

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL VALLEY REGION

ORDER R5-2013-XXXX

NPDES NO. CA0083500

WASTE DISCHARGE REQUIREMENTS  
FOR  
FRESNO METROPOLITAN FLOOD CONTROL DISTRICT, CITY OF FRESNO,  
CITY OF CLOVIS, COUNTY OF FRESNO, AND  
CALIFORNIA STATE UNIVERSITY FRESNO  
STORM WATER DISCHARGES FROM  
MUNICIPAL SEPARATE STORM SEWER SYSTEM  
FRESNO COUNTY

The California Regional Water Quality Control Board, Central Valley Region, (hereafter Central Valley Water Board) finds that:

1. The Fresno Metropolitan Flood Control District (District), City of Fresno, City of Clovis, County of Fresno, and California State University Fresno (CSUF), hereafter jointly referred to as 'Discharger' and individually as 'Permittees', submitted a complete Report of Waste Discharge (ROWD) on 16 September 2005, requesting renewal of Waste Discharge Requirements (WDRs) Order 5-01-048, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0083500 (Order or Permit) for discharges from the area-wide municipal separate storm sewer system (MS4) to groundwater and to waters of the United States (U.S.). The ROWD included a Storm Water Quality Management Program (SWQMP). Supplemental information was provided by the Discharger on 27 October 2008. The SWQMP plan is required as part of the application pursuant to 40 CFR 122.26(2)(d)(iv) and is an integral and enforceable component of the MS4 Permit.
2. Waste Discharge Requirements Order 5-01-048 (NPDES No. CA0083500) was adopted on 21 March 2001.
3. The City of Fresno is defined as a medium municipality (population greater than 100,000) in the Code of Federal Regulations (CFR) 40 CFR 122.26 (b)(4). As such, the City must obtain an NPDES municipal storm water permit for the area under its' jurisdiction. Although the population of the City is currently greater than a "medium sized municipality," it was defined as such in Appendix G to Part 122, 40 CFR.
4. The County of Fresno (hereafter County) contains urbanized areas and areas of potential growth, which are within the limits of the District, the cities of Fresno and Clovis, and CSUF or surrounding the District and Cities. Due to the proximity of the County's urbanized areas to the District and Cities of Fresno and Clovis, their physical interconnections to the District's storm sewer system, and the locations of their discharges relative to the District's system, the County is designated as part

of the MS4 in accordance with 40 CFR 122.26(b)(4)(iii). The area subject to the Permit requirements includes all local planned urban drainage areas defined in the Fresno Metropolitan Flood Control District Storm Drainage and Flood Control Master Plan, the community of Easton, and the County area along Friant Road between the San Joaquin River and the Friant-Kern Canal. This area will be referred to as the Fresno-Clovis Urbanized Area, and will expand as development progresses into areas of planned growth. Attachment A shows the Order coverage boundary at the time of Order adoption.

5. The Permittees have jurisdiction over and/or maintenance responsibilities for the storm drainage system in the Fresno/Clovis Urbanized Area. The storm drain system is owned and operated by the Fresno Metropolitan Flood Control District. The system includes 158 drainage areas, with all but five of the drainage areas discharging to 153 retention or detention basins, referred to in this permit as storm water basins. Three (3) of the five drainage areas discharge directly to surface water through a pumping station to an irrigation canal and two (2) of the drainage areas drain by gravity to the San Joaquin River without benefit of any basin storage. Six (6) drainage areas discharge to the river, upon release from storm basins, while thirty nine (39) storm water basins discharge to canals. The balance of the storm water basins have either indirect or direct relief lines to the 39 basins that discharge to canals or currently only discharge to the groundwater aquifer depending on the construction phase of the basin and/or the constructed drainage area's storm drain lines. The storm water basins are an engineered feature between 10 to 40 acres in size, situated at the lowest point in the drainage area, and collect storm water runoff from about one to two square miles of urbanized land. Urban storm water runoff not recharged by the storm water basins is discharged to canals of the Tulare Lake Basin. The majority of the canals eventually flow into the Herndon Canal which discharges into the San Joaquin River outside the MS4 permit area.
6. The Permittees' land use authority allows urban developments that may generate pollutants and runoff that could impair receiving water quality and beneficial uses. The Permittees are responsible for considering potential storm water impacts when making planning decisions in order to fulfill the Clean Water Act (CWA) requirement to reduce the discharge of pollutants in municipal storm water to the maximum extent practicable (MEP) from new development and redevelopment activities. In addition, the Permittees must exercise their legal authority to ensure that the increased pollutant loads and flows do not adversely affect the beneficial uses of the receiving waters.
7. This Order is not intended to prohibit the inspection for or abatement of vectors by the State Department of Public Health or local vector agencies in accordance with California Health and Safety Code § 2270 *et seq.* and §116110 *et seq.* Certain

Treatment Control Best Management Practices (BMPs), if not properly designed, operated, or maintained, may create habitats for vectors (e.g. mosquito and rodents). This Order expects that the Permittees will closely cooperate and collaborate with local vector control agencies and the California Department of Public Health for the implementation, operation, and maintenance of Treatment Control BMPs in order to minimize the risk to public health from vector borne diseases.

8. There are portions of the Cities and County that are mainly agricultural, rural, and open space lands. It is not the intent of the federal storm water regulations to regulate storm water discharges from land uses of these types. Therefore, these areas are exempt from the requirements of this Order unless they are a point source discharge to the Permittees' conveyance system. Discharges from these sources may be subject to TMDL allocations and control programs.
9. When natural vegetated pervious ground cover is converted to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Runoff leaving a developed urban area is typically greater in runoff volume, velocity, and peak flow rate than pre-development runoff from the same area. Runoff durations can also increase as a result of flood control and other efforts to control peak flow rates. Increased volume, velocity, rate, and duration of runoff can accelerate the erosion of downstream natural channels. Significant declines in the biological integrity and physical habitat of streams and other receiving waters have been found to occur with as little as a 10% conversion from natural to impervious surfaces. The increased runoff characteristics from new development must be controlled to protect against increased erosion of channel beds and banks, sediment pollutant generation, or other impacts to beneficial uses and stream habitat.
10. Urban development creates new pollution sources as human population density increases and brings with it higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, trash, etc., which can either be washed or directly dumped into the MS4. As a result, the runoff leaving developed urban areas may be significantly greater in pollutant load than the pre-development runoff from the same areas. Increased pollutant loads must be controlled to protect receiving water quality.
11. Development and urbanization especially threaten environmentally sensitive water bodies such as those supporting rare, threatened or endangered species and CWA 303(d) impaired water bodies. Such water bodies may have a lower capacity to withstand pollutant shocks than might be acceptable in the general circumstance. In essence, development that is ordinarily insignificant in its impact on the environment may become significant in a particular sensitive environment.

Therefore, additional controls to reduce pollutants from new and existing development may be necessary for areas adjacent to or discharging directly to an environmentally sensitive water body.

12. Although dependent on several factors, the risks typically associated with properly managed infiltration of runoff (especially from residential land use areas) are not significant. The risks associated with infiltration can be managed by many techniques, including: (1) designing landscape drainage features that promote infiltration of runoff, but do not “inject” runoff (injection bypasses the natural processes of filtering and transformations that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; (3) protecting footings and foundations; and (4) ensuring that each drainage feature is adequately maintained in perpetuity.

### **DISCHARGE CHARACTERISTICS**

13. The quality and quantity of MS4 discharges vary considerably because of the effects of hydrology, geology, land use, season, and sequence and duration of precipitation events. Urban storm water runoff may contain pollutants that may lower the quality of receiving waters and adversely impact beneficial uses of the San Joaquin River, Herndon Canal, and Dry Creek Canal. Studies indicate there may be increases in pollutant levels and aquatic toxicity in receiving waters as a result of urban storm water discharges.
14. Pollutants that may be contained in storm water include, but are not limited to, certain heavy metals; sediments; petroleum hydrocarbons from sources such as used motor oil; microbial pathogens; pesticides; sources of acute and chronic aquatic toxicity; and nutrients that cause or contribute to the depletion of dissolved oxygen and/or toxic conditions in the receiving water. Excessive flow rates of storm water may cause or contribute to downstream erosion and/or excessive sediment discharge and deposition in stream channels.
15. The discharge of wash waters and polluted storm water from industries and businesses is an environmental threat, and can also adversely impact public health and safety. The pollutants of concern in such wash waters include food waste, oil and grease, and toxic chemicals. Other storm water/industrial waste programs in California have reported similar observations and have identified illicit discharges from automotive and food service facilities as a major cause of water quality problems.
16. Certain pollutants present in storm water and/or urban runoff may be derived from extraneous sources that Permittees have no or limited jurisdiction over. Examples of such pollutants and their respective sources are: polynuclear aromatic

hydrocarbons which are products of internal combustion engine operation, nitrates, bis (2-ethylhexyl) phthalate, pesticides, metals, and mercury from wet and dry atmospheric deposition; lead from fuels, copper from brake pad wear; zinc from tire wear; bacteria from natural sources including wildlife; dioxins as products of combustion, and natural-occurring minerals from local geology. However, the implementation of the measures set forth in this Order is intended to reduce the entry of these pollutants into storm water and their discharge to receiving waters to the MEP.

17. Estimates in the District's Basin Hydrologic Study (1995) show that during an average year, the MS4 retains 90% of the urban runoff from the Permit area in storm water basins located throughout the Permit area. Another 8% of the urban runoff is discharged to canals or the San Joaquin River after being detained in storm water basins. The remaining 2% is discharged directly to canals or the San Joaquin River.
18. Very little of the storm water collected by the MS4 is discharged directly; most discharges are detained for extended periods of time. Because of this and the constraints of the current sampling procedures, it is not known for certain whether the existing sampling program captures the full effect of the urban runoff in the receiving water. Evaluation of the monitoring and sampling procedures is necessary to assure the effects of the discharge are being captured in the Discharger's sampling results.
19. Urban runoff is discharged to the San Joaquin River, and to various canals of the Tulare Lake Basin that eventually flow into the Herndon Canal or the Dry Creek Canal. The Herndon Canal spills to the San Joaquin River. The Dry Creek canal is hydraulically connected to the James Bypass, which flows to the Fresno Slough. All of these waters are considered waters of the United States.

### **STATUTORY AND REGULATORY CONSIDERATIONS**

20. The CWA authorizes the U.S. Environmental Protection Agency (U.S. EPA) to permit a state to serve as the NPDES permitting authority in lieu of the U.S. EPA. The State of California has in-lieu authority for the NPDES program. The Porter-Cologne Water Quality Control Act or California Water Code (CWC) authorizes the State Water Resources Control Board (State Water Board), through the regional water quality control boards, to regulate and control the discharge of pollutants into waters of the State. On 22 September 1989, the State Water Board entered into a memorandum of agreement with the U.S. EPA to administer the NPDES Program governing discharges to waters of the United States.

21. This Order does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section (6) of the California Constitution for several reasons, including, but not limited to, the following. First, this Order implements federally mandated requirements under federal Clean Water Act section 402, subdivision (p)(3)(B). (33 U.S.C. § 1342(p)(3)(B).) This includes federal requirements to effectively prohibit non-storm water discharges, to reduce the discharge of pollutants to the maximum extent practicable, and to include such other provisions as the Administrator or the State determines appropriate for the control of such pollutants. Federal cases have held these provisions require the development of permits and permit provisions on a case-by-case basis to satisfy federal requirements. (*Natural Resources Defense Council, Inc. v. U.S. E.P.A.* (9th Cir. 1992) 966 F.2d 1292, 1308, fn. 17.) The authority exercised under this Order is not reserved state authority under the Clean Water Act's savings clause (*cf. Burbank v. State Water Resources Control Bd.* (2005) 35 Cal.4th 613, 627-628 [relying on 33 U.S.C. § 1370, which allows a state to develop requirements which are not "less stringent" than federal requirements]), but instead, is part of a federal mandate to develop pollutant reduction requirements for municipal separate storm sewer systems. To this extent, it is entirely federal authority that forms the legal basis to establish the permit provisions. (See, *City of Rancho Cucamonga v. Regional Water Quality Control Bd.-Santa Ana Region* (2006) 135 Cal.App.4th 1377, 1389; *Building Industry Ass'n of San Diego County v. State Water Resources Control Bd.* (2004) 124 Cal.App.4th 866, 882-883.)

