

**California Regional Water Quality Control Board
San Diego Region**

**Waste Discharge Requirements for
Discharges of Runoff from the
Municipal Separate Storm Sewer Systems
(MS4s)**

**Draining the Watershed of the County of Orange,
The Incorporated Cities of Orange County, and
The Orange County Flood Control District
Within the San Diego Region**

**Tentative Order No. R9-2009-0002
NPDES NO. CAS0108740**

Date to be determined

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**WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES OF RUNOFF FROM THE
MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
DRAINING THE WATERSHED OF
THE COUNTY OF ORANGE, THE INCORPORATED CITIES OF
ORANGE COUNTY, AND THE ORANGE COUNTY FLOOD
CONTROL DISTRICT WITHIN THE SAN DIEGO REGION**

Adopted by the
California Regional Water Quality Control Board
San Diego Region
on MM.DD, 20##

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R9-2009-0002

The California Regional Water Quality Control Board, San Diego Region (hereinafter Regional Board), finds that:

A. BASIS FOR THE ORDER

1. This Order is based on the federal Clean Water Act (CWA), the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable State and federal regulations, all applicable provisions of statewide Water Quality Control Plans and Policies adopted by the State Water Resources Control Board (State Board), the Water Quality Control Plan for the San Diego Basin adopted by the Regional Board, the California Toxics Rule, and the California Toxics Rule Implementation Plan.
2. This Order reissues National Pollutant Discharge Elimination System (NPDES) Permit No. CAS0108740, which was first adopted by the Regional Board on July 16, 1990 (Order No. 90-38), and then reissued on August 8, 1996 (Order No. 96-03) and February 13, 2002 (Order No. R9-2002-01). On August 21, 2006, in accordance with Order No. R9-2002-01, the County of Orange, as the Principal Copermittee, submitted a Report of Waste Discharge (ROWD) for reissuance of the municipal separate storm sewer system (MS4) Permit.
3. This Order is consistent with the following precedential Orders adopted by the State Water Resources Control Board (State Board) addressing municipal storm water NPDES Permits: Order 99-05, Order WQ-2000-11, Order WQ 2001-15, and Order WQO 2002-0014.

B. REGULATED PARTIES

1. Each of the persons in Table 1 below, hereinafter called Copermittees or dischargers, owns or operates an MS4, through which it discharges ~~urban~~-runoff into waters of the United States within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the United States (waters of the U.S).

Table 1. Municipal Copermittees

| | |
|--------------------------|--|
| 1. City of Aliso Viejo | 8. City of Mission Viejo |
| 2. City of Dana Point | 9. City of Rancho Santa Margarita |
| 3. City of Laguna Beach | 10. City of San Clemente |
| 4. City of Laguna Hills | 11. City of San Juan Capistrano |
| 5. City of Laguna Niguel | 12. County of Orange |
| 6. City of Laguna Woods | 13. Orange County Flood Control District |
| 7. City of Lake Forest | |

C. DISCHARGE CHARACTERISTICS

1. ~~Urban~~ Runoff from an MS4 contains waste, as defined in the California Water Code (CWC), and pollutants that adversely affect the quality of the waters of the State. The discharge of ~~urban~~ runoff from an MS4 is a “discharge of pollutants from a point source” into waters of the U.S. as defined in the CWA.
2. Municipal storm water (wet weather) and non-storm water (dry weather) discharges are likely to contain pollutants that cause or threaten to cause an exceedance of the water quality standards, as outlined in the Regional Board’s Water Quality Control Plan for the San Diego Basin (Basin Plan). Wet weather and dry weather discharges are subject to the conditions and requirements established in the San Diego Basin Plan for point source discharges. These water quality standards must be complied with at all times, irrespective of the source and manner of discharge.
3. The most common categories of pollutants in ~~urban~~ runoff include total suspended solids, sediment, pathogens (e.g., bacteria, viruses, protozoa); heavy metals (e.g., copper, lead, zinc and cadmium); petroleum products and polynuclear aromatic hydrocarbons; synthetic organics (e.g., pesticides, herbicides, and PCBs); nutrients (e.g., nitrogen and phosphorus fertilizers), oxygen-demanding substances (decaying vegetation, animal waste), detergents, and trash.
4. The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and/or impair or threaten to impair designated beneficial uses resulting in a condition of pollution (i.e., unreasonable impairment of water quality for designated beneficial uses), contamination, or nuisance.
5. Pollutants in ~~urban~~ runoff can threaten and adversely affect human health. Human illnesses have been clearly linked to recreating near storm drains flowing to coastal waters. Also, ~~urban~~ runoff pollutants in receiving waters can bioaccumulate in the tissues of invertebrates and fish, which may be eventually consumed by humans.

6. Urban-runoff discharges from MS4s often contain pollutants that cause toxicity to aquatic organisms (i.e., adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). Toxic pollutants impact the overall quality of aquatic systems and beneficial uses of receiving waters.
7. The Copermittees discharge urban-runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within one of the eleven hydrologic units (San Juan Hydrologic Unit) comprising the San Diego Region as shown in Tables 2a and 2b. Some of the receiving water bodies have been designated as impaired by the Regional Board and the United States Environmental Protection Agency (USEPA) in 2006 pursuant to CWA section 303(d). Also shown in the Tables are the watershed management areas (WMAs) as defined in the Regional Board report, Watershed Management Approach, January 2002.
8. Trash is a persistent pollutant which can enter receiving waters from the MS4 resulting in accumulation and transport in receiving waters over time. Trash poses a serious threat to the Beneficial Uses of the receiving waters, including, but not limited to, human health, rare and endangered species, navigation and human recreation.

