

**ORDINANCE NO. - \_\_\_\_\_ C.S.**

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MADERA, ADDING CHAPTER 9 TO TITLE V, OF THE MADERA MUNICIPAL CODE REGARDING STORM WATER QUALITY MANAGEMENT

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MADERA AS FOLLOWS:

SECTION 1. The City Council have held a public hearing on \_\_\_\_\_ and have determined that the proposed ordinance text is consistent with the General Plan.

SECTION 2. The City Council have determined the Ordinance to be consistent with the purpose and intent of title V of the Madera Municipal Code

**§5-9.01 TITLE.**

This Chapter shall be known as the “Storm Water Quality Management” of the City of Madera.

**§5-9.02 FINDINGS.**

- (A) The Council of the City of Madera hereby finds and determines that the City of Madera's storm and surface water drainage system is planned, designed, and operated to handle storm water runoff flows from public and private properties.
- (B) In order to function effectively, this system requires all private connections to it to be properly constructed, maintained, and operated. Storm water runoff flows from individual properties onto the streets, then through storm drains to catch basins and ultimately storm water basins, the Fresno River or Madera Irrigation District facilities. It is therefore in the public interest to ensure that both public and private drainage systems are properly maintained to facilitate the proper functioning of the City's storm and surface water drainage system, and to prevent pollutants from entering these catch basins and the surrounding bodies of water.
- (C) The federal Clean Water Act provides for the regulation and reduction of pollutants discharged into the waters of the United States by extending National Pollutant Discharge Elimination System (“NPDES”) requirements to the state and local level and make it necessary for owners and operators of municipal storm drain systems to implement programs to reduce and control pollutants in urban storm water to the maximum extent practicable.
- (D) The City of Madera is a permittee under a National Pollutant Discharge Elimination System (NPDES) Municipal Permit and as such is obligated to implement Best Management Practices (“BMP”) procedures to prevent and control the entry of pollutants and non-storm water runoff into the City storm drain system. The most significant pollutants in urban runoff come from particulates, oil, and grease. To better control the quantity and quality of urban runoff pollution, an active program requiring existing

properties to adopt "good housekeeping" practices is essential. To reduce runoff contamination and runoff volume from new construction, private and publicly owned properties which will be newly developed, substantially rehabilitated or redeveloped in the future, a program ensuring that new developments incorporate design elements which facilitate such control is required.

### **§5-9.03 PURPOSE.**

The purpose of this Chapter is to implement policies and procedures to reduce and control storm water pollution. The objectives of this Chapter include the reduction of both runoff volume and runoff contamination from existing residential and nonresidential properties and from future construction and developments. It aims to ensure that project sites maximize on-site percolation of runoff and/or have the capacity to convey or store peak runoff from a storm and release it at a slow rate so as to minimize the peak discharge into storm drains. Also, to ensure that rain water is directed or contained so as not to become polluted by passage through contaminating material. This Chapter will prohibit illicit connections and discharges into the Municipal Separate Storm Sewer System (MS4). Lastly, the final goal of this chapter is to authorize the City of Madera Engineering Department to enforce the BMP procedures as set forth in the NPDES permit.

### **§5-9.04 DEFINITIONS.**

(A) Except where the context otherwise requires, the definitions given in this section govern the construction of this article. If any of the definitions in this section conflict with the definitions in other chapters of the Municipal Code, these definitions shall prevail for the purpose of interpreting and enforcing this section. If a term is not defined in this section, or other sections of the Municipal Code, the most common dictionary definition shall be assumed to be correct.

(B) The following definitions are listed in alphabetical order.

***AUTHORIZED ENFORCEMENT AGENCY.*** The City of Madera Community Development and Engineering Department.

***AREA SUSCEPTIBLE TO RUNOFF.*** Any non-permeable surface directly exposed to precipitation or in the path of runoff caused by precipitation which leads directly to neighboring properties or to the street.

***BEST MANAGEMENT PRACTICES ("BMP").*** Practices principally applicable to construction sites, parking lots, and new developments which reduce the toxicity contained in, and the volume of, water which runs into storm drains, treatment facilities, and catch basins.

***CASQA HANDBOOKS.*** The California Stormwater Quality Association Stormwater Best Management Practices Handbooks.

***CLEARING.*** Any activity that removes the vegetative surface cover.

**CONSTRUCTION GENERAL PERMIT.** A permit to be obtained prior to construction activity resulting in a land disturbance of one acre or more, or less than one acre but part of a larger common plan of development or sale.

**CONSTRUCTION SITE.** Any project, including projects requiring coverage under the General Construction Permit, that involves soil disturbing activities including, but not limited to, clearing, grading, paving, disturbances to ground such as stockpiling, and excavation.