Second, the local agency permittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental dischargers who are issued NPDES permits for storm water discharges. With a few inapplicable exceptions, the Clean Water Act regulates the discharge of pollutants from point sources (33 U.S.C. § 1342) and the Porter-Cologne regulates the discharge of waste (Wat. Code, § 13263), both without regard to the source of the pollutant or waste. As a result, the "costs incurred by local agencies" to protect water quality reflect an overarching regulatory scheme that places similar requirements on governmental and nongovernmental dischargers. (See *County of Los Angeles v. State of California* (1987) 43 Cal.3d 46, 57-58 [finding comprehensive workers compensation scheme did not create a cost for local agencies that was subject to state subvention].)

The Clean Water Act and the Porter-Cologne Water Quality Control Act largely regulate storm water with an even hand, but to the extent there is any relaxation of this even-handed regulation, it is in favor of the local agencies. Except for municipal separate storm sewer systems, the Clean Water Act requires point source dischargers, including discharges of storm water associated with industrial or construction activity, to comply strictly with water quality standards. (33 U.S.C. § 1311(b)(1)(C), *Defenders of Wildlife v. Browner* (1999) 191 F.3d 1159,

1164-1165 [noting that industrial storm water discharges must strictly comply with water quality standards.] As discussed in prior State Water Resources Control Board decisions, this Order does not require strict compliance with water quality standards. (SWRCB Order No. WQ 2001-15, p. 7.) The Order, therefore, regulates the discharge of waste in municipal storm water more leniently than the discharge of waste from non-governmental sources.

Third, the local agency permittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order. The fact sheet demonstrates that numerous activities contribute to the pollutant loading in the municipal separate storm sewer system. Local agencies can levy service charges, fees, or assessments on these activities, independent of real property ownership. (See, e.g., *Apartment Ass'n of Los Angeles County, Inc. v. City of Los Angeles* (2001) 24 Cal.4th 830, 842 [upholding inspection fees associated with renting property].) The ability of a local agency to defray the cost of a program without raising taxes indicates that a program does not entail a cost subject to subvention. (*County of Fresno v. State of California* (1991) 53 Cal.3d 482, 487-488.)

Fourth, the Permittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in federal Clean Water Act section 301, subdivision (a) (33 U.S.C. § 1311(a)) and in lieu of numeric restrictions on their discharges. To the extent, the local agencies have voluntarily availed themselves of the Permit, the program is not a state mandate. (*Accord County of San Diego v. State of California* (1997) 15 Cal.4th 68, 107-108.) Likewise, the Permittees have voluntarily sought a program-based municipal storm water permit in lieu of a numeric limits approach. (See *City of Abilene v. U.S. E.P.A.* (5th Cir. 2003) 325 F.3d 657, 662-663 [noting that municipalities can choose between a management permit or a permit with numeric limits].) The local agencies' voluntary decision to file a report of waste discharge proposing a program-based permit is a voluntary decision not subject to subvention. (See *Environmental Defense Center v. USEPA* (9th Cir. 2003) 344 F.3d 832, 845-848.)

Fifth, the local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under state law predates the enactment of Article XIII B, Section (6) of the California Constitution.

22. The Water Quality Act of 1987 added Section 402(p) to the Clean Water Act (CWA 33 U.S.C. § 1251-1387). This section requires the U.S. EPA to establish regulations setting forth NPDES requirements for storm water discharges in two phases.

- The U.S. EPA Phase I storm water regulations were directed at MS4s serving a population of 100,000 or more, including interconnected systems and storm water discharges associated with industrial activities, including construction activities. The Phase I Final Rule was published on November 16, 1990 (55 *Fed. Reg.* 47990).
  - The U.S. EPA Phase II storm water regulations are directed at storm water discharges not covered in Phase I, including small MS4s (serving a population of less than 100,000), small construction projects (one to five acres), municipal facilities with delayed coverage under the Intermodal Surface Transportation Efficiency Act of 1991, and other discharges for which the U.S. EPA Administrator or the State determines that the storm water discharge contributes to a violation of a water quality standard, or is a significant contributor of pollutants to waters of the United States. The Phase II Final Rule was published on December 8, 1999 (64 *Fed. Reg.* 68722).
23. This Order specifies requirements for the Permittees to reduce the discharge of pollutants in urban runoff to the MEP.<sup>1</sup> The State Board's Office of Chief Counsel (OCC) has issued a 11 February 1993 memorandum interpreting the meaning of MEP to include effectiveness, regulatory compliance, public acceptance, technical feasibility, and cost. The burden is on the municipality to demonstrate compliance with MEP by showing that a BMP is not technically feasible in the locality or that BMPs costs would exceed any benefit to be derived. However, since MEP is a dynamic performance standard which evolves over time as urban runoff management knowledge increases, the Permittees' storm water programs must continually be assessed and modified to incorporate improved programs, control measures; best management practices (BMPs), etc. in order to achieve the evolving MEP standard. MEP is a technology-based standard established in CWA section 402(p)(3)(B)(iii) that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve. Factors that must be considered when defining MEP include, but are not limited to; effectiveness, regulatory compliance, public acceptance, cost, and technical feasibility.
24. This Permit requires the Permittees to develop and implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water to the MEP from the permitted areas in the Fresno-Clovis Urbanized Area subject to the Permittees' jurisdiction.

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<sup>1</sup> A definition of MEP may be found in Attachment C.

25. Section 402(p)(3)(B)(ii) of the CWA requires that NPDES permits effectively prohibit non-storm water discharges into MS4s. Federal regulations at 40 CFR 122.26(d)(2)(iv)(B)(1) require control programs to prevent illicit discharges to MS4s and allows certain categories of non-storm water discharges to MS4s provided that the Permittees eliminate such discharges once they are identified as sources of pollutants to waters of the United States.
26. The Permittees have adopted their own respective storm water ordinances. These ordinances provide the Permittees the authority to protect and enhance the water quality of watercourses, water bodies, and wetlands in the Fresno-Clovis Urbanized area in a manner pursuant to and consistent with the CWA and the Porter-Cologne Water Quality Control Act.
27. Federal regulations at 40 CFR 122.26(d)(2)(iv)(A) and 40 CFR 122.26(d)(2)(iv)(C) require that MS4 permittees implement a program to monitor and control pollutants in discharges to the municipal system from industrial and commercial facilities that contribute a substantial pollutant load to the MS4. Federal regulations require that permittees establish priorities and procedures for inspection of industrial facilities and priority commercial establishments. This Permit, consistent with the U.S. EPA policy, specifies minimum expectations between the Central Valley Water Board and the Permittees for the inspection of industrial facilities and priority commercial establishments to control pollutants in storm water discharges (58 Fed. Reg. 61157).
28. The State Water Board has issued two statewide general NPDES permits for storm water discharges: one for storm water from industrial sites [NPDES No. CAS000001, Order No. 97-03-DWQ, General Industrial Activity Storm Water Permit (General Industrial Permit)] and the other for storm water from construction sites [NPDES No. CAS000002, Order No. 2010-0014-DWQ, General Construction Activity Storm Water Permit (General Construction Permit)]. The current General Industrial Permit is expired and its replacement is undergoing public review. The current General Construction Permit became effective on 1 July 2010. In addition, the Central Valley Water Board has issued General Order 5-00-175 for dewatering and other low threat discharges, which authorizes such discharges to the MS4s owned and operated by Permittees. This Order requires the Permittees to conduct compliance inspections at industries and construction sites that discharge to the MS4. Many of these sites are currently covered under State NPDES general permits.
29. On 10 January 2005, the California Regional Water Quality Control Board, Central Valley, conducted a program evaluation of three of the five co-permittees implementing the Fresno-Clovis Metropolitan Area Urban Storm Water Discharges Program. The purpose of the evaluation was: (1) to determine the co-permittees'

- compliance with the National Pollutant Discharge Elimination System Permit (WDRs Order No. 5-01-048), and (2) to evaluate the current implementation status of the co-Permittees' SWQMP. The following deficiencies were considered the most significant: the District lacked an appropriate enforcement escalation mechanism to address issues of continuous non-compliance; the City of Fresno does not require erosion and sediment control best management practices to be included on development grading plans and does not review storm water pollution prevention plans (SWPPPs) submitted for private development projects; a City of Clovis capital improvement project (CIP) Project did not include a SWPPP or submittal of a Notice of Intent for coverage under the State's Construction General Storm Water Permit. The District has since adopted a Progressive Enforcement Response Plan that escalates enforcement activity in cases of non-compliance. The City of Fresno requires review of basic BMPs on the Erosion and Sediment Control Plan and now requires that the Plan be attached to a grading permit before the permit can be issued (for projects in excess of 1 acre). The City of Clovis CIP, which was originally designed to disturb less than one acre, was required to file for Construction General Permit coverage and the City has added a procedure that requires project area calculations earlier in the design and permitting process.
30. In 2005, a U.S. EPA contractor audited the MS4 program on behalf of the Central Valley Water Board. The audit found the District lacked an appropriate enforcement mechanism to address continuous non-compliance, the City of Fresno did not require erosion and sediment controls on grading plans and did not review storm water pollution prevention plans for private developments, and the City of Clovis did not obtain coverage under the State Water Resources Control Board Construction General Permit. The U.S. EPA conducted an audit of the construction component of the Districts SWQMP in November of 2009 (the other copermitees were not evaluated at this time). The auditors found that the District was not ensuring compliance with the Construction General Permit (i.e. adequate implementation of BMPs on individual construction projects inspected during the audit) as required by Provisions D.12 and D.13 of the District's MS4 Permit. The Dischargers responded to both audits; the responses provide for increased enforcement activity, regional training on the new Construction General Permit requirements, a commitment to re-writing the District's Construction Management Guidelines and an expanded inspection programs including increased site inspections, joint City-District inspections and follow up enforcement inspections. This Order requires review of the Permittee's Enforcement Response Plan, Memorandums of Understanding, roles and responsibilities, and Legal Authorities.
31. When industrial or construction site discharges occur in violation of local permits and ordinances, the Central Valley Water Board in most cases refers first to the municipality where the discharge occurs for appropriate actions. If the municipality has demonstrated a good faith effort to educate and enforce but remains

- unsuccessful, the Central Valley Water Board may assist the municipality and conduct a cooperative investigation and/or enforcement effort including enforcement of the applicable statewide general permit. If the municipality has not demonstrated a good faith enforcement effort, the Central Valley Water Board may initiate enforcement action against both the industrial or construction discharger under the statewide general permits, as well as against the authorizing municipal Permittee for violations of this Order. Each Permittee must also provide the first level of enforcement against illegal discharges from other land uses it has authorized, such as commercial and residential developments.
32. This Order includes requirements to ensure that discharges shall not cause or contribute to exceedances of water quality standards that would cause or create a condition of nuisance, pollution, or water quality impairment in receiving waters. These requirements must be addressed through the effective implementation of Best Management Practices (BMPs) to reduce pollutants in storm water to the MEP.
  33. Regulations at 40 CFR 122.26(d)(2)(iv) require that the SWQMP be implemented for the entire duration of the Permit. The Permittees shall demonstrate compliance with the SWQMP and this Order through the information and data supplied in the Annual Report. The SWQMP shall remain in effect as an integral and enforceable part of this Order until revised and approved by the Central Valley Water Board. If there are conflicts between the SWQMP and this Order, then this Order supercedes the SWQMP.
  34. Federal, state, regional, or local entities within the Permittees' boundaries, not currently named in this Order, operate storm drain facilities and/or discharge storm water to the storm drains covered by this Order. The Permittees may lack legal jurisdiction over these entities under applicable state and federal authorities. Consequently, the Central Valley Water Board recognizes that the Permittees shall not be held responsible for such facilities and/or discharges. Caltrans is currently designated as such an entity. On 15 July 2000, the State Water Board issued a separate statewide NPDES storm water permit to Caltrans (NPDES No. CAS000003, Order No. 99-06-DWQ). The Permittees shall work cooperatively with Caltrans for the purpose of maintaining mutually beneficial storm water management program coordination, cooperation and communication.
  35. The State Board and the Central Valley Water Board may consider issuing separate NPDES storm water permits to other federal, state, or regional entities operating and discharging within the Permittees' boundaries that may not be subject to direct regulation by the Permittees. Federal agencies are not subject to municipal storm water requirements although they may be permitted as industrial

dischargers.

