoption, budget/finances, projects related priorities, expenditures or implementation issues) will be made using the following procedure designed to include and value as wide a range of perspectives as feasible.

6.2.1. Introductory Discussion: The chair will provide an opportunity for discussion of the item by all active group members.

6.2.2. Non-Binding Poll of All Meeting Participants: The RWMG will use polling to assess the degree of preliminary support for an idea before it is submitted as a formal proposal for a vote. The poll results will potentially indicate the need for subsequent work to revise the text of a recommendation and to prepare it for a vote. The RWMG will use the following three levels to indicate a degree of approval & support for a proposal or being considered.

6.2.2.1. Thumbs Down / I do not agree with the proposal. I feel the need to block its adaptation and propose an alternative.

6.2.2.2. Thumbs Sideways / I can accept the proposal although I do not necessarily support it.

6.2.2.3. Thumbs Up / I think this proposal is the best choice of the options available to us.

6.2.2.3.1. The RWMG will strive to have participants in the 'Thumbs Up' or 'Thumbs Sideways' indicators of support on a given proposal. If a participant is at a 'Thumbs Down' level, that person should provide a counter proposal that legitimately attempts to achieve his/her interests and the interests of all the RWMG members. The RWMG will evaluate how best to proceed when a counterproposal is presented.

6.2.2.3.2. 'Thumbs Down' viewpoints will be documented in the meeting minutes. If a participant would also like to document their alternate view, the said participant may submit a write up to the RWMG Administrative Assistant within one week of the meeting in which the discussion took place. The write up will be attached to the meeting minutes. The write up should be expressed in the following manner: a) Outlines the key concern from an organizational or interest-based stance. b) Provides a recommendation for improving the decision/product in question.

6.3. Formal Voting

6.3.1. Dues Paying Member and DAC Group Voting: The Dues Paying members and the DAC Group representative will be referred to as the "RWMG Voting Members." Each Dues Paying Member can have as many representatives attend as they wish, but at the time of a vote only one person will be allowed to vote per Dues Paying Member entity. As specified in Section 2.3.2. of these by-laws, the

DAC Group Representative will vote on behalf of the DAC Group. As with Dues Paying Members, the DAC Group can have as many representatives attend as they wish, but at the time of vote only the designated representative will be allowed to vote.

6.3.2. Designated Voting Representative: Each Dues Paying Member entity will designate who the voting party will be to represent their entity. As outlined in Section 2.3.2 of these by-laws, the DAC Group representative will be chosen as specified.

6.3.3. Designated Voting Alternate: Each Dues Paying Member will designate an alternate. As specified in Section 2.3.2. of these by-laws, the DAC Group alternate will be chosen as specified.

6.3.4. Calling for Motion Upon the conclusion of the discussion among the RWMG Voting Members on an item of business requiring a vote, the chair shall call for a motion. A motion must be seconded before the chair may put it to a vote of the RWMG Voting Members. If, after a reasonable time, a motion is not seconded, the motion shall die for lack of a second and the chair shall call for a new motion.

6.3.5. Putting Motion to a Vote. When a motion has been made and seconded, the chair shall then state the motion and call for a vote. The chair shall first ask for all RWMG Voting Members voting in favor of the motion to give their vote orally, and shall then ask those Voting Members opposed to the motion to give their vote orally. Upon request of any Voting Member, the chair shall call for a roll-call vote, with the chair to vote last.

6.3.6. Minimum Votes Needed to Pass Motion The RWMG shall not approve any item of business except upon the majority vote of those casting a vote.

6.3.7. Abstention Abstaining votes are not counted.

6.3.8. Announcement of Vote. When all voting is complete, the chair shall announce whether the motion is approved or denied, or whether a new motion is needed.

6.3.9. Change of Vote. A member can change his or her vote up to the time the chair announces the result of the vote. After the chair announces the vote, no changes shall be allowed.

7. Dues

7.1. Justification: Baseline administration of the RWMG requires financial support from participating members.

7.2. Procedure: In May of each calendar year the Chair will propose an administrative operating budget for the coming fiscal year running from July 1 – June 30. The RWMG will seek to formally adopt the budget proposed at the May meeting at the subsequent June meeting.

7.3. Dues Paying Members: MOU signatories, including water agencies, irrigation districts, local government, and other entities will pay an equal dues amount.

7.4. DAC Group Members: The RWMG will not require monetary financial support from the DAC Group members through dues. But the DACs will be expected to provide support for sponsored implementation projects (which could be supplied through in-kind support).

7.5. In-Kind Administrative Services: In the case that a RWMG member organization provides administrative support (i.e. sending invoices, receiving dues payments, creating expenditure/receivable reports) that entity may subtract from their dues the cost of providing those services for the year.
The amount of credit for In-Kind Administrative Services shall be approved by a majority vote of the Regular Members of the RWMG.

7.6. Special Projects: A "Special Project" is an activity undertaken by fewer than all the Parties in the RWMG. The activity must be consistent with the scope of the RWMG's efforts. Prior to undertaking a Special Project, the Parties electing to participate in the Special Project shall enter into a 'Special Project'

agreement. Such activity agreement shall provide that (i) no Special Project undertaken pursuant to such agreement shall conflict with the terms of the RWMG MOU and (ii) the Parties to the activity agreement shall indemnify, defend and hold the other Parties harmless from and against any liabilities, costs or expenses of any kind arising as a result of the Special Project described in the activity agreement. All assets, rights, benefits, debts, liabilities and obligations attributable to a Special Project shall be assets, rights, benefits debts, liabilities and obligations solely of those parties that have entered into the activity agreement for that Special Project, in accordance with the terms of the activity agreement, and shall not be the assets, rights, benefits, debts, liabilities and obligations of those parties that have not executed the activity agreement.

7.7. Unforeseen Circumstances: Due to the uncertainty of the grant funding process and other factors outside the control of the RWMG, circumstances could arise wherein members would need to decide whether an additional financial contribution is necessary. This decision would take place through the RWMG's voting procedures.

7.8. Donations: Donations by participating members are welcomed and will be accepted.

7.9. Conflicts of Interest: Should any member have a financial interest, as defined by Government Code section 87103 and its regulations, in the outcome of any item being considered by the RWMG, that a member shall declare his or her interest and refrain from participation as a member in any debate or discussion and any vote on the item. The recused member shall not be counted toward the existence of a quorum.

8. Miscellaneous

8.1. Public Records: The Lead Agency shall be the repository for all records of the RWMG, for purposes of responding to requests for inspection and copying of public records.

8.2. Subcommittees: The RWMG may form subcommittees for the purposes of carrying out its duties, or for addressing issues affecting particular areas of the Madera Region or for certain issues within the general jurisdiction of the RWMG.

8.3. Amendments: These rules and procedures may be amended as needed, in a manner provided by law.

8.4. Roberts Rules of Order: Where these bylaws do not cover an issue; Roberts Rules of Order shall apply.

GROUND RULES

Regional Water Management Group
Madera Region Integrated Regional Water Management Plan

MEMBER CODE OF ETHICS
Ground Rules

As a member of the Regional Water Management Group I will:

- ✓ Listen carefully to my Group members
- ✓ Respect the opinion of my fellow Group members
- ✓ Respect and support the majority decisions of the Group
- ✓ Recognize that all authority is vested in the Group when it meets in legal session
- ✓ Keep well informed of developments relevant to issues that may come before the Group and come to meetings well prepared
- ✓ Participate actively in Group meetings and actions
- ✓ Bring to the attention of the Group any issues that I believe will have an adverse effect on the Group or those we serve
- ✓ Attempt to interpret the needs of those we serve to the Group, and interpret the actions of the Group to those we serve
- ✓ Recognize that my job is to ensure that the Group is well managed, not to manage the Group
- ✓ Represent all those whom this Group serves with in the designated Region
- ✓ Consider myself a "trustee" of the Group and do my best to ensure that the best interest of those we serve
- ✓ Always work to learn how to do my job better
- ✓ Declare conflicts of interest between my personal life and my position on the Group and abstain from the voting when appropriate
- ✓ Strive to find common ground
- ✓ Stay focused on issues not on people
- ✓ Stick to the topic during meetings and not waste valuable Group time

As a member of the Regional Water Management Group, I will not:

- ✓ Criticize the fellow Group members or their opinions, in or out of the Group meetings
- ✓ Use the Group for my personal advantage or that of my friends or relatives
- ✓ Promise how I will vote on any issue before a meeting
- ✓ Interfere with the duties of the facilitator/coordinator or undermine his or her authority with staff members

All RWMG meetings are open to the public.

_____
Date

_____ _____
Name (please print) Signature

Appendix B

Adoption Resolution

Madera Regional
Water Management Group

RESOLUTION NO __-14

RESOLUTION OF THE MADERA REGIONAL WATER MANAGEMENT GROUP AUTHORIZING ADOPTION OF THE UPDATED MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

WHEREAS, beginning in 2013, the Madera Regional Water Management Group (RWMG) began work to update an Integrated Regional Water Management Plan (IRWMP), which was originally prepared in 2008; and

WHEREAS, the IRWMP was developed with input from the public, community organizations and public agencies; and

WHEREAS, the RWMG received a presentation on the IRWMP at a regularly scheduled RWMG meeting on September 8, 2014, and approved the IRWMP by minute order; and

WHEREAS, it is desired to formally adopt the IRWMP by resolution, for purposes of compliance with the California Water Code and the requirements of the California Department of Water Resources.

NOW, THEREFORE, BE IT RESOLVED by the Madera Regional Water Management Group that:

1. The updated Integrated Regional Water Management Plan is approved as presented to the RWMG on September 8, 2014, together with all additions and amendments stated on the record in the public meeting held on that date.

* * * * * * * * * * * * * * *

The foregoing Resolution was adopted this day of September 8, 2014 by the following vote:

AYES

NOES:

ABSTAIN:

ABSENT:

_____
Chair

ATTEST:

_____
Secretary

Appendix C

Estimated Agricultural Water Demands

Madera Integrated Regional Water Management Plan
Estimated Agricultural Water Demands (valley portion of Madera County)

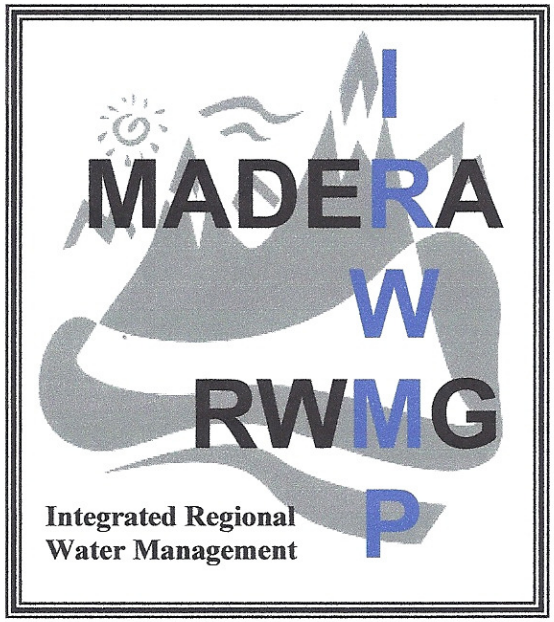
Crop	2003 [1]			2011 [1]			2013 (projected) [2]				2013 Ag Commissioner [5]		
	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)[6]	Estimated Annual Irrigation (1,000 AF)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)	Average Annual Change (2003-2011)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)	Irrigated Crop Area (1,000 ac)	Applied Water Requirements (AF/acre)	Estimated Annual Irrigation (1,000 AF)
Grain	1.0	1.2	6.8	42.1	1.3	54.7	5.1	52.3	1.3	68.0	10.5	1.3	13.6
Rice	0.0	0.0	0.0	0.5	5.2	2.4	0.1	0.6	5.2	2.9	0.0	5.2	0.0
Cotton	18.2	3.2	58.2	5.6	2.9	16.5	-1.6	2.5	2.9	7.3	2.3	2.9	6.7
Sugar Beet	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	1.8	0.0	0.0	1.8	0.0
Corn[5]	20.6	2.7	56.4	4.3	2.3	10.0	-2.0	0.3	2.3	0.6	25.3	2.3	58.3
Dry Bean	1.0	2.5	2.5	0.6	2.0	1.3	0.0	0.6	2.0	1.1	0.4	2.0	0.7
Safflower	0.0	0.0	0.0	0.2	1.2	0.3	0.0	0.3	1.2	0.4	0.0	1.2	0.0
Other Field	18.2	2.7	49.1	4.6	2.4	11.0	-1.7	1.2	2.4	3.0	6.4	2.4	15.3
Alfalfa[5]	38.8	4.5	174.2	29.1	4.2	122.1	-1.2	26.6	4.2	111.8	19.6	4.2	82.2
Pasture[5]	4.7	4.4	20.6	4.2	4.3	17.9	-0.1	4.1	4.3	17.4	1.7	4.3	7.1
Process Tomato	1.6	2.5	4.0	2.3	3.6	8.1	0.1	2.4	3.6	8.7	3.8	3.6	13.8
Fresh Tomato	0.4	1.6	0.7	0.0	2.5	0.0	-0.1	0.0	2.5	0.0	0.8	2.5	2.0
Cucumber	0.4	1.2	0.5	0.1	2.4	0.2	0.0	0.0	2.4	0.0	0.1	2.4	0.3
Onion/Garlic	0.4	1.5	0.6	0.0	3.8	0.1	0.0	0.0	3.8	0.0	0.4	3.8	1.6
Other Truck Crops	1.1	1.2	1.3	2.2	1.2	2.6	0.1	2.5	1.2	3.0	2.2	1.2	2.6
Almond/Pistachio	81.1	3.5	280.6	145.1	3.3	481.6	8.0	161.1	3.3	534.7	170.8	3.3	567.0
Other Deciduous	18.4	3.7	68.1	20.9	3.4	72.1	0.3	21.6	3.4	74.3	16.2	3.4	55.7
Subtropical	6.4	2.9	18.8	8.8	2.7	23.5	0.3	9.4	2.7	25.1	7.9	2.7	20.9
Vine	94.0	2.6	240.6	81.8	2.1	174.1	-1.5	78.7	2.1	167.6	80.8	2.1	172.2
Multiple Crop [3]	8.5	3.2	27.2	8.5	2.8	23.8	0.0	8.5	2.8	23.8	8.5	2.8	23.8
Total Acres	**314.8**	-	-	**360.9**	-	-	-	**372.6**	-	-	**357.7**	-	-
Weighted Avg Water Req.	-	**3.2**	**-**	-	**2.8**	**-**	**-**	-	**2.8**	**-**	-	**2.8**	**-**
Total Applied Water	-	**-**	**1,010**	-	**-**	**1,022**	**-**	-	**-**	**1,050**	-	**-**	**1,044**

Notes
1 - 2003 and 2011 cropping data from California Department of Water Resources
2 - Cropping in 2013 was projected based on average annual increases between 2003 and 2011
3 - 'Multiple Crop' acreage was not provided in 2011 data and was assumed to be same as 2003 data
4 - County Ag Commissioner data received from Madera Irrigation District, filtered to include data for 2013 issued pesticide permits.
5 - County Ag Commissioners data adjusted up slightly to account for a large organic dairy that did not require permits in 2013 due to no pesticide application. Correction (based on 2011 Ag Commissioner data) accounts for about 1,600 acres total across three crops.

6 - Unit water demands based on those used in the Madera 2008 IRWMP and are from California DWR Irrigated Crop Area and Crop Water Use - Applied Water for Madera County. Water demands are assumed to include effective precipitation and account for 80% irrigation efficiency. Unit water demands vary for different years due to difference in effective precipitation in different years.

Appendix D

Public Outreach Presentations



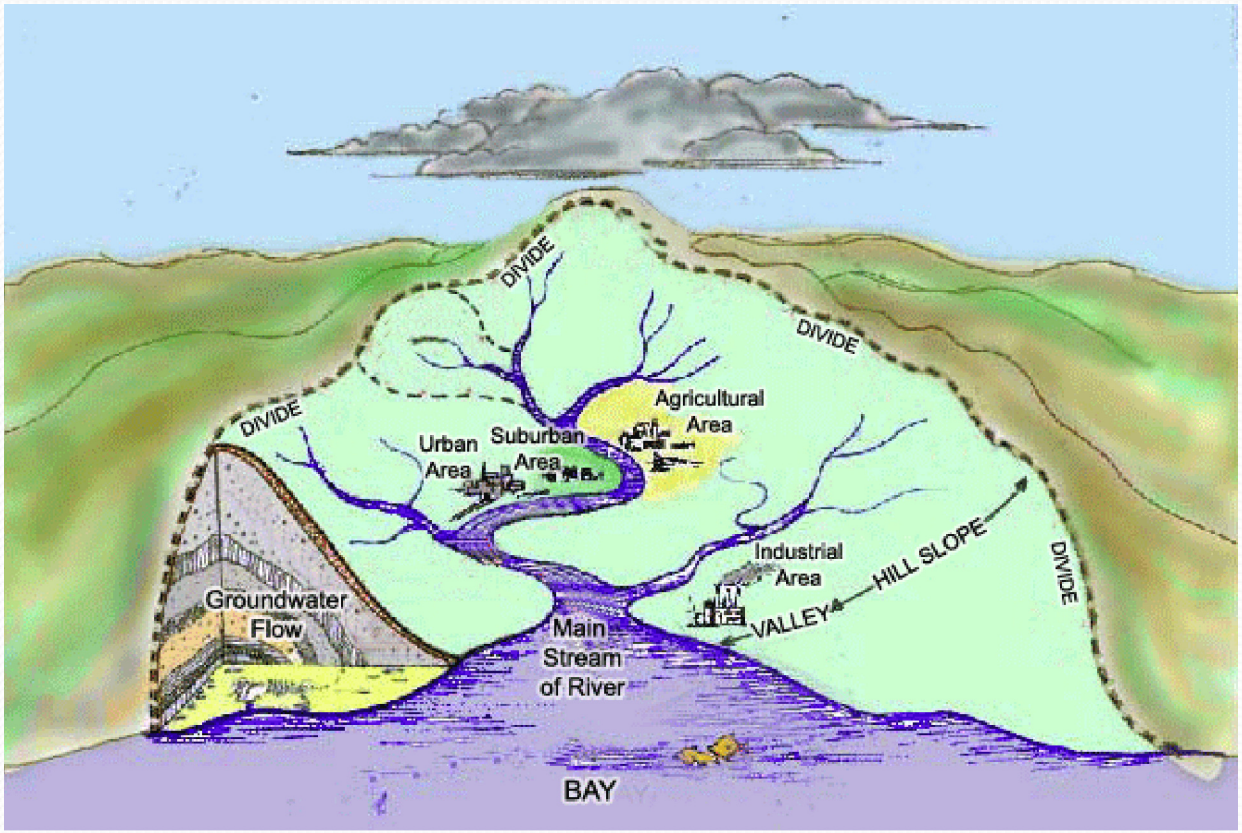
Madera
Integrated Regional Water Management

What is Integrated Regional Water Management Planning?

- **Collaborative effort to coordinate management of many types of water resource programs and projects in a region that deal with:**
  - Water Supply
  - Water Quality
  - Waste Water Management
  - Flood and Storm Management

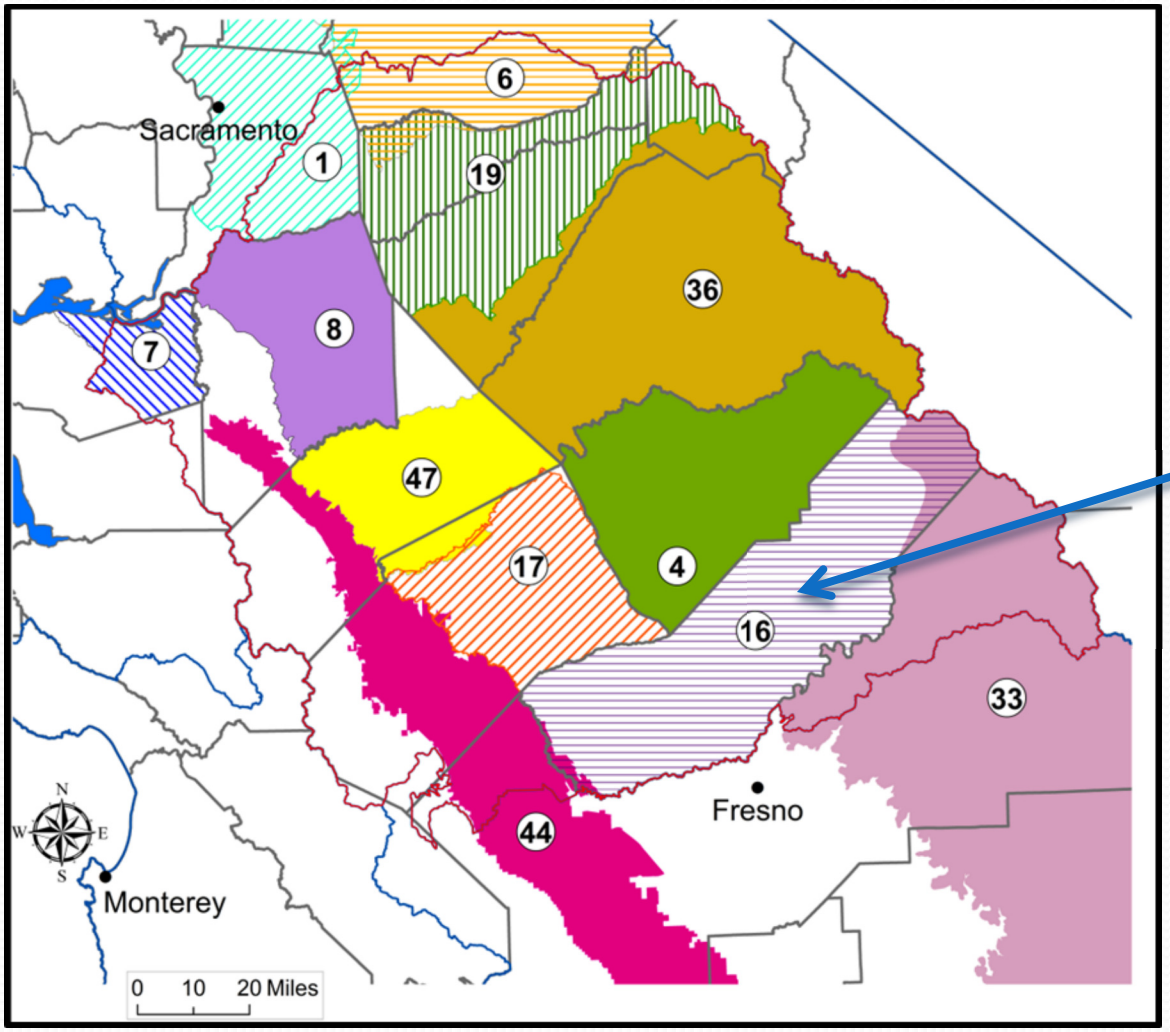
- **Opportunity to formulate comprehensive, sustainable solutions for a watershed**

What is a Watershed?



A watershed is the "area of land" where all of the water that is under it or drains off of it goes into a common waterway, such as a stream, lake, river, etc. and/or ultimately to the ocean. Watersheds come in all shapes and sizes; and cross county, state, and national boundaries. Everyone lives in a watershed!

Madera Region



Madera Region

Goals of an IRWM

- **To encourage integrated regional strategies for management of water resources**
- **To meet the long term water needs including the delivery of safe drinking water, protection of water quality, reducing negative consequences of flooding, and supporting a healthy ecosystem**
- **Provide an opportunity for local agencies and organizations to accomplish more than they could individually**

Benefits of an IRWM

- **Non-regulatory, consensus-based approach**
- **Builds capacity, cooperation and increases efficiency**
- **Develops multiple-interest water resource projects and fosters upstream-downstream communication**
- **<u>Provides access to funding opportunities</u>**

It's Voluntary – So Why Do One?

- **Encourages a broad, long-term perspective.**
- **Identifies broad benefits, costs, and tradeoffs.**
- **Promotes sustainable resource management.**
- **Increases regional drought preparedness.**
- **Uses open forums that includes all communities.**

It's Voluntary – So Why Do One?

(Continued)

- **Promotes coordination and collaboration among local agencies and governments.**
- **Uses sound science, best data, and local knowledge.**
- **Collaboration strengthens regional clout, reduces conflict, increases benefits across the region and may reduce costs for individual agencies.**

CA State IRWM History

- 2002: IRWM Act (SB1672)
- 2002: Prop 50 passes - provides $500,000,000
- 2006: Prop 1E passes - provides $300,000,000
- 2006: Prop 84 passes - provides $1,000,000,000
  - Planning Grants (Prop 84)
  - Implementation Grants (Prop 84)

Madera IRWM History

- **2006: County of Madera began development of an IRWM Plan**
- **2008: Completed and Board Accepted IRWM Plan**
- **2010: Formed Regional Water Management Group (RWMG)**

Madera IRWM History

(Continued)

- **2011/12: Received $9,413,947 Implementation Grant. Used to fund:**
  - **Ash Slough Arundo and Sediment Removal**
  - **Cottonwood Creek, Dry Creek & Berenda Creek – Arundo and Sediment Removal**
  - **Root Creek Recharge Project**
  - **Sierra National Forest Fuel Reduction Project**

Madera IRWM History

(Continued)

- **2012/13: Received $271,438 Planning Grant to update IRWM Plan to meet Prop 84 standards**
- **2013: Established Disadvantaged Community (DAC) membership process and application**
- **2014: In process of updating IRWM Plan (expected completion by Dec. 2014)**

Status of Plan Update and Projects

March – July 2014: DAC Outreach

July 2014: Drought Funds Applications

July 2014: Call for projects for the Plan Update

August 2014: Draft Plan expected to be ready for review

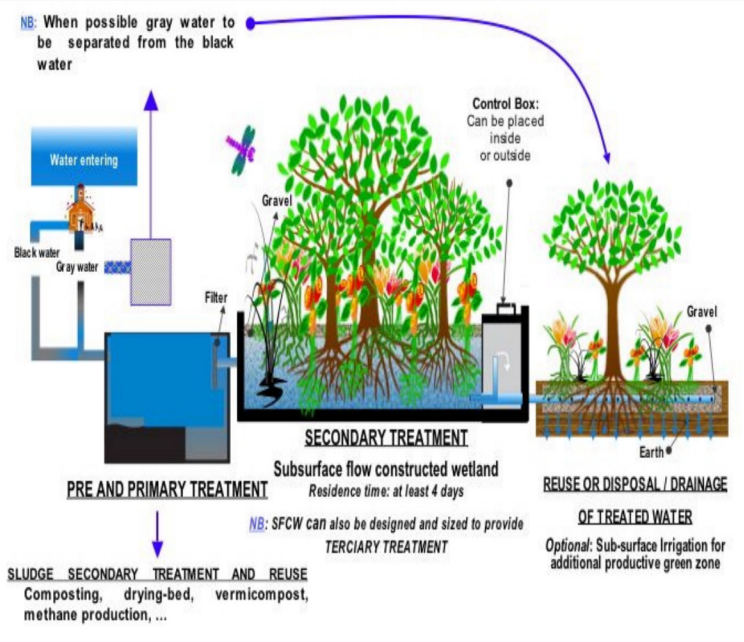
September 2014: Plan adoption & Announcement of Recipients of the Expedited Drought Funding

Mid-Summer 2015: Apply for Final Round of Implementation Grant Funding

Mid 2017: Complete Round 1 Projects

Possible Project Areas

- Water supply and distribution
- Wastewater management
- Water conservation
- Restoration
- Groundwater studies
- Fuel load management
- Pollution prevention
- Storm water drainage management
- Increase capacity of water ways
- Invasive/non-native plant eradication



San Joaquin River Funding Area

$200 million Expedited Drought Funds

2015 Implementation Funds

Integrated Regional Water Planning

- **All stakeholders are encouraged to participate:**
  - Water purveyors
  - Wastewater agencies
  - Flood control agencies
  - Native American tribes
  - State, federal and regional agencies and universities
  - Private landowners
  - Resource-related non-profits

RWMG Members

Chowchilla Red Top Resource Conservation District

Chowchilla Water District

City of Chowchilla

City of Madera

Coarsegold Resource Conservation District

Gravelly Ford Water District

Madera County

Madera County Special Districts

Madera Irrigation District

Madera Valley Water Company

Madera Water District

North Fork – Mono Rancheria

Root Creek Water District

South East Madera Citizens United (SEMCU)

Yosemite/Sequoia Resource Conservation and Development Council

DAC Group

Current Rep: Self-Help Enterprises
Friend of Fairmead

The RWMG's regular meetings are:

2nd Monday of each month: 1:30 p.m. — 3:30 p.m.

Meetings rotate between:
Madera
Chowchilla
Oakhurst

Contact Information:
Jeannie Habben
Phone: 559-642-3263
email: info@cfwatershed.org

Learn more at:
http://www.madera-id.org/index.php/rwmg

Questions & Discussion

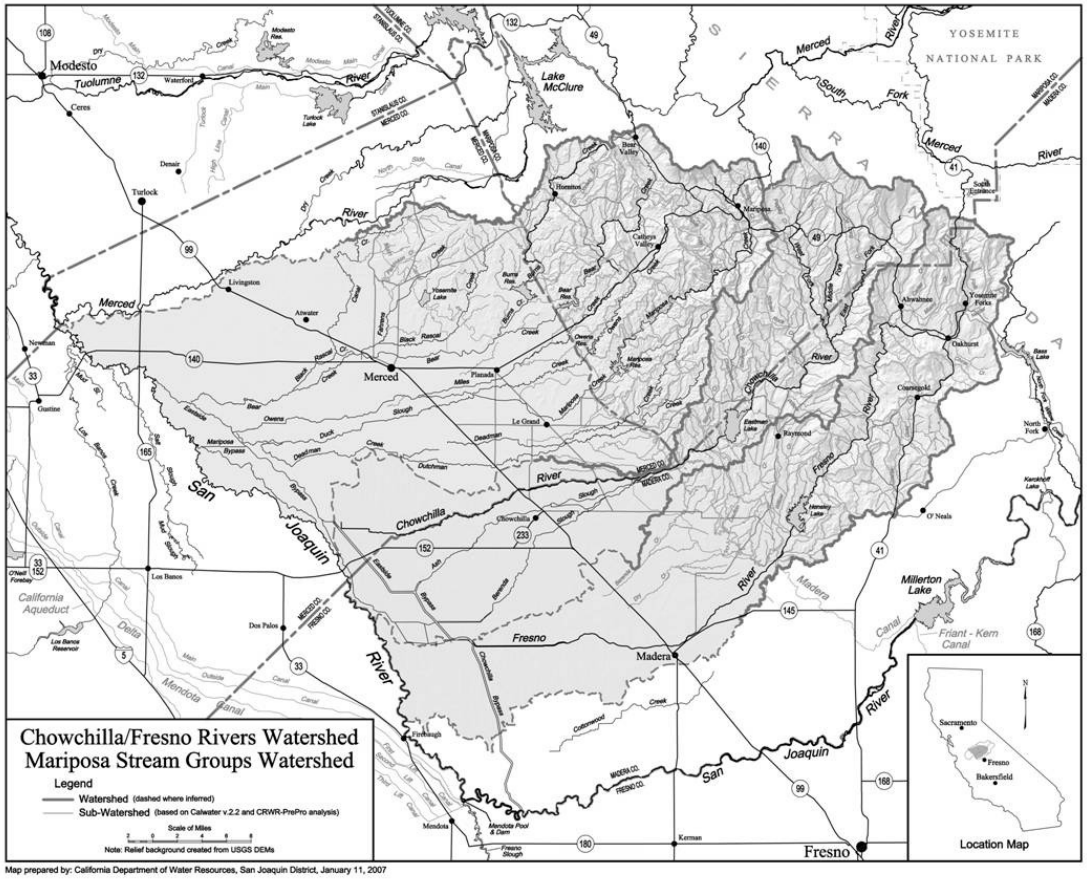
What are your issues and concerns regarding:

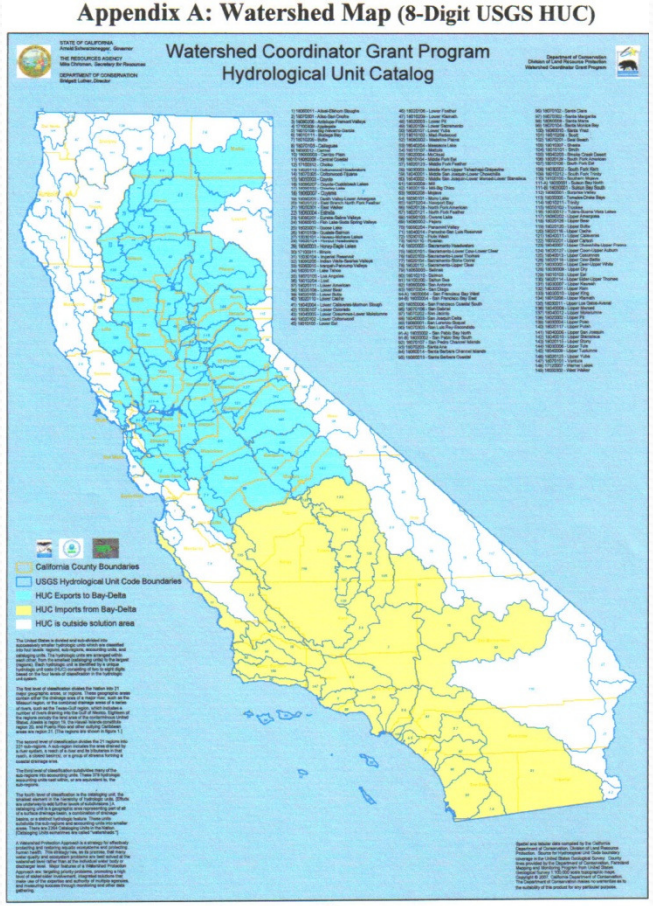
- Water supply
- Water quality
- Wastewater treatment
- Flood and storm water management
- Other?

Madera County Groups Who Address Water

- Watershed Coordinator
- Central Sierra Watershed Committee
- Resource Conservation Districts
- Tribal Conservation Districts
- Resource Conservation and Development Councils
- Sierra-San Joaquin Noxious Weed Alliance
- Regional Water Management Group
- Madera County Water Advisory Commission

Watershed Coordinator Program





Chowchilla/Fresno Watershed Presentation – March 2013

Watershed Coordinator

- Upper Chowchilla/Upper Fresno & Lower Chowchilla/Middle San Joaquin – 2.2 million acres
- Grant from Department of Conservation
- Grant held by Chowchilla Red Top RCD
- 1st Round started June 2004
- Current & 3rd Round began August 2011
- 153 Watersheds in the State
- Last round of grant funds – through August 2014
  - 116 applications and only 40 were funded
  - Only 1 was funded in the San Joaquin Region
  - 2nd part time Watershed Coordinator added - 2012

Watershed Coordinator

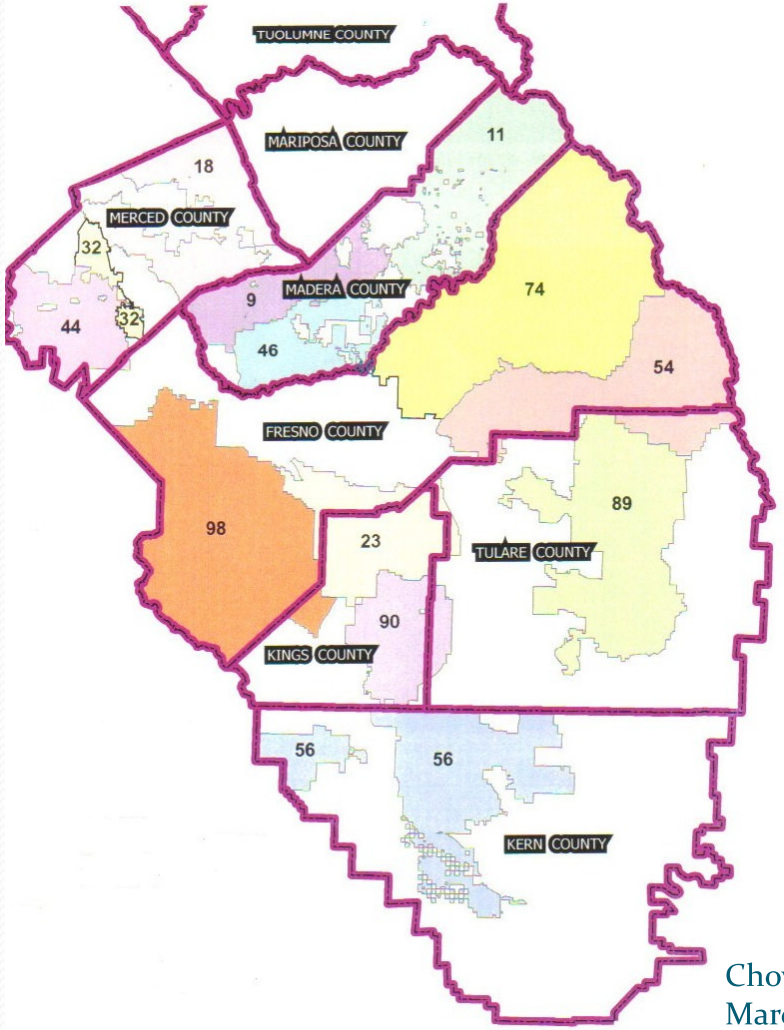
- Liaison between agencies, water groups, and stakeholders in the watershed
- Education – Field Trips, Workshops, Community Presentations
- Fuel Reduction and Fire Breaks
- Noxious and Invasive Weeds – Vegetation Management

Central Sierra Watershed Committee

The mission of the Central Sierra Watershed Committee is to promote the quality, quantity, and aesthetic values of our water resources through the conservation and restoration of our watersheds.

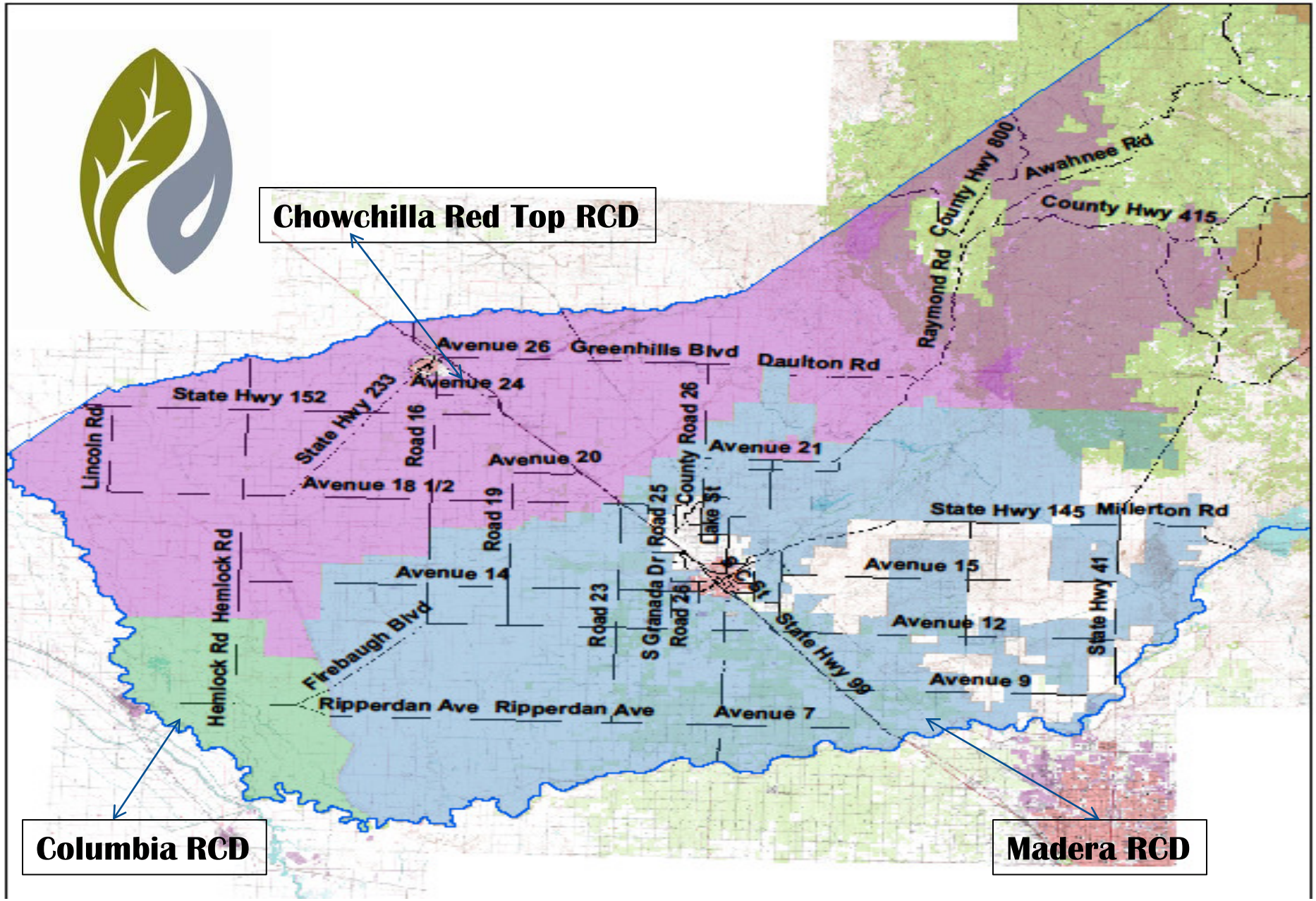
- Formed 1997
- Foothill Areas of Three Counties – Mariposa, Madera, Fresno
- Ad Hoc Committee of over 50 partners
- 15 to 20 in attendance at each meeting
- Develop common ground solutions &/or agreements for improving watershed and local habitat

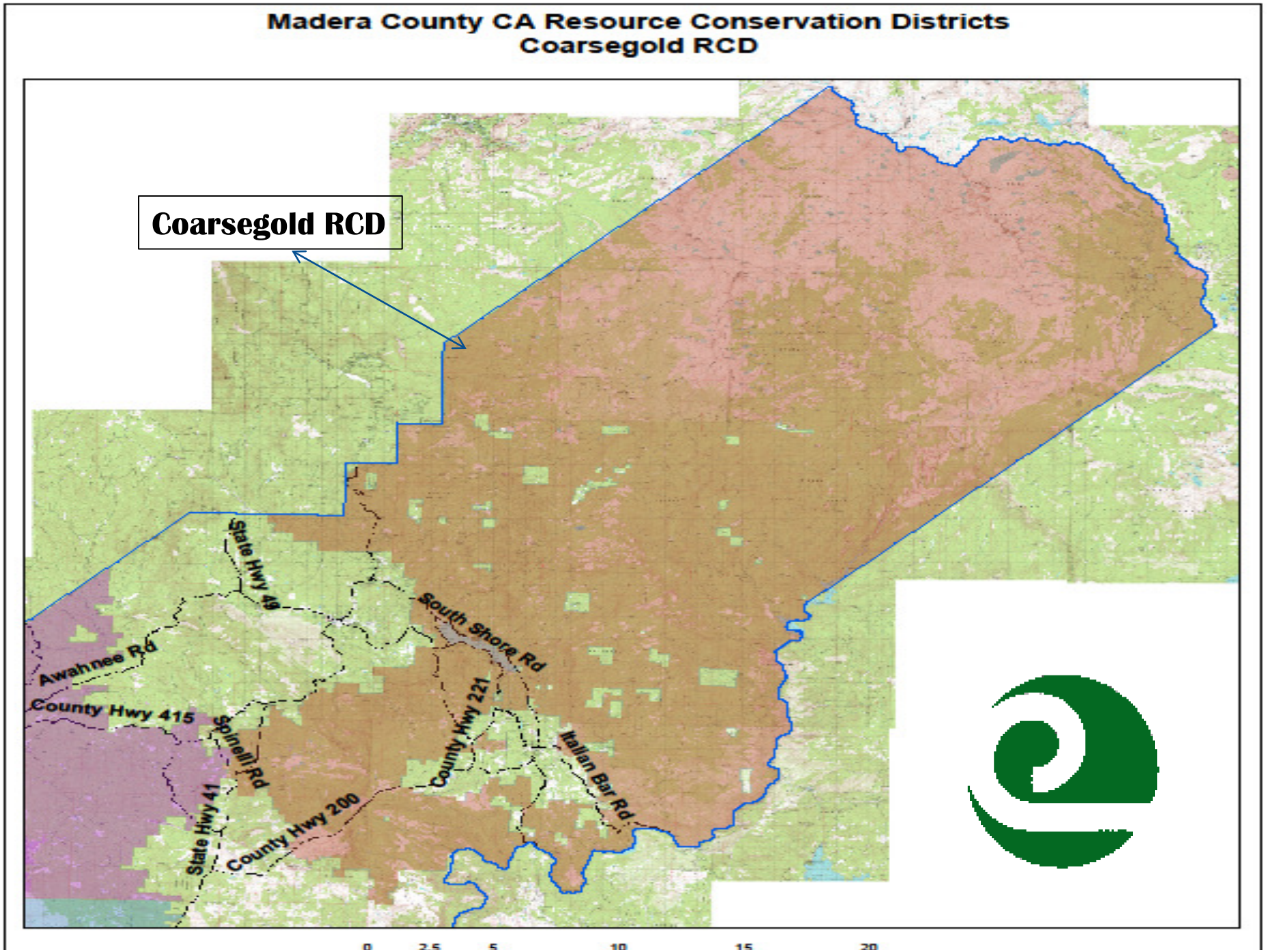
Resource Conservation Districts



- "Special Districts" of the state of California, set up under California law to be locally governed agencies
- Locally appointed independent boards of directors
- Authorized under Division 9 of the Public Resources Code
- 99 RCDs in California
- 4 RCDs in Madera County

Madera County CA Resource Conservation Districts
Columbia, Chowchilla-Red Top, Madera RCDs




Madera County CA Resource Conservation Districts
Coarsegold RCD
Coarsegold RCD
State Hwy 49
South Shore Rd
Awahnee Rd
County Hwy 415
Spinelli Rd
County Hwy 221
Italian Bar Rd
State Hwy 41
County Hwy 200
0
2.5
5
10
15
20

Chowchilla Red Top
Resource Conservation District

- Location: Madera County
- Year Formed: 1956
- District Size: 278,731 acres
- Resource Concerns:
  - Air Quality
  - Arundo Eradication
  - Erosion Control
  - Irrigation Water Management
  - Soil Nutrient Depletion
  - Urban Planning & Development
  - Water – Flooding, Quality, Quantity, Drainage
- Meetings: 300 Kings Avenue, Chowchilla, California
  - Third Tuesday of each month
  - 11:00 am

www.cfwatershed.org

Coarsegold
Resource Conservation District

- Location: Madera County, Foothills
- Year Formed: 1966
- District Size: 534,380 acres
- Resource Concerns:
  - Fire & Fuels Reduction
  - Forest Stewardship
  - Recreational Land Restoration
  - Soil and Water Management on Rangeland
  - Wildlife Habitat Enhancement
  - Water – Quality, Quantity, Enhancement
- Meetings: Old Mill Site, North Fork, California,
  - Fourth Thursday each month
  - 10:00 am

www.crcd.org

Madera

Resource Conservation District

- Location: Madera County
- Year Formed: 1995
- District Size: 273,404 acres
- Resource Concerns:
  - Irrigation Water Management
  - Ground Water Recharge
  - Rural Subdivision Encroachment
  - Soil Erosion
  - Surface Water Availability
- Meetings: 425 N. Gateway, Suite E, Madera
  - Fourth Wednesday each month
  - 5:00 pm

Columbia
Resource Conservation District

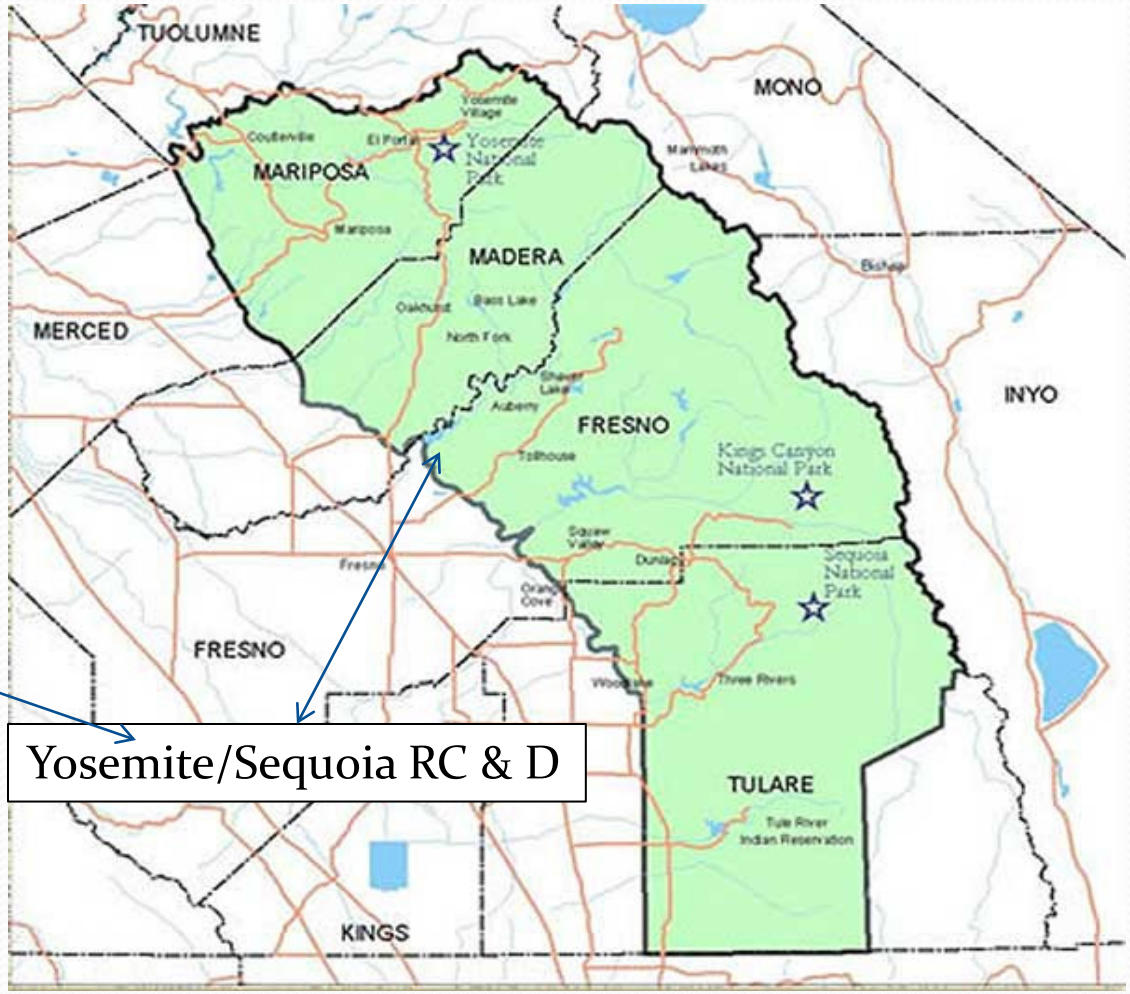
- Location: Madera County,
  Firebaugh, CA
- Year Formed: 1997
- Year New Board Appointed: 2008
- Resource Concerns:
  - Columbia Canal
  - Columbia Water District
  - Westside/San Joaquin IRWMP
- Meetings: Contact Randy Houk, for more information
  - rghccc@sbcglobal.net
  - 559-659-2426

Tribal Conservation Districts

- 564 Recognized Tribes in the United States

- Majority of Tribes on West Coast
  - 234 in Alaska
  - 110 in California
- Three Tribal Conservation Districts in California
  - North Fork Mono Rancheria
  - Chukchansi Picayune Rancheria
  - Hoopa (Northern California)

Resource Conservation and Development Councils (RC&D)



RC & Ds

- USDA initiated the program in 1962
- 375 RC & Ds in the US, Caribbean, and the Pacific Basin
- 16 RC & Ds in California
- 2 RC & Ds in Madera though one is now in-active
- Were managed under USDA/Natural Resource Conservation Service until Federal funding was pulled in April 2011
- Works to improve the general level of economic activity and to enhance the environment and standard of living in all communities.
- Provide a system of rural development to encourage the wise use of natural resources, and improve the quality of life

NATIONAL ASSOCIATION OF RESOURCE CONSERVATION AND DEVELOPMENT COUNCILS
Partnerships Serving America's Communities

California Association of Resource Conservation and Development Councils

Yosemite/Sequoia Resource Conservation & Development Council

- Helps people care for and protect their natural resources in a way that improves our economy, environment, and way of life.
- Formed by CSWC and authorized by Congress in 2001
- Articles of incorporation endorsed(501c3)
  - – October 21, 2002
- Region – Mariposa, Eastern Madera County, Eastern Fresno County, Tulare
- All RC & Ds Lost Federal funding
  - – April 2011

Yosemite Resource Conservation Sequoia & Development Council

Sierra-San Joaquin Noxious Weed Alliance

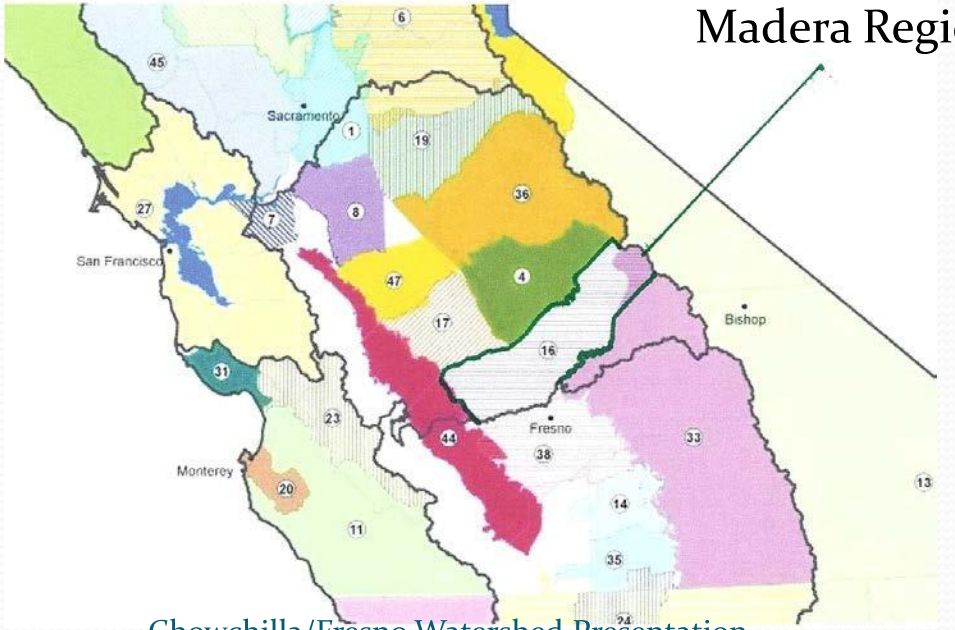
- Formed: 1998
- Region Covered: Fresno, Madera, & Mariposa Counties
- Meet 3 times a year @ the Bass Lake Ranger Station
- Publications:
  - Top 10 Noxious Weeds
  - Field Guide to Invasive Non-Native Weeds

The Madera Region Regional Water Management Group has the exact borders of Madera County. This Region was approved June 6, 2011.

In 2006 the County of Madera began the process of developing on IRWMP.

IRWM Plan completed for the Madera Region under Prop 50 on April 14, 2008

On November 24, 2009, the Madera County Water Advisory Commission created the Formation Committee to create the Regional Water Management Group.



Chowchilla/Fresno Watershed Presentation – March 2013

Round 1 Implementation Grant Awarded - $9,413,947.00

Project #1 – Ash Slough Arundo and Sediment Removal

Project #2 – Cottonwood Creek, Dry Creek, & Berenda Creek - Arundo and Sediment Removal

Project #3 – Root Creek Recharge Project

Arundo on Ash Slough

Project #4 – Fuel Reduction for Forest Health & Fire Safety in the Sierra National Forest (The first Forest Management Project funded as part of an IRWM which recognizes Watershed Health as a whole.)

Successes

MOUs with our adjacent IRWM Regions:

- Southern Sierra Integrated Regional Water Management Group
- Yosemite/Mariposa Regional Water Management Group
- Merced Integrated Regional Water Management Group
- Inyo-Mono IRWMP – Devil's Postpile National Monument
- Westside-San Joaquin RWMG – (pending signature)
- Kings River IRWM

Completion of Integrated Regional Water Management Plan under Prop 50 standards:

This is a complete plan that includes both the foothill and the valley areas – creating many new partnerships and involvement. The stakeholders understand the importance of both areas within the region.

Future Milestones/Goals

1. Formalize the Governance structure regarding the roles and responsibilities of the RWMG's Project Manager/Coordinator, as well as stakeholders and voting members.

2. Conduct successful outreach to DACs that results in the addition of DAC stakeholders and/or members to the RWMG, and inclusion of DAC water quality and wastewater issues in the Plan's project list.

3. Begin the process of updating the current Plan**, received $271, 438.00 - Round 2 Planning Grant**, to Proposition 84 standards by identifying items needed to update and improve the Plan before we engage the services of a consultant.