Table 2a. Common Watersheds and CWA Section 303(d) Impaired Waters

| Regional Board Watershed Management Area (WMA) | Hydrologic Area (HA) or Hydrologic Subarea (HSA) of the San Juan Hydrologic Unit | Major Receiving Water Bodies | 303(d) Pollutant(s)/stressor or Water Quality Effect ¹ |
|--|--|------------------------------------|---|
| Laguna Coastal Streams | Laguna HA, excluding Aliso HSA and Dana Point HSA | Laguna Canyon Creek, Pacific Ocean | Bacterial indicators Sediment toxicity |
| Aliso Creek | Aliso HSA | Aliso Creek, Pacific Ocean | Toxicity Phosphorus Bacterial indicators Benzo[b]flouranthene Dieldrin Sediment toxicity |

¹ The listed 303(d) pollutant(s) do not necessarily reflect impairment of the entire corresponding WMA or all corresponding major surface water bodies. The specific impaired portions of each WMA are listed in the State Water Resources Control Board's 2006 Section 303(d) List of Water Quality Limited Segments.

Table 2a. Common Watersheds and CWA Section 303(d) Impaired Waters

| Regional Board Watershed Management Area (WMA) | Hydrologic Area (HA) or Hydrologic Subarea (HSA) of the San Juan Hydrologic Unit | Major Receiving Water Bodies | 303(d) Pollutant(s)/stressor or Water Quality Effect ¹ |
|--|--|--|---|
| Dana Point Coastal Streams | Dana Point HSA | Dana Point Harbor, Salt Creek, Pacific Ocean | Bacterial indicators |
| San Juan Creek | Mission Viejo HA | San Juan Creek, Trabuco Creek, Oso Creek, Canada Gobernadora, Bell Canyon, Verdugo Canyon, Pacific Ocean | Bacterial indicators DDE Chloride Sulfates Total dissolved solids |
| San Clemente Coastal Streams | San Clemente HA | Prima Deshecha, Segunda Deshecha, Pacific Ocean | Bacterial indicators Phosphorus Turbidity |
| San Mateo Creek | San Mateo HA | San Mateo Creek, Christianitos Creek, Pacific Ocean | |

Table 2b. Common Watersheds and Municipalities

| Municipality | Laguna Coastal Streams | Aliso Creek | Dana Point Coastal Streams | San Juan Creek | San Clemente Coastal Streams | San Mateo Creek |
|--|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Aliso Viejo | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | |
| Dana Point | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Laguna Beach | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | | |
| Laguna Hills * | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | |
| Laguna Niguel | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | |
| Laguna Woods * | | <input checked="" type="checkbox"/> | | | | |
| Lake Forest * | | <input checked="" type="checkbox"/> | | | | |
| Mission Viejo | | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> | | |
| Rancho Santa Margarita | | | | <input checked="" type="checkbox"/> | | |
| San Clemente | | | | | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| San Juan Capistrano | | | | <input checked="" type="checkbox"/> | | |
| County of Orange * | <input checked="" type="checkbox"/> |
| Orange County Flood Control District * | <input checked="" type="checkbox"/> | |

* Municipality also includes areas within watersheds of the Santa Ana Regional Board that are outside the scope of this Order

9. The Copermittees' water quality monitoring data submitted to date documents persistent violations of Basin Plan water quality objectives for various ~~urban~~-runoff-related pollutants (fecal coliform bacteria, total suspended solids, turbidity, metals, etc.) at various watershed monitoring stations. Persistent toxicity has also been observed at some watershed monitoring stations. In addition, bioassessment data indicates that the majority of urbanized receiving waters have Poor to Very Poor Index of Biotic Integrity ratings. In sum, the above findings indicate that ~~urban~~-runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in Orange County.
10. 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. Therefore, runoff leaving a developed urban area is significantly 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 greatly 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 3-5 percent 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 due to increased erosive force.
11. Urban development creates new pollution sources as human population density increases and brings with it proportionately 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 the developed urban area is significantly greater in pollutant load than the pre-development runoff from the same area. These increased pollutant loads must be controlled to protect downstream receiving water quality.
12. Development and urbanization especially threaten environmentally sensitive areas (ESAs), such as water bodies designated as supporting a RARE beneficial use (supporting rare, threatened or endangered species) and CWA 303(d)-impaired water bodies. Such areas have a much lower capacity to withstand pollutant shocks than might be acceptable in other areas. In essence, development that is ordinarily insignificant in its impact on the environment may become significant in a particularly sensitive environment. Therefore, additional control to reduce pollutants from new and existing development may be necessary for areas adjacent to or discharging directly to an ESA.

13. 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 transformation that occur in the soil); (2) taking reasonable steps to prevent the illegal disposal of wastes; (3) protecting footings and foundations; (4) ensuring that each drainage feature is adequately maintained in perpetuity; and (5) pretreatment.

14. Non-storm water (dry weather) discharge is not considered a storm water (wet weather) discharge and therefore is not subject to regulation to the Maximum Extent Practicable (MEP) from CWA 402(p)(3)(B)(iii), which is explicitly for “Municipal and Industrial Stormwater Discharges (emphasis added)”. Non-storm water discharges, per CWA 402(p)(3)(B)(ii) are to be effectively prohibited unless specifically exempted. Exempted discharges identified as a source of pollutants are required to be addressed (emphasis added) through prohibition. Dry weather non-storm water discharges have been shown to contribute significant levels of pollutants and flow in arid, urban Southern California watersheds. The Copermittees have identified landscape irrigation, irrigation water and lawn water, previously exempted discharges, as a source of pollutants and conveyance of pollutants to waters of the United States.