36. The Central Valley Water Board adopted the *Water Quality Control Plan for the Sacramento River Basin and the San Joaquin River Basin, Fourth Edition, Revised October 2011*, and adopted the *Water Quality Control Plan for the Tulare Lake Basin, Second Edition, Revised January 2004* (collectively Basin Plans, individually Sacramento-San Joaquin River Basin Plan and Tulare Lake Basin Plan). The Basin Plans designate beneficial uses, establish water quality objectives, and contain implementation programs and policies to achieve water quality objectives for all waters of the Basins. This Order implements the Basin Plans.
37. The Sacramento-San Joaquin River Basin Plan designates the beneficial uses of the San Joaquin River between Friant Dam and Mendota Pool as Municipal and Domestic Supply (MUN), Industrial Process Supply (PRO), Agricultural Supply (AGR); Water Contact Recreation (REC-1), Non-contact Water Recreation (REC-2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Migration of Aquatic Organisms (MIGR); Spawning, Reproduction, and/or Early Development (SPWN) and Wildlife Habitat (WILD).
38. The Tulare Lake Basin Plan designates the beneficial uses of Fresno Slough, as a Valley Floor Water, as Industrial Service Supply (IND), PRO, AGR; REC-1, REC-2, WARM, WILD, Rare, Threatened, or Endangered Species (RARE); and Groundwater Recharge (GWR).
39. Man-made conveyances such as the Dry Creek Canal, Herndon Canal, and the James Bypass do not have specifically designated beneficial uses in the Tulare Lake Basin Plan. State Water Board Resolution No. 88-63 establishes that all waters, with certain exceptions, shall be considered suitable or potentially suitable for municipal or domestic supply. In addition, the canals, as tributaries to navigable waters, are themselves waters of the U.S., the quality of water in the canals must be maintained to meet the federal Clean Water Act threshold of "swimmable and fishable." The existing uses of the canals include agricultural supply and groundwater recharge. The beneficial uses of water in the canals are therefore MUN, AGR, GWR, REC-1, and WARM.
40. As designated in the Tulare Lake Basin Plan, the beneficial uses of the groundwater beneath the Fresno Urbanized Area are MUN, IND, PRO, and AGR.
41. *Congress has determined* that it is not feasible at this time to establish numeric effluent limits for pollutants in storm water discharges from MS4s [Clean Water Act

(CWA)<sup>2</sup> Section 402(p)(3)(B)(iii)<sup>3</sup>. In addition, the California Superior Court ruled; *“Water quality-based effluent limitations are not required for municipal Stormwater discharges [33 USC §1342(p)(3)(B)] and [40 CFR §122.44(k)(3)]. For municipal stormwater discharges, the Permits must contain best management practices (BMPs), which reduce pollutants to the maximum extent practicable [33 USC §1342(p)(3)(B)]. These Permits do contain these through the Stormwater Management Plan which is incorporated into the Permits by reference.”* (*San Francisco Baykeeper vs. Regional Water Quality Control Board, San Francisco Bay Region, Case No. 500527, 14 November 2003*). Therefore, the effluent limitations in this Order are narrative, and include the requirement to reduce pollutants in storm water discharges to the MEP. In lieu of numeric effluent limitations, this Order requires the implementation of BMPs identified in the Permittees’ SWQMP to control and abate the discharge of pollutants in storm water discharges. Implementation of BMPs, compliance with long-term performance standards in accordance with the Permittees’ SWQMP and its schedules, an established maintenance program with enforcement procedures, constitutes compliance with the MEP standard.

42. 40 CFR 122.26(d)(2)(iv)(B)(1)<sup>4</sup> lists several non-storm water flows that are not required to be prohibited unless such discharges are specifically identified by the Phase I MS4 Permittees as sources of pollutants to waters of the United States.
43. *The State Water Resources Control Board (SWRCB) convened a Storm Water Panel (Blue Ribbon Panel) of experts to address the issue of numeric effluent*

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<sup>2</sup> The U.S. Environmental Protection Agency (EPA) published the regulation entitled “National Pollutant Discharge Elimination System - Regulations for Revision of the Water Pollution Control Program Addressing Storm Water Discharges” (Federal Register, Volume 64, Number 235, pages 68722-68852) on December 8, 1999 as required by Section 402(p) of the Clean Water Act (CWA).

<sup>3</sup> CWA Section 402(p)(3)(B)(iii): “...controls to reduce pollutants to the maximum extent practicable, including management practices, control techniques, and system, design and engineering methods, and such other provisions as the Administrator or the State determines appropriate for the control of such pollutants.”

<sup>4</sup>40 CFR 122.26(d)(2)(iv)(B)(1) A description of a program, including inspections, to implement and enforce an ordinance, orders or similar means to prevent illicit discharges to the municipal separate storm sewer system; this program description shall address all types of illicit discharges, however the following category of non-storm water discharges or flows shall be addressed where such discharges are identified by the municipality as sources of pollutants to waters of the United States: water line flushing, landscape irrigation, diverted stream flows, rising ground waters, uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20)) to separate storm sewers, uncontaminated pumped ground water, discharges from potable water sources, foundation drains, air conditioning condensation, irrigation water, springs, water from crawl space pumps, footing drains, lawn watering, individual residential car washing, flows from riparian habitats and wetlands, dechlorinated swimming pool discharges, and street wash water (program descriptions shall address discharges or flows from fire fighting only where such discharges or flows are identified as significant sources of pollutants to waters of the United States).

- limits<sup>5</sup>. The study also concluded that it is not feasible at this time to set enforceable numeric effluent criteria for storm water and non-storm water discharges from MS4s.
44. The U.S. EPA published an 'Interim Permitting Approach for Water Quality-Based Effluent Limitations in Storm Water Permits' on August 26, 1996 (61 Fed. Reg. 43761). This policy discusses the appropriate kinds of water quality-based effluent limitations to be included in NPDES storm water permits to provide for the attainment of water quality standards.
45. On 12 March 2001, the U.S. Court of Appeals ruled that it is necessary to obtain an NPDES permit for application of aquatic pesticides to waterways [Headwaters, Inc. vs. Talent Irrigation District, 243 F.3d. 526 (Ninth Cir., 2001)]. The U.S. EPA issued a Final Rule on 17 October 2006, that exempted the application of a pesticide to or over, including near, waters of the United States if conducted consistent with all relevant requirements under the Federal Insecticide and Fungicide Rodenticide Act (FIFRA), from an NPDES permit under the Clean Water Act in the following two circumstances: (a) the application of pesticides directly to waters of the United States in order to control pests,<sup>6</sup> and (b) The application of pesticides to control pests that are present over waters of the United States, including near such waters,<sup>7</sup> that results in a portion of the pesticides being deposited to waters of the United States (40 CFR 122.3(h)). On 7 January 2009, the Sixth Circuit Court of Appeals vacated U.S. EPA's Final Rule and granted a two-year stay of the effect of the decision until 9 April 2011 in order to provide agencies time to develop, propose, and issue NPDES general permits for pesticide applications covered by the ruling. Subsequently, U.S. EPA was granted an extension of the stay until 31 October 2011. The State Water Board has adopted and is adopting NPDES general permits for various types of pesticide applications.
46. On 17 June 1999, the State Water Board adopted Order WQ 99-05 (SBO 99-05), a precedent setting-decision, which identifies acceptable receiving water limitations language to be included in municipal storm water permits issued by the State

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<sup>5</sup> Recommendations of the Blue Ribbon Panel were finalized as *The Feasibility of Numeric Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities*, dated 19 June 2006.

<sup>6</sup> Water Quality Order 2004-0008-DWQ, Statewide General National Pollutant Discharge Elimination System Permit for Discharges of Aquatic Pesticides to Surface Waters of the United States for Victor Control, General Permit No. CAG990004

<sup>7</sup> Water Quality Order 2004-0008-DWQ, Statewide General National Pollutant Discharge Elimination System Permit for Discharges of Aquatic Pesticides for Aquatic Weed Control in Waters of the United States, General Permit No. CAG990005

Water Board and regional water boards. The receiving water limitations included herein are consistent with the State Water Board Order, U.S. EPA policy, and the U.S. Court of Appeals decision in *Defenders of Wildlife v. Browner* (Ninth Cir., 1999). The State Water Board's OCC has determined that the federal court decision did not conflict with SBO 99-05 (memorandum dated October 14, 1999).

47. Federal regulations at 40 CFR 122.42(c)(7) require the Permittees to submit an annual report that identifies water quality improvements or degradation.
48. The action to adopt an NPDES permit is exempt from the provisions of Chapter 3 of the California Environmental Quality Act (Public Resources Code, Section 21100, et. seq.) in accordance with Section 13389 of the California Water Code.
49. This Order serves as an NPDES permit, pursuant to Section 402 of the CWA, and amendments thereto, and shall take effect 50 days from the date of hearing, provided that U.S. EPA has no objections.
50. This Order does not authorize any take of endangered species. To ensure that endangered species issues have been raised to the responsible agencies, the Central Valley Water Board notified the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the California Department of Fish and Game of Central Valley Water Board consideration of this Order.

### **STORM WATER QUALITY MANAGEMENT PROGRAM**

51. The 16 September 2005 ROWD includes the Permittee's draft SWQMP plan, including proposed changes to the SWQMP and monitoring programs, and the SWQMP 2004-2005 Annual Report. The Permittees submitted supplemental information on 27 October 2008. The supplemental information consists of an antidegradation analysis, information to support the continuation of the findings that indicate Fresno-Clovis new development and redevelopment standards continue to exceed SUSUP requirements, a Fresno-Clovis MS4 Permit water quality monitoring review document, and a description of the ways the Permittees are promoting water quality principles, low impact development, and smart growth.
52. This Order requires evaluation of water quality impacts of storm water discharges from industrial and construction sites, existing urbanized areas, and new developments. This Order also requires implementation and evaluation of the SWQMP and related programs to reduce the discharge of pollutants in storm water runoff to MEP and to improve water quality and protect beneficial uses.

53. Implementation of the the SWQMP shall result in:
- a. Identification and control those pollutants in urban runoff that pose significant threats to the waters of the State and waters of the U.S. and their beneficial uses;
  - b. Compliance with the federal regulations to eliminate or control to the MEP the discharge of pollutants from urban runoff associated with the storm drain system;
  - c. Achievement with water quality standards;
  - d. Development of a cost-effective program which focuses on pollution prevention of urban storm water;
  - e. Implementation of effective alternative solutions where prevention is not a practical solution for a significant problem; and
  - f. Coordination of control measures with other agencies.
54. The draft SWQMP outlined in the ROWD (dated June 2006) largely follows the requirements in 40 CFR 122.26 and contains the following program elements:
- a. Public Involvement and Participation Program
  - b. Illicit Discharge Program
  - c. Structural Controls Program
  - d. Operations and Maintenance Program
  - e. Construction and Development Program
  - f. Commercial and Industrial Program
  - g. Legal Authority and Enforcement Authorities
  - h. Source Identification and Monitoring Element
  - i. Program Effectiveness Element
55. The Permittees' proposed SWQMP contains BMP control programs that identify the specific BMPs that each Permittee will implement to reduce the discharge of pollutants from their respective MS4s to the MEP. The SWQMP also includes objectives and measurable goals for each control program to establish the level of effort required to comply with this Order and the federal MEP standard and an implementation schedule to identify when certain activities must be completed. Each BMP control program also identifies effectiveness assessments that the Discharger will utilize to ensure the program is meeting the desired objectives and that the resources expended are providing commensurate benefits and are protective of water quality.
56. On 12 April 2001, the Permittees submitted to the Central Valley Water Board three memorandums of understanding (MOUs) that formalize the partnership

between the District and the City of Fresno, the City of Clovis, and Fresno County to control pollutants discharged from one portion of the shared MS4s to another portion of the storm sewer system. The City of Fresno adopted an MOU on 8 June 2001 (Provision D.9. of the previous permit required that this MOU be submitted to the Central Valley Water Board by 15 April 2001). The Fresno County Board of Supervisors approved its MOU with the District 29 July 1998. The Clovis City Council approved its MOU on 16 July 1996. The terms of the MOUs are automatically extended so long as the agencies remain co-permittees under the NPDES permit. The Permittees also submitted a 1995 Inspection Response and Enforcement Procedures used by the City and County to cooperate with the District to ensure compliance. The Permittees provided an evaluation report regarding whether the current MOUs contain sufficient enforcement tools and accurately reflect actual working relationships between the Permittees. The report indicated that the existing MOUs adequately defined Permittees responsibilities and provided for adequate enforcement of the SWQMP. This report met the requirements of Provision D.8. in the existing permit, WDRS Order 5-01-048 (NPDES No. CA0083500). Given the time that has elapsed and that the MS4 regulatory program has evolved, it is prudent to have the Permittees reevaluate and revise, if necessary, their MOUs.