Madera County Water Advisory Commission

•August 2007 – Madera County Board of Supervisors dismissed /disbanded the:
1) Water Oversight Committee,
2) Eastern Madera County Water Oversight Committee, and
3) Madera County Flood Control and Water Conservation Advisory Council

•Formed the MC Water Advisory Commission by each Supervisor appointing one Commissioner for each District

•In place to review water issues and projects and present them to the County Board of Supervisors

MEMBERS OF THE COMMISSION:

JAMES WATKINS,	**District 5**
EDWARD J MCINTYRE,	**District 4**
LOREN FREEMAN,	**District 3**
CASE VLOT,	**District 2**
ROBERT L STANFIELD,	**District 1**

PAST COMMISSIONERS:

JOHN REED,	**District 5**
STEVE SAGOUSPE,	**District 3**
EDGAR DEJAGER,	**District 2**

Other Partners and Agencies

Local and Neighbors

- Oakhurst River Parkway
- Sierra RCD
- East Merced RCD
- Mariposa County RCD
- Upper Merced Watershed
- San Joaquin River Parkway
- Mariposa IRWM Group
- Southern Sierra IRWM Group
- San Joaquin Leadership Forum
- Chowchilla Joint Powers Authority
- E. M. County Fire Safe Council
- California Association of RCDs
- Sierra Nevada Alliance
- CSU, Fresno/CA Water Institute
- Many, Many More

Government

- Department of Conservation
- Dept. of Water Resources
- CA Dept. of Fish & Wildlife
- US Fish & Wildlife Service
- USDA, Natural Resources Conservation Service
- Sierra Nevada Conservancy
- UC Cooperative Extension
- Regional Water Quality Control Board
- Madera County
- USDA Forest Service
- Cities of Chowchilla & Madera
- Many, Many More

Thank You

Jeannie Habben
Chowchilla/Fresno River Watershed
Central Sierra Watershed Committee
Post Office Box 1061
Coarsegold, CA 93614
559-642-3263
info@cfwatershed.org
www.cfwatershed.org

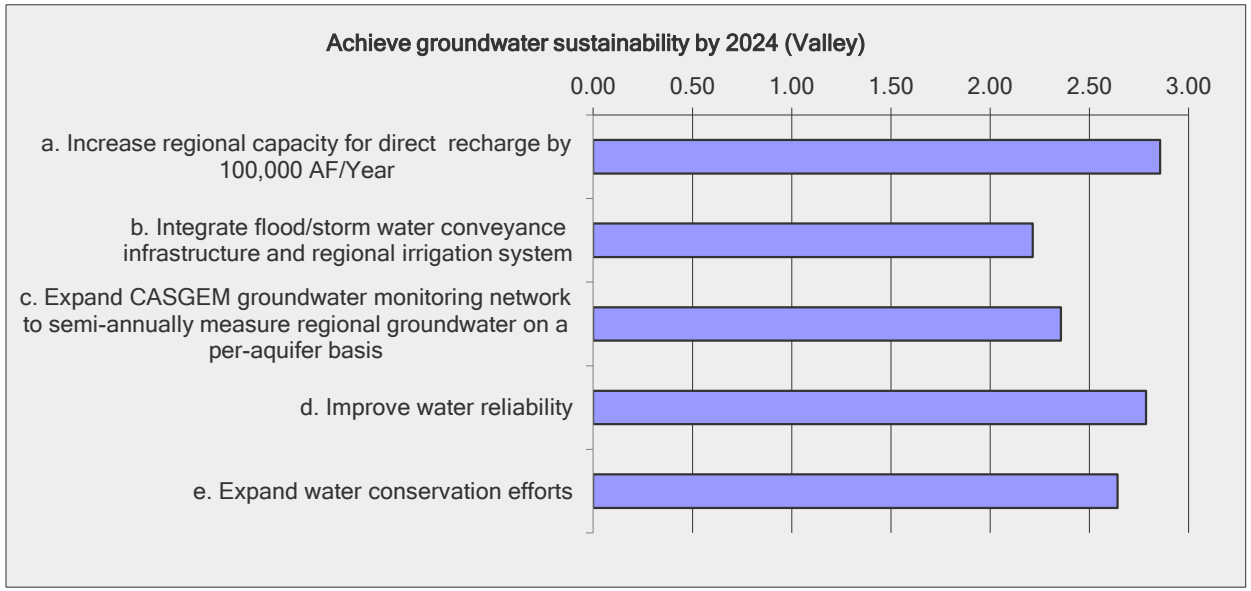
Appendix E

Results of Regional Objectives Ranking Survey

Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

1) Achieve groundwater sustainability by 2024 (Valley)

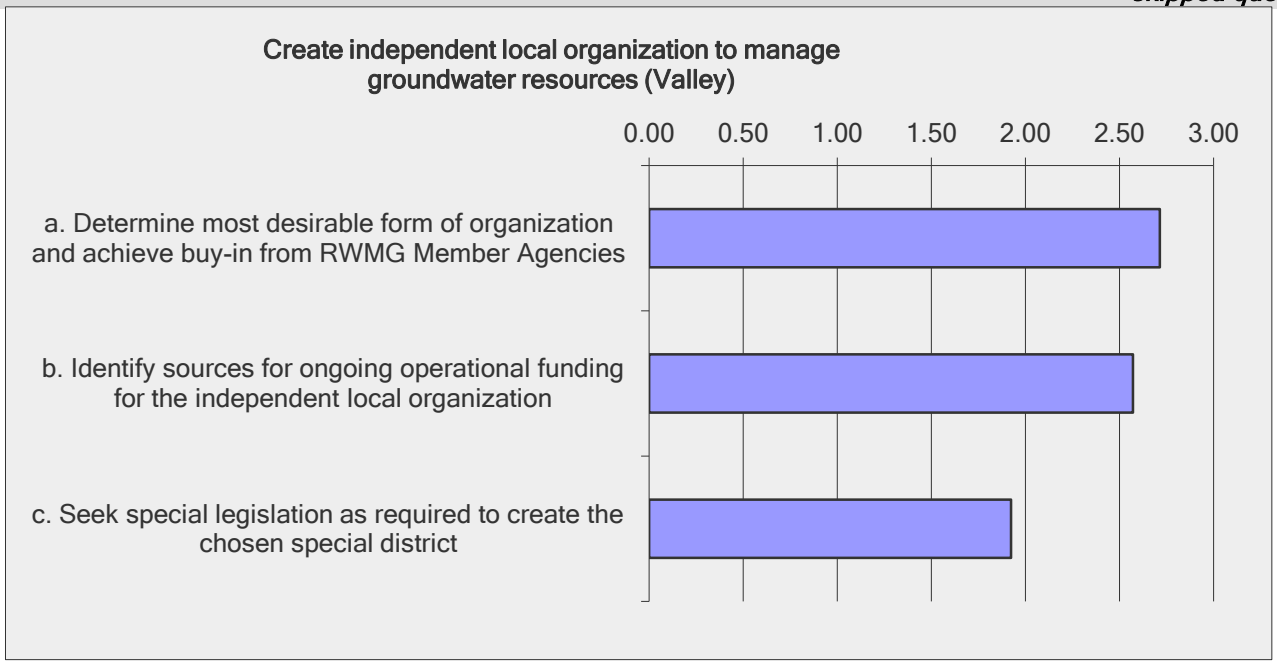
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Increase regional capacity for direct recharge by 100,000 AF/Year	0	2	12	2.86	14
b. Integrate flood/storm water conveyance infrastructure and regional irrigation system	2	7	5	2.21	14
c. Expand CASGEM groundwater monitoring network to semi-annually measure regional groundwater on a per-aquifer basis	1	7	6	2.36	14
d. Improve water reliability	0	3	11	2.79	14
e. Expand water conservation efforts	0	5	9	2.64	14
				answered question	16
				skipped question	0



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

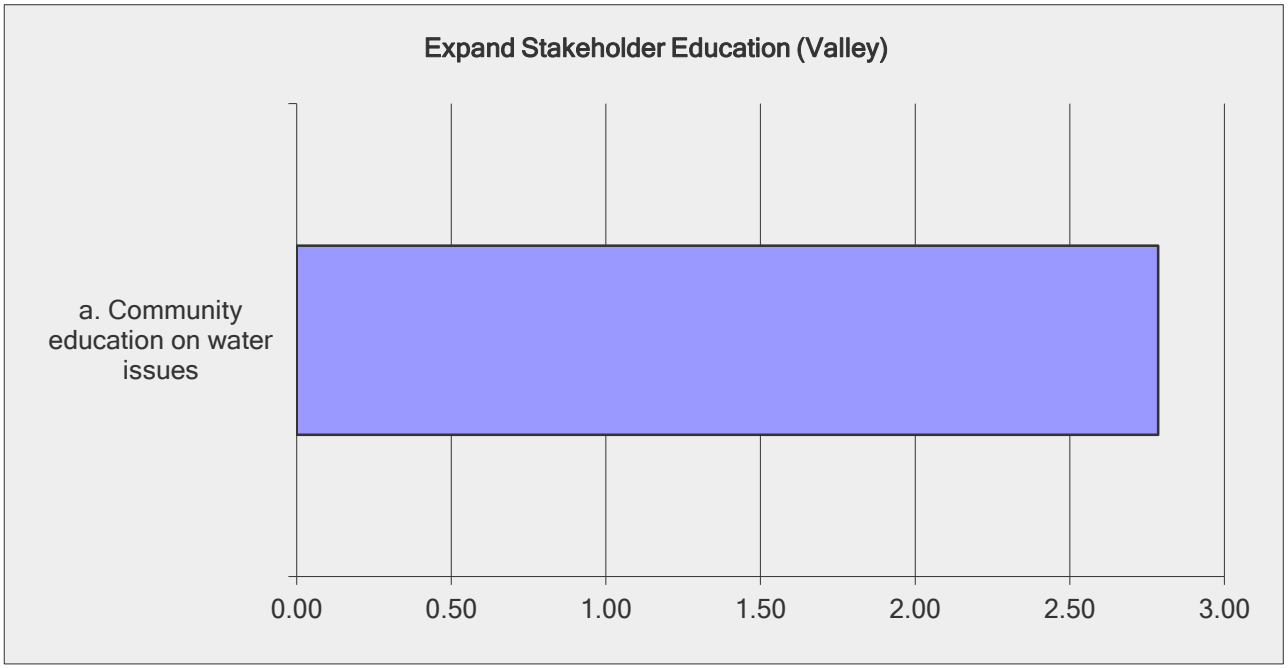
2) Create independent local organization to manage groundwater resources (Valley)

Answer Options	Low	Medium	High	Rating Average	Response Count
a. Determine most desirable form of organization and achieve buy-in from RWMG Member Agencies	1	2	11	2.71	14
b. Identify sources for ongoing operational funding for the independent local organization	0	6	8	2.57	14
c. Seek special legislation as required to create the chosen special district	4	6	3	1.92	13
				answered question	16
				skipped question	0



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

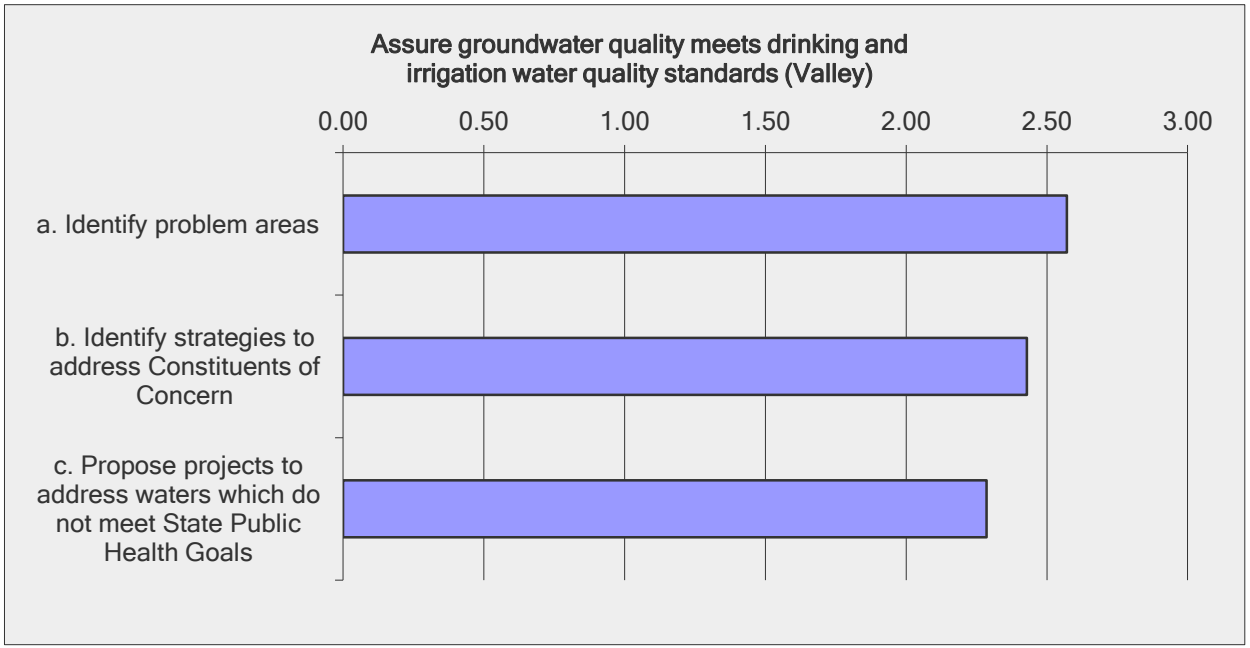
3) Expand Stakeholder Education (Valley)					
Answer Options	**Low**	**Medium**	**High**	**Rating Average**	**Response Count**
a. Community education on water issues	0	3	11	2.79	14
				answered question	**16**
				skipped question	**0**



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

4) Assure groundwater quality meets drinking and irrigation water quality standards (Valley)

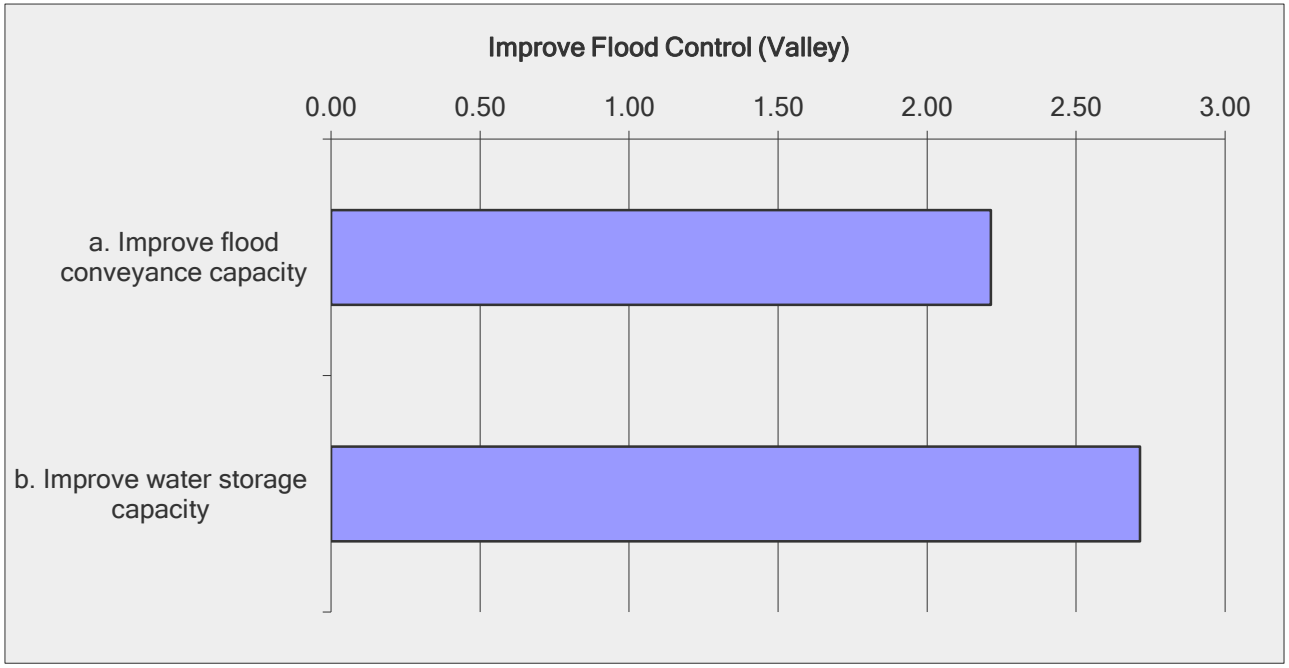
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Identify problem areas	2	2	10	2.57	14
b. Identify strategies to address Constituents of Concern	1	6	7	2.43	14
c. Propose projects to address waters which do not meet State Public Health Goals	2	6	6	2.29	14
				answered question	16
				skipped question	0



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

5) Improve Flood Control (Valley)

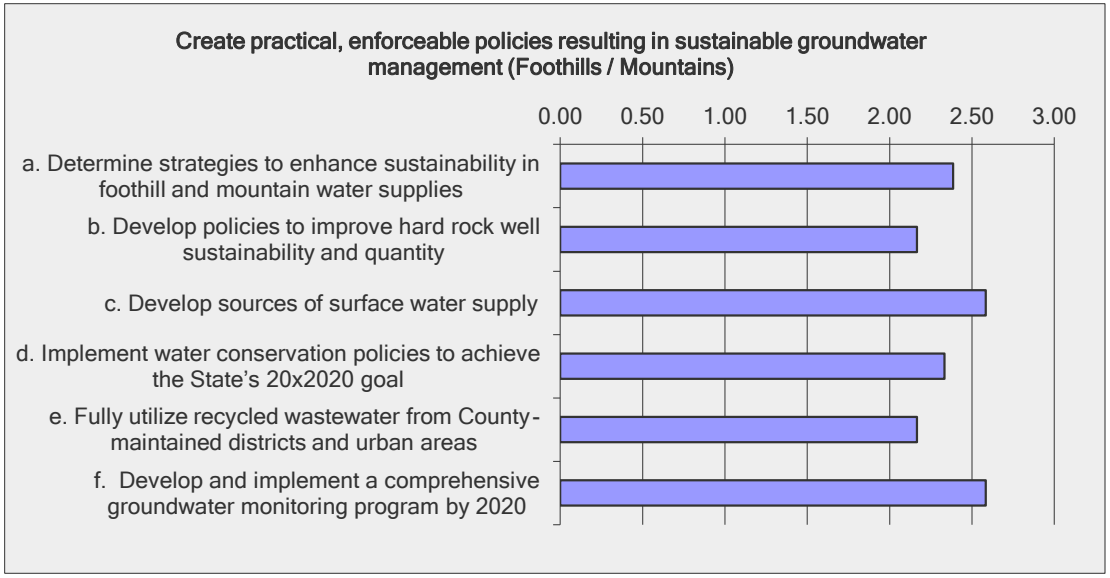
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Improve flood conveyance capacity	2	7	5	2.21	14
b. Improve water storage capacity	1	2	11	2.71	14
				answered question	16
				skipped question	0



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

6) Create practical, enforceable policies resulting in sustainable groundwater management (Foothills/Mountains)

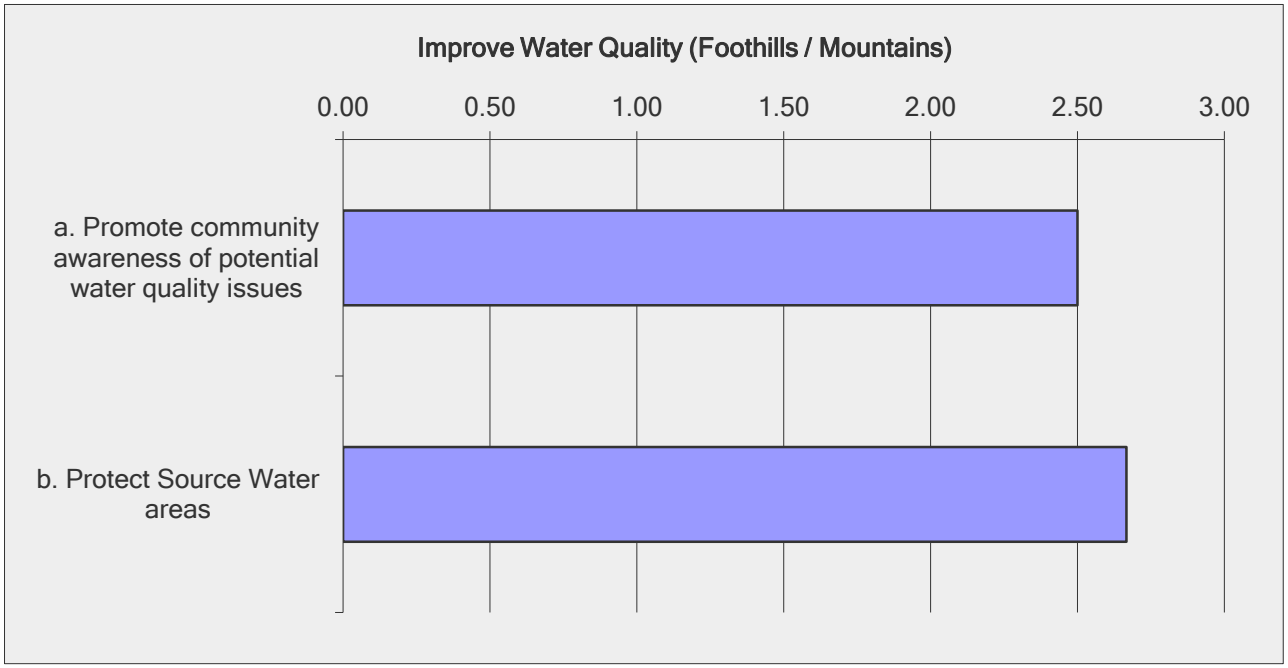
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Determine strategies to enhance sustainability in foothill and mountain water supplies	1	6	6	2.38	13
b. Develop policies to improve hard rock well sustainability and quantity	2	6	4	2.17	12
c. Develop sources of surface water supply	0	5	7	2.58	12
d. Implement water conservation policies to achieve the State's 20x2020 goal	1	6	5	2.33	12
e. Fully utilize recycled wastewater from County-maintained districts and urban areas	3	4	5	2.17	12
f. Develop and implement a comprehensive groundwater monitoring program by 2020	0	5	7	2.58	12
				answered question	**14**
				skipped question	**2**



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

7) Improve Water Quality (Foothills / Mountains)

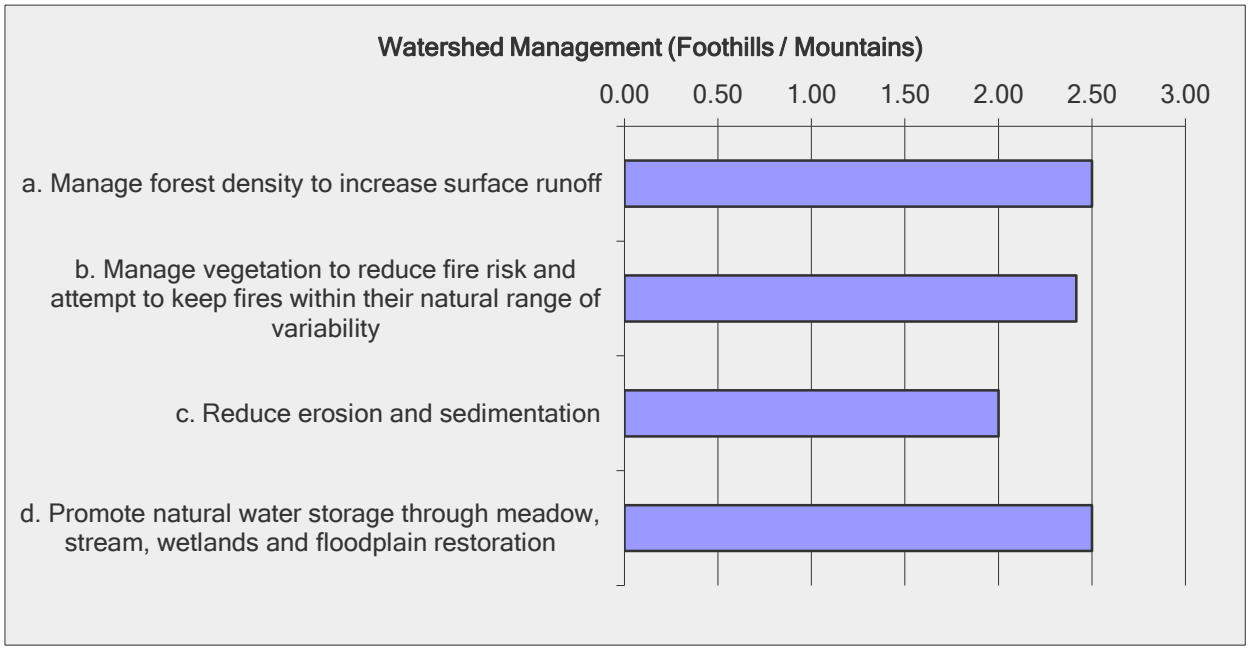
Answer Options	Low	Medium	High	Rating Average	Response Count
a. Promote community awareness of potential water quality issues	0	6	6	2.50	12
b. Protect Source Water areas	0	4	8	2.67	12
				answered question	14
				skipped question	2



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

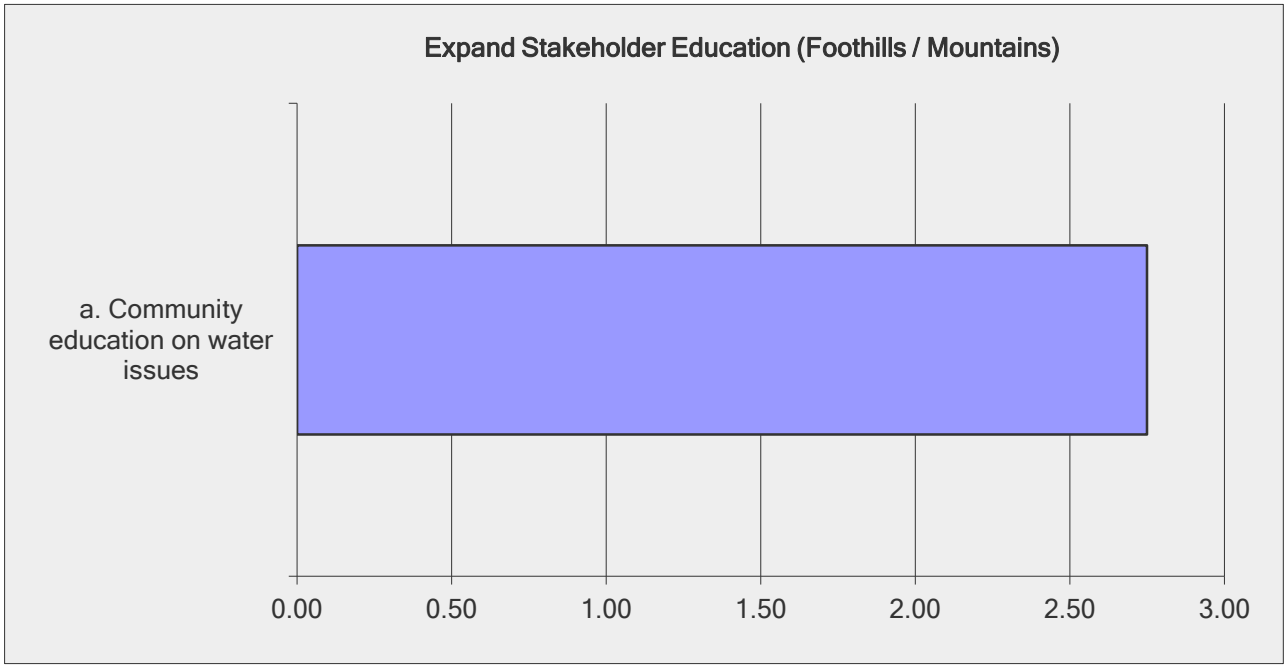
8) Watershed Management (Foothills / Mountains)

Answer Options	Low	Medium	High	Rating Average	Response Count
a. Manage forest density to increase surface runoff	1	4	7	2.50	12
b. Manage vegetation to reduce fire risk and attempt to keep fires within their natural range of variability	2	3	7	2.42	12
c. Reduce erosion and sedimentation	3	6	3	2.00	12
d. Promote natural water storage through meadow, stream, wetlands and floodplain restoration	1	4	7	2.50	12
				answered question	14
				skipped question	2



Madera Integrated Regional Water Management Plan
Results of Regional Objectives Ranking Survey

9) Expand Stakeholder Education (Foothills / Mountains)					
Answer Options	**Low**	**Medium**	**High**	**Rating Average**	**Response Count**
a. Community education on water issues	0	3	9	2.75	12
				answered question	**14**
				skipped question	**2**



Appendix F

Project List

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
1	Improved Water Level Control Structures in CWD	Chowchilla Water District	Leave on list		Feasibility Study required
2	Improved Water Measurement Structures in CWD	Chowchilla Water District	Leave on list		Feasibility Study required
3	Land Acquisitions for Groundwater Recharge Basins	Chowchilla Water District	New		Feasibility Study required
4	Regulating/Recharge Basins in CWD a. Berenda Canal/Greenhills Basin	Chowchilla Water District	Leave on list		Feasibility Study required
5	Regulating/Recharge Basins in CWD c. Water Supply Development Study	Chowchilla Water District	Awaiting Authorization		Study to evaluate the potential of developing new supply for future farming and development
6	Replacement of Cast-in-Place Pipe	Chowchilla Water District	In Progress		CWD currently replacing 1/2 mile per year
7	Regulating/Recharge Basins in CWD b. Joint use of City of Chowchilla Basins	Chowchilla Water District/City of Chowchilla	Leave on list		Feasibility Study required
8	Merced Irrigation District CWD Water Transfer	Chowchilla Water District/Merced ID	Scope of work & Feasibility Study		Further evaluations of alternatives required.
9	Expansion of CWD Service Area	Chowchilla Water District/USBR	In Process		USBR processing application to add 10,000 acres
10	Surface Water Storage Reservoirs in CWD	Chowchilla Water District/USBR	Leave on list		Feasibility Study of sites near the Madera Canal required
11	Ultra-low Flush Toilet Replacement Program	City of Chowchilla	Currently no program		Water savings based on AWWARP study and costs based on City of Fresno costs
12	WWTP Effluent Reuse (Agricultural Reclamation)	City of Chowchilla/Chowchilla Water District	On Hold		Current 1.8 MGD WWTP to be used for industrial wastewater when the new plant is online
13	City of Madera Water Meter Installation Project	City of Madera	In design	Yes	Install 850 meters on industrial, commercial, multi-family and institutional connections

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
14	Fresno River Consolidated Stormwater Quality Enhancement Project	City of Madera	New		
15	Ultra-low Flush Toilet Replacement Program	City of Madera	Currently no program		Water savings based on AWWARP study and costs based on City of Fresno costs
16	Water Conservation Program	City of Madera	New		Provide rebates, loans or incentives for installation of high efficiency water fixtures, appliances, smart irrigation clocks or irrigation components, synthetic lawn, etc.
17	City of Madera Water Well Project	City of Madera	In design	Yes	Construct municipal well to counter well capacity loss due to drought
18	Install recycled water storage, treatment and conveyance systems	City of Madera	New		
19	City of Madera / MID Schmidt Creek Recharge and Flood Control Project	City of Madera / Madera Irrigation District	New		
20	City of Madera/MID Storm water Recharge/Retention Basin Projects	City of Madera/Madera Irrigation District	Leave on list		City & MID need to work cooperatively to implement existing agreement & further develop project description
21	Create an Assessment District for Madera Ranchos	Madera County	New		Feasibility Study required
22	Retirement of Irrigated Agricultural Lands	Madera County	Conceptual		Further development of potential program required
23	Berenda Slough Arundo removal	Madera County	New		
24	Broadview Terrace Sewer System	Madera County	New		
25	Chuk-Chanse sewer and water system improvements	Madera County	Conceptual	Yes	30 lots are DAC. Replace portion of sewer line and install meters
26	Fairmead - New Well	Madera County	New		Feasibility Study required

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
27	Fairmead - Sewer Treatment Plant/Sewer System (MD-33)	Madera County	Conceptual	Yes	Complete plans, specifications and cost estimate for complete wastewater collection, treatment and disposal system
28	Fresno River channel clearing	Madera County	New		
29	Groundwater Management Plan Update	Madera County	New		
30	Hidden Lakes water treatment and collection systems repair	Madera County	New		
31	Indian Lakes Pond Dredging and Clearing	Madera County	New		
32	MD - 6 Water Reliability Project	Madera County			
33	MD - 8 North Fork Sewer System Repair	Madera County	Conceptual	Yes	Replace septic systems and private wastewater system with new wastewater system
34	MD-10A Sewer System	Madera County	New		
35	MD-10A Storm water and flood control system	Madera County	New		
36	MD - 95 well water supply reliability project	Madera County	New		
37	Parksdale water meter water conservation Project	Madera County	New		
38	Parkwood Water meter water conservation Project	Madera County	Conceptual	Yes	Install self-reading electronic meters on about 633 connections
39	Parkwood Well Water Supply Reliability Project	Madera County	Conceptual	Yes	Install new well to allow Parkwood to meet their maximum daily demands
40	Root Creek Detention Facility	Madera County	New		
41	Bonadelle Ranchos Groundwater Recharge Project	Madera County or SEMCU			
42	Illegal Marijuana grow site clean-up - Hazardous waste, Rodenticides, grow supplies	Madera County/CRCD/ Y/S RC&D	New		Studies have been done - this is an ongoing concern and project
43	Arundo Removal Project	Madera County/CWD/MID	In Progress		Continued funding required

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
44	Downtown Fresno River Project	Madera County/MID/City of Madera	Conceptual		County and City of Madera seeking funds for feasibility study
45	Root Creek Flood Control and Water Supply	Madera County/MID/RCWD	Conceptual		Feasibility Study required
46	Madera Canal/Hidden Dam Pump Storage Project - Replacement of Low Flow Gate	Madera Irrigation District	In Progress		MID pursuing USACE authorization
47	Madera Lake Regulating and Recharge Project	Madera Irrigation District	In Progress		MID may pursue installation of a permanent water elevation control structure in the Fresno River & additional recharge basins.
48	Madera Lake/Fresno River Diversion Structure & Fresno River to Madera Canal Diversion Structure	Madera Irrigation District	Leave on list		Feasibility Study Required
49	Pipeline for Allende Pond	Madera Irrigation District	New		Feasibility Study required
50	Replacement/Rehabilitation of Pipe	Madera Irrigation District	Conceptual		For Safety
51	Town of Irrigosa Water System	Madera Irrigation District	New		Feasibility Study required
52	Water Enhancement Project (Madera Water Bank)	Madera Irrigation District	In Progress		Developing funding sources and continuing pilot testing
53	Western Madera County Subsidence Solutions - Shallow Water Supply Replacement Wells	Madera Irrigation District / Chowchilla Water District	Conceptual	Yes	Develop approximately 30 new shallow wells to replace deep wells
54	Western Madera County Subsidence Solutions - Recharge Ponds and Turnouts	Madera Irrigation District / Chowchilla Water District	Conceptual	Yes	720 acres of recharge ponds in Red Top Area
55	Western Madera County Subsidence Solutions - Surface Water Distribution System	Madera Irrigation District / Chowchilla Water District	Conceptual / In design	Yes	Provide distribution system to serve 25,640 acres of agricultural land and groundwater recharge
56	Subsidence around the Bypass & Red Top area in Madera	Madera Irrigation District/Madera County	New		Feasibility Study required

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
57	Acquisition	Madera Irrigation District/Madera County	New		Feasibility Study required
58	Expansion of MID Service Area	Madera Irrigation District/USBR	In Process		Feasibility Study required
59	Root Creek Parkway Water Conservation Project	Root Creek Water District	In design	Yes	Mutli-use facilities to reuse effluent, recharge stormwater and recharge surface water supplies
60	Root Creek Avenue 10 Intentional Recharge Project	Root Creek Water District	In design	Yes	
61	Liberty Groves - Madera Ranchos South Drainage	SEMCU	New		Potential to create basin for groundwater recharge at Ave 11 ¼ alignment (existing vineyard)
62	Madera Ranchos North Drainage – Section north of Avenue 12 between Road 34 ½ & 35. Location in the back portion of 10-acre parcels accessed by Avenue 12 ¼.	SEMCU	New		Potential to create off-channel basin or in-channel basin for groundwater recharge. Feasibility Study is Required.
63	Madera Ranchos North Drainage: South of Avenue 12 to Avenue 11, Road 31	SEMCU	New		Feasibility Study is Required
64	Madera Ranchos South – Detention Basin: North of Avenue 12 & Road 38,	SEMCU	New		Feasibility Study is Required
65	MD-10A & Rolling Hills Service Area 19 - Residential Water Metering & Conservation Project	SEMCU	New		Similar to the City of Madera and Chowchilla projects - Also meters are required by 2025 for existing public water systems.
66	Madera Ranchos: Water Fixture Retrofit	SEMCU	New		

Madera Regional Water Management Group

Project List - September 2014

Number	Project Name	Implementation Agency	Project Status	Project Description Form Completed	Notes or Comments
67	Madera Ranchos: Water Meter Installations	SEMCU	New		
68	Madera Ranchos - Repair Leaking Water System	SEMCU	New		
69	Madera Ranchos: Install 1-million Gallon Water Storage Tank	SEMCU	New		
70	Valley Teen Ranch /MD10A Water System Consolidation	SEMCU	Grant application submitted		Grant application has been submitting to the State Revolving Fund
71	Replacement of Discharge Valve at Friant Dam - Madera Canal	USBR	working w/bureau		Feasibility Study Required
72	San Joaquin River Storage - Temperance Flat	USBR	Requires State Legislation		County needs to support authorization legislation & obtain its share of the project yield.

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **City of Madera Water Well Project**

Project Sponsor: City of Madera

If Joint Project, Other Sponsors: N/A

Project Contact Person: David Merchen

Telephone: (559) 661-5430 FAX: (559) 674-2972

Email: dmerchen@cityofmadera.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

The City of Madera Water Well Project will construct or complete construction on a municipal water to counter the reduction in capacity in the City's water system which has occurred due to drought conditions. The project will address the community's need for a safe and reliable source of drinking water.

Project Location

Description *(description of proposed location, etc.)*:

A water well will be constructed on one of 4 designated well sites where CEQA compliance has already been achieved. The specific well site will be identified through the completion of a water system modeling evaluation to identify maximum system benefit, together with an evaluation of matching fund sources to include the best available match.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $1.65 Million ☐ <$100K ☐ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☐ Conceptual ☑ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☑ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

The addition of a new well will add between 1000 and 2000 gallons per minute to City's water system to counter the loses in capacity which have resulted from drought conditions.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [ ] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [ ] Expand environmental stewardship
- [ ] Practice integrated flood management
- [ ] Protect surface water and groundwater quality

Program Preferences

- [ ] Include regional projects or programs
- [ ] Effectively integrate water management programs and projects within a hydrologic region
- [ ] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [x] Drinking Water Treatment and Distribution
- [ ] Drought Planning
- [ ] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [ ] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **CSA-14 Chuck Chanse Sewer and Water System Improvements**

Project Sponsor: Madera County

If Joint Project, Other Sponsors:

Project Contact Person: Kheng Vang

Telephone: 559-675-7817 FAX: 559-675-7639

Email: kheng.vang@madera-county.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

The County is planning to replace 500 linear feet of sewer line that has recently been video inspected. The camera footage revealed root intrusion into the clay pipes. Due to the severe root intrusion there substantial inflow and infiltration that increase system flows. The replacement of this section of pipeline should eliminate a significant amount of inflow into the wastewater ponds, and potential groundwater contamination from sewage flows. Water meters would also be installed at each of the existing water services, to conserve water and reduce water demands. With meters installed, a savings of 20 percent would result in a reduction in water production approximately 5.60 acre-feet per year, all of which is water left in the aquifer and would directly reduce groundwater overdraft.

Project Location

Description *(description of proposed location, etc.)*:

County Service Area 14 (Chuk–Chanse) is a Disadvantaged Community located north of the City of Madera near Road 28-½ and 19-1/2. The County provides water and sewer services to 31 residential homes and also contracts sewer service to one commercial user. Sewer services include wastewater collection, treatment and final disposal.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $339,825 ☐ <$100K ☑ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☑ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☑ 1-100 AF ☐ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

The initial project is 5 acres and at full buildout will cover approximately 13 acres. At full buildout there will be a recreational component to the project site.

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

With meters installed, a savings of 20 percent would result in a reduction in water production per average day of about 5,000 gpd, which sums to 1,825,000 gallons or 5.60 acre-feet per year, all of which is water left in the aquifer and would directly reduce groundwater overdraft.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [ ] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **MD-33 Fairmead Sewer System Master Plan**

Project Sponsor: Madera County

If Joint Project, Other Sponsors:

Project Contact Person: Kheng Vang

Telephone: 559-675-7817 FAX: 559-675-7639

Email: kheng.vang@madera-county.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

This project proposes to carry out the planning and engineering work necessary to complete plans, specifications and cost estimate for a complete wastewater collection, treatment and disposal system for the Disadvantaged Community of Fairmead (County Maintenance District MD33). While no construction would be carried out under this grant, the plans and specifications produced would leave Fairmead in position to competitively apply for construction grant funding from agencies including USDA Rural Utility Service and the CDPH State Revolving Fund. As a disadvantaged community Fairmead would not otherwise be able to afford the cost of preparing the feasibility report, engineered plans and specifications.

Project Location

Description *(description of proposed location, etc.)*:

MD-33 water system serves the unincorporated community of Fairmead. Fairmead is a disadvantaged community located in the southeast area of HWY 152 and HWY 99. The water system currently provides water to 175 homes and Fairmead Elementary School. The community relies on individual private septic systems for sewage service, many due to their age are failing and leaking.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $831,000 ☐ <$100K ☑ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☑ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☑ 1-100 AF ☐ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

The proposed project, once carried through to construction completion, will replace existing private individual septic tanks (many of which are failing and leaking) with a community-wide sewer disposal system to serve the Disadvantaged Community of Fairmead. Benefits of the project accrue from a reduction in the risk of polluting the local aquifer with nitrates and coliforms from the eventual failure of septic systems.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [ ] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [ ] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [ ] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [x] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [x] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **North Fork - South Fork Sewer Improvements**

Project Sponsor: Madera County

If Joint Project, Other Sponsors:

Project Contact Person: Kheng Vang

Telephone: 559-675-7817 FAX: 559-675-7639

Email: kheng.vang@madera-county.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

The County desires to plan, design and construct a wastewater collection and conveyance system for the South Fork community to allow many of the existing septic tanks and the failing North Fork Mill Housing Facility private wastewater system to be taken out of service. The system is expected to consist of a gravity wastewater collection system, a wastewater pump station, and a sewer force main. The gravity wastewater collection system would convey wastewater from the properties served to the pump station, where it would be pumped via the force main to another gravity wastewater collection system and then discharge to the existing MD-8 wastewater treatment system.

Project Location

Description *(description of proposed location, etc.)*:

County Maintenance District 8A, North Fork, is located in North Fork near Road 228 and Road 225. The district will provide sewer and water service to approximately 200 homes, apartments and businesses when final build out is complete. About 155 are currently served by the water and/or sewer systems. The unincorporated community of South Fork lies within the boundaries of MD-8. South Fork currently relies on individual septic tanks for wastewater disposal, with the exception of a single private wastewater system. The North Fork Mill Housing Facility's private wastewater system serves a residential neighborhood of approximately 24 residential structures. The North Fork Mill Housing Facility private wastewater system is subject to Waste Discharge Requirements Order No. 90-051, and Cleanup and Abatement Order No. 99-729, as issued by the Regional Water Quality Control Board (RWQCB). It has a long history of chronic noncompliance with RWQCB regulations, dating from 1986.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $2,395,348 ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☑ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☑ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Septic system flows treated were analyzed and anticipated to annually treat up to 20,375 gallons per day (gpd) or 170 AFY.

Other (describe qualitative and/or quantitative benefits):

provide assistance to Disadvantaged Community.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [ ] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [ ] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [x] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [ ] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [x] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [x] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [x] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Parkwood Water Meter Project**

Project Sponsor: Madera County

If Joint Project, Other Sponsors:

Project Contact Person: Kheng Vang

Telephone: 559-675-7817 FAX: 559-675-7639

Email: kheng.vang@madera-county.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

The proposed project is to install self-reading electronic meters. Including all necessary boxes, materials, labor, the central receiving computer with software, the project cost will be approximately $760,000. Design and installation of self-reading water meters to realize 20% reduction in water usage. With meters installed, a savings of 20 percent would result in a reduction in water production per average day of about 76,675 gpd, which sums to 27,986,375 gallons or 86 acre-feet per year, all of which is water left in the aquifer and directly reducing groundwater overdraft. This reduction in pumped water saves electrical annual power costs of $100 per acre foot pumped. The current annual water use averages 383,378 gpd. January water production averages 7 million gallons, while summer water projection (June, July, August) typically ranges from 17 million to 20 million gallons. The large difference between summer and winter use is all assignable to outdoor irrigation. The metered water usage will be measured monthly and compared with prior year readings to verify water reductions. The project will address water conservation, and reduce groundwater overdraft. As a result of the reduction in energy savings their is also a reduction gHg.

Project Location

Description *(description of proposed location, etc.)*:

Parkwood is located south of Avenue 13 between Highway 145 and Raymond Thomas Road and is bordered on three sides by the City of Madera. There are currently 633 existing connections. Water is supplied by onluy one well (Well No. 3), which has also lost production capacity (from 1,000 gpm originally to 400 gpm currently), is also producing some sand, and is the sole source of water for Parkwood. The Parkwood Water System serves a Disadvantaged Community. No water meters exist on the water services. Madera County is unable to fund meter reading at any of its special districts, including those which were constructed with water meters in place.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $760,000 ☐ <$100K ☑ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☑ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☑ 1-100 AF ☐ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

With meters installed, a savings of 20 percent would result in a reduction in water production per average day of about 76,675 gpd, which sums to 27,986,375 gallons or 86 acre-feet per year, all of which is water left in the aquifer and directly reducing groundwater overdraft. This reduction in pumped water saves electrical annual power costs of $100 per acre foot pumped.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [x] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [ ] Expand environmental stewardship
- [ ] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [x] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [x] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [x] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Parkwood Water Supply Project**

Project Sponsor: Madera County

If Joint Project, Other Sponsors:

Project Contact Person: Kheng Vang

Telephone: 559-675-7817 FAX: 559-675-7639

Email: kheng.vang@madera-county.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

Design and construction of a new well (water supply) to produce at least 680 gpm (approximately 430 AFY). The new well will help keep this district in compliance with Section 65445(a), Title 22CCR. The new well will provide a reliable water supply to the Parkwood Community. Parkwood is a disadvantage community and cannot afford to build the well.

Project Location

Description *(description of proposed location, etc.)*:

MD19 Parkwood currently serves 605 residential and 28 commercial water connections. This community, designated a Disadvantage Community, is located south of Avenue 13 between Hwy 145 and Raymond Thomas Road in Madera, California. The District is subject to Enforcement Letter 03-11-11E-007 from the California Department of Public Health. It has been in violation of Section 65445(a), Title 22CCR. This section of the Code states that at all times a public water system's water source(s) shall have the capacity to meet the system's maximum day demand (MDD). At one time the Parkwood system had three wells on line and was more than capable of meeting this 680 gpm requirement. However, the only remaining well in Parkwood has a current pumping capacity of 400 gpm (down from 470 gpm a year ago).

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: $1.2M ☐ <$100K ☑ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☑ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☑ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

Water Supply, water reliability, provide assistance to Disadvantaged Community.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [ ] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [ ] Expand environmental stewardship
- [ ] Practice integrated flood management
- [ ] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [ ] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [x] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [ ] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [ ] Conjunctive Management and Groundwater Storage
- [ ] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [x] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [ ] Flood Management
- [ ] Forest Management
- [ ] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [ ] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [ ] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [ ] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [ ] Water Transfers
- [ ] Water-Dependent Recreation
- [ ] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Root Creek Avenue 10 Intentional Recharge Project**

Project Sponsor: Root Creek Water District

If Joint Project, Other Sponsors:

Project Contact Person: Brian Ehlers

Telephone: 559-326-1100 FAX: 559-326-1090

Email: behlers@ppeng.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

(See attached)

Project Location

Description *(description of proposed location, etc.)*:

Along Avenue 10 just west of Road 39.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☐ Conceptual ☑ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☑ In progress

Estimated Year of Construction: 2015-2016

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☑ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Open space, Habitat - 40 acres

Volume of Treated Water:

1,000 AF

Other (describe qualitative and/or quantitative benefits):

Storm water control

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [ ] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [ ] Expand environmental stewardship
- [x] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [ ] Address critical water supply or water quality needs of DACs within the region
- [x] Effectively integrate water management with land use planning
- [x] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [x] Conjunctive Management and Groundwater Storage
- [x] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [ ] Economic Incentives
- [ ] Ecosystem Restoration
- [x] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [x] Land Use Planning and Management
- [x] Matching Water Quality to Water Use
- [x] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [x] Recharge Areas Protection
- [x] Recycled Municipal Water
- [x] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [x] Surface Storage - Regional/Local
- [ ] System Reoperation
- [x] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [x] Water and Culture
- [x] Water Transfers
- [ ] Water-Dependent Recreation
- [x] Watershed Management
- [x] Other Strategies

Root Creek Avenue 10 Intentional Recharge Basin – Project Description

The project consists of approximately 80 acres of basins that are ultimately planned for wastewater disposal from the planned new development within RCWD. Recent borings have suggested that portions of this site, after removal of a hard pan layer, would be conducive to intentional recharge activities. It is assumed at this time that half the site or 40 acres would be developed for intentional recharge and would be connected to the newly constructed conveyance irrigation line in Road 40. The new lateral would be constructed along Avenue 10. Water Supply to the site will consist of storm water and imported water per the District's water supply contracts.

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: Root Creek Parkway Water Conservation Project

Project Sponsor: Root Creek Water District

If Joint Project, Other Sponsors:

Project Contact Person: Brian Ehlers

Telephone: 559-326-1100 FAX: 559-326-1090

Email: behlers@ppeng.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

(See Attached)

Project Location

Description *(description of proposed location, etc.)*:

Along Root Creek from Road 40 to Business Highway 41 in Sections 4, 5, and 8 T12S, R20E MDB&M.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☐ Conceptual ☑ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☑ In progress

Estimated Year of Construction: 2015-2016

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☑ 100-1,000 AF ☐ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Public Access, Recreation, Open space ~120 ac; water/flood storage ~27 ac

Volume of Treated Water:

700 AF

Other (describe qualitative and/or quantitative benefits):

water supply, storm and flood control, environmental, water conservation and drought protection

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [x] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [x] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [ ] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [x] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [ ] Address critical water supply or water quality needs of DACs within the region
- [x] Effectively integrate water management with land use planning
- [x] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [ ] Agricultural Lands Stewardship
- [ ] Agricultural Water Use Efficiency
- [x] Conjunctive Management and Groundwater Storage
- [x] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [x] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [ ] Economic Incentives
- [ ] Ecosystem Restoration
- [x] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [x] Land Use Planning and Management
- [x] Matching Water Quality to Water Use
- [x] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [x] Recharge Areas Protection
- [x] Recycled Municipal Water
- [x] Salt and Salinity Management
- [x] Sediment Management
- [ ] Surface Storage - CALFED
- [x] Surface Storage - Regional/Local
- [x] System Reoperation
- [x] Urban Runoff Management
- [x] Urban Water Use Efficiency
- [x] Water and Culture
- [x] Water Transfers
- [x] Water-Dependent Recreation
- [x] Watershed Management
- [x] Other Strategies

Project Description.

The water conservation project consists of multi use facilities that will be used to 1) conserve and reuse wastewater effluent, 2) conserve and recharge storm water and 3) intentionally recharge surface waters available to the District when agricultural demand is low to maximize the conjunctive use of both surface and groundwater. Additionally, the facilities will be planned to enhance the environmental biodiversity of the Root Creek stream corridor. The plan consists of installing a service pipeline from the wastewater treatment plant to run within the planned parkway. Other key facilities consist of control structures constructed to control water within the low depressions found within the parkway. These structures are planned to be incorporated at road crossings and pedestrian bridges. At these locations it is envisioned that a flow control structure will be incorporated so that water can be controlled during the non flood times allowing for water to pond behind the structure. It is envisioned that the modified channel will consist of a low flow section that will be able to handle the flood or storm flows with a higher bench that can be flooded with the use of these structures forming a small pond area. Facilities include: 1) approximately 1.5 miles of 12” purple pipe, five water control structures, regulation basin structure, earthwork to build storm retention basin and modify channel.

This project would have water supply benefits, storm and flood control benefits, environmental benefits, recreation benefits, water conservation and drought protection benefits. The project is anticipated to reuse and intentionally recharge 700 af annually.

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Western Madera County Subsidence Solutions - Recharge Ponds & Turnouts**

Project Sponsor: Red Top Area Growers, San Luis Canal Company

If Joint Project, Other Sponsors: Madera Irrigation District, Chowchilla Irrigation District

Project Contact Person: Rick Iger

Telephone: 661-616-5900 FAX: 661-616-5890

Email: riger@ppeng.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

Develop 720 acres of recharge ponds in the Red Top Area. The ponds could provide capacity to absorb about 180 cfs off the flood system. Over three months this would equal 32,400 acre-feet. The project will also potentially include rehabilitation of existing and construction of new turnouts from the San Joaquin River flood system along with direct pipelines to the recharge sites. Water supplies shall be riparian water rights of growers, San Joaquin River recirculation flows, high flow flood water, or other water purchased by growers.

Project Location

Description *(description of proposed location, etc.)*:

The proposed project is located in the northwest corner of Madera County.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☐ 100-1,000 AF ☑ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

By conveying flood water and surface waters to recharge ponds, a shallow aquifer groundwater bank will be built for overlying farming helping to reduce need for deep well pumping and subsequently reduce land subsidence in the area.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [x] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [x] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [x] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [ ] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [x] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [x] Agricultural Lands Stewardship
- [x] Agricultural Water Use Efficiency
- [x] Conjunctive Management and Groundwater Storage
- [x] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [x] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [x] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [x] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [x] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [x] Water Transfers
- [ ] Water-Dependent Recreation
- [x] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Western Madera County Subsidence Solutions - Surface Water Distribution System**

Project Sponsor: Red Top Growers, San Luis Canal Company

If Joint Project, Other Sponsors: Madera Irrigation District, Chowchilla Irrigation District

Project Contact Person: Rick Iger

Telephone: 661-616-5900 FAX: 661-616-5890

Email: riger@ppeng.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

This project will expand and develop a surface water distribution system to provide irrigation water to approximately 25,640 acres of agricultural land and groundwater recharge. The overall project will be completed in phases with the first phase being the Red Top Area Conveyance Project. Conveyance facilities to be constructed in this first phase include a 40 cfs turnout on the Poso Canal with a 36" gravity pipeline across the San Joaquin River and a junction box with two booster pump stations capable of delivering from 5 to 20 cfs each to serve landowners and future recharge pond sites. Each booster pumps station will discharge into a 24" PVC pipeline. One will proceed east approximately 1 mile and terminate with a turnout for Triangle T Ranch and land to the south. The other will proceed east approximately 2 miles and have 6 turnouts along the alignment for Vlot fields to the north. Additionally, three small turnouts connected to the Vlot pipeline with a capacity of 5 cfs each will be located near the Fresno River to discharge into Harman's ditch and to the Fresno River. Delivery capacity will be about 3,000 Acre Feet per month. Water supplies shall be riparian water rights of growers, San Joaquin River recirculation flows, high flow flood water, or other water purchased by growers.

Project Location

Description *(description of proposed location, etc.)*:

The majority of the proposed project is located in the northwest corner of Madera County with a small portion of the project within northern Fresno County.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☑ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☐ In progress

Estimated Year of Construction: 2015 for the first phase

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☐ 100-1,000 AF ☑ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

Mitigation of subsidence by providing a conveyance system to allow landowners to utilize water from other sources than deep water pumping. Conveying flood water to recharge ponds will build a shallow aquifer groundwater bank for overlying farming which will also reduce deep well pumping.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [x] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [x] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [x] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [ ] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [x] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [x] Agricultural Lands Stewardship
- [x] Agricultural Water Use Efficiency
- [x] Conjunctive Management and Groundwater Storage
- [x] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [x] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [x] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [x] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [x] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [x] Water Transfers
- [ ] Water-Dependent Recreation
- [x] Watershed Management
- [ ] Other Strategies

Madera Regional Water Management Group
Project Description Form

General Information

Project Name: **Western Madera County Subsidence Solutions - Shallow Water Supply Replacement Wells**

Project Sponsor: Red Top Growers, Triangle T Ranch, San Luis Canal Company

If Joint Project, Other Sponsors: Madera Irrigation District, Chowchilla Irrigation District

Project Contact Person: Rick Iger

Telephone: 661-616-5900 FAX: 661-616-5890

Email: riger@ppeng.com

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

Develop approximately 30 new shallow water wells to replace deep wells. The goal will be to decrease use of the deep aquifer by 5,400 acre feet per month, thereby reducing subsidence.

Project Location

Description *(description of proposed location, etc.)*:

The proposed project is located in the northwest corner of Madera County.

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☑ $1M-$10M ☐ $1M-$10M

Project Status: ☑ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☐ In progress

Estimated Year of Construction: 2015

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☐ 100-1,000 AF ☑ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

Developing shallow water wells to replace deep well pumping below the Corcoran Clay will help to reduce subsidence in the area.

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- [x] Long-term drought preparedness
- [x] Use and reuse water more efficiently
- [x] Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- [x] Expand environmental stewardship
- [x] Practice integrated flood management
- [x] Protect surface water and groundwater quality

Program Preferences

- [x] Include regional projects or programs
- [x] Effectively integrate water management programs and projects within a hydrologic region
- [x] Effectively resolve significant water-related conflicts within or between regions
- [ ] Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- [ ] Address critical water supply or water quality needs of DACs within the region
- [ ] Effectively integrate water management with land use planning
- [x] Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- [x] Agricultural Lands Stewardship
- [x] Agricultural Water Use Efficiency
- [x] Conjunctive Management and Groundwater Storage
- [x] Conveyance – Regional/Local
- [ ] Conveyance to Conveyance – Delta
- [ ] Desalination
- [ ] Drinking Water Treatment and Distribution
- [x] Drought Planning
- [x] Economic Incentives
- [ ] Ecosystem Restoration
- [x] Flood Management
- [ ] Forest Management
- [x] Groundwater/Aquifer Remediation
- [ ] Land Use Planning and Management
- [x] Matching Water Quality to Water Use
- [ ] Outreach and Education
- [ ] Pollution Prevention
- [ ] Precipitation Enhancement
- [x] Recharge Areas Protection
- [ ] Recycled Municipal Water
- [ ] Salt and Salinity Management
- [ ] Sediment Management
- [ ] Surface Storage - CALFED
- [ ] Surface Storage - Regional/Local
- [x] System Reoperation
- [ ] Urban Runoff Management
- [ ] Urban Water Use Efficiency
- [ ] Water and Culture
- [x] Water Transfers
- [ ] Water-Dependent Recreation
- [x] Watershed Management
- [ ] Other Strategies

Appendix G

Project Review Process

Madera Regional Water Management Group
Project Description Form

General Information

Project Name:

Project Sponsor:

If Joint Project, Other Sponsors:

Project Contact Person:

Telephone: FAX:

Email:

Project Description

Project Description *(include which Regional Measurable Goals and Objectives are addressed by the project)*:

Project Location

Description *(description of proposed location, etc.)*:

Estimated Capital Costs (Note: estimated cost, if known, OR check rough estimate):

Project Cost: ☐ <$100K ☐ $100K-$1M ☐ $1M-$10M ☐ $1M-$10M

Project Status: ☐ Conceptual ☐ In design ☐ Ready for construction

CEQA Status: ☐ Not started ☐ In progress

Estimated Year of Construction:

Project Benefits

Water Supply *(New supply created AFY) (Check one)*: ☐ 1-100 AF ☐ 100-1,000 AF ☑ 1,000+ AF

Public Access, Open Space, Habitat, Recreation (acres created/restored):

Volume of Treated Water:

Other (describe qualitative and/or quantitative benefits):

Project Criteria

Please review the project against the Statewide Priorities, Program Preferences, and Water Plan Management Strategies and place in the box if the project meets the criteria:

Statewide Priorities

- ☐ Long-term drought preparedness
- ☐ Use and reuse water more efficiently
- ☐ Climate change response actions (assess vulnerabilities, adapt to climate change, reduce greenhouse gas emissions, and reduce energy consumption
- ☐ Expand environmental stewardship
- ☐ Practice integrated flood management
- ☐ Protect surface water and groundwater quality

Program Preferences

- ☐ Include regional projects or programs
- ☐ Effectively integrate water management programs and projects within a hydrologic region
- ☐ Effectively resolve significant water-related conflicts within or between regions
- ☐ Contribute to one or more of the objectives of the CALFED Bay-Delta Program
- ☐ Address critical water supply or water quality needs of DACs within the region
- ☐ Effectively integrate water management with land use planning
- ☐ Flood control or flood prevention projects that provide multiple benefits, including but not limited to: water quality improvements, ecosystem benefits, reduction of instream erosion and sedimentation, and groundwater recharge

CA Water Management Plan – Resource Management Strategies

- ☐ Agricultural Lands Stewardship
- ☐ Agricultural Water Use Efficiency
- ☐ Conjunctive Management and Groundwater Storage
- ☐ Conveyance – Regional/Local
- ☐ Conveyance to Conveyance – Delta
- ☐ Desalination
- ☐ Drinking Water Treatment and Distribution
- ☐ Drought Planning
- ☐ Economic Incentives
- ☐ Ecosystem Restoration
- ☐ Flood Management
- ☐ Forest Management
- ☐ Groundwater/Aquifer Remediation
- ☐ Land Use Planning and Management
- ☐ Matching Water Quality to Water Use
- ☐ Outreach and Education
- ☐ Pollution Prevention
- ☐ Precipitation Enhancement
- ☐ Recharge Areas Protection
- ☐ Recycled Municipal Water
- ☐ Salt and Salinity Management
- ☐ Sediment Management
- ☐ Surface Storage - CALFED
- ☐ Surface Storage - Regional/Local
- ☐ System Reoperation
- ☐ Urban Runoff Management
- ☐ Urban Water Use Efficiency
- ☐ Water and Culture
- ☐ Water Transfers
- ☐ Water-Dependent Recreation
- ☐ Watershed Management
- ☐ Other Strategies

Madera Regional Water Management Group
Outline for Grant Pre-Application

1 – PROJECT DESCRIPTION
1.1 – Project Summary
1.2 – Goals and Objectives of Project
1.3 – Relation to Southern Sierra IRWMP

2 – PROJECT TASKS

3 – PROJECT BENEFITS
3.1 - Water Supply
3.2 - Water Quality
3.3 - Flood Damage Reduction
3.4 - Ecosystem
3.5 - Other Benefits

3 – PERMITTING AND ENVIRONMENTAL ISSUES

4 – DATA MANAGEMENT AND MONITORING DELIVERABLES

5 – PROJECT BUDGET

6 – PROJECT SCHEDULE

8 – IRWM PROGRAM PREFERENCES AND STATEWIDE PRIORITIES

9 – CONCLUSIONS AND JUSTIFICATION FOR IRWMP GRANT APPLICATION

Attachments
1 – Vicinity Map
2 – Project Location Map
3 – Cost Estimate

APPENDICES

ROOT CREEK WATER DISTRICT

Regional Water Management Group Submission

for

Root Creek Water District In-Lieu Groundwater Recharge Project

SAMPLE PRE-APPLICATION

Submitted to

Madera Integrated Regional Water Management Group

November 2010

Prepared by:

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Attachments

1 – Vicinity Map
2 – Project Location Map
3 – Cost Estimate

SAMPLE PRE-APPLICATION

1 – PROJECT DESCRIPTION

1.1 – Project Summary

The Root Creek Water District 'In-Lieu Groundwater Recharge Project' includes the acquisition of surface water supplies and construction of a new 48-inch diameter pipeline that would deliver surface water to an initial 3,200 acres of lands that currently rely exclusively on groundwater. The project would deliver surface water 'in-lieu' of groundwater pumping and thus preserve groundwater resources. Funding is requested for constructing the pipeline to convey water supplies that have already been secured by RCWD. **Figure 1** is a vicinity map showing the location of the project in Madera County. **Figure 2** is a project location map showing the area that would be served by the surface water, and the locations of the proposed facilities.