**DEVELOPMENT PROJECT.** Any construction-activity or alteration of the landscape, its terrain, contour or vegetation, including the erection or alteration of single or multiple structures, and any grading for projects that create and/or replace (including projects with no net increase in impervious footprint) between 2,500 square feet and 5,000 square feet of impervious surface, including detached single family homes that create and/or replace 2,500 square feet or more of impervious surface and are not part of a larger plan of development.

**DIRECT DISCHARGE.** A discharge that is routed directly to waters of the United States by means of a pipe, channel, or ditch (including a municipal storm sewer system), or through surface runoff.

**DISCHARGE.** Any release, spill, leak, pumping, flow, escape or leaching, including subsurface migration to groundwater, dumping or disposal of any gas, liquid, semi-solid or solid substance, whether accidental or intentional.

**DISCHARGE OF A POLLUTANT.** The addition of any pollutant or combination of pollutants to waters of the United States from any point source. The term includes additions of pollutants to waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

**DRAINAGE WAY.** Any channel that conveys surface runoff throughout the site.

**EROSION CONTROL.** A measure that prevents erosion.

**GRADING.** Excavation or fill of material including the resulting conditions thereof.

**GOOD HOUSEKEEPING REQUIREMENTS (“GHR”).** Storm water pollution control practices applicable to existing properties which have been demonstrated to significantly reduce and control storm water urban runoff pollution which runs into storm drains, treatment facilities, and the catch basins.

**ILLICIT DISCHARGE.** Any discharge to a municipal separate storm sewer (storm drain) system (MS4) that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term illicit discharge includes all non-storm water discharges not composed

entirely of storm water and discharges that are identified under the Discharge Prohibitions section of this General Permit. The term illicit discharge does not include discharges that are regulated by an NPDES permit (other than the NPDES permit for discharges from the MS4).

***INCIDENTAL RUNOFF.*** Any unintended amounts (volume) of runoff, such as unintended, minimal over-spray from sprinklers that escapes the area of intended use. Water leaving an intended use area is not considered incidental if it is part of the facility design, if it is due to excessive application, if it is due to intentional overflow or application, or if it is due to negligence.

***INDUSTRIAL ACTIVITY.*** Activities subject to NPDES Industrial Permits as defined in 40 CFR, Section 122.26 (b) (14).

***INDUSTRIAL AND COMMERCIAL FACILITIES –*** facilities such as salvage yards, metal and other recycling collection facilities, waste transfer facilities, vehicle mechanical repair, maintenance or cleaning, building trade center or yards, corporation yards, landscape nurseries and greenhouses, building material retailers and storage, plastic manufactures, other facilities designated by the Permittees or Regional Water Boards to have reasonable potential to contribute to pollution of storm water runoff.

***LOW IMPACT DEVELOPMENT (LID).*** A sustainable practice that benefits water Supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, Low Impact Development (LID) takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes, The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate, and detain runoff close to the source of rainfall.

***LINEAR UNDERGROUND/OVERHEAD PROJECTS (LUPs).*** Include, but are not limited to, any conveyance, pipe, or pipeline for the transportation of any gaseous, liquid (including water and wastewater for domestic municipal services), liquescent, or slurry substance; any cable line or wire for the transmission of electrical energy; any cable line or wire for communications (e.g., telephone, telegraph, radio, or television messages); and associated ancillary facilities. Construction activities associated with LUPs include, but are not limited to, (a) those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment, and associated ancillary facilities); and include, but are not limited to, (b) underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/ or pavement repair or replacement, and stockpile/borrow locations.

***MS4.*** Municipal Separate Storm Sewer Systems is a conveyance or system of conveyances that is: owned by a state, city, town, village, or other public entity that discharges to waters of the

U.S., designed or used to collect or convey stormwater (e.g., storm drains, pipes, ditches), not a combined sewer, and not part of a sewage treatment plant, or publicly owned treatment works

***NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT.*** A discharge permit issued by the State Water Resources Control Board, the Regional Water Quality Control Board or the United States Environmental Protection Agency.

***NEW DEVELOPMENT.*** Land disturbing activities; structural development, including construction or installation of a building or structure, creation of impervious surfaces; and land subdivision on an area that has not been previously developed.