57. On 14 September 2001, the Permittees submitted to the Central Valley Water Board a detailed training proposal outlining how various targeted groups were to be trained per Provision D.11. of WDRs Order 5-01-048. The submittal indicates that the training would be provided to all Permittee employees, offered to regulated activities and businesses, and be required for illicit dischargers. The training proposal satisfied the requirements of Provision D.11 in WDRs Order 5-01-048 (NPDES No. CA0083500).
58. The State Water Board established California's antidegradation policy in Resolution 68-16. Resolution 68-16 incorporates the federal antidegradation policy (40 CFR 131.12) where the federal policy applies under federal law. The proposed discharge complies with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution 68-16. Resolution 68-16 requires in part that:
  - a. High quality waters be maintained until it has been demonstrated that any change will be consistent with maximum benefit to the people of the State, will not unreasonably affect present and anticipated beneficial use of such water and will not result in water quality less than that prescribed in the policies; and
  - b. Any activity which produces or may produce a waste or increased volume or concentration of waste and which discharges or proposes to discharge to existing high quality waters will be required to meet waste discharge

requirements which will result in the best practicable treatment or control of the discharge necessary to assure that (i) a pollution or nuisance will not occur and (ii) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

The Permittees submitted an antidegradation analysis report on 27 October 2008. The report states that the proposed increase in discharge that results from continued urban development may result in some minimal and temporally limited degradation of waters of the State and navigable waters of the United States. As described in the Fact Sheet, the Regional Board concurs with that conclusion. Accordingly, a complete antidegradation analysis contemplated by the State Water Board's Administrative Procedures Update 90-004 (APU) is not necessary. Instead, a simplified antidegradation analysis is sufficient.

In the simplified antidegradation analysis described in the Fact Sheet, the Regional Board concludes that the limited degradation anticipated to occur will be consistent with the maximum benefit to the people of the State. Limited degradation that does not cause exceedances of water quality objectives is warranted to allow for the economic benefit stemming from local growth. There is a need in the Fresno-Clovis Metropolitan Area to accommodate growth. The Central Valley Water Board does not have the jurisdiction to control growth in the region, but is required to assure that the receiving waters are adequately protected as a result of urban discharges. The proposed Order allows the expansion of service necessary to accommodate housing and economic expansion in the area and is considered to be a benefit to the people of the State. The Fact Sheet contains additional information regarding the antidegradation analysis and constituents of concern in the waste discharge.

Because these requirements will result in the implementation of the best practicable treatment or control and they require best management practices and the reduction of pollutants to the maximum extent practicable. These requirements will also assure that pollution or nuisance will not occur and that the highest water quality consistent with maximum benefit to the people of the State will be maintained. Due to the high level of source control and treatment control measures to prevent and reduce discharges to surface waters, the proposed order will result in maintenance of existing in-stream uses.

## **DEVELOPMENT STANDARDS**

59. On 5 October 2000, the State Water Board adopted Order WQ 2000-11, a precedent setting decision concerning the use of Standard Urban Storm Water Mitigation Plans (hereafter Development Standards) in municipal storm water permits for new developments and significant redevelopments. The State Water

Board recognized that the decision includes significant legal or policy determinations that are likely to recur (Gov. Code §11425.60). Due to the precedent setting nature of Order WQ 2000-11, the Central Valley Water Board's MS4 permits must be consistent with applicable portions of the State Water Board's decision and include Development Standards.

60. On 27 October 2008, the Permittees submitted a summary of existing post-construction programs being implemented within the permitted area. The summary demonstrates that existing regional storm water detention and retention implemented within the District's drainage areas meets or exceeds those standards specified by the Water Quality Planning and Design Principals.
61. The District Storm Drainage and Flood Control Master Plan (Master Plan) proposes to maintain approximately 153 storm water basins that currently exist in the Permit area, to design storm water to collect and retain or detain 100 percent of the runoff generated during storm events, and to continue to construct basins in drainage areas included in the Master Plan that do not yet have storm water basins.
62. Estimates in the District's Basin Hydrologic Study show that during an average year, the MS4 retains 90% of the urban runoff from the permit area in storm water basins located throughout the permit area. Another 8% of the urban runoff is discharged to the San Joaquin River or canals after being detained in storm water basins. The remaining 2% is discharged directly to the San Joaquin River or canals.
63. Since 1982, the District storm water management system has been designed so that 100 percent of all storm water runoff generated in new and redevelopment projects drains through storm water basins. The District maintains reserve storage capacity in storm water basins equal to the maximum 48 hour rain event, which exceeds the storage volume of the 85% storm by a factor of 4 to 6.
64. The District conducted In-System Water Quality Monitoring from 1996 through 2005 to determine and evaluate the pollutant removal capabilities of three storm water basins (Basins C, V and EK). The results of the monitoring confirm that the basins reduce the mass load discharge of TSS, metals, nutrients, pesticides and PAHs. Specifically, Basin EK exceeded an 80 percent load retention for aluminum, TSS, total Kjeldahl nitrogen, chlorpyrifos, and fluoranthene. The average load retention for total recoverable metals from EK was a 67.4 percent. Storm water basins V and C had statistically significant reductions for 19 pollutants including several PAHs, TSS, copper, lead, and zinc.
65. Several of the MS4 permits for areas around the State that are on their second and third terms contain or have given consideration to Standard Urban Storm Water Mitigation Plans (SUSMPs) for specific categories of new development and

redevelopment. In general, the SUSMPs require that 85 percent of the runoff from the subject sites be infiltrated or treated and recommend or require other BMPs. The State Water Board has found that the provisions in the SUSMPs constitute MEP. However, a SUSMP was not considered for this Permit due to the nature of the MS4 in the Permit area. As summarized in the document *Continuation of Fresno-Clovis MS4 Permit Finding of Exceeding SUSMPs for New Development and Redevelopment* (submitted 27 October 2008) the MS4 continues to be composed of regional, structural detention/retention facilities, which capture runoff from all urban land uses, providing a substantially broader coverage than that created by the SUSMPs. The individual requirements imposed by the SUSMPs on specific categories of development would therefore create a non-productive duplication effort. Additionally, many of the BMPs included in the SUSMPs are already addressed in the Discharger's SWMP. Also, many of the BMPs are designed to address water quality issues different from what occurs in the area covered by this Permit. The regional nature of the MS4 and a single responsible body provides better assurance of proper operation and maintenance.

66. Federal regulations at 40 CFR 131.10(a) prohibit states from designating waste transport or waste assimilation as a use for any water of the United States. Authorizing the construction of a storm water/urban runoff treatment facility in a jurisdictional water body would be tantamount to accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction and operation of a pollution control facility in a water body can impact the physical, chemical, and biological integrity as well as the beneficial uses of the water body. Therefore, storm water treatment and/or mitigation in accordance with Development Standards and any other requirements of this Order must occur prior to the discharge of storm water into a water of the United States.
67. Low Impact Development (LID) is a storm water management strategy concerned with maintaining or restoring the natural hydrologic functions of a site to achieve natural resource protection objectives and fulfill environmental regulatory requirements. LID employs a variety of natural and built features that reduce the rate of runoff, filter out pollutants, and facilitate the infiltration of water into the ground. By reducing water pollution and increasing groundwater recharge, LID helps to improve the quality of receiving surface waters and stabilize the flow rates of nearby streams. Therefore, LID design concepts should be promoted for new developments and significant redevelopments.
68. Hydromodification is the alteration of the natural flow of water, and often takes the form of channelizing former stream or riverbeds. When development projects that modify hydrology are carried out without protecting soil and water resources, a variety of problems can result, including: excess sediment flowing into our watersheds; downstream erosion; disruption of natural drainage; irregular stream

flows; and elevated water temperatures. Due to the flat topography associated with the MS4 area, low annual rainfall, and the District's use of regional detention/retention facilities, discharges from the MS4 do not cause hydromodification issues in the receiving waters.

69. Studies indicate that facilities with paved surfaces subject to frequent motor vehicle traffic (such as parking lots and fast food restaurants), or facilities that perform vehicle repair, maintenance, or fueling (automotive service facilities) are potential sources of pollutants of concern in storm water. [References: Pitt et al., Urban Storm Water Toxic Pollutants: Assessment, Sources, and Treatability, Water Environment Res., 67, 260 (1995); Results of Retail Gas Outlet and Commercial Parking Lot Storm Water Runoff Study, Western States Petroleum Association and American Petroleum Institute, (1994); Action Plan Demonstration Project, Demonstration of Gasoline Fueling Station Best Management Practices, Final Report, County of Sacramento (1993); Source Characterization, R. Pitt, In Innovative Urban Wet-Weather Flow Management Systems (2000) Technomic Press, Field, R et al. editors; Characteristics of Parking Lot Runoff Produced by Simulated Rainfall, , L.L. Tiefenthaler et al. Technical Report 343, Southern California Coastal Water Research Project (2001)].
70. Retail Gasoline Outlets (RGOs) are significant sources of pollutants in urban runoff. RGOs are points of convergence for motor vehicles for automotive related services such as repair, refueling, tire inflation, and radiator fill-up and consequently produce significantly higher loadings of hydrocarbons and trace metals (including copper and zinc) than other urban areas. To meet MEP, source control, and treatment control BMPs are needed at RGOs that meet the following criteria: (a) 5,000 square feet or more. This is an appropriate threshold since vehicular development size is a good indicator of potential impacts of urban runoff from RGOs on receiving waters.
71. The Los Angeles and San Diego Regional Water Quality Control Boards have jointly prepared a Technical Report on the applicability of new development BMP design criteria for RGOs, [Retail Gasoline Outlets: New Development Design Standards for Mitigation of Storm Water Impacts, (June 2001)]. RGOs in Washington, Oregon, and other parts of the United States are already subject to numerical BMP design criteria under MS4 programs.
72. In March 1997, the California Storm Water Quality Task Force (SWQTF) published Best Management Practice Guide – Retail Gasoline Outlets.

State Water Board Order WQ 2000-11 directed the Los Angeles Regional Water Quality Control Board to mandate that RGOs employ the BMPs listed in SWQTF's

March 1997 RGO BMP publication. Due to the potential threat to storm water quality from RGOs, Development Standards for RGOs are included in this Order.

73. Each Permittee is individually responsible for adopting and enforcing local ordinances necessary to implement effective BMPs to prevent or reduce pollutants in storm water, and for providing funds for capital, operation, and maintenance expenditures necessary to implement such BMPs for the storm drain system that it owns and/or operates. Enforcement actions concerning this Order will, whenever necessary, be pursued only against the individual Permittee responsible for specific violations of this Order.

### **IMPAIRED WATER BODIES**

74. Section 303(d)(1)(A) of the CWA requires that "Each state shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard (WQS) applicable to such waters." The CWA also requires states to establish a priority ranking of impaired waterbodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads (TMDLs) for such waters. This priority list of impaired waterbodies is called the Section 303(d) List.
75. A TMDL is a quantitative assessment of the total pollutant load that can be discharged from all sources each day while still meeting water quality objectives. The Central Valley Water Board is currently in the process of developing TMDLs for listed water bodies within the Region. Prior to TMDL's being adopted and approved, Permittees must implement actions and/or assessments to address their contribution to the water quality impairments. Once the Central Valley Water Board and U.S. EPA approve TMDLs, this Order may be reopened to incorporate provisions consistent with waste load allocations established under the TMDLs.
76. Urban runoff is discharged to the San Joaquin River, and to various canals of the Tulare Lake Basin that eventually flow into the Herndon Canal or the Dry Creek Canal. All of these waters are considered waters of the United States. The Central Valley Water Board adopted Water Quality Control Plans for the San Joaquin River Basin and Tulare Lake Basin (hereafter Basin Plans), which contain water quality objectives for all waters of the Basins. These requirements implement the Basin Plans.
77. The San Joaquin River from Friant Dam to Mendota Pool is listed on the 2010 Section 303(d) list as impaired for Invasive Species. Fresno Slough is listed as impaired for pesticides and unknown toxicity. A TMDL has not been established for these listings. The Central Valley Water Board has not identified any impaired segments nor established TMDLs for the distribution canals that receive

discharges from the MS4. This Order contains a provision that requires the Permittees to submit within one year of TMDL approval a plan to comply with waste load allocations.

78. The Water Code allows the Central Valley Water Board to require dischargers submit technical and monitoring reports where the burden of these reports shall bear a reasonable relationship to the need for the report and the benefits to be obtained from the reports. The Central Valley Water Board may require the monitoring and technical reports that are identified as necessary in the Findings above specifically in this Order or in a separate Order under authority of the Water Code.