Surface water would be delivered to Root Creek Water District (RCWD) through Madera Irrigation District (MID) facilities under existing water purchase, conveyance and exchange agreements. Water would be diverted into RCWD through a proposed turnout on MID's Lateral 6.2. Additional facilities would include 2.7-miles of 48-inch diameter concrete pipe, 4.2-miles of lateral pipes ranging in diameter from 4 to 24 inches, and approximately ten to twelve connections to existing irrigation pump stations.

Using available surface water supplies, the proposed pipeline will be able to deliver, on average, 6,100 AF/year to the project area. In some years the pipeline would be able to provide all of the water demands in the project area, or about 9,400 AF/year. The pipeline will have capacity to convey about 50 cfs, or about 36,000 AF/year if operated continuously. Therefore, the project yield could be increased if the project area is expanded or the pipeline is connected to recharge facilities. The proposed project is the first phase in a potentially larger project that could deliver water to most of RCWD.

The water sources include San Joaquin River Section 215 floodwater, CVP water supplies purchased from Madera Irrigation District, and a firm water supply purchased from the Westside Mutual Water Company.

The project would import a new surface water supply into Madera County. Every acre-foot of surface water delivered by the project will offset an acre-foot of groundwater pumping and reduce overdraft in the local area and surrounding communities. The project will help to reverse the net overdraft in Southeastern Madera County of 22,000 AF/year, as referenced in a report by Kenneth D. Schmidt Associates entitled '*Hydrogeologic Investigation – Southeastern Madera County*', prepared in 1998 and updated in 2001. The estimated overdraft within RCWD is 3,400 AF, which is referenced in the same study. The project yield of 6,100 AF will not only mitigate for this local overdraft, but also deliver a net positive balance of (6,100-3,400) = 2,700 AF/year within RCWD. The surface water delivery will also help to improve local water quality and improve water reliability.

The estimated cost for constructing the pipeline and appurtenant facilities is $5.5 million.

SAMPLE PRE-APPLICATION

RCWD is requesting grant funds of $4.125 million and can fund a cost share of $1.375 million.

Significant work has already been completed on the project including a DWR funded feasibility study, designs, permitting, legal agreements, and a previous grant application. Construction of the project can begin within five months of receiving a grant award, and be completed in six months thereafter.

1.2 – Goals and Objectives

Goals and objectives for the project include the following:

1. Expand the available water supply by importing 6,100 AF of new surface water into the area each year.
2. Improve water reliability by providing alternate water sources.
3. Reduce groundwater overdraft by reducing the rate of groundwater pumping.
4. Reduce groundwater pumping costs and the need to deepen wells or install new wells.
5. Maintain the viability of irrigated agriculture in the area.
6. Improve water quality by importing high quality surface water that will mix with lower quality groundwater

1.3 – Relation to Madera IRWMP

Following is a list of IRWMP sections that mention the project or include goals and objectives that are compatible with the project:

- The Executive Summary (page ES-1) states that "*The main objectives of the IRWMP are water resources management optimization, evaluating and increasing water supplies, water quality protection and improvement, and flood control planning*". All of these goals will be met with the proposed project.

- The Executive Summary (page ES-15) states that "*The major water supply issue in the Valley Floor is the continuing overdraft of the groundwater basins*." The project will directly address this issue through importation of surface water that will supplant a minimum of 6,100 AF/year of groundwater pumping.

- Pages 1-1 to 1-4 list several goals for the Valley Floor that are consistent with the project. These goals cover the topics of groundwater overdraft, conjunctive use, groundwater quality improvement, and acquiring new water supplies.

- The 2003 feasibility study for this proposed project is listed in Table 1-1 as a reference used in preparing the IRWMP.

- Section 3.1.1.6 discusses the proposed project including the construction of a turnout on Lateral 6.2 and acquisition of a Section 215 water contract.

SAMPLE PRE-APPLICATION

- The project is listed in Table 8-1: Potential Water Supply Augmentation and Overdraft Reduction Projects on the Valley Floor (Project No. 7 – Root Creek Water District Surface Water Project).

- The RCWD In-Lieu Groundwater Recharge Project is not specifically mentioned in Chapter 9 –Conclusions and Recommendations of the IRWMP, however the project is consistent with the theme of several other recommendations in Chapter 9. In addition, the IRWMP recommends that Madera County purchase Section 215 water and develop agreements with MID, Chowchilla Water District and USBR facilities to convey the water (page 9-13). The proposed project is identical except RCWD would import and use the water, instead of Madera County.

1.4 – Project Tasks

Significant tasks completed to date include:

1. Project Feasibility Study funded by a planning grant from the Department of Water Resources (May 2003)
2. Proposition 13 Grant Application for proposed project (June 2003)
3. 30% complete specifications and contract documents
4. 95% design drawings for the turnout and main pipeline (April 2010)
5. Numerous permits and agreements (see Section 1.5)

Remaining task to complete are described below:

Task 1 – Finalize permitting and agreements. Finalize any outstanding permits and contracts including: CEQA Compliance, USBR Section 215 water Contract, and design approvals from USBR and MID. It is anticipated that these will all be completed before the DWR awards grants in June 2011.

Task 2 - Finalize Design. Complete the specifications, bidding documents and design drawings for the turnout, pipeline, and laterals.

Task 3 - Project Bidding. Solicit and review bids from qualified contractors and award a construction contract.

Task 4 – Construction. Construct the project according to the plans and specifications and prepare record drawings.

1.5 – Permits

RCWD has signed several water purchase agreements that will ensure a surface water supply and conveyance for the project. RCWD is finalizing several other permits and a USBR Section 215 water contract, which are all expected to be completed in late 2010 and early 2011. Following is a description of each permit/agreement and its status.

SAMPLE PRE-APPLICATION

California Environmental Quality Act. The Root Creek Water District prepared a CEQA Initial Study for the project, and issued a notice of intent to adopt a Negative Declaration on October 15, 2010. A public hearing is scheduled for November 17, 2010 to adopt the Negative Declaration. USBR has accepted the biological studies and cultural and historical resources studies for the project, and is expected to support the Negative Declaration.

Agreements with Landowners. No property acquisition will be needed for the project. RCWD has easements from private landowners for all of the proposed pipelines.

Agreement Concerning Agricultural, Municipal, and Industrial Water Use Within Root Creek Water District (December 1999). This is a cooperative agreement with the Friant Water Users Authority, Madera Irrigation District, and Chowchilla Water District and RCWD to sell and deliver surplus waters to RCWD when possible.

Agreement Between Madera Irrigation District and Root Creek Water District For The Conveyance and Sale of Water (March 2002). This agreement outlines terms for RCWD to purchase up to 10,000 AF/year of surplus Class 2 water from MID. This agreement also provides for all conveyance of the RCWD water from Millerton Lake to the new RCWD turnout.

USBR 215 Water Contract. The District has been negotiating for a long-term Section 215 floodwater contract with the USBR. The environmental review is underway and the contract is expected to be finalized in early 2011.

Approvals from MID and USBR. The proposed turnout would be on Lateral 6.2, a facility jointly owned by MID and USBR, who will both need to approve the turnout design. RCWD has sent a copy of the turnout design drawings to MID for approval. After MID approval the drawings will be sent to USBR. The design follows standard engineering practices and it is anticipated that both agencies will approve the design by December 2010.

Water Supply Agreements with Westside Mutual Water Company. RCWD has an agreement with Westside Mutual Water Company (Westside) to deliver a firm water supply of up to 7,000 AF/year for 50 years.

Exchange Agreement. RCWD has an agreement with Westside, MID, and Shafter Wasco ID to exchange the Westside water to MID for delivery to RCWD's turnout.

Other Permits. Other required permits include a grading permit and encroachment permit from Madera County. RCWD does not anticipate any problems securing these permits.

SAMPLE PRE-APPLICATION

1.6 – Data Management and Monitoring Deliverables

RCWD has already developed a data management and monitoring program for the project. The information will be compiled into an annual report for at least ten years after project construction. The aim of the monitoring program is to document and verify the project's intended benefits, namely a positive impact on the region's groundwater levels. The primary monitoring parameters are listed below:

- Surface water deliveries. Surface water deliveries will be measured and recorded at the new turnout on Lateral 6.2.
- Groundwater levels. RCWD has already established a network of wells that have been used for annual groundwater-level monitoring since 1998. The data is stored in the District's groundwater Geographic Information System, which was developed using a Local Groundwater Assistance Grant from the Department of Water Resources.
- Groundwater quality. Groundwater quality will be tested in several monitoring wells annually to verify that the groundwater quality is improving, or determine if the project is adversely impacting groundwater quality.

1.7 – Consistency with Basin Plan

The proposed project is in the San Joaquin Valley Basin and is subject to the Regional Water Quality Control Board's *Water Quality Control Plan for the Sacramento and San Joaquin River Basins* (Basin Plan). The proposed project will be in full compliance with the Basin Plan. The water supply will be beneficially used for irrigation, and the project will not contribute to groundwater quality degradation. Instead, the project will improve groundwater quality by importing high quality surface water that will result in some groundwater quality improvement.

SAMPLE PRE-APPLICATION

2 – PROJECT BUDGET

A cost estimate for the proposed project is included as **Attachment 1**. The total estimated cost for project construction and remaining engineering services is $5.5 million. The cost estimate includes a 15% contingency to reflect the level of design completed to date.

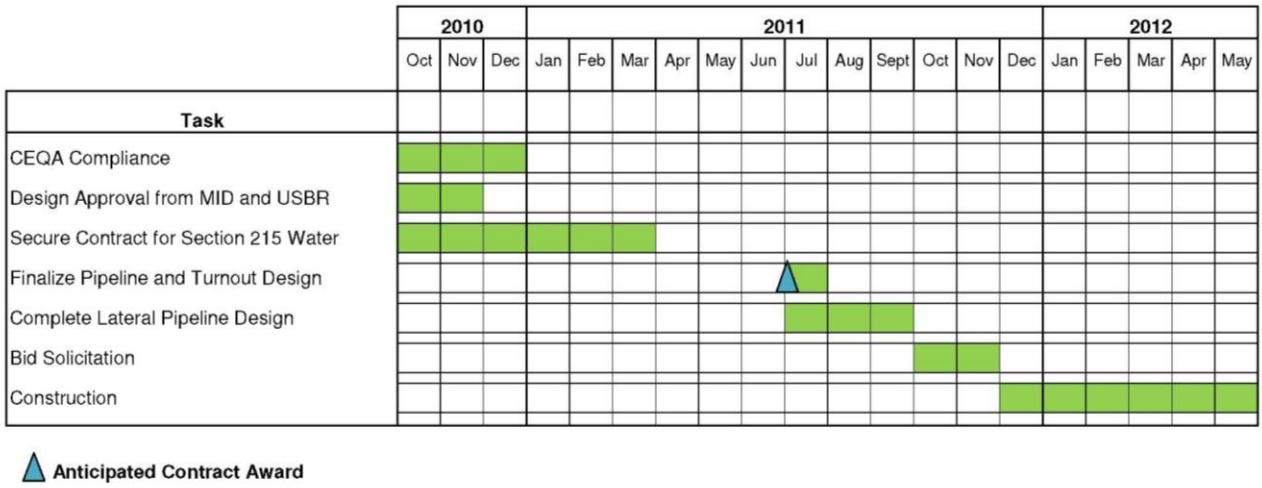
RCWD requests $4.125 million for construction of the pipeline and appurtenant facilities. The grant guidelines require at least a 25% funding match, which equates to 25% x $5.5 million = $1.375 million. Root Creek Water District has signed agreements with landowners served by the project to provide the cost share either through a direct cash payment or assessments applied to their lands.

To date approximately $3.7 million has already been spent on the project for water contracts with MID and Westside Mutual Water Company, feasibility studies, surveying, design, permitting, USBR processing fees, and legal fees. These expenditures illustrate the amount of work already performed on the project, and exemplify RCWD's financial commitment to the project.

SAMPLE PRE-APPLICATION

3 – PROJECT SCHEDULE

A proposed schedule for the project is shown below. RCWD anticipates having all permits and approvals by the anticipated grant award date in June 2011. As a result, RCWD can begin finalizing designs in July 2011 and begin construction within five months of the contract award. Project construction would be completed by the end of May 2012.



SAMPLE PRE-

4 – WATER SUPPLY COSTS AND BENEFITS

Root Creek Water District will be able to provide an economic analysis of water supply costs and benefits. In 2003, an economic analysis of the project was prepared for a Proposition 13 grant application. This analysis followed Department of Water Resources guidelines and tables, which are similar to the guidelines in the Implementation Grant Proposal Solicitation Package. These analyses will be reviewed and updated based on inflation, minor adjustments to the project design, and the increase in project yield (from 4,200 AF/year to 6,100 AF/year) due to the recent acquisition of the Westside Mutual water supply. The previous analysis estimated a project yield of 4,200 AF/year, a benefit cost ratio of 2.02, and a unit water price of $99/AF. A recent, preliminary financial analysis shows that project will still have a water cost of about $100/AF, however the benefit cost ratio will increase to approximately 2.30.

SAMPLE PRE-APPLICATION

5 – WATER QUALITY BENEFITS

Root Creek Water District will be able to provide an analysis of water quality benefits. These analyses will be based on those presented in the Proposition 13 Grant Application submitted in 2003, with some additional refinements and improvements.

San Joaquin river water will be diverted for the project. This water originates in the Sierra Nevada Mountains and has excellent quality for irrigation or municipal use. Ground water quality in the District is generally adequate for agricultural use, but there are groundwater quality problems in certain areas, including in and near the proposed project. These problems include elevated levels of salinity, chloride, manganese, arsenic, and slime producing organisms.

The project will provide water quality benefits by reducing the recirculation of lower quality groundwater and importing an average of 6,100 AF/year of high quality surface water. Some of the surface water will percolate and mix with the groundwater, thus improving its overall quality. Groundwater quality problems also increase with depth, and the project will help to maintain higher groundwater levels and provide better quality groundwater.

SAMPLE PRE-APPLICATION

6 – FLOOD DAMAGE REDUCTION COSTS

The proposed project will help deliver San Joaquin floodwater to RCWD. The diversions will not reduce flooding in a specific area, but rather they will reduce flood flows along the entire San Joaquin River system. Therefore, quantifying the reduction in flood damage costs from these diversions would not be practical or feasible. Nevertheless, the proposed project will make a real and tangible contribution to flood management on the San Joaquin River.

SAMPLE PRE-APPLICATION

7 – IRWM PROGRAM PREFERENCES

Following is a discussion on how the proposed project meets the IRWMP Program Preferences and California Statewide Priorities.

1. **Include regional projects or programs.** The project has regional benefits with multiple parties benefitting from its implementation. RCWD and neighboring communities of Rolling Hills and Madera Ranchos will directly benefit from the imported surface water and higher groundwater levels. Madera ID and Chowchilla WD will benefit from selling water to RCWD. The entire IRWMP area will benefits from the importation of a new water supply into the region.

2. **Effectively integrate water management programs and projects within a hydrologic boundary identified in the California Water Plan, RWQCB region, or DWR.** The proposed project will offer regional benefits throughout the Madera IRWMP area.

3. **Effectively resolve significant water-related conflicts within or between regions.** The project will help to resolve the most significant water-related conflict in the region – groundwater overdraft.

4. **Contribute to attainment of one or more of the objectives of the CALFED Bay-Delta Program.** The four CALFED Bay-Delta objectives include: Water Quality, Levee Integrity, Water Supply Reliability and Ecosystem Restoration. The project will improve the local groundwater quality and quality of water delivered to farms (see Section 5), reduce the stress on San Joaquin River levees (Section 6), and improve water reliability by importing a new water supply.

5. **Address critical water supply or water quality needs of disadvantaged communities within the region.** The area served by the project is not a disadvantaged community. However, the project has regional benefits, and therefore will indirectly benefit other disadvantaged communities in the IRWMP region. The project will also create job opportunities that may employ individuals from disadvantaged communities.

6. **Effectively integrate water management with land use planning.** The project includes a water supply from the Westside Mutual Water Company that will be used in the future to offset groundwater pumping by new residential developments.

SAMPLE PRE-APPLICATION

7. **SWFM funded projects are not receiving state funding or provide multiple benefits.** The Root Creek Water District is not currently seeking funding for Stormwater Flood Management (SWFM) projects and this Program Preference is therefore not applicable.

Statewide Priorities

1. **Drought Preparedness.** The project will improve drought preparedness by increasing the total water supplies available to RCWD through the acquisition of new water purchase agreements, including a firm water supply from Westside Mutual Water Company. In addition, the project will reduce demands on groundwater thus helping to preserve groundwater reserves for use in droughts.

2. **Use and Reuse Water More Efficiently.** The project will use water more efficiently by capturing floodwater (section 215 water) and surplus water (MID Class 2 water) that may otherwise go unused and flow out of the IRWMP area.

3. **Climate Change Response Actions.** Climate change may result in earlier snowmelts and greater quantities of floodwater and surplus water. This project provides an opportunity to beneficially use those flows. The project will also help to reduce groundwater pumping leading to a reduction in greenhouse emissions.

4. **Expand Environmental Stewardship.** The project will enhance the environment through improvements in the quality of water used in the area. The project will also help reduce greenhouse gas emissions by reducing the need for groundwater pumping.

5. **Practice Integrated Flood Management.** The project will help to decrease flooding on the San Joaquin River by diverting and using floodwaters for irrigation. The project will harness local high flows and covert then into a dependable supply.

6. **Protect Surface Water and Groundwater Quality.** The project will import high quality surface water that will mix with the groundwater and improve its overall quality.

7. **Improve Tribal Water and Natural Resources.** The area directly served by the project does not include any tribal communities or resources. However, the

SAMPLE PRE-APPLICATION

project has regional benefits and therefore will indirectly benefit tribal communities and resources throughout the IRWMP region.

8. **Ensure Equitable Distribution of Benefits.** The landowners directly benefiting from the project will be responsible for its payment, ether through a one-time cash payment, or more likely through long-term assessments applied to their land. This will help to ensure that the primary beneficiaries are paying for the project.

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8 – IRWMP GRANT APPLICATION

Below are discussions on why RCWD believes the project would score well on an IRWMP Implementation Grant application.

Technical and Scientific Documentation

The project is well developed through numerous studies, designs and legal agreements. A list of relevant documents on the project is provided in Section 9 – References. The technical and economic feasibility of the project is well demonstrated, and the District is ready to proceed with final design and construction.

Previous Grant Application

RCWD submitted a Proposition 13 grant application to DWR for the proposed project in 2003. The project was not selected for funding, however, the previous grant application is a significant asset that will help improve the project's chances for funding. DWR provided written comments on the application, and RCWD has addressed most of their comments and concerns. In addition, many of the application sections can be used in the IRWMP grant application after they are reviewed, improved, and updated, making the grant application to the State easier to prepare.

Public Support

The project has widespread support from the public. The 2003 grant application included letters of support from the Madera County Board of Supervisors, Rolling Hills Citizens Association, Madera Irrigation District, Chowchilla Water District, and Madera County Farm Bureau. Letters of support will be sought from these parties, and other stakeholders, for the new grant application.

Resources to Complete Application

RCWD has adequate resources to complete the grant application by the end of December 2010. RCWD's engineer, Provost & Pritchard Consulting Group, has a staff of 130, is familiar with the project and RCWD, and has staff dedicated to work on the grant application. In addition, District staff and legal counsel are thoroughly familiar with the project and can contribute to the application effort.

Implementation Grant Application

RCWD is ready to prepare an Implementation Grant Application. Using previous studies and the previous grant application, many of the application sections are currently complete or in the draft stage as seen in Table 1.

SAMPLE PRE-APPLICATION

Table 1 – IRWMP Application Attachment Checklist

No.	Attachment	Status
1	Authorization and Eligibility Requirements	Draft
2	Adopted Plan and Proof of Formal Adoption	Complete
3	Workplan	Draft
4	Budget	Complete
5	Schedule	Draft-Final
6	Monitoring, Assessment, & Performance Measures	Draft
7	Economic Analysis – Water Supply	Draft
8	Water Quality and Other Expected Benefits	Complete
9	Economic Analysis – Flood Damages	Complete
10	Costs and Benefits Summary	Draft
11	Program Preferences	Draft
12	Disadvantaged Community Assistance	Draft
13	AB1420 Compliance	Not Applicable
14	Consent Form	To be completed

Based on a review of the scoring criteria, RCWD believes that the proposed project will receive a score of 75 to 85 out of 85. This high score is a reflection of the project's readiness to proceed, proven project feasibility, water supply benefits, and the documentation in the previous grant application that can be reused.

SAMPLE PRE-APPLICATION

9 – REFERENCES

*"**Water Exchange Agreement**" (January 2009), Westside Mutual Water, Shafter Wasco Irrigation District and Root Creek Water District.*

*"**Water Supply Agreement between Root Creek Water District and Westside Mutual Water Company, LLC**", (November 2006), Root Creek Water District and Westside Mutual Water Company.*

***"Root Creek In-Lieu Groundwater Recharge and Storage Project – Proposition 13 Groundwater Storage Program Construction Grant Application"** (June 2003), Root Creek Water District.*

***"Root Creek Water District In-Lieu Groundwater Recharge Facilities Feasibility Study"** (April 2003), Provost & Pritchard Engineering Group, Inc.*

***"Root Creek Water District AB303 Report"** (May 2003), Provost & Pritchard Engineering Group, Inc. in conjunction with Kenneth D. Schmidt & Associates.*

***"Hydrogeologic Investigation: Southeastern Madera County"** (October 2001), Kenneth D. Schmidt & Associates in conjunction with Provost & Pritchard Engineering Group, Inc.*

***"Hydrogeologic Investigation: Southeastern Madera County"** (June 1998), Kenneth D. Schmidt & Associates in conjunction with Provost & Pritchard Engineering Group, Inc.*

***"Ground Water Management Plan for Root Creek Water District"** (October 1997), Provost & Pritchard Engineering Group, Inc.*

***"Agreement Between Madera Irrigation District and Root Creek Water District for the Conveyance and Sale of Water"** (March 2002), Madera Irrigation District and Root Creek Water District*

***"Agreement Concerning Agricultural, Municipal and Industrial Water Use within Root Creek Water District"** (December 1999), Madera Irrigation District, Chowchilla Water District, the Friant Water Users Authority and Root Creek Water District.*

*"**Hydrogeologic Investigation – Southeastern Madera County**" (1998, Updated in 2001), Kenneth D. Schmidt and Associates and Provost & Pritchard Engineering Group, Inc.*

SAMPLE PRE-APPLICATION

Appendix H

Grant Programs and Funding Sources

MADERA REGIONAL WATER MANAGEMENT GROUP
INTEGRATED REGIONAL WATER MANAGEMENT PLAN
GRANT PROGRAMS AND FUNDING SOURCES

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
1	Bureau of Land Management	Fish, Wildlife and Plant Conservation Resource Management	Protect, Restore, & Enhance Fish, Wildlife, & Plant Conservation Resources	$500 - $1,400,000		http://www.federalgrantswire.com/fish-wildlife-and-plant-conservation-resource-management.html
2	Bureau of Land Management	Habitat Restoration	Restores Areas on the Land in Need of Attention- Like Abandoned Roads or Erosion Scars			http://www.blm.gov/ca/st/en/fo/hollister/fort_ord/restoration_fo.html
3	Bureau of Land Management	Environmental Quality & Protection Resource Management	Reduce or Remove Pollutants in the Environment for the Protection of Human Health, Water & Air Resources			http://www.federalgrantswire.com/environmental-quality-and-protection-resource-management.html
4	Bureau of Land Management	Rangeland Resource Management	Manage, Develop, & Protect Public Lands & Enhance the Understanding of Rangeland & Watershed Resources	$49,000 Avg. Per Project		http://www.federalgrantswire.com/rangeland-resource-management.html
5	Bureau of Land Management	Recreation Resource Management	Manage and/or Upgrade Recreational Resources & Related Facilities in Lands Administered by the BLM	$33,000 Avg. Per Project		http://www.federalgrantswire.com/recreation-resource-management.html
6	Bureau of Land Management	Secure Rural Schools & Community Self - Determination	Road & Trail Construction, Culvert Replacements for Fish Passage, Stream Channel Enhancement, Watershed Restoration	$83,000 Avg. Per Project		http://www.federalgrantswire.com/secure-rural-schools-and-community-self-determination.html
7	Bureau of Land Management	Wildland Fire & Resource Management	Wildland Fire Management Needs	$30,000 Avg. Per Project		http://www.federalgrantswire.com/wildland-fire-research-and-studies-program.html
8	Bureau of Reclamation	WaterSMART Programs (Water & Energy Efficiency Grants)	Increase Water Conservation & Efficiency	$20 Million / $1 million per project		http://www.usbr.gov/WaterSMART/weeg/index.html
9	California Department of Conservation	California Farmland Conservancy Program	Agricultural Conservation Easements			http://www.conservation.ca.gov/dlrp/cfcp/Pages/Index.aspx
10	California Department of Conservation	Resource Conservation District Assistance Program		Currently Inactive (01/03/2014)		http://www.conservation.ca.gov/dlrp/RCD/Pages/Index.aspx
11	California Department of Conservation	Watershed Coordinator Grants Program	Watershed Improvements & Management			http://www.conservation.ca.gov/dlrp/wp/grants/Pages/wcgp_intro.aspx
12	California Dept. of Fish & Wildlife	Landowner Incentive Program	Habitat Management Plans that Benefit at-Risk Species			http://www.dfg.ca.gov/lands/lip/
13	California Dept. of Fish & Wildlife	Traditional Section 6 Species Recovery Program	Conserve & Recover Federally Threatened & Endangered Species by Focusing on Habitat Restoration			http://www.dfg.ca.gov/wildlife/grants/tradsec6/
14	California Dept. of Fish & Wildlife	Natural Community Conservation Planning Local Assistance Grants	Conservation Planning & Purchases of Vital Habitat for Threatened & Endangered Fish, Wildlife, & Plant Species			http://www.dfg.ca.gov/habcon/nccp/grants.html
15	California Dept. of Parks & Recreation	Land & Water Conservation Fund	Acquisition or Development of Recreation Areas & Facilities	50% Match	Annually	http://www.parks.ca.gov/?page_id=21360
16	California Dept. of Parks & Recreation	Habitat Conservation Fund	Acquisition or Development of Wildlife Corridors & Trails	$2 Million	Annually	http://www.parks.ca.gov/?Page_id=21361
17	California Dept. of Parks & Recreation	Statewide Park Program	Creation of New Parks and Recreation Facilities in Critically Underserved Communities	$368 Million		http://www.parks.ca.gov/?page_id=26025
18	California Dept. of Parks & Recreation	Recreational Trails Program	Recreational Trails & Trails Related	$1.47 Million; Max. Funding is 88% of Project	Annually	http://www.parks.ca.gov/?Page_id=24324
19	California Dept. of Parks & Recreation	Environmental Enhancement & Mitigation Program	Acquisition, Restoration, or Enhancement of Resource Lands	Currently Inactive (01/03/2014)		http://www.resources.ca.gov/eem/
20	California Dept. of Public Health	American Recovery & Reinvestment Act	Infrastructure Development for California's Drinking Water Systems	$20 Million Per Project		http://www.cdph.ca.gov/services/funding/Pages/ARRA.aspx
21	California Dept. of Water Resources	IRWMP Implementation Grant	IRWM Plan process developed water management projects	TBD, 25% Match	Round 3, Summer 2014	http://www.water.ca.gov/irwm/grants/implementation.cfm
22	California Dept. of Water Resources	IRWMP Prop 1E Stormwater Flood Management Grant	Projects designed to manage stormwater runoff to reduce flood damages consistent with IRWMP and the Basin Plan	Up to $30 Million Per Project, 50% Match	Future Round unknown	http://www.water.ca.gov/irwm/grants/stormwaterflood.cfm
23	California Dept. of Water Resources	Local Groundwater Assistance (LGA)	Groundwater studies or carry out groundwater monitoring and management actitivies	Up to $250,000. No Match	Future unknown	http://www.water.ca.gov/lgagrant/
24	California Dept. of Water Resources	Urban Streams Restoration Program	Reduce flooding and erosion & associated property damages; restore, enhance, or protect the natural ecological values of streams; & promote	Less than $1 Million	Spring 2014 PSP	http://www.water.ca.gov/urbanstreams/
25	California Dept. of Water Resources	FloodSAFE	Various programs: Delta Levee, Flood Control Sebventions, Flood Corridor, Flood Emergency Response and Local Levee Assistance	Varies	Varies	http://www.water.ca.gov/floodsafe/grants/

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GRANT PROGRAMS AND FUNDING SOURCES

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
26	California Edison	Corporate Contributions	Environmental			http://www.edison.com/community/contribution_guidelines.asp
27	California Infrastructure Bank	Infrastructure State Revolving Fund Program	Drainage, Water Supply & Flood Control, Environmental Mitigation Measures	$50,000 - $25 Million		http://www.ibank.ca.gov/infrastructure_loans.htm
28	Chuckchansi Tribe	Community Grant Program	Various community projects including water resources related projects	$1 million / year through 2016	Due March 1	http://www.chukchansi.net/communitygrant.html
29	Edison International	Environmental Giving Program	Environmental Sustainability	$2.7 Million		http://www.edison.com/community/programs.asp?id=7873
30	Environmental Protection Agency	Clean Water State Revolving Fund	Water Quality Protection Projects for Wastewater Treatment, Non-Point Source Pollution Control & Watershed Management	$5 Billion	Annually	http://water.epa.gov/grants_funding/cwsrf/cwsrf_index.cfm
31	Environmental Protection Agency	Drinking Water State Revolving Fund	Public Health Protection, Compliance with Drinking Water Standards, & Affordable Access to Drinking Water			http://water.epa.gov/grants_funding/dwsrf/index.cfm
32	Farm Services Agency	Water & Waste Disposal Direct Loans & Grants	Develop Water & Waste Disposal Systems in Rural Areas			http://www.rurdev.usda.gov/UWP-dispdirectloansgrants.htm
33	Farm Services Agency	Water & waste Revolving Fund Grant	Assist Communities with Water & Wastewater Systems			http://www.rurdev.usda.gov/UWP-revolvingfund.html
34	Federal Emergency Management Agency	Flood Mitigation Assistance Programs	Flood Mitigation Plans, & Implement Measures to Reduce Flood Losses	$120 Million		http://www.fema.gov/flood-mitigation-assistance-program
35	National Fish & Wildlife Foundation	Five Star & Urban Waters Restoration Grant Program	Water Quality Issues in Priority Watersheds			http://www.nfwf.org/fivestar/Pages/home.aspx
36	National Fish & Wildlife Foundation	Sierra Nevada Meadow Restoration	Restore & Protect Meadows in the Sierra Nevada			http://www.nfwf.org/sierranevada/Pages/home.aspx
37	National Forest Foundation	Matching Awards Program	Conservation & Restoration Projects	1:1 Match	Annually	http://www.nationalforests.org/conserve/grantprograms/ontheground/map
38	National Forest Foundation	Wilderness Stewardship Challenge	Conservation Projects Benefiting National Forest Wilderness Areas	Match up to $50,000	Annually	http://www.nationalforests.org/conserve/grantprograms/ontheground/wilderness
39	National Forest Foundation	Ski Conservation Fund	Watershed Restoration, Recreation Enhancements, & Forest Projects		Annually	http://www.nationalforests.org/conserve/grantprograms/ontheground/scf
40	National Forest Foundation	Community Capacity & Land Stewardship	Watershed Restoration	$5,000 - $24,000	Annually	http://www.nationalforests.org/conserve/grantprograms/capacitybuilding/ccls
41	National Institute of Food & Agriculture	Foundational Program	Agriculture, Community Development, Natural Resources & Environmental	$82 Million		http://www.csrees.usda.gov/fo/foundationalprogramafri.cfm
42	National Science Foundation	Hydrologic Science	Studying Processes from Rainfall to Runoff to Infiltration & Streamflow	$10 Million	Annually	http://www.nsf.gov/funding/pgm_summ.jsp?pims_id=13684&org=ERE
43	Natural Resources Conservation Service	Conservation of Private Grazing Lands	Grazing Land Management & Conservation of Water	$47 Million for Technical Assistance		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/cpgl/
44	Natural Resources Conservation Service	Conservation Reserve Program	Establishing Conservation Practices	50% of Costs		http://www.fsa.usda.gov/FSA/webapp?area=home&subject=copr&topic=crp
45	Natural Resources Conservation Service	Conservation Stewardship Program (CSP)	Maintain and improve existing conservation systems and adopting additional conservation activities to address resource concerns	$200,000		http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/csp/?cid=stelprdb1242683
46	Natural Resources Conservation Service	Conservation Technical Assistance	Opportunities, Concerns, & Problems Related to Natural Resource Projects	Technical Assistance		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/technical/
47	Natural Resources Conservation Service	Environmental Quality Incentives Program (EQIP)	Establishing Conservation Practices that address various Natural Resource Concerns	Varies		http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/?cid=nrcs144p2_063939
48	Natural Resources Conservation Service	Wildlife Habitat Incentive Program (Now folded into EQIP)	Establish & Improve Fish & Wildlife Habitat	Technical Assistance & up to 75% Cost-Share Assistance		http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/whip/?cid=nrcs143_008423
49	Natural Resources Conservation Service	Watershed Protection & Flood Prevention Program	Watershed Planning			http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/wfpo/
50	Natural Resources Conservation Service	Emergency Watershed Protection Program	Projects that Address Watershed Impairments	75% of Construction Cost		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/landscape/ewpp/

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GRANT PROGRAMS AND FUNDING SOURCES

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
51	Natural Resources Conservation Service	Farm & Ranch Lands Protection Program (Now foded into ACEP)	Acquisition of Conservation Easements or Other Interests in Land from Landowners	50% of Fair Market Easement Value		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/farmranch/
52	Natural Resources Conservation Service	Grassland Reserve Program (Now folded into ACEP)	Protection of Grassland, Enhancement of Plant & Animal Biodiversity, & Grazing Operations	Currently Inactive (01/03/2014)		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/grassland/
53	Natural Resources Conservation Service	Healthy Forests Reserve Program	Restoring & Protecting Forests			http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/forests/
54	Natural Resources Conservation Service	Wetlands Reserve Program (Now folded into ACEP)	Wetland Improvements	Currently Inactive (01/03/2014)		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/easements/wetlands/
55	Natural Resources Conservation Service	Agriculture Conservation Easement Program (ACEP)	Wetland Reserve and Agriculture Land Easements			http://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/easements/acep/?cid=stelprdb1242695
56	Natural Resources Conservation Service	Conservation Security Program	Conservation & Improvement of Water	Currently Inactive (01/03/2014)		http://www.nrcs.usda.gov/wps/portal/nrcs/main/national/programs/alphabetical/csp/
57	Pacific Gas & Electric	Nature Restoration Trust	Restoration Projects that Benefit Wildlife	$30,000/ Request		http://www.nfwf.org/nrt/Pages/home.aspx
58	Pacific Gas & Electric	Community Investment Program	Projects Vary			http://www.pge.com/en/about/community/contributions/index.page
59	Regional Water Quality Control Boards	Supplemental Environmental Projects Regional Water Quality Improvement Projects Program	Various Environmental Projects			http://www.waterboards.ca.gov/rwqcb5/water_issues/enforcement/index.shtml
60	Resources Legacy Fund Foundation	California Water Foundation	Improving Water Management			http://www.californiawaterfoundation.org/page.php?id=32&menuid=94
61	Rotary Club of Auberry Intermountain	Charitable Foundation	Projects That Support Broad Goals of an Organization and Groups			http://auberryrotary.org/requests.php
62	Sierra Nevada Conservancy	Prop 84 Grant Program	Forest Management to increase Forest resilience , Enhance Water Supply & Quality	$350,000		http://www.sierranevada.ca.gov/other-assistance
63	Sloan Foundation		Various-grants for original research and broad-based education related to science, technology, and economic performance		Year Round	http://www.sloan.org/apply-for-grants/grant-proposals/?L=ilbfnjfrwnqn
64	State Water Resources Control Board	Non-Point Source Grant Program	Water Quality Problems in Surface & Ground Water Resulting from NPS Pollution	$40 Million	Annually	http://www.waterboards.ca.gov/water_issues/programs/nps/grant_program.shtml
65	US Bureau of Indian Affairs	Numerous	Water and environmental resources projects on tribal reservations	Varies		http://www.federalgrants.com/Bureau-of-Indian-Affairs-Grant-23918.html
66	US Fish & Wildlife Service	North American Wetlands Conservation Act	Wetlands Conservation Projects	$75,000		http://www.fws.gov/birdhabitat/Grants/NAWCA/index.shtm
67	US Fish & Wildlife Service	Wildlife Restoration Grant Program	Habitat Management, Species Restoration, & Land Acquisition			http://www.fws.gov/southwest/federal_assistance/wr.html
68	US Fish & Wildlife Service	Sport Fish Restoration Grant Program	Protect, Manage, & Restore Aquatic Habitats			http://www.fws.gov/midwest/wsfr/sfr.htm
69	US Fish & Wildlife Service	Clean Vessel Act Grant Program	Construction, Renovation, Operation, & Maintenance of Pump Out Stations & Waste Reception Facilities for Recreational Boaters			http://www.fws.gov/southwest/federal_assistance/cva.html
70	US Fish & Wildlife Service	State Wildlife Grant Program	Develop & Implement Programs that Benefit Wildlife & their Habitats			http://wsfrprograms.fws.gov/Subpages/GrantPrograms/SWG/SWG.htm
71	US Fish & Wildlife Service	Multistate Grant Program	Wildlife & Sport Fish Restoration	$6 Million	Annually	http://wsfrprograms.fws.gov/Subpages/GrantPrograms/MultiState/MS.htm
72	US Fish & Wildlife Service	Neotropical Migratory Birds Conservation Act	Conservation of Habitat for Hundreds of Neotropical Migratory Birds			http://www.fws.gov/birdhabitat/Grants/NMBCA/index.shtm
73	US Forest Service	Woody Biomass Utilization	Removal of Hazardous woody Biomass	Currently Inactive (01/03/2014)		http://www.fs.usda.gov/detail/r1/communityforests/?cid=stelprdb5339807
74	US Forest Service	Collaborative Forest Landscape Restoration Program	Achieve Ecological and Watershed Health	$40,000,000	Annually	http://www.fs.fed.us/restoration/CFLRP/
75	US Forest Service	Legacy Roads & Trails Restoration Program	Forest Service Roads that may be Contributing to Water Quality Problems in Streams & Water Bodies			http://www.fs.fed.us/restoration/Legacy_Roads_and_Trails/

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GRANT PROGRAMS AND FUNDING SOURCES

No.	Agency/Organization	Grant Program	Projects Funded	Available Funding	Recurrence	Website
76	Wildlife Conservation Board, State of California	Prop. 40	Wildlife Corridors & Landscapes, Public Access, Land Management	$89,000,000		https://www.wcb.ca.gov/FundingSources/Prop40.aspx
77	Wildlife Conservation Board, State of California	Prop. 50	Protect & Improve Regional Water Quality	$140,000,000	Continuously	https://www.wcb.ca.gov/FundingSources/Prop50/WaterCodeandFundingUses.aspx
78	Wildlife Conservation Board, State of California	Prop. 84	Water Quality & Supply, Flood Control	$823,855		http://bondaccountability.resources.ca.gov/p84.aspx
79	Wildlife Conservation Board, State of California	Prop. 1E	Flood Protection	$65,646		http://bondaccountability.resources.ca.gov/p1e.aspx

Appendix I

Regional Water Management Group Brochure

IMPORTANT PARTNERSHIPS

RWMG MEMBERS

- Chowchilla Red Top Resource Conservation District
- Chowchilla Water District
- City of Chowchilla
- City of Madera
- Coarsegold Resource Conservation District
- Gravelly Ford Water District
- Madera County
- Madera County Special Districts
- Madera Irrigation District
- Madera Valley Water Company
- Madera Water District
- North Fork – Mono Rancheria
- Root Creek Water District
- South East Madera County United (SEMCU)
- Yosemite/Sequoia Resource Conservation and Development Council
- DAC Groups:
  - Self-Help Enterprises
  - Fairmead Community & Friends

Upper Region

Lower Region

For meeting schedule, application packet, copy of IRWMP, MOU/Bylaws, and other information—visit our website at :

http://www.madera-id.org/index.php/rwmg

IRWM

Integrated Regional Water Management (IRWM) is a collaborative effort to manage all aspects of water resources in a region. IRWM crosses jurisdictional, watershed, and political boundaries; involves multiple agencies, stakeholders, individuals, and groups; and attempts to address the issues and differing perspectives of all the entities involved through mutually beneficial solutions.

Reaching both the Foothills and the Valley in the Center of California

Madera RWMG

REGIONAL WATER MANAGEMENT GROUP

Madera Regional Water Management Group
Lead Agency - Madera Irrigation District
Chairperson - Carl Janzen
cjanzen@madera-id.org
Phone: 559-479–1070
Administrative Assistant
Jeannie Habben
Phone 559-642-3263
E-mail: info@cfwatershed.org

MADERA IRWMP
RWMG
Integrated Regional Water Management

Madera Regional Water Management Group

Mission Statement

The mission of the Regional Water Management Group (RWMG) will facilitate future coordination, collaboration, and communication for comprehensive management of water resources in the Madera Region. Through the mutual understanding among entities in the Madera Region regarding their joint efforts toward Integrated Regional Water Management we will ensure governance, development, planning, funding, and implementation to make certain that optimal and affordable water supplies & facilities are available now and in the future to sustain this region and its responsible growth.

February 2010

INTEGRATED REGIONAL WATER MANAGEMENT PLANNING

PLAN UPDATE IS COMPLETE

The idea of integrated regional water management first surfaced in the state of California in Proposition 50, the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002, Water Code Section 79500, et seq., which was passed by California voters in the November 2002 general election. In response to this substantial new challenge and opportunity from the State, in 2006 Madera County solicited a planning grant to prepare the region's initial Integrated Regional Water Management Plan (IRWMP). Though Madera County was the lead agency for the original IRWMP, many stakeholders from throughout the County were involved in the process of writing the IRWMP which was accepted in 2008 and adopted in 2009. The original Plan was approved by DWR for meeting Prop 50 standards and a new group was formed to implement the projects and the ideas of the Plan. This group, the Madera Regional Water Management Group (RWMG) was created by a Formation Committee who followed parameters set by the State. The RWMG grew and evolved to include a more diverse group of stakeholders who formally organized under a Memorandum of Understanding in 2010. Now to move ahead; RWMG has now completed four implementation projects, two Facilitation Support contracts, and updating the Plan to the new Prop 84 Standards.

By Updating the IRWM Plan they completed a new list of projects, a new section on Disadvantaged Communities, and a new section on Climate Change. They also created processes for ranking goals and objectives, a project review process, and polished up their - already in place - governance process.

MILESTONES

- 2006 - the County of Madera (MC) began the process of developing an Integrated Regional Water Management Plan (IRWMP) for managing and protecting its water resources.
- April 14, 2008 - MC Board of Supervisors accepted the IRWMP.
- November 2008 - Advisory committees formed to assist in deliberation of issues addressed in IRWMP or regional water issues.
- November 24, 2009 - MC Board of Supervisors passed a resolution approving the IRWMP to officially adopt the Plan
- January 2, 2010 - RWMG was officially formed. Since the formation we have created a standing MOU for all members along with the Mission and Vision statement and other official documents for the formation.
- October 2010 - Madera RWMG applied for the Planning Grant with DWR and in January 2011 the Implementation Grant was submitted also to DWR.
- May 23, 2011 - Madera Region was recommended for Proposition 84 Implementation funding in the amount of $9,413,947.00.
- June 6, 2011 - Madera Region was recommended for full acceptance as a region during the Region Acceptance Process.
- February 2, 2012 - facilitation task orders for Madera was approved to start Facilitation Support Services with a contracted Facilitator.
- June 5, 2012 - Madera RWMG signed contract for Prop 84 Implementation funding to begin four projects.
- November 29, 2012 - Madera RWMG received final notice of $271,438 award to update their IRWM Plan
- January 2013 - Finalized creation and writing of New Members Packet and application for DisAdvantaged Communities (DAC)
- May 8, 2013 - Received second Facilitation Support Contract
- September 2014 - Completed the Update of the IRWM Plan to Prop 84 Standards

ROUND I PROJECTS

□2011/12: Received $9,413,947 Implementation Grant. Used to fund:

Cottonwood, Berenda, & Dry Creek Arundo & Sediment Removal

Ash Slough Arundo & Sediment Removal

Sierra National Forest Fuel Reduction Program

Root Creek Recharge Project

MOUs with our Adjacent IRWM Regions:

- Southern Sierra IRWM Group
- Yosemite/Mariposa Regional Water Advisory Council
- Merced Integrated Regional Water Management Group
- Inyo-Mono IRWMP—Devil's Postpile National Monument
- Kings River IRWM
- Westside-San Joaquin RWMG (pending signature)

Appendix J

Public Notices

NOTICE OF INTENTION TO ADOPT UPDATED
MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN that the Madera Regional Water Management Group (RWMG) plans to adopt an update to their Integrated Regional Water Management Plan (IRWMP), which was originally prepared in 2008. The updated IRWMP was prepared in accordance with the State of California Department of Water Resources IRWMP Guidelines. The IRWMP includes groundwater, surface water, and flood control management objectives and a listing of planned strategies to accomplish the objectives of the IRWMP throughout Madera County. Additional information on the RWMG and a draft copy of the updated IRWMP can be found at http://madera-id.org/index.php/rwmg. A copy of the IRWMP is also available at the office of the Madera County Resource Management Agency Building, 2037 W. Cleveland Avenue, Madera, California for public review. Landowners and other interested parties who wish to provide comments on the draft IRWMP may submit them in writing through August 15, 2014 to Jeannie Habben at Chowchilla/Fresno Watershed, Post Office Box 1061, Coarsegold, CA 93614, 559-642-3263, or info@cfwatershed.org. A regularly scheduled RWMG will be held at 1:30 pm on September 8, 2014 at the Oakhurst Library Conference Room, 49044 Civic Circle Drive, Oakhurst, California to adopt the updated IRWMP. This Notice has been prepared in accordance with Government Code 6066 requirements per the IRWMP Guidelines.

Proof of Publication

(2015.5 C.C.P.)

NOTICE OF INTENTION TO UPDATE MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

STATE OF CALIFORNIA)
) ss.
County of Madera)

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years, and not a party to or interested in the above entitled matter. I am the principal clerk of the printer of the Madera Tribune, a newspaper of general circulation, published in the City of Madera, County of Madera, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court of the County of Madera, State of California, under the date of November 9, 1966, Case Number 4875 that the notice, of which the annexed is a printed copy, has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to wit:

DECEMBER 31, 2013, JANUARY 7, 2014

NOTICE OF INTENTION TO UPDATE THE MADERA INTEGRATED REGIONAL WATER MANAGEMENT PLAN

NOTICE IS HEREBY GIVEN that the Madera Regional Water Management Group (RWMG) plans to update the 2008 Madera Integrated Regional Water Management Plan (IRWMP). The updated IRWMP will be prepared in accordance with the State of California Department of Water Resources IRWMP Guidelines. The IRWMP includes groundwater, surface water, and storm water management objectives and a listing of planned strategies to accomplish the objectives of the IRWMP throughout Madera County. Additional information on the RWMG can be found athttp://madera-id.org/index.php/rwmg. Landowners and other interested parties who wish to participate in updating the IRWMP may do so by contacting Jeannie Habben at 559-642-3263 or info@cfwatershed.org, or attending the next RWMG meeting at the Chowchilla City Hall, Training Room, 130 S. Second Street, Chowchilla at 1:30 pm on January 13, 2014. This Notice has been prepared in accordance with Government Code 6066 requirements.
No. 758 - Dec. 31, 2013, Jan. 7, 2014

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Ellen Branch

Signature

Date: January 7, 2014

SIERRA STAR
Bridging the mountain communities together since 1957
57, No. 26 — Oakhurst
Thursday, April 24, 2014

Water planning

Dear Editor,

It is important to have a say in the planning of our water. The Madera Regional Water Management Group is currently update this area's water management plan. The Madera Regional Water Management Group is a group of water agencies, organizations, and other interested parties that meet monthly to discuss regional water management issues, projects, and opportunities for funding new projects.

The group successfully secured $9.4 million for water resources projects in Madera County in 2011 and an additional $271 thousand to update the Integrated Regional Water Management Plan (IRWMP) in 2013.

The group is currently updating this IRWMP, which was originally prepared in 2007. The Plan will address surface water, groundwater and flood control issues in Madera County, and include strategies to accomplish water management goals.

The updated Plan will also allow the group to remain eligible for certain State grant programs. Landowners, agencies, organizations and other interested parties who wish to participate in updating the IRWMP may do so by contacting me at (559) 642-3263 or info@cfwatershed.org, or attending the next Regional Water Management Group meeting. Meeting times and locations can be found at madera-id.org/index.php/rwmg.

Jeannie Habben,
Oakhurst

Sierra News ONLINE

McGoldrick & McGoldrick
Attorneys at Law
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Regional Water Management Plan Updated

Rate this item (0 votes)

Submitted by Jeannie Habben

It is important to have a say in the planning of our water. The Madera Regional Water Management Group is currently updating this area's water management plan.

The Madera Regional Water Management Group is a group of water agencies, organizations, and other interested parties that meet monthly to discuss regional water management issues, projects, and opportunities for funding new projects. The group successfully secured $9.4 million for water resources projects in Madera County in 2011 and an additional $271,000 to update the Integrated Regional Water Management Plan (IRWMP) in 2013.

The group is currently updating this IRWMP, which was originally prepared in 2007. The Plan will address surface water, groundwater and flood control issues in Madera County, and include strategies to accomplish water management goals. The updated Plan will also allow the group to remain eligible for certain State grant programs.

Landowners, agencies, organizations and other interested parties who wish to participate in updating the IRWMP may do so by contacting Jeannie Habben at 559-642-3263 or info@cfwatershed.org , or by attending the next Regional Water Management Group meeting. Meeting times and locations can be found at http://madera-id.org/index.php/rwmg.

Remember to be Green Not Mean!

Jeannie Habben

Central Sierra Watershed Committee

Madera Regional Water Management Group

Chowchilla/Fresno Rivers Watershed

Phone: 559-642-3263

FAX: 559-658-7170

info@cfwatershed.org

Read 431 times

Last modified on Tuesday, 25 March 2014 15:40

Appendix K

Letters of Agreement with Neighboring IRWMPs

May 10, 2010

State of California
Department of Water Resources
Division of Planning and Local Assistance
Attn. Ralph Svetich
Post Office Box 942836
Sacramento, CA 94236-0001

Dear Mr. Svetich:

Integrated Regional Water Management -
Letter of Agreement on Regions Common Shared Areas

The Madera and Southern Sierra Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement, have established a common shared area. This Letter of Agreement establishes that the Madera and Southern Sierra RWMGs accept this area for purposes of defining their respective Integrated Regional Water Management Plan (IRWMP) regions, as set forth in the Department of Water Resources' (DWR) 2009 *Final IRWM Region Acceptance Process Guidelines* (RAP Guidelines).

The shared area between the Southern Sierra RWMG and the Madera RWMG will be the subwatershed area upstream of Mammoth Pool Reservoir and north of the southern Madera County Line as showm on Attachment1. The parties will work to maintain communication and collaboration on a variety of watershed-based issues. In accordance with the RAP Guidelines, this area takes into account the water management issues of the two regions, including water quality and supply, environmental stewardship, flood management and drought preparedness, as well as stakeholder concerns and water infrastructure.

The Madera and Southern Sierra RWMGs have both identified water management issues and objectives that are applicable to the entire San Joaquin River watershed. Subsequently, the Madera and Southern Sierra RWMGs agree to collaborate on water management issues related to the entire San Joaquin River watershed, including, but not limited to the following mutually identified items:

1. Protection of water quality, including headwater protection;
2. Control and/or removal of invasive species;
3. Riparian habitat restoration; and
4. Post-fire restoration
5. The relationship between land use and water quality and quantity

Note: A formal process for collaboration will be defined and agreed to in a second letter agreement to be established once both RWMGs have adopted their respective long-term governance structures. Until such time, the Madera and Southern Sierra RWMGs agree to continue to actively collaborate in accordance with the existing governance procedures of both RWMGs.

On behalf of the Madera Regional Water Management Group:

M&R Neves, YSPUC

M. R. Neves

Lead Agency: YSPUC
Contact: Michael Neves
Phone number: (559) 658-7466

On behalf of the Southern Sierra Regional Water Management Group:

Lead Agency: Sequoia Riverlands Trust
Contact: Bobby Kamansky, Project Manager
Phone number: (559) 287-3311

cc: Tracie Billington, Department of Water Resources
Jim Lin, Department of Water Resources

INTEGRATED REGIONAL WATER MANAGEMENT

Merced and Madera Regions

Letter of Agreement

For

Regions Common Boundary

and

Overall Cooperation and Collaboration

The Merced and Madera Integrated Water Management Regions (IWMR), through collaboration and mutual agreement, have established a common boundary line. This Letter of Agreement establishes that the Madera and Merced IWRMs accept this common boundary line for purposes of defining their respective Integrated Regional Water Management Plan (IRWMP) regions, as set forth in the Department of Water Resources' (DWR) 2009 *Final IRWM Region Acceptance Process Guidelines* (RAP Guidelines). The IWMRs also agree to cooperate and collaborate on goals common to the San Joaquin River Watershed.

The shared boundary line between the Merced and the Madera regions will begin at the easterly boundary of Merced Groundwater Basin as identified in the DWR Bulletin 118, and continues westerly along Chowchilla River to its intersection with Madera County Boundary line, where it departs along said county line to its intersection with the San Joaquin River, as shown on Attachment 1. The common boundary line is intended to eliminate any gaps between the two regions. The parties will work to maintain communication and collaboration on a variety of watershed-based issues.

The Madera and Merced IWMRs are both located with the San Joaquin River Watershed and certain water management issues and objectives are applicable to the entire San Joaquin River watershed. Subsequently, the Madera and Merced IWMRs agree to collaborate on such water management issues, including, but not limited to the following mutually identified items:

1. Protection of water quality, including headwater protection;
2. Control and/or removal of invasive species;
3. Riparian habitat restoration; and
4. Post-fire restoration
5. The relationship between land use and water quality and quantity

A formal process for collaboration will be defined and agreed to in a second letter agreement to be established once both IWMRs have adopted their respective long-term governance structures. Until such time, the Madera and Merced agree to continue to actively collaborate in accordance with the existing governance procedures of both RWMGs.

On behalf of the Madera Regional Water Management Plan:

Carl Janzen 4-11-11

Lead Agency:
Contact: Carl Janzen
Phone number: (559) 479-1070

On behalf of the Merced Regional Water Management Plan:

H. Eltal 4-12-11

Lead Agency: Merced Irrigation District
Contact: Hicham Eltal
Phone number (209) 722-5761

cc: Michelle Dooley, Department of Water Resources
Tracie Billington, Department of Water Resources
Jim Lin, Department of Water Resources

Integrated Regional Water Management -
Letter of Agreement on Coordination and Communication Between Regions

The Madera and Yosemite-Mariposa Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement have established an agreement on coordination and communication between their regions. This Letter of Agreement establishes the procedures and intentions regarding such coordination and communication.

Intent: The Yosemite-Mariposa and Madera regions share a common border and portions of the upper watersheds of the Chowchilla, Fresno and Merced Rivers. The two regions, represented by their respective Regional Water Management Groups, will work to maintain coordination and communication on a variety of common water and watershed-based issues.

Procedure: The Yosemite-Mariposa RWMG will be developing its Integrated Regional Water Management (IRWM) Plan over the next several years and the Madera RWMG will be updating its existing plan to meet new State requirements during the same time period. In both cases, a revised governance structure is likely to result from the Plan development. The two RWMGs agree to include a formal procedure for coordination and communication between their regions as part of their revised governance structures. Until such time, the Yosemite-Mariposa and the Madera RWMGs agree to actively coordinate and communicate in accordance with the existing procedures of both RWMGs

On behalf of the Madera Regional Water Management Group:

Carl Janzen

Lead Agency: Madera Regional Water Management Group

Contact: Carl Janzen or Jeannie Habben

Phone Number: 559-673-3514 or 559-642-3263

10/10/11

On behalf of the Yosemite-Mariposa Regional Water Management Group:

Lead Agency: MARIPOSA COUNTY RESOURCE CONSERVATION DISTRICT

Contact: GLENN FRANKLIN OR PAT GARCIA

Phone Number: 209-966-3431 - SEPT. 22, 2011

Integrated Regional Water Management -
Letter of Agreement on Communication Between Regions

The Madera and Kings Basin Regional Water Management Groups (RWMG), through a process of open discussion, collaboration and mutual agreement have established an agreement on communication between their regions. This Letter of Agreement establishes the procedures and intentions regarding such communication.

Intent: The Kings Basin and Madera regions share a common border along the Fresno and Madera County line. The two regions, represented by their respective RWMGs, will work to maintain communication on a variety of common water and watershed-based issues.

Procedure: The Kings Basin and Madera RWMGs will be updating their existing Integrated Regional Water Management Plans (IRWMPs) to meet new State requirements over the course of the next several years. As a task to update its IRWMP, the Kings Basin RWMG will add language which describes the nature of its cooperative and collaborative relationship with the Madera RWMG. In the case of Madera RWMG, a revised governance structure is likely to result from its IRWMP update. Madera RWMG will include a formal procedure for communication with Kings Basin RWMG as part of their revised governance structure, or, will describe the nature of its cooperative and collaborative relationship with the Kings Basin RWMG within its updated IRWMP. Until such time, the Kings Basin and the Madera RWMGs agree to actively communicate in accordance with the existing procedures of both RWMGs

On behalf of the Madera Regional Water Management Group:

Carl Janzen

Lead Agency: Madera Irrigation District

Contact: Carl Janzen

Phone Number: 559-673-3514

On behalf of the Kings Basin Regional Water Management Group:

David Orth

Lead Agency: Upper Kings Basin IRWM Authority

Contact: David Orth, Secretary/Treasurer

Phone Number: 559-237-5567

INYO-MONO INTEGRATED REGIONAL WATER MANAGEMENT PLANNING PROJECT

TO: Mr. Svetich

State of California
Department of Water Resources
Division of Planning and Local Assistance

FROM: Dr. Mark Drew, Project Manager, Inyo-Mono IRWMP Launch Project

SUBJECT: Integrated Regional Water Management-Letter of Agreement on Devils Postpile National Monument and Mammoth Mountain Ski Area

DATE: 4/24/2009

CC: Tracie Billington, Department of Water Resources
Jim Lin, Department of Water Resources

Dear Mr. Svetich:

This letter addresses the shared interest among the Inyo-Mono, South Sierra, and Madera IRWMPs in the Devils Postpile National Monument and Mammoth Mountain Ski Area.