D. **URBAN**-RUNOFF MANAGEMENT PROGRAMS

1. General

- a. This Order specifies requirements necessary for the Copermittees to reduce the discharge of pollutants in storm water urban-runoff to the maximum extent practicable (MEP). However, since MEP is a dynamic performance standard, which evolves over time as urban-runoff management knowledge increases, the Copermittees’ urban-runoff management 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. Absent evidence to the contrary, this continual assessment, revision, and improvement of urban-runoff management program implementation is expected to ultimately achieve compliance with water quality standards in the Region.
- b. The Copermittees have generally been implementing the jurisdictional urban runoff management programs required pursuant to Order No. 2002-01 since February 13, 2003. Prior to that, the Copermittees were regulated by Order No. 96-03 since August 8, 1996. However, urban-runoff discharges continue to cause or contribute to violations of water quality standards as evidenced by the Copermittees monitoring results.

- c. This Order contains new or modified requirements that are necessary to improve Copermittees' efforts to reduce the discharge of pollutants in ~~urban~~-runoff to the MEP and achieve water quality standards. Some of the new or modified requirements, such as the expanded Watershed ~~Urban~~-Runoff Management Program section, are designed to specifically address high priority water quality problems. Other new or modified requirements address program deficiencies that have been noted during audits, report reviews, and other Regional Board compliance assessment activities.
- d. Updated Jurisdictional ~~Urban~~-Runoff Management Plans (J~~U~~RMPs) and Watershed ~~Urban~~-Runoff Management Plans (W~~U~~RMPs), which describe the Copermittees' ~~urban~~-runoff management programs in their entirety, are needed to guide the Copermittees' ~~urban~~-runoff management efforts and aid the Copermittees in tracking ~~urban~~-runoff management program implementation. It is practicable for the Copermittees to update the J~~U~~RMPs and W~~U~~RMPs within one year, since significant efforts to develop these programs have already occurred.
- e. Pollutants can be effectively reduced in ~~urban~~-runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best "first line of defense". Source control BMPs (both structural and non-structural) minimize the contact between pollutants and flows (e.g., rerouting run-on around pollutant sources or keeping pollutants on-site and out of receiving waters). Treatment control BMPs remove pollutants that have been mobilized by wet-weather or dry-weather flows.
- f. ~~Urban-r~~Runoff needs to be addressed during the three major phases of urban development (planning, construction, and use) in order to reduce the discharge of pollutants from storm water to the MEP, eliminate pollutants in dry weather flows and protect receiving waters. Urban development which is not guided by water quality planning policies and principles can unnecessarily result in increased pollutant load discharges, flow rates, and flow durations which can negatively impact receiving water beneficial uses. Construction sites without adequate BMP implementation result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing urban development generates substantial pollutant loads which are discharged in ~~urban~~-runoff to receiving waters.
- g. Annual reporting requirements included in this Order are necessary to meet federal requirements and to evaluate the effectiveness and compliance of the Copermittees' programs.

h. This Order establishes Municipal Action Levels (MALs) for selected pollutants based on nationwide Phase I MS4 monitoring data for pollutants in storm water. The MALs were computed using the statistical based population approach, one of three approaches recommended by the California Water Board's Storm Water Panel in its report, 'The Feasibility of Numerical Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities (June 2006). MALs are identified in Section D of this Order. Copermittees shall implement a timely, comprehensive, cost-effective storm water pollution control program to reduce the discharge of pollutants in storm water from the permitted areas so as not to exceed the MALs. MALs express an integration of the adequacy/inadequacy of programmatic measures and BMPs required in this Order. The exceedance of an MAL will create a presumption that MEP is not being met.

2. Development Planning

- a. The Standard ~~Urban~~-Storm Water Mitigation Plan (SUSMP) requirements contained in this Order are consistent with Order WQ-2000-11 adopted by the State Water Resources Control Board (State Board) on October 5, 2000. In the precedential order, the State Board found that the design standards, which essentially require that ~~urban~~-runoff generated by 85 percent of storm events from specific development categories be infiltrated or treated, reflect the MEP standard. The order also found that the SUSMP requirements are appropriately applied to the majority of the Priority Development Project categories contained in Section D.1 of this Order. The State Board also gave Regional Water Quality Control Boards the needed discretion to include additional categories and locations, such as retail gasoline outlets (RGOs), in SUSMPs.
- b. Controlling ~~urban~~-runoff pollution by using a combination of onsite source control and site design BMPs augmented with treatment control BMPs before the runoff enters the MS4 is important for the following reasons: (1) Many end-of-pipe BMPs (such as diversion to the sanitary sewer) are typically ineffective during significant storm events. Whereas, onsite source control BMPs can be applied during all runoff conditions; (2) End-of-pipe BMPs are often incapable of capturing and treating the wide range of pollutants which can be generated on a sub-watershed scale; (3) End-of-pipe BMPs are more effective when used as polishing BMPs, rather than the sole BMP to be implemented; (4) End-of-pipe BMPs do not protect the quality or beneficial uses of receiving waters between the pollutant source and the BMP; and (5) Offsite end-of-pipe BMPs do not aid in the effort to educate the public regarding sources of pollution and their prevention.
- c. Use of Low-Impact Development (LID) site design BMPs at new development.

redevelopment and retrofit projects can be an effective means for minimizing the impact of ~~urban~~ runoff discharges from the development projects on receiving waters. LID is a site design strategy with a goal of maintaining or replicating the pre-development hydrologic regime through the use of design techniques. LID site design BMPs help preserve and restore the natural hydrologic cycle of the site, allowing for filtration and infiltration which can greatly reduce the volume, peak flow rate, velocity, and pollutant loads of ~~urban~~ runoff. Current runoff management, knowledge, practice and technology has resulted in the use of LID BMPs as an acceptable means of meeting the MEP standard.