***NON-STORM WATER DISCHARGE.*** Any discharge to the storm drain system that is not composed entirely of storm water.

***POLLUTANT.*** Anything which causes or contributes to pollution. Pollutants may include, but are not limited to: paints, varnishes, and solvents; oil and other automotive fluids; non-hazardous liquid and solid wastes and yard wastes; refuse, rubbish, garbage, litter, or other discarded or abandoned objects, ordinances (explosives) and accumulations, so that same may cause or contribute to pollution; floatables; pesticides, herbicides, and fertilizers; hazardous substances and wastes; sewage, fecal coli form and pathogens; dissolved and particulate metals; animal wastes; wastes and residues that result from constructing a building or structure; and noxious or offensive matter of any kind.

***PERIMETER CONTROL.*** A barrier that prevents sediment from leaving a site by filtering sediment laden runoff or diverting it to a sediment trap or basin.

***PREMISES.*** Any building, lot, parcel of land, or portion of land whether improved or unimproved including adjacent sidewalks and parking strips.

***PHASING.*** Clearing a parcel of land in distinct phases with the stabilization of each phase completed before the clearing of the next.

***REDEVELOPMENT.*** Land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a site on which some past development has occurred. Redevelopment does not include trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway.

***SEDIMENT CONTROL.*** Measures that prevent eroded sediment from leaving the site.

***SITE.*** A parcel of land or a contiguous combination thereof where grading work is performed as a single unified operation.

***STABILIZATION.*** The use of practices that prevent exposed soil from eroding.

**START OF CONSTRUCTION.** The first land-disturbing activity associated with a development, including but not limited to: land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footings, piers, or foundations; erection of temporary forms; and installation of accessory buildings such as garages.

**STATE WATER RESOURCES CONTROL BOARD.** The Department of the State that ensure violations of orders and permits result in firm, fair, and consistent enforcement through direct actions, the development of policies and guidance, and the identification of metrics for decision-making on enforcement issues.

**STORM DRAINAGE SYSTEM.** Publicly-owned facilities by which storm water is collected and/or conveyed, including but not limited to any roads with drainage systems, municipal streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs, and other drainage structures.

**STORM WATER.** Any surface flow, runoff, and drainage consisting entirely of water from any form of natural precipitation, and resulting from such precipitation.

**STORM WATER POLLUTION PREVENTION PLAN.** A plan required by the State Water Resources Control Board, the Regional Water Quality Control Board or the United States Environmental Protection Agency which sets forth the site map, identifies the activities that have the potential to pollute storm water which may enter the City's storm drain system, describes the proposed BMPs to be implemented by the discharger, and contains a description of any other requirements that the State Water Resources Control Board, the Regional Water Quality Control Board or the United States Environmental Protection Agency requires the discharger to list in the SWPPP.

**WATERCOURSE** Any body of water, including, but not limited to lakes, ponds, rivers, streams, and bodies of water.

**WATERWAY.** A channel that directs surface runoff to a watercourse or to the public storm drain.

#### **§5-9.05 ENFORCEMENT AND LEGAL AUTHORITY.**

The *City Engineer* or his or her designee, is legally authorized to enforce this chapter as follows:

- (A) Effectively prohibit non-storm water discharges through the Municipal Separate Storm Sewer System (MS4).
- (B) Detect and eliminate illicit discharges and illegal connections to the MS4. Illicit connections include pipes, drains, open channels, or other conveyances that have the potential to allow an illicit discharge to enter the MS4. Illicit discharges include all non-storm water discharges not otherwise authorized including, but not limited to, discharges from privately owned septic systems; discharges of runoff from material storage areas; discharges from spills; and discharges from organized car washes, mobile cleaning and pressure wash operations.

- (C) Respond to the discharge of spills, and prohibit dumping or disposal of materials other than storm water into the MS4.
- (1) May, without prior notice, suspend MS4 discharge access to a person when such suspension is necessary to stop an actual or threatened discharge which presents or may present:
    - (a) imminent and substantial danger to the environment,
    - (b) to the health or welfare of persons, or
    - (c) to the MS4 or Waters of the United States.
  - (2) No user shall discharge any substances directly into a manhole or other opening in a public storm drain system, unless the owner has been issued a permit by the Engineering Department.

If the violator fails to comply with a suspension order issued in an emergency, the authorized enforcement agency may take such steps as deemed necessary to prevent or minimize damage to the MS4 or Waters of the United States, or to minimize danger to persons. Cost of abatement will be borne by the violator.