Devils Postpile National Monument is located near the headwaters of the Upper Middle Fork of the San Joaquin in Madera County, and can only be accessed by road from the Town of Mammoth Lakes in Mono County CA. Through the discussions among the representatives of the Madera, Southern Sierra, and Inyo-Mono IRWMPs, and Devils Postpile, there is consensus that it is important to include Devils Postpile in these IRWMPs and include each other in discussions that affect this shared area of interest.

Mammoth Mountain Ski Area operates under a Special Use Permit administered by the Inyo National Forest. The permit area encompasses 3500 acres, covers both Madera and Mono Counties, and is split by two distinct watersheds/aquifers. The majority of the permit area is covered by the South Lahontan Watershed and its two drainages: Dry Creek, which flows northeast into Mono County, and Mammoth Creek, which flows southeast into Mono County. The 535 acres of the permit area in Madera County are in the North Fork of the San Joaquin Watershed flowing west from the top of Mammoth Mountain towards Reds Meadow and Devils Postpile National Monument.

The representatives of these five entities agree to communicate and collaborate regarding water-related projects in these shared areas of interest in line with the goals of the IRWM program.

Sincerely,

Mark Drew, Inyo-Mono IRWMP Launch Project Manager
Lead Agency: California Trout
Contact: Dr. Mark Drew, (760) 924-1008

United States Department of the Interior

NATIONAL PARK SERVICE
Devils Postpile National Monument
P. O. Box 3999
Mammoth Lakes, California 93546
760-934-2289

L317

March 9, 2009

Norman Shopay
Department of Water Resources
PO Box 942836
Sacramento, CA 94236

Subject : Devils Postpile National Monument within Madera, Southern Sierra, and Mono/Inyo IRWMP

Dear Mr. Shopay,

Thank you for the opportunity for inclusion of Devils Postpile (DEPO) into the Integrated Regional Management Groups process that is underway within California. The purpose of this letter is to inform Dept of Water Resources of an agreement between Madera, Southern Sierra, and Mono/Inyo IRWMPs to identity this as an area of shared interest and overlapping boundaries, and to request approval of this agreement to help facilitate the regional acceptance process.

Devils Postpile National Monument is located near the headwaters of the Upper Middle Fork of the San Joaquin in Madera County, and can only be accessed by road from the Town of Mammoth Lakes in Mono County CA. Devils Postpile is at the core of the glaciated river valley with abundant wetlands and wildlife, and as a National Park Service unit is a destination visited by many people that brings satisfaction to them and revenue to the local gateway communities in Mono County. The Monument which is along the Upper Middle Fork of the San Joaquin in Madera County is interconnected to Mono County by the shared groundwater aquifer on Mammoth Mountain, migratory corridors for wildlife and shared biodiversity, and the ecotourism benefits to the gateway communities. By maintaining a healthy watershed, biodiversity and migratory corridors will be preserved, while there is a clean and sustainable water supply for downstream users. Additionally, visitors and gateway communities will benefit from the recreational and ecotourism benefits, and an intact watershed will reduce risk of catastrophic fires and eroded slopes that could cause flooding and siltation and have a negative impact on gateway communities sustainable tourism economy and downstream users. Another important aspect of insuring the watershed's integrity, is maintaining the resilience of the watershed and the ability to adapt to climate change scenarios that may significantly impact water resources.

IRWMPs share the goals of understanding the watershed resources, and making sound decisions. Through the discussions among the representatives of the Madera, Southern Sierra, and Inyo/Mono IRWMP, and DEPO, there is consensus that it is important to include DEPO in these IRWMPS and include each other in discussions that affect this shared area of interest. Thank you again for your consideration, and if any further information can be provided, please contact me.

Sincerely,
/s/ Deanna M. Dulen
Superintendent

Appendix L

Comments on Draft Integrated Regional Water Management Plan

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Executive Summary

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
1	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that a simplified chart is made available that illustrates what the overall surface/groundwater water budget is for the Madera County IRWM area. The information is in various parts of the plan. However, it has to be pieced together to gain a general idea.	The IRWMP has been modified to state that a detailed water budget for Madera County is not available, but is critically needed and a high priority for the Region. Some components of a water budget were recently calculated for the 2014 Draft Madera Regional Groundwater Management Plan (GMP), and some of that data is summarized in the IRWMP. Discussions were added on how the work for the GMP only included certain portions of the Valley and no work in the foothills or mountains, and that data was lacking to prepare a thorough water budget, so more monitoring and analyses will be needed in the future.
2	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that an estimate of remaining groundwater supply is made as a starting point for a finite resource that could be depleted and economically no longer available.	The IRWMP has been modified to explain that estimating the available groundwater resources is not possible with current data. The depth to saline groundwater has not been estimated on a regional scale since 1973 when USGS performed a study. This study, conducted by R.W. Page, is referenced in the IRWMP. The depth to saline water varies throughout the County. Other constituents, such as arsenic, also impact the depth to usable water and a detailed delineation of the water quality is not available in all areas. Some other factors, such as the economics of drilling and operating deep wells, also impact the available groundwater supply. A spatial evaluation of total groundwater supplies is needed and has been added as a goal for the Region.
3	Steve Haze, Yosemite Sequoia RC & DC	ES	ES	I would recommend that the ratio of surface to groundwater used annually is illustrated with a simplified chart – with the amount and percentage.	Complete data for the County is not available. Some data is provided but it only covers part of the County. A comparison of water uses is not highlighted because it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or would be very small, without the agricultural industry. A large percentage of the water is also used for environmental flows.
4	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-2	Region Description: "… Region's experience with land subsidence due to (add) unsustainable and significant groundwater pumping."	Comment addressed
5	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-3	I would suggest that the Evapotranspiration Zones are briefly mentioned as a part of the descriptions: http://www.cimis.water.ca.gov/App_Themes/images/etozonemap.jpg This can be very helpful to understanding to what extent this drives the demand for water	Reference was added to the suggested website and a discussion provided on how evapotranspiration rates in the Valley portion of Madera County are higher than the Statewide average, thus leading to large water demands. The map was not added to the report since it contains a lot of information in small print and is difficult to read in a report sized page.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Executive Summary

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
6	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-3	Paragraph for water supplies mentions 2012-2014. However, weren't 2009 & 2010 below average as well? Thus, isn't 5 out of 6 years with below average precipitation?	According to an index for the San Joaquin Valley 2009 was below normal but 2010 was slightly above normal
7	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-4	I would suggest that the California Water Plan Update 2013 (Bulletin 160) be referenced side by side with Bulletin 118, 2003. Beginning with CWP 2013, groundwater information is now being continually updated for regional reports and a separate reference volume on groundwater will be available as well. Bulletin 118 has not been update for 11 years – version B160 is updated approximately every 5 years.	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
8	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-4	24K acre ft - domestic versus 1M acre ft agriculture water demand should be noted as 2.5% and 97.5% respectively (if I did my math correctly!).	Complete data for the County is not available. The data referenced only covers part of the County. This data is provided in the IRWMP, but not emphasized since it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or be very small, without the agricultural industry. A large percentage of the waters is also used for environmental flows.
9	Chowchilla Water District	ES	ES-4	ES-4 concerning Land Subsidence. There needs to be an acknowledgement a major reason for the recent land subsidence is the huge amount to surface water lost to the River Restoration Program, thus requiring farmers to use deep wells.	Comment addressed as suggested in the Executive Summary and Section 3.13 – Land Subsidence
10	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-6	Thought it was very good that Drought Planning is noted as an additional strategy	Comment noted.
11	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-7	Data Management – would it include identification of all known infrastructure for water resource management?	Updated. This was added as a data management goal and addressed in the Data Management Chapter and executive summary.
12	Steve Haze, Yosemite Sequoia RC & DC	ES	ES-9	Stakeholder Involvement – Last paragraph include Tribal Governments?	Tribal Governments added to the goals of future outreach efforts

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Executive Summary

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
13	Chowchilla Water District	ES	ES-10	ES 10-11 concerning climate change. There needs to be an acknowledgement that the climate warming data shows that the goal of reviving self-sustaining salmon runs on the San Joaquin River will not work. We should not ignore the obvious, especially when the surface water lost is so critical to the success of the IRWMP.	In the Climate Change chapter, reference added to the 2007 Natural Resources Defense Council document entitled "*In Hot Water – Water Management Strategies to Weather the Effects of Global Warming*". The following highlights from the document were added to the IRWMP: 1. Higher temperatures (from climate change) will decrease salmon and other cold water fish habitat. According to studies by the Intergovernmental Panel on Climate Change, up to 38 percent of locations currently suitable for cold-water fish could become too warm to provide habitat by 2090. 2. As water temperatures rise, the amount of dissolved oxygen (DO) in water drops. On the Lower San Joaquin River, reduced DO has caused fish kills and created temporary seasonal barriers to salmon migration 3. Adequate flows are essential to sustain aquatic ecosystems since higher flows and deeper water can reduce water temperatures. But non flow actions such as removing migration barriers, improving water quality, and restoring habitat can significantly reduce the need for additional flows.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 1 - Introduction

No.	Comment Received By	Chapter	Section/Page	Comments	Draft Response
14	Chowchilla Water District	1	1-1	1-1 & 1-2. Again, we need to emphasize in the Background the detrimental effect of the River Restoration on surface water supplies.	Statement added on the long-term impacts the River Restoration will have on surface water supplies and groundwater overdraft.
15	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	If overall average water demand is 1.09M acre ft/yr – and the average surface water supply is 347K/yr (ref: Table 3.3) – then this implies that groundwater is used to make up the difference – or approximately 742K acre ft/yr (ref: Table 3.2). Is this a correct assumption – and if so, how does the 250K overdraft fit into that assumption?	A brief discussion on water budget was added, and these values are presented in several tables. The reader is cautioned that the data only cover a portion of the Valley and more detailed monitoring and analysis are needed to develop an accurate water budget.
16	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	Does it make sense to note that the average storage capability is based upon 15% porosity? Also, does it make sense to note that fractured rock areas are approximately 2% in maximum storage (based upon DWR Facts publications)?	Specific yields in the Valley were estimated to be 12-13% in the Draft Madera Regional Groundwater Management Plan. This was added to the IRWMP. The Department of Water Resources publication "*Water Facts – Ground Water in Fractured Hard Rock*" has also been referenced and quoted as saying that the specific yield of fractured hard rock is estimated to be less than two percent. This emphasizes the groundwater challenges in the mountain areas.
17	Steve Haze, Yosemite Sequoia RC & DC	1	1-2	Mission Statement "…clean, adequate and affordable… (placeholder discussion for Group)	Revisions to the Mission Statement will require discussion with the RWMG
18	Gravelly Ford Water District	1	1.2	Page 1-2 First paragraph - Needs to make reference to the SJR Restoration Project as a new and permanent contributor to the reduction in surface water supplies and will compound the overdraft problems of the Madera and Chowchilla groundwater basins.	Comment addressed as suggested.
19	Steve Haze, Yosemite Sequoia RC & DC	1	1-3	"Purpose, Need, and Common Understanding for the IRWMP". Should a bullet be added that talks about identifying, understanding, quantifying and qualifying all available water resources within the IRWM boundary – and what the water budget values and characteristics are; as well as vulnerabilities and deficiencies?	Identifying, understanding and quantifying all available water supplies is beyond the scope of an IRWMP which takes a regional approach looking broadly at the water supplies, with the focus on the main water supplies. There is currently no detailed water budget for Madera County, but language has been added to emphasize the critical need for a comprehensive water budget. The IRWMP does look at vulnerabilities and deficiencies and this has been added to the list of the purposes of the IRWMP.
20	Steve Haze, Yosemite Sequoia RC & DC	1	1-7	Not certain as to where this may fit in. However, Data collection & management requires qualitative/quantitative and trend analysis in order to have value. This is probably mentioned elsewhere? Maybe in monitoring?	Comment addressed in Plan Performance and Monitoring chapter

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Comments and Draft Reponses
Chapter 2 - Governance

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
21	City of Madera	2	2-1	Page 2-1. Last Paragraph. The second sentence states that the "Madera RWMG has sixteen members". This seems to conflict with other references in the document, which indicate that there are 17 members.	Updated. Correct number of members is 17.
22	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-1	Page 2-1: Last sentence – change "The Madera RWMG has sixteen" to "The Madera RWMG has seventeen"	Comment addressed.
23	City of Madera	2	2-2	Page 2-2. Table 2.1. The marks in the column that define which signatories have "Statutory Authority" seems to be in conflict with the list of agencies that have statutory authority as described in the second paragraph on Page 2-3.	Table 2.1 and page 2.3 corrected to be consistent
24	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-2	References to SEMCU – County vs. Citizens Page 2-2: also page 10-1 also page 14-5	Updated throughout document to say 'County'
25	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-3	Page 2-3: MD22A is also a Madera County Special District – Oakhurst Sewer	List updated to include MD22A
26	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-3	Page 2-3: Statutory Authority for Water Management Seven members of the RWMG have statutory authority Chowchilla Red Top RCD DOES NOT have statutory Authority	Chowchilla Red-Top RCD removed from list of agencies having statutory authority for water management
27	Madera Irrigation District	2	2-3	In Table 2.1, MID is not listed as a Statutory Authority, but the following Page 2-3 lists Madera Irrigation District as a Statutory Authority.	Updated to show Madera Irrigation District having statutory authority for water management in both locations.
28	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-5	Page 2-5: Public Outreach Process Paragraph 1 and paragraph 3 in this section are duplicates	These two paragraphs were combined and the repetitive information was deleted.

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Comments and Draft Reponses
Chapter 2 - Governance

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
29	Gravelly Ford Water District	2	2-5	Page 2-5 2.5 Meeting Notices and Agendas - Are these regularly posted two weeks in advance of monthly meetings?	Posting the Meeting Notices and Agendas two weeks in advance at the Madera Irrigation District Office is the suggested protocol according to the Regional Water Management Group Administrative Assistant. This section was also expanded to include details on email and newspaper notices for each meeting.
30	Steve Haze, Yosemite Sequoia RC & DC	2	2-10	Add Natural Resources Conservation Services (NRCS) to list in which to outreach with?	Comment addressed
31	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-10	Page 2-10 #2.12 Collaborative… Penultimate sentence in opening paragraph – an extra space in DWR	Comment addressed
32	Jeannie Habben, Administrative Assistant Madera RWMG	2	2-10	Page 2-10 – Coordination with State and Federal Agencies (2.11) State Agencies and Federal Agencies CANNOT sign on the MOU. I have no copy of one for any state or federal agencies – the RWMG never came up with a membership level for them. They cannot pay dues and they cannot sign a resolution.	Sentences removed that stated that California Department of Fish and Wildlife and Sierra National Forest are MOU signatories. Text also added that internal rules at most State and Federal agencies prevent them from signing the MOU and paying dues, but they can be Interested Parties.

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Comments and Draft Reponses
Chapter 3 – Region Description

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
33	Steve Haze, Yosemite Sequoia RC & DC	3	3-5	Table 3.1 and last paragraph – Should 2009 and 2010 be added to both since these were below average years as well, thus making 5 of the last 6 years below average?	According to an index for the San Joaquin Valley, 2009 was below normal but 2010 was slightly above normal
34	Steve Haze, Yosemite Sequoia RC & DC	3	3-15	Table 3.2 – How does this relate to the 250K groundwater overdraft as described in the 1st paragraph on page 1-2?	A discussion on water budget has been added. The readers are cautioned though that this data is preliminary and only covers a portion of the Valley and does not include any data from the foothills or mountains.
35	Madera Irrigation District	3	3-15	Do you know where the estimated average annual groundwater pumped (2004-2013) values came from in Table 3.2 on Page 3-15? I'm wondering if MID provided these in the past or were these estimates from our past USBR WMP 5-year updates?	These values came from the Draft Madera Regional Groundwater Management Plan. Several tables were updated to reference this document.
36	Chowchilla Water District	3	3-15	3-15 & 16. Same as comment 14.	Statement added on the long-term impacts the River Restoration will have on surface water supplies and groundwater overdraft.
37	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Section 3.5 – I would recommend that a table be established that shows what each of the three rivers provide annually in surface water in order to reach the 347K acre feet delivered as noted in Table 3.3	This information is not provided because the data cannot be reported in a simple manner. Flows would have to be reported over a long-term hydrologically average period. Other issues such as carryover storage, reservoir evaporation, reservoir seepage, and river seepage also need to be considered. These values could be reported and compared to water used more accurately after a detailed water budget is prepared for Madera County.
38	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Is there an estimated percent of increase over time for additional water due to maturation of orchards?	The text has been modified to state that the water demand estimates assume full maturation, but these values are not expected to be reached until 2017. Insufficient data is available on the maturity of all tree crops in the County to estimate the current demand versus the 2017 demand
39	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	The paragraph on groundwater in the foothill/mountain areas – it may be useful to again state DWR's estimate of 2% water content. Also, there was the Todd Engineering Technical Memorandum of Groundwater Conditions that was performed on behalf of Madera County in 2002	The Department of Water Resources publication "Water Facts – Ground Water in Fractured Hard Rock" has been referenced and quoted as saying that the specific yield of fractured hard rock is estimated to be less than two percent. This emphasizes the groundwater challenges in the mountain areas. The Todd Engineers report is also mentioned, and the content of the report briefly summarized.
40	Steve Haze, Yosemite Sequoia RC & DC	3	3-16	Another study dealing with water resources in Madera County is Bulletin No. 135 – Madera Area Investigation , 1966 This may be useful reference	This document was added to the References.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 3 – Region Description

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
41	Gravelly Ford Water District	3	3-16	Page 3-16 Surface Water Supplies - MID, CWD and GFWD each meet significant portions of their water demands with surface water. This may have been true before SJR Restoration. GFWD only expects to receive any B of R water one year out of three in the future which puts the onus on ground water.	Updated to say that in the past significant portions of water demands were met with surface waters. However, the demand met with surface water has decreased due to impacts from the San Joaquin River Restoration Settlement. In GFWD they now only expect to receive Friant water in one out of three years, which puts the onus on groundwater.
42	City of Madera	3	3-17	Page 3-17. First sentence under section 3.6. Typo….. “us” should probably be “is”.	Comment addressed
43	Gravelly Ford Water District	3	3-17	Page 3-17/18 Water Demands for Environmental Needs – Environmental needs for surface water needs to be accountable to efficiency standards the same as houses and farms. These needs should also be judged on meeting stated goals and objectives, the same as for other users.	Under Section 3.7 – Water Demands for Environmental Needs, the following was added: “The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized.”
44	Chowchilla Water District	3	3-17	3-17 or 18 - Water Demands for Environmental Needs. We need to make a statement that this water must also adhere to efficiency standards. Currently, there exists no requirement for environmental releases be efficient or even accomplish the goal for which they were taken	Under Section 3.7 – Water Demands for Environmental Needs the following was added: “The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized.”
45	Steve Haze, Yosemite Sequoia RC & DC	3	3-18	My understanding is that the average amount of water for the restoration is 200K acre ft. Does it make sense to have as reference the settlement agreement? Also, within the agreement is supposed to be 1:1 replacement of water used and infrastructure enhancements to be supported for capturing and recirculating water. Additionally, it is my understanding that the Madera Canal would be upgraded. These may be significant opportunities for infrastructure enhancements within the Madera County IRWM boundary. I believe that this could be further explored.	The quantity of restoration flows lost to the river varies with precipitation year type. 200K AF is not the average, but is the number for a range of years above and below average annual rainfall. In wetter years, the quantity increases to over 400K AF, while in the driest years (like 2014) no restoration flows are required. The San Joaquin River Restoration has a goal of a 1:1 return on lost water, but that goal is not a formal promise nor is it stated in the final settlement agreement. The text was modified to reference this goal and the water contractor’s plans to track progress on meeting the goal. The Madera Canal Expansion would be one way to help meet this goal by allowing for larger water deliveries during wet years.
46,	Chowchilla Water District	3	3-18	3-18. I object to the sentence in last paragraph of 3-7, “… the net effect on ag users may not be as severe as initially appears.” I recommend deleting that sentence.	Updated. That portion of the sentence was deleted.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 3 – Region Description

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
47	Steve Haze, Yosemite Sequoia RC & DC	3	3-19	3.10 – Geology – Again Bulletin 118 is referenced, and I would suggest that CWP 2103 and its separate groundwater technical report may be another reference going forward since it will be updated every 5 years.	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
48	Steve Haze, Yosemite Sequoia RC & DC	3	3-20	Same potential for referencing more recent data from CWP Update 2013	The California Water Plan Update was added as a useful reference for groundwater data, as suggested.
49	Steve Haze, Yosemite Sequoia RC & DC	3	3-24	3.12 – Geomorphology and Soils: Paragraph 2 indicates freshwater zone of approximately 3K ft. Should the marine/saline zone underneath be noted as well in order to demonstrate the finiteness of the freshwater zone – and potential exposure of saline water creating contamination. As an example, it is my understanding is that a couple years ago, a well was drilled 2K ft on the westside and that it was saline and very warm water that had to be blended with better water.	The IRWMP has been modified to explain that estimating the available groundwater resources is not possible with current data. The depth to saline water has not been estimated on a regional scale since a USGS study, conducted by R.W. Page, in 1973. This study is referenced in the IRWMP. The depth to saline water varies throughout the County. Other constituents, such as arsenic, also impact the depth to usable water. A detailed delineation of water quality is not available in all areas. Other factors, such as the economics of drilling and operating deep wells, also impact the available groundwater supply. A spatial evaluation of total groundwater supplies is needed and has been added as a goal for the Region.
50	Steve Haze, Yosemite Sequoia RC & DC	3	3-26	Take 'the' out before Madera County in the 2nd paragraph	Comment addressed
51	Steve Haze, Yosemite Sequoia RC & DC	3	3-26	Does it make sense to show a profile of these deposits and their average depth for illustration purposes to go along with the narrative?	Generalized geologic cross section from a USGS report added to Section 3.10 – Geology
52	Steve Haze, Yosemite Sequoia RC & DC	3	3-30	Is this an opportunity to discuss the role of CASGEM in the future? Water Data library?	Discussions added on the role of CASGEM and the Water Data Library and reference made to the Plan Monitoring and Performance chapter that also includes some discussions on these programs.
53	Madera County	3	3-37	Page 3-37, Second paragraph – "Groundwater in the foothill and mountain portion of the Region is also of generally-acceptable quality for domestic and municipal uses without treatment, though many wells do require well head treatment to remove naturally-occurring iron, manganese and gross alpha radiation resulting from granitic decay." Uranium and Arsenic are other contaminants of concern in our mountain areas.	Uranium and arsenic were added to list of constituents of concern in the mountain areas.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 3 – Region Description

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
54	Jeannie Habben, Administrative Assistant Madera RWMG	3	3-37	Page 3-37 and 3-38 Groundwater Quality What about Uranium added to the list of contaminants?	Uranium added to the list of constituents of concern in the County, especially in mountain areas.
55	Madera County	3	3-38	Page 3-38, Second paragraph – "Arsenic is found in numerous Valley areas but has not been a constituent of concern in foothill and mountain wells." This statement is incorrect. Prior to the revised Maximum Contaminant Level (MCL) of 10 µg/L for arsenic, this was probably true. However, now there are six districts in our mountain areas that exceed the MCL for arsenic, including MD42 Still Meadows, MD6 Lakeshore, MD7 Marina View, MD8A North Fork, MD24 Teaford Meadows, and MD46 Miami Creek Estates.	Comment addressed as suggested.
56	Madera County	3	3-39	Page 3-39, Sixth paragraph – "Nitrate contamination, at levels above or slightly below the MCL, has been observed in certain wells in County Maintenance District 10A (MD 10A – Madera Ranchos) and in MD 33 – Fairmead." Nitrates are currently only an issue at MD10A, Madera Ranchos. The groundwater well at MD33, Fairmead is not exceeding MCLs for Nitrate. The current sewer feasibility study for MD33 is being prepared as a proactive measure since the community is served by individual septic systems.	Comment addressed as suggested.
57	Jeannie Habben, Administrative Assistant Madera RWMG	3	3-42	Page 3-42 Social and Cultural Makeup of the Region The second paragraph should it say "Largely a rural area, it includes only TWO cities"	Revised as suggested.

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Comments and Draft Reponses
Chapter 4 – Disadvantaged Communities

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
58	Jeannie Habben, Administrative Assistant Madera RWMG	4	4-2	Page 4-2 – Tribal Government Involvement and Collaborative "North Fork Mono Indian Tribe" should be "North Fork Rancheria of Mono Indians" The North Fork Mono Indians are not a recognized tribe.	Comment addressed
59	Steve Haze, Yosemite Sequoia RC & DC	4	4-9 / 14-8	Does the county have a list of water quality and/or water supply issues affecting DACs?	Common issues affecting DACs are listed throughout Chapter 4. Due to the nature of the IRWMP it is not intended to provide specific details on every community and water user. However, a list of issues at 13 County DACs will be added to the text as further examples.

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Comments and Draft Reponses
Chapter 5 – Goals and Objectives

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
60	City of Madera	5	5-3	Page 5-3. Table 5.1 and the following discussion on goals and objectives. Although the objectives for the foothill/mountain areas call for the development of surface water supply sources (Objective 6c), the stated objectives for the valley do not include this language. Should the RWMG include this objective, or similar language, for the valley? It seems like it might be appropriate, in light of the emphasis the IRWMP places on acquiring new water supplies for the valley, such as discussion on the top of Page 3-43.	Updated. Language added under Objective 1d. Improve Water Reliability for Valley area, including securing outside water rights to import water to the RWMG area, and making greater use of floodwater supplies through surface and subsurface storage projects.
61	Madera Irrigation District	5	5-4	On Page 5-4 Objective 1a states 100,000 AF/YR, but Table 5.2 on Page 5-14 states 50,000 AF/YR.	Updated. Change to 50,000 AF/year to reflect the most recent version of the draft Madera Regional Groundwater Management Plan
62	City of Madera	5	5-6	Page 5-6. Objective 2a. As drafted, Objective 2a seems to link the new "Independent Local Organization" to the RWMG. Although there will be significant overlap between the membership of these two entities, and the new organization's goals would be consistent with those of the RWMG, the two entities will not be formally linked and the objective should probably be rewritten to avoid language which states that buy will be achieved from RWMG members. Additionally, with regard to the Methods for Measurement of Objective 2a (Page 5-14, Table 5-2), the methods should be revised to reflect the process the JPA Formation Committee is following. There is intention to prepare an internal report on organizational options.	Text modified to state that the group developing the Organization would engage the RWMG to gain their input on the formation of a new Organization. Text was also modified to describe the JPA Formation Committee and their current efforts to prepare a report on organizational options
63	Madera County	5	5-8	Page 5-8, last paragraph – "…heterotrophic place count ..." Replace the word place with "plate".	Comment addressed.
64	Madera County	5	5-9	Page 5-9, Fourth paragraph, Second sentence – Remove "Flood Control." Looks like this was accidently removed from another sentence.	Comment addressed.
65	Madera County	5	5-11	Page 5-11, Fourth paragraph – "Existing issues include certain wells with levels of iron, manganese, nitrate, gross alpha radiation and uranium in excess of CDPH MCLs. Include arsenic as an additional constituent of concern.	Arsenic has been added to the list of water quality issues.
66	Steve Haze, Yosemite Sequoia RC & DC	5	5-14	Table 5.2: 1a Objective – should it be 100,000 rather than 50,000?	Updated to say 50,000 AF/year to be consistent with the Draft Madera Regional Groundwater Management Plan

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
67	Steve Haze, Yosemite Sequoia RC & DC	5	5-14	Table 5.2: 3a, 9a Objectives – Number of DACs and other special needs groups involved?	Table 4.2 in the Disadvantaged Communities Chapter lists the DACs in the County. Thirty DACs were identified using the documented criteria. This information was added to the discussions in Objectives 3a and 9a, both related to stakeholder outreach and education.
68	Madera County	5	5-14	Page 5-14, Table 5-2, No. 1a – "Increase regional capacity for direct recharge by a minimum of 50,000 AF/Year" Inconsistent with Page 5-4, Goal 1a which states as a Valley goal to increase regional capacity for direct recharge by a minimum of 100,000 AF/Year.	Modified to say 50,000 AF/year to be consistent with the draft Madera Regional Groundwater Management Plan

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
69	Steve Haze, Yosemite Sequoia RC & DC	6	6-4	Other EWMPs: Last paragraph – refer to RDI, Regulated Deficit Irrigation (Kearny Research)	A definition of Regulated Deficit Irrigation was provided along with a reference to literature on the topic and the benefits and challenges in using this method.
70	Gravelly Ford Water District	6	6-8	Page 6-8 2nd paragraph - The Bureau is already reoperating Friant Dam attempting to meet the Restoration demands.	Comment addressed as suggested
71	Chowchilla Water District	6	6-8	6-8 Water Transfers. 2nd Paragraph, 2) "Consistency with Friant Water Authority..." Chowchilla Water District, Gravelly Ford, and Madera County are all Friant contractors who do NOT belong to Friant Water Authority. Recommend deleting that.	"Consistency with Friant Water Authority" deleted.
72	Steve Haze, Yosemite Sequoia RC & DC	6	6-9	Section 6.4 – Increase Water Supply: add reference to MID Water Bank in 3rd paragraph?	Updated to include brief description of MID Water Bank
73	Steve Haze, Yosemite Sequoia RC & DC	6	6-11	Precipitation Enhancement: According to some studies by CA Fish & Wildlife Silver Iodide may be present in upper elevation fish that are caught for consumption (A Gordus)	Text modified to state that there is no clear consensus on the impacts of silver iodide on aquatic wildlife. It continues to be used as a cloud seeding agent and research is ongoing into new cloud seeding agents.
74	Madera County	6	6-12	Page 6-12, Fourth paragraph – " This will occur particularly in new Greenfield residential and mixed-use developments which are being entitled within the southeast portion of the County." Reclaimed water will be utilized in areas within the Rio Mesa area plan.	Text has been modified to include "For example, in the planned Rio Mesa area, reclaimed water will be beneficially used."
75	Steve Haze, Yosemite Sequoia RC & DC	6	6-14	6.6 Improve Water Quality: What is potential of WQ impairment due to CECs – Constituents of Emerging Concern for domestic and ag use?	CECs are not currently monitored in Madera County and there are no regulations or requirements to monitor them, and no established MCLs. As a result there is nothing to report on this topic.
76	Gravelly Ford Water District	6	6-14	Page 6-14 Flood Management - GFWD has an offstream pond that is used to divert flood flows for recharge. GFWD also diverts flood water from Cottonwood Creek into the Gravelly Ford Canal for percolation and recharge. As previously provided to P&P by email on 5/27/14.	Information added.
77	Steve Haze, Yosemite Sequoia RC & DC	6	6-20	Should SB375 be referenced for 2nd paragraph?	Text modified under the Land Use Planning and Management Section to reference California Senate Bill 375 – The Sustainable Communities and Climate Protection Act of 2008. The bill encourages more-dense developments to reduce transportation and air pollution and to reduce water consumption.

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
78	Steve Haze, Yosemite Sequoia RC & DC	6	6-21	Should MID water bank be referred with its storage capacity of 250 acre ft?	Updated to include brief description of MID Water Bank.
79	Chowchilla Water District	6	6-25	6-25 -26 Crops Idling for Water Transfers. Last paragraph in which it is implied that obstacles need to be overcome so water saved in Madera can be sent out of the area. I object to that if that is the intent. Of course, I am OK with other areas idling land and sending water to us.	This strategy is intended to conserve water through crop idling to allow water transfers to other lands in Madera County, and not to other Counties. Text has been modified to make this clear.
80	Steve Haze, Yosemite Sequoia RC & DC	6	6-26	Again, should RDI, Regulated Deficit Irrigation be referred to? It is my understanding that 20% less water is used. There is also a film that can be applied to foliage that can reduce transpiration by plants, (Kearny Research)	Regulated Deficit Irrigation is referenced in the sub-section on Agricultural Water Use Efficiency. Text also modified to include brief description of anti-transpirants. They are commercially available and used in gardens, nurseries, on cut flowers and Christmas trees, etc. Use on large-scale agriculture is still experimental and has several obstacles to overcome, including potential reduction in crop yields, high cost, and difficulty applying to large leaf/foliage areas of some crops.
81	City of Madera	6	6-26	Page 6-26. Irrigated Land Retirement. The RWMG should consider incorporating the following observations into the discussion regarding irrigated land retirement. • As long as the demand for farm commodities remains relatively high, the retirement of irrigated lands in one location may naturally lead to the conversion of other native or non-irrigated agricultural lands in another location. For this reason, a program focusing on irrigated land retirement may be less effective at achieving conservation goals within the region without a limitation on the conversion of other lands to uses that require an increase in water consumption. • Should the region look to a land retirement as a tool to reduce overall consumption or to facilitate water balance on a project or sub-regional level, a program should be developed that encourages consistency regarding key elements such as the mechanisms that that can be used to confirm land retirement; the methodology for calculating net reductions in water usage; and the subsequent uses of the properties after they have been retired.	Text updated as suggested

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
82	City of Madera	8	8-14	Second Paragraph Under Section 8.5. The second sentence in this paragraph reads as follows… "The RWMG will generally not support projects that have remaining adverse impacts after mitigation." That sentence should be stricken, as it doesn't reflect the realities of CEQA, where it is extremely common for Significant and Unavoidable impacts to be identified for all types of projects, even after mitigation.	Updated. Sentence deleted.
83	City of Madera	8	8-14	Third Paragraph Under Section 8.5. The RWMG should consider adding Climate Change to the list of topics to be addressed, since that topic is already required to be a focus point for the IRWMP and is a required topic of discussion in most CEQA documents.	Updated. Climate change added to topics addressed in CEQA.

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Comments and Draft Reponses
Chapter 9 – Plan Performance and Monitoring

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
84	Madera County	9	9-16	Page number is incorrect, should be 9-1. Or another possibility could be that I'm missing pages from this Chapter. Please let me know.	Page numbers have been corrected
85	Steve Haze, Yosemite Sequoia RC & DC	9	9-18	Should a brief description Southern Sierra Critical Zone Observatory be added? http://criticalzone.org/sierra/	Updated as suggested.
86	Steve Haze, Yosemite Sequoia RC & DC	9	9-18	Should a brief description of the system schematic on 3.7 be added?	Figure 3-4: Hydrologic Diagram referenced in Section 9 – Plan Performance and Monitoring to illustrate the major hydrologic features, most of which are actively monitored.
87	Steve Haze, Yosemite Sequoia RC & DC	9	9-20	Should there be discussion of trend analysis and its qualitative and quantitative effect on water resources?	Discussions added to the Data Management chapter on the importance of trend analysis

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Comments and Draft Reponses
Chapter 10 – Data Management

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
88	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should GeoTracker be added? http://geotracker.waterboards.ca.gov/	Geotracker added to list of Other Data Sources
89	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should CDEC – California Data Exchange Center be added? http://cdec.water.ca.gov/	CDEC added to list of Other Data Sources
90	Steve Haze, Yosemite Sequoia RC & DC	10	10-7	Should CA Water Plan be added? http://www.waterplan.water.ca.gov/	California Water Plan added to list of Other Data Sources

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Comments and Draft Reponses
Chapter 11 – Financing

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
91	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-1	Page 11-1 Penultimate word on the page "due" should be "dues"	Comment addressed
92	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-2	Page 11-2 – Native American Tribal Funding The last sentence of the paragraph – "The Chukchansi Tribe also offers grants to certain public agencies and non-profit organizations in Madera County through a settlement program known as a Community Grant Program"	Comment addressed
93	Jeannie Habben, Administrative Assistant Madera RWMG	11	11-6	Page 11-6 Proposition 84. … Prop 84-funded Implementation Grants is expected to begin in mid-2015.	Comment addressed

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 13 – Relation to Local Land Use & Water Planning

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
94	Jeannie Habben, Administrative Assistant Madera RWMG	13	13-1	Page 13-1 Introduction 1st paragraph – penultimate sentence – "mangers" should be "managers"	Comment addressed
95	Madera County	13	13-2	**Page 13-2, Table 13.1 – Land Use Planning Documents** This table needs to be revised. See attachment from the Planning Department.	Table has been revised based on comments from Madera County to more accurately show the County Plans and their adoption dates
96	Madera Irrigation District	13	13-3	On Page 13-3, Chowchilla Irrigation District should be changed to Chowchillla Water District.	Updated
97	Madera Irrigation District	13	13-3	On Page 13-3, can you send me a copy of the Municipal Service Review for the Eight Public Water Districts Document October 2007?	Copy sent to MID. Report was prepared by LAFCO. Table modified to show that the report was prepared by LAFCO.
98	Madera Irrigation District	13	13-4	On Page 13-4, remove "in progress" on Table 13.5 Agricultural Water Management Plan. We are officially on the Federal Register now (attached email).	Updated. 'In Progress' removed.
99	Gravelly Ford Water District	13	13-4	Page 13-4 Table 13-4 GFWD Plan adopted April 13, 1998. Table 13-5 Agricultural Water Management Plan (2008 Criteria), December 2012	Tables updated as suggested.
100	Madera County	13	13-11	**Page 13-11, Table 13.7 – Water Management Attributes Employed by Local Planning Agencies** This table should be revisited so that County Staff understands what the prior County Engineer may have discussed with Provost & Pritchard. This will take a quick phone call for clarification.	P&P called interim City Engineer Christina Knudsen 8-21-14 and brought her up-to-date on the purpose of the table, how the checkmarks were determined and that the RWMG was afforded an opportunity to review and comment on the table and including offering different interpretations for placement of check-marks; at that time, no changes were offered by the prior County Engineer. Ms. Knudsen indicated that explanation was helpful, and she had no further comments.

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Comments and Draft Reponses
Chapter 13 – Relation to Local Land Use & Water Planning

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
101	City of Madera	13	13-20	Page 13-20. Bullet points describing primary characteristics of land use and planning documents. The City of Madera does not support the description as it is presented. The discussion of primary characteristics of land use and planning documents is painted with an overly broad brush as it relates to the City of Madera's General Plan, which was comprehensively updated in 2009. Where Table 13.7 illustrates that the City of Madera General Plan employs all water management attributes which are applicable to a local government in the San Joaquin Valley, the bullet points here suggest both cities fail to acknowledge the regional issues and their relationship to those issues. The City of Madera believes that this description is not supported by the City's General Plan and accompanying EIR, which together demonstrate that an evaluation of regional issues occurred, and that solutions in the form of general plan policies, were identified. Both the evaluation and the policies are presented within the context of what the City has control over, or can influence. The City will be happy to work with the preparers to refine these bullet points to reflect a more accurate description of primary characteristics prior to the completion of the Final IRWMP.	The text was modified to remove statements that City of Chowchilla and Madera General Plans do not address regional groundwater overdraft issues, impacts to irrigation facilities as a result of development, and increases in storm water releases into existing flood control facilities. Text was added to say that the Cities' General Plans do address regional groundwater and policies which are intended to enhance the sustainability of their water supplies.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 14 – Stakeholder Involvement

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
102	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-2	Page 14-2 Meetings In 2012 and in 2013, the RWMG received a grant from the Department of Water Resources for meeting facilitation services from the Center of Collaborative Policy.	Comment addressed.
103	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-2	Page 14-2 Printed Material – Appendix 1 – add new brochure	Updated brochure added to Appendix I
104	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-4	Page 14-4 – Columbia Resource Conservation District – "the outreach coordinator" has never attended a meeting with Columbia RCD	Columbia Resource Conservation District removed from list of agencies that attended presentations from RWMG
105	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-5	Page 14-5 last paragraph Add to range of interests – cultural interests	Cultural interests added to range of interests in the RWMG
106	Jeannie Habben, Administrative Assistant Madera RWMG	14	14-6	Page 14-6 Last sentence of the second paragraph Add school districts to the list of groups contacted	School districts added to list of stakeholders contacted to encourage participation in the RWMG

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 15 – Coordination and Integration

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
107	Steve Haze, Yosemite Sequoia RC & DC	15	15.1	Coordination: Resource Identification and pooling	'Resource Identification and Pooling' added to the list of Coordination goals.
108	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-1	Page 15-1 – Introduction The first paragraph/second sentence – remove the word "we"	Comment addressed
109	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-3	Page 15 – 3 Number 3/ last sentence The RWMG is a separate entity from each member, but all members are integrated through the Regional Water Management Group – What does this mean? It does not make sense…	Updated to say just say that "All members are integrated through the Regional Water Management Group".
110	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-5	Page 15-5 First Paragraph – last sentence – In the past the RWMG has prepared a PowerPoint Presentation that documented major accomplishments for the RWMG, and this served as their annual report as well as a brochure – each year.	Edits made as suggested.
111	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-5	15-5 Neighboring IRWMPs Line one and line two – "IRWM Regions" – in a different font	Comment addressed
112	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-6	Page 15-6 Paragraph at the end of the page 2 spots – "IRWM Regions" – in a different font	Comment addressed
113	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-7	Page 15-7 Number 6 Second line 12 IRWM Regions – extra space between n and the s	Comment addressed

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 15 – Coordination and Integration

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
114	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-8	Page 15-8 First paragraph – last line Sierra Nevada Water Workgroup – should be – Sierra Water Work Group Last paragraph – second sentence – IRWM Regions are separated – add the s to Regions	Comments addressed
115	Jeannie Habben, Administrative Assistant Madera RWMG	15	15-9	Page 15-9 Yosemite-Mariposa IRWM Regional boundaries are the exact borders of Mariposa County. (just like Madera)	Updated using suggested text.
116	Chowchilla Water District	15	15-10	15-10. Coordination and Integration with Federal Agencies. We need the USBR and any other Federal Agency involved in the Restoration Program to regularly coordinate with us on whether it working or not. If not, this is a huge source of water that could really help Madera County.	The following text was added to the end of the chapter: "The signatories to the San Joaquin River Restoration Settlement hope to coordinate and communicate more with the USBR on their monitoring of the Restoration Project. This would include updates on the success of the program, evaluation on how efficiently the environmental flows are being used, and progress toward meeting the goal of a 1:1 return of lost water supplies to the water contractors."

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
117	Steve Haze, Yosemite Sequoia RC & DC	16	16-1	Language regarding net yield as expressed in run-off measurements? KREW study indicates less run-off up to 30% - (local research and observations)	The article "*Snowmelt Runoff and Water Yield along Elevation and Temperature Gradients in California's Southern Sierra Nevada*" published in August 2012 in the Journal of the American Water Resources Association will be referenced in the chapter, and described as a source of local research on potential climate change impacts.
118	Jeannie Habben, Administrative Assistant Madera RWMG	16	16-4 / 16-6	Page 16 -6 (see attached letters) Number 1.b – that 90 percent of water in the region is used by agriculture is still in question. I have heard so many figures that it is difficult to know the truth anymore – but what I have heard at many of the meetings that I have been to is that when the percentage of water is stated for agriculture, that also includes "environmental" water because it is all thrown together as water on the land – not industrial or urban homes, etc. Also what is now being said is that half of the agricultural water goes to environmental concerns – the last figures I have seen were 42% Environmental and 46% Agricultural, 11% urban, and 1 % industrial – in the Central Valley. Environmental is things like the SJ R Restoration. I have had conversations with the restoration group and they respond to this by saying that even though the water is environmental, it is being released down the river so it is acting as actual recharge for the farmers – thusly putting it back on agriculture. It just bothers me to see such large numbers thrown around stating that Agriculture is taking all of our water – because it gets misconstrued – also they may be using it, but we all benefit by the food, etc. it provides. (See attached letters – going back and forth with my farmers and the groundwater issue)	Some data is provided, but without emphasis on it since it can cause conflict and be divisive. Urban interests claim most of the water is used by agriculture, but agriculture claims that urban areas would not exist, or be very small, without the agricultural industry. A large percentage of the waters is also used for a third purpose: environmental flows. Text was added to state that a significant amount (precise amount is not known) of water is released for environmental flows including water for the San Joaquin River Restoration, in-stream flows, wildlife refuge water and other environmental flows. The reference to 90% of water being used by agriculture was removed.
119	Gravelly Ford Water District	16	16-5	Page 16-5 Ash Slough, Berenda Slough, Berenda Creek and Dry Creek are more significant during flood flows than either Little Dry Creek or Root Creek.	Ash Slough, Berenda Slough, Berenda Creek and Dry Creek added to the list of primary water features.
120	Gravelly Ford Water District	16	16-7	Page 16-7 2.d - The flood control parameters on Hidden severely restrict any realistic carryover. The Corps has been most judicious in adhering to their criteria here.	Comment added as suggested to emphasize the difficulty in storing water from year-to-year behind Hidden Dam.
121	Chowchilla Water District	16	16-7	16-7 – Paragraph 1f. Last sentence "these flows have one of the highest priorities for surface water …. I would like to add, …"but the loss to the historical users has been devastating."	Updated as suggested.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 16- Climate Change

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
122	Jeannie Habben, Administrative Assistant Madera RWMG	16	16-8	Page 16-8 2f Arundo should be Arundo donax	Updated
123	Gravelly Ford Water District	16	16-8	Page 16-8 2.e - The SJR Restoration will compound the surface water supply availability during below "normal" water years putting more pressure on groundwater demand.	Sentence added as suggested.
124	Steve Haze, Yosemite Sequoia RC & DC	16	16-14	Table 16.1: Recommend adding KREW potential stream run-off separate from Climate Change Tool Kit referenced	The Climate Change Tool Kit was kept in the table as a separate reference.
125	Steve Haze, Yosemite Sequoia RC & DC	16	16-15	Bales' narrative – extent and cost associated?	Much of the forested watershed could benefit from forest thinning. Expenses associated with forest thinning can vary from low hundreds of dollars to a thousand or more dollars per acre for "first entry" (to achieve sustainability). "Second entry" costs would be those related to long term maintenance. Expenses would be dependent on a variety of site-specific conditions, including: how much thinning is needed, the appropriate method of thinning and maintenance to be used, whether follow-up work is needed, access conditions, topography of the area being cleared, equipment/worker mobilization, what types of trees and undergrowth are in the grove already, and current health and size of the trees being removed. Frequency would be on a case-by-case basis depending on the growth characteristics of the grove. Expenses could conceivably be offset by revenues potentially derived from/for the thinning project; that is, considerations for values of usable timber/lumber, biomass energy generated, or contributions from headwater protection agencies, or others .

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
Chapter 17 - References

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
126	Steve Haze, Yosemite Sequoia RC & DC	17	17-3	Add Todd Engineering to reference list	The March 2002 report by Todd Engineers entitled “Draft Technical Memorandum – Groundwater Conditions in Eastern Madera County” has been reviewed and mentioned in the IRWMP as a useful reference on foothill and mountain hydrogeology.

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
127	Steve Haze, Yosemite Sequoia RC & DC	App C	Appendix C	Table implies flat trend for average applied water over time?	The table shows about a 5% increase in agricultural demand over the past 10 years. This is the best available information including data from the Department of Water Resources and Madera County Agriculture Commissioner's Office.
128	City of Madera	APP F	Appendix F	Appendix F - Project List. Please add the "City of Madera/MID Schmidt Creek Recharge and Flood Control Project" to the project List.	Project added to list.
129	Madera County	App F	Appendix F	Appendix F, Madera Regional Water Management Group Project List – July 2014 Item No. 39, Brockman Park needs to be removed. This recharge basin project has been determined to be infeasible due to a biological study that deemed the area as wetlands.	Project has been removed from the project list

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
General / Miscellaneous Comments

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
130	Jeannie Habben, Administrative Assistant Madera RWMG	GEN		Local Cost Share Funding Penultimate sentence in the first paragraph – "required const share" should be "required cost share"	Comment addressed
131	Chowchilla Water District	GEN		The San Joaquin River Restoration Program is a major loss to our historical water supplies. It should be reviewed and monitored so that if it is not going to work that the surface water can be returned to Madera County users.	Under Section 3.7 – Water Demands for Environmental Needs the following was added: "The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized."
132	Chowchilla Water District	GEN		Environmental uses are currently not required to show efficiency. They should be required to be as efficient as other users. If the water taken is not doing the task, then it should be returned to the historical users.	Under Section 3.7 – Water Demands for Environmental Needs the following was added: "The RWMG supports the development of efficiency standards for River Restoration Flows to help ensure that they are used as effectively as possible, benefits to aquatic species are maximized, and impacts to water contractors are minimized."
133	Sally Rowden, Madera County Citizen	GEN		Do any of these projects as proposed on the "Project List" support the Bonadelle Ranchos area in recharge/sustainability of water? If not, I would like to add a project to the list to create a basin or possible basins in the Bonadelle Ranchos for groundwater recharge. My assumption from reviewing the list is that a Feasibility Study would be required.	A Recharge Project in Bonadelle Ranchos was added to the project list.

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
134	Karen Petryna, Madera County Citizen	GEN		The first two projects, 1 and 2, have misspellings in their Project Names. The third project with the misspelled Project Name, Root Creek *Detention* Facility, appears to have been removed. I assume Project Number 20, Create an Assessment District for Madera Ranchos, is intended to address the issues I raised facing residents that border the MD10A Water System, i.e., that they need to be added in. I still see no projects to address secondly, the leaking water system itself or thirdly, the planned 1 million gallon storage tank, both of which Ken Vang spoke of at numerous community meetings. In addition, I am reminded of a fourth project Ken spoke about which I understand Provost & Pritchard may have submitted a grant application for--connection of Valley Teen Ranch to the MD10A Water System and installation of an additional drinking water well--at the Valley Teen Ranch Property. Not only do I hope that the RWMG will also add this fourth project for MD10A, but I also urge Provost & Pritchard and Madera County to give serious consideration to installing the new drinking water well upgradient of MD10A in order *to maximize the chances to achieve the best possible results*, particularly in light of the fact that the Ranch's current well is contaminated with arsenic. Again, regardless of whether SEMCU, Madera County or some other agency be associated with the above-described projects, it is my understanding that it is imperative that any and all conceivable projects for the Region be listed with the current draft Plan. To that end, please let me know if I can assist the Group to complete Project Description Forms, or whatever is necessary.	Misspellings fixed in the project list as suggested. The following projects have been added to the project list with SEMCU as the implementing agency: 1. Repair leaking water system in Madera Ranchos 2. Install 1-million gallon storage tank in MD 10A 3. Connect Valley Teen Ranch to the MD10A Water System and install new well on a portion of the Valley Teen Ranch parcel, which would then be granted to MD 10A. A grant application for the project has already been submitted to the State Revolving Fund and it is expected to be funded.

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
General / Miscellaneous Comments

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
135	Karen Petryna, Madera County Citizen	GEN		In review of the 2014 Plan Project List for the Madera RWM Group to attach to our Regional Plan, I noticed a few misspellings (cells highlighted in yellow in the attached) as well as some critical omissions for the Madera Ranchos MD10A Water System. Namely, there is no mention of any projects to repair, upgrade or expand the water system that serves approximately 4,500 people in the Ranchos. It is my understanding from the former Madera County Engineer, Ken Vang, that the MD10A Water System has an approximate 25% leak rate. It may be much higher. Regardless, records show the system is comprised largely of undersized, lead and asbestos-containing piping. Steve Norman, the Special Districts Manager, should have full details and I copy him here. As I'm sure anyone can imagine and Steve can verify, a very leaky water system in a area with high concentrations of septic tanks, such as MD10A's, only exacerbates the issue of groundwater contamination--*which is something MD10A already contends with.* Furthermore, residents surrounding the MD10A Water System that are not connected to it are also at high risk, not only of contaminated groundwater but also having their wells run dry--as many have. And a project to connect those residents within the sphere of influence of the water system is greatly needed. Despite the need for recharge basins and flood control, there is no higher domestic need than that for clean, available water. As we discussed at the last SEMCU meeting, it is imperative that any and all potential projects for the Region be included in the project list since there are no future plans to update the Regional Plan further. It was also my understanding that SEMCU had already proposed the above-described projects as well as a project for a one million gallon water tank for MD10A. Therefore, I strongly urge the Group to include some kind of projects or projects to repair, upgrade and expand the MD10A Water System, to include a water storage tank, whether the implementation agency is listed as SEMCU or not.	See response to other comment from Karen Petryna
136	South-East Madera County United	GEN		Add the following projects to the project list: 1. MD10A Water Tank and Valley Teen Ranch Consolidation 2. Root Creek Off-Stream Storage 3. Madera Ranchos Water Fixture Retrofit 4. Madera Ranchos Water Meters	Projects added to the project list

Draft Madera Integrated Regional Water Management Plan - September 2014
Comments and Draft Reponses
General / Miscellaneous Comments

	Comment Received By	Chapter	Section/Page	Comments	Draft Response
137	Jeannie Habben, Administrative Assistant Madera RWMG	ES		Page ES – 2; Page ES-9; Page 2-4; Page 2-7; Page 14-6, and Page 14-7 There are 3 steps to becoming a member to the RWMG – 1. A signed Resolution by the Board of the new members group 2. A signed MOU between the group and the RWMG 3. Agreed upon dues payment This means that not just anyone can join the RWMG – you must have a legal board – so this must be a 501c3 or the like to be able to create and sign a Resolution.	Updated in all areas to include the three requirements. In Chapter 2 – Governance, language added to state that a member must have a governing body.
138	Gravelly Ford Water District	ES		Page ES-1 2nd sentence : 17 public, private 2-1 Definition RWMG - RWMG has 16 members 2-3 Breadth of Membership - RWMG consists of 17	Updated. Correct number of members is 17.
139	Jeannie Habben, Administrative Assistant Madera RWMG	2; 9; 11; 13		Section 2.13 – IRWMP Updates , also page 2-11, twice on Page 9-20, Page 11-5 and page 13-8 “the RWMG plans to periodically prepare an annual report” (twice) You can’t prepare a “periodic annual report” that is two different things – how about “the RWMG plans to periodically prepare a report” - remove “annual”	Comment addressed as suggested.
140	Madera Irrigation District	3	3-35	In general, do all of the plan statistics and data get updated annually? I wondered when I saw Table 3.5 on Page 3-35, because the years listed are 2003, 2011, 2013. Were the gap years not available or intentionally omitted?	The cropping data you reference from 2003, 2011, 2013 was not collected by the Regional Water Management Group, but rather the County and DWR. The IRWMP is updated as needed and future updates will likely be every 5 to 10 years. The IRWMP relies largely on data already collected and documented by other agencies. Most individual agencies update and maintain their own statistics annually.

Return to Agenda

REPORT TO CITY COUNCIL

MEETING DATE: January 21, 2015

AGENDA ITEM NUMBER: C-3

Approved By:

PUBLIC WORKS DIRECTOR

CITY ADMINISTRATOR

SUBJECT:

Consideration of a Resolution Approving Amendments to the City's Sidewalk Repair Cost Sharing Reimbursement Program to Allow Repairs to be Made Directly by and/or Through The City, and to Allow Eligibility in the Program to Include Non Residential Properties.

RECOMMENDATION:

That the Council direct staff to expand the City's sidewalk repair cost sharing program to allow repairs to be made directly by and/or through the City, and to allow participation in the program to include all properties. The specific changes to the program are found in sections 5.0 (A) and 6.0 in the attached Resolution - Exhibit A.

DISCUSSION:

In February 2009 the City Council approved a program to participate equally with property owners in cost of repairs to sidewalks, curbs and gutters damaged by street trees. The program only applied to residential parcels where the damage was caused by street trees.

Although the City may require a property owner to repair sidewalk and related facilities along their frontage, participation in the cost sharing program is not mandatory. The Program was created during the difficult economic times of 2009 to assist home owners with repairs that may have to be made. The City could have chosen to continue to allow property owners to fully bear the cost for the repairs as stipulated by State Statutes, but chose to create a cost sharing program and budget $80,000 towards repairs under the new program. *(For those less familiar with the liabilities of repairs of public sidewalks; attached is a list of relevant facts and policies.)*

Initially there was some participation in the program, however after initial work requests were met in the first two years, participation dropped dramatically. In the past two years there has only been one participant. The City's requirements for the program have made it difficult and only marginally financially beneficial for participants to utilize the funding.

The greatest disadvantage of the program is that because the City provides funding, any work performed by a contractor must be done under prevailing wage provisions. This drives the cost up. It is also difficult to find a contractor that will make the repairs on small jobs such as this, due to the licensing, bonding, insurance, and prevailing wage issues required by the City.

It is proposed that the Council authorize staff to implement two new alternative methods to affect repairs, in what should be a more economical fashion. The Council may also want to consider broadening the use of the programs to expand the eligibility to all properties rather than just residential properties as limited to in the current program.

Alternate Method 1. The City would perform the repairs. The City would aggregate the repair requests and then have them performed by a contractor in the employ of the City. The City would issue a request for proposals to provide fixed unit prices for performing the work. The contractors would be given lists of repairs to be made twice a year, and they would be allowed to make the repairs over three months. This tactic of aggregating small jobs and allowing the contractor to make the repairs when they have time has proven to be very cost effective in the City asphalt patching program. The rates the City gets are usually at or below normal rates for larger jobs. The contractors use this work to keep their crews employed between larger jobs.

Alternative Method 2. As in method 1 the jobs would be aggregated, but instead of contracting the work out, the City would periodically use its own personnel with concrete skills to oversee and train workers from the Madera County Workforce Investment Corporation's on-the-job training program to perform the repairs. City employee wages are well below prevailing wage and the workforce participants' wages are subsidized 50%. If the volume of work became significant, the City could hire a contractor as a part time City employee to instruct and oversee the workforce and manage the jobs.

Since a sidewalk defects cause just as much liability for the City in front of a business as it does in front of a residence; it is recommended that the Council expand eligibility to allow any existing developed properties to utilize the program regardless of the cause of the damage unless the damage was caused by conditions on the property such as roots from a tree outside of the right-of-way. This would likely increase participation substantially.

An example of where this expanded eligibility might be applied to commercial properties is at the Quality Inn on the corner of "G" and Fourth Streets. The street trees have caused significant damage to the sidewalks, curbs and gutters. The total for repairs, if performed by the City, is estimated at about $32,000. Here, because it is a larger project than residential repairs, City's rates may not offer as much of a savings as with smaller jobs.

FISCAL IMPACT: In this year's budget there is $80,000 allocated for such repair. These funds come from revenues the City receives from the Local Transportation Fund "LTF". The program has only expended a total of $20,687 since its inception:

2009/10	$ 5,750	2012/13	$ 3,340
2010/11	$ 7,992	2013/14	$ 1,000
2011/12	$ 2,605	2014/15	$ 0

Increase in program activity means that there will be fewer funds available to the City for repair of local streets. The LTF funds have been declining in the past years, and the fund balance will be exhausted within three years. The City's ability to sustain these cost overtime is uncertain.

The Program's funding and participation is not sufficient to make significant reductions in our existing sidewalk conditions to substantially lower our liability exposure for trip and fall claims. Over the past five years we have experienced 14 claims which cost a total of $82,000 for expenses and payouts, but the potential for larger or more frequent claims exists.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

The activity described in this report is not specifically incorporated in the strategies contained in the action plans of the Vision Madera 2025, is not in conflict with any of the action or goals contained in the plan, but is related to Action Item# 401 – Develop and promote Madera as a walk-able community with an emphasis on improving the quality of natural resources.

Information on Repairs of Sidewalks, Curbs and Trees in the Right-of-Way

- Per the Streets and & Highway Code, property owners are responsible for maintaining the sidewalk, curb, and street trees within the right-of-way along their property frontages.

- The City and the home owners have potential liability when there is a defect in the improvements that may cause damages to others.

- The City's policy is to not proactively inspect and remedy these defects unless we have constructive knowledge, i.e. we have received a complaint, or they are applying for a development entitlement.

- When the City receives a valid notice/complaint about a defect in the sidewalk, curb or problem with a tree, the City notifies the property owners of the defect and attempts to work with them to remedy the problem, which may include the use of the City's 50/50 repair program. If the property owner does not affect the repair or make arrangement within 30 days the City will make improvements to remedy the problem and the property owner becomes liable for the expenses.

- Individuals that desire to make repairs to improvements within the City right-of-way must obtain an encroachment permit from the Engineering Department which inspects all of the work to insure that it meets the minimum standards.