- d. 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.
- e. Heavy industrial sites are significant sources of pollutants in ~~urban~~ runoff. Pollutant concentrations and loads in runoff from industrial sites are similar or exceed pollutant concentrations and loads in runoff from other land uses, such as commercial or residential land uses. As with other land uses, LID site design, source control, and treatment control BMPs are needed at heavy industrial sites in order to meet the MEP standard. These BMPs are necessary where the heavy industrial site is larger than one acre. The one acre threshold is appropriate, since it is consistent with requirements in the Phase II NPDES storm water regulations that apply to small municipalities.
- f. If not properly designed or maintained, certain BMPs implemented or required by municipalities for ~~urban~~ runoff management may create a habitat for vectors (e.g. mosquitoes and rodents). However, proper BMP design and maintenance to avoid standing water can prevent the creation of vector habitat. Nuisances and public health impacts resulting from vector breeding can be prevented with close collaboration and cooperative effort between municipalities, the Orange County Vector Control District, and the California Department of Public Health during the development and implementation of ~~urban~~ runoff management programs.
- g. The increased volume, velocity, frequency and discharge duration of storm water runoff from developed areas has the potential to greatly accelerate downstream erosion, impair stream habitat in natural drainages, and negatively impact beneficial uses. Development and urbanization increase pollutant loads and volume. Impervious surfaces can neither absorb water nor remove pollutants and thus lose the purification and infiltration provided by natural vegetated soil.

3. Construction and Existing Development

- a. In accordance with federal NPDES regulations and to ensure the most effective oversight of industrial and construction site discharges, discharges of runoff from industrial and construction sites are subject to dual (state and local) storm water regulation. Under this dual system, each Copermittee is responsible for enforcing its local permits, plans, and ordinances, and the Regional Board is responsible for enforcing the General Construction Activities Storm Water Permit, State Board Order 99-08 DWQ, NPDES No. CAS000002 (General Construction Permit) and the General Industrial Activities Storm Water Permit, State Board Order 97-03 DWQ, NPDES No. CAS000001 (General Industrial Permit). NPDES municipal regulations require that municipalities develop and implement measures to address runoff from industrial and construction activities. Those measures may require the implementation of additional BMPs than are required under the statewide general permits for activities subject to both state and local regulation.
- b. Identification of sources of pollutants in ~~urban~~-runoff (such as municipal areas and activities, industrial and commercial sites/sources, construction sites, and residential areas), development and implementation of BMPs to address those sources, and updating ordinances and approval processes are necessary for the Copermittees to ensure that discharges of pollutants from its MS4 in storm water are reduced to the MEP. Inspections and other compliance verification methods are needed to ensure minimum BMPs are implemented. Inspections are especially important at high risk areas for pollutant discharges.
- c. Historic and current development makes use of natural drainage patterns and features as conveyances for ~~urban~~-runoff. Urban streams used in this manner are part of the municipalities MS4 regardless of whether they are natural, man-made, or partially modified features. In these cases, the urban stream is both an MS4 and receiving water.
- d. As operators of the MS4s, the Copermittees cannot passively receive and discharge pollutants from third parties. By providing free and open access to an MS4 that conveys discharges to waters of the U.S., the operator essentially accepts responsibility for discharges into the MS4 that it does not prohibit or control. These discharges may cause or contribute to a condition of contamination or a violation of water quality standards.
- e. Waste and pollutants which are deposited and accumulate in MS4 drainage structures will be discharged from these structures to waters of the U.S. unless they are removed. These discharges may cause or contribute to, or threaten to cause or contribute to, a condition of pollution in receiving waters. For this reason, pollutant discharges into MS4s must be reduced using a combination of management measures, including source control, and an effective MS4

maintenance program must be implemented by each Copermittee.

- f. Enforcement of local ~~urban~~-runoff related ordinances, permits, and plans is an essential component of every ~~urban~~-runoff management program and is specifically required in the federal storm water regulations and this Order. Each Copermittee is individually responsible for adoption and enforcement of ordinances and/or policies, implementation of identified control measures/BMPs needed to prevent or reduce pollutants in storm water runoff, and for the allocation of funds for the capital, operation and maintenance, administrative, and enforcement expenditures necessary to implement and enforce such control measures/BMPs under its jurisdiction.
- g. Education is an important aspect of every effective ~~urban~~-runoff management program and the basis for changes in behavior at a societal level. Education of municipal planning, inspection, and maintenance department staffs is especially critical to ensure that in-house staffs understand how their activities impact water quality, how to accomplish their jobs while protecting water quality, and their specific roles and responsibilities for compliance with this Order. Public education, designed to target various urban land users and other audiences, is also essential to inform the public of how individual actions affect receiving water quality and how adverse effects can be minimized.
- h. Public participation during the development of ~~urban~~-runoff management programs is necessary to ensure that all stakeholder interests and a variety of creative solutions are considered.
- i. Retrofitting existing development with storm water treatment controls including LID, is necessary to address storm water discharges from existing development that may cause or contribute to a condition of pollution or a violation of water quality standards. Although SSMP BMPs are required for redevelopment, the current rate of redevelopment will not address water quality problems caused by hydromodification in a timely manner. Cooperation with private landowners is necessary to effectively identify, implement and maintain retrofit projects for the preservation, restoration, and enhancement of water quality.