- (D) Require parties responsible for runoff in excess of incidental runoff to:
- (1) Detect leaks (for example, from broken sprinkler heads) and correct the leaks within 72 hours of learning of the leak;
  - (2) Properly design and aim sprinkler heads;
  - (3) Not irrigate during precipitation events as described in the City's Water Restriction Policy; and
  - (4) Manage pond containing recycled water such that no discharge occurs unless the discharge is a result of a 25-year, 24-hour storm event or greater, and the appropriate Regional Water Board is notified by email no later than 24 hours after the discharge. The notification is to include identifying information, including the Permittee's name and permit identification number.
- (E) Require vendors, contractors and operators of commercial facilities, construction sites, new or redevelopment land to minimize the discharge of pollutants to the MS4 through the installation, implementation, and maintenance of BMPs consistent with the CASQA Best Management Practice Handbooks or equivalent.
- (F) Inspect public and private construction projects and conduct enforcement as necessary. Enter private property for the purpose of inspecting, at reasonable times, any facilities, equipment, practices, or operations for active or potential storm water discharges, or non-compliance with local ordinances/standards or requirements in this Chapter, as consistent with any applicable state and federal laws.
- (G) Require that dischargers promptly cease and desist discharging and/or cleanup and abate a discharge, including the ability to:
- (1) Effectively require the discharger to abate and clean up their discharge, spill, or pollutant release within 72 hours of notification; high risk spill should be cleaned up as soon as possible.
  - (2) Require abatement within 30 days of notification, for uncontrolled sources of pollutants that could pose an environmental threat;
  - (3) Perform the clean-up and abatement work and bill the responsible party, if necessary;
  - (4) Provide the option to order the cessation of activities until such problems are adequately addressed if a situation persists where pollutant-causing sources or activities are not abated;

- (5) Require a new timeframe and notify the appropriate Regional Water Board when all parties agree that clean-up activities cannot be completed within the original timeframe and notify the appropriate Regional Water Board in writing within five business days of the determination that the timeframe requires revision.
- (H) For the first failure to comply with provisions in this chapter, the *City* shall issue to the affected person a written notice which includes the following information:
  - (1) A statement specifying the violation committed;
    - (a) A specified time period within which the affected person must correct the failure or file a written notice disputing the notice of failure to comply;
    - (b) A statement of the penalty for continued noncompliance.
- (I) Levy citations or administrative fines against responsible parties either immediately at the site or within a few days. The violation of this Chapter shall constitute an infraction punishable by a fine as listed on the City Master Penalty Schedule. Each day that a violation occurs shall constitute a separate offense.
- (J) Impose more substantial civil or criminal sanctions and escalate corrective response for persistent non-compliance, repeat or escalating violations, or incidents of major environmental harm.
- (K) A violation of any provision of this Chapter is declared to be a public nuisance and the City is authorized to abate such violation(s) by means of a civil action.
- (L) The penalties and remedies established by this Chapter shall be cumulative.
  - (1) Any penalty collected hereunder shall be deposited in the *Urban Runoff Fund* to be used as reimbursement to the *Engineering Department* for costs and expenses of administration and enforcement of this Chapter

**§5-9.06 CONSTRUCTION SITE STORM WATER RUNOFF CONTROL.**

The following Best Management Practices which address the problem of urban runoff shall apply to all projects undergoing construction in the City. The Best Management Practices list set forth below is required by the City. The requirements set forth below shall apply at the time of demolition of an existing structure or commencement of construction and until receipt of a certificate of occupancy:

- (A) Applicability - All projects that disturb soil are subject to the Urban Runoff Requirements for projects under construction. Projects that disturb one acre or more of soil or disturb less than one acre but are part of a larger common plan or development or sale are subject to the State Water Board's Construction General Permit in addition to the Construction Site Storm Water Runoff Control requirements.
- (B) Prior to issuing a grading or building permit, the City of Madera shall require each operator of a construction activity within the *City of Madera's* jurisdiction to prepare and submit for review and approval an erosion and sediment control plan (ESCP). The ESCP shall contain appropriate site specific construction site BMPs that meet the minimum requirements to control storm water pollution due to construction activities. The City of Madera holds the right to require additional specific BMPs before approving the ESCP.