- Street trees are in most cases required in the park strip portion of the right of way. The type of tree must be approved by the City and all new trees require a "root barrel" to reduce lifting caused by roots. Approval must be obtained from the Parks Department for removal or placement of any tree in the right of way.

- Maintenance of street trees is the responsibility of the property owner.

RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF MADERA, CALIFORNIA, APPROVING AMENDMENTS TO THE CITY'S SIDEWALK REPAIR COST SHARING REIMBURSEMENT PROGRAM TO ALLOW REPAIRS TO BE MADE DIRECTLY BY AND/OR THROUGH THE CITY, AND TO ALLOW ELIGIBILITY IN THE PROGRAM TO INCLUDE NON RESIDENTIAL PROPERTIES.

WHEREAS, the City of Madera is committed to the maintenance and continuous improvement of City infrastructure; and

WHEREAS, the City desires to maintain a harmonious peaceful environment, and walkable neighborhoods; and

WHEREAS, The City Council implemented a Sidewalk Repair Cost Sharing Reimbursement Program on February 4, 2009; and

WHEREAS, the City desires to more efficiently effect the administration of such program by allowing additional eligibility and means of affecting repairs under the program.

NOW, THEREFORE, THE COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.
2. The City does hereby direct that the sidewalk repair cost sharing reimbursement program is amended to read as shown in the attached Exhibit A and incorporated herein by reference.
3. This resolution is effective immediately upon adoption.

Exhibit A
Sidewalk Repair Cost Sharing Reimbursement Program

1.0 BACKGROUND:

The California Streets and Highway Code Chapter 22, Maintenance of Sidewalks, beginning with Section 5600, states that the owners of lots or portions of lots fronting on any portion of the public street shall maintain any sidewalk in a condition that will not endanger persons or property, and in a condition which will not interfere with the public convenience in the use of the sidewalk. The term sidewalk includes the park strip, curbs and other improvements to protect the sidewalk.

The American with Disabilities Act (ADA) provides comprehensive civil rights protections to individuals with disabilities. Sidewalks must be accessible for individuals with disabilities.

2.0 PURPOSE:

The purpose of this program is to establish criteria and guidelines for:

- Defining when concrete sidewalk replacement is required;
- Defining responsibility for payment of all costs related to sidewalk repair; and,
- Determining property owner responsibilities and rates of participation by City.

3.0 DUTY OF OWNER:

When a sidewalk, driveway approach, curb, gutter or appurtenance becomes defective, unsafe or hazardous, or in such a condition that it endangers persons or property or interferes with public convenience, it shall be the duty of the owner of the abutting property to reconstruct or repair same and the expense of such work shall be borne by the abutting property owner. When a sidewalk, driveway approach, curb, gutter or appurtenance is found to be defective, unsafe or hazardous, the Public Works Director shall notify the owner of the abutting property of their obligation to reconstruct or repair the same.

4.0 CITY COST SHARE PROGRAM – ELIGIBLE COSTS:

Abutting property owners of substantially developed land are eligible to participate in the Program. Only sidewalks, drive approaches, sprinkler and drainage pipe repairs, back, curb and gutter repair within the City right-of-way are eligible. In no event will reconstruction/repairs be performed on private property. . City participation shall be 50 percent of eligible cost items as specified in Section 5.0 below, including payment of

incidental items. Payment of ineligible cost items will solely be the responsibility of the property owner.

5.0 POLICIES AND PROCEDUES:

The City's 50-50 Sidewalk Repair Program (hereinafter referred to as "the Program") shall operate as follows:

(A) Eligible Repairs: Abutting property owners are eligible to participate in the Program: Sidewalks, drive approaches, curb and gutters, tree root pruning, root barrier installation and tree removal within the City's right-of-way are eligible. In no event will reconstruction/repairs be performed on private property.

(B) Cost: The property owner's share of cost under the Program shall be based on 50% of the eligible cost items and 100% of the ineligible cost items.

(C) Ineligible costs not included: The cost of repairs for the Program does not include any necessary damage that may occur to sprinkler systems, fences, trees, adjoining concrete improvements, widening of driveway approaches, mailboxes, shrubs, reseeding and leveling of lawn area or other improvements in the City's right-of-way. It shall be the responsibility of the abutting property owner to protect such improvements prior to and during reconstruction/repair and to leveling of lawn area after construction. City tree replacement will also be the responsibility of homeowner. Damage caused by private trees is not eligible under this program. In addition, concrete spalls, cracking or general deterioration due to age or workmanship, and not due to City trees, are not a part of this program.

6.0 PROGRAM GUIDELINES:

A property owner that wishes to participate in the program may elect to have the work done by a private contractor through the steps shown in subsection (A) below, or elect to have the work performed by the City through the steps shown in subsection (B) below.

(A) Private Contractor Process:

1) A City representative along with the property owner determines the work to be covered in the program.
2) The owner obtains bids from three contractors that have a valid State of California Contractor's License, proof of insurance and current City of Madera business licenses. Bids must be calculated using prevailing wages. The City reviews the bids with the owner and the owner selects the contractor to perform the work. The City, However, pays for work based on the lowest bid provided.
3) The owner enters into an agreement with the City pursuant to these guidelines.
4) The Contractor obtains an encroachment permit from the City, Free of Charge.

5) Work to be performed must meet the City of Madera Standards, and must be inspected and approved by the City's Inspector.
6) The property owner supervises the work of the contractor, pays the contractor in full for all repair costs and receives a reimbursement from the City for the City's portion of the repair costs upon completion of work, receipt and approval of final invoice from the contractor, and submission of invoice to City.

(B) <u>City Performed Repair Process:</u>

1) A City representative along with the property owner determines the work to be covered in the program.
2) The City provides the property owner with an estimate of the costs for the City to perform the repairs through the City's resources and or subcontractors.
3) The owner enters into an agreement with the City pursuant to these guidelines.
4) The City performs the repair which must meet the City of Madera Standards, and will be inspected and approved by the City's Inspector.
5) The property owner will be given the opportunity to review the work performed along with the City's Inspectors final inspection of the work.
6) Once the City has completed the agreed upon repairs in accordance with the agreement, the City will invoice the property owner for payment of the home owners portion of the repairs.

Return to Agenda

MEMO

DATE: January 21, 2015

TO: Madera City Council

FROM: Bobby Kahn, Executive Director
Madera County Economic Development Commission

RE: Request to adopt a resolution supporting the renewal of Madera County as a Recycling Market Development Zone (RMDZ)

RECOMMENDATION

Madera City Council to adopt a Resolution supporting the renewal of the Madera County Recycling Market Development Zone. (RMDZ).

SUMMARY

The RMDZ program is a partnership of local government and the California Integrated Waste Management Board (CIWMB), created to provide business incentives to businesses that use materials from the waste stream for their manufacturing. Our Madera County RMDZ program is a joint effort between the County of Madera, and cities of Madera and Chowchilla with the Madera County Economic Development Commission (EDC) serving as the zone coordinator.

DISCUSSION

Every ten years it is necessary for each zone to apply for renewal. The Madera County RMDZ will expire on February 23, 2015. The renewal process involves a variety of elements including, the existing RMDZ jurisdictions need to approve a new resolution approving the renewal of the zone.

FINANCIAL/STAFFING IMPACT

None.

RESOLUTION NO. _____

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MADERA, CALIFORNIA SUPPORTING THE RENEWAL OF MADERA COUNTY AS A RECYCLING MARKET DEVELOPMENT ZONE (RMDZ)

WHEREAS, California Public Resources Code Section 42010, et al. provides for the establishment of the Recycling Market Development Zone (RMDZ) program throughout the State which provides incentives to stimulate development of post-consumer and secondary materials markets for recyclables; and

WHEREAS, all California jurisdictions must meet a 50% reduction in landfill waste disposal as mandated by the California Integrated Waste Management Act; and

WHEREAS, the Madera County *RMDZ* includes designated areas in the *City of Madera and City of Chowchilla*; and

WHEREAS, the *Madera County RMDZ* is dedicated to establishing, sustaining and expanding recycling-based manufacturing businesses, which is essential for market development and to assist these jurisdictions in meeting the established landfill waste reduction goals; and

WHEREAS, the COUNTY OF MADERA previously applied for and was awarded the RMDZ designation; and

WHEREAS, the designation of Madera County *RMDZ* will expire on *February 23, 2015*; and

WHEREAS, the *CITY OF MADERA* desires existing and new recycling-based manufacturing businesses located within the *Madera County RMDZ* to be eligible for the technical and financial incentives associated with the RMDZ program; and

WHEREAS, the renewal of *Madera County RMDZ* as a RMDZ is still necessary to facilitate local and regional planning, coordination, and support existing recycling-based manufacturing businesses, as well as attract private sector recycling investments to the RMDZ; and

WHEREAS, the continued development of local markets for recycled materials would reduce the need to transport them out of the region in the future; and

WHEREAS, the current and proposed waste management practices and conditions are favorable to the development of post-consumer and secondary waste materials markets; and

WHEREAS, the California Legislature has defined environmental justice as "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies" [Government Code section 65040.12(e)], and has directed the California Environmental Protection Agency to conduct its programs, policies, and activities that substantially affect human health or the environment in a manner that ensures the fair treatment of people of all races, cultures, and income levels, including minority populations and low-income populations of the state [Public Resources Code section 71110(a)]; and

WHEREAS, CalRecycle has adopted a goal to continuously integrate environmental justice concerns into all of its programs and activities; and

WHEREAS, the County of Madera, City of Madera, and City of Chowchilla have agreed to submit an application to CalRecycle requesting renewal as a RMDZ; and

WHEREAS, County of Madera has agreed to act as Lead Agency for the proposed renewal of the RMDZ; and

WHEREAS, in accordance with the California Environmental Quality Act (CEQA), the County of Madera previously prepared or caused to be prepared a Negative Declaration ND #2004-53 (SCH #2004091030) which determined that there was no potential for the creation of significant environmental effects in conjunction with the renewal of Madera County as a RMDZ; and

WHEREAS, the County of Madera, in conjunction with the request for the current renewal of the RMDZ designation, has prepared and adopted an addendum to the previously prepared Negative Declaration, determining that there are no changes to the aforementioned Negative Declaration and finding that there is no evidence that the proposal will have any significant effects on the environment; and

WHEREAS, the City of Madera has reviewed the 2004 Negative Declaration and the 2014 addendum to the Negative Declaration adopted by the County of Madera in its role as lead agency and the City of Madera supports the County's action to adopt these documents and concurs with the finding that no significant environmental effects will result from the project.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF MADERA HEREBY finds, orders and resolves as follows:

1. The above recitals are true and correct.

2. The City of Madera concurs with the County of Madera's finding, inasmuch as the County is acting as lead agency under CEQA, that the proposed renewal of the Recycling Market Development Zone designation will not cause any potentially significant effects on the environment.

3. The *City of Madera* approves the submittal of a Recycling Market Development Zone renewal application to include Madera County, the City of Madera, and the City of Chowchilla.

4. The *City of Madera* will administer the RMDZ program in a manner that seeks to ensure the fair treatment of people of all races, cultures and incomes, including but not limited to soliciting public participation in all communities within the RMDZ, including minority and low income populations.

5. This resolution is effective immediately upon adoption.

ADDENDUM

CEQA INITIAL STUDY/MITIGATED

NEGATIVE DECLARATION

MADERA COUNTY RECYCLING DEVELOPMENT ZONE PROGRAM

MADERA COUNTY, CALIFORNIA

Submitted to:

California Integrated Waste Management Board
Bay Area Development Section
1001 "I" Street/P.O. Box 4025/MS 22
Sacramento, CA 95812-4025

Prepared by:

Madera County Community and Economic Development
Planning Division
200 W. 4th Street, Suite 3100
Madera, CA 93637

December 15, 2014

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I. Introduction

A. Introduction

This document constitutes an Addendum to the August 31, 2004 Recycling Market Development Zone (RMDZ) Initial Study and Negative Declaration #2004-35 originally prepared for this project. This addendum evaluates whether modifications/refinements to the proposed RMDZ designation would result in any new or substantially more adverse significant effects or require any new mitigation measures not identified in the 2004 IS/ND.

B. Background

The original project was evaluated in 2004 and an Initial Study and Negative Declaration were prepared pursuant to the California Environmental Quality Act (CEQA) and were subsequently adopted.

The Recycling Market Development Zone program is a partnership of local government and the California Integrated Waste Management Board, created to provide incentives to business that use materials from the waste stream for their manufacturing. This project is the renewal of Madera County's status as a Recycling Market Development Zone.

C. Purpose of this Addendum

The purpose of this addendum is to evaluate whether the proposed project as currently proposed would result in any new or substantially greater significant effects or require any new mitigation measures not identified in the 2004 IS/ND for the original project. This addendum, together with the 2004 IS/ND will be used by the County when considering approval of the renewal.

D. Project Description

This project is to submit for the renewal of the Recycling Market Development Zone (RMDZ) through the California Integrated Waste Management Board. The previous submittals included an Initial Study and Negative Declaration which were approved.

E. CEQA Framework for Addendum

For purposes of the project, State CEQA Guidelines (Section 15162 and 15164) provide that an Addendum to an adopted Negative Declaration may be prepared

if only minor technical changes or additions are necessary ***or*** none of the following conditions calling for the preparation of a subsequent ND has occurred:

1. Substantial changes in the project which require major revisions to the ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

2. Substantial changes with respect to the circumstances under which the project is undertaken which require revisions to the ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of ND adoption, shows any of the following:

    a. The project will have one or more significant effects not discussed in the ND.

    b. The project will result in impacts substantially more severe than those disclosed in the ND,

    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measure or alternative; or

    d. Mitigation measures or alternatives that are considerably different from those analyzed in the ND would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

The purpose of this Addendum is to evaluate the proposed renewal of the Recycling Market Development Zone (RMDZ) as a modification to the 2004 IS/ND for the original project and to demonstrate that the proposed project does not trigger any of the conditions described above. Based on the analysis contained herein, an Addendum to the 2004 IS/ND is the appropriate CEQA document.

II. Determination

Determination

On August 31, 2004, Madera County adopted Negative Declaration #2004-53 for the Recycling Market Development Zone project.

Based on a review of the proposed amendment to the project, which is a renewal of the Recycling Market Development Zone designation, it has been determined that an addendum is appropriate because the project is minor, has no changes associated with the original project, and ***none*** of the following conditions (pursuant to CEQA Section 15162) has occurred:

1. Substantial changes in the project which require major revisions to the ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

2. Substantial changes with respect to the circumstances under which the project is undertaken which require revisions to the ND due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time of ND adoption, shows any of the following:

    a. The project will have one or more significant effects not discussed in the ND.

    b. The project will result in impacts substantially more severe than those disclosed in the ND,

    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponent declines to adopt the mitigation measure or alternative; or

    d. Mitigation measures or alternatives that are considerably different from those analyzed in the ND would substantially reduce one or more significant effects on the environment, but the project proponent declines to adopt the mitigation measures or alternatives.

Findings

1. The County of Madera has determined that an addendum is warranted, finding that none of the above conditions are in evidence and that there is no substantial evidence, in light of the whole record before the County, that the amendment proposal will have a significant effect on the environment.

2. The Addendum to the Negative Declaration, with its supporting documentation (Initial Study) reflects the independent judgment and analysis of the County of Madera.

3. Pursuant to Section 15074 of CEQA, the County of Madera finds that proposed renewal of the designation will not cause any potentially significant effects on the environment.

4. The prior prepared Initial Study and Negative Declaration stands uncorrected due to no changes in the program in any regard.

Public Review Distribution

Pursuant to Section 15164(c) of CEQA, an Addendum does not require circulation for public review. The original adopted Negative Declaration is attached.

Copies of the Addendum, the Negative Declaration, and the original Initial Study may be obtained at the Madera County Economic Development Commission, 2425 W. Cleveland Avenue, Suite #101, Madera, California. Contact Lois Grow at (559) 675-7768.

12-15-14
Date

Robert Mansfield, AICP
Planner III
Madera County Community and Economic Development
Planning Division

Notice of Determination

Form C

FILED
MADERA COUNTY
05 APR 22 PM 1:54
REBECCA MARTINEZ
COUNTY CLERK
DEPUTY

900530

To: ☒ Office of Planning and Research
PO Box 3044
Sacramento, CA 95812-3044

☒ County Clerk
County of Madera
209 W. Yosemite Avenue
Madera, CA 93637

From: Madera County Planning Department
2037 W. Cleveland Avenue
Madera, CA 93637

Subject:

Filling of Notice of Determination in compliance with Section 21108 or 21152 of the Public Resources Code.

Madera County Recycling Market Development Zone Program

Project Title

2004091030	David Merchen	(559) 675-7821
State Clearinghouse Number (If Submitted to Clearinghouse)	Lead Agency Contact Person	Area Code/Telephone/Extension

The Madera County Recycling Market Development Zone Program is a County-wide program.

Project Location (including County)

Project Description:

The Madera County Recycling Market Development Zone Program is a partnership of local government and the California Integrated Waste Management Board, created to provide incentives to businesses that use materials from the waste stream for their manufacturing. The project is the renewal of Madera County's status as a Recycling Market Development Zone.

This is to advise that the Madera County has approved the above described project on

☒ Lead Agency ☐ Responsible Agency

April 21, 2005 and has made the following determinations regarding the above described project:

1. The project [☐ will ☒ will not] have a significant effect on the environment.
2. ☐ An Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
   ☒ A Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures [☐ were ☒ were not] made a condition of the approval of the project.
4. A statement of Overriding Considerations [☐ was ☒ was not] adopted for this project.
5. Findings [☐ were ☒ were not] made pursuant to the provisions of CEQA.

This is to certify that the final environmental document, with all comments, responses, and record of project approval is available to the general public at: Madera County Planning Department, 2037 W. Cleveland, Madera, CA 93637.

Signature (Public Agency)	April 22, 2005 *Date*	Assistant Planning Director *Title*

Date received for filing at OPR:

Environmental Checklist Form

Title of Proposal: Recycling Market Development Zone

Date Checklist Submitted: August 31, 2004

Agency Requiring Checklist: Madera County Planning Department
2037 W Cleveland Avenue MS-G
Madera, CA 93637

Agency Contact: Briza Sholars **Phone:** (559) 661-6333

Description of Project:

The Recycling Market Development Zone (RMDZ) program is a partnership of local government and the California Integrated Waste Management Board, created to provide incentives to businesses that use materials from the waste stream for their manufacturing. The project is the renewal of Madera County's status as a Recycling Market Development Zone.

Project Location:

To participate, the business must be located in Madera County. A site location map showing the boundaries of the County of Madera, inclusive of its two incorporated cities , is attached as an Exhibit. (See Exhibit A).

The RMDZ is a program that makes assistance (including loans) available to all businesses and local governments in the County. Therefore the scope of this document is countywide.

Applicant Name and Address: Madera County Economic Development Commission
2425 Cleveland Avenue Suite 101
Madera, CA 93637

General Plan Designation: The Madera County General Plan establishes general land use categories (designations) for the unincorporated portions of the County. The County's Zoning Ordinance implements the General Plan's goals and policies. Similarly, each of the two cities in the county has adopted General Plans and has designated land use categories.

Zoning Designation: Land Use designations are created to accommodate various types of uses and businesses. Zoning Ordinances set standards for land use entitlements and approval of those uses and businesses. If a business benefits from the countywide RMDZ and is allowed by the land use designation and zoning, then that business would be compatible with the County General Plan if located in the unincorporated area and with city general plan designations if in a city.

Surrounding Land Uses and Setting: Fresno County-South, West
Mono County-East
Mariposa County- Northeast
Merced County-Northwest

Other Public Agencies whose approval is required:

None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Geology /Soils
☐ Land Use / Planning	☐ Hydrology / Water Quality	☐ Hazards & Hazardous Materials
☐ Mineral Resources	☐ Noise	☐ Population / Housing
☐ Public Services	☐ Recreation	☐ Transportation/Traffic
☐ Utilities / Service Systems	☐ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

■ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature _____ August 31, 2004
Date

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
I.	AESTHETICS -- Would the project:				
a)	Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b)	Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c)	Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☐	■
d)	Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any direct activities or measures that are expected to have an impact on scenic areas or the creation of additional lighting.

II.	AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a)	Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b)	Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	■
c)	Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zonedoes not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal willresult in any direct activities or measures that impact agricultural resources.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
III.	AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a)	Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b)	Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	☐	☐	☐	■
c)	Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☐	☐	☐	■
d)	Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☐	■
e)	Create objectionable odors affecting a substantial number of people?	☐	☐	☐	■

Discussion: The proposed renewal of the County's designation as a Recycling Market Development Zone does not include any direct activities or measures that are expected to introduce additional air pollutants to the existing environment. No specific air quality impacts can be anticipated to occur as a result of this proposal. The documents requesting that the State renew Madera County's designation as a Recycling Market Development Zone do not propose anynew or expanded facilities that are expected to impact air quality at specific locations. To the extent that renewal of the County's designation as a RMDZ is, in the future, partly responsible for the expansion or recruitment of a business, the air quality impacts of that business' activities will be subject to separate environmental review.

IV.	MINERAL RESOURCES -- Would the project:				
a)	Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
b)	Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not requireor ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewalwill result in any direct activities or measures that utilize mineral resources. The project would not result in the loss of any mineral resources which are of value to the region or residents of the state.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
V.	BIOLOGICAL RESOURCES -- Would the project:				
a)	Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	■
b)	Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	■
c)	Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	■
d)	Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	■
e)	Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	■
f)	Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	■

Discussion: The project will not conflict with any local policies or ordinances protecting biological resources, and the project will not conflict with the provision of any conservation plans. Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any direct activities or measures that impact wetland habitat or endangered, threatened, or rare species. Because no facilities would be permitted without individual review as to location and impacts under local jurisdictions' regulations, no adverse environmental impacts on any wetland habitat or endangered, threatened, or rare species are anticipated to occur as a result of this proposal.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI.	CULTURAL RESOURCES -- Would the project:				
a)	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	■
b)	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☐	☐	■
c)	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	■
d)	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any direct activities or measures that would have adverse impacts on cultural resources. In the future, businesses may choose to locate or expand in Madera County, in part based on incentives that they may obtain through programs made possible by Madera County's designation as a Recycling Market Development Zone. In those cases, when their actions trigger the CEQA process, they will be subject to environmental review and evaluated on a case-by-case basis.

'II .	LAND USE AND PLANNING - Would the project:				
a)	Physically divide an established community?	☐	☐	☐	■
b)	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■
c)	Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	■

Discussion: While creation or expansion of recycling, manufacturing, or composting facilities could have significant adverse impact on the community character, there are no new or expanded facilities proposed in the documents requesting renewal of Madera County's designation as a Recycling Market Development Zone. The existing zoning ordinance in the County restricts the potential for recycling activities to have an affect on surrounding uses such as agriculture. Therefore, in the event any future facilities that might be able to take advantage of incentives provided by the RMDZ program have the potential to impact the character of the community, they will be subject to separate environmental review at the time that they are proposed. There is no substantial evidence to indicate that there will be an impact at this time.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VIII.	GEOLOGY AND SOILS -- Would the project:				
a)	Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	☐	☐	☐	■
	I) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	■
	ii) Strong seismic ground shaking?	☐	☐	☐	■
	iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
	iv) Landslides?	☐	☐	☐	■
b)	Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	■
c)	Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on - or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☐	■
d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	■
e)	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any direct activities or measures that would have an adverse environmental impact on areas known for erosion, landslides, liquefaction, or faults. There are no active or potentially active faults of major historic significance within Madera County. The County does not lie within any Alquist Priolo Special Studies Zone for surface faulting or fault creep. Seismic ground shaking, however, is the primary seismic hazard in Madera County because of the County's seismic setting and its record of historical activity (General Plan Background Element and Program EIR). The project represents no specific threat or hazard from seismic ground shaking, and all future facilities constructed that might be able to take advantage of incentives provided by the RMDZ program will comply with current local and state building codes. Other geologic hazards, such as landslides, lateral spreading, subsidence, and liquefaction have not been known to occur within Madera County.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
IX.	HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
a)	Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☐	■
b)	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☐	■
c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	■
d)	Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
f)	For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	☐	☐	☐	■
g)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
h)	Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐		☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not requireor ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will create any hazard to the public. In the future, businesses may choose to locate or expand in Madera County, in part based on incentives that they may obtain through programs made possible through Madera County's Recycling Market Development Zone. In those cases, projects will be subject to environmental review and evaluated on a case by case basis.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
X.	HYDROLOGY AND WATER QUALITY -- Would the project:				
a)	Violate any water quality standards or waste discharge requirements?	☐	☐	☐	■
b)	Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☐	■
c)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	☐	☐	☐	■
d)	Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	☐	☐	☐	■
e)	Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☐	■
f)	Otherwise substantially degrade water quality?	☐	☐	☐	■
g)	Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	■
h)	Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	■
I)	Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	■
j)	Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	■

Discussion: The proposed renewal of the County's designation as a Recycling Market Development Zone does not include any direct activities or measures that are expected to lead to the reduction of the existing groundwater supplies. This proposal does not propose or ensure any new or expanded facilities, therefore, there is no substantial evidence to indicate that zone renewal will result in the degradation of the existing groundwater quality in Madera County.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XI.	NOISE – Would the project result in:				
a)	Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☐	■
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☐	■
c)	A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	■
d)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☐	■
e)	For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■
f)	For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in anydirect activities or measures that would have any adverse environmental impacts relative to noise or vibrations.

XII.	POPULATION AND HOUSING -- Would the project:				
a)	Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	■
b)	Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■
c)	Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

Discussion: The proposed renewal of the County's designation as a Recycling Market Development Zone is not considered growth inducing because it does not remove an impediment nor set a precedent for future development of facilities. There is no substantial evidence to indicate that the proposed renewal of the County's designation as a RMDZ would result in the removal of existing housing or increase the demand for additional housing. Therefore there would be no population or housing impacts associated with the renewal of the designation. In the event any future businesses locate or expand in Madera County in part as a result of the incentives provided by the RMDZ program, they will be subject to separate environmental review at the time they are proposed.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII.	PUBLIC SERVICES				
a)	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
I)	Fire protection?	☐	☐	☐	■
ii)	Police protection?	☐	☐	☐	■
iii)	Schools?	☐	☐	☐	■
iv)	Parks?	☐	☐	☐	■
v)	Other public facilities?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any direct activities or measures that would require any public service as part of its operation

XIV.	RECREATION				
a)	Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
b)	Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will result in any directactivities or measures having adverse environmental impacts on local and regional parks/facilities.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XV.	TRANSPORTATION/TRAFFIC -- Would the project:				
a)	Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☐	☐	☐	■
b)	Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	☐	☐	☐	■
c)	Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	☐	☐	☐	■
d)	Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☐	■
e)	Result in inadequate emergency access?	☐	☐	☐	■
f)	Result in inadequate parking capacity?	☐	☐	☐	■
g)	Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will have any adverse environmental impacts on traffic or transportation level of service

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVI.	UTILITIES AND SERVICE SYSTEMS – Would the project:				
a)	Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☐	☐	☐	■
b)	Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
c)	Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☐	■
d)	Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☐	■
e)	Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☐	■
f)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☐	■
g)	Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	■

Discussion: Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will have any adverse environmental impacts on existing public water systems or quality of water supplied by public water systems. In the future, businesses may choose to locate or expand in Madera County, in part based on incentives that they may obtain through programs made possible through Madera County's Recycling Market Development Zone. In those cases, projects will be evaluated, permitted, regulated or otherwise controlled on a case by case basis.

Renewal of the County's designation as a Recycling Market Development Zone does not require or ensure any future facilities; therefore, there is no substantial evidence to indicate that zone renewal will have any adverse environmental impacts resulting from generation of solid waste or on individual sewage disposal systems. In the future, businesses may choose to locate or expand in Madera County, in part based on incentives that they may obtain through programs made possible through Madera County's Recycling Market Development Zone. In those cases, projects will be subject to environmental review and evaluated individually, on a case by case basis.

		Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII.	MANDATORY FINDINGS OF SIGNIFICANCE				
a)	Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☐	■
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☐	■
c)	Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?		☐	☐	■

Discussion: The project includes the renewal of the Recycling Market Development Zone (RMDZ) program which is a partnership of local government and the California Integrated Waste Management Board, created to provide incentives to businesses that use materials from the waste stream for their manufacturing. No impacts to biological or cultural resources will be generated.

No cumulative impacts have been identified for the project.

No opportunities for direct or indirect adverse effects on human beings have been identified for the project.

NEGATIVE DECLARATION

The Recycling Market Development Zone — **ND** 2004-53

Project Name

County of Madera — **DATE:** August 31, 2004

Name of Proponent

PROJECT LOCATION:

The Madera County Assessor's Office indicates that the County of Madera is 1,378,268 acres in size and that there are 51,843 assessor parcel numbers within the boundaries of Madera County. A site location map showing the boundaries of the County of Madera, inclusive of its two incorporated cities , is attached as an Exhibit. (See Exhibit A).

PROJECT DESCRIPTION:

The Recycling Market Development Zone (RMDZ) program is a partnership of local government and the California Integrated Waste Management Board, created to provide incentives to businesses that use materials from the waste stream for their manufacturing. The project is the renewal of Madera County's status as a Recycling Market Development Zone.
The RMDZ is a program that makes assistance (including loans) available to all businesses and local governments in the County. Therefore the scope of this document is countywide.

PROPOSED FINDINGS:

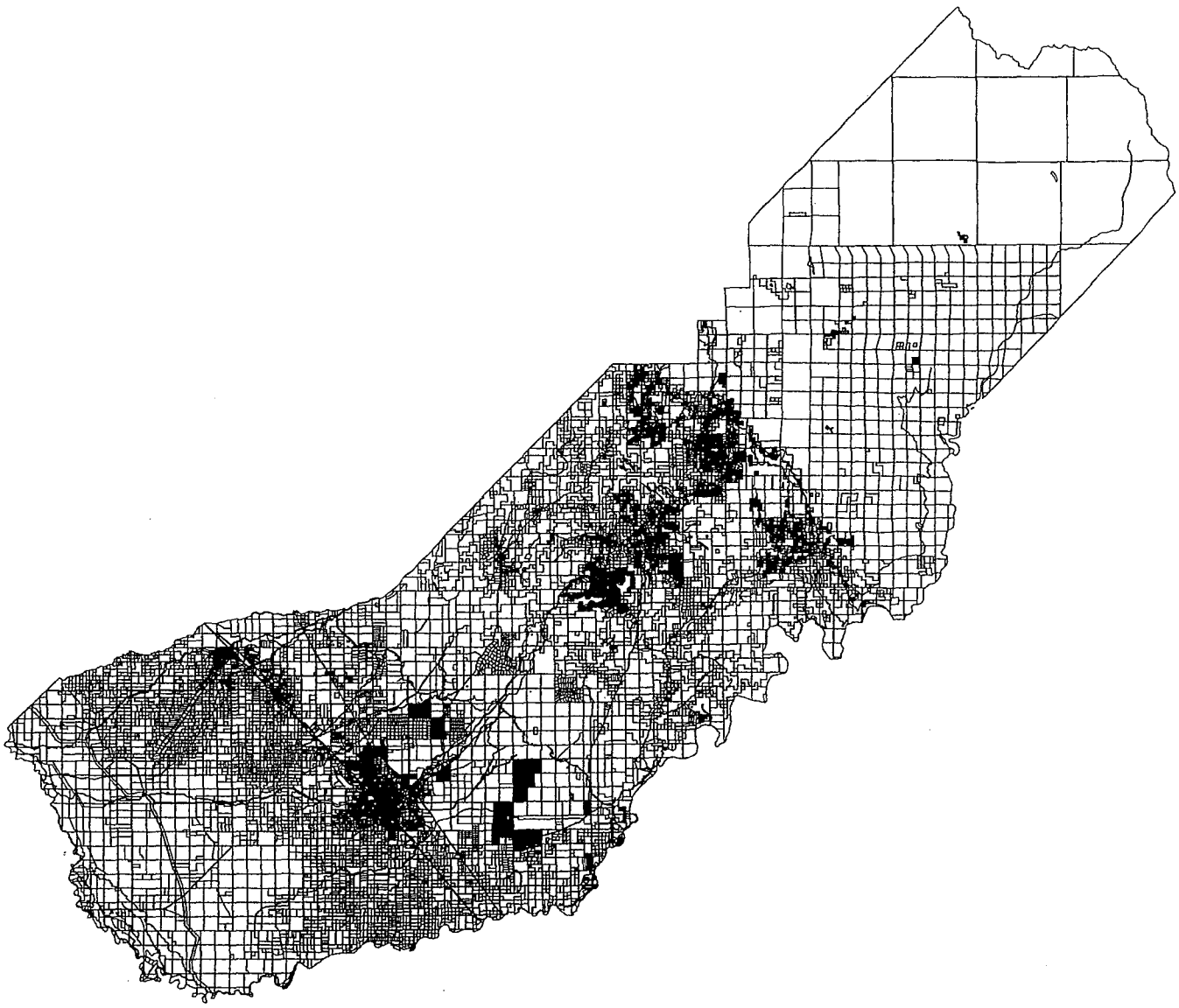
X — An Initial Study has been conducted and a finding made that the proposed project will have no significant effect on the environment (CEQA 15070 (a)).

___ An Initial Study has been conducted and a finding made that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because Mitigation Measures have been added to the project (CEQA 15070 (b)).

A copy of this document is available for review at the Madera County Planning Department, 2037 W. Cleveland Avenue, Madera, California.

Briza Sholars, Planner
Madera County Environmental Committee

EXHIBIT A

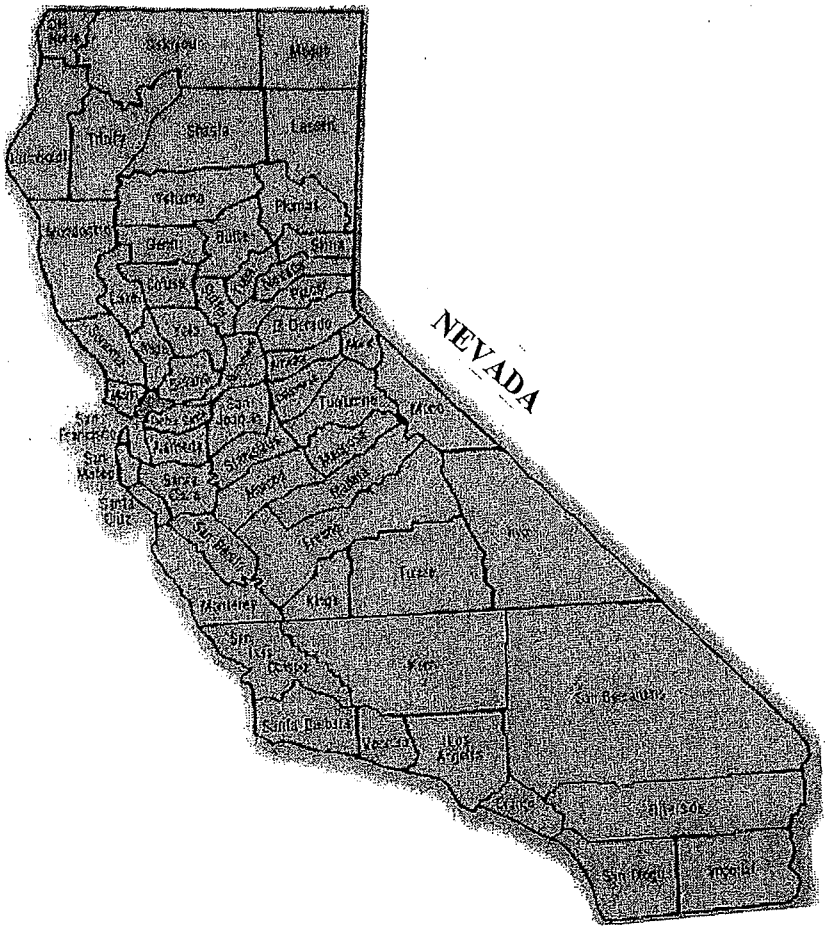


N

MADERA COUNTY

EXHIBIT B

OREGON



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CALIFORNIA'S 50 COUNTIES

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REPORT TO THE CITY COUNCIL

COUNCIL MEETING OF January 21, 2015

AGENDA ITEM NUMBER E-2

APPROVED BY

Steve Frazier
DEPARTMENT DIRECTOR

CITY ADMINISTRATOR

SUBJECT: INFORMATIONAL REPORT ON A CHANGE IN CRIME ANALYTICS SOFTWARE FOR THE MADERA POLICE DEPARTMENT

RECOMMENDATION

Informational report.

SUMMARY

In 2011 we purchased Crime Reports, a tool that represents crime in a visual fashion to the public via the internet and provides, on the back end, (law enforcement side) the ability to predict crime trends. We successfully integrated Crime Reports into our policing philosophy and had some success in deterring crime through the successful mapping of crime hotspots and deploying officer to designated areas at designated times. We also actively pushed the public side of crime reports in our community outreach efforts and integrated Crime Reports into our neighborhood watch programs. The concept is to provide real time information to the community in order to create partnerships and involvement by the community in the policing process.

Crime Reports allowed the Department to enter the field of intelligence based policing and as our knowledge in that arena grows we are discovering that Crime Reports one dimensional approach no longer fits the needs of our organization. Intelligence based policing is not based exclusively on the concept of hot spot policing but on a number of factors in addition to hot spot policing. Crime Reports also made upgrades designed to enhance their product, increasing their cost of their product in line with the upgrades they were making. Crime reports went from $5,000 annually in 2013 to $14,000 plus in 2014. What we found with the upgrades was a loss in functionality with no gained benefit organizationally yet our costs had more than doubled. We found ourselves at crossroads; continue to pay for a system that was not providing the analytical features we felt

were necessary to keep us in the intelligence policing game or move away from Crime Reports altogether. Our hand was forced to some extent as the annual fee was due January 2015.

In speaking with several vendors we found, like our records management system, that the cost of crime analysis software varies significantly from $14,000 on the low end to well over $100,000. Cyrun, our new vendor for CAD/RMS recommended Bair Analytics, whom they had worked with in the past. We met with Bair and liked what we saw and the features contained in their software met and exceeded our needs for crime analysis. Bair was also willing to meet the price of Crime Reports even though their product was priced significantly higher. They were willing to do this in order to increase their exposure in the central valley. Bair has features that will allow us to trend not only date and time but method of operation and their product has already integrated with Cyrun and their Alliance 7 product, which is now our CAD/RMS system.

Bair Analytics has every feature that was offered by Crime Reports, their predictability on the law enforcement side and the public side for citizen engagement. At this juncture we lose nothing as the functionality of Crime Reports was diminished to the point that we were paying $14,000 annually in order to maintain the public side of the program. Another advantage to Bair is their annual costs are significantly less than Crime Reports. Our initial startup costs for Bair will mirror that of Crime Reports, $14,000. Annually thereafter that figure will drop to $5,050.

The PD is in the process of acquiring the Bair product; we have had several demonstrations with both PD staff and Information Services and feel that the Bair product is more closely aligned with our analytical needs.

FISCAL IMPACT

There will be no additional fiscal impact beyond the approved P.D. budget.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN

Strategy 115 – Economic resources provision: ensure sufficient economic resources to provide adequate City services and prepare for future growth.

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REPORT TO CITY COUNCIL

Approved by:

Department Director

City Administrator

Council Meeting of: January 21, 2015

Agenda Number: E-3

SUBJECT: Acceptance of the Audited Financial Statements and Single Audit Report (Federal Grants) for the Fiscal Year ended June 30, 2014.

RECOMMENDATION: Acceptance of Audited Financial Statements and Single Audit Report for Fiscal Year ended June 30, 2014.

SUMMARY: The City of Madera's (City's) Financial Statements for Fiscal Year ended June 30, 2014 have been audited by an independent accounting firm and an Unqualified Opinion (clean opinion) has been issued.

DISCUSSION: In accordance with the Single Audit Act of 1984 and the provisions of the U.S. Office of Management and Budget (OMB) Circular A-133, the City is required to have an independent firm audit their Financial Statements whenever $500,000 in Federal grants are received for any Fiscal Year. The audit must follow Generally Accepted Auditing Standards as set forth by the American Institute of Certified Public Accountants and comply with the standards for financial audits set forth in the U.S. General Accounting Office's Governments Auditing Standards (1994). The audit completed for Fiscal Year ending June 30, 2014 complies with all the provisions and standards previously stated and the City's Financial Statements have been found to be in conformity with Generally Accepted Accounting Principles.

Copies of the most recent Audited Financial Statements and Single Audit Reports will be posted on the City's website.

FINANCIAL IMPACT: No financial impact to the City.

CONSISTENCY WITH THE VISION MADERA 2025 PLAN: Approval of the audited Financial Statements and Single Audit Report is not addressed in the vision or action plans; the submitted item is also not in conflict with any of the actions or goals contained in that plan.

CITY OF MADERA
CALIFORNIA

FINANCIAL STATEMENTS

FOR THE YEAR ENDED
JUNE 30, 2014

CITY OF MADERA
CALIFORNIA

JUNE 30, 2014

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INDEPENDENT AUDITOR'S REPORT

To the Honorable Mayor and Members of the City Council of the
City of Madera
Madera, California

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the discretely presented component unit, each major fund, and the aggregate remaining fund information of the City of Madera, California (the City) as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the City's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the City's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

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Clovis, CA 93612
tel 559.299.9540
fax 559.299.2344
www.ppcpas.com

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the discretely presented component unit, each major fund, and the aggregate remaining fund information of the City of Madera, California, as of June 30, 2014, and the respective changes in financial position, and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3-15, budgetary comparison information on pages 78-81, and schedule of funding progress on page 82 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City's basic financial statements. The combining nonmajor fund financial statements are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining nonmajor fund financial statements are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining nonmajor fund financial statements are fairly stated in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with Government Auditing Standards, we have also issued our report dated January 14, 2015, on our consideration of the City of Madera, California's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control over financial reporting and compliance.

Price Paige & Company

Clovis, California
January 14, 2015

This discussion and analysis of the City of Madera's financial performance provides an overview of the City's financial activities for the fiscal year ended June 30, 2014. Please read it in conjunction with the accompanying basic financial statements and the accompanying notes to those financial statements.

Financial Highlights

- The City's government-wide total assets exceeded liabilities (net position) at the close of the fiscal year by $310 million, which is 4% greater than 2013. Of this amount, $32 million is in unrestricted net position and available to meet the City's ongoing commitments to citizens and creditors. That represents an increase of $1.6 million or 6% over fiscal year 2013.

- The City's total net position increased by $11 million. The increase is due primarily to grant funding provided to the City for road improvements and for low-income housing projects.

- At the close of the current fiscal year, the City's governmental funds reported combined fund balances of $45 million, an increase of $10 million in comparison with the prior year. Approximately 25% of this amount ($11 million) is available for spending at the City's discretion (unassigned fund balance).

- The City's General Fund, including Code Enforcement, Insurance Reserve, Payroll Clearing, Community Development and LEA Tire Grants, ended the year with a fund balance of $12 million, which represents a net increase of approximately $2 million from the previous year. The unassigned balance of slightly over $11 million is available for carryover to fund future general fund expenditures.

- During the year, 4% rate increases were implemented for water and sewer services. A recommendation for incremental rate increases over the next five years will be presented for Council consideration in the first quarter of 2015. A new contract for refuse franchise hauling services was awarded during fiscal year 2013. Fiscal year 2014 was the first full fiscal year under this contract, and resulted in an increase to the net position in the solid waste fund of $400,000 or 14% over 2013.

Overview of the Financial Statements

This annual report consists of a series of financial statements. These statements include all activities of the City of Madera, using the integrated approach as prescribed by GASB Statement No. 34. The Statement of Net Position and Statement of Activities provide information about the activities of the City as a whole and present a longer-term view of the City's finances. Fund financial statements tell how these services are financed in the short-term as well as what remains for future spending. Fund financial statements also report the City's operations in more detail than the government-wide statements by providing information about the City's most significant funds. The remaining statements provide financial information about activities for which the City acts solely as a trustee or agent for the benefit of those outside the Government.

Reporting the City as a Whole

Government-wide financial statements. The government-wide financial statements are designed to provide readers with a broad overview of the City's finances. These statements include all assets and liabilities of the City using the *accrual basis of accounting,* which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when cash is received or paid out.

The *statement of net position* presents information on all the City's assets, liabilities, and deferred outflows of resources, with the difference between the two reported as *net position.* Over time, increases or decreases in net position may serve as one indicator of whether the City's financial position is improving or deteriorating.

The *statement of activities* presents information showing how the City's net position changed in the most recent fiscal year. All changes of net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows. Thus, revenues and expenses are reported on this statement for some items that will result in cash flows in future fiscal periods (e.g. earned but unused vacation leave).

The government-wide financial statements of the City are divided as follows:

Governmental Activities: Most of the City's basic services are included here such as public safety, transportation (street and roads), community development, culture and recreation and general government. These services are primarily financed by property and sales taxes and federal and state grants.

Business-type Activities: The City charges fees to customers to cover the costs of services provided. The City's utilities, water, sewer, community sanitation (refuse and street cleaning), golf course, and airport, as well as public transit services are included here.

The government-wide financial statements can be found on pages 19-21 of this report.

Fund financial statements. The fund financial statements provide more detailed information about the City's most significant funds, not the City as a whole. A fund is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. Some funds are required to be established by State Law or by bond covenants. Management establishes other funds to control and manage money for particular purposes or to show the City is meeting legal responsibilities for using certain taxes, grants, and other money. All the funds of the City can be classified into three categories: governmental funds, proprietary funds and fiduciary funds.

Governmental funds. Governmental funds are used to account for essentially the same functions reported as governmental activities in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on the near-term inflows and outflows of spendable resources, as well as on balances of spendable resources available at the end of the fiscal year. These funds are reported using an accounting method called *modified accrual* accounting, which measures cash and all other financial assets that can readily be converted to cash. Such information is useful in evaluating a governments near-term financing requirements.

Because the focus of the governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for the governmental funds with similar information presented for *governmental activities* in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide reconciliations between governmental funds and governmental activities. This reconciliation explains the relationship (or differences) between the fund statements and the government-wide statements.

The City of Madera maintains nineteen individual governmental funds. Information is presented separately in the governmental funds balance sheet and in the governmental funds statement of revenues, expenditures and changes in fund balances for the General Fund, General Development Impact Fee Fund, Special Gas Tax Fund, and Residential Rehab Fund all of which are considered to be major funds. Data from the other sixteen funds are combined into a single aggregated presentation.

Individual fund data for each of these non-major governmental funds is provided in the form of combining statements elsewhere in this report.

The City adopts an annual appropriated budget for the General Fund. A budgetary comparison statement has been provided for the General Fund to demonstrate compliance to this budget.

The basic governmental fund financial statements can be found on pages 22-25 of this report.

Proprietary funds. The City has two different types of proprietary funds, enterprise funds and internal service funds. Enterprise funds are used to report the same functions presented as business-type activities in the government-wide financial statements. The City utilizes enterprise funds to account for those activities that are supported primarily by user charges to external users, and includes community sanitation, sewer disposal, water and transit. Internal service funds are used to account for activities that are supported by user charges primarily to the City's other programs and activities and include fleet management, facility maintenance, and computer replacement. Because all of these services predominantly benefit governmental rather than business-type functions, they have been included within governmental activities in the government-wide financial statements.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for Water, Sewer, Solid Waste, and Drainage Operations funds since they are all major funds. Individual fund data for each of these non-major enterprise funds is provided in the form of combining statements elsewhere in this report. All of the internal service funds are combined into a single, aggregated presentation in the fund financial statements. Individual fund data for the internal service funds is provided in the form of combining statements elsewhere in this report.

The basic proprietary fund financial statements can be found on pages 26-33 of this report.

Fiduciary funds. Fiduciary funds are used to account for resources held for the benefits of parties outside the City. Fiduciary funds are not reflected in the government-wide financial statements because the City cannot use these funds to finance its operations.

The fiduciary fund financial statements can be found on pages 34-35 of this report.

Notes to the basic financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund statements. The notes to the basic financial statements can be found on pages 36-75 of this report.

Other Information. In addition to the basic financial statements and accompanying notes, this report also presents required supplementary information concerning the City's progress in funding its obligation to provide pension and OPEB benefits to its employees. Required supplementary information can be found on pages 78-83 of this report.

Government-wide Financial Analysis

Below is a table showing the City's net position for the fiscal year ended June 30, 2014, with comparative data for the fiscal year ended June 30, 2013.

City of Madera's Net Position

	Governmental Activities		Business-Type Activities		Total	
	2014	2013	2014	2013	2014	2013
Assets:						
Current and other assets	$ 54,004,893	$ 44,586,418	$ 26,636,377	$ 26,429,927	$ 80,641,270	$ 71,016,345
Capital assets	190,540,149	188,043,614	111,316,923	113,578,402	301,857,072	301,622,016
Total assets	244,545,042	232,630,032	137,953,300	140,008,329	382,498,342	372,638,361
Liabilities:						
Current and other liabilities	5,317,645	4,889,284	3,166,347	3,428,033	8,483,992	8,317,317
Long-term liabilities	8,835,978	9,132,036	54,781,993	56,380,358	63,617,971	65,512,394
Total liabilities	14,153,623	14,021,320	57,948,340	59,808,391	72,101,963	73,829,711
Deferred inflows of resources:						
Deferred service concession agreement receipts	-	-	209,000	45,000	209,000	45,000
Net position:						
Net investment in capital assets	185,644,703	182,862,086	60,056,090	60,768,756	245,700,793	243,630,842
Restricted	32,451,846	24,794,707	-	-	32,451,846	24,794,707
Unrestricted	12,294,870	10,951,919	19,739,870	19,386,182	32,034,740	30,338,101
Total net position	$ 230,391,419	$ 218,608,712	$ 79,795,960	$ 80,154,938	$ 310,187,379	$ 298,763,650

As of June 30, 2014, the City's government-wide total assets exceeded liabilities (net position) by $310 million. Governmental activities finished the year with a positive net position balance of $230 million, an increase of $11 million, or 5% over 2013. Business-type activities finished the year with a positive balance of $80 million, which is same as 2013. Net position, as noted earlier, may serve over time as a useful indicator of the City's financial position. Of the total net position, $246 million or 79% is the City's net investment in capital assets (e.g. land, buildings and improvements, machinery and equipment and the road network) less any related debt used to acquire those assets that is still outstanding.

The City's net investment in capital assets increased by $2 million, restricted net position increased by $8 million and unrestricted net position increased by $1 million, accounting for the increase in total net position of $11 million. The increase in capital assets is primarily related to improvements to public ways and facilities. The increase to restricted net position is due primarily to grant funding for HOME low-income housing project loans. The increase to unrestricted net position is the result of positive results from operations, with overall operational revenues exceeding operational expenditures in fiscal year 2013/2014.

All of the City's long-term liabilities relate to the acquisition of capital assets. Some of those assets include the City's youth center, police facility, and sewer and water infrastructure including the water and wastewater treatment plant, a sewer truck and a municipal golf course facility. These capital assets are utilized to provide services to citizens and are not available for future spending. The repayment of the debt on these assets must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

Restricted net position represents $32 million or 10% of the total. Restricted net position represents those resources that are subject to external restrictions on how they may be used. These restrictions are established by bond covenants or restrictions on the use of funds by state or federal regulations.

Unrestricted net position represents those resources which may be used to meet the City's ongoing commitments to citizens and creditors. Government-wide unrestricted net position represents $32 million or 10% of the total net position, which is an increase of $1 million or 6% from the previous year. Governmental activities account for $12 million or 38% of the total unrestricted net position and increased by $1 million or 12% compared to last year. Business-type activities account for $19 million or 62% of the total unrestricted net position and increased by $353,687 or 2% compared to last year.

Governmental activities. Governmental activities account for $230 million or 74% of the total government-wide net position. This is an increase of $11 million or 5% over June 30, 2013.

The following table lists key components of this increase:

City of Madera's Changes in Net Position

	Governmental Activities		Business-Type Activities		Total	
	2014	2013	2014	2013	2014	2013
Revenues						
Program revenues:						
Charges for services	$ 6,760,893	$ 7,099,271	$ 18,845,117	$ 19,136,415	$ 25,606,010	$ 26,235,686
Operating grants and contributions	22,576,808	21,036,408	1,458,594	1,431,191	24,035,402	22,467,599
Capital grants and contributions	5,532,696	713,470	1,730,356	1,208,520	7,263,052	1,921,990
General revenues:						
Property taxes	2,943,796	2,757,456	61,049	98,923	3,004,845	2,856,379
Sales and use taxes	5,472,283	4,573,272	-	-	5,472,283	4,573,272
Franchise taxes	591,116	584,160	-	-	591,116	584,160
Other taxes	1,821,326	1,899,648	-	-	1,821,326	1,899,648
Investment earnings	795,691	1,216,644	19,076	19,315	814,767	1,235,959
Gain (loss) on sale of capital assets	75,607	14,184	(11,968)	(52,915)	63,639	(38,731)
Miscellaneous	1,071,486	841,992	25,478	35,542	1,096,964	877,534
Total revenues	47,641,702	40,736,505	22,127,702	21,876,991	69,769,404	62,613,496
Expenses						
General government	11,482,393	11,946,360	-	-	11,482,393	11,946,360
Public safety	13,358,929	13,096,060	-	-	13,358,929	13,096,060
Public ways and facilities	3,766,236	2,940,005	-	-	3,766,236	2,940,005
Social services	517,537	686,717	-	-	517,537	686,717
Culture and recreation	3,814,936	3,749,071	-	-	3,814,936	3,749,071
Community development	5,478,644	5,639,070	-	-	5,478,644	5,639,070
Interest on long-term debt	269,845	291,000	-	-	269,845	291,000
Local transit	-	-	1,827,194	1,792,905	1,827,194	1,792,905
Water	-	-	4,788,350	5,212,633	4,788,350	5,212,633
Sewer	-	-	7,318,263	7,281,744	7,318,263	7,281,744
Golf course	-	-	66,651	130,394	66,651	130,394
Airport	-	-	687,228	697,826	687,228	697,826
Solid waste	-	-	4,326,840	5,524,217	4,326,840	5,524,217
Drainage operations	-	-	933,506	895,238	933,506	895,238
Total expenses	38,688,520	38,348,283	19,948,032	21,534,957	58,636,552	59,883,240
Increase (decrease) in net position before transfers	8,953,182	2,388,222	2,179,670	342,034	11,132,852	2,730,256
Transfers	2,538,648	1,305,047	(2,538,648)	(1,305,047)	-	-
Increase (decrease) in net position	11,491,830	3,693,269	(358,978)	(963,013)	11,132,852	2,730,256
Net position - beginning	218,608,712	175,958,483	80,154,938	98,318,981	298,763,650	274,277,464
Prior period adjustments	290,877	38,956,960	-	(17,201,030)	290,877	21,755,930
Net position - beginning, as restated	218,899,589	214,915,443	80,154,938	81,117,951	299,054,527	296,033,394
Net position - ending	$ 230,391,419	$ 218,608,712	$ 79,795,960	$ 80,154,938	$ 310,187,379	$ 298,763,650

Total governmental revenues for the year were $48 million, which is $7 million or 17% more than in 2013.

- Charges for services of $7 million in 2014 accounted for 14% of the total revenue and are approximately $338,000 or 5% less than 2013. Most of this decrease is related to a $530,000 decrease route and roll-off fees within the general government funds. There is an increase of approximately $539,000 in impact fees, a $106,000 increase in building permits, a $552,000 decrease in fines and penalties for violations, and the remaining $100,000 increase is due to an overall increase in service fees.

- Operating grants and contributions increased $1 million from the previous year, due to a $1.8 million increase is due to the City has received $2.9 million HOME grant in fiscal year 2013 and $4.5 million HOME grant in fiscal year 2014. $841,135 increase is due to the reimbursement of the NSP3 grant from the State. There is a $1.9 million decrease in Measure T Sales Tax Proceeds and $406,373 increase in Proposition 1B proceeds.

- Capital grants and contributions increased $5 million from the previous year, due to approximately $5 million of state transportation grant funding received for street improvements on the 4th Street widening project.

- Taxes, including property, sales, franchise, and other taxes, account for $11 million or 23% of the City's governmental activities revenue. Property taxes increased by $186,340 due to growth and to slight increases in property values. Sales and use taxes increased by $899,011 from the fiscal year 2013 due primarily to $351,000 of revenues that should have been captured and reported in 2013, rather than 2014. That represents a swing of about $702,000 between fiscal years, leaving an increase of about $197,000 that resulted from an improving Madera economy. Franchise taxes increased by $6,956 and other taxes decreased by $78,322.

- Investment earnings decreased by $420,953 from the previous year due to reduced interest rates.

- Miscellaneous revenue increased by $229,494 from the previous year due to refunds of $193,000 for liability insurance and $40,000 or refunds related to employment insurance.

Total governmental expenses for the year were $38 million, which is the same as 2013.

- General government decreased by $463,967 from the previous year due primarily to a $440,000 decrease in depreciation expense, created by assets that were fully depreciated in the prior fiscal year.

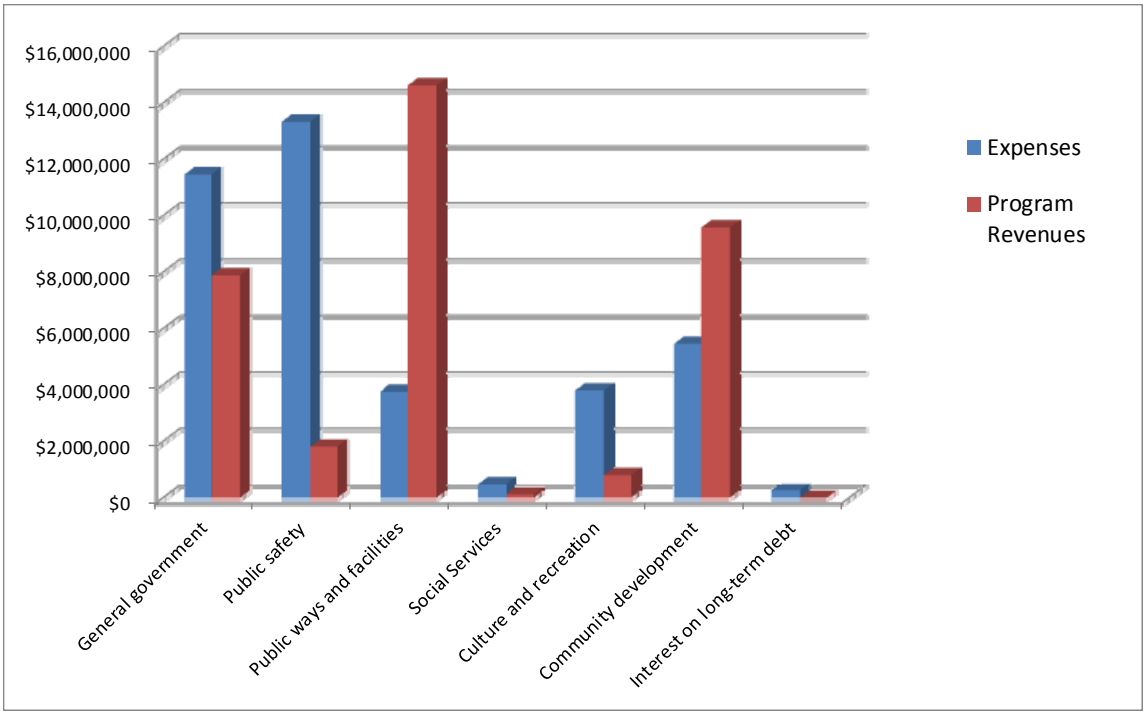
- Public safety increased by $262,869 from the previous year due to a $143,619 increase in C.D.F annual contract, a $91,861 increase in vehicle replacement, and a $46,020 increase in funding to other agencies.

- Public ways and facilities increased by $826,231 from the previous year due to $253,000 more of surface seal treatments and $588,000 in additional depreciation expense related to street improvements.