4. Watershed ~~Urban~~-Runoff Management

- a. Since ~~urban~~-runoff within a watershed can flow from and through multiple land uses and political jurisdictions, does not recognize political boundaries, watershed-based ~~urban~~-runoff management can greatly enhance the protection of receiving waters ~~within a watershed~~. Such management provides a means to focus on the most important water quality problems in each watershed. By focusing on the most important water quality problems, watershed efforts can maximize protection of beneficial use in an efficient manner. Effective

watershed-based ~~urban~~-runoff management actively reduces pollutant discharges and abates pollutant sources causing or contributing to watershed water quality problems. Watershed-based ~~urban~~-runoff management that does not actively reduce pollutant discharges and abate pollutant sources causing or contributing to watershed water quality problems can necessitate implementation of the iterative process outlined in section A.3 of the Tentative Order. Watershed management of ~~urban~~-runoff does not require Copermittees to expend resources outside of their jurisdictions. Watershed management requires the Copermittees within a watershed to develop a watershed-based management strategy, which can then be implemented on a jurisdictional basis.

- b. Some ~~urban~~-runoff issues, such as general education and training, can be effectively addressed on a regional basis. Regional approaches to ~~urban~~-runoff management can improve program consistency and promote sharing of resources, which can result in implementation of more efficient programs.
- c. It is important for the Copermittees to coordinate their water quality protection and land use planning activities to achieve the greatest protection of receiving water bodies. Copermittee coordination with other watershed stakeholders, especially Caltrans, the Department of Defense, and water and sewer districts, is also important.

E. STATUTE AND REGULATORY CONSIDERATIONS

1. The Receiving Water Limitations (RWL) language specified in this Order is consistent with language recommended by the USEPA and established in State Board Water Quality Order 99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Board on June 17, 1999. The RWL in this Order require compliance with water quality standards, which is to be achieved through an iterative approach requiring the implementation of improved and better-tailored BMPs over time. Compliance with receiving water limits based on applicable water quality standards is necessary to ensure that MS4 discharges will not cause or contribute to violations of water quality standards and the creation of conditions of pollution.
2. The Water Quality Control Plan for the San Diego Basin (Basin Plan), identifies the following beneficial uses for surface waters in Orange County: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1) Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH), Hydropower Generation (POW), and Preservation of Biological Habitats of Special

Significance (BIOL). The following additional beneficial uses are identified for coastal waters of Orange County: Navigation (NAV), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

3. This Order is in conformance with State Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*, and the federal Antidegradation Policy described in 40 CFR 131.12.
4. Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This NPDES permit addresses the management measures required for the urban category, with the exception of septic systems. The adoption and implementation of this NPDES permit relieves the Copermittee from developing a non-point source plan, for the urban category, under CZARA. The Regional Board addresses septic systems through the administration of other programs.
5. Section 303(d)(1)(A) of the CWA requires that “Each state must 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. The current Section 303(d) List was approved by the State Board on October 25, 2006. On June 28, 2007 the 2006 303(d) list for California was given final approval by the United States Environmental Protection Agency (USEPA), and by USEPA on November 30, 2006.
6. 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).) Second, the local agency Copermittees’ 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. Third, the local agency Copermittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order. Fourth, the Copermittees 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. 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.

7. ~~Urban R~~unoff treatment and/or mitigation must occur prior to the discharge of ~~urban~~ runoff into receiving waters. Treatment BMPs must not be constructed in waters of the U.S. or State unless the ~~urban~~-runoff flows are sufficiently pretreated to protect the values and functions of the water body. Federal regulations at 40 CFR 131.10(a) state that in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of an ~~urban~~ runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Furthermore, the construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body. Without federal authorization (e.g., pursuant to Clean Water Act Section 404), waters of the U.S. may not be converted into, or used as, waste treatment or conveyance facilities. Similarly, waste discharge requirements pursuant to California Water Code Section 13260 are required for the conversion or use of waters of the State as waste treatment or conveyance facilities. Diversion from waters of the U.S./State to treatment facilities and subsequent return to waters of the U.S. is allowable, provided that the effluent complies with applicable NPDES requirements.
8. The issuance of waste discharge requirements and an NPDES permit for the discharge of ~~urban~~-runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with the CWC section 13389.
9. ~~Copermittees have operated and have proposed to continue developing and operating facilities that extract water from waters of the U.S., subject such extracted water to treatment, then discharge the treated water back to waters of the U.S. Without sufficient treatment processes, facilities that extract, treat, and discharge (FETDs) to waters of the U.S. may discharge effluent that does not support all designated beneficial uses. This Order does not regulate the discharge of said facilities. Copermittees have implemented operated and have proposed to continue implementing developing and operating facilities that extract water from waters of the U.S., subject such extracted water to treatment, then discharge the treated water back to waters of the U.S. Without sufficient treatment processes, facilities that extract, treat, and discharge (FETDs) to waters of the U.S. may discharge effluent that does not support all designated beneficial uses. Use of the MS4 NPDES Permit to regulate discharges from FETDs is an interim approach until individual or general NPDES requirements for such discharges are developed. At that time, the FETD~~

~~discharges will be expected to meet all applicable water quality standards. At this time, monitoring of FETDs is necessary to characterize their effectiveness, and ensure that facilities do not add or concentrate pollutants, create conditions of erosion, or unreasonably affect the quality of receiving waters.~~