### **PUBLIC PROCESS**

79. The Central Valley Water Board has notified the Permittees and interested parties of its intent to prescribe waste discharge requirements for this discharge. These parties have been given an opportunity to address the Central Valley Water Board at a public hearing and an opportunity to submit their written views and recommendations.
80. The Central Valley Water Board has considered the information in the attached Fact Sheet in developing the Findings of this Order. The attached Fact Sheet is part of this Order.
81. The Central Valley Water Board, in a public meeting, heard and considered all comments pertaining to the discharge.

**IT IS HEREBY ORDERED** that Order No. 5-01-048 is rescinded, and that the Permittees, their agents, successors and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

#### **A. Discharge Prohibitions – Storm Water Discharges**

1. Discharges from the MS4 in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance as defined in Water Code section 13050 are prohibited.
2. Discharges from the MS4, which cause or contribute to exceedances of water quality standards (designated beneficial uses in the Basin Plan and the water quality objectives developed to protect those uses) for surface water or

groundwater, are prohibited.

3. Discharges from the MS4 containing pollutants, which have not been reduced to the MEP, are prohibited.

**B. Discharge Prohibitions – Non-Storm Water Discharges**

1. Each Permittee shall have and implement the legal authority necessary to effectively prohibit all types of non-storm water discharges into the MS4 unless such discharges are either authorized by a separate NPDES permit; or not prohibited in accordance with this Order.
2. Pursuant to 40 CFR 122.26(d)(2)(iv)(B)(1), the following categories of non-storm water discharges need only be prohibited from entering the MS4 if such categories of discharges are identified by the Permittees as a source of pollutants to waters of the United States:
  - a. Diverted stream flows;
  - b. Rising ground waters;
  - c. Uncontaminated ground water infiltration as defined by 40 CFR 35.2005(20);
  - d. Uncontaminated pumped ground water;
  - e. Foundation drains;
  - f. Springs;
  - g. Water from crawl space pumps;
  - h. Footing drains;
  - i. Air conditioning condensation;
  - j. Flows from riparian habitats and wetlands;
  - k. Water line and hydrant flushing;
  - l. Landscape irrigation;
  - m. Discharges from potable water sources other than water main breaks;
  - n. Irrigation water;
  - o. Individual residential car washing;
  - p. De-chlorinated swimming pool discharges;
  - q. Lawn watering; and
  - r. Street wash water.
3. When a non-storm water discharge category above is identified as a source of pollutants to waters of the United States, the Permittees shall either:
  - a. Prohibit the discharge category from entering its MS4s; or

- b. Not prohibit the discharge category and implement, or require the responsible party(ies) to implement, BMPs which will reduce pollutants to the MEP; and
  - c. Submit the following information to the Central Valley Water Board as part of the Annual Report:
    - i. The non-storm water discharge category listed above that the Permittee elects not to prohibit; and
    - ii. The BMPs for each discharge category listed above that the Permittee will implement, or require the responsible party(ies) to implement, to prevent or reduce pollutants to the MEP.
4. Emergency fire-fighting flows (i.e., flows necessary for the protection of life or property) do not require immediate implementation of BMPs and are not prohibited. However, each Permittee should coordinate with other agencies to develop a response plan to minimize the impact of fire-fighting flows to the environment. BMPs must be implemented to reduce pollutants from non-emergency fire-fighting flows (i.e., flows from controlled or practice blazes) identified by the Permittees to be significant sources of pollutants to waters of the State. The response plan and BMPs shall be updated as needed and incorporated into the SWQMP.
5. Each Permittee shall examine all dry weather analytical monitoring results collected in accordance with the Monitoring and Reporting Program of this Order to identify water quality problems that may be the result of any non-storm water discharge, including any non-prohibited discharge category(ies). Follow-up investigations shall be conducted as necessary to identify and control any non-storm water discharges that are sources of pollutants. Non-prohibited discharges listed above containing pollutants that cannot be reduced to the MEP by the implementation of BMPs shall be prohibited on a categorical or case-by-case basis.

### **C. Receiving Water Limitations**

1. Receiving water limitations are site-specific interpretations of water quality standards from applicable water quality control plans. As such they are required as part of the Permit. However, a receiving water condition not in conformance with the limitation is not necessarily a violation of this Order. The Central Valley Water Board may require an investigation to determine cause and culpability prior to asserting a violation has occurred. Discharges

from MS4s shall not cause the following in receiving waters:

- a. Concentrations of dissolved oxygen to fall below 7.0 mg/l.
- b. Oils, greases, waxes, or other materials to form a visible film or coating on the water surface or on the stream bottom.
- c. Oils, greases, waxes, floating material (liquids, solids, foams, and scums) or suspended material to create a nuisance or adversely affect beneficial uses.
- d. Aesthetically undesirable discoloration.
- e. Fungi, slimes, or other objectionable growths.
- f. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:
  - i. Where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), controllable factors shall not cause downstream turbidity to exceed 2 NTUs.
  - ii. Where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU.
  - iii. Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent.
  - iv. Where natural turbidity is between 50 and 100 NTUs, increases shall not exceed 10 NTUs.
  - v. Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent.
- g. The normal ambient pH to fall below 6.5, exceed 8.3, or change by more than 0.3 unit.
- h. Deposition of material that causes nuisance or adversely affects beneficial uses.
- i. Taste or odor-producing substances to impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to cause nuisance or adversely affect beneficial uses.
- j. Radionuclides to be present in concentrations that exceed maximum contaminant levels specified in the California Code of Regulations, Title 22; that harm human, plant, animal or aquatic life; or that result in the

accumulation of Radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

- k. Aquatic communities and populations, including vertebrate, invertebrate, and plant species, to be degraded.
  - l. Toxic pollutants to be present in the water column, sediments, or biota in concentrations that adversely affect beneficial uses; that produce detrimental response in human, plant, animal, or aquatic life; or that bioaccumulate in aquatic resources at levels which are harmful to human health.
  - m. Pathogen/Bacteria concentrations to be present that exceed criteria or threaten public health. The fecal coliform concentration, based on a minimum of not less than five samples for any 30-day period, to exceed a geometric mean of 200 MPN/100 mL, nor more than ten percent of the total number of fecal coliform samples taken during any 30-day period to exceed 400 MPN/100 mL.
  - n. Violation of any applicable water quality standard for receiving waters adopted by the Central Valley Water Board or the State Water Board pursuant to the CWA and regulations adopted there under.
2. The discharge shall not cause or contribute to an exceedance of any applicable water quality standards.
  3. The Permittees shall comply with Discharge Prohibition A.2 and Receiving Water Limitations C.1 and C.2 through timely implementation of control measures and other actions to reduce pollutants in the discharges in accordance with the SWQMP and other requirements of this Order, including any modifications. The SWQMP shall be designed to achieve compliance with the above mentioned Prohibitions and Receiving Water Limitations C.1 and C.2. If exceedance(s) of water quality objectives or water quality standards (collectively, WQS) persist notwithstanding implementation of the SWQMP and other requirements of this Order, the Permittees shall assure compliance with Discharge Prohibition A.2 and Receiving Water Limitations C.1 and C.2 by complying with the following procedure:
    - a. Upon a determination by either the Permittees or Central Valley Water Board that discharges are causing or contributing to an exceedance of an applicable WQS, the Permittees shall promptly notify and thereafter submit a report to the Executive Officer that describes BMPs that are currently being implemented and additional BMPs that will be

implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance of WQs. This Report of Water Quality Exceedance (RWQE) shall be incorporated in the Annual Report unless the Central Valley Water Board directs an earlier submittal. The RWQE shall include proposed revisions to the SWQMP and an implementation schedule containing milestones and performance standards for new or improved BMPs, if applicable. The RWQE shall also include a monitoring program and the rationale for new or improved BMPs, including a discussion of expected pollutant reductions and how implementation of additional BMPs will prevent future exceedance of WQs. The Central Valley Water Board may require modifications to the RWQE.

- b. The Permittees shall submit any modifications to the RWQE required by the Central Valley Water Board within **30 days** of receipt of all data from analytical laboratories.
- c. Within **30 days** following approval of the RWQE by the Executive Officer, the Permittees shall revise the SWQMP and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.
- d. The Permittees shall implement the revised SWQMP and monitoring program in accordance with the approved schedule.

If the Permittees have complied with the procedures set forth above and are implementing the revised SWQMP, the Permittees do not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Executive Officer to develop additional BMPs.

#### **D. Provisions**

1. Within its geographic jurisdiction, each Permittee shall:
  - a. Comply with the requirements of this Order, the SWQMP, and any modifications to the SWQMP;
  - b. Coordinate among its internal departments and agencies, as appropriate, to facilitate the implementation of the requirements of the SWQMP applicable to such Permittee in an efficient and cost effective manner;

- c. Participate in intra-agency coordination (e.g. Public Works, Planning, Building, Fire Department, Code Enforcement, Public Health) necessary to successfully implement the provisions of this Order and the SWQMP.
- d. As part of the Annual Report and Annual Work Plan, the Permittees shall jointly prepare an annual fiscal analysis identifying the expenditures made during the Annual Report reporting period and projecting the planned future expenditures for the storm water management program. The analysis shall include a summary that identifies the storm water budget for both the previous year and estimates expenditures for the upcoming year using estimated percentages and written explanations where necessary, for the specific categories noted below:
  - i. Program management (administrative costs)
  - ii. SWQMP Development
    - a) Construction Program
    - b) Industrial and Commercial Program
    - c) Municipal Operations Program
    - d) Structural Controls
    - e) Illicit Connection and Discharge Program
    - f) Public Involvement and Education Program
    - g) Planning and Land Development Program
    - h) Performance and Effectiveness Evaluations
  - iii. Storm Water Quality Monitoring Program
  - iv. Training
  - v. Other Services and Expenses

### **STORM WATER MANAGEMENT PROGRAM**

- 2. The SWQMP is required as part of the application pursuant to 40 CFR 122.26(2)(d)(iv); therefore it is an integral and enforceable component of the MS4 Permit.

By **(six months after Order adoption)**, the Permittees shall modify the SWQMP to address the requirements of this Order, including but not limited to the Provisions below, and submit a revised SWQMP, for public review and comment and Central Valley Water Board approval. New or revised BMPs may be based upon special studies or other activities conducted by the Permittees, literature review, or special studies conducted by other programs or dischargers. The SWQMP shall contain the rationale for any new or revised BMPs and include a discussion of baseline conditions, expected reductions in mass loading, and methods to be used to verify that BMPs have been successfully implemented. The SWQMP shall include an

implementation schedule containing identifiable milestones, detailed performance standards, and a proposed compliance monitoring and reporting program.

The performance standards shall be used as assessment tools to gauge the success of the program in achieving measurable benefits and improving water quality. The Permittees shall incorporate newly developed or updated BMPs and assessment tools/performance standards into applicable annual revisions to the SWQMP and adhere to implementation of the new/revised BMPs. The approved SWQMP shall serve as the framework for identification, assignment, and implementation of BMPs. The Permittees shall implement or require implementation of BMPs in the approved SWQMP to ensure that pollutant discharges from its MS4s are prevented or reduced to the MEP. The Permittees shall implement a SWQMP that contains the following components:

- a. Program Management
  - i. Annual Work Plan
  - ii. Annual Reporting
  - iii. Memorandums of Understanding
  - iv. Departmental Coordination
  - v. Training
  - vi. Legal Authority
  - vii. Fiscal Analysis
- b. Programs
  - i. Construction Program
  - ii. Industrial and Commercial Program
  - iii. Municipal Operations Program
  - iv. Illicit Connection and Discharge Program
  - v. Public Involvement and Education Program (Public Outreach)
  - vi. Planning and Land Development Program
  - vii. Storm Water Quality Monitoring Program
  - viii. Program Effectiveness Assessment and Reporting Program

### **PROGRAM MANAGEMENT**

3. The Program Management component of the SWQMP shall involve ensuring that all elements of the SWQMP are implemented on schedule and all requirements of this Order are complied with.

**SWQMP Implementation:** Each Permittee shall continue to implement the current SWQMP until such time that the SWQMP has been modified to be consistent with this Order and approved by the Central Valley Water Board. Once approved, the Permittees shall implement the modified SWQMP consistent with the schedule specified within this Order. The SWQMP, with modifications, revisions, or amendments as may be approved by the Executive Officer or Central Valley Water Board, is an enforceable component of this Order.