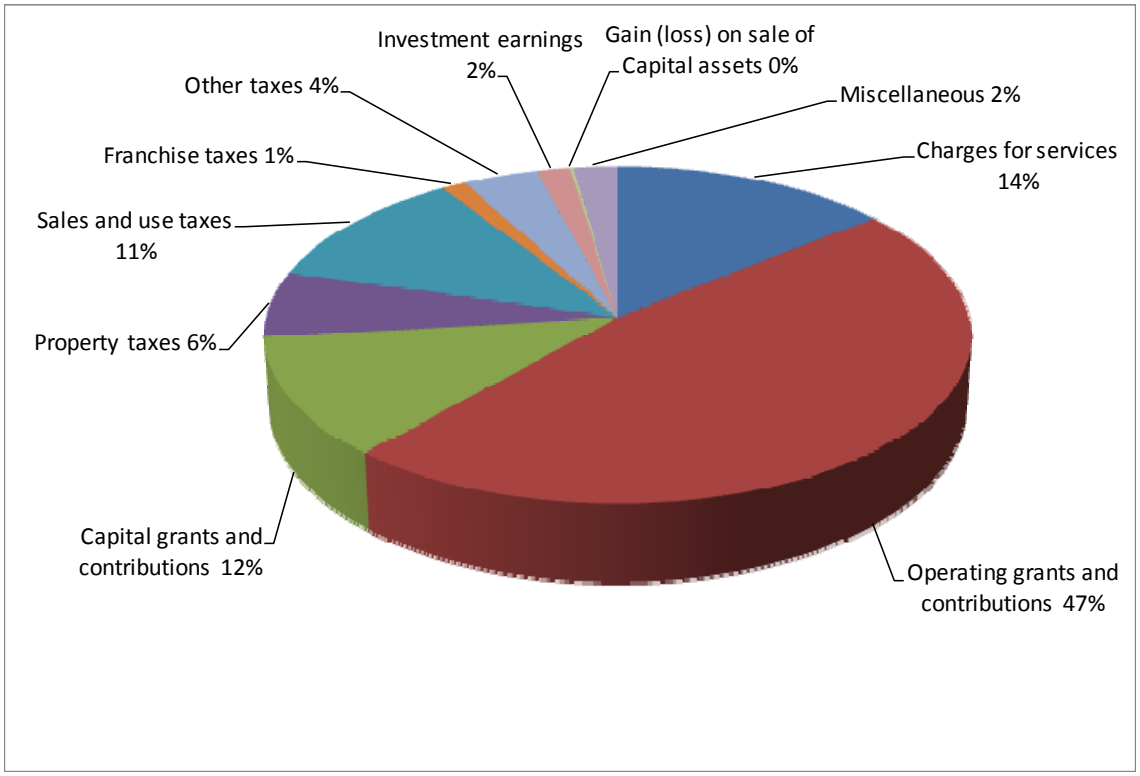
- Social services decreased by $169,180 from the previous year due primarily to a $195,000 reduction in depreciation expense.

- Community development decreased by $160,426 from the previous year due to an $805,488 decrease is attributed from the Low and Moderate Income Housing Asset Fund, a $430,488 decrease in settlement due to the Department of Finance shut down the Housing Successor Agency for their settlement and a $375,000 decrease due to project completed in 2013. In addition, there is a $205,991 increase in down payment loans and $423,440 in rehabilitation assistance.

Expenses and Program Revenues - Governmental Activities



Revenues by Source - Governmental Activities



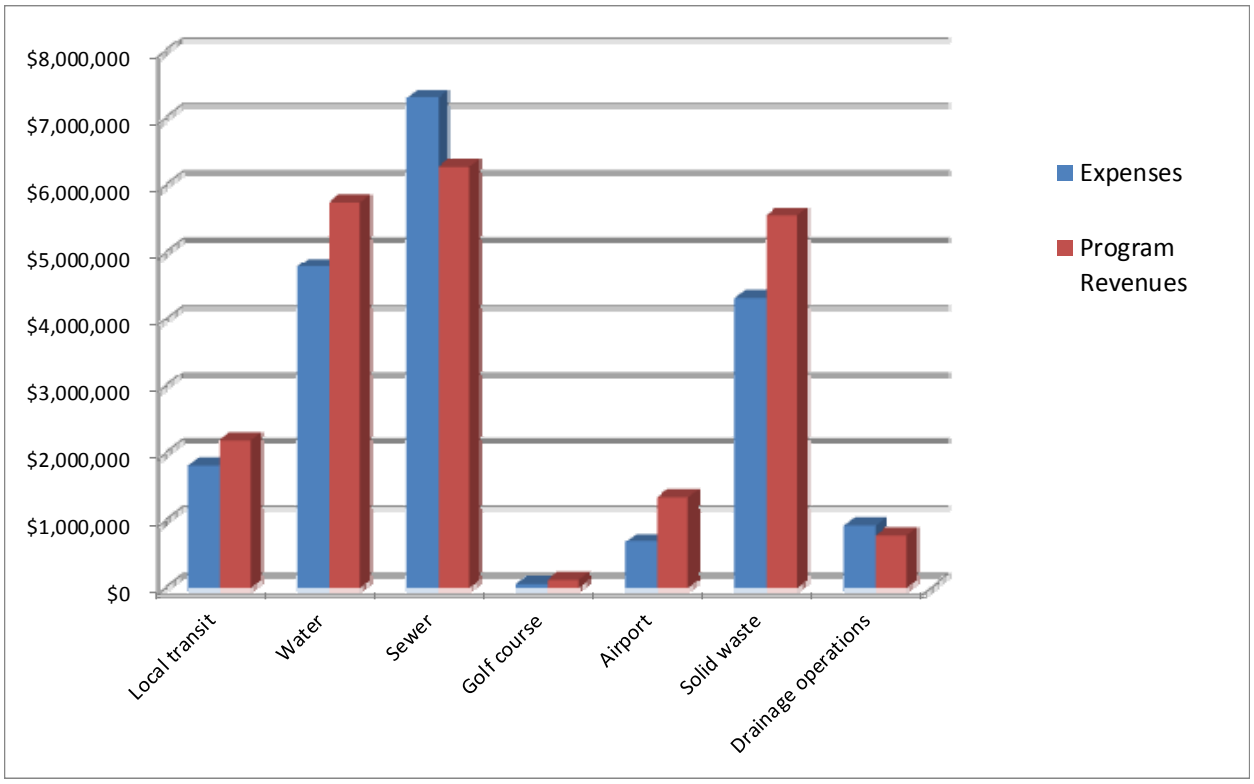
Program revenues that include charges for services and grants specific to certain programs account for $35 million or 73% of the total governmental activity revenue. The amounts necessary to fully fund the governmental activity programs are made up of "general" revenues such as taxes, interest, and grants and contributions.

Business-type Activities. Business-type activities account for $80 million or 26% of the total government-wide net position. This is a decrease of $358,978 from June 30, 2013. Net investment in capital assets accounts for $60 million or 75% of the total net position and is a decrease of $712,666 from 2013. Unrestricted net position of $20 million, or 25% of total net position, represents an increase of $353,687 from 2013.

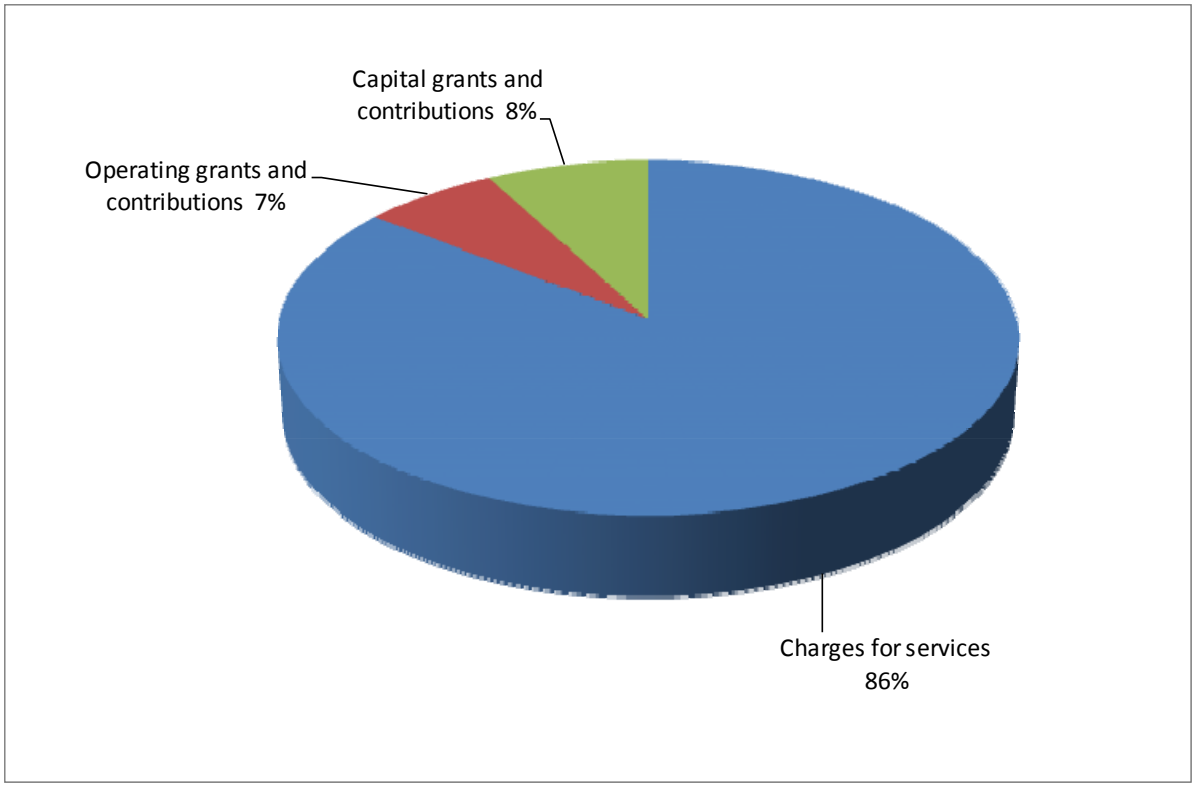
Charges for services decreased by $291,298 from the prior year due to a reduction of over $1 million in solid waste disposal collection fees offset by increases of approximately $265,000 in water user charges, $255,000 in sewer user charges, and $190,000 in solid waste street sweeping fees.

Capital grants and contributions increased by $521,836 from the prior year due primarily to $830,000 in FFA grant funds received in connection with the apron reconstruction project at the City Airport.

Expenses and Program Revenues-Business-Type Activities



Revenues by Source - Business-Type Activities



Included in charges for services are user fees relating to the water, sewer, solid waste, drainage, transit, golf course, and airport operations.

Financial Analysis of the City's Funds

As noted earlier, the City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

Governmental funds. Fund balance is defined in five categories: non-spendable, restricted, committed, assigned and unassigned. Non-spendable fund balances cannot be spent because they are not in spendable form. Restricted fund balances have limitations imposed externally by creditors, granters, contributors, or laws and regulations of other governments. Committed fund balances have self-imposed limitations set in place prior to the end of the period. Assigned fund balances are constrained by the City's intent to be used for a specific purpose but are neither restricted nor committed. Unassigned fund balances are the amounts that have not been assigned to other funds or restricted, committed or assigned to a specific purpose.

All of the City's governmental funds ended the year with positive fund balances. The ending fund balance for all funds is $45 million, which is $10 million more than the previous year. The increase is due to increases to restricted fund balances of nearly $5 million in community development, $1.5 million in public works and transportation and $1.5 million in capital projects and improvements. These increases are related to grant funding for capital projects. There was also an increase in unassigned fund balances of nearly $3 million, with about $2.6 million in the general fund and almost $200,000 in non-major funds.

Of the total fund balance, $11 million or 25% is unassigned which, within the limitations of the fund's purpose, is available for spending at the City's discretion. The remainder of the fund balance is either non-spendable, restricted, committed, or assigned to indicate that it is not in spendable form, legally required to be maintained intact, restricted for particular purposes, committed for particular purposes, or assigned for particular purposes. The details of the remainder are as follows:

Nonspendable:	
Inventory	$ 49,622
Long-term interfund advances	232,562
Restricted:	
Community development	11,210,234
Park development	112,210
Parking improvements	130,769
Public works and transportation	8,591,613
Special assessment project	1,423,375
Social services	52,003
Capital projects and improvements	10,931,642
Debt service	251,393
Assigned:	
Golf course capital	20,000
OPEB liability	97,339
Insurance	1,082,179
Unassigned	11,323,555

General Fund

The General Fund is the chief operating fund of the City. As of June 30, 2014, the *total* fund balance (including all categories) of the general fund was $12.8 million, up $2.6 million from June 30, 2013. The total fund balance of $12.8 million includes non-spendable balances of $0.3 million, restricted balance of $0.08 million, assigned balances of $1.2 million and an unassigned balance of $11.3 million.

The *restricted fund* balance increased by $87,453 from in 2013. The *assigned* fund balance is $1.2 million, which is the same as 2013.

The *unassigned* fund balance increased $2.6 million when compared to June 30, 2013. The $11.3 million unassigned portion represents the amount carried over to offset the impact of any revenue shortfall that may occur in the next year due to economic uncertainty. As a measurement of the General Fund's liquidity, it may be useful to compare both unassigned fund balance and total fund balance to total General Fund expenditures. Unassigned fund balance represents approximately 42% of total General Fund expenditures, while total fund balance represents approximately 48% of that same amount.

The fund balance of the City's general fund increased by $2.7 million during fiscal 2014 year due to the current year revenues exceeding the expenditures.

Other Major Funds

The General Development Impact Fee Special Revenue Fund, a major fund, had a $1.5 million increase in fund balance during the current fiscal year. This increase in fund balance is due to more development impact fees being collected than was expended on projects during the fiscal year. It is typical for such funds to be collected and built up until sufficient funds are available for major projects. The ending fund balance of $10.9 million is restricted for capital projects and improvements.

The Special Gas Tax Special Revenue Fund, a major fund, has a $1.2 million increase in fund balance during the current fiscal year. This increase in fund balance is also due to more revenues being collected than were expended during the fiscal year. The ending fund balance of $8.3 million is restricted for public works and transportation.

The Residential Rehab Special Revenue Fund, a major fund, has a $4.6 million increase in fund balance during the current fiscal year. The increase in fund balance is due to nearly $5.9 million federal aid revenues and over $200,000 of state aid revenues that were received in 2014, with just over $1.7 million of expenditures in these community development programs. The ending fund balance of $7.4 million is restricted for community development.

Proprietary Funds. As indicated in the description of proprietary funds, there are two types of funds, enterprise and internal service funds. The City's proprietary funds provide the same type of information found in the government-wide financial statements, but in more detail.

All of the City's enterprise funds and internal service funds ended the year with positive unrestricted net position as follows:

Water Fund	$7,727,174
Sewer Fund	7,950,663
Solid Waste Fund	3,300,937
Drainage Operations Fund	243,056
Nonmajor Enterprise Funds	844,547
Internal Service Fund	450,882

As noted earlier in the discussion of business-type activities, rates for water and sewer services increased by 4% in the current year. A recommendation for incremental rate increases over the next five years will be presented for Council consideration in the first quarter of 2015.

General Fund Budgetary Highlights

Throughout the fiscal year it was necessary to adjust the original General Fund budget. The General Fund's Schedule of Revenues, Expenditures, and Changes in Fund Balance-Budget to Actual on page 78 shows the original budget and final budget. Below is a summary of the primary amendments:

- $200,514 Community Development – Creation of two new positions in the neighborhood outreach program
- $878,487 Capital Outlay - $700,000 for sewer project and $140,00 for vehicle purchases

The general fund ended fiscal year 2014 with $2 million in savings compared to budget. These variances were primarily the result of delayed projects and equipment purchases, with some savings on personnel and contract services costs. Much of the savings related to delayed projects will be encumbered and rolled into the 2015 budget. So, although they are reflected as savings to the current year budget, they may very well be reserved for and expended in the subsequent fiscal year.

- Actual expenditures for General Government came in $318,580 under budget due to the delayed purchase of new accounting software, personnel cost savings, and lower than expected contract services and OPEB obligation expenses.
- Actual expenditures for Public Ways and Facilities were $461,964 under budget due to lower than projected expenditures on road maintenance, personnel cost savings in streets and in graffiti abatement, and delayed vehicle and equipment replacement.
- Actual expenditures for Community Development came in $296,341 under budget due to a delayed plan update project, lower than anticipated contract services costs and lower than anticipated personnel costs.
- Actual expenditures for Capital Outlay were $740,516 under budget due to the delay of a $700,000 sewer project related to a CDBG transfer and savings on vehicles and equipment purchases.

Capital Assets and Debt Administration

Capital Assets. The City's investment in capital assets for its governmental and business-type activities as of June 30, 2014, amounts to $302 million (net of depreciation), an increase of $235,056 over 2013. The increase is due to street and airport improvements, equipment purchases. This investment in capital assets includes land, buildings and improvements, machinery and equipment, and road network.

Major capital asset additions this year include the following:

- Road network improvements - $11 million
  - 4th street widening project – $9 million
  - Various other street improvement projects - $800,000
  - Various parks improvement projections - $120,000
  - Developer Donations (sidewalk, pavement, pipelines, and others) - $800,000
- Airport improvements (General Aviation Apron Reconstruction) - $1 million
- Equipment purchases (transit busses, vehicles, sewer cleaner) - $1.3 million

During the year the City made improvements to various streets and received developer-donated infrastructure. Capital projects constructed by the City include:

- 4th Street Improvements: Pine to "K" and UPRR to Lake Street
- A.C. Overlay: Almond and "D" Street, Gateway, Granada, "I" Street, Pecan, Golden State

Developer constructed infrastructure was constructed in conjunction with the partial list of projects shown below:

- Arco Station - Golden State Blvd/Avenue 17
- CVS Pharmacy - Howard Road at Pine Street
- Howard & Pine Plaza - Howard Road at Pine Street
- Madera Family Apartments - Stadium Road
- Squeeze Inn - Gateway Drive

Additional information on the City's capital assets can be found in Note 5 on pages 52-53.

City of Madera's Capital Assets

	Governmental Activities		Business-Type Activities		Total	
	2014	2013	2014	2013	2014	2013
Land	$ 7,488,789	$ 7,434,539	$ 9,026,517	$ 9,026,516	$ 16,515,306	$ 16,461,055
Construction in progress	10,878,090	18,931,513	81,732	382,369	10,959,822	19,313,882
Buildings and improvements	16,006,377	16,432,839	33,242,086	35,022,559	49,248,463	51,455,398
Equipment	2,796,903	2,596,262	2,430,562	2,204,448	5,227,465	4,800,710
Infrastructure	153,369,990	142,648,461	66,536,026	66,942,510	219,906,016	209,590,971
	$ 190,540,149	$ 188,043,614	$ 111,316,923	$ 113,578,402	$ 301,857,072	$ 301,622,016

Long-term Debt. The City's long-term debt as of June 30, 2014 was $60 million with governmental activities accounting for $6 million or 9%, and business-type activities accounting for $54 million or 91%. The total debt decreased by $2 million during the current fiscal year. The reason for the decrease was due to principal payment made in current fiscal year.

City of Madera's Outstanding Debt

	Governmental Activities		Business-Type Activities		Total	
	2014	2013	2014	2013	2014	2013
Capital Leases	$ 1,964,615	$ 2,179,997	$ 42,089	$ 68,565	$ 2,006,704	$ 2,248,562
Loans Payable	842,091	1,053,926	8,699,577	8,987,186	9,541,668	10,041,112
Bonds Payable	2,756,931	2,786,337	45,548,146	46,782,875	48,305,077	49,569,212
	$ 5,563,637	$ 6,020,260	$ 54,289,812	$ 55,838,626	$ 59,853,449	$ 61,858,886

General obligation debts are direct obligations of the City and are backed by the full faith and credit of the City requiring voter approval, and may have a tax rate set to cover repayment. State statues limit the amount of general obligation debt to 15% of the City's total assessed valuation. The City of Madera's debt limit is $1.1 billion. Detailed information on the City's long-term debt activity can be found in Note 7 on pages 55-61.

Economic Factors and Next Year's Budgets and Rates

California tends to be last in and last out of a recession; the Central Valley, including Madera, has a tendency to be last in and last out within the State of California. As a result, economic recovery has been late in coming to Madera. The first signs of a full recovery are now in full play.

The region as a whole lost 17,200 jobs from 2007 until 2009. Those jobs have been replaced and an additional 5,000 jobs added. This trend is reflected in a 14.8% increase in local sales tax over the previous 12-month period. The greatest increases are taking place in business-to-business sales and new auto sales. The pent up demand for purchases in these sectors is finally turning into sales. Additionally, there is a clear increase in restaurant sales demonstrating individuals have disposable income and are spending it.

Economic development activity has dramatically increased over the previous twelve months. The industrial vacancy rate has slipped from a high of 14% to under 1%. In response, the City began a joint venture with a local company to develop a 100-acre industrial park. Construction has begun on site improvements and when complete the park will be "plug and play" ready with full infrastructure and rail access. A design build agreement has been executed with a first tenant, representing 100 new jobs, and negotiations are taking place with a second tenant at this time. The intersection and Avenue 17 and Highway 99 remains a primary focus of the City's economic development efforts. A prospect has executed an escrow agreement for a site at this location and is projected to employ 75 to 100 individuals; project completion is approximately 18 months out.

Finally, residential housing starts have grown over the last 24-month period to approximately 160 units and an added valuation of $19 million per year. While less than the 1,000 units per year housing during the boom years, the City sees this trend as the beginning of a new beginning.

The City optimism remains guarded due to the ongoing historic drought that grips California. Water is and will remain the key element in regional economy. The City is taking an active role in regional groundwater management efforts and is planning the next stages of improvements to address long-term water service for current residents and future development. A recommendation for incremental rate increases over the next five years will be presented for Council consideration in the first quarter of 2015. Engineering costs for capital improvements are anticipated to be paid on a pay as you go basis. Bond financing is the most probable source of funds for the actual improvements.

In all respects the City is going to continue with a prudent, conservative financial planning model.

Requests for Information

This financial report is designed to provide our citizens, taxpayers, customers, investors and creditors with a general overview of the City of Madera's finances and to demonstrate the City's accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the Financial Services Director, City of Madera, 205 W. 4th Street, Madera, CA 93637.

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BASIC FINANCIAL STATEMENTS

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CITY OF MADERA
STATEMENT OF NET POSITION
JUNE 30, 2014

	Governmental Activities	Business-Type Activities	Total	Component Unit Housing Authority of the City of Madera
ASSETS				
Cash and investments	$ 36,169,973	$ 20,526,040	$ 56,696,013	$ 2,603,977
Receivables:				
Accounts, net	7,006,214	1,729,968	8,736,182	73,476
Interest	141,692	1,713	143,405	56,398
Prepaid items	-	-	-	24,013
Inventories	49,622	-	49,622	39,707
Internal balances	952,299	(952,299)	-	-
Restricted assets:				
Cash and investments with fiscal agents	251,393	5,330,955	5,582,348	1,830,853
Notes receivable	8,173,700	-	8,173,700	4,556,433
Land held for resale	1,260,000	-	1,260,000	-
Capital assets, not being depreciated	18,366,879	9,108,249	27,475,128	785,827
Capital assets, net of accumulated depreciation	172,173,270	102,208,674	274,381,944	9,627,372
Total assets	244,545,042	137,953,300	382,498,342	19,598,056
LIABILITIES				
Accounts payable	1,730,476	928,327	2,658,803	47,898
Accrued liabilities	-	-	-	56,426
Salaries payable	183,318	27,561	210,879	-
Accrued interest payable	45,100	760,046	805,146	-
Unearned revenue	251,932	109,239	361,171	5,158
Deposits payable	3,106,819	1,341,174	4,447,993	183,690
Noncurrent liabilities:				
Due within one year	1,298,433	1,922,007	3,220,440	118,276
Due in more than one year	7,537,545	52,859,986	60,397,531	3,723,162
Total liabilities	14,153,623	57,948,340	72,101,963	4,152,542
DEFERRED INFLOWS OF RESOURCES				
Deferred service concession agreement receipts	-	209,000	209,000	-
Total deferred inflows of resources	-	209,000	209,000	-
NET POSITION				
Net investment in capital assets	185,644,703	60,056,090	245,700,793	6,773,269
Restricted for:				
Community development	11,210,234	-	11,210,234	-
Park development	112,210		112,210	-
Parking improvements	130,769	-	130,769	-
Public works and transportation	8,591,613	-	8,591,613	-
Special assessment project	1,423,375	-	1,423,375	-
Law enforcement	-	-	-	-
Social service	52,003	-	52,003	-
Capital projects and improvements	10,931,642	-	10,931,642	-
Housing services	-	-	-	1,525,841
Unrestricted	12,294,870	19,739,870	32,034,740	7,146,404
Total net position	$ 230,391,419	$ 79,795,960	$ 310,187,379	$ 15,445,514

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2014

Functions/Programs:	Expenses	Program Revenues: Charges for Services	Program Revenues: Operating Grants and Contributions	Program Revenues: Capital Grants and Contributions
Primary government:				
Governmental activities:				
General government	$ 11,482,393	$ 1,800,514	$ 6,094,370	$ -
Public safety	13,358,929	843,142	977,661	-
Public ways and facilities	3,766,236	1,339,346	7,737,929	5,532,696
Social services	517,537	29,185	82,038	-
Culture and recreation	3,814,936	750,980	85,846	-
Community development	5,478,644	1,997,726	7,598,964	-
Interest on long-term debt	269,845	-	-	-
Total governmental activities	38,688,520	6,760,893	22,576,808	5,532,696
Business-type activities:				
Local transit	1,827,194	149,180	1,424,303	618,059
Water	4,788,350	5,716,033	-	43,067
Sewer	7,318,263	6,199,328	-	76,339
Golf course	66,651	122,494	-	-
Airport	687,228	487,328	-	854,426
Solid waste	4,326,840	5,516,070	34,291	-
Drainage operations	933,506	654,684	-	138,465
Total business-type activities	19,948,032	18,845,117	1,458,594	1,730,356
Total primary government	$ 58,636,552	$ 25,606,010	$ 24,035,402	$ 7,263,052
Component units:				
Housing Authority of the City of Madera	$ 8,792,783	$ 1,539,374	$ 5,902,845	-
Total component units	$ 8,792,783	$ 1,539,374	$ 5,902,845	$ -

General revenues:	
Property taxes	
Sales and use taxes	
Franchise taxes	
Other taxes	
Investment earnings	
Gain (loss) on sale of capital assets	
Miscellaneous	
Transfers	
Total general revenues and transfers	
Change in net position	
Net position - beginning	
Prior period adjustments	
Net position - beginning (restated)	
Net position - ending	

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

Net (Expense) Revenue and Changes in Net Position			
			Component Unit
Governmental Activities	Business-Type Activities	Total	Housing Authority of the City of Madera
$ (3,587,509)	$ -	$ (3,587,509)	$ -
(11,538,126)	-	(11,538,126)	-
10,843,735	-	10,843,735	-
(406,314)	-	(406,314)	-
(2,978,110)	-	(2,978,110)	-
4,118,046	-	4,118,046	-
(269,845)	-	(269,845)	-
(3,818,123)	-	(3,818,123)	-
-	364,348	364,348	-
-	970,750	970,750	-
-	(1,042,596)	(1,042,596)	-
-	55,843	55,843	-
-	654,526	654,526	-
-	1,223,521	1,223,521	-
-	(140,357)	(140,357)	-
-	2,086,035	2,086,035	-
(3,818,123)	2,086,035	(1,732,088)	-
			(1,350,564)
			(1,350,564)
2,943,796	61,049	3,004,845	-
5,472,283	-	5,472,283	-
591,116	-	591,116	-
1,821,326	-	1,821,326	-
795,691	19,076	814,767	6,763
75,607	(11,968)	63,639	-
1,071,486	25,478	1,096,964	635,203
2,538,648	(2,538,648)	-	-
15,309,953	(2,445,013)	12,864,940	641,966
11,491,830	(358,978)	11,132,852	(708,598)
218,608,712	80,154,938	298,763,650	16,154,112
290,877	-	290,877	-
218,899,589	80,154,938	299,054,527	16,154,112
$ 230,391,419	$ 79,795,960	$ 310,187,379	$ 15,445,514

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
BALANCE SHEET
GOVERNMENTAL FUNDS
JUNE 30, 2014

	General	Special Revenue: General Development Impact Fee Fund	Special Revenue: Special Gas Tax Fund	Special Revenue: Residential Rehab	Total Nonmajor Funds	Total Governmental Funds
ASSETS						
Cash and investments	$ 11,175,535	$ 14,044,643	$ 5,712,927	$ -	$ 4,196,517	$ 35,129,622
Receivables:						
Accounts, net	2,862,393	6,222	3,339,490	505,413	288,761	7,002,279
Interest	141,261	-	-	-	431	141,692
Notes	-	-	-	7,496,577	677,123	8,173,700
Prepaid items	-	-	-	-	-	-
Inventories	49,622	-	-	-	-	49,622
Due from other funds	588,166	-	-	-	22	588,188
Advances to other funds	232,562	-	-	-	-	232,562
Other assets	-	-	-	-	-	-
Land held for resale	-	-	-	-	1,260,000	1,260,000
Restricted assets:						
Cash and investments with fiscal agents	-	-	-	-	251,393	251,393
Total assets	$ 15,049,539	$ 14,050,865	$ 9,052,417	$ 8,001,990	$ 6,674,247	$ 52,829,058
LIABILITIES						
Accounts payable	$ 1,146,968	$ 34,787	$ 34,608	$ 212,472	$ 56,320	$ 1,485,155
Salaries payable	176,369	-	-	-	1,254	177,623
Due to other funds	22	-	-	20,323	174,616	194,961
Unearned revenue	-	-	-	-	251,932	251,932
Deposit payable	22,383	3,084,436	-	-	-	3,106,819
Total liabilities	1,345,742	3,119,223	34,608	232,795	484,122	5,216,490
DEFERRED INFLOWS OF RESOURCES						
Unavailable revenue	853,984	-	676,464	395,655	177,969	2,104,072
Total deferred inflows of resources	853,984	-	676,464	395,655	177,969	2,104,072
FUND BALANCES (DEFICITS)						
Nonspendable:						
Inventory	49,622	-	-	-	-	49,622
Long-term interfund advances	232,562					232,562
Restricted:						
Community development	87,453	-	-	7,373,540	3,749,241	11,210,234
Park development	-	-	-	-	112,210	112,210
Parking improvements	-	-	-	-	130,769	130,769
Public works and transportation	-	-	8,341,345	-	250,268	8,591,613
Special assessment project	-	-	-	-	1,423,375	1,423,375
Social service	-	-	-	-	52,003	52,003
Capital projects and improvements	-	10,931,642	-	-	-	10,931,642
Debt service	-	-	-	-	251,393	251,393
Assigned:						
Golf course capital	20,000	-	-	-	-	20,000
OPEB liability	97,339	-	-	-	-	97,339
Insurance	1,082,179	-	-	-	-	1,082,179
Unassigned	11,280,658	-	-	-	42,897	11,323,555
Total fund balances (deficits)	12,849,813	10,931,642	8,341,345	7,373,540	6,012,156	45,508,496
Total liabilities, deferred inflows of resources, and fund balances (deficits)	$ 15,049,539	$ 14,050,865	$ 9,052,417	$ 8,001,990	$ 6,674,247	$ 52,829,058

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
RECONCILIATION OF THE BALANCE SHEET OF GOVERNMENTAL FUNDS
TO THE GOVERNMENT-WIDE STATEMENT OF NET POSITION
JUNE 30, 2014

Amounts reported for governmental activities in the statement of net position are different because:

Total fund balances - governmental funds		$ 45,508,496
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the governmental funds. These assets consist of:		
Land	7,488,789	
Construction in progress	10,818,098	
Buildings and improvements	21,345,585	
Equipment	7,370,219	
Infrastructure	277,832,967	
Accumulated depreciation	(135,498,829)	
Total capital assets		189,356,829
Other long-term assets are not available to pay for current period expenditures and, therefore, are reported as unavailable revenue in the funds.		2,104,072
Interest payable on long-term debt does not require the use of current financial resources and, therefore, interest payable is generally not accrued as a liability in the balance sheet of governmental funds.		(45,100)
Long-term liabilities, including bonds payable, are not due and payable in the current period and, therefore, are not reported in the funds. Long-term liabilities at year-end consists of:		
Bonds payable	(2,756,931)	
Loans payable	(668,192)	
Capital leases	(1,964,615)	
Compensated absences	(1,270,548)	
Net other postemployment benefit obligation	(1,833,305)	
Total long-term liabilities		(8,493,591)
Internal service funds are used by management to charge costs of certain activities to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net position.		1,960,713
Net position of governmental activities		$ 230,391,419

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
GOVERNMENTAL FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	General	Special Revenue: General Development Impact Fee Fund	Special Revenue: Special Gas Tax	Special Revenue: Residential Rehab	Total Nonmajor Funds	Total Governmental Funds
REVENUES:						
Property taxes	$ 2,869,599	$ -	$ -	$ -	$ -	$ 2,869,599
Sales and use taxes	5,539,847	-	-	-	-	5,539,847
Other taxes	1,106,701	993	-	-	734,308	1,842,002
Use of money and property	803,058	10,088	13,003	30	135,136	961,315
Franchises	591,116	-	-	-	-	591,116
Licenses and permits	395,730	-	-	-	-	395,730
Fines	846,080	-	-	-	28,781	874,861
Aid from other governmental agencies:						
Federal	1,297,393	-	1,397,478	5,575,082	488,136	8,758,089
State	6,831,788	-	7,452,741	211,032	991,044	15,486,605
Other	183,506	-	4,007,477	-	2,001	4,192,984
Charges for current services	3,829,497	1,812,112	-	93,999	39,928	5,775,536
Miscellaneous	846,287	-	-	432,668	174,781	1,453,736
Total revenues	25,140,602	1,823,193	12,870,699	6,312,811	2,594,115	48,741,420
EXPENDITURES:						
Current:						
General government	4,547,145	419	250,000	-	-	4,797,564
Public protection	12,947,607	-	-	-	229,962	13,177,569
Social services	-	-	-	-	510,579	510,579
Public ways and facilities	2,365,904	2,462	-	-	643,909	3,012,275
Community development	3,617,319	-	-	954,591	109,307	4,681,217
Culture and recreation	2,814,466	-	-	-	-	2,814,466
Capital outlay	275,171	84,092	9,448,604	749,987	367,344	10,925,198
Debt service:						
Principal	70,254	-	-	-	345,666	415,920
Interest	63,333	-	-	-	206,922	270,255
Total expenditures	26,701,199	86,973	9,698,604	1,704,578	2,413,689	40,605,043
Excess (deficiency) of revenues over (under) expenditures	(1,560,597)	1,736,220	3,172,095	4,608,233	180,426	8,136,377
OTHER FINANCING SOURCES (USES):						
Transfers in	5,635,529	-	-	-	703,430	6,338,959
Transfers out	(1,413,861)	(194,257)	(1,963,901)	(15,000)	(770,451)	(4,357,470)
Total other financing sources (uses)	4,221,668	(194,257)	(1,963,901)	(15,000)	(67,021)	1,981,489
Net change in fund balances	2,661,071	1,541,963	1,208,194	4,593,233	113,405	10,117,866
Fund balances - beginning	10,188,742	9,389,679	7,016,897	2,780,307	5,724,128	35,099,753
Prior period adjustments	-	-	116,254	-	174,623	290,877
Fund balances - beginning (restated)	10,188,742	9,389,679	7,133,151	2,780,307	5,898,751	35,390,630
Fund balances - ending	$ 12,849,813	$ 10,931,642	$ 8,341,345	$ 7,373,540	$ 6,012,156	$ 45,508,496

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE GOVERNMENT-WIDE STATEMENT OF ACTIVITIES
FOR THE YEAR ENDED JUNE 30, 2014

Amounts reported for governmental activities in the statement of activities are different because:

Net change in fund balances - total governmental funds		$ 10,117,866
Governmental funds report capital outlays as expenditures. However, in the statement of activities, the costs of these assets are allocated over their estimated useful lives and reported as depreciation expense. In the current period, these amounts are:		
Capital outlay	9,999,581	
Depreciation expense	(8,186,814)	
Excess of depreciation expense over capital outlay		1,812,767
Revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.		(1,594,129)
The net effect of various miscellaneous transactions involving capital assets (i.e., sales and donations) is to increase net position.		492,225
The issuance of long-term debt (e.g., bonds, leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of premiums, discounts, and similar items when debt is first issued, whereas theses amounts are deferred and amortized in the statement of activities. This amount is the net effect of these differences in the treatment of long-term debt and related items.		415,326
Some items reported in the statement of activities do not require the use of current financial resources and therefore, are not reported as expenditures in governmental funds. These activities consist of:		
Net decrease in accrued interest	410	
Decrease in compensated absences	(10,167)	
Decrease in net other postemployment benefit obligation	(134,524)	
Total additional expenditures		(144,281)
The internal service funds are used by management to charge the costs of certain activities to individual funds. The net revenue of certain activities of internal service funds is reported with governmental activities.		392,056
Change in net position of governmental activities		$ 11,491,830

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
JUNE 30, 2014

	Business-Type Activities			
	Water Fund	Sewer Fund	Solid Waste Fund	Drainage Operations Fund
ASSETS				
Current assets:				
Cash and investments	$ 8,148,232	$ 7,679,221	$ 3,480,077	$ 295,979
Accounts receivable, net	454,645	315,131	251,848	26,780
Interest receivable	1,382	-	-	-
Total current assets	8,604,259	7,994,352	3,731,925	322,759
Noncurrent assets:				
Restricted assets:				
Cash and investments	4,064,148	964,369	-	-
Capital assets, not depreciated	275,944	1,803,047	-	3,645,601
Capital assets, net of accumulated depreciation	24,063,057	49,589,787	28,589	16,257,528
Total noncurrent assets	28,403,149	52,357,203	28,589	19,903,129
Total assets	37,007,408	60,351,555	3,760,514	20,225,888
LIABILITIES				
Current liabilities:				
Accounts payable	196,494	220,153	303,739	18,639
Salaries payable	7,080	8,323	4,452	3,386
Accrued interest payable	198,344	553,242	-	-
Due to other funds	-	-	-	19,000
Advances from other funds	-	-	-	-
Deposits payable	1,340,974	-	-	200
Unearned revenue	-	-	95,698	-
Compensated absences, due within one year	81,120	112,821	11,411	17,343
Long-term debt, due within one year	305,000	1,120,612	-	-
Total current liabilities	2,129,012	2,015,151	415,300	58,568
Noncurrent liabilities:				
Long-term debt, due in more than one year	12,787,859	37,148,699	15,688	21,135
Total noncurrent liabilities	12,787,859	37,148,699	15,688	21,135
Total liabilities	14,916,871	39,163,850	430,988	79,703
DEFERRED INFLOWS OF RESOURCES				
Deferred service concession arrangement receipts	-	-	-	-
Total deferred inflows of resources	-	-	-	-
NET POSITION				
Net investment in capital assets	14,363,363	13,237,042	28,589	19,903,129
Unrestricted	7,727,174	7,950,663	3,300,937	243,056
Total net position	$ 22,090,537	$ 21,187,705	$ 3,329,526	$ 20,146,185
Adjustment to report the cumulative internal balance for the net effect of the activity between the internal service funds and the enterprise funds over time.				
Net position of business-type activities				

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
JUNE 30, 2014
(Continued)

Business-Type Activities		Governmental Activities
Nonmajor Enterprise Funds	Total Enterprise Funds	Internal Service Fund
$ 922,531	$ 20,526,040	$ 1,040,351
681,564	1,729,968	3,936
331	1,713	-
1,604,426	22,257,721	1,044,287
302,438	5,330,955	-
3,383,657	9,108,249	59,992
12,269,713	102,208,674	1,123,327
15,955,808	116,647,878	1,183,319
17,560,234	138,905,599	2,227,606
189,303	928,328	245,323
4,320	27,561	5,695
8,461	760,047	-
374,227	393,227	-
232,562	232,562	-
-	1,341,174	-
13,542	109,240	-
14,996	237,691	77,411
258,704	1,684,316	37,934
1,096,115	5,714,146	366,363
2,886,605	52,859,986	227,042
2,886,605	52,859,986	227,042
3,982,720	58,574,132	593,405
209,000	209,000	-
209,000	209,000	-
12,523,967	60,056,090	1,183,319
844,547	20,066,377	450,882
$ 13,368,514	80,122,467	$ 1,634,201
	(326,508)	
	$ 79,795,959	

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Business-Type Activities			
	Water Fund	Sewer Fund	Solid Waste Fund	Drainage Operations Fund
Operating revenues:				
Charges for services	$ 5,716,031	$ 6,199,330	$ 5,516,069	$ 654,685
Other	-	-	-	-
Total operating revenues	5,716,031	6,199,330	5,516,069	654,685
Operating expenses:				
Salaries and benefits	889,384	1,236,007	241,963	350,260
General and administrative	921,620	1,150,550	3,882,232	121,497
Supplies and miscellaneous	221,337	558,011	4,905	46,092
Parts and supplies	77,093	4,737	149,895	-
Utilities	1,263,722	504,059	6,799	43,655
Amortization	4,054	(18,783)	-	-
Depreciation	831,645	2,273,079	7,836	348,242
Total operating expenses	4,208,855	5,707,660	4,293,630	909,746
Operating income (loss)	1,507,176	491,670	1,222,439	(255,061)
Nonoperating revenues (expenses):				
Interest income	10,713	5,540	2,115	186
Property taxes	-	-	-	-
Operating grants	-	-	34,291	-
Capital grants	-	-	-	-
Other revenue	4	379	488	-
Gain (loss) on disposal of property	-	(30,485)	-	-
Interest expense	(599,498)	(1,620,697)	-	-
Other nonoperating expense	-	-	-	-
Total nonoperating revenues (expenses)	(588,781)	(1,645,263)	36,894	186
Income before capital contributions and transfers	918,395	(1,153,593)	1,259,333	(254,875)
Capital contributions	43,067	76,339	-	138,465
Transfers in	-	-	70,000	-
Transfers out	(466,023)	(1,316,023)	(924,460)	(41,000)
Change in net position	495,439	(2,393,277)	404,873	(157,410)
Net position - beginning	21,595,098	23,580,982	2,924,653	20,303,595
Net position - ending	$ 22,090,537	$ 21,187,705	$ 3,329,526	$ 20,146,185

Adjustment for the net effect of the current year activity between the internal service funds and the enterprise funds.

Changes in net position of business-type activities

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

Business-Type Activities		Governmental Activities
Nonmajor Enterprise Funds	Total Enterprise Funds	Internal Service Fund
$ 759,004	$ 18,845,119	$ 2,491,600
101	101	-
759,105	18,845,220	2,491,600
261,487	2,979,101	1,286,786
1,310,226	7,386,125	307,397
217,392	1,047,737	279,400
101,153	332,878	114,413
24,984	1,843,219	388,409
-	(14,729)	-
559,073	4,019,875	348,801
2,474,315	17,594,206	2,725,206
(1,715,210)	1,251,014	(233,606)
1,976	20,530	-
61,049	61,049	-
1,424,303	1,458,594	-
1,461,487	1,461,487	-
23,051	23,922	11,411
18,517	(11,968)	-
(11,779)	(2,231,974)	-
(64,766)	(64,766)	-
2,913,838	716,874	11,411
1,198,628	1,967,888	(222,195)
10,998	268,869	-
237,000	307,000	518,179
(50,000)	(2,797,506)	(9,162)
1,396,626	(253,749)	286,822
11,971,888		1,347,379
$ 13,368,514		$ 1,634,201
	(105,230)	
	$ (358,979)	

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Business-Type Activities			
	Water Fund	Sewer Fund	Solid Waste Fund	Drainage Operations Fund
Cash flows from operating activities:				
Receipts from customers and users	$ 5,654,145	$ 6,144,229	$ 5,558,369	$ 651,477
Payments to suppliers	(2,512,937)	(2,222,213)	(4,030,905)	(199,222)
Payments to employees	(885,092)	(1,250,646)	(235,975)	(364,440)
Payments to other funds	-	-	-	-
Net cash provided (used) by operating activities	2,256,116	2,671,370	1,291,489	87,815
Cash flows from noncapital financing activities:				
Transfers from (to) other funds	(466,023)	(1,316,023)	(854,460)	(41,000)
Other nonoperating revenues	4	379	488	-
Property taxes	-	-	-	-
Operating grants	-	-	34,845	-
Net cash provided (used) by noncapital financing activities	(466,019)	(1,315,644)	(819,127)	(41,000)
Cash flows from capital and related financing activities:				
Acquisition and construction of capital assets	(21,550)	-	-	-
Capital grants	-	-	-	-
Principal paid on capital leases	-	(26,476)	-	-
Principal paid on notes	-	(269,761)	-	-
Principal paid on bonds	(205,000)	(785,000)	-	-
Interest paid	(601,731)	(1,634,519)	-	-
Net cash provided (used) by capital and related financing activities	(828,281)	(2,715,756)	-	-
Cash flows from investing activities:				
Interest received	9,431	5,540	2,115	185
Net cash provided (used) by investing activities	9,431	5,540	2,115	185
Net increase (decrease) in cash and cash equivalents	971,247	(1,354,490)	474,477	47,000
Cash and cash equivalents - July 1, 2013	11,241,133	9,998,080	3,005,600	248,979
Cash and cash equivalents - June 30, 2014	$ 12,212,380	$ 8,643,590	$ 3,480,077	$ 295,979

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

Business-Type Activities		Governmental Activities
Nonmajor Enterprise Funds	Total Enterprise Funds	Internal Service Fund
$ 1,098,598	$ 19,106,818	$ 2,522,901
(1,821,738)	(10,787,015)	(1,024,102)
(279,396)	(3,015,549)	(1,265,218)
(720,421)	(720,421)	-
(1,722,957)	4,583,833	233,581
187,000	(2,490,506)	509,017
23,051	23,922	11,411
61,049	61,049	-
1,424,303	1,459,148	-
1,695,403	(946,387)	520,428
(1,498,488)	(1,520,038)	(540,343)
1,461,487	1,461,487	-
-	(26,476)	-
(17,850)	(287,611)	(41,297)
(230,000)	(1,220,000)	-
(77,487)	(2,313,737)	-
(362,338)	(3,906,375)	(581,640)
1,645	18,916	-
1,645	18,916	-
(388,247)	(250,013)	172,369
1,613,216	26,107,008	867,982
$ 1,224,969	$ 25,856,995	$ 1,040,351

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

	Business-Type Activities			
	Water Fund	Sewer Fund	Solid Waste Fund	Drainage Operations Fund
Reconciliation of operating income (loss) to cash provided (used) by operating activities:				
Operating income (loss)	$ 1,507,176	$ 491,670	$ 1,222,439	$ (255,061)
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:				
Depreciation	831,645	2,273,079	7,836	348,242
Amortization	4,055	(18,783)	-	-
(Gain) loss on disposal of capital assets	-	-	-	-
Changes in assets and liabilities:				
(Increase) decrease in accounts receivable	(24,619)	(55,101)	42,300	(3,008)
Increase (decrease) in accounts payable	(29,165)	(4,856)	12,926	12,022
Increase (decrease) in salaries payable	5,206	6,449	2,579	1,513
Increase (decrease) in due to other funds	-	-	-	-
Increase (decrease) in advances from other funds	-	-	-	-
Increase (decrease) in deposits payable	(37,268)	-	-	(200)
Increase (decrease) in unearned revenue	-	-	-	-
Increase (decrease) in deferred inflow of resources	-	-	-	-
Increase (decrease) in compensated absences	5,515	(12,209)	2,097	(11,568)
Increase (decrease) in other postemployment benefit obligations	(6,429)	(8,879)	1,312	(4,125)
Net cash provided (used) by operating activities	$ 2,256,116	$ 2,671,370	$ 1,291,489	$ 87,815
Reconciliation of cash and cash equivalents to the Statement of Net Position:				
Cash and investments - unrestricted	$ 8,148,232	$ 7,679,221	$ 3,480,077	$ 295,979
Cash and investments - restricted	4,064,148	964,369	-	-
Total cash and investments	$ 12,212,380	$ 8,643,590	$ 3,480,077	$ 295,979
Noncash investing, capital, and financing activities:				
Developer and other capital contributions	$ 43,067	$ 76,339	$ -	$ 138,465

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

Nonmajor Enterprise Funds	Total Enterprise Funds	Governmental Activities Internal Service Fund
$ (1,715,210)	$ 1,251,014	$ (233,606)
559,073	4,019,875	348,801
-	(14,728)	-
18,517	18,517	-
200,765	160,337	31,301
(186,500)	(195,573)	65,517
(2,646)	13,101	5,695
(646,980)	(646,980)	-
(73,441)	(73,441)	-
-	(37,468)	-
(25,272)	(25,272)	-
164,000	164,000	-
(8,374)	(24,539)	164
(6,889)	(25,010)	15,709
$ (1,722,957)	$ 4,583,833	$ 233,581
$ 922,531	$ 20,526,040	$ 1,040,351
302,438	5,330,955	-
$ 1,224,969	$ 25,856,995	$ 1,040,351
$ 10,998	$ 268,869	$ -

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF FIDUCIARY NET POSITION
FIDUCIARY FUNDS
JUNE 30, 2014

	Successor Agency Private Purpose Trust Fund	Agency Fund
ASSETS		
Cash and investments	$ 6,573,716	$ 1,319,767
Receivables:		
Accounts, net	52,953	11,159
Interest	8,998	-
Prepaid items	4,954	275,678
Land held for resale	753,904	-
Restricted assets:		
Cash and investments with fiscal agents	4,362,858	-
Capital assets, not depreciated	389,566	-
Capital assets, net of accumulated depreciation	2,590,308	-
Total assets	$ 14,737,257	$ 1,606,604
LIABILITIES		
Accounts payable	$ 222,178	$ 74,423
Accrued liabilities	-	672,018
Salaries and accrued liabilities	62,672	-
Accrued Interest	818,993	-
Deposit payable	-	22,654
Other liabilities	5,043	-
Due to other governments	-	837,509
Long-term debt, due within one year	1,135,289	-
Long-term debt, due in more than one year	47,324,680	-
Total liabilities	49,568,855	$ 1,606,604
NET POSITION		
Net position held in trust for redevelopment dissolution and other purposes	$ (34,831,598)	

The accompanying notes are an integral part of these financial statements.

CITY OF MADERA
STATEMENT OF CHANGES FIDUCIARY IN NET POSITION
FIDUCIARY FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Successor Agency Private Purpose Trust Fund
ADDITIONS:	
Property taxes	$ 724,744
Interest inocme	33,431
Other payment received	205,014
Total additions	963,189
DEDUCTIONS:	
General and administartive	318,863
Project expenses	199,792
Amortization	31,518
Depreciation	164,391
Interest on debts	2,464,481
Total deductions	3,179,045
Change in net position	(2,215,856)
Net position - beginning	(32,441,119)
Prior period adjustments	(174,623)
Net position - beginning (restated)	(32,615,742)
Net position - ending	$ (34,831,598)

The accompanying notes are an integral part of these financial statements.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The City of Madera, California (the "City") was incorporated in 1907 under the general laws of the State of California. The City operates under an elected Council/City Manager form of government.

The City has defined its reporting entity in accordance with generally accepted accounting principles ("GAAP") in the United States of America, which provide guidance for determining which governmental activities, organizations, and functions should be included in the reporting entity. In evaluating how to define the City for financial reporting purposes, management has considered all potential component units. The primary criterions for including a potential component unit within the reporting entity are the governing body's financial accountability and a financial benefit or burden relationship and whether it is misleading to exclude. A primary government is financially accountable and shares a financial benefit or burden relationship if it appoints a voting majority of an organization's governing body and it is able to impose its will on the organization, or if there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on, the primary government. A primary government may also be financially accountable if an organization is fiscally dependent on the primary government regardless of whether the organization has a separately elected governing board, a governing board appointed by a higher level of government, or a jointly appointed board, and there is a potential for the organization to provide specific financial benefits to, or impose specific financial burdens on the primary government. Based upon the application of these criteria, the following is a brief description of each component unit included within the City's reporting entity. All such component units have been "blended" as though they are part of the primary government because the component unit's governing body is substantially the same as the City's primary government and there is a financial benefit or burden relationship between the City and the component unit, management of the City has operational responsibilities for the component unit, and/or the component units provide services entirely, or almost entirely, to the City or otherwise exclusively, or almost exclusively, benefits the City, even though it does not provide services directly to it.

Blended component unit. The Madera Public Financing Authority (Financing Authority) was created in 1989. The Financing Authority is a joint exercise of joint powers. The City Council serves as directors of the Financing Authority. The purpose of the Financing Authority is to act as a financing/lending type of entity only. No separate annual financial statements are prepared for the Financing Authority.

Since the City Council previously served as the government board for this component unit, the City's component unit was considered to be a blended component unit. Blended component units, although legally separate entities, are in substance, part of the City's operations and so data from this unit was reported with the data of the primary government.

Discretely presented component unit. The Housing Authority of the City of Madera (Housing Authority) is a governmental entity authorized in accordance with state law to engage in the development, acquisition, leasing, and administration of low-rent housing programs. The Housing Authority is governed by a Board of Commissioners, which is comprised of members of the City Council. Management of the Housing Authority is appointed and held accountable to the Governing Board. The annual financial statements for the Housing Authority can be obtained at the Housing Authority's administrative office.

The financial statements of the City have been prepared in conformity with accounting principles generally accepted in the United States of America as applied to governmental audits. The Governmental Accounting Standards Board is the accepted standard setting body for governmental accounting and financial reporting principles. The more significant of the City's accounting policies are described below.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

B. Basis of Presentation

The accounts of the City are organized on the basis of funds. A fund is defined as an independent fiscal and accounting entity wherein the operations of each fund are accounted for in a separate set of self-balancing accounts that records resources, related liabilities, obligations, reserves and equities segregated for the purpose of carrying out specific activities or attaining certain objectives in accordance with special regulations, restrictions or limitations.

Government-wide Financial Statements

The government-wide financial statements (i.e., the statement of net position and the statement of activities) report information on all of the non-fiduciary activities of the primary government and its component units. *Governmental activities*, which normally are supported by taxes and intergovernmental revenues, are reported separately from *business-type activities*, which rely to a significant extent on fees and charges for support.

The statement of activities demonstrates the degree to which the direct expenses of a given function or segment are offset by program revenues. *Direct expenses* are those that are clearly identifiable with a specific function or segment. *Program revenues* include 1) charges to customers or applicants who purchase, use or directly benefit from goods, services, or privileges provided by a given function or segment and 2) grants and contributions that are restricted to meeting the operational or capital requirements of a particular function or segment. Taxes and other items not properly included among program revenues are reported instead as *general revenues*.

While separate government-wide and fund financial statements are presented, they are interrelated. The governmental activities column incorporates data from governmental funds and internal service funds, while business-type activities incorporate data from the government's enterprise funds. Separate financial statements are provided for governmental funds, proprietary funds, and fiduciary funds, even though the latter are excluded from the government-wide financial statements.

Fund Financial Statements

The fund financial statements provide information about the government's funds, including its fiduciary funds and blended component units. Separate statements for each fund category – governmental, proprietary, and fiduciary – are presented. The emphasis of fund financial statements is on major governmental and enterprise funds, each displayed in a separate column. All remaining governmental and enterprise funds are aggregated and reported as nonmajor funds. Major individual governmental and enterprise funds are reported as separate columns in the fund financial statements.

The government reports the following major governmental funds:

The *General Fund* accounts for all the general revenues of the City not specifically levied or collected for by other City Funds and for expenditures related to the rendering of general services by the City.

The *General Development Impact Fee Fund* accounts for and reports the proceeds of the AB1600 development impact fee monies that are restricted or committed to expenditures for the intended purposes.

The *Special Gas Tax Fund* accounts for and reports the proceeds of the City's share of state gasoline taxes, which are restricted or committed to expenditures for the street construction and street maintenance projects.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

B. Basis of Presentation (Continued)

Fund Financial Statements (Continued)

The *Residential Rehab Fund* accounts for and reports activities for Home and CalHOME grants received from Federal and State governments.

The City reports the following major enterprise funds:

The *Water Fund* accounts for revenues and expenses of the operations of the City's water utility. All activities necessary to provide this service are accounted for in this fund, including administration, operations, maintenance, billing and collection and depreciation.

The *Sewer Fund* accounts for the revenues and expenses for the maintenance, repair and depreciation of the sewers within the City.

The *Solid Waste Fund* accounts for revenues and expenses of the solid waste removal and street cleaning activities.

The *Drainage Operations Fund* accounts for the activities related to drainage.

Additionally, the City reports the following fund types:

Internal Service Funds account for the financing of goods and services provided by one department of the City to other departments on a cost-reimbursement basis. The City has Internal Service Funds for Fleet Management and Replacement, Facility Maintenance, and Computer Replacement.

The *Successor Agency Private Purpose Trust Fund* accounts for the assets and liabilities of the former Redevelopment Agency and its allocated revenue to pay estimated installment payments of the enforceable obligations until the obligations of the former Redevelopment Agency are paid in full and assets have been liquidated.

The *Agency Fund* is used to account for assets held by the City as an agent for individuals or private organizations and other governmental units. These include developer deposits, collections from the State of California, Federal, and Madera police department for assets forfeited, utility deposits, collections of payroll and related taxes and various restricted donations. Agency funds are custodial in nature (assets equals liabilities) and do not involve the measurement or results of operations. The City's Agency Fund accounts for assets held for other governments and various deposits held for individuals or private organizations.

During the course of operations, the City has activity between funds for various purposes. Any residual balances outstanding at year-end are reported as due from/to other funds and advances to/from other funds. While these balances are reported in fund financial statements, certain eliminations are made in the preparation of the government-wide financial statements. Balances between the funds included in governmental activities (i.e., the governmental and internal service funds) are eliminated so that only the net amount is included as internal balances in the governmental activities column. Similarly, balances between the funds included in business-type activities (i.e., enterprise funds) are eliminated so that only the net amount is included as internal balances in the business-type activities column.

Further, certain activity occurs during the year involving transfers of resources between funds. In fund financial statements these amounts are reported at gross amounts as transfers in/out. While reported in fund financial statements, certain eliminations are made in the preparation of the government-wide financial statements. Transfers between the funds included in governmental activities are eliminated so that only the net amount is included as transfers in the governmental activities column. Similarly, balances between the funds included in business-type activities are eliminated so that only the net amount is included as transfers in the business-type activities column.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

C. Measurement Focus and Basis of Accounting

The accounting and financial reporting treatment is determined by the applicable measurement focus and basis of accounting. Measurement focus indicates the type of resources being measured such as *current financial resources* or *economic resources*. The basis of accounting indicates the timing of transactions or events for recognition in the financial statements.

The government-wide financial statements are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. Revenues are recorded when earned and expenses are recorded when a liability is incurred regardless of the timing of related cash flows. Property taxes are recognized as revenues in the year for which they are levied. Grants and similar items are recognized as revenue as soon as all eligibility requirements imposed by the provider have been met.

The governmental fund financial statements are reported using the *current financial resources measurement focus* and the *modified basis of accounting*. Revenues are recognized as soon as they are both measurable and available. Revenues are considered to be available when they are collectible within the current period or soon enough thereafter to pay liabilities of the current period. For this purpose, the City considers revenues to be available if they are collected within 60 days of the end of the current fiscal year. Expenditures generally are recorded when a liability is incurred as under accrual accounting. However, debt service expenditures, as well as expenditures related to compensated absences, are recorded only when payment is due. General capital asset acquisitions are reported as expenditures in governmental funds. Issuance of long-term debt and acquisitions under capital leases are reported as other financing sources.

Property taxes, sales taxes, franchise taxes, licenses, and interest associated with the current fiscal period are all considered to be susceptible to accrual and so have been recognized as revenue of the current fiscal year. Entitlements are recorded as revenues when all eligibility requirements are met, including any time requirement, and the amount is received during the period or within the availability period for this revenue resource (within 60 days of year-end). Expenditure-driven grants are recognized as revenue when the qualifying expenditures have been incurred and all other eligibility requirements have been met, and the amount is received during the period or within the availability period for this revenue source (within 60 days of year-end). All other revenues items are considered to be measurable and available only when cash is received by the City.

The City applies all applicable GASB pronouncements in accounting and reporting for its proprietary operations as well as the following private sector standards issued on or before November 30, 1989, unless these pronouncements conflict with or contradict GASB pronouncements. Governments have the option of following subsequent private sector guidance for their business-type activities and enterprise funds, subject to the same limitation. The City has elected not to follow subsequent private sector guidance.