- (1) The ESCP shall include the rationale used for selecting BMPs including, if necessary, supporting soil loss calculations. The ESCPs shall contain, as needed, erosion and sediment controls, soil stabilization, dewatering, source controls, and pollution prevention measures per the CASQA Best Management Practices Handbooks or as approved by the City of Madera.
  - (2) The ESCP shall list all applicable permits directly associated with any grading activity, including State Water Boards' Construction General Permit, State Water Boards' 401 Water Quality Certification, U.S. Army Corps of Engineers 404 Permit, and the California Department of Fish and Wildlife 1600 Streambed Alteration Agreement. The responsible party shall submit evidence to the City of Madera that all permits directly associated with the grading activity have been obtained prior to commencing the soil disturbing activities authorized by the grading permit.
  - (3) Conduct and document review of each erosion and sediment control plan using a checklist or similar process.
  - (4) The Storm Water Pollution Prevention Plan (SWPPP) developed pursuant to the Construction General Permit may substitute for the ESCP for projects where a SWPPP is developed. The City of Madera holds the right to require additional BMPs before approving the SWPPP.
- (C) Require operators of construction sites, new or redeveloped land, and industrial and commercial facilities to minimize the discharge of pollutants to the MS4 through the installation, implementation, or maintenance of Best Management Practices (BMPs) consistent with the California Storm Water Quality Association (CASQA) Best Management Practice Handbooks or equivalent.
- (D) Construction Site Inspection and Enforcement
- (1) The Authorized Enforcement Agency or designated agent shall make inspections as required and either shall approve that portion of the work completed or shall notify the permittee when the work fails to comply with the Storm Water Pollution Prevention Plan or ESCP as approved. The approved plans for grading, stripping, excavating, and filling work shall be maintained at the site during the progress of the work.

**§5-9.07 POST CONSTRUCTION STORM WATER MANAGEMENT.**

(A) Site Design Measures

- (1) All projects that create and/or replace (including projects with no net increase in impervious footprint) between 2,500 square feet and 5,000 square feet of impervious surface, including detached single family homes that create and/or replace 2,500 square feet or more of impervious surface and are not part of a larger plan of development are required to implement one or more of the following site design measures to reduce project site runoff:
  - (a) Stream Setbacks and Buffers - a vegetated area including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream system, lake reservoir, or coastal estuarine area;
  - (b) Soil Quality Improvement and Maintenance - improvement and maintenance soil through soil amendments and creation of microbial community;

- (c) Tree Planting and Preservation - planting and preservation of healthy, established trees that include both evergreens and deciduous, as applicable;
  - (d) Rooftop and Impervious Area Disconnection - rerouting of rooftop drainage pipes to drain rainwater to rain barrels, cisterns, or permeable areas instead of the storm sewer;
  - (e) Porous Pavement - pavement that allows runoff to pass through it, thereby reducing the runoff from a site and surrounding areas and filtering pollutants;
  - (f) Green Roofs - a vegetative layer grown on a roof (rooftop garden);
  - (g) Vegetated Swales - a vegetated, open-channel management practice designed specifically to treat and attenuate storm water runoff;
  - (h) Rain Barrels and Cisterns - system that collects and stores storm water runoff from a roof or other impervious surface.
- (2) Project proponents shall use the State Water Board SMARTS Post-Construction Calculator to quantify and submit to the City of Madera the runoff reduction resulting from implementation of site design measures.
- (3) Site design measures as specified in this section are not applicable to linear underground/overhead projects (LUPs).

(B) Regulated Projects:

Projects that create and/or replace 5,000 square feet or more of impervious surface (Regulated Projects) are required to implement measures for site design, source control, runoff reduction, storm water treatment and baseline hydromodification management.

(1) Regulated Projects do not include:

- (a) Detached single family home projects that are not part of a larger plan of development;
- (b) Interior remodels;
- (c) Routine maintenance or repair such as: exterior wall surface replacement, pavement resurfacing within the existing footprint.
- (d) LUPs - Unless the LUP has a discrete location that has 5,000 square feet or more of newly constructed contiguous impervious surface. When the LUP has a discrete location that has 5,000 sq-ft or more of new contiguous impervious surface, only that specific discrete location is considered a regulated project.

- (2) Development Projects are regulated projects. Development includes new and redevelopment projects on public or private land that fall under the planning and permitting authority of the City of Madera. Redevelopment is any land-disturbing activity that results in the creation, addition, or replacement of exterior impervious surface area on a site on which some past development has occurred. Redevelopment does not include trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway. The following (a-b) describe specific Regulated Project requirements for redevelopment, road projects and LUPs:

- (a) Where a redevelopment project results in an increase of more than 50 percent of the impervious surface of a previously existing development, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included to the extent feasible.
  - (b) Where a redevelopment project results in an increase of less than 50 percent of the impervious surface of a previously existing development, only runoff from the new and/or replaced impervious surface of the project must be included.
- (3) Road Projects and LUPs that are regulated projects. Any of the following types of road projects and LUPs that create 5,000 square feet or more of newly constructed contiguous impervious surface and that are public road projects and/or fall under the building and planning authority of the City of Madera shall comply with the Low Impact Development section of this ordinance except that treatment of runoff of the 85th percentile that cannot be infiltrated onsite shall follow U.S. EPA guidance regarding green infrastructure to the extent feasible.
- (a) Construction of new streets or roads, including sidewalks and bicycle lanes built as part of the new streets or roads.
  - (b) Widening of existing streets or roads with additional traffic lanes.
    - (1) Where the addition of traffic lanes results in an alteration of more than 50 percent of the impervious surface of an existing street or road, runoff from the entire project, consisting of all existing, new, and/or replaced impervious surfaces, must be included in the treatment system design.
    - (2) Where the addition of traffic lanes results in an alteration of less than 50 percent (but 5,000 square feet or more) of the impervious surface of an existing street or road, only the runoff from new and/or replaced impervious surface of the project must be included in the treatment system design.
  - (c) Construction of linear underground/overhead projects (LUPs).
  - (d) Specific exclusions are:
    - (1) Sidewalks built as part of new streets or roads and built to direct storm water runoff to adjacent vegetated areas.
    - (2) Bicycle lanes that are built as part of new streets or roads that direct storm water runoff to adjacent vegetated areas.
    - (3) Impervious trails built to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas, preferably away from creeks or towards the outboard side of levees.
    - (4) Sidewalks, bicycle lanes, or trails constructed with permeable surfaces.
    - (5) Trenching, excavation and resurfacing associated with LUPs; pavement grinding and resurfacing of existing roadways and parking lots; construction of new sidewalks, pedestrian ramps, or bike lanes on existing roadways; or routine replacement of damaged pavement such as pothole repair or replacement of short, non-contiguous sections of roadway.

(C) Source Control Measures

Regulated Projects with pollutant-generating activities and sources are required to implement standard permanent and/or operation source control measures. Measures for the following pollutant generating activities and sources shall be designed consistent with recommendations from the CASQA Storm Water BMP Handbook for New Development and Redevelopment or equivalent manual:

- (1) Accidental spills or leaks
- (2) Interior floor drains
- (3) Parking/storage areas and maintenance
- (4) Indoor and structural pest control
- (5) Landscape/outdoor pesticide use
- (6) Pools, spas, ponds, decorative fountains, and other water features
- (7) Restaurants, grocery stores, and other food service operations
- (8) Refuse areas
- (9) Industrial processes
- (10) Outdoor storage of equipment or materials
- (11) Vehicle and equipment cleaning
- (12) Vehicle and equipment repair and maintenance
- (13) Fuel dispensing areas
- (14) Loading docks
- (15) Fire sprinkler test water
- (16) Drain or wash water from boiler drain lines, condensate drain lines, rooftop equipment, drainage sumps, and other sources
- (17) Unauthorized non-storm water discharges
- (18) Building and grounds maintenance

(D) Low Impact Development (LID)

All Regulated Projects must implement low impact development (LID) standards as follows:

- (1) Site Assessment: Regulated Projects are required to assess and evaluate how site conditions, such as soils, vegetation, and flow paths, will influence the placement of buildings and paved surfaces. The evaluation will be used to meet the goals of capturing and treating runoff and assuring these goals are incorporated into the project design. The Regulated Projects are required to optimize the site layout through the following methods:
  - (a) Define the development envelope and protected areas, identifying areas that are most suitable for development and areas to be left undisturbed.
  - (b) Concentrate development on portions of the site with less permeable soils and preserve areas that can promote infiltration.
  - (c) Limit overall impervious coverage of the site with paving and roofs.
  - (d) Set back development from creeks, wetlands, and riparian habitats.
  - (e) Preserve significant trees.
  - (f) Conform the site layout along natural landforms.
  - (g) Avoid excessive grading and disturbance of vegetation and soils.
  - (h) Replicate the site's natural drainage patterns.
  - (i) Detain and retain runoff throughout the site.