**SWQMP Modification:** The Permittees' SWQMP may need to be modified, revised, or amended from time to time to respond to a change in conditions and to incorporate more effective approaches to pollutant control. Provisions of this Order require review and/or revision of the certain components of the Permittees' SWQMP. Proposed SWQMP revisions will be part of the annual review process and incorporated in the Annual Report. In addition, the Permittees shall revise their SWQMP to comply with regional or watershed-specific requirements, and/or waste load allocations developed and approved pursuant to the process for the designation and implementation of TMDLs for impaired water bodies, and/or amendments to the Basin Plan when the amendments become effective. A 30-day public notice and comment period shall apply to all proposed significant revisions to the SWQMP. Significant SWQMP revisions shall be brought before the Central Valley Water Board for review and approval. Minor SWQMP revisions may be approved by the Executive Officer.

- a. **Annual Work Plan:** The Permittees shall submit an Annual Work Plan as part of the Annual Report. The Annual Work Plan shall describe in detail the SWQMP's and the Permittees' proposed activities for the upcoming reporting year.
- b. **Annual Report:** The Permittees shall submit an Annual Report by 1 September of each year beginning with the 2013-2014 reporting period. The Annual Report shall document the status of the SWQMP's and the Permittees' activities during the previous fiscal year, including the results of a qualitative and quantitative field level assessment of activities implemented by the Dischargers, and the performance of tasks contained in the SWQMP. The Annual Report shall include a compilation of deliverables and milestones completed during the previous 12-month period, as described in the SWQMP and Annual Work Plan. Per 40 CFR 122.42(c), the Annual Report shall include a program effectiveness assessment and recommended modifications to for each Program Element/Control Measure. Each Annual Report shall build upon the previous year's efforts. In each Annual Report, the Permittees may propose pertinent updates, improvements, or revisions to the SWQMP, which shall be complied with under this Order.

- c. **Memorandums of Understanding:** The Permittees shall collaborate with each other to address common issues, promote consistency between SWQMP and Monitoring Programs, and to plan and coordinate activities required under this Order.
  - i. The Permittees shall review and revise their existing MOUs to ensure that they provide for a management structure that addresses the items below, and submit the updated MOUs to the Central Valley Water Board by **(12 months after adoption of the Order)**. The MOUs shall address the following:
    - a) Designation of joint responsibilities;
    - b) Decision making;
    - c) Information management of data and reports, including the requirements under this Order; and
    - d) Any and all other collaborative arrangements for compliance with this Order.
  - ii. The Permittees shall jointly develop and/or update the standardized format(s) for all reports required under this Order (e.g., annual reports, monitoring reports, fiscal analysis reports, and program effectiveness reports, etc.). The standardized reporting format(s) shall be used by all Permittees and shall include protocols for electronic reporting, specifically data reporting.
- f. **Departmental Coordination:** The Permittees shall identify all departments within their jurisdiction that conduct storm water pollution control related activities and their roles and responsibilities under this Order. The Annual Report shall include an up-to-date organizational chart identifying these departments and key personnel responsible for issuance of enforcement actions.
- g. **Training:** The Permittees shall evaluate existing training protocols and submit a summary of how the protocols will be changed to meet the requirements of this Permit within the updated SWQMP.
- h. **Legal Authority:** The Permittees shall review, revise, maintain, and enforce adequate legal authority to control pollutant discharges from the MS4 through ordinance, statute, permit, contract, or similar means.
  - i. This legal authority must, at a minimum, authorize the Permittees to:
    - a) Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to the MS4. This requirement applies both to industrial and construction sites, which have coverage under the statewide general

- industrial or construction storm water permits, as well as to those sites that do not require permit coverage.
- b) Effectively prohibit identified illegal discharges into the MS4 (e.g., discharges of wash water from gas stations, mobile businesses, parking lots, storage areas containing equipment, discharges of pool water containing chlorine or bromine, discharges of sediment, pet waste, vegetation, food related wastes, toxic materials, pesticides, construction debris, etc.).
  - c) Prohibit and eliminate illicit connections to the MS4s;
  - d) Prohibit the discharge of spills, dumping, or disposal of materials other than storm water to its MS4s;
  - e) Use enforcement mechanisms to require compliance with the Permittees storm water ordinances, permits, contracts, or orders;
  - f) Control the contribution of pollutants from one portion of the shared MS4s to another portion of the storm sewer system through interagency agreements among the Permittees (and other owners of the storm sewer system such as Caltrans);
  - g) Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits, including the prohibition on illicit discharges to the MS4s;
  - h) Require the use of BMPs to prevent or reduce the discharge of pollutants from MS4s to the MEP; and
  - i) Require that Treatment Control BMPs be properly operated and maintained to prevent the breeding of vectors.
- ii. Each Permittee shall amend its existing ordinances as needed, to enforce all the requirements of this Order by **(12 months after adoption of this Order)** of the SWQMP. The ordinance(s) shall contain implementable and progressive enforcement procedures.
  - iii. Each Permittee shall provide to the Executive Officer by **(18 months after adoption of this Order)** a statement certified by its chief legal counsel that it has adequate legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order, including any modifications thereto in effect when the certified statement is provided. This statement shall be included in Permittees' revised SWQMP(s) along with detailed descriptions of the following:
    - a) All urban runoff related ordinances adopted by the Permittees and appropriate citations thereof and the reasons they are enforceable;

- b) The Permittee's Progressive Enforcement Policy and how it will be effectively implemented;
  - c) The local administrative and legal procedures available to mandate compliance with urban runoff related ordinances and, therefore, with the conditions of this Order;
  - d) Descriptions of how these ordinances are implemented and how enforcement actions under these ordinances may be appealed; and
  - e) A description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.
4. **Fiscal Analysis:** Each Permittee shall secure the resources necessary to meet the requirements of this Order and shall prepare an annual fiscal summary as part of the SWQMP Annual Report. The summary shall, for each fiscal year covered by this Order, identify the expenditures necessary to accomplish the activities of the SWQMP. The summary shall also include a description of the source(s) of funds that are proposed to **meet** the necessary expenditures, including legal restrictions on the use of such funds.

### **SWQMP Programs**

#### **5. Construction Program**

- a. The objectives of the Construction Program shall be to:
  - i. Provide adequate legal authority to control pollutants to the MS4 from construction sites with land disturbance greater than or equal to one acre in size;
  - ii. Require review of construction plans and grading permits to ensure consistency with Permittee requirements;
  - iii. Require BMPs to control discharges sediment and pollutants from construction sites to the MS4;
  - iv. Maintain a tracking systems (inventory) of active construction sites;
  - v. Ensure inspections of construction sites to ensure proper BMP implementation and compliance with local requirements and applicable Provisions of this Order and follow-up inspections to bring inadequate sites into compliance;
  - vi. Bring forth enforcement actions for sites in violation of Permittee requirements and advise the Central Valley Water Board of potential violations of Construction General Permit requirements;
  - vii. Provide regular internal and external training on applicable components of the SWQMP and related Permits; and

- viii. Conduct an assessment as a part of the annual reporting process to determine the effectiveness of the Construction Program element and identify any necessary modifications.
- b. Each Permittee shall update its SWQMP to reduce pollutants in runoff from construction sites during all construction phases to the MEP. At a minimum, the Construction Program shall address the items above, as well as include the following control measures:
  - i. Source Identification,
  - ii. Threat to water quality prioritization,
  - iii. Progressive enforcement of non-compliant sites, and
  - iv. Reporting of recalcitrant non-compliant sites the Central Valley Water Board.
- c. Each Permittee shall implement and enforce a program to control runoff from all construction sites subject to the NPDES General Construction Permit. The program shall ensure the following minimum requirements are effectively implemented at these construction sites:
  - i. Sediments generated on the project site shall be retained using adequate source control BMPs;
  - ii. Construction-related materials, wastes, spills, or residues shall be retained at the project site to avoid discharge to streets, drainage facilities, receiving waters, or adjacent properties by wind or runoff;
  - iii. Non-storm water runoff from equipment and vehicle washing and any other activity shall be contained at the project site;
  - iv. Erosion from slopes and channels shall be controlled by implementing an effective combination of BMPs such as limiting grading during the wet season; inspecting graded areas during rain events; planting and maintenance of vegetation on slopes; and covering erosion susceptible slopes; and
  - v. Prior to issuance of a grading permit for a construction site, submittal to the permitting agency of an erosion and sediment control plan that contains, at a minimum, the following:
    - a) If applicable to the site, a certification that a Notice of Intent to obtain coverage under the General Construction Permit has been submitted to the State Water Board.
    - b) A vicinity map showing nearby roadways, the construction site perimeter, and the geographic features and general topography surrounding the site;
    - c) A site map showing the construction project in detail, including the existing and planned paved areas and buildings; general topography both before and after construction; drainage patterns across the project area; and anticipated storm water

- discharge locations (i.e., the receiving water, a conduit to receiving water, and/or drain inlets);
- d) A description of BMPs to address contractor activities that generate pollutants including, at a minimum, vehicle washing, equipment maintenance, and waste handling;
  - e) A description of the type and location of erosion and sediment control BMPs to be employed at the site, including but not limited to, limited grading during the wet season and planting and maintenance of vegetation on slopes, and
  - f) The name and telephone number of the qualified person responsible for implementing the Storm Water Pollution Prevention Plan (SWPPP).
- vi. If applicable, all environmental permits must be obtained from agencies such as Department of Fish and Game, U.S. Army Corp of Engineers, and the Central Valley Water Board's 401 Water Quality Certification;
  - vii. The Permittees shall inspect construction sites within the MS4 Permit boundaries for compliance with local ordinances and SWQMP and to confirm the Construction General Permit required SWPPP documents are on site. Sites shall be reinspected at a frequency determined to be effective by the Permittees, based on the site's threat to water quality, and/or record of compliance until site completion and termination from coverage under the Construction General Permit. Sites in chronic noncompliance shall be reported to the Central Valley Water Board; and
- d. On 14 September 2001, the Permittees submitted a Construction and Development Stormwater NPDES Assessment Checklist and a Grading Inspection Checklist to the Central Valley Water Board, as required by Provision D.10 in WDRs Order 5-01-048 (NPDES No. CA0083500). The checklist must be updated, and an updated copy included in the Annual Report.

## 6. Industrial and Commercial Program

- a. The objectives of the Industrial and Commercial Program shall be to:
  - i. Provide adequate legal authority to control pollutants from industrial and commercial facilities to the MS4;
  - ii. Develop and maintain an inventory of industrial and commercial facilities within the MS4's Permit boundary;
  - iii. Prioritize based on their threat to water quality the industrial and commercial facilities within the inventory;
  - iv. Inspect the industrial and commercial facilities that pose a significant threat to water quality at frequencies based on the

- inventory prioritization, and conduct follow-up inspections, as necessary, to bring non-compliant facilities into compliance;
- v. Implement a progressive enforcement policy to ensure that adequate enforcement is conducted and coordinated with the Central Valley Water Board regarding targeted inspected facilities and referrals of potential non-filers;
  - vi. Provide for regular internal and external training on components of the SWQMP and related Permits; and
  - vii. Complete an assessment as part of the annual reporting process to determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Industrial/Commercial component of its SWQMP to reduce pollutants in runoff from industrial/commercial sites to the MEP. At a minimum, the Industrial/Commercial Program shall address the objectives listed above, as well as the following control measures:
- i. At a minimum, the Permittees shall inventory restaurants, automotive service facilities, retail gasoline outlets, and industrial facilities that are not covered by the General Industrial Permit. The Permittees are required to inventory any additional facilities which may pose a threat to water quality.
  - ii. The Permittees must prioritize facilities into high, medium, and low categories on the basis of the potential for water quality impact using criteria such as pollutant sources on site, pollutants of concern, proximity to a water body, and violation history of the facility. The different priority categories can be assigned different inspection frequencies, with the highest priority facilities receiving more frequent inspections. The Permittees must describe the process for prioritizing inspections and frequency of inspections. High priority facilities must be inspected a minimum of once per year. If any geographical areas are to be targeted for inspections due to high potential for storm water pollution, these areas must be listed in the SWQMP. Further, the SWQMP must explain how the priority assigned to any one facility may be modified based on the site inspection findings and the facility's potential to discharge pollutants.
  - iii. Each Permittee shall require implementation of pollutant reduction and control measures at high priority industrial and commercial facilities per implementation of the approved model SWPPP or its equivalent, with the objective of effectively prohibiting non-storm water runoff and reducing pollutants in storm water runoff. Except as specified in other sections of this Order, pollutant reduction and control measures can be used alone or in combination, and can

- include Source and Treatment Control BMPs, which can be applied before, during, and/or after pollution generating activities.
- iv. Permittees must conduct inspections which at a minimum:
    - a) Evaluate the facility's compliance with the requirement to select, design, install, and implement storm water control measures;
    - b) Conduct a visual observation for evidence of unauthorized discharges, illicit connections, and potential discharge of pollutants to storm water;
    - c) Verify whether the facility is required to be authorized under the General Industrial Permit, and whether the facility has in fact obtained such permit coverage; and
    - d) Evaluate the facility's compliance with any other relevant local storm water requirements.
  - v. At a minimum, the Permittees must document the following for each inspection:
    - a) The inspection date and time; the name(s) and signature(s) of the inspector(s);
    - b) Weather information and a description of any discharges occurring at the time of the inspection;
    - c) Any previously unidentified discharges of pollutants from the site;
    - d) Any control measures needing maintenance or repairs;
    - e) Any failed control measures that need replacement;
    - f) Any incidents of noncompliance observed; and
    - g) Any additional control measures needed to comply with the Permit requirements.