The proprietary and private-purpose trust funds are reported using the *economic resources measurement focus* and the *accrual basis of accounting*. The agency fund has no measurement focus but utilizes the *accrual basis of accounting* for reporting its assets and liabilities.

Proprietary funds distinguish *operating* revenues and expenses from *nonoperating* items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the City's proprietary funds are charges to customers for sales and services. Operating expenses for proprietary funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

D. Cash and Cash Equivalents

The government's cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

E. Cash and Investments

The City pools cash and investments of all funds, except for assets held by fiscal agents. Each fund's share in this pool is displayed in the accompanying financial statements as cash and investments. Investment income earned by the pooled investments is allocated to the various funds based on each fund's average cash and investment balance.

Investments for the City are reported at fair value (generally based on quoted market prices) except for the position in the State Treasurer's Investment Pool (Pool). In accordance with the state law, the Pool operates in conformity with all of the requirements of the Securities and Exchange Commission's (SEC) Rule2a7 and promulgated under the Investment Company Act of 1940, as amended. Accordingly, the Pool qualifies as a 2a7-like pool and is reported at the net asset value per share (which approximately fair value) even though it is calculated using the amortized cost method. The Pool is subject to regulatory oversight by the State Treasurer, although it is not registered with the SEC.

In accordance with GASB Statement No. 31, *Accounting and Financial Reporting for Certain Investments and for External Investment* Pools, investments were stated at fair value. Accordingly, the City reports its investments at fair value in the balance sheet. Changes in fair value that occur during a fiscal year are recognized as investment income reported for that fiscal year.

F. Inventories and Prepaid Items

Inventories are valued at cost using the first-in/first-out (FIFO) method and consist of expendable supplies and vehicle repair parts. The cost of such inventories is recorded as expenditure/expenses when consumed rather than when purchased.

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items in both government-wide and fund financial statements. The costs of prepaid items are recorded as expenditures/expenses when consumed rather than when purchased.

G. Land Held for Resale

Land held for resale is recorded as an asset at the lower of historical cost or estimated net realizable value.

H. Capital Assets

Capital assets, which include public domain (infrastructure) capital assets consisting of certain improvements, including streets (pavements, medians, curbs/gutters, sidewalks, traffic signals, monument signs and bridges), storm drains and water/sewer systems and improvements, are reported in the applicable governmental or business-type activities column in the government-wide financial statements.

Generally, capital asset acquisitions in excess of $5,000 (general capital assets) and $25,000 (infrastructure) are capitalized if they have an expected useful life of one year or more. Acquisitions of capital assets (including infrastructure) are recorded at historical cost at the time of purchase. Donated capital assets are recorded at their fair value at the date of donation.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

H. Capital Assets (Continued)

Land and construction in progress are not depreciated. The other property, plant, equipment, and infrastructure of the City are depreciated using the straight-line method over the following estimated useful lives:

Buildings	25-30 years
Improvements	5-50 years
Equipment	4-15 years
Infrastructure	10-50 years

I. Compensated Absences

The City's policy permits employees to accumulate earned but unused vacation benefits, which are eligible for payment upon separation from government service. The liability for such leave is reported as incurred in the government-wide and proprietary fund financial statements. A liability for those amounts is recorded in the governmental funds only if the liability has matured as a result of employee resignations or retirements. The liability for compensated absences includes salary-related benefits, where applicable.

J. Unearned Revenue

Unearned revenue is that for which recognition criteria have been met, but for which revenue recognition criteria have not been met. The City typically records intergovernmental revenues (primary grants and subventions) received but not earned (qualifying expenditures not yet incurred).

K. Unavailable Revenue

In the fund financial statements, unavailable revenue is recorded when transactions have not yet met the revenue recognition criteria based on the modified accrual basis of accounting. The City records unavailable revenue for transactions for which revenues have been earned, but for which funds are not available to meet current financial obligations. Typical transactions for which unavailable revenue is recorded are grants when funding requirements have been met, but the related funding is not yet available.

L. Net Position

The government-wide and proprietary fund financial statements utilize a net position presentation. Net position is classified in the following categories:

- ***Net investment in capital assets*** – This category groups all capital assets, including infrastructure, into one component of net position. Accumulated depreciation and the outstanding balances of debt that are attributable to the acquisition, construction or improvement of these assets reduce this category.
- ***Restricted net position*** – This category presents external restrictions imposed by creditors, grantors, contributors or laws or regulations of other governments and restrictions imposed by law through constitutional provisions or enabling legislation.
- ***Unrestricted Net Position*** – This category represents net amounts that do not meet the criteria for "restricted" or "net investment in capital assets".

When both restricted and unrestricted resources are available for use, it is the City's policy to use restricted first, and then unrestricted resources as they are needed.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

M. Fund Balances

The governmental fund financial statements present fund balances based on classifications that comprise a hierarchy that is based primarily on the extent to which the City is bound to honor constraints on the specific purposes for which amounts in the respective governmental funds can be spent. The classifications used in governmental fund financial statements are as follows:

- Nonspendable: This classification includes amounts that cannot be spent because they are either (a) not in spendable form or (b) are legally or contractually required to be maintained intact.

- Restricted: This classification includes amounts for which constraints have been placed on the use of the resources either (a) externally imposed by creditors (such as through a debt covenant), grantors, contributors, or laws or regulations of other governments, or (b) imposed by law through constitutional provisions or enabling legislation.

- Committed: This classification includes amounts that can be used only for specific purposes pursuant to constraints imposed by formal action of the City Council. These amounts cannot be used for any other purpose unless the City Council removes or changes the specified use by taking the same type of action (ordinance or resolution) that was employed when the funds were initially committed. This classification also includes contractual obligations to the extent that existing resources have been specifically committed for use in satisfying those contractual requirements.

- Assigned: This classification includes amounts that are constrained by the City's intent to be used for a specific purpose but are neither restricted nor committed. This intent can be expressed by the City Council or through the City Council delegating this responsibility to the Finance Director through the budgetary process. This classification also includes the remaining positive fund balance for all governmental funds except for the General Fund.

- Unassigned: This classification includes amounts that have not been assigned to other funds or restricted, committed or assigned to a specific purpose within the City.

When expenditures are incurred for purposes for which both restricted and unrestricted (committed, assigned, or unassigned) fund balances are available, the City's policy is to first apply restricted fund balance. When expenditures are incurred for purposes for which committed, assigned, or unassigned fund balances are available, the City's policy is to first apply committed fund balance, then assigned fund balance, and finally unassigned fund balance.

This policy delegates to the Finance Director the authority to assign unassigned fund balance amounts where the City's intent is for those amounts to be used for specific purposes. This delegation of authority is for the sole purpose of reporting these amounts in the annual financial statements.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

N. Property Taxes

Property taxes are assessed, collected and allocated by County of Madera throughout the fiscal year according to the following property tax calendar:

	Secured	Unsecured
Levy Dates	July 1	July 1
Lien Dates	January 1	January 1
Due Dates	November 1 and February 1	August 1
Delinquent After	December 10 and April 10	August 31

O. Use of Estimates

A number of estimates and assumptions relating to the reporting of revenues, expenditures/expenses, assets, deferred outflows of resources, liabilities and deferred inflows of resources, and the disclosure of contingent liabilities were used to prepare these financial statements in conformity with accounting principles generally accepted in the United States of America. Actual results could differ from those estimates.

P. Pronouncements

a. New Accounting Pronouncements Adopted

Governmental Accounting Standards Board Statement No. 70

In April 2013, GASB issued Statement No. 70, *Accounting and Financial Reporting for Nonexchange Financial Guarantees.* The objective of this Statement is to improve accounting and financial reporting by state and local governments that extend and receive nonexchange financial guarantees. The requirements of this Statement are effective for the City's fiscal year ending June 30, 2014. As of July 1, 2013, the City adopted this standard; however, its adoption had no effect on the financial statements for the year ended June 30, 2014.

b. New Accounting Pronouncements Not Yet Adopted

Governmental Accounting Standards Board Statement No. 68

In June 2012, GASB issued Statement No. 68, Accounting and Financial Reporting for Pensions—an amendment of GASB Statement No. 27. The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for pensions. It also improves information provided by state and local governmental employers about financial support for pensions that is provided by other entities. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for pensions with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity, and creating additional transparency. This Statement replaces the requirements of Statement No. 27, *Accounting for Pensions by State and Local Governmental Employers,* as well as the requirements of Statement No. 50, *Pension Disclosures,* as they relate to pensions that are provided through pension plans administered as trusts or equivalent arrangements (hereafter jointly referred to as trusts) that meet certain criteria. The requirements of Statements 27 and 50 remain applicable for pensions that are not covered by the scope of this Statement. The requirements of this Statement are effective for the City's fiscal year ending June 30, 2015.

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

P. Pronouncements (Continued)

b. New Accounting Pronouncements Not Yet Adopted

Governmental Accounting Standards Board Statement No. 69

In January 2013, GASB issued Statement No. 69, *Government Combinations and Disposals of Government Operations.* The objective of this Statement is to establish accounting and financial reporting standards related to government combinations and disposals of government operations. The Statement requires disclosure to be made about government combinations and disposals of government operations to enable financial statement users to evaluate the nature and financial effects of those transactions. The requirements of this Statement are effective for the City's fiscal year ending June 30, 2015.

Governmental Accounting Standards Board Statement No. 71

In November 2013, GASB issued Statement No. 71, *Pension Transition for Contributions Made Subsequent to the Measurement Date—An Amendment of GASB Statement No. 68.* The objective of this Statement is to address an issue regarding application of the transition provisions of Statement No. 68, *Accounting and Financial Reporting for Pensions*. The issue relates to amounts associated with contributions, if any, made by a state or local government employer or nonemployer contributing entity to a defined benefit pension plan after the measurement date of the government's beginning net pension liability. The requirements of this Statement are effective for the City's fiscal year ending June 30, 2015.

NOTE 2 – CASH AND INVESTMENTS

Cash and investments at June 30, 2014 are classified in the accompanying financial statements as follows:

	Government-Wide Statement of Net Position			
	Governmental Activities	Business-Type Activities	Fiduciary Funds	Total
Cash and investments	$ 36,169,973	$ 20,526,040	$ 7,893,483	$ 64,589,496
Restricted cash and investments with fiscal agents	251,393	5,330,955	4,362,858	9,945,206
Total	$ 36,421,366	$ 25,856,995	$ 12,256,341	$ 74,534,702

Cash and investments consist of the following as of June 30, 2014:

Cash and investments:	
Petty cash	$ 6,645
Deposits with financial institutions	6,812,955
Investments	67,715,102
Total cash and investments	$ 74,534,702

NOTE 2 – CASH AND INVESTMENTS (Continued)

Investments Authorized by the California Government Code and the City's Investment Policy

The table below identifies the investment types that are authorized for the City by the California Government Code (or the City's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the City's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk. This table does not address investments of debt proceeds held by bond trustees that are governed by the provision of debt agreements of the City, rather than the general provisions of the California Government Code or the City's investment policy.

Authorized Investment Type	Maximum Remaining Maturity	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
Local Agency Bonds, Notes, Warrants	5 years	None	None
Registered State Bonds, Notes, Warrants	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
U.S. Agency Securities	5 years	None	None
Banker's Acceptances	180 days	40%	30%
Commercial Paper	270 days	25%	10%
Negotiable Certificates of Deposit	5 years	30%	None
Repurchase Agreements	1 year	None	None
Reverse Repurchase Agreements	92 days	20% of base	None
Medium-Term Corporate Notes	5 years	30%	None
Mutual Funds	N/A	20%	10%
Money Market Mutual Funds	N/A	20%	10%
Mortgage Pass-Through Securities	5 years	20%	None
County Pooled Investment Funds	N/A	None	None
Local Agency Investment Fund	N/A	None	None
Joint Powers Authority Pools	N/A	None	None

Investments Authorized by the Debt Agreements

Investment of debt proceeds held by bond trustee is governed by provisions of the debt agreements rather than the general provisions of the California Government Code or the City's investment policy. The table below identifies the investment types that are authorized for investments held by bond trustee. The table also identifies certain provisions of these debt agreements that address interest rate risk, credit risk, and concentration of credit risk.

Authorized Investment Type	Maximum Maturity	Maximum Percentage of Portfolio	Maximum Investment in One Issuer
U.S. Treasury Obligations	None	None	None
U.S. Agency Securities	None	None	None
Banker's Acceptances	180 days	None	None
Commercial Paper	270 days	None	None
Money Market Mutual Funds	N/A	None	None
Investment Contracts	30 years	None	None

NOTE 2 – CASH AND INVESTMENTS (Continued)

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the City manages its exposure to interest rate risk is by purchasing a combination of shorter-term and longer-term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

Information about the sensitivity of the fair values of the City's investments (including investments held by bond trustee) to market interest rate fluctuations is provided by the following table that shows the distribution of the City's investments by maturity:

		Remaining Maturity (in months)			
Investment Type	Amounts	12 Months or Less	13 to 24 Months	25 to 60 Months	More Than 60 Months
Pooled Investments in the City:					
Local Agency Investment Fund	$ 4,784,102	$ 4,784,102	$ -	$ -	$ -
Money Market Funds	512,046	512,046	-	-	-
Certificates of Deposit	10,638,010	1,492,973	1,202,583	7,942,454	-
U.S. Treasury Notes	5,961,260	-	-	5,961,260	-
U.S. Government Securities:					
Federal Home Loan Banks	7,192,760	-	2,197,640	3,995,010	1,000,110
Federal Home Loan Mortgage Corporation	2,002,835	-	-	1,002,005	1,000,830
Federal National Mortgage Association	1,998,600	-	-	1,998,600	-
State Municipal Bonds	3,817,367	1,128,236	2,689,131	-	-
U.S. Corporate Bonds	14,627,603	2,229,166	5,066,569	7,331,868	-
Investments held by bond trustee:					
Money Market Funds	4,770,873	4,770,873	-	-	-
Federal Home Loan Mortgage Corporation	405,247	-	-	405,247	-
Federal National Mortgage Association	409,020	-	-	409,020	-
Total pooled investments in the City	57,119,723	14,917,396	11,155,923	29,045,464	2,000,940
Investments in Successor Agency Private Purpose Trust Fund:					
Local Agency Investment Fund	6,219,689	6,219,689	-	-	-
Investments held by bond trustee:					
Money Market Funds	1,544,239	1,544,239	-	-	-
Certificates of Deposit	2,239,806	722,754	657,279	859,773	-
Federal Home Loan Mortgage Corporation	155,095	-	-	155,095	
Federal National Mortgage Association	436,550	-	-	436,550	-
Total Investments in Successor Agency Private Purpose Trust Fund	10,595,379	8,486,682	657,279	1,451,418	-
Total Investments	$ 67,715,102	$ 23,404,078	$ 11,813,202	$ 30,496,882	$ 2,000,940

NOTE 2 – CASH AND INVESTMENTS (Continued)

Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligations to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization.

Presented below is the minimum rating required by (where applicable) the California Government Code, the City's investment policy, or debt agreements, and the actual rating as of year-end for each investment type.

Investment Type	Amounts	Exempt From Disclosure	Rating as of Year End								
			Aaa	Aa2	Aa3	A1	A2	A3	Baa1	P-1	Not Rated
Pooled Investments in the City:											
Local Agency Investment Fund	$ 4,784,102	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,784,102
Money Market Funds	512,046	-	-	-	-	-	-	-	-	-	512,046
Certificates of Deposit	10,638,010	-	-	-	-	-	-	-	-	-	10,638,010
U.S. Treasury Notes	5,961,260	5,961,260	-	-	-	-	-	-	-	-	-
U.S. Government Securities:											
Federal Home Loan Banks	7,192,760	-	7,192,760	-	-	-	-	-	-	-	-
Federal Home Loan Mortgage Corporation	2,002,835	-	2,002,835	-	-	-	-	-	-	-	-
Federal National Mortgage Association	1,998,600	-	1,998,600	-	-	-	-	-	-	-	-
State Municipal Bonds	3,817,367	-	-	-	1,128,236	-	972,910	1,716,221	-	-	-
U.S. Corporate Bonds	14,627,603	-	-	114,777	114,689	6,108,196	4,232,743	2,025,278	2,031,920	-	-
Investments held by bond trustee:											
Money Market Funds	4,770,873	-	4,770,873	-	-	-	-	-	-	-	-
Federal Home Loan Mortgage Corporation	405,247	-	405,247	-	-	-	-	-	-	-	-
Federal National Mortgage Association	409,020	-	409,020	-	-	-	-	-	-	-	-
Total pooled investments in the City	57,119,723	5,961,260	16,779,335	114,777	1,242,925	6,108,196	5,205,653	3,741,499	2,031,920	-	15,934,158
Investments in Successor Agency Private Purpose Trust Fund:											
Local Agency Investment Fund	6,219,689	-	-	-	-	-	-	-	-	-	6,219,689
Investments held by bond trustee:											
Money Market Funds	1,544,239	-	1,544,239	-	-	-	-	-	-	-	-
Certificates of Deposit	2,239,806	-	-	-	-	-	-	-	-	2,239,806	-
Federal Home Loan Mortgage Corporation	155,095	-	155,095	-	-	-	-	-	-	-	-
Federal National Mortgage Association	436,550	-	436,550	-	-	-	-	-	-	-	-
Total Investments in Successor Agency Private Purpose Trust Fund	10,595,379	-	2,135,884	-	-	-	-	-	-	2,239,806	6,219,689
Total Investments	$ 67,715,102	$ 5,961,260	$ 18,915,219	$ 114,777	$ 1,242,925	$ 6,108,196	$ 5,205,653	$ 3,741,499	$ 2,031,920	$ 2,239,806	$ 22,153,847

Concentration of Credit Risk

The investment policy of the City contains no limitations on the amount that can be invested in any one issuer beyond that stipulated by the California Government Code. Investments in any one issuer (other than U.S. Treasury securities, mutual funds, and external investment pools) that represent 5% or more of total investments across the City's funds are as follows:

Issuer	Investment Type	Reported Amount
JP Morgan Chase Bank NA	U.S. Corporate Bonds	$ 4,008,840

NOTE 2 – CASH AND INVESTMENTS (Continued)

Custodial Credit Risk

Custodial credit risk for *deposits* is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for *investments* is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the City's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure City deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits.

The City had no uncollateralized cash at June 30, 2014. As of June 30, 2014, $6,812,955 of the City's deposits with financial institutions in excess of federal depository insurance limits was held in accounts collateralized in accordance with State law as described above. As of June 30, 2014, in accordance with the City's investment policy, none of the City's investments were held with a counterparty. All of the City's investments were held with an independent third party custodial bank.

Local Agency Investment Fund

The City of Madera is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code under the oversight of the Treasurer of the State of California. The fair value of the City's investment in this pool is reported in the accompanying financial statements at amounts based upon the City's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

At June 30, 2014, the City's investments in LAIF were $4,784,102 and the Successor Agency's investments in LAIF were $6,219,689. The weighted average maturity of LAIF was 278 days at June 30, 2014. The total amount recorded by all public agencies in LAIF at June 30, 2014 was approximately $21.1 billion. LAIF is part of the State's Pooled Money Investment Account (PMIA). PMIA has a total of approximately $64.8 billion and of that amount, 98.14% was invested in non-derivative financial products and 1.86% in structured notes and asset-backed securities.

NOTE 3 – RECEIVABLES

Accounts Receivable

At June 30, 2014, accounts receivable of the City's major individual funds and nonmajor funds including the applicable allowance for uncollectible accounts are as follows:

Governmental Activities:	General	General Development Impact Fee Fund	Special Gas Tax Fund	Residential Rehab	Total Nonmajor Funds	Total Governmental Funds
Accounts receivable	$ 2,877,752	$ 6,222	$ 3,339,490	$ 505,413	$ 288,971	$ 7,017,848
Less: allowance for uncollectibles	(15,359)	-	-	-	(210)	(15,569)
Total accounts receivable, net	$ 2,862,393	$ 6,222	$ 3,339,490	$ 505,413	$ 288,761	$ 7,002,279

Business-type Activities:	Water Fund	Sewer Fund	Solid Waste Fund	Drainage Operations Fund	Nonmajor Enterprise Funds	Total Enterprise Funds	Internal Service Fund
Accounts receivable	$ 502,456	$ 368,153	$ 366,120	$ 38,394	$ 681,564	$ 1,956,687	$ 3,936
Less: allowance for uncollectibles	(47,811)	(53,022)	(114,272)	(11,614)	-	(226,719)	-
Total accounts receivable, net	$ 454,645	$ 315,131	$ 251,848	$ 26,780	$ 681,564	$ 1,729,968	$ 3,936

The amount of the allowance for each fund is a management determination made by reviewing past collections received on each account. This analysis includes reviewing the aging of the receivable balance, past account write-offs and other known variables. The allowance is evaluated at the end of the year for adequacy.

Notes Receivable

Residential Rehab Special Revenue Fund:

The City was awarded a $3 million dollar federal grant from the HOME Investment Program (HOME) administered through the State of California. The proceeds of this grant were used to provide a $3 million loan to Madera Pacific Associates (MPS) for multi-family rental housing projects serving low and very low income individuals through subordinate loans with terms up to 55 years. MPS is required to repay the loan through the net cash flow payments it receives from project operations. The loan balance at June 30, 2014 is $2,962,234, which is recorded as a note receivable in the Residential Rehab special revenue fund.

The City was awarded a $5 million dollar federal grant from the HOME Investment Program (HOME) administered through the State of California. The proceeds of this grant were used to provide a $5 million loan to 100 Stadium Rd., L.P. for multi-family rental housing projects serving low and very low income individuals through subordinate loans with terms up to 55 years. 100 Stadium Rd., L.P. is required to repay the loan through the net cash flow payments it receives from project operations. The loan balance at June 30, 2014 is $4,534,343, which is recorded as a note receivable in the Residential Rehab special revenue fund.

Low and Moderate Income Housing Asset Special Revenue Fund:

The Low and Moderate Income Housing Asset special revenue fund reports $677,123 of notes receivable. These were loans funded from the former Redevelopment Agency to developers for construction of affordable housing or rehabilitation within the boundaries of the Redevelopment Project Area. These low interest bearing loans are secured by deeds of trust. Maturities vary according to terms and disposition of property.

NOTE 3 – RECEIVABLES (Continued)

Notes Receivable (Continued)

Forgivable Loans:

The City administers the first time homebuyer, housing rehabilitation, and small business loan programs funded with various grants (i.e. CDBG, HOME, CalHome, NSP, etc.). Under these programs, individuals with incomes below certain levels are eligible to receive low interest loans. These loans are secured by deeds of trust on the properties. Deferred payment loans receivable under the these forgivable loans are not required to be paid back unless the participating homeowner sells, transfers title to the property, or discontinues residence in the dwelling at which time the full amount of the deferred loan is due. These deferred payment loans are "nonperforming loans" and are not recorded as loans receivable in the financial statements. Loans and related items as of June 30, 2014 are summarized as follows:

Loan Type	Oustanding Loan Balance	Due
First time homebuyer	$ 5,106,049	30 years
Housing rehabilitation	725,582	30 years
Small business	280,849	10 years
Total	$ 6,112,480	

NOTE 4 – INTERFUND ACTIVITY

Current Interfund Receivables/Payables

Current interfund balances that arise in the normal course of business are expected to be repaid shortly after the end of the fiscal year. Due to other funds represents short-term borrowing resulting from a fund's temporary need for additional cash. Primarily, these amounts have been recorded when funds overdraw their share of pooled cash. The following is a summary of current interfund balances as of June 30, 2014:

	Due From Other Funds	Due To Other Funds
Major funds:		
General fund	$ 588,166	$ 22
Rehab residential special revenue fund	-	20,323
Drainage operations enterprise fund	-	19,000
Nonmajor funds:		
Senior citizens services special revenue fund	-	82,514
Supplemental law enforcement special revenue fund	-	72,909
Low and moderate income housing assets special revenue fund	22	19,193
Local transit enterprise fund	-	313,403
Golf course enterprise fund	-	60,824
Total	$ 588,188	$ 588,188

NOTE 4 – INTERFUND ACTIVITY (Continued)

Long-term Interfund Receivables/Payables

As of June 30, 2014, balances for interfund loans were as follows:

	Advances To Other Funds	Advances From Other Funds
Major funds:		
General fund	$ 232,562	$ -
Nonmajor funds:		
Golf course enterprise fund	-	232,562
Total	$ 232,562	$ 232,562

The advance for $232,562 from the General Fund to the Golf Course Enterprise Fund was made for funding facility construction.

Transfers Between Funds

With City council approval, resources may be transferred from one City fund to another. The purpose of the majority of transfers is to reimburse a fund that has made expenditures on behalf of another fund.

	Transfers	
	In	Out
Major funds:		
General fund	$ 5,635,529	$ 1,413,861
General impact fee special revenue fund	-	194,257
Special gas tax special revenue fund	-	1,963,901
Rehab residential special revenue fund	-	15,000
Water enterprise fund	-	466,023
Sewer enterprise fund	-	1,316,023
Solid waste enterprise fund	70,000	924,460
Drainage operations enterprise fund	-	41,000
Nonmajor funds:		
Park development special revenue fund	2,125	-
Street construction special revenue fund	-	379,936
Senior citizens services special revenue fund	296,714	-
Landscape assessment special revenue fund	44,819	-
Supplemental law enforcement special revenue fund	-	9,000
Community facilities district special revenue fund	165,515	381,515
Park facilities special revenue fund	194,257	-
Local transit enterprise fund	-	50,000
Golf course enterprise fund	237,000	-
Internal service fund	518,179	9,162
Total	$ 7,164,138	$ 7,164,138

NOTE 5 – CAPITAL ASSETS

Capital assets activity of the governmental activities for the year ended June 30, 2014 is as follows:

	Balance June 30, 2013	Additions	Deletions	Balance June 30, 2014
Governmental Activities				
Capital assets not being depreciated:				
Land	$ 7,434,539	$ 54,250	$ -	$ 7,488,789
Construction in progress	18,931,513	10,200,575	18,253,998	10,878,090
Total capital assets not being depreciated	26,366,052	10,254,825	18,253,998	18,366,879
Capital assets being depreciated:				
Buildings and improvements	21,345,585	-	-	21,345,585
Equipment	9,343,627	825,816	150,138	10,019,305
Infrastructure	259,782,298	18,217,531	166,862	277,832,967
Total capital assets being depreciated	290,471,510	19,043,347	317,000	309,197,857
Less accumulated depreciation for:				
Buildings and improvements	4,912,746	426,462	-	5,339,208
Equipment	6,747,365	625,176	150,139	7,222,402
Infrastructure	117,133,837	7,483,977	154,837	124,462,977
Total accumulated depreciation	128,793,948	8,535,615	304,976	137,024,587
Governmental activities capital assets, net	$ 188,043,614	$ 20,762,557	$ 18,266,022	$ 190,540,149

Capital assets activity of the business-type activities for the year ended June 30, 2014 is as follows:

	Balance June 30, 2013	Additions	Deletions	Balance June 30, 2014
Business-Type Activities				
Capital assets not being depreciated:				
Land	$ 9,026,517	$ -	$ -	$ 9,026,517
Construction in progress	382,369	1,052,756	1,353,393	81,732
Total capital assets not being depreciated	9,408,886	1,052,756	1,353,393	9,108,249
Capital assets being depreciated:				
Buildings and improvements	56,905,295	-	33,408	56,871,887
Equipment	5,184,778	593,412	205,523	5,572,667
Infrastructure	93,537,266	1,496,132	-	95,033,398
Total capital assets being depreciated	155,627,339	2,089,544	238,931	157,477,952
Less accumulated depreciation for:				
Buildings and improvements	21,882,736	1,749,961	2,896	23,629,801
Equipment	2,980,330	367,298	205,523	3,142,105
Infrastructure	26,594,756	1,902,616	-	28,497,372
Total accumulated depreciation	51,457,822	4,019,875	208,419	55,269,278
Business-type activities capital assets, net	$ 113,578,403	$ (877,575)	$ 1,383,905	$ 111,316,923

NOTE 5 – CAPITAL ASSETS (Continued)

Depreciation expense was charged to the functions/programs of the governmental activities and business-type activities of the primary government as follows:

Governmental activities:	
General government	$ 6,454,451
Public protection	143,047
Social services	14,085
Public ways and facilities	593,684
Community development	11,704
Culture and recreation	969,843
Capital assets held by the government's internal service funds are charged to the various functions based on their usage of the assets	348,801
Total depreciation expense - governmental activities	$ 8,535,615
Business-type activities:	
Water	$ 831,645
Sewer	2,273,079
Solid waste	7,836
Drainage operations	348,242
Local transit	277,440
Airport	281,633
Total depreciation expense - business-type activities	$ 4,019,875

NOTE 6 – DEFERRED OUTFLOWS/INFLOWS OF RESOURCES

The City implemented GASB Statement No. 63, *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources, and Net Position* and GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities* as of June 30, 2013.

GASB Statement No. 63 provides financial reporting guidance for deferred outflows of resources and deferred inflows of resources. This Statement also amends the net asset reporting requirements and other pronouncements by incorporating deferred outflows of resources and deferred inflows of resources into the definitions of the required components of the residual measure and by renaming that measure as net position, rather than net assets.

GASB Statement No. 65 establishes accounting and financial reporting standards that reclassify, as deferred outflows of resources or deferred inflows of resources, certain items that were previously reported as assets and liabilities and recognizes, as outflows of resources or inflows of resources, certain items that were previously reported as assets and liabilities.

In addition to assets, the statement of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position or fund balance that applies to a future period(s) and thus, will not be recognized as an outflow of resources (expense/expenditure) until then. The City does not have any items to report as a deferred outflow of resources.

NOTE 6 – DEFERRED OUTFLOWS/INFLOWS OF RESOURCES (Continued)

In addition to liabilities, the statement of net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position or fund balance that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. The City has two types of items that qualify for reporting in this category and they are *unavailable revenue* and *deferred service concession agreement receipts*.

- Unavailable revenue arises only under modified accrual basis of accounting and is reported only in the governmental funds balance sheet. Unavailable revenue is deferred and recognized as an inflow of resources in the period that the amounts become available. Deferred inflows of resources reported in the governmental funds for unavailable revenues are as follows:

				Nonmajor Governmental Funds					
	General Fund	Special Gas Tax Fund	Residential Rehab	Federal Aid Urban	Street Construction	Landscape Assessment	Supplemental Law Enforcement	Community Facilities District	Total
Property taxes	$ 2,919	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 2,919
Other taxes	250,088	-	-	-	-	-	-	-	250,088
Intergovernmental	574,404	676,464	395,655	65,625	39,067	-	66,555	-	1,817,770
Charges for services	26,573	-	-	-	-	-	-	-	26,573
Special assessments	-	-	-	-	-	1,917	-	4,805	6,722
Total	$ 853,984	$ 676,464	$ 395,655	$ 65,625	$ 39,067	$ 1,917	$ 66,555	$ 4,805	$ 2,104,072

- On October 7, 2009, the City entered into an operation and management lease agreement (agreement) with the Sierra Golf Management, Inc. (SGM), under which SMG will operate and collect user fees from the Madera Municipal Golf Course for the 5 years with an additional five years extension of the agreement. SGM will pay the City installment payment over the course of the arrangement; the present value of these installment payments is $209,000. SGM will also pay a “per round” rate that establishes an initial rate of $1.00 per round but increases in later years. SGM is required to operate and maintain the golf course in accordance with the agreement. The City reports the golf course and related equipment as capital assets with a carrying amount of $2,028,861 at year-end, and reported a receivable and deferred inflow of resources in the amount of $209,000 at year-end pursuant to the service concession arrangement.

NOTE 7 – LONG-TERM LIABILITIES

Changes in the City's long-term liabilities for the year ended June 30, 2014 were as follows:

	Balance June 30, 2013	Additions	Deletions	June 30, 2014	Due Within One Year
Governmental Activities					
Capital Leases:					
Fire Truck and Street Sweeper	$ -	$ -	$ -	$ -	$ -
Police Facility	1,193,954	-	(70,254)	1,123,700	73,898
Madera Youth Center	986,043	-	(145,128)	840,915	152,205
Total Capital Leases	2,179,997	-	(215,382)	1,964,615	226,103
Loans Payable:					
California Housing Finance Agency Loan	838,731	-	(170,539)	668,192	-
PG&E Energy Efficiency Retrofit Loan	215,195	-	(41,296)	173,899	37,934
Total Loans Payable	1,053,926	-	(211,835)	842,091	37,934
Bonds Payable:				-	
CFD 2006-1 Series Special Tax Bond	2,800,000	-	(30,000)	2,770,000	35,000
Less: unamortized bond discounts	(13,663)	-	594	(13,069)	-
Total Bonds Payable	2,786,337	-	(29,406)	2,756,931	35,000
Compensated absences	1,337,627	1,026,359	(1,016,027)	1,347,959	999,396
Net other postemployment benefit obligation	1,774,149	150,233	-	1,924,382	-
Total	$ 9,132,036	$ 1,176,592	$ (1,472,650)	$ 8,835,978	$ 1,298,433
Business-Type Activities					
Capital leases:					
Jetrod Sewer Truck	$ 68,565	$ -	$ (26,476)	$ 42,089	$ 27,733
Total Capital Leases	68,565	-	(26,476)	42,089	27,733
Loans payable:					
CIEDB Loan	8,764,933	-	(269,759)	8,495,174	277,879
Airport Hanger Loan	222,253	-	(17,850)	204,403	18,704
Total Loans Payable	8,987,186	-	(287,609)	8,699,577	296,583
Bonds payable:					
Water and Wastewater Revenue Bonds, Series 2006	32,155,000	-	(840,000)	31,315,000	875,000
Add: unamortized bond premiums	458,435	-	(20,151)	438,284	-
Water Revenue Bonds, Series 2010	11,150,000	-	(150,000)	11,000,000	245,000
Less: unamortized bond discounts	(135,560)	-	5,422	(130,138)	-
1993 Variable Rate Demand Bonds (Madera Municipal Golf Course Refinancing Project)	3,155,000	-	(230,000)	2,925,000	240,000
Total Bonds Payable	46,782,875	-	(1,234,729)	45,548,146	1,360,000
Compensated absences	262,230	201,743	(226,282)	237,691	237,691
Net other postemployment benefit obligation	279,502	-	(25,012)	254,490	-
Total	$ 56,380,358	$ 201,743	$ (1,800,108)	$ 54,781,993	$ 1,922,007

Governmental Activities Long-Term Debt

Capital Leases

Fire Truck and Street Sweeper

In September 2007, the City entered into a capital lease agreement with La Salle Bank to lease one fire truck and one street sweeper. The purchase price of the fire truck and street sweeper was $690,000 and is payable over a period of six years. Semi-annual payments on the contract are $78,147. The effective interest rate on the contract is 4.660% per annum. The City has paid off this capital lease during the current fiscal year.

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Governmental Activities Long-Term Debt (Continued)

Capital Leases *(Continued)*

Police Facility

In December 2005, the City entered into a capital lease agreement with La Salle Bank to lease a portion of the construction cost for the police facility. The entire purchase price of the police station was $5,200,000. The leased portion of the police station was $1,500,000 and is payable over a period of twenty years. Semi-annual payments on the contract are $65,249. The effective interest rate on the contract is 5.120% per annum. At June 30, 2014, the outstanding balance of the police station capital lease was $1,123,700.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 73,898	$ 56,599	$ 130,497
2016	77,730	52,767	130,497
2017	81,760	48,737	130,497
2018	86,000	44,497	130,497
2019	90,459	40,038	130,497
2020-2024	527,718	124,768	652,486
2025-2026	186,135	9,610	195,745
Total	$ 1,123,700	$ 377,016	$ 1,500,716

Madera Youth Center

In May 2010, the City entered into a capital lease agreement with Municipal Finance Corporation to lease a portion of the construction of the Youth Center. The lease portion of the Youth Center was $1,500,000 and is payable over a period of ten years. Semi-annual payments on the contract are $194,257. The effective interest rate on the contract is 5% per annum. At June 30, 2014, the outstanding balance of the Youth Center capital lease was $840,915.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 152,205	$ 42,052	$ 194,257
2016	159,816	34,441	194,257
2017	167,806	26,450	194,256
2018	176,197	18,060	194,257
2019	184,891	9,250	194,141
Total	$ 840,915	$ 130,253	$ 971,168

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Governmental Activities Long-Term Debt (Continued)

Loans Payable

California Housing Finance Agency Loan

In September 2005, the City entered into a loan agreement with California Housing Finance Agency (CalHFA) to operate the City's housing program. The City is required to use the loan funds exclusively to facilitate a multifamily rental rehabilitation program. The maximum loan fund available to the City is $1,500,000. The effective interest rate is 3% per annum and interest will be charged only on funds disbursed. Principal and interest payments are deferred until September 2015. At June 30, 2014, the outstanding balance of the CalHFA loan payable was $668,192.

PG&E Energy Efficiency Retrofit Loan

In June 2012, the City entered into a loan agreement with PG&E to convert old high pressure sodium lights with new energy efficient LED streetlights. The loan amount is $249,731 and is payable over a period of 6.7 years with zero percent interest. Monthly payments on the loan are $3,161. At June 30, 2014, the outstanding balance of the PG&E Energy Efficiency Retrofit Loan was $173,899.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 37,934	$ -	$ 37,934
2016	37,934	-	37,934
2017	37,934	-	37,934
2018	37,934	-	37,934
2019	22,163	-	22,163
Total	$ 173,899	$ -	$ 173,899

Bonds Payable

CFD 2006-1 Series Special Tax Bond

In December 2006, the City issued the 2006 Special Tax Bonds in the amount of $2,885,000 for the purpose of constructing and acquiring certain public facilities of benefit to the District, providing for the establishment of a reserve fund, providing capitalized interest through September 1, 2008 and paying the cost of issuance of the Bond. The Bonds will be amortized with annual payments through September 2036, with interest payable semi-annually on September 1 and March 1 or each year at 3.7% to 4.7%. The Bonds are secured by and payable from a pledge of special taxes to be levied by the City on real property within the boundaries of the District, from the proceeds of any foreclosure actions brought following a delinquency in the payment of the special taxes, and from amounts held in certain funds under the Indenture, all as more fully described herein. Unpaid special taxes do not constitute a personal indebtedness to the owners of the parcels within the District. In the event of delinquency, proceedings may be conducted only against the parcel of real property securing the delinquent special tax. There is assurance the owners will be able to pay the special tax or that they will pay a special tax even if financially able to do so. At June 30, 2014, the outstanding balance of the 2006 Special Tax Bonds was $2,770,000.

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Governmental Activities Long-Term Debt (Continued)

Bonds Payable (Continued)

CFD 2006-1 Series Special Tax Bond (Continued)

The City has pledged a portion of future property tax revenue to repay the 2006 Special Tax Bond. The Bond required 1.8% of the property tax increment revenues. Total principal and interest remaining on the agreement is $4,830,496 payable through 2037.

The 2006 Special Tax Bonds were issued at a discount which is being amortized over the life of the bonds resulting in an annual amortization of $594. At June 30, 2014, the outstanding balance of the discount on the bonds was $13,069.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 35,000	$ 134,565	$ 169,565
2016	40,000	132,970	172,970
2017	45,000	131,120	176,120
2018	50,000	129,030	179,030
2019	55,000	126,693	181,693
2020-2024	375,000	587,123	962,123
2025-2029	590,000	472,495	1,062,495
2030-2034	875,000	292,125	1,167,125
2035-2037	705,000	54,375	759,375
Total	$ 2,770,000	$ 2,060,496	$ 4,830,496

Business-Type Activities Long-Term Debt

Capital Leases

Jetrod Sewer Truck

In December 2005, the City entered into a capital lease agreement with La Salle Bank to lease a Jetrod Sewer Truck. The purchase price of the sewer truck was $232,435 and is payable over a period of ten years. Semi-annual payments on the contract are $14,693. The effective interest rate on the contract is 4.690% per annum. At June 30, 2014, the outstanding balance of the Jetrod Sewer Truck capital lease was $42,089.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 27,733	$ 1,653	$ 29,386
2016	14,356	337	14,693
Total	$ 42,089	$ 1,990	$ 44,079

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Business-Type Activities Long-Term Debt (Continued)

Loans Payable

California Infrastructure and Economic Development Bank (CIEDB) Loan

Loan payable to California Infrastructure and Economic Development Bank for the regional wastewater treatment plant upgrade and expansion project; semi-annual installments of $383,084 to $525,788, including interest at 3.01% per annum. At June 30, 2014, the outstanding balance of the California Infrastructure and Economic Development Bank loan was $8,495,174.

The annual debt service requirements June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 277,879	$ 251,523	$ 529,402
2016	286,244	243,033	529,277
2017	294,860	234,287	529,147
2018	303,735	225,278	529,013
2019	312,877	215,998	528,875
2020-2024	1,711,449	930,714	2,642,163
2025-2029	1,985,002	653,045	2,638,047
2030-2034	2,302,278	330,993	2,633,271
2035-2036	1,020,850	30,955	1,051,805
Total	$ 8,495,174	$ 3,115,826	$ 11,611,000

Airport Hanger Loan

Loan payable to the Department of Transportation, Division of Aeronautics for the purchase of fourteen airplane hangars; annual installments of $14,131 to $27,180, including interest at 4.7829%. At June 30, 2014, the outstanding balance of the Department of Transportation, Division of Aeronautics loan was $204,403.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 18,704	$ 9,776	$ 28,480
2016	19,598	8,882	28,480
2017	20,536	7,944	28,480
2018	21,518	6,962	28,480
2019	22,547	5,933	28,480
2020-2023	101,500	12,421	113,921
Total	$ 204,403	$ 51,918	$ 256,321

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Business-Type Activities Long-Term Debt (Continued)

Bonds Payable

Water and Wastewater Revenue Bonds, Series 2006

Water and Wastewater Revenue Bonds, Series 2006 were issued by the Financing Authority in March 2006 for $35,995,000. Proceeds from the bonds were used to refund $2,225,000 of its 1996 Sewer Revenue Refunding Bonds, Series A, and for Water and Sewer System Capital Facilities. The bonds are due in annual installments of $50,000 to $2,055,000 through March 1, 2036, with interest payable semiannually on September 1 and March 1 of each year at 3.5% to 4.75%. At June 30, 2014, the outstanding balance of the Water and Wastewater Revenue Bonds was $31,315,000.

The Financing Authority has pledged a portion of future wastewater revenue to repay the 2006 Water and Wastewater Revenue Bonds. Total principal and interest remaining on the agreement is $50,849,653 payable through 2036.

The Water and Wastewater Revenue Bonds, Series 2006 were issued at a premium which is being amortized over the life of the bonds resulting in an annual amortization of $20,151. At June 30, 2014, the outstanding balance of the premium on the bonds was $438,284.

Annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 875,000	$ 1,436,663	$ 2,311,663
2016	910,000	1,401,663	2,311,663
2017	945,000	1,365,263	2,310,263
2018	980,000	1,327,463	2,307,463
2019	1,025,000	1,285,813	2,310,813
2020-2024	5,845,000	5,705,775	11,550,775
2025-2029	7,330,000	4,236,075	11,566,075
2030-2034	9,105,000	2,450,688	11,555,688
2035-2036	4,300,000	325,250	4,625,250
Total	$ 31,315,000	$ 19,534,653	$ 50,849,653

Water Revenue Bonds, Series 2010

Water Revenue Bonds, Series 2010 were issued by the Financing Authority in November 2010 for $11,215,000. The City will use the proceeds from the Bonds along with the changing of water and sewer rates to bring the City into compliance with State Law to have the entire City on water meters by the year 2025. The bonds are due in annual installments of $65,000 to $745,000 through March 1, 2038, with interest payable semi-annually on September 1 and March 1 of each year at 4.5%. At June 30, 2014, the outstanding balance was $11,000,000.

The Financing Authority has pledged a portion of future wastewater revenue to repay the 2010 Water Revenue Bonds. Total principal and interest remaining on the agreement is $18,671,534, payable through 2038.

The Water Revenue Bonds, Series 2010 were issued at a discount which is being amortized over the life of the bonds resulting in an annual amortization of $5,422. At June 30, 2014, the outstanding balance of the discount on the bonds was $130,138.

NOTE 7 – LONG-TERM LIABILITIES (Continued)

Business-Type Activities Long-Term Debt (Continued)

Bonds Payable (Continued)

Water Revenue Bonds, Series 2010 (Continued)

Annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 245,000	$ 498,463	$ 743,463
2016	290,000	491,113	781,113
2017	300,000	479,513	779,513
2018	315,000	467,513	782,513
2019	320,000	458,063	778,063
2020-2024	1,800,000	2,108,681	3,908,681
2025-2029	2,200,000	1,696,450	3,896,450
2030-2034	2,765,000	1,117,238	3,882,238
2035-2037	2,765,000	354,500	3,119,500
Total	$ 11,000,000	$ 7,671,534	$ 18,671,534

1993 Variable Rate Demand Bonds

In May 1993, the Financing Authority issued Variable Rate Demand Bonds in the aggregate principal of $5,280,000. The proceeds were used to redeem $4,835,000 of its December 8, 1989 Lease Revenue Bonds, Series A, and $262,450 for additional Golf Course construction. The bonds are due in annual installments of $140,000 to $350,000 beginning November 2001 with interest at 4.3% to 10.0% per annum payable semi-annually. Payments of principal and interest on the bonds are supported by an irrevocable direct draw letter of credit. At June 30, 2014, the outstanding balance of the Variable Rate Demand Bonds was $2,925,000. Total principal and interest remaining on the agreement is payable through 2024.

Annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 240,000	$ -	$ 240,000
2016	250,000	-	250,000
2017	260,000	-	260,000
2018	275,000	-	275,000
2019	285,000	-	285,000
2020-2024	1,615,000	-	1,615,000
Total	$ 2,925,000	$ -	$ 2,925,000

Compensated Absences

The City's policy relating to compensated absences is described in Note 1. At June 30, 2014, the City's liability for vested and unpaid compensated absences (accrued vacation and sick pay) balance is $1,347,959 for governmental activities and $237,691 for business-type activities. All compensated absence amounts above are generally liquidated by the fund incurring the expense.

NOTE 8 – PENSION OBLIGATIONS

California Public Employees' Retirement Plan (CalPERS)

Plan Description

The City contributes to the California Public Employees' Retirement System (CalPERS), a cost-sharing multiple-employer public employee retirement system defined benefit pension plan. CalPERS provides retirement benefits and disability benefits, annual cost-of-living adjustments, and death benefits to plan members and beneficiaries. CalPERS acts as a common investment and administrative agent for participating public entities within the State of California. State statutes within the Public Employees' Retirement Law establish a menu of benefit provisions as well as other requirements. The City selects optional benefit provisions from the benefit menu by contract with CalPERS and adopts those benefits through local ordinance. Copies of CalPERS annual financial report may be obtained from their Executive Office, 400 Q Street, Sacramento, CA 95814.

Funding Policy

Active members are required to contribute 8% if a miscellaneous employee and 9% if a safety employee of their annual salary. The City employer made the contributions required of the City employees on their behalf and for their account, which amounted to $383,129 for miscellaneous employee and $226,891 for safety employee for the year ended June 30, 2014. The City employer is required to contribute for fiscal year 2013-2014 at an actuarially determined rate of 16.242% for miscellaneous employees and 36.066% for safety employees. The contribution requirements of plan members are established by State statute and the employer contribution is established and may be amended by PERS.

Annual Pension Cost and Net Pension Obligation

For the year ended June 30, 2014, the City's annual pension cost was $3,418,392. The City's required and actual contributions were $2,808,372 and contributions made on behalf of the employees were $610,020. The required contribution was determined as part of the June 30, 2011 actuarial valuation using the entry age normal cost method. The actuarial assumptions included (a) 7.50% investment rate of return (net of administrative expenses); (b) projected salary increases ranging from 3.30% to 14.20% for both miscellaneous employees and safety employees depending on age, service, and type of employment; and (c) 3.00% per year cost-of-living adjustments. Both (a) and (b) include an inflation component of 2.75%. The actuarial value of CalPERS assets was determined using techniques that smooth effects of short-term volatility in the market value of investments over a three-year period. CalPERS unfunded actuarial accrued liability (or surplus) is being amortized as a level percentage of projected payroll on a closed basis. The amortization period at June 30, 2014 was 24 years for miscellaneous employees and 21 years for safety employees for the prior and current service unfunded liability.

Trend Information

The City's Annual Pension Cost (APC), percentage of APC contributed, and Net Pension Obligation for the plan for the current year and each of the two preceding years were as follows:

Year Ended June 30,	Annual Pension Cost (APC)	Percentage of APC Contributed	Net Pension Obligation
2014	$ 3,418,392	100%	$ -
2013	$ 3,434,473	100%	$ -
2012	$ 3,754,150	100%	$ -

NOTE 8 – PENSION OBLIGATIONS (Continued)

California Public Employees' Retirement Plan (CalPERS) (Continued)

Funded Status and Funding Progress

At June 30, 2013, the most recent actuarial valuation date, the funded status of the miscellaneous plan and safety plan are as follows:

Actuarial Valuation Date	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
Miscellaneous	$ 62,630,735	$ 45,696,730	$ 16,934,005	72.96%	$ 8,615,096	196.56%
Safety	$ 45,744,204	$ 32,443,863	$ 13,300,341	70.92%	$ 4,034,189	329.69%

The information presented above relates to the plan as a whole, of which the City is one participating employer.

The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information about whether the actuarial value of plan assets is increasing or decreasing relative to the actuarial accrued liability for benefits.

NOTE 9 – OTHER POST-EMPLOYMENT BENEFITS (OPEB) OBLIGATIONS

Plan Description

The City of Madera Retiree Healthcare Plan (Plan) is a single-employer defined benefit healthcare plan administered by the City. The Plan provides healthcare benefits to eligible retirees. Benefit provisions are negotiated and may be amended through agreements and memorandums of understanding between the City, its management employees, and union representing City employees. Membership in the Plan at the most recent valuation date July 1, 2012 consisted of the following: Eligible active employees for safety and miscellaneous were 57 and 193, respectively; enrolled eligible retirees for safety and miscellaneous were 8 and 15, respectively.

Eligibility

Membership of the Plan at the most recent valuation date July 1, 2012 consisted of the following:

	Management*	All Other Bargaining Group**
Eligibility	Retire directly from City at age 50 and 20 years City service, including 3 years with Management***	Retire directly from City at age 50 and 5 years CalPERS service (or disability retirement)
Medical	Retiree - City pays single premium including supplemental to Medicare and prescription drug premium when Medicare eligible. Must be enrolled at retirement; cannot re-elect coverage; spouse/family - retiree-paid	Retiree pays premium (until age 65 or Medicare eligible). Spouse/family-retiree-paid (until age 65 or Medicare eligible; cannot re-elect coverage)

*Benefits consistent with individual executive contracts
**Excludes City Council
***Management with 5 years City service can participate with payment of premium

NOTE 9 – OTHER POST-EMPLOYMENT BENEFITS (OPEB) OBLIGATIONS (Continued)

Funding Policy

There is no statutory requirement for the City to pre-fund its OPEB obligation. The City has currently chosen to pay Plan benefits on a pay-as-you-go basis. There are no employee contributions. For fiscal year 2013-14, the City contributed approximately $42,740 on a pay-as-you-go-basis for cash subsidy benefit payments and approximately $82,425 for implied subsidy benefit payments.

Annual Other Post-Employment Benefits (OPEB) Cost and Net OPEB Obligations

The City's annual OPEB cost is calculated based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years. The following table shows the City's annual required contribution (OPEB costs), for the fiscal years ended June 30, 2014, 2013, and 2012, the amount actually contributed to the plan, the percentage of annual OPEB cost contributed to the plan and the net OPEB obligation:

Year Ended	Annual OPEB Cost	Actual Contributions	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
June 30, 2012	$ 822,840	$ 163,418	20%	$ 1,906,266
June 30, 2013	$ 253,016	$ 105,631	42%	$ 2,053,651
June 30, 2014	$ 250,388	$ 125,165	50%	$ 2,178,874

The following table shows the components of City's annual OPEB cost for the fiscal year ended June 30, 2014, the amount actually contributed to the plan, and changes in the City's net OPEB obligation for the year.

Annual required contribution (ARC)	$ 287,005
Interest on net OPEB obligation	82,146
Adjustment to annual required contribution	(118,763)
Annual OPEB cost (expense)	250,388
Contributions made	(125,165)
Change in net OPEB obligation	125,223
Net OPEB obligation, beginning of the year	2,053,651
Net OPEB obligation, end of the year	$ 2,178,874

Funded Status and Funding Progress

The funded status of the plan as of the most recent actuarial valuation, July 1, 2012, was as follows:

Actuarial accrued liability (AAL)	$ 4,717,369
Actuarial value of plan assets	-
Unfunded actuarial accrued liability (UAAL)	$ 4,717,369
Funded ratio (actuarial value of plan assets/AAL)	0%
Covered payroll (active plan members)	$ 12,328,640
UAAL as a percentage of covered payroll	38%

NOTE 9 – OTHER POST-EMPLOYMENT BENEFITS (OPEB) OBLIGATIONS (Continued)

Funded Status and Funding Progress (Continued)

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of events far into the future. Examples include assumptions about future employment, mortality and the healthcare cost trend. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the basic financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Methods and Assumptions

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets consistent with the long-term perspective of the calculations.

The ARC for the year ended June 30, 2014 was determined as part of the July 1, 2012 actuarial valuation using the following methods and assumptions:

Actuarial cost method:	Projected unit credit with service pro-rate
Amortization method:	30-year-level dollars, open period
Remaining amortization period:	30 years
Discount rate:	4.0% per annum
Rate of return on investments:	4.0% per annum (for funding schedules)
Retirement rates:	Based on City experience
Turnover:	According to Crocker-Sarason Table T-5 less mortality, increased by 40% at all ages.
Mortality:	RP-2000 Combined Mortality, statix projection to 2012 by scale AA.
Health care cost trend rate:	2012 (8.0%), 2013 (7.0%), 2014 (6.0%), 2015 (5.0%)

NOTE 10 – DEFERRED COMPENSATION

The City offers its employees a deferred compensation plan in accordance with Internal Revenue Code Section 457. The plan was amended so that the assets of the plan are held in trust for the exclusive benefit of the participants and their beneficiaries. Since the plan assets are administered by an outside party and not subject to the claims of the City's general creditors, their assets and related liabilities are not on the City's financial statements in accordance with Governmental Accounting Standards Board (GASB) Statement No. 32, *"Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans."*

NOTE 11 – RISK MANAGEMENT

The City is a member of the Central San Joaquin Valley Risk Management Authority (CSJVRMA), a public entity risk pool for workers' compensation and general liability insurance. The CSJVRMA is a consortium of fifty-five cities located in California's San Joaquin Valley. It was established under the provisions of California Government Code Section 6500 et. seq. CSJVRMA is governed by a Board of Directors, consisting of one member appointed by each member city. The day-to-day business operations are handled by a management group employed by CSJVRMA. The relationship between the City and CSJVRMA is such that the CSJVRMA is not considered a component unit of the City for financial reporting purposes.

General Liability Insurance coverage is addressed via retention maintained by the City and participation in CSJVRMA. The City maintains a self-insured retention level of $100,000 and participates in the CSJVRMA risk pool for coverage up to $1,000,000. CSJVRMA participates in an excess pool, which provides coverage from $1,000,000 to $29,000,000.

Workers' Compensation coverage is also addressed via a retention maintained by the City and participation in CSJVRMA. The City maintains a self-insured retention level of $100,000 and participates in the CSJVRMA risk pool for additional coverage up to $250,000. CSJVRMA also participates in an excess pool which provides workers' compensation coverage from $250,000 to $500,000 and purchases excess insurance of approximately $500,000 to the statutory limit.

The summary financial position and results of operations for CSJVRMA, as of June 30, 2014, is presented as follows:

Statement of Net Position

Current assets	$ 17,939,283
Noncurrent assets	62,755,515
Total assets	80,694,798
Current liabilities	17,235,687
Noncurrent liabilities	48,205,260
Total liabilities	65,440,947
Total net position	$ 15,253,851

Statement of Revenues, Expenses and Changes in Net Position

Operating revenues	$ 30,958,373
Operating expenses	32,739,704
Operating income (loss)	(1,781,331)
Non-operating income (loss)	1,149,773
Increase (decrease) in net position	(631,558)
Net position - beginning of year	15,885,409
Net position - end of year	$ 15,253,851

NOTE 12 – CONTINGENCIES AND COMMITMENTS

Litigation

The City is currently a party to various claims and legal proceedings. In management's opinion, the ultimate liabilities, if any, resulting from such claims and proceedings will not materially affect the financial position of the City.

Contingent Liabilities

On March 1, 1993, the City issued Certificates of Participation in the aggregate of $10,250,000 for the benefit of Madera Community Hospital (Hospital), a California nonprofit public benefit corporation. The Hospital is not included in the City's reporting entity. The City is obligated to make the purchase payments only from and to the extent that it receives revenue from the Hospital. They are not secured by any pledge of taxes or other revenues of the City. In addition, the purchase payments are insured by the Office of Statewide Health Planning and Development of the State of California. As of June 30, 2014, the City has not recorded revenues from the Hospital.

Federal Awards and Grants

The City participates in various federal grant programs, the principal of which are subject to program compliance audits pursuant to the Single Audit act as amended. Accordingly, the City's compliance with applicable grant requirements will be established at a future date. The amount of expenditures which may be disallowed by the granting agencies cannot be determined at this time, although the City anticipates such amounts, if any, will be immaterial.

Contractual Commitments

The City has active construction projects as of June 30, 2014. At year-end, the City's major contractual commitments are as follows:

Project	Contract Amount	Spent-to-Date	Remaining Commitment
Water Well #8 Installation	$ 503,870	$ -	$ 503,870
Total	$ 503,870	$ -	$ 503,870

Encumbrances

At year-end the amount of encumbrances expected to be honored upon performance by the vendor in the next year were as follows:

General fund	$ 212,763
General development impact fund	17,530
Special gas tax fund	1,246,692
Residential rehab fund	40,098
Nonmajor governmental funds	105,139
Total	$ 1,622,222

NOTE 12 – CONTINGENCIES AND COMMITMENTS (Continued)

Operating Leases

In June 2014, the City entered into an operating lease agreement for computers for the City. The term of the agreement ends June 2017. Rental expense for the year ended June 30, 2014 was $62,215.

In June 2013, the City entered into an operating lease agreement for copiers for the City. The term of the agreement ends June 2018. Rental expense for the year ended June 30, 2014 was $33,322.

The future minimum payments anticipated under these commitments as of June 30, 2014 are as follows:

Fiscal Year Ending June 30,	Computers	Copiers	Total
2015	$ 62,215	$ 33,322	$ 95,537
2016	62,215	33,322	95,537
2017	62,215	33,322	95,537
2018	-	33,322	33,322
	$ 186,645	$ 133,288	$ 319,933

NOTE 13 – DEFICIT FUND BALANCE

Deficit Fund Balance

The City has accumulated fund deficits in the following individual funds:

Nonmajor governmental funds:

The Senior Citizen Services special revenue fund has a net fund deficit of $85,777. The deficit will be eliminated through future revenues or transfers from other funds.

Nonmajor enterprise funds:

The Golf Course Fund has a net fund deficit of $876,805. The deficit is due primarily to the $2,925,000 outstanding bonds for the Madera Municipal Golf Course Refinancing Project. It is anticipated that the deficit in this fund will be eliminated through future revenues or transfers from other funds.