10. Multiple water bodies in Orange County have been identified as impaired and placed on the 303(d) list. On December 12, 2007, the Regional Board adopted a Basin Plan amendment to incorporate 19 TMDLs developed in *Bacteria Impaired Waters TMDL Project I for Beaches and Creeks* in the San Diego Region. This action meets requirements of section 303(d) of the Clean Water Act (CWA). The Basin Plan amendment process is authorized under section 13240 of the Water Code. In 2004, *Bacteria Impaired Waters TMDL Project II* included six bacteria impaired shorelines in Dana Point Harbor and San Diego Bay: Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park, B Street, G Street Pier, Tidelands Park, and Chula Vista Marina in San Diego Bay. Since then, only Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay can be confirmed as still impaired by indicator bacteria. On June 11, 2008 the Regional Board adopted a Basin Plan amendment to incorporate *Bacteria Impaired Waters TMDL Project II for San Diego Bay and Dana Point Harbor Shorelines*.
11. The San Diego Regional Board (Regional Board) finds storm water discharges from urban and developing areas in Orange County to be significant sources of certain pollutants that cause, may be causing, threatening to cause or contributing to water quality impairment in the waters of Orange County. Furthermore, as delineated in the CWA section 303(d) list, the Regional Board has found that there is a reasonable potential that municipal storm water and dry weather discharges from MS4s cause or may cause or contribute to an excursion above water quality standards for the following pollutants: Indicator Bacteria, Phosphorous, Toxicity and Turbidity. In accordance with CWA section 303(d), the Regional Board is required to establish Total Maximum Daily Loads (TMDLs) for these pollutants to these waters to eliminate impairment and attain water quality standards. Therefore, certain early pollutant control actions and further pollutant impact assessments by the Copermittees are warranted and required pursuant to this Order.
12. This Order incorporates MS4 WLAs developed in TMDLs that have been adopted by the Regional Water Board and have been approved by the State Board, Office of Administrative Law and U.S. EPA. The TMDL WLAs in the Order are addressed using water quality-based numeric effluent limits (WQBELs) calculated at end-of-pipe. Water quality-based effluent limits for storm water discharges have been included within this Order. Non storm water dry weather TMDLs have been included in this order as water quality-based effluent limits. Adopted TMDLs will be addressed as Cleanup and Abatement Orders (CAOs) subject to approval and adoption by the Regional Board. Storm water compliance date(s), schedules and monitoring to assess compliance will be included within each adopted TMDL CAO.

even if said date(s) do not fall within the term of this Order.

13. Basin Plan Prohibition 5 in Attachment A of the Permit states "The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited." Taken together with Finding C.1 and Discharge Prohibition 4, the Copermittes discharge from the MS4 is required to meet receiving water limitations.

F. PUBLIC PROCESS

1. The Regional Board has notified the Copermittes, all known interested parties, and the public of its intent to consider adoption of an Order prescribing waste discharge requirements that would serve to renew an NPDES permit for the existing discharge of ~~urban~~ runoff.
2. The Regional Board has held public hearings on April 11, 2007, ~~and~~ February 13, 2008, ~~and MM DD, 20##~~ and heard and considered all comments pertaining to the terms and conditions of this Order.

IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in Division 7 of the California Water Code (CWC) and regulations adopted thereunder, and the provisions of the Clean Water Act (CWA) and regulations adopted thereunder, must each comply with the following:

A. PROHIBITIONS AND RECEIVING WATER LIMITATIONS

1. Discharges into and from municipal separate storm sewer systems (MS4s) in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance (as defined in CWC section 13050), in waters of the state are prohibited.
2. Storm water ~~Dis~~charges from MS4s containing pollutants which have not been reduced to the maximum extent practicable (MEP) are prohibited.²
3. Discharges from MS4s that cause or contribute to the violation of water quality standards (designated beneficial uses, ~~and~~ water quality objectives developed to protect beneficial uses, and the State policy with respect to maintaining high quality waters) are prohibited.
 - a. Each Copermittee must comply with section A.3 and section A.4 as it applies to Prohibition 5 in Attachment A of this Order through timely implementation of control measures and other actions to reduce pollutants in ~~urban~~-runoff discharges in accordance with ~~the Jurisdictional Urban Runoff Management Program and other requirements of~~ this Order, including any modifications. ~~The Jurisdictional Urban Runoff Management Program must be designed to achieve compliance with section A.3 and section A.4 as it applies to Prohibition 5 in Attachment A of this Order.~~ If exceedance(s) of water quality standards persist notwithstanding implementation of ~~the Jurisdictional Urban Runoff Management Program and other requirements of~~ this Order, the Copermittee must assure compliance with section A.3 and section A.4 as it applies to Prohibition 5 in Attachment A of this Order by complying with the following procedure:
 - (1) Upon a determination by either the Copermittee or the Regional Board that MS4 discharges are causing or contributing to an exceedance of an applicable water quality standard, the Copermittee must ~~promptly~~ notify the Regional Board within 30 days and thereafter submit a report to the Regional Board that describes best management practices (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 water quality standards. The report may be incorporated in the Annual Report update to the Jurisdictional Urban Runoff Management Program

² This prohibition does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer).

unless the Regional Board directs an earlier submittal. The report must include an implementation schedule. The Regional Board may require modifications to the report;