Further, inspection findings must be tracked to ensure inspections are conducted at the frequency required and highlight and document the recidivism of noncompliant facilities, and aid follow up and enforcement activities;
  - vi. The Permittees must ensure that all necessary follow up and enforcement activities are conducted as necessary to require necessary implementation and maintenance of the control measures implemented by industrial/commercial facilities;
  - vii. The Permittees must ensure that all staff whose primary job duties are implementing the industrial storm water program is trained to conduct facility inspections. The training must cover what is required under this Permit in terms of storm water control measures, the requirements of other applicable industrial storm water general permits or other related local requirements, the Permittee's site inspection and documentation protocols, and enforcement procedures. Follow-up training must be provided every other year to address changes in procedures, techniques, or

- staffing. Permittees must document and maintain records of the training provided and the staff trained; and
- viii. The Permittees must conduct an assessment as a part of the Annual Report process to determine the effectiveness of the program and identify any necessary modifications.

## 7. **Municipal Operations Program**

- a. The objectives of the Municipal Operations Program shall be to:
  - i. Prevent sanitary sewer overflows (SSO) or spills from entering the storm drain system and respond quickly and appropriately if an SSO or spill does enter the storm drain system;
  - ii. Participate in and implement the regional storm water basin system;
  - iii. Implement pollution prevention BMPs for public facilities (e.g., corporation yards) and facility pollution prevention plans (FPPPs) for public facilities to minimize or eliminate pollutant discharges to the storm drain system;
  - iv. Implement standard protocols for storage, usage, and disposal of pesticides, herbicides (including pre-emergents), and fertilizers on Permittee-owned property such as park sites, landscaped medians, and golf courses;
  - v. Promote the use of integrated pest management (IPM) methods and less toxic alternatives;
  - vi. Prioritize pump stations and siphons for cleaning based on accumulation of waste. Clean and maintain basin inlets when necessary to prevent debris accumulation and flooding;
  - vii. Ensure that basin inlets are properly stenciled, are permanently imprinted, or have legible curb markers to discourage illicit discharges into the storm drain system and promote a 24-hour reporting number;
  - viii. Maintain and inspect storm water basins and pump stations;
  - ix. Conduct street sweeping activities;
  - x. Clean and maintain Permittee-owned parking facilities to minimize the build-up and discharge of pollutants to the storm drain system;
  - xi. Provide regular internal training on applicable components of the SWQMP; and
  - xii. Conduct an assessment as a part of the annual reporting process, determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Municipal Operations Program component in the SWQMP to effectively prohibit non-storm water discharges and prevent or reduce pollutants in runoff from all municipal land use areas, facilities, and activities to the MEP. At a minimum, the

Municipal Operations Program shall address the objectives listed above, as well as the following control measures:

- i. Sanitary sewer overflow and spill response;
- ii. Construction requirements for municipal capital improvement projects;
- iii. Pollution prevention at Permittee facilities;
- iv. Landscape and pest management;
- v. Storm drain system maintenance;
- vi. Street cleaning and maintenance;
- vii. Parking facilities maintenance;
- viii. Storm water basin construction and maintenance;
- ix. Public industrial activities management;
- x. Emergency procedures;
- xi. Non-emergency fire fighting flows;
- xii. Training; and
- xiii. Effectiveness assessment.

## **8. Illicit Connection and Discharge Program**

- a. The objectives of the Illicit Connection Discharge Program shall be to:
  - i. Provide adequate legal authority to control and/or prohibit pollutants from being discharged to the municipal storm drain system;
  - ii. Proactively detect illicit discharges and connections through a variety of mechanisms including, but not limited to, public reporting, dry weather monitoring, and field crew inspections;
  - iii. Upon identification of an illegal connection, investigate and eliminate the connection through a variety of mechanisms including, but not limited to, permitting or plugging the connection;
  - iv. Upon identification of an illicit discharge, investigate the discharge and conduct any necessary follow up actions to mitigate the impacts of the discharge;
  - v. Conduct an assessment as a part of the annual reporting process; determine the effectiveness of the Program Element and identify any necessary modifications.
- b. Each Permittee shall update the Illicit Connection and Discharge Program component of the SWQMP to actively seek and eliminate illicit discharges and connections. At a minimum, the Illicit Connection and Discharge Program shall address the objectives listed above and include the following control measures:
  - i. Detection of illicit connections and illicit discharges;
  - ii. Illegal connection identification and elimination;
  - iii. Investigation/inspection and follow-up procedures;

- iv. Enforcement of local codes and ordinances;
- v. Training; and
- vi. Effectiveness assessment.

**9. Public Involvement and Education Program (Public Outreach Program):**

- a. Each Permittee shall implement a Public Outreach Program using all media as appropriate to (1) measurably increase the knowledge of target communities regarding MS4s, impacts of urban runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment. The objectives of the Public Outreach Program shall be to:
  - i. Encourage the public to actively participate in the implementation of the storm water program as well as the various outreach events;
  - ii. Promote the use of the 24-hour public reporting phone number ;
  - iii. Implement a public education strategy for the overall program that includes developing and distributing materials, conducting a mixed media campaign, participating in community outreach events, and conducting public opinion surveys to gauge the level of awareness and behavior change within a community and/or target audience;
  - iv. Evaluate the ability to interface and coordinate with school education programs within the MS4 NPDES Permit boundaries;
  - v. Implement a business outreach program; and
  - vi. Conduct an assessment as a part of the annual reporting process, determine the effectiveness of the program component and identify any necessary modifications.
- b. Each Permittee shall update the Public Outreach Program component of its SWQMP to educate the public and encourage their participation in the implementation of the SWQMP. At a minimum, the Public Outreach Program shall address the objectives listed above and include the following control measures:
  - i. Public participation,
  - ii. Twenty-four hour reporting phone number,
  - iii. Public Outreach implementation,
  - iv. Public school education,
  - v. Business outreach, and
  - vi. Effectiveness assessment.
- c. Each Permittee shall incorporate a mechanism for public participation in the implementation of the SWQMP (i.e., programs that engage the

public in cleaning up creeks, removal of litter in river embankments, stenciling of storm drains, etc.).

**10. Planning and Land Development Program:**

- a. The objectives of the Planning and Land Development Program shall be to:
  - i. Incorporate water quality and watershed protection principles into the Permittee's policies and planning procedures by continuing to update the Storm Drainage and Flood Control Master Plan that covers the MS4 Permit boundaries to provide water quality and watershed protection through the implementation of a Regional Storm Water Basin System.
  - ii. Ensure that all storm water basins are maintained to maximize infiltration rates.
  - iii. Ensure that selected post-construction storm water controls will remain effective upon project completion by requiring maintenance agreements and by conducting periodic inspections for all priority development projects;
  - iv. Provide a comprehensive review of development plans to ensure that all new and existing developments within the MS4 Permit boundaries are connected to the regional storm water basin system or have implemented equivalent temporary controls until the site is connected to the storm water basin system to minimize storm water quality impacts;
  - v. Provide regular internal training on applicable components of the SWQMP; and
  - vi. As a part of the annual reporting process, conduct an annual assessment to determine the effectiveness of the program element and identify any necessary modifications.
- b. Each Permittee shall update the Planning and Land Development Program component of the SWQMP to minimize the short and long-term impacts on receiving water quality from new development and redevelopment. At a minimum, the Planning and Land Development Program shall address the objectives listed above and the following control measures:
  - i. Implementation of the FMFCD Storm Drainage and Flood Control Master Plan;
  - ii. Maintenance agreement and transfer where appropriate;
  - iii. Training;
  - iv. Update and implementation of post construction guidelines;
  - v. Update of hydrology studies;

- vi. Study of storm water basin designs that improve storm water quality; and
- vii. Effectiveness assessment.

11. **Water Quality Protection Principles** - In order to further reduce pollutants and runoff flows from new development and redevelopment beyond the criteria provided in the FMFCD Storm Drainage and Flood Control Master Plan, each Permittee shall encourage the following concepts:

- a. Minimization of impervious surfaces and directly connected impervious surfaces in areas of new development and redevelopment and where feasible to maximize on-site infiltration of runoff (low impact development concepts).
- b. Implementation of pollution prevention methods supplemented by pollutant source controls and treatment, and where practical, use of strategies that control the sources of pollutants or constituents (i.e., the point where water initially meets the ground) to minimize the transport of urban runoff and pollutants offsite and into MS4s.
- c. Preservation, and where possible, creation or restoration of areas that provide important water quality benefits, such as riparian corridors, wetlands, and buffer zones.
- d. Limiting disturbances of natural water bodies and natural drainage systems by development including roads, highways, and bridges.
- e. Identification and avoidance of development in areas that are particularly susceptible to erosion and sediment loss; or establishment of guidance that protects areas from erosion and sediment loss.
- f. Coordination with local traffic management programs to reduce pollutants associated with vehicles and increased traffic resulting from development.
- g. Implementation of source and structural controls as necessary and appropriate to protect downstream receiving water quality from increased pollutant loads and flows (hydromodification concepts) from new development and significant redevelopment.
- h. Control of the post-development peak storm water run-off discharge rates and velocities to maintain or reduce pre-development downstream erosion, and to protect stream habitat.
- i. Low Impact Development - New development and redevelopment projects shall consider integration of Low Impact Development (LID) principles into project design.

12. **Development Standards** - Permittees shall follow FMFCD development standards in accordance with the FMFCD Storm Drainage and Flood Control Master Plan. Additionally, Permittees shall develop/revise (**by 12 Months from the adoption of this Order**) Development Standards to address the following:
- a. **Post Development Standards** - Each Permittee shall ensure that all new development and significant redevelopment projects falling under the Priority Development Project categories listed below and in Drainage Areas not discharging to storm water basins meet Development Standards. Development Standards shall apply to all Priority Development Projects or phases of Priority Development Projects.
  - b. **Priority Development Project Categories** – Development Standards shall apply to: (1) *significant* redevelopment; (2) home subdivisions of 10 housing units or more; (3) commercial developments great than 100,000 square feet; (4) automotive repair shops; (5) restaurants; (6) parking lots 5,000 square feet or more or with 25 or more parking spaces and potentially exposed to urban runoff; (7) street and roads; and (8) retail gasoline outlets (RGO). Significant redevelopment is defined as the creation or addition of at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to, expansion of a building footprint or addition or replacement of a structure; structural development including an increase in gross floor area and/or exterior construction or remodeling; replacement of impervious surface that is not part of a routine maintenance activity; and land disturbing activities related with structural or impervious surfaces. Where significant redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to the Development Standards, the numeric sizing criteria discussed below applies only to the addition, and not the entire development.
  - c. **BMP Requirements** – The Development Standards shall include a list of recommended pollution prevention, source control, and/or structural treatment control BMPs. The Development Standards shall require all new development and significant redevelopment projects falling under the above priority project categories and not discharging to a storm water basin to implement a combination of BMPs selected from the recommended BMP list, including at a minimum: (1) incorporation of LID principles where feasible, (2) source control BMPs and (3) structural treatment control BMPs.