NOTE 14 – PRIOR PERIOD ADJUSTMENTS AND RESTATEMENTS

Governmental Activities

The beginning net position of the Governmental Activities in the government-wide Statement of Net Position has been restated to record prior period adjustments to correct the following errors in the prior year. A reconciliation of the prior period ending net position to the current year beginning net position for the Governmental Activities is as follows:

Beginning net position	$ 218,608,712
Adjustment to correct:	
Overstatement of accounts receivable	116,254
Understatement of cash	174,623
Total prior period adjustments and restatements	290,877
Beginning net position, as restated	$ 218,899,589

Fund Financial Statements

The City has determined that certain transactions were recorded incorrectly in the prior year. The beginning fund balance of the following funds has been restated on the fund basis financial statements to correct prior year errors. Reconciliations of the prior period ending to the current year beginning fund balances are as follows:

	Major Fund	Nonmajor Fund	
Description	Special Gas Tax Fund	Low and Moderate Income Housing Asset	Total
Beginning fund balance	$ 7,016,897	$ 2,635,633	$ 9,652,530
Understatement of accounts receivable	116,254		116,254
Understatement of cash	-	174,623	174,623
Total prior period adjustments and restatements	116,254	174,623	290,877
Beginning fund balance, as restated	$ 7,133,151	$ 2,810,256	$ 9,943,407

NOTE 15 – SEGMENT INFORMATION

Segment information for the Water Fund, Sewer Fund, and Golf Course Fund was as follows:

	Water Fund	Sewer Fund	Golf Course Fund
CONDENSED STATEMENT OF NET POSITION			
Assets:			
Current assets	$ 12,668,407	$ 8,958,721	$ 524,956
Capital assets	24,339,001	51,392,834	2,028,861
Total assets	37,007,408	60,351,555	2,553,817
Liabilities:			
Current liabilities	2,129,012	2,015,151	536,622
Noncurrent liabilities	12,787,859	37,148,699	2,685,000
Total liabilities	14,916,871	39,163,850	3,221,622
Deferred inflows of resources:			
Deferred service concession arrangement receipts	-	-	209,000
Net position:			
Net investment in capital assets	14,363,363	13,237,042	(896,139)
Unrestricted	7,727,174	7,950,663	19,334
Total net position	$ 22,090,537	$ 21,187,705	$ (876,805)
CONDENSED STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION			
Operating revenues	$ 5,716,031	$ 6,199,330	$ 122,495
Depreciation expense	(831,645)	(2,273,079)	-
Other operating expenses	(3,377,210)	(3,434,581)	-
Operating income (loss)	1,507,176	491,670	122,495
Nonoperating revenue (expenses):			
Investment income	10,713	5,540	1,063
Interest expense	(599,498)	(1,620,697)	(1,885)
Other nonoperating revenue (expenses)	4	(30,106)	(64,766)
Capital contributions	43,067	76,339	-
Transfers in	-	-	237,000
Transfers out	(466,023)	(1,316,023)	-
Change in net position	495,439	(2,393,277)	293,907
Beginning net position	21,595,098	23,580,982	(1,170,712)
Ending net position	$ 22,090,537	$ 21,187,705	$ (876,805)
CONDENSED STATEMENT OF CASH FLOWS			
Net cash provided (used) by:			
Operating activities	$ 2,256,116	$ 2,671,370	$ (428,135)
Noncapital financing activities	(466,019)	(1,315,644)	237,000
Capital and related financing activities	(828,281)	(2,715,756)	(296,858)
Investment activities	9,431	5,540	732
Net increase (decrease)	971,247	(1,354,490)	(487,261)
Beginning cash and cash equivalents	11,241,133	9,998,080	789,699
Ending cash and cash equivalents	$ 12,212,380	$ 8,643,590	$ 302,438

NOTE 16 – SUCCESSOR AGENCY TRUST FUND

On January 11, 2012, the City Council elected to become the Successor Agency for the former redevelopment agency in accordance with Assembly Bill 1X26 (the Bill") which dissolved all redevelopment agencies in the State of California.

Under the control of an oversight board, remaining assets can only be used to pay enforceable obligations in existence at the date of dissolution of the redevelopment agency (including the completion of any unfinished projects that were subject to legally enforceable contractual commitments).

Successor agencies are only allocated revenue in the amount that is necessary to pay estimated annual installment payments on enforceable obligations of the former redevelopment agency until all enforceable obligations of the prior redevelopment agency have been paid in full and all assets have been liquidated.

After the date of the dissolution, the assets and activities of the dissolved redevelopment agency are reported in a fiduciary fund (private-purpose trust fund) in the financial statements of the City.

Capital Assets

Capital assets activity of the Successor Agency Trust Fund as of June 30, 2014 is as follows:

	Balance June 30, 2013	Additions	Deletions	Balance June 30, 2014
Capital assets not being depreciated:				
Land	$ 389,566	$ -	$ -	$ 389,566
Total capital assets not being depreciated	389,566	-	-	389,566
Capital assets being depreciated:				
Buildings and improvements	3,339,683	-	-	3,339,683
Equipment	378,169	-	-	378,169
Total capital assets being depreciated	3,717,852	-	-	3,717,852
Less accumulated depreciation for:				
Buildings and improvements	771,487	132,814	-	904,301
Equipment	191,666	31,577	-	223,243
Total accumulated depreciation	963,153	164,391	-	1,127,544
Capital assets, net	$ 3,144,265	$ (164,391)	$ -	$ 2,979,874

NOTE 16 – SUCCESSOR AGENCY TRUST FUND (Continued)

Long-term Debt

The following is a summary of long-term debt obligation transactions for the Successor Agency Trust Fund at June 30, 2014:

	Balance June 30, 2013	Additions	Deletions	June 30, 2014	Due Within One Year
1998 Tax Allocation Bonds	$ 6,085,000	$ -	$ (125,000)	$ 5,960,000	$ 130,000
Less: unamortized bond discounts	(80,266)	-	5,351	(74,915)	-
2003 Tax Allocation Bonds	16,240,000	-	(525,000)	15,715,000	550,000
Add: unamortized bond premiums	9,186	-	(459)	8,727	-
2008A Series Tax Allocation Bonds	24,170,000	-	(355,000)	23,815,000	365,000
2008B Series Tax Allocation Bonds	3,730,000	-	(75,000)	3,655,000	80,000
Less: unamortized bond discounts	(665,650)	-	26,625	(639,025)	-
Compensated absences	-	20,182	-	20,182	10,289
Total	$ 49,488,270	$ 20,182	$ (1,048,483)	$ 48,459,969	$ 1,135,289

1998 Tax Allocation Bonds

On October 8, 1998, the Agency issued $7,440,000 of 1998 Tax Allocation Redevelopment Project Bonds. The proceeds of the bonds were used to finance redevelopment activities within the Madera Redevelopment Project Area, to pay costs incurred in connection with the issuance, sale and delivery of the bonds, and to fund the reserve account.

Principal payments are due annually on September 1, commencing on September 1, 1999, with the final payment due in the year 2029. Interest payments are due on September 1 and March 1 of each year until the bonds are paid off. Interest rates range from 3.15% to 4.95%. Principal and interest will be paid from tax increment revenues consisting of a portion of taxes levied upon all taxable property within the Project Area. The outstanding balance of the bonds at June 30, 2014 was $5,960,000.

The Agency has pledged a portion of future property tax increment revenue to repay the 1998 Tax Allocation Redevelopment Bonds. The bonds required 10% of the RDA property tax increment revenue. Total principal and interest remaining on the bonds is $8,986,462 payable through 2029.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 130,000	$ 278,753	$ 408,753
2016	135,000	272,724	407,724
2017	140,000	266,468	406,468
2018	140,000	260,098	400,098
2019	150,000	253,500	403,500
2020-2024	860,000	1,152,350	2,012,350
2025-2029	4,405,000	542,569	4,947,569
Total	$ 5,960,000	$ 3,026,462	$ 8,986,462

The 1998 Tax Allocation Bonds were issued at a discount of $160,533, which is being amortized over the 30-year life of the bonds resulting in an annual amortization of $5,351. Unamortized bond discount as of June 30, 2014 was $74,915.

NOTE 16 – SUCCESSOR AGENCY TRUST FUND (Continued)

Long-term Debt *(Continued)*

2003 Tax Allocation Bonds

On October 23, 2003, the Agency issued $19,495,000 of 2003 Tax Allocation Refunding and Redevelopment Project Bonds. The proceeds of the bonds were used to advance refund the Agency's 1993 Bond Anticipation Notes dated July 1, 1993, in an amount of $7,201,007, to fund the acquisition and construction of new improvements within the Madera Redevelopment Project Area, to pay Agency housing set-aside obligations, to pay costs incurred in connection with the issuance, sale and delivery of the bonds, and to fund the reserve account.

Principal payments are due annually on September 1, commencing on September 1, 2004, with the final payment due in the year 2034. Interest payments are due on September 1 and March 1 of each year until the bonds are paid off. Interest rates range from 2.00% to 5.00%. Principal and interest will be paid from tax increment revenues consisting of a portion of all taxes levied upon all taxable property within the Project Area. The outstanding balance of the bonds at June 30, 2014 was $15,715,000.

The Agency has pledged a portion of future property tax increment revenue to repay the 2003 Tax Allocation Refunding Bonds. The bond required 34% of the RDA property tax increment revenues. Total principal and interest remaining on the bond is $25,225,100 payable through 2034.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 550,000	$ 756,506	$ 1,306,506
2016	575,000	729,006	1,304,006
2017	605,000	704,569	1,309,569
2018	635,000	678,856	1,313,856
2019	660,000	651,075	1,311,075
2020-2024	3,790,000	2,763,375	6,553,375
2025-2029	1,460,000	2,074,463	3,534,463
2030-2034	7,440,000	1,152,250	8,592,250
Total	$ 15,715,000	$ 9,510,100	$ 25,225,100

The 2003 Tax Allocation Bonds were issued at a premium of $13,799, which is being amortized over the 30-year life of the bonds resulting in an annual amortization of $459. Unamortized bond premium as of June 30, 2014 was $8,727.

2008A Series Tax Allocation Bonds

On September 10, 2008, the Agency issued $25,455,000 of 2008A Series Tax Allocation Bonds. The proceeds of the bonds were used to finance redevelopment activities within the Madera Redevelopment Project Area, to pay costs incurred in connection with the issuance of the bonds, and to fund the reserve account.

Principal payments are due annually on September 1, commencing on September 1, 2010, with the final payment due in the year 2039. Interest payments are due on September 1 and March 1 of each year until the bonds are paid off. Interest rates range from 3.50% to 5.38%. Principal and interest will be paid from tax increment revenues consisting of a portion of all taxes levied upon all taxable property within the Project Area. The outstanding balance of the bonds at June 30, 2014 was $23,815,000.

NOTE 16 – SUCCESSOR AGENCY TRUST FUND (Continued)

Long-term Debt *(Continued)*

2008A Series Tax Allocation Bonds (continued)

The Agency has pledged a portion of future property tax increment revenue to repay the 2008A Series Tax Allocation Bonds. The bond required 41% of the RDA property tax increment revenue. Total principal and interest remaining on the bond is $45,127,088 payable through 2039.

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 365,000	$ 1,222,104	$ 1,587,104
2016	380,000	1,206,415	1,586,415
2017	395,000	1,190,118	1,585,118
2018	415,000	1,172,768	1,587,768
2019	430,000	1,153,598	1,583,598
2020-2024	2,490,000	5,423,785	7,913,785
2025-2029	3,200,000	4,679,523	7,879,523
2030-2034	4,160,000	3,668,938	7,828,938
2035-2039	11,980,000	1,594,839	13,574,839
Total	$ 23,815,000	$ 21,312,088	$ 45,127,088

The 2008A Series Tax Allocation Bonds were issued at a discount of $692,753, which is being amortized over the 30-year life of the bonds resulting in an annual amortization of $23,092. Unamortized bond discount as of June 30, 2014 was $554,202.

2008B Series Tax Allocation Bonds

On September 10, 2008, the Agency issued $4,000,000 of 2008B Housing Set-Aside Subordinate Tax Allocation Bonds. The proceeds of the bonds were used to finance low and moderate-income housing within the Madera Redevelopment Project Area, to pay costs incurred in connection with the issuance of the bond, and to fund the reserve account.

Principal payments are due annually commencing on September 1, 2010, with the final payment due in the year 2038. Interest payments are due on September 1 and March 1 of each year until the bonds are paid off. Interest rates range from 3.50% to 5.38%. Principal and interest will be paid from tax increment revenues consisting of a portion of all taxes levied upon all taxable property within the Project Area. The outstanding balance of the bonds at June 30, 2014 was $3,655,000.

The Agency has pledged a portion of future property tax increment revenue to repay the 2008B Housing Set-Aside Subordinate Tax Allocation Bonds. The bond required 7% of the RDA property tax increment revenues. Total principal and interest remaining on the bond is $6,929,289 payable through 2039.

NOTE 16 – SUCCESSOR AGENCY TRUST FUND (Continued)

Long-term Debt *(Continued)*

2008B Series Tax Allocation Bonds (continued)

The annual debt service requirements at June 30, 2014 are as follows:

Year Ending June 30,	Principal	Interest	Total
2015	$ 80,000	$ 187,758	$ 267,758
2016	80,000	185,348	265,348
2017	85,000	182,844	267,844
2018	90,000	180,179	270,179
2019	90,000	177,233	267,233
2020-2024	525,000	833,285	1,358,285
2025-2029	675,000	718,940	1,393,940
2030-2034	880,000	563,678	1,443,678
2035-2039	1,150,000	245,024	1,395,024
Total	$ 3,655,000	$ 3,274,289	$ 6,929,289

The 2008B Series Tax Allocation Bonds were issued at a discount of $106,026, which is being amortized over the 30-year life of the bonds resulting in an annual amortization of $3,534. Unamortized bond discount as of June 30, 2014 was $84,821.

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REQUIRED SUPPLEMENTARY INFORMATION

CITY OF MADERA
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
BUDGET AND ACTUAL – GENERAL FUND
FOR THE YEAR ENDED JUNE 30, 2014

	Budgeted Amounts			Variance with Final Budget Positive
	Original	Final	Actual	(Negative)
REVENUES:				
Property taxes	$ 3,057,074	$ 3,292,000	$ 2,869,599	$ (422,401)
Sales and use taxes	4,203,626	4,276,000	5,539,847	1,263,847
Other taxes	990,236	1,026,379	1,106,701	80,322
Use of money and property	704,500	575,300	803,058	227,758
Franchises	581,991	595,000	591,116	(3,884)
Licenses and permits	340,400	340,400	395,730	55,330
Fines	382,000	847,000	846,080	(920)
Aid from governmental agencies:				
Federal	975,737	1,003,837	1,297,394	293,557
State	6,203,600	6,573,000	6,831,788	258,788
Other	175,831	175,831	183,506	7,675
Charges for current services	3,437,931	3,564,021	3,829,497	265,476
Miscellaneous	556,547	545,873	846,287	300,414
Total revenues	21,609,473	22,814,641	25,140,603	2,325,962
EXPENDITURES:				
Current:				
General government	4,888,765	4,865,725	4,547,145	318,580
Public protection	12,964,186	12,964,186	12,947,607	16,579
Public ways and facilities	2,832,704	2,827,868	2,365,904	461,964
Community development	3,713,146	3,913,660	3,617,319	296,341
Culture and recreation	2,803,822	2,851,548	2,814,466	37,082
Capital outlay	137,200	1,015,687	275,171	740,516
Debt service:				
Principal	255,497	263,227	70,254	192,973
Interest	4,000	4,000	63,333	(59,333)
Total expenditures	27,599,320	28,705,901	26,701,199	2,004,702
Excess (deficiency) of revenues over (under) expenditures	(5,989,847)	(5,891,260)	(1,560,596)	4,330,664
OTHER FINANCING SOURCES (USES):				
Transfers in	4,575,124	6,488,590	5,635,528	(853,062)
Transfers out	(1,504,352)	(1,532,452)	(1,413,861)	118,591
Total other financing sources (uses)	3,070,772	4,956,138	4,221,667	(734,471)
Net change in fund balance	(2,919,075)	(935,122)	2,661,071	3,596,193
Fund balance - beginning	10,188,742	10,188,742	10,188,742	-
Fund balance - ending	$ 7,269,667	$ 9,253,620	$ 12,849,813	$ 3,596,193

CITY OF MADERA
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
BUDGET AND ACTUAL – GENERAL DEVELOPMENT IMPACT FEE FUND
FOR THE YEAR ENDED JUNE 30, 2014

	Budgeted Amounts			Variance with Final Budget Positive
	Original	Final	Actual	(Negative)
REVENUES:				
Other taxes	$ -	$ -	$ 993	$ 993
Use of money and property	7,117	7,117	10,088	2,971
Charges for current services	1,156,705	1,156,705	1,812,112	655,407
Total revenues	1,163,822	1,163,822	1,823,193	659,371
EXPENDITURES:				
Current:				
General government	-	-	419	(419)
Public ways and facilities	-	-	2,462	(2,462)
Capital outlay	1,425,195	3,397,374	84,092	3,313,282
Total expenditures	1,425,195	3,397,374	86,973	3,310,401
Excess (deficiency) of revenues over (under) expenditures	(261,373)	(2,233,552)	1,736,220	3,969,772
OTHER FINANCING SOURCES (USES):				
Transfers out	(594,913)	(784,913)	(194,257)	590,656
Total other financing sources (uses)	(594,913)	(784,913)	(194,257)	590,656
Net change in fund balance	(856,286)	(3,018,465)	1,541,963	4,560,428
Fund balance - beginning	9,389,679	9,389,679	9,389,679	-
Fund balance - ending	$ 8,533,393	$ 6,371,214	$ 10,931,642	$ 4,560,428

CITY OF MADERA
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
BUDGET AND ACTUAL – SPECIAL GAS TAX FUND
FOR THE YEAR ENDED JUNE 30, 2014

	Budgeted Amounts			Variance with Final Budget Positive
	Original	Final	Actual	(Negative)
REVENUES:				
Use of money and property	$ -	$ -	$ 13,003	$ 13,003
Aid from governmental agencies:				
Federal	560,000	560,000	1,397,478	837,478
State	8,937,617	8,858,941	7,452,741	(1,406,200)
Other	3,963,476	3,956,407	4,007,477	51,070
Total revenues	13,461,093	13,375,348	12,870,699	(504,649)
EXPENDITURES:				
Current:				
General government	250,000	250,000	250,000	-
Capital outlay	15,432,519	16,718,662	9,448,604	7,270,058
Total expenditures	15,682,519	16,968,662	9,698,604	7,270,058
Excess (deficiency) of revenues over (under) expenditures	(2,221,426)	(3,593,314)	3,172,095	6,765,409
OTHER FINANCING SOURCES (USES):				
Transfers in	-	-	-	-
Transfers out	(2,375,000)	(2,375,000)	(1,963,901)	411,099
Total other financing sources (uses)	(2,375,000)	(2,375,000)	(1,963,901)	411,099
Net change in fund balance	(4,596,426)	(5,968,314)	1,208,194	7,176,508
Fund balance - beginning	7,016,897	7,016,897	7,016,897	-
Prior period adjustments	116,254	116,254	116,254	-
Fund balances - beginning (restated)	7,133,151	7,133,151	7,133,151	-
Fund balance - ending	$ 2,536,725	$ 1,164,837	$ 8,341,345	$ 7,176,508

CITY OF MADERA
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCE
BUDGET AND ACTUAL – RESIDENTIAL REHAB FUND
FOR THE YEAR ENDED JUNE 30, 2014

	Budgeted Amounts			Variance with Final Budget Positive
	Original	Final	Actual	(Negative)
REVENUES:				
Use of money and property	$ -	$ -	$ 30	$ 30
Aid from governmental agencies:				
Federal	6,164,940	7,084,505	5,575,082	(1,509,423)
State	511,650	511,650	211,032	(300,618)
Charges for current services	-	-	93,999	93,999
Miscellaneous	-	291,395	432,668	141,273
Total revenues	6,676,590	7,887,550	6,312,811	(1,574,739)
EXPENDITURES:				
Current:				
Community development	6,271,590	7,292,550	954,591	6,337,959
Capital outlay	660,000	660,000	749,987	(89,987)
Total expenditures	6,931,590	7,952,550	1,704,578	6,247,972
Excess (deficiency) of revenues over (under) expenditures	(255,000)	(65,000)	4,608,233	4,673,233
OTHER FINANCING SOURCES (USES):				
Transfers out	(45,000)	-	(15,000)	(15,000)
Total other financing sources (uses)	(45,000)	-	(15,000)	(15,000)
Net change in fund balance	(300,000)	(65,000)	4,593,233	4,658,233
Fund balance - beginning	2,780,307	2,780,307	2,780,307	-
Fund balance - ending	$ 2,480,307	$ 2,715,307	$ 7,373,540	$ 4,658,233

CITY OF MADERA
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF FUNDING PROGRESS
FOR THE YEAR ENDED JUNE 30, 2014

The City's defined benefit pension plans, the Miscellaneous Plan and the Safety Plan, are cost-sharing multiple employer defined benefit pension plans that provide retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. The information presented below in the schedule of funding progress and employer contributions relates to the plan as a whole, of which the City is one participating employer.

Defined Benefit Pension Plan
Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Accrued Liability (AAL)	Actuarial Value of Assets (AVA)	Unfunded AAL (UAAL)	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
Miscellaneous Plan						
June 30, 2011	$ 56,335,048	$ 46,472,177	$ 9,862,871	82.49%	$ 10,039,660	98.24%
June 30, 2012	$ 59,812,197	$ 49,117,851	$ 10,694,346	82.12%	$ 9,346,225	114.42%
June 30, 2013	$ 62,630,735	$ 45,696,730	$ 16,934,005	72.96%	$ 8,615,096	196.56%
Safety Plan						
June 30, 2011	$ 42,225,521	$ 33,606,366	$ 8,619,155	79.59%	$ 4,162,783	207.05%
June 30, 2012	$ 44,036,553	$ 29,486,802	$ 14,549,751	66.96%	$ 4,131,776	352.14%
June 30, 2013	$ 45,744,204	$ 32,443,863	$ 13,300,341	70.92%	$ 4,034,189	329.69%

Other Postemployment Benefits Plan
Schedule of Funding Progress

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded AAL	Funded Ratio	Covered Payroll	UAAL as a Percentage of Covered Payroll
June 30, 2007	$ -	$ 3,100,000	$ 3,100,000	0%	$ 11,757,000	26%
June 30, 2011	$ -	$ 4,970,000	$ 4,970,000	0%	$ 13,326,000	37%
July 1, 2012	$ -	$ 4,717,369	$ 4,717,369	0%	$ 12,328,640	38%

CITY OF MADERA
NOTES TO THE REQUIRED SUPPLEMENTARY INFORMATION
FOR THE YEAR ENDED JUNE 30, 2014

NOTE 1 – BUDGET CONTROL AND ACCOUNTING

BUDGETARY INFORMATION

The City adheres to the following general procedures in establishing its annual budget, which is reflected in the accompanying schedules:

- Budgets are legally adopted and formal budgetary integration is employed as a management control device during the year for the General, Special Revenue and Debt Service Funds. Budgets presented in this report for comparison to actual amounts are presented in accordance with accounting principles generally accepted in the United States of America. From the effective date of the budget, the amounts stated therein as proposed expenditures become appropriations to the various City departments.

- Reported budget amounts represent the original legally adopted budget as amended. Individual amendments were not material in relation to the original adopted budget amounts. The City Council may amend the budget to increase appropriations only by a duly adopted minute resolution during a regular meeting, providing that sufficient monies are available and that expenditures of proceeds of taxes will not be increased beyond the constitutional appropriation limit as imposed by Article XIIIB of the State Constitution. Management can transfer, without City Council approval, budgeted amounts provided that they do not increase or decrease total fund appropriations adopted by the City Council.

- Unexpended budgeted amounts lapse at the end of the budget year. Spending control for the fund is established by the amount of expenditures budgeted for the fund, but management control is exercised at the budgetary line item levels.

- Expenditures may not legally exceed overall budgeted appropriations.

- The budgets of the City's capital projects are primarily "long-term" budgets which emphasize major programs and capital outlay plans extending over a number of fiscal periods. Therefore, no budget-to-actual schedules are presented for Capital Projects Funds.

EXCESS OF EXPENDITURES OVER APPROPRIATIONS

The following funds incurred expenditures in excess of appropriations in the following amounts for the year ended June 30, 2014:

General Fund		
Debt service - interest	$	59,333
General Development Impact Fee Fund		
General government	$	419
Public ways and facilities	$	2,462
Special Gas Tax Fund		
Capital outlay	$	89,987

The excess expenditures were covered by available fund balance in the funds.

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SUPPLEMENTARY INFORMATION

CITY OF MADERA
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS
JUNE 30, 2014

	Business Improvement District	Park Development	Parking District	Federal Aid Urban	Street Construction
ASSETS					
Cash and investments	$ 7,077	$ 112,210	$ 61,529	$ 228,260	$ 144,422
Receivables:					
Accounts, net	2,184	-	5,310	68,224	39,067
Interest	-	-	-	-	-
Notes	-	-	-	-	-
Due from other funds	-	-	-	-	-
Land held for resale	-	-	-	-	-
Restricted assets:					
Cash and investments with fiscal agents	-	-	-	-	-
Total assets	$ 9,261	$ 112,210	$ 66,839	$ 296,484	$ 183,489
LIABILITIES					
Accounts payable	$ 6,871	$ -	$ 1,247	$ 5	$ 27,920
Salaries payable	-	-	63	-	-
Due to other funds	-	-	-	-	-
Unearned revenue	-	-	-	-	-
Total liabilities	6,871	-	1,310	5	27,920
DEFERRED INFLOWS OF RESOURCES					
Unavailable revenue	-	-	-	65,625	39,067
Total deferred inflows of resources	-	-	-	65,625	39,067
FUND BALANCES (DEFICITS)					
Restricted:	-	-	-	-	-
Community development	2,390	-	-	-	-
Park development	-	112,210	-	-	-
Parking improvements	-	-	65,529	-	-
Public works and transportation	-	-	-	230,854	-
Special assessment project	-	-	-	-	-
Social services	-	-	-	-	-
Debt service	-	-	-	-	-
Unassigned	-	-	-	-	116,502
Total fund balances (deficits)	2,390	112,210	65,529	230,854	116,502
Total liabilities, deferred inflows of resources, and fund balances (deficits)	$ 9,261	$ 112,210	$ 66,839	$ 296,484	$ 183,489

CITY OF MADERA
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS
JUNE 30, 2014
(Continued)

	Senior Citizens Services	Senior Citizens Nutrition	Landscape Assessment	Supplemental Law Enforcement	Intermodal Building	Community Facilities District
ASSETS						
Cash and investments	$ -	$ 52,437	$ 519,588	$ -	$ 114,289	$ 1,061,947
Receivables:						
Accounts, net	423	-	1,917	161,170	5,661	4,805
Interest	-	-	-	-	-	431
Notes	-	-	-	-	-	-
Due from other funds	-	-	-	-	-	-
Land held for resale	-	-	-	-	-	-
Restricted assets:						
Cash and investments with fiscal agents	-	-	-	-	-	251,393
Total assets	$ 423	$ 52,437	$ 521,505	$ 161,170	$ 119,950	$ 1,318,576
LIABILITIES						
Accounts payable	$ 2,614	$ 347	$ 4,264	$ 9,534	$ 1,610	$ 1,289
Salaries payable	1,072	87	-	-	32	-
Due to other funds	82,514	-	-	72,909	-	-
Unearned revenue	-	-	-	-	98,894	153,038
Total liabilities	86,200	434	4,264	82,443	100,536	154,327
DEFERRED INFLOWS OF RESOURCES						
Unavailable revenue	-	-	1,917	66,555	-	4,805
Total deferred inflows of resources	-	-	1,917	66,555	-	4,805
FUND BALANCES (DEFICITS)						
Restricted:						
Community development	-	-	-	-	-	-
Park development	-	-	-	-	-	-
Parking improvements	-	-	-	-	-	-
Public works and transportation	-	-	-	-	19,414	-
Special assessment project	-	-	515,324	-	-	908,051
Social services	-	52,003	-	-	-	-
Debt service	-	-	-	-	-	251,393
Unassigned	(85,777)	-	-	12,172	-	-
Total fund balances (deficits)	(85,777)	52,003	515,324	12,172	19,414	1,159,444
Total liabilities, deferred inflows of resources, and fund balances (deficits)	$ 423	$ 52,437	$ 521,505	$ 161,170	$ 119,950	$ 1,318,576

CITY OF MADERA
COMBINING BALANCE SHEET
NONMAJOR GOVERNMENTAL FUNDS
JUNE 30, 2014
(Continued)

	Economic Development	Park Facilities	Low and Moderate Income Housing Asset	Total Nonmajor Special Revenue Funds
ASSETS				
Cash and investments	$ 1,015,619	$ 65,240	$ 813,899	$ 4,196,517
Receivables:				
Accounts, net	-	-	-	288,761
Interest	-	-	-	431
Notes	-	-	677,123	677,123
Due from other funds	-	-	22	22
Land held for resale	-	-	1,260,000	1,260,000
Restricted assets:				
Cash and investments with fiscal agents	-	-	-	251,393
Total assets	$ 1,015,619	$ 65,240	$ 2,751,044	$ 6,674,247
LIABILITIES				
Accounts payable	$ -	$ -	$ 619	$ 56,320
Salaries payable	-	-	-	1,254
Due to other funds	-	-	19,193	174,616
Unearned revenue	-	-	-	251,932
Total liabilities	-	-	19,812	484,122
DEFERRED INFLOWS OF RESOURCES				
Unavailable revenue	-	-	-	177,969
Total deferred inflows of resources	-	-	-	177,969
FUND BALANCES (DEFICITS)				
Restricted:				
Community development	1,015,619	-	2,731,232	3,749,241
Park development	-	-	-	112,210
Parking improvements	-	65,240	-	130,769
Public works and transportation	-	-	-	250,268
Special assessment project	-	-	-	1,423,375
Social services	-	-	-	52,003
Debt service	-	-	-	251,393
Unassigned	-	-	-	42,897
Total fund balances (deficits)	1,015,619	65,240	2,731,232	6,012,156
Total liabilities, deferred inflows of resources, and fund balances (deficits)	$ 1,015,619	$ 65,240	$ 2,751,044	$ 6,674,247

CITY OF MADERA
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Business Improvement District	Park Development	Parking District	Federal Aid Urban	Street Construction
REVENUES:					
Other taxes	$ 26,185	$ -	$ 29,911	$ -	$ -
Use of money and property	-	-	-	-	-
Fines	2,249	-	26,532	-	-
Aid from other governmental agencies:					
Federal	-	-	-	233,088	-
State	-	-	-	-	815,210
Other	-	-	-	-	-
Charges for current services	158	-	1,198	-	-
Miscellaneous	-	31,526	-	-	-
Total revenues	28,592	31,526	57,641	233,088	815,210
EXPENDITURES:					
Current:					
Public protection	-	-	-	-	-
Social services	-	-	-	-	-
Public ways and facilities	-	-	21,744	-	70,000
Community development	27,801	-	-	-	-
Capital outlay	-	101,521	-	62,890	181,984
Debt service:					
Principal	-	-	-	-	-
Interest	-	-	-	-	-
Total expenditures	27,801	101,521	21,744	62,890	251,984
Excess (deficiency) of revenues over (under) expenditures	791	(69,995)	35,897	170,198	563,226
OTHER FINANCING SOURCES (USES):					
Transfers in	-	2,125	-	-	-
Transfers out	-	-	-	-	(379,936)
Total other financing sources (uses)	-	2,125	-	-	(379,936)
Net change in fund balances	791	(67,870)	35,897	170,198	183,290
Fund balances - beginning	1,599	180,080	29,632	60,656	(66,788)
Prior period adjustments	-	-	-	-	-
Fund balances - beginning (restated)	1,599	180,080	29,632	60,656	(66,788)
Fund balances - ending	$ 2,390	$ 112,210	$ 65,529	$ 230,854	$ 116,502

CITY OF MADERA
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

	Senior Citizens Services	Senior Citizens Nutrition	Landscape Assessment	Supplemental Law Enforcement	Intermodal Building	Community Facilities District
REVENUES:						
Other taxes	$ -	$ -	$ 191,022	$ -	$ -	$ 487,190
Use of money and property	-	-	-	(22)	20,658	5,187
Fines	-	-	-	-	-	-
Aid from other governmental agencies:						
Federal	82,039	-	-	144,911	28,098	-
State	-	-	-	145,401	30,433	-
Other	-	-	-	-	-	-
Charges for current services	29,185	-	-	-	9,387	-
Miscellaneous	58,921	-	-	-	-	-
Total revenues	170,145	-	191,022	290,290	88,576	492,377
EXPENDITURES:						
Current:						
Public protection	-	-	-	229,962	-	-
Social services	510,440	139	-	-	-	-
Public ways and facilities	-	-	463,655	-	65,600	22,910
Community development	-	-	-	-	-	-
Capital outlay	-	-	-	84	20,865	-
Debt service:						
Principal	-	-	-	-	-	30,000
Interest	-	-	-	-	-	135,915
Total expenditures	510,440	139	463,655	230,046	86,465	188,825
Excess (deficiency) of revenues over (under) expenditures	(340,295)	(139)	(272,633)	60,244	2,111	303,552
OTHER FINANCING SOURCES (USES):						
Transfers in	296,714	-	44,819	-	-	165,515
Transfers out	-	-	-	(9,000)	-	(381,515)
Total other financing sources (uses)	296,714	-	44,819	(9,000)	-	(216,000)
Net change in fund balances	(43,581)	(139)	(227,814)	51,244	2,111	87,552
Fund balances - beginning	(42,196)	52,142	743,138	(39,072)	17,303	1,071,892
Prior period adjustments	-	-	-	-	-	-
Fund balances - beginning (restated)	(42,196)	52,142	743,138	(39,072)	17,303	1,071,892
Fund balances - ending	$ (85,777)	$ 52,003	$ 515,324	$ 12,172	$ 19,414	$ 1,159,444

CITY OF MADERA
COMBINING STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
NONMAJOR GOVERNMENTAL FUNDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

	Economic Development	Park Facilities	Low and Moderate Income Housing Asset	Total Nonmajor Special Revenue Funds
REVENUES:				
Other taxes	$ -	$ -	$ -	$ 734,308
Use of money and property	750	-	108,563	135,136
Fines	-	-	-	28,781
Aid from other governmental agencies:				
Federal	-	-	-	488,136
State	-	-	-	991,044
Other	-	-	2,001	2,001
Charges for current services	-	-	-	39,928
Miscellaneous	-	-	84,334	174,781
Total revenues	750	-	194,898	2,594,115
EXPENDITURES:				
Current:				
Public protection	-	-	-	229,962
Social services	-	-	-	510,579
Public ways and facilities	-	-	-	643,909
Community development	-	-	81,506	109,307
Capital outlay	-	-	-	367,344
Debt service:				
Principal	-	145,127	170,539	345,666
Interest	-	49,130	21,877	206,922
Total expenditures	-	194,257	273,922	2,413,689
Excess (deficiency) of revenues over (under) expenditures	750	(194,257)	(79,024)	180,426
OTHER FINANCING SOURCES (USES):				
Transfers in	-	194,257	-	703,430
Transfers out	-	-	-	(770,451)
Total other financing sources (uses)	-	194,257	-	(67,021)
Net change in fund balances	750	-	(79,024)	113,405
Fund balances - beginning	1,014,869	65,240	2,635,633	5,724,128
Prior period adjustments	-	-	174,623	174,623
Fund balances - beginning (restated)	1,014,869	65,240	2,810,256	5,898,751
Fund balances - ending	$ 1,015,619	$ 65,240	$ 2,731,232	$ 6,012,156

CITY OF MADERA
COMBINING STATEMENT OF NET POSITION
NONMAJOR ENTERPRISE FUNDS
JUNE 30, 2014

	Local Transit Fund	Golf Course Fund	Airport Fund	Total Nonmajor Enterprise Funds
ASSETS				
Current assets:				
Cash and investments	$ -	$ -	$ 922,531	$ 922,531
Accounts receivable, net	410,549	222,187	48,828	681,564
Interest receivable	-	331	-	331
Total current assets	410,549	222,518	971,359	1,604,426
Noncurrent assets:				
Restricted assets:				
Cash and investments	-	302,438	-	302,438
Capital assets, not depreciated	32,712	146,933	3,204,012	3,383,657
Capital assets, net of accumulated depreciation	2,045,336	1,881,928	8,342,449	12,269,713
Total noncurrent assets	2,078,048	2,331,299	11,546,461	15,955,808
Total assets	2,488,597	2,553,817	12,517,820	17,560,234
LIABILITIES				
Current liabilities:				
Accounts payable	161,500	2,922	24,881	189,303
Salaries payable	3,021	-	1,299	4,320
Accrued interest payable	-	314	8,147	8,461
Due to other funds	313,403	60,824	-	374,227
Advances from other funds	-	232,562	-	232,562
Unearned revenue	13,542	-	-	13,542
Compensated absences, due within one year	10,978	-	4,018	14,996
Long-term debt, due within one year	-	240,000	18,704	258,704
Total current liabilities	502,444	536,622	57,049	1,096,115
Noncurrent liabilities:				
Long-term debt, due in more than one year	10,023	2,685,000	191,582	2,886,605
Total noncurrent liabilities	10,023	2,685,000	191,582	2,886,605
Total liabilities	512,467	3,221,622	248,631	3,982,720
DEFERRED INFLOWS OF RESOURCES				
Deferred service concession arrangement receipts	-	209,000	-	209,000
Total deferred inflows of resources	-	209,000	-	209,000
NET POSITION				
Net investment in capital assets	2,078,048	(896,139)	11,342,058	12,523,967
Unrestricted	(101,918)	19,334	927,131	844,547
Total net position	$ 1,976,130	$ (876,805)	$ 12,269,189	$ 13,368,514

CITY OF MADERA
COMBINING STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
NONMAJOR ENTERPRISE FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Local Transit Fund	Golf Course Fund	Airport Fund	Total Nonmajor Enterprise Funds
Operating revenues:				
Charges for services	$ 149,180	$ 122,495	$ 487,329	$ 759,004
Other	101	-	-	101
Total operating revenues	149,281	122,495	487,329	759,105
Operating expenses:				
Salaries and benefits	162,076	-	99,411	261,487
General and administrative	1,121,903	-	188,323	1,310,226
Supplies and miscellaneous	199,175	-	18,217	217,392
Parts and supplies	56,209	-	44,944	101,153
Utilities	-	-	24,984	24,984
Depreciation	277,440	-	281,633	559,073
Total operating expenses	1,816,803	-	657,512	2,474,315
Operating income (loss)	(1,667,522)	122,495	(170,183)	(1,715,210)
Nonoperating revenues (expenses):				
Interest income	-	1,063	913	1,976
Property taxes	-	-	61,049	61,049
Operating grants	1,424,303	-	-	1,424,303
Capital grants	607,061	-	854,426	1,461,487
Other revenue	51	-	23,000	23,051
Gain (loss) on disposal of property	18,517	-	-	18,517
Interest expense	-	(1,885)	(9,894)	(11,779)
Other nonoperating expense	-	(64,766)	-	(64,766)
Total nonoperating revenues (expenses)	2,049,932	(65,588)	929,494	2,913,838
Income before capital contributions and transfers	382,410	56,907	759,311	1,198,628
Capital contributions	10,998	-	-	10,998
Transfers in	-	237,000	-	237,000
Transfers out	(50,000)	-	-	(50,000)
Change in net position	343,408	293,907	759,311	1,396,626
Net position - beginning	1,632,722	(1,170,712)	11,509,878	11,971,888
Net position - ending	$ 1,976,130	$ (876,805)	$ 12,269,189	$ 13,368,514

CITY OF MADERA
COMBINING STATEMENT OF CASH FLOWS
NONMAJOR ENTERPRISE FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Local Transit Fund	Golf Course Fund	Airport Fund	Total Nonmajor Enterprise Funds
Cash flows from operating activities:				
Receipts from customers and users	$ 243,892	$ 121,855	$ 732,851	$ 1,098,598
Payments to suppliers	(1,292,070)	922	(530,590)	(1,821,738)
Payments to employees	(173,240)	-	(106,156)	(279,396)
Payments to other funds	(169,509)	(550,912)	-	(720,421)
Net cash provided (used) by operating activities	(1,390,927)	(428,135)	96,105	(1,722,957)
Cash flows from noncapital financing activities:				
Transfers from (to) other funds	(50,000)	237,000	-	187,000
Other nonoperating revenues	51	-	23,000	23,051
Property taxes	-	-	61,049	61,049
Operating grants	1,424,303	-	-	1,424,303
Net cash provided (used) by noncapital financing activities	1,374,354	237,000	84,049	1,695,403
Cash flows from capital and related financing activities:				
Acquisition and construction of capital assets	(590,488)	-	(908,000)	(1,498,488)
Proceeds from the sale of assets	-	-	-	-
Capital grants	607,061	-	854,426	1,461,487
Principal paid on notes	-	-	(17,850)	(17,850)
Principal paid on bonds	-	(230,000)	-	(230,000)
Interest paid	-	(66,858)	(10,629)	(77,487)
Net cash provided (used) by capital and related financing activities	16,573	(296,858)	(82,053)	(362,338)
Cash flows from investing activities:				
Interest received	-	732	913	1,645
Net cash provided (used) by investing activities	-	732	913	1,645
Net increase (decrease) in cash and cash equivalents	-	(487,261)	99,014	(388,247)
Cash and cash equivalents - July 1, 2013	-	789,699	823,517	1,613,216
Cash and cash equivalents - June 30, 2014	$ -	$ 302,438	$ 922,531	$ 1,224,969

CITY OF MADERA
COMBINING STATEMENT OF CASH FLOWS
NONMAJOR ENTERPRISE FUNDS
FOR THE YEAR ENDED JUNE 30, 2014

	Local Transit Fund	Golf Course Fund	Airport Fund	Total Nonmajor Enterprise Funds
Reconciliation of operating income (loss) to cash provided (used) by operating activities:				
Operating income (loss)	$ (1,667,522)	$ 122,495	$ (170,183)	$ (1,715,210)
Adjustments to reconcile operating income (loss) to net cash provided (used) by operating activities:				
Depreciation	277,440	-	281,633	559,073
(Gain) loss on disposal of capital	18,517	-	-	18,517
Changes in assets and liabilities:				
(Increase) decrease in accounts receivable	119,883	(164,640)	245,522	200,765
Increase (decrease) in accounts payable	66,700	922	(254,122)	(186,500)
Increase (decrease) in salaries payable	734	-	(3,380)	(2,646)
Increase (decrease) in due to other funds	(169,509)	(477,471)	-	(646,980)
Increase (decrease) in advances from other funds	-	(73,441)	-	(73,441)
Increase (decrease) in unearned revenue	(25,272)	-	-	(25,272)
Increase (decrease) in deferred inflow of resources	-	164,000	-	164,000
Increase (decrease) in compensated absences	(10,010)	-	1,636	(8,374)
Increase (decrease) in other postemployment benefit obligations	(1,888)	-	(5,001)	(6,889)
Net cash provided (used) by operating activities	$ (1,390,927)	$ (428,135)	$ 96,105	$ (1,722,957)
Reconciliation of cash and cash equivalents to the Statement of Net Position:				
Cash and investments - unrestricted	$ -	$ -	$ 922,531	$ 922,531
Cash and investments - restricted	-	302,438	-	302,438
Total cash and investments	$ -	$ 302,438	$ 922,531	$ 1,224,969
Noncash investing, capital, and financing activities:				
Developer and other capital contributions	$ 10,998	$ -	$ -	$ 10,998

CITY OF MADERA
STATEMENT OF CHANGES IN ASSETS AND LIABILITIES
AGENCY FUND
FOR THE YEAR ENDED JUNE 30, 2014

	Balance June 30, 2013	Additions	Deductions	Balance June 30, 2014
ASSETS				
Cash and investments	$ 1,717,443	$ 25,180,034	$ 25,577,710	$ 1,319,767
Accounts Receivable, net	-	17,115	5,956	11,159
Prepaid items	117,922	275,678	117,922	275,678
Total assets	$ 1,835,365	$ 25,472,827	$ 25,701,588	$ 1,606,604
LIABILITIES				
Accounts payable	$ 31,832	$ 6,814,860	$ 6,772,269	$ 74,423
Accrued liabilities	813,795	22,453,799	22,595,576	672,018
Deposit payable	20,364	689,704	687,414	22,654
Due to other governments	969,374	997,695	1,129,560	837,509
Total liabilities	$ 1,835,365	$ 30,956,058	$ 31,184,819	$ 1,606,604

CITY OF MADERA
CALIFORNIA

SINGLE AUDIT REPORT

FOR THE YEAR ENDED
JUNE 30, 2014

CITY OF MADERA
CALIFORNIA

SINGLE AUDIT REPORT
JUNE 30, 2014

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INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the Honorable Mayor and Members of the City Council of the
City of Madera
Madera, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the governmental activities, the business-type activities, the discretely presented component unit, each major fund, and the aggregate remaining fund information of City of Madera, California (the City), as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise City's basic financial statements, and have issued our report thereon dated January 14, 2015.

Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered City's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the City's internal control. Accordingly, we do not express an opinion on the effectiveness of the City's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the City's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified. We did identify a certain deficiency in internal control, described in the accompanying schedule of findings and questioned costs as Finding 2014-001, that we consider to be a significant deficiency.

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Compliance and Other Matters

As part of obtaining reasonable assurance about whether the City's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

City's Response to Finding

The City of Madera, California's response to the finding identified in our audit is described in the accompanying schedule of findings and questioned costs. The City's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the City's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the City's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Price Paige & Company

Clovis, California
January 14, 2015

INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE
FOR EACH MAJOR PROGRAM AN ON INTERNAL CONTROL
OVER COMPLIANCE REQUIRED BY OMB CIRCULAR A-133

To the Honorable Mayor and Members of the City Council of the
City of Madera
Madera, California

Report on Compliance for Each Major Federal Program

We have audited the City of Madera, California's (the City) compliance with the types of compliance requirements described in the *OMB Circular A-133 Compliance Supplement* that could have a direct and material effect on each of the City's major federal programs for the year ended June 30, 2014. The City's major federal programs are identified in the summary of auditor's results section of the accompanying schedule of findings and questioned costs.

Management's Responsibility

Management is responsible for compliance with the requirements of laws, regulations, contracts, and grants applicable to its federal programs.

Auditor's Responsibility

Our responsibility is to express an opinion on compliance for each of the City's major federal programs based on our audit of the types of compliance requirements referred to above. We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and OMB Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations.* Those standards and OMB Circular A-133 require that we plan and perform the audit to obtain reasonable assurance about whether noncompliance with the types of compliance requirements referred to above that could have a direct and material effect on a major federal program occurred. An audit includes examining, on a test basis, evidence about the City's compliance with those requirements and performing such other procedures as we considered necessary in the circumstances.

We believe that our audit provides a reasonable basis for our opinion on compliance for each major federal program. However, our audit does not provide a legal determination of the City's compliance.

Opinion on Each Major Federal Program

In our opinion, the City of Madera, California, complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2014.

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Report on Internal Control Over Compliance

Management of the City is responsible for establishing and maintaining effective internal control over compliance with the types of compliance requirements referred to above. In planning and performing our audit of compliance, we considered the City's internal control over compliance with the types of requirements that could have a direct and material effect on each major federal program to determine the auditing procedures that are appropriate in the circumstances for the purpose of expressing an opinion on compliance for each major federal program and to test and report on internal control over compliance in accordance with OMB Circular A-133, but not for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, we do not express an opinion on the effectiveness of the City's internal control over compliance.

A *deficiency in internal control over compliance* exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies. We did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Schedule of Expenditures of Federal Awards Required by OMB Circular A-133

We have audited the financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component unit, each major fund, and the aggregate remaining fund information of the City of Madera, California (the City) as of and for the year ended June 30, 2014, and the related notes to the financial statements, which collectively comprise the City's basic financial statements. We issued our report thereon dated January 14, 2015, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by OMB Circular A-133 and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of expenditures of federal awards is fairly stated in all material respects in relation to the basic financial statements as a whole.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of OMB Circular A-133. Accordingly, this report is not suitable for any other purpose.

Price Paige & Company

Clovis, California
January 14, 2015

CITY OF MADERA
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2014

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Pass-Through Grantor's Number	Federal Expenditures
U.S. DEPARTMENT OF JUSTICE			
Direct Award:			
Bureau of Justice Assistance			
Edward Byrne Memorial Justice Assistance Grant Program	16.738	2011-DJ-BX-3238	$ 9,000
Edward Byrne Memorial Justice Assistance Grant Program	16.738	2013-DJ-BX-1087	19,615
			28,615
Direct Award:			
Community Oriented Policing Services			
COP Hiring Program 2010	16.710	2010UMWX0032	115,558
COP Hiring Program 2011	16.710	2011UMWX0022	203,028
COP Hiring Program 2013	16.710	2013UMWX0034	18,717
			337,303
Total U.S. Department of Justice			365,918
U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT			
Direct Award:			
Office of Community Planning and Development			
Community Development Block Grant	14.218	B-13MC-06-0053	22,871
Community Development Block Grant	14.218	B-14MC-06-0053	938,877
			961,748
Pass-through California Department of Housing and Community Development			
HOME Investment Partnerships Program	14.239	08-HOME-4870	262,234
HOME Investment Partnerships Program	14.239	11-HOME-6950	4,534,343
			4,796,577
Total U.S. Department of Housing and Urban Development			5,758,325
U.S. DEPARTMENT OF TRANSPORTATION			
Direct Award:			
Federal Transit Administration			
Federal Transit Formula Grants	20.507	CA-90-Z004-00	692,939
ARRA - Federal Transit Formula Grants	20.507	CA-90-X062-00	592,623
			1,285,562
Direct Award:			
Federal Aviation Administration			
Airport Improvement Program	20.106	3-06-0144-24-2012	907,999
Airport Improvement Program	20.106	3-06-0144-25-2013	22,668
			930,667
Pass-through California Department of Transportation			
Highway Planning and Construction	20.205	BPMP-5157(081)	12,197
Highway Planning and Construction	20.205	CML-5157(079)	5,897
Highway Planning and Construction	20.205	CML-5157(085)	18,655
Highway Planning and Construction	20.205	CML-5157(094)	1,959
Highway Planning and Construction	20.205	CML-5157(095)	1,024
Highway Planning and Construction	20.205	HSIPL-5157(084)	11,765
Highway Planning and Construction	20.205	STPLR-7500(208)	11,392
Highway Planning and Construction	20.205	RPSTPL-5157(083)	5,141,911
Highway Planning and Construction	20.205	SR2SL-5157(091)	1,187
			5,205,987
Office of Traffic Safety			
Minimum Penalties for Repeat Offenders for Driving While Intoxicated	20.608	PT1485	55,090
Minimum Penalties for Repeat Offenders for Driving While Intoxicated	20.608	PT1367	15,281
Minimum Penalties for Repeat Offenders for Driving While Intoxicated	20.608	SC14244	22,776
Minimum Penalties for Repeat Offenders for Driving While Intoxicated	20.608	SC13244	7,371
			100,518
Total U.S. Department of Transportation			7,522,734

The accompanying notes are an integral part of this statement.

CITY OF MADERA
SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2014
(Continued)

Federal Grantor/Pass-Through Grantor/Program Title	Federal CFDA Number	Pass-Through Grantor's Number	Federal Expenditures
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES			
Aging Cluster			
Pass-through Fresno-Madera Area Agency on Aging			
Special Programs for the Aging - Title III -			
Title IIIB Grants for Supportive Services	93.044	13-0143	33,182
Title IIIB Grants for Supportive Services	93.044	13-0144	11,920
Title III C1 Grants Site Management	93.045	13-0147	36,936
Total U.S. Department of Health and Human Services			82,038
TOTAL EXPENDITURES OF FEDERAL AWARDS			$ 13,729,015

The accompanying notes are an integral part of this statement.

CITY OF MADERA
NOTES TO THE SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS
FOR THE YEAR ENDED JUNE 30, 2014

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

Funds received under the various grant programs have been recorded within the general, special revenue, capital projects, and enterprise funds of the City of Madera (the City). The City utilizes the modified accrual basis of accounting for the general, special revenue, and capital projects funds. The accrual basis of accounting is used for the enterprise fund. The accompanying Schedule of Expenditures of Federal Awards (Schedule) is presented in accordance with the requirements of Office of Management and Budget (OMB) Circular A-133, *Audits of States, Local Governments, and Non-Profit Organizations.*

Schedule of Expenditures of Federal Awards

The accompanying Schedule presents the activity of all Federal financial assistance programs of the City. Federal financial assistance received directly from Federal agencies as well as Federal financial assistance passed through the State of California and other agencies are included in the Schedule. The Schedule was prepared from only the accounts of various grant programs and, therefore, does not present the financial position or results of operations of the City.

CITY OF MADERA
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2014

SECTION I – SUMMARY OF AUDITOR'S RESULTS

FINANCIAL STATEMENTS

Type of auditor's report issued:	Unmodified			
Internal control over financial reporting:				
Material weakness(es) identified?	____	yes	X	no
Significant deficiency(ies) identified - not considered to be material weaknesses?	X	yes	____	none reported
Noncompliance material to financial statements noted?	____	yes	X	no

FEDERAL AWARDS

Internal control over major programs:				
Material weakness(es) identified?	____	yes	X	no
Significant deficiency(ies) identified - not considered to be material weaknesses?	____	yes	X	none reported
Type of auditor's report issued on compliance for major programs:	Unmodified			
Any audit findings disclosed that are required to be reported in accordance with Circular A-133, Section .510(a)?	____	yes	X	no

IDENTIFICATION OF MAJOR PROGRAMS

CFDA Number(s)	Name of Federal Program or Cluster
14.239	HOME Investment Partnerships Program
20.205	Highway Planning and Construction

Dollar threshold used to distinguish between Type A and Type B programs:	$300,000			
Auditee qualified as low-risk auditee?	____	yes	X	no

CITY OF MADERA
SCHEDULE OF FINDINGS AND QUESTIONED COSTS
FOR THE YEAR ENDED JUNE 30, 2014

SECTION II – FINANCIAL STATEMENT FINDINGS

Finding 2014-001

Condition: The City did not post certain expenses to the appropriate fiscal year during the closing process for recording accounts payable year-end accruals. During our audit we identified these errors and proposed the necessary accounting entries to correct the balances of these accounts. City management agreed with our adjustments and posted the entries.

Criteria: A strong system of internal controls and management review requires that general ledger account balances be properly reconciled to a subsidiary ledger or other adequate supporting documentation on a periodic basis, as well as during the year-end financial close process. Management is responsible for maintaining its accounting records in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP.)

Cause: Financial closing adjustments to record expenses in the appropriate year were not properly posted to the City accounts payable records at the fiscal year-end.

Effect: As a result of this condition, payables were misstated. Specifically, the misstatements were as follows:

- Enterprise Fund Accounts Payable – Understated by $26,704
- Internal Service Fund Accounts Payable – Overstated by $101,348

Recommendation: We recommend that the City enhance the year-end financial closing process to include the necessary steps to ensure proper reconciliation and reporting of all payable account balances.

Management's Response: The City concurs with the finding. Management will enhance the year-end financial closing process to include the necessary steps to ensure proper reconciliation and reporting of all payable account balances.

SECTION III – FEDERAL AWARD FINDINGS

No reportable items.

CITY OF MADERA
SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
FOR THE YEAR ENDED JUNE 30, 2014

FINANCIAL STATEMENT FINDINGS

2013-001

Condition: The City did not properly record all payables, receivables, revenues, unavailable revenues and land held for resale during the year-end closing process. During our audit we identified these errors and proposed the necessary accounting entries to correct the balances of these accounts. City management agreed with our adjustments and posted the entries.

Criteria: A strong system of internal controls and management review requires that general ledger account balances be properly reconciled to a subsidiary ledger or other adequate supporting documentation on a periodic basis, as well as during the year-end financial close process. Management is responsible for maintaining its accounting records in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP.)

Cause: Financial closing adjustments to record year-end payables, receivables, revenues, unavailable revenues and land held for resale were not identified and posted to the City accounting records.

Effect: As a result of this condition, payables, receivables, revenues, unavailable revenues and land held for resale were initially materially misstated. Specifically, the misstatements were as follows:

- Interest Payable – Understated by $130,303
- Loans Payable – Overstated by $838,731
- Compensated Absences – Overstated by $818,528
- Accounts Receivable – Overstated by $551,527
- Notes Receivable – Understated by $2,700,000
- Allowance for Doubtful Accounts – Understated by $724,654
- Revenues – Overstated by $3,698,201
- Unavailable Revenue – Understated by $3,698,201
- Land Held for Resale – Understated by $1,440,000

Recommendation: We recommend that the City create a year-end financial closing checklist which includes the necessary steps, in detail, that should be undertaken at year-end to ensure proper reconciliation and reporting of all significant account balances.

Management's Response: The City concurs with the finding. Management will create a year-end financial closing checklist that includes the necessary steps at year-end to ensure proper reconciliation and reporting of all significant account balances. The City also recognizes the importance of consistency and stability in management. Having too much turnover and at times vacancies in the Finance Director and Finance Manager positions have contributed to the conditions that lead to these findings. The City is hopeful that the newly-hired Finance Director and Finance Manager will bring more stability and structure to the City and help to prevent such findings, in the future.

Status: Implemented

FINANCIAL STATEMENT FINDINGS (Continued)

Finding 2013-002

Condition: The accounting records of the City were not adjusted to reflect the dissolution of the Madera Redevelopment Agency and the establishment of the Successor Agency.

Criteria: On December 29, 2011, the California Supreme Court upheld Assembly Bill x1 26 ("the Bill"), which provided for the dissolution of all redevelopment agencies in the State of California. Under the Bill, the City of Madera accepted the role of successor agency to serve as custodian for the assets of the dissolved redevelopment agency, pending distribution to the appropriate taxing entities after the payment of enforceable obligations that were in effect as of the signing of the Bill. Based upon the nature of this custodial role, upon dissolution the assets and liabilities of the dissolved redevelopment agency, the activity should have been reported in a fiduciary fund (private-purpose trust fund) of the City in accordance with generally accepted accounting principles.

Cause: The City and its prior auditor did not adequately understand the required accounting and related financial reporting applicable to the dissolution.

Effect: The City accounting records did not accurately reflect the dissolution of the former redevelopment agency and subsequent custodial role of the successor agency.

Recommendation: We recommend that the City's financial management obtain the necessary training to increase their knowledge of governmental accounting practices and GASB pronouncements. Additionally, the year-end closing process should be enhanced to ensure identification of accounting changes for inclusion in the accounting records.

Management's Response: The City concurs with the finding. However, the City believes that much of the responsibility for the improper reporting of the dissolution of the former redevelopment agency should be placed on the former audit firm, who did not appear to have adequate training and who reported the dissolution incorrectly in the audited 2012 financial statements. Management has replaced the former auditors with a new CPA firm, and management will receive ongoing training to increase their knowledge of governmental accounting practices and GASB pronouncements. Management is also hopeful that the newly-hired Finance Director and Finance Manager will bring to Madera the much-needed stability and consistency that has been lacking over the past few years, due to turnover in those positions.

Status: Implemented

CITY OF MADERA
SUMMARY SCHEDULE OF PRIOR AUDIT FINDINGS
FOR THE YEAR ENDED JUNE 30, 2014

FEDERAL AWARD FINDINGS AND QUESTIONED COSTS

Finding 2013-003

Condition: Federal award expenditures of $3,007,234 under the HOME Investment Partnership Program Grant received from the U.S. Department of Housing and Urban Development (CFDA #14.229), passed through the California Department of Housing and Community Development (08-HOME-4870), were omitted from the initial Schedule of Expenditures of Federal Awards prepared by the City. The omission was identified as a result of our audit and the City corrected the final Schedule.

Criteria: Circular A-133 §___.310 (b) states that the auditee should prepare a Schedule of Expenditures of Federal Awards (the "Schedule") for the period covered by the auditee's financial statements. The Schedule should provide total Federal awards expended for each individual Federal program.

Questioned Costs: $0

Effect: Total Federal expenditures reported on the Schedule were understated by $3,007,234. An improperly prepared Schedule can result in noncompliance with Circular A-133.

Cause: The City does not have a system in place to capture all Federal award expenditures incurred for inclusion in the Schedule of Federal Awards.

Recommendation: We recommend that the City create a system to capture all Federal award expenditures incurred for inclusion in the Schedule of Federal Awards.

Management's Response: The City concurs with the finding. Management will create a system to capture all Federal award expenditures incurred for inclusion in the Schedule of Federal Awards.

Status: Implemented