- (2) Submit any modifications to the report required by the Regional Board within 30 days of notification;
 - (3) Within 30 days following approval of the report described above by the Regional Board, the Copermittee must revise its Jurisdictional ~~Urban~~ Runoff Management Program and monitoring program to incorporate the approved modified BMPs that have been and will be implemented, the implementation schedule, and any additional monitoring required; and
 - (4) Implement the revised Jurisdictional ~~Urban~~ Runoff Management Program and monitoring program in accordance with the approved schedule.
- b. ~~So long as the Copermittee has complied with the procedures set forth above and is implementing the revised Jurisdictional Urban Runoff Management Program, the Copermittee does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by the Regional Board to do so. The Copermittee will have to repeat the procedure set forth above to comply with the receiving water limitations for continuing or recurring exceedances of the same water quality standard(s) unless directed to do otherwise by the Regional Board Executive Officer.~~
 - c. Nothing in section A.3 must prevent the Regional Board from enforcing any provision of this Order while the Copermittee prepares and implements the above report.
4. In addition to the above prohibitions, discharges from MS4s are subject to all Basin Plan prohibitions cited in Attachment A to this Order.
 5. Discharges of Waste to State Water Quality Protected Areas (SWQPAs) or Areas of Special Biological Significance (ASBS) are prohibited except where allowable under a State approved Ocean Plan Exception or Special Condition.

B. NON-STORM WATER DISCHARGES

1. Each Copermittee must effectively prohibit all types of non-storm water discharges into its MS4 unless such discharges are either authorized by a separate National Pollutant Discharge Elimination System (NPDES) permit; or not prohibited in accordance with sections B.2 and B.3 below.

2. The following categories of non-storm water discharges are not prohibited unless a Copermittee or the Regional Board identifies the discharge category as a **significant** source of pollutants to waters of the U.S. For such a discharge category, the Copermittee must either prohibit the discharge category or develop and implement appropriate control measures to **prevent reduce** the discharge of pollutants to the **MEP-MS4** and report to the Regional Board pursuant to Section **HK.1** and **HK.3** of this Order.
 - a. Diverted stream flows;
 - b. Rising ground waters;
 - c. Uncontaminated ground water infiltration [as defined at 40 CFR 35.2005(20)] to MS4s;
 - 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 flushing;
 - ~~l. Landscape irrigation;~~
 - m.l.** Discharges from potable water sources not subject to NPDES Permit No. CAG679001, other than water main breaks;
 - ~~n. Irrigation water;~~
 - o.m.** Lawn watering;
 - ~~p.n.~~ Individual residential car washing; **and**
 - o.** Dechlorinated swimming pool discharges; **and**
 - p.** Saline swimming pool discharges directly to a saline water body.
3. Emergency fire fighting flows (i.e., flows necessary for the protection of life or property) do not require BMPs and need not be prohibited. As part of the Jurisdictional **Urban** Runoff Management Plan (JURMP), each Copermittee must develop and implement a program to reduce pollutants from non-emergency fire fighting flows (i.e., flows from controlled or practice blazes and maintenance activities) identified by the Copermittee to be significant sources of pollutants to waters of the United States.
4. Each Copermittee must examine all dry weather **field screening and effluent** analytical monitoring results collected in accordance with section **DF.4** of this Order and Receiving Waters Monitoring and Reporting Program No. R9-200~~89~~-000~~21~~ to identify water quality problems which may be the result of any non-prohibited discharge category(ies) identified above in section B.2. Follow-up investigations must be conducted as necessary to identify and control any non-prohibited discharge category(ies) listed above.

- ~~5. Facilities that Extract, Treat, and Discharge (FETDs). Each Copermittee that extracts water from waters of the U.S., subjects the water to treatment processes, then discharges the treated effluent to waters of the U.S. must implement the following:~~

~~The effluent discharged to waters of the U.S. must not contain pollutants added by the treatment process or pollutants in greater concentration than the influent;~~

~~The discharge must not cause or contribute to a condition of erosion;
Submit verification to the Regional Board of compliance with Clean Water Act Section 404 at least 30 days prior to discharging effluent to waters of the U.S.; and~~

~~Conduct monitoring in accordance with Receiving Waters and Urban Runoff Monitoring and Reporting Program No. R9-2008-0001, Attachment E to this Order.~~

~~Any other requirements specified by the Regional Board pursuant to an individual or general NPDES permit, or waste discharge requirements, for discharges from the facility.~~

- ~~5. Dry weather non-storm water discharges to State Water Quality Protected Areas and Areas of Special Biological Significance (ASBS) are prohibited, except as a result of emergency fire fighting flows or where allowable under a State approved Ocean Plan Exception.~~

C. NON-STORM WATER DRY WEATHER NUMERIC EFFLUENT LIMITS

- ~~1. Section C of this Order incorporates numeric limits to assure non-storm water dry weather discharges from the Orange County MS4 into receiving waters are not causing, threatening to cause or contributing to a condition of pollution or nuisance and to protect designated Beneficial Uses.~~
- ~~2. Each Copermittee, beginning no later than the 3rd year following adoption of this Order, shall begin the non-storm water dry weather numeric effluent monitoring as described in Attachment E of this Order.~~
- ~~3. Each Copermittee shall implement all measures to comply with the numeric limits in Section C of this Order.~~
- ~~4. Monitoring of effluent will occur end-of-pipe prior to discharge into the receiving waters at all Major Outfalls, as defined in 40 CFR 122.26(B5-6) and Attachment E of this Order.~~
- ~~5. Each Copermittee shall monitor for and attain the non-storm water dry weather numeric limits, which are incorporated into this Order as Basin Plan Water Quality~~

Objectives, California Toxic Rule and/or USEPA Criteria as follows:

Table 3. Non-storm Water Dry Weather Numeric Limits

| <u>Constituents</u> | <u>Hydrological Area</u> | <u>BPO/CTR/USEPA</u> |
|--|--------------------------|------------------------|
| <u>Total Dissolved Solids</u> | <u>Group 1*</u> | <u>1000</u> |
| <u>Total Dissolved Solids</u> | <u>Group 2**</u> | <u>500</u> |
| <u>Turbidity (NTU)</u> | <u>Group 1+2</u> | <u>20</u> |
| <u>pH</u> | <u>Group 1+2</u> | <u>Between 6.5-8.5</u> |
| <u>Iron</u> | <u>Group 1+2</u> | <u>0.3 mg/L</u> |
| <u>Dissolved Oxygen WARM</u> | <u>Group 1+2</u> | <u>5.0 mg/L</u> |
| <u>Dissolved Oxygen COLD</u> | <u>Group 1+2</u> | <u>6.0 mg/L</u> |
| <u>Total Phosphorus</u> | <u>Group 1+2</u> | <u>0.1 mg/L</u> |
| <u>Nitrite + Nitrate</u> | <u>Group 1+2</u> | <u>10 mg/L</u> |
| <u>Methylene Blue Active Substances (MBAS)</u> | <u>Group 1+2</u> | <u>0.5 mg/L</u> |
| <u>Arsenic, Dissolved</u> | <u>Group 1+2</u> | <u>0.05 mg/L</u> |
| <u>Cadmium, Dissolved</u> | <u>Group 1+2</u> | <u>0.005 mg/L</u> |
| <u>Chromium, Dissolved</u> | <u>Group 1+2</u> | <u>0.05 mg/L</u> |
| <u>Copper, Dissolved</u> | <u>Group 1+2</u> | <u>0.009 mg/L</u> |
| <u>Lead, Dissolved</u> | <u>Group 1+2</u> | <u>0.0025 mg/L</u> |
| <u>Nickel, Dissolved</u> | <u>Group 1+2</u> | <u>0.1 mg/L</u> |
| <u>Selenium</u> | <u>Group 1+2</u> | <u>0.05 mg/L</u> |
| <u>Zinc, Dissolved</u> | <u>Group 1+2</u> | <u>120 ug/L</u> |
| <u>E. coli Single Sample</u> | <u>Group 1+2</u> | <u>235/100</u> |
| <u>E. coli Geometric Mean</u> | <u>Group 1+2</u> | <u>126/100</u> |
| <u>Fecal Coliform REC 1 Single Sample</u> | <u>Group 1+2</u> | <u>400/100</u> |
| <u>Fecal Coliform REC 1 Geometric Mean</u> | <u>Group 1+2</u> | <u>200/100</u> |
| <u>Fecal Coliform REC 2 Single Sample</u> | <u>Group 1+2</u> | <u>4000/100</u> |
| <u>Fecal Coliform REC 2 Geometric Mean</u> | <u>Group 1+2</u> | <u>2000/100</u> |
| <u>Sulfate</u> | <u>Group 1*</u> | <u>500</u> |
| <u>Sulfate</u> | <u>Group 2**</u> | <u>250</u> |
| <u>Chlorides (Cl)</u> | <u>Group 1*</u> | <u>400</u> |
| <u>Chlorides (Cl)</u> | <u>Group 2**</u> | <u>250</u> |

* Group 1: Laguna Hydrologic Area

**Group 2: Mission Viejo, San Clemente, San Mateo Canyon and San Onofre Hydrologic Areas

D. MUNICIPAL ACTION LEVELS

1. Beginning Year 3 after Order adoption date, a running average of twenty percent or greater of exceedances of any discharge of storm water from the MS4 to waters of the United States that exceed the Municipal Action Levels (MALs) for the pollutants listed in Table 4 (below) will require each Copermittee to affirmatively augment and implement all necessary storm water controls and measures to reduce the discharge

of the associated class of pollutants(s) to the MEP standard. Exceedances after Year 3 of the MAL(s) shall create a presumption that the Copermittee(s) have not complied to the MEP and have failed to implement adequate storm water control measures and BMPs to comply with the MEP requirement.

Table 4. Municipal Action Levels

| <u>Pollutant</u> | <u>Action Level</u> |
|---|---------------------|
| <u>pH</u> | <u>6.0-9.0</u> |
| <u>TSS mg/L</u> | <u>211</u> |
| <u>COD mg/L</u> | <u>120</u> |
| <u>Kjedahl Nitrogen TKN mg/L</u> | <u>3.5</u> |
| <u>Nitrate & Nitrite total mg/L</u> | <u>1.116</u> |
| <u>P total mg/L</u> | <u>.82</u> |
| <u>Cd total µg/L</u> | <u>7.34</u> |
| <u>Cr total µg/L</u> | <u>20.4</u> |
| <u>Cu total µg/L</u> | <u>70.7</u> |
| <u>Pb total µg/L</u> | <u>62.2</u> |
| <u>Ni total µg/L</u> | <u>19.2</u> |
| <u>Zn total µg/L</u> | <u>756</u> |
| <u>Hg total µg/L</u> | <u>1.01</u> |

2. The end-of-pipe assessment points for the determination of MAL compliance are all major outfalls, as defined in 40 CFR 122.26(b)(5) and (b)(6).
3. The absence of MAL exceedances does not give rise to a presumption that the Copermittee(s) is in compliance with MEP criteria.

E. LEGAL AUTHORITY