- d. **Numeric Sizing Criteria** – The Development Standards shall require structural treatment BMPs, including LID BMPs where feasible, to be implemented for all priority development projects. In addition to meeting the BMP requirements listed above, all structural treatment BMPs for a single priority development project shall be sized collectively to comply with either the volume-based or flow-based numeric sizing criteria:
- i. Volume-based BMPs shall be designed to mitigate (infiltrate or treat) either:
    - a) The volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the local historical rainfall record; or
    - b) The volume of runoff produced by the 85th percentile 24-hour rainfall event, determined as the maximized capture storm water volume for the area, from the formula recommended in *Urban Runoff Quality Management, WEF Manual of Practice No. 23/ASCE Manual of Practice No. 87, (1998)*; or
    - c) The volume of annual runoff based on unit basin storage volume, to achieve 80% or more volume treatment by the method recommended in *California Storm Water Best Management Practices Handbook – Industrial/Commercial, (1993)*; or
    - d) A Permittee justified design storm volume that is determined as part of the Development Standard development and approved by the Executive Officer. The treatment of this volume shall achieve approximately the same reduction in pollutant loads achieved by treatment of the 85<sup>th</sup> percentile 24-hour runoff event.
  - ii. Flow-based BMPs shall be designed to mitigate (infiltrate or treat) either:
    - a) The maximum flow rate of runoff produced by the 85<sup>th</sup> percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two; or
    - b) The maximum flow rate of runoff, as determined from local historical rainfall records, that achieves approximately the same reduction in pollutant loads and flows as achieved by mitigation of the 85<sup>th</sup> percentile hourly rainfall intensity multiplied by a factor of two.
- e. **Equivalent Numeric Sizing Criteria** - Each Permittee may develop any equivalent numeric sizing criteria or performance-based standard for post-construction structural treatment BMPs as part of the Development Standards. Such equivalent sizing criteria may be authorized for use in place of the above criteria. In the absence of development and

subsequent authorization of such equivalent numeric sizing criteria, the above numeric sizing criteria requirement shall be implemented.

- f. **Pollutants and Activities of Concern** – As part of the Development Standards, each Permittee shall identify pollutants and/or activities of concern for each new development or significant redevelopment project. The Permittees shall identify the pollutants of concern by considering the following: (1) receiving water quality, including pollutants for which receiving waters are listed as impaired under CWA Section 303(d); (2) land use type of the development project and pollutants associated with that land use type; (3) pollutants expected to be present on site at concentrations that pose potential water quality concerns; (4) activities expected to be on the site; and (5) changes in flow rates and volumes resulting from the development project and sensitivity of receiving waters to changes in flow rates and volumes.
  - g. **Restaurants Less than 5,000 Square Feet** - New development and significant redevelopment restaurant projects where the land area development is less than 5,000 square feet shall meet all Development Standards except for structural treatment BMP and numeric sizing criteria requirement above.
  - h. **Infiltration and Groundwater Protection** – To protect groundwater quality, each Permittee shall consider the type of development and resulting storm water discharge and, if appropriate, apply restrictions to the use of structural BMPs, which are designed to primarily function as infiltration devices (such as infiltration trenches, dry wells, and infiltration basins).
  - i. **Regional Storm Water Mitigation** – A Permittee may apply to the Central Valley Water Board for approval of a regional or sub-regional storm water mitigation **program** to substitute in part or wholly for the Development Standards requirements. The Central Valley Water Board may consider for approval such a program if its implementation will:
    - a) Result in equivalent or improved storm water quality;
    - b) Protect stream habitat;
    - c) Promote cooperative problem solving by diverse interests;
    - d) Be fiscally sustainable and has secure funding; and
    - e) Be completed in five years including the construction and start-up of treatment facilities.
13. **Maintenance Agreement and Transfer** - Each Permittee shall require that all developments subject to site specific plan requirements provide verification of maintenance provisions for Structural Treatment Control BMPs, including but not limited to legal agreements, covenants, California Environmental

Quality Act (CEQA) mitigation requirements, and or conditional use permits. Verification at a minimum shall include:

- a. The developer's signed statement accepting responsibility for maintenance until the responsibility is legally transferred; and either
- b. A signed statement from the public entity assuming responsibility for Structural Treatment Control BMP maintenance and that it meets all local agency design standards; or
- c. Written conditions in the sales or lease agreement, which requires the recipient to assume responsibility for maintenance and conduct a maintenance inspection at least once a year; or
- d. Written text in project conditions, covenants and restrictions for residential properties assigning maintenance responsibilities to the Home Owners Association for maintenance of the Structural Treatment Control BMPs; or
- e. Any other legally enforceable agreement that assigns responsibility for the maintenance of post-construction Structural Treatment Control BMPs.

14. **California Environmental Quality Act (CEQA) Document Update** - Each Permittee shall incorporate into its CEQA process, procedures for considering potential storm water quality impacts and providing for appropriate mitigation when preparing and reviewing CEQA documents. The procedures shall require consideration of the following:

- a. Potential impact of project construction on storm water runoff;
- b. Potential impact of project post-construction activity on storm water runoff;
- c. Potential for discharge of storm water from areas from material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas;
- d. Potential for discharge of storm water to impair the beneficial uses of the receiving waters or areas that provide water quality benefit;
- e. Potential for the discharge of storm water to cause significant harm on the biological integrity of the waterways and water bodies;
- f. Potential for significant changes in the flow velocity or volume of storm water runoff that can cause environmental harm; and

- g. Potential for significant increases in erosion of the project site or surrounding areas.

**15. General Plan Update**

- a. FMFCD shall amend, revise, or update its Storm Drainage and Flood Control Master Plan to create drainage areas that encompass the Permittees' MS4 NPDES permit boundaries.
- b. FMFCD shall provide the Central Valley Water Board with the draft amendment or revision when its Storm Drainage and Flood Control Master Plan is amended to create new drainage areas that encompass the Co-Permittees General Plan within the NPDES permit area

**16. Planning Department Coordination, Enforcement, and Tracking**

- a. Each Permittee shall provide for the review of proposed project plans and require measures to ensure that all applicable development will be in compliance with local storm water ordinances, local permits, and all other applicable ordinances and requirements.
- b. Each Permittee shall continue to follow its established process identified in its MOU with FMFCD that identifies when FMFCD – Storm Drainage and Flood Master Plan Development Standards will be implemented. The process shall identify at what point in the planning process development projects will be required to meet Development Standards.
- c. Each Permittee shall develop and implement no later than **(6 months from this Order's adoption)** the following:
  - i. A GIS or other electronic system for tracking projects that have been conditioned for post-construction treatment control BMPs. The electronic system, at a minimum, should contain the following information:
    - a) Municipal Project ID.
    - b) State WDID No.
    - c) Project Address/Location.
    - d) Project Acreage.
    - e) Inspection Date and Summaries.
    - f) Corrective Actions Taken.
    - g) Date Certificate of Occupancy Issued.

- 17. Targeted Employee Training** - Each Permittee shall periodically train its employees in targeted positions (whose jobs or activities are engaged in development planning) to ensure they can adequately implement the Planning and Land Development Program requirements.

18. **Outreach and Information for Developers** - Each Permittee, individually or in collaboration, shall develop and provide information to the development community promoting water quality protection principles and LID designs for new development and redevelopment projects.

### **MONITORING PROGRAM**

19. **Monitoring and Reporting Program:** The Permittees shall comply with Monitoring and Reporting Program No. R5-2013-XXXX, which is part of this Order, and any revisions thereto approved by the Board.
20. **Additional Studies:** The Permittees shall conduct any additional studies described herein, within the Monitoring and Reporting Program, or as described in the revised SWQMP, once approved by the Board.
21. **Program Effectiveness Assessment and Reporting Program— By (6 months of the adoption of the Permit)** the Permittees shall submit a proposed Long Term Effectiveness (LTEA) strategy, which shall build on the results of the Permittees' Annual Reports and the initial program effectiveness assessments. The LTEA shall identify how the Permittees will conduct a more comprehensive effectiveness assessment of the storm water program as part of the SWQMP. The strategy shall identify key goals for the program and address the storm water program in terms of achieving both programmatic goals (raising awareness, changing behavior) and environmental goals (reducing pollutant discharges, improving environmental conditions).
  - a. The Permittees shall report program assessment results in the Annual Reports. The program assessments shall identify the direct and indirect measurements that the Permittees use to track the effectiveness of their programs as well as the outcome levels at which the assessment is occurring consistent with this Order. Direct and indirect measurements shall include, but not be limited to, conformance with established performance standards, quantitative monitoring to assess the effectiveness of control measures, measurements or estimates of pollutant load reductions or increases from identified sources, raising awareness of the public, and/or detailed accounting/documentation of SWQMP accomplishments.
  - b. The Permittees shall track the long-term progress of their SWQMP towards achieving improvements in receiving water quality.

- c. The Permittees shall use the information gained from the program effectiveness assessment to improve their SWQMPs and identify new BMPs, or modification of existing BMPs. This information shall be reported within the Annual Reports consistent with this Order.

### **ADDITIONAL REQUIREMENTS**

22. This Order may be modified, or alternatively, revoked or reissued, prior to the expiration date as follows: a) to address significant changed conditions identified in the technical reports required by the Central Valley Water Board which were unknown at the time of the issuance of this Order; b) to incorporate applicable requirements of amendments to the Basin Plans approved by the State Water Board; c) to incorporate provisions as a result of new or amended statewide water quality control plans or policies adopted by the State Water Board, d) to incorporate changes due to State Water Board action regarding the precedential language of State Water Board Order WQ 99-05, (e) to replace the Monitoring and Reporting Program with regional monitoring requirements, or (f) to comply with any applicable requirements, guidelines, or regulations issued or approved under Section 402(p) of the CWA, if the requirement, guideline, or regulation so issued or approved contains different conditions or additional requirements not provided for in this Order. The Order as modified or reissued under this paragraph shall also contain any other requirement of the CWA when applicable.
23. Each Permittee shall comply with all applicable storm water-related items of the "Standard Provisions and Monitoring Requirements for Waste Discharge Requirements (NPDES)," dated February 2004, which are part of this Order. This attachment and its individual paragraphs are referred to as "Standard Provisions."
24. Within one year of TMDL approval by the Office of Administrative Law, the Permittees shall submit to the Central Valley Water Board a Waste Load Allocation Plan for every TMDL that assigns the Permittee a wasteload allocation due to its MS4 discharges. Within 60 days of submitting the plan, the Permittees shall start implementing the plan. The Wasteload Allocation Attainment Plan(s) shall include, at a minimum, each of the components listed below, unless the Permittee provides justification for why specific components are in conflict with specific TMDL provisions.
  - a. A detailed description of the Permittee's strategy for BMP selection, assessment, and implementation, to ensure that implemented BMPs will effectively abate pollutant sources, reduce pollutant discharges, and achieve wasteload allocations according to TMDL schedule.

- b. Identification of sources of the impairment within the Permit coverage area, including specific information on various source locations and their magnitude within the Permit coverage area.
  - c. Prioritization of sources within the Permit coverage area, based on suspected contribution to the impairment, ability to control the source, and other pertinent factors.
  - d. Identification of BMPs that will address the sources of impairing pollutants and reduce the discharge of impairing pollutants.
  - e. Prioritization of BMPs, based on expected effectiveness at abating sources and reducing impairing pollutant discharges, as well as other pertinent factors.
  - f. A detailed BMP implementation schedule. For each BMP, proposed milestones for tracking implementation, measurable goals that will use to assess implementation efforts and measures that will be used to assess BMP effectiveness. The Permittee shall include expected BMP implementation for future implementation years, with the understanding that future BMP implementation plans may change as new information is obtained.
  - g. A quantifiable numeric analysis demonstrating the BMPs selected for implementation will likely achieve, based on published BMP pollutant removal performance estimates, best professional judgment, and other available tools, the Permittee's wasteload allocation according to the schedule identified in the TMDL
  - h. A detailed description, including a schedule, of the monitoring program the Permittees plans to implement or use to assess discharge and receiving water quality, BMP effectiveness, and progress towards any interim targets and ultimate attainment of the Permittee's wasteload allocation.
  - i. A description of how the Permittee will modify the plan to improve upon BMPs that the effectiveness assessment highlights as ineffective.
  - j. A detailed description of information the Permittee will include in Annual Reports to illustrate progress towards meeting wasteload allocations according to TMDL schedule.
25. This Order expires on **(five years following adoption date)**. The Permittees must file a Report of Waste Discharge (RWD) in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for re-issuance of waste discharge requirements. U.S. EPA 40 CFR Part 122 *Interpretive Policy Memorandum on Reapplication Requirements for Municipal Separate Storm Sewer Systems* states the fourth year annual report may be used as the RWD reapplication package. The reapplication package must identify any proposed changes or improvement to the SWQMP, an assessment of the effectiveness of the program, and

monitoring activities for the upcoming five year term of the Order, if those proposed changes have not already been submitted pursuant to 40 CFR 122.42 (c).

I, PAMELA C. CREEDON, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Central Valley Region, on XX May 2013.

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PAMELA C. CREEDON, Executive Officer