- (2) Drainage Management Areas- Regulated Projects must provide a map or diagram dividing the developed portions of the project site into discrete Drainage Management Areas (DMAs), and to manage runoff from each DMA using Site Design Measures, Source Controls and/or Storm Water Treatment and Baseline Hydromodification Measures.
- (3) Numeric Sizing Criteria for Storm Water Retention and Treatment- Regulated projects shall be design to evapotranspire, infiltrate, harvest/use, and biotreat storm water are required to meet at least one of the following hydraulic sizing design criteria:
  - (a) Volumetric Criteria:
    - (1) The maximized capture storm water volume for the tributary area, on the basis of historical rainfall records, determined using the formula and volume capture coefficients in Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE manual of Practice No. 87 (1998) pages 175-178 (that is, approximately the 85th percentile 24-hour storm runoff event); or
    - (2) The volume of annual runoff required to achieve 80 percent or more capture, determined in accordance with the methodology in Section 5 of the CASQA's Storm Water Best Management Practice Handbook, New Development and Redevelopment (2003), using local rainfall data.
  - (b) Flow-based Criteria:
    - (1) The flow of runoff produced from a rain event equal to at least 0.2 inches per hour intensity; or
    - (2) The flow of runoff produced from a rain event equal to at least 2 times the 85th percentile hourly rainfall intensity as determined from local rainfall records.
- (4) Site Design Measures, as defined above, site layout, and design measures shall be implemented on the objective of achieving infiltration, evapotranspiration and/or harvesting/reuse of the 85th percentile 24-hour storm runoff event. Site design measures shall be used to reduce the amount of runoff, to the extent technically feasible, for which retention and runoff is required. Any remaining runoff from impervious DMAs may then be directed to one or more bioretention facilities as specified in Storm Water Treatment Measures and Baseline Hydromodifications Management below.
- (5) Source Controls- All Regulated Projects shall implement Source Control Measures as defined above
- (6) Storm Water Treatment Measures and Baseline Hydromodifications Management- After implementation of Site Design Measures on Regulated Projects, the remaining runoff from impervious DMAs must be directed to one or more facilities designed to infiltrated, evapotranspire, and/or bioretain the amount of runoff specified in Numeric Sizing Criteria for Storm Water Retention and Treatment. The facilities must be demonstrated to be at least as effective as a bioretention system with the following design parameters:
  - (a) Maximum surface loading rate of 5 inches per hour, based on the flow rates calculated. A sizing factor of 4% of tributary impervious area may be used.

- (b) Minimum surface reservoir volume equal to surface area times a depth of 6 inches.
  - (c) Minimum planting medium depth of 18 inches. The planting medium must sustain a minimum infiltration rate of 5 inches per hour throughout the life of the project and must maximize runoff retention and pollutant removal. A mixture of sand (60%-70%) meeting the specifications of American Society for Testing and Materials (ASTM) C33 and compost (30%-40%) may be used.
  - (d) Subsurface drainage/storage (gravel) layer with an area equal to the surface area and having a minimum depth of 12 inches.
  - (e) Underdrain with discharge elevation at top of gravel layer.
  - (f) No compaction of soils beneath the facility, or ripping/loosening of soils if compacted.
  - (g) No liners or other barriers interfering with infiltration.
  - (h) Appropriate plant palette for the specified soil mix and maximum available water use.
- (7) Alternative Design- Facilities, or a combination of facilities, of a different design than in Storm Water Treatment Measures and Baseline Hydromodifications Management may be permitted if all of the following measures of equivalent effectiveness are demonstrated:
- (a) Equal or greater amount of runoff infiltrated or evapotranspired;
  - (b) Equal or lower pollutant concentrations in runoff that is discharged after biotreatment;
  - (c) Equal or greater protection against shock loadings and spills;
  - (d) Equal or greater accessibility and ease of inspection and maintenance.
- (8) Allowed Variations for Special Site Conditions - The bioretention system design parameters in Storm Water Treatment Measures and Baseline Hydromodifications Management may be adjusted for the following special site conditions:
- (a) Facilities located within 10 feet of structures or other potential geotechnical hazards established by the geotechnical expert for the project may incorporate an impervious cutoff wall between the bioretention facility and the structure or other geotechnical hazard.
  - (b) Facilities with documented high concentrations of pollutants in underlying soil or groundwater, facilities located where infiltration could contribute to a geotechnical hazard, and facilities located on elevated plazas or other structures may incorporate an impervious liner and may locate the underdrain discharge at the bottom of the subsurface drainage/storage layer (this configuration is commonly known as a “flow-through planter”).
  - (c) Facilities located in areas of high groundwater, highly infiltrative soils or where connection of underdrain to a surface drain or to a subsurface storm drain are infeasible, may omit the underdrain.
  - (d) Facilities serving high-risk areas such as fueling stations, truck stops, auto repairs, and heavy industrial sites may be required to provide additional treatment to address pollutants of concern unless these high-risk areas are isolated from storm water runoff or bioretention areas with little chance of spill migration.

- (9) Exceptions to Requirements of Bioretention Facilities- Contingent on a demonstration that use of bioretention or a facility of equivalent effectiveness is infeasible, other types of biotreatment or media filters (such as tree box-type biofilters or in-vault media filters) may be used for the following categories of Regulated Projects:
- (a) Projects creating or replacing an acre or less of impervious area, and located in a designated pedestrian-oriented commercial district (i.e., smart growth projects), and having at least 85% of the entire project site covered by permanent structures;
  - (b) Facilities receiving runoff solely from existing (pre-project) impervious areas; and
  - (c) Historic sites, structures or landscapes that cannot alter their original configuration in order to maintain their historic integrity.
- (10) Hydromodification Management- Hydromodification management projects are Regulated Projects that create and/or replace one acre or more of impervious surface. A project that does not increase impervious surface area over the pre-project condition is not a hydromodification management project.
- (a) Post-project runoff for hydromodification management projects shall not exceed estimated pre-project flowrate for the 2-year, 24-hour storm.
- (11) Operation and Maintenance of Post-Construction Storm Water Management Measures- All Regulated Projects shall at a minimum, require from all project proponents and their successors in control of the Project or successors in fee title:
- (a) The property owner or responsible party shall sign a Statement of Responsibility accepting responsibility for the on-going operation, inspection, and maintenance of the treatment control measures until the property and/or responsibility is legally transferred to another entity. The Statement of Responsibility shall be on a form approved by the City.
  - (b) Written conditions in the sales or lease agreements or deed for the project that requires the recipient to assume responsibility for maintenance of any treatment control measures until such responsibility is legally transferred to another entity;
  - (c) Written text in project deeds, or conditions, covenants and restrictions for multi-unit residential projects that require the home owner's association or, if there is no association, each individual owner to assume responsibility for the O&M of the installed treatment system(s) and hydro modification control(s) (if any) until such responsibility is legally transferred to another entity; or
  - (d) Any other legally enforceable agreement or mechanism, such as recordation in the property deed, that assigns the O&M responsibility for the installed treatment system(s) and hydro modification control(s) (if any) to the project owner(s) or the Permittee.
  - (e) The City will send the responsible party an Operation and Maintenance self-certification form. The responsible party will certify that the Operations and Maintenance program is being implemented and that the Treatment Control measures are in an effective operational condition. The

responsible party will have sixty (60) days to complete and return the annual Operation and Maintenance self-certification form.

- (f) If the Operation and Maintenance self-certification form is not received within the sixty (60) day period, the City of Madera will perform the inspection and assessment. The responsible party will be billed for the inspection and assessment as applicable.
- (12) All projects subject to this Section shall submit a completed Post Construction Storm Water Worksheet to the City of Madera.
- (13) Post-Construction Best Management Practice Condition Assessment

#### **§5-9.08 EXCEPTIONS TO DISCHARGE PROHIBITION.**

- (A) The following discharges are exempt from the prohibitions set forth in Section
  - (1) Any discharge regulated under a NPDES permit issued to the discharger provided that the discharger is in compliance with all requirements of the permit and all other applicable laws and regulations.
  - (2) Discharges from the following non-storm water activities unless identified by either the City or the Regional Water Quality Control Board as a significant source of pollutants to waters of the United States:
    - (a) water line flushing;
    - (b) individual residential car washing;
    - (c) diverted stream flows;
    - (d) rising ground waters;
    - (e) uncontaminated ground water infiltration (as defined at 40 C.F.R. §35.2005(20)) to separate storm sewers;
    - (f) uncontaminated pumped ground water;
    - (g) discharges from potable water sources;
    - (h) foundation drains;
    - (i) air conditioning condensation;
    - (j) springs;
    - (k) water from crawl space pumps;
    - (l) footing drains;
    - (m) flows from riparian habitats and wetlands;
    - (n) dechlorinated swimming pool discharges; and
    - (o) Discharges or flows from fire fighting activities;
    - (p) City municipal storm drain maintenance line clearing activities; and
    - (q) Incidental runoff from landscaped areas as defined below:
      - (1) Discharges in excess of an amount deemed to be incidental runoff shall be controlled.
      - (2) Non-storm water runoff discharge that is not incidental is prohibited, unless otherwise listed above in a-q
      - (3) Incidental runoff may be regulated by waste discharge requirements or, where necessary, waste discharge requirements that serve as a NPDES permit, including MS4 permits.



SECTION 4. If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause or phrase thereof irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared unconstitutional or void for any other reason.

SECTION 5. This Ordinance shall be effective and of full force and effect at 12:01 am on the thirty-first day after its passage.

The foregoing Ordinance was introduced on \_\_\_\_\_, 2018, and duly and regularly passed by the Council of the City of Madera at a regular meeting thereof held on the \_\_\_\_\_ day of \_\_\_\_\_, 2018, by the following vote:

AYES:

NOES:

ABSENT:

\_\_\_\_\_  
Mayor of the City of Madera

ATTEST:

By: \_\_\_\_\_  
Sonia Alvarez, City Clerk

APPROVED AS TO FORM:

\_\_\_\_\_  
Brent Richardson, City Attorney

\* \* \* \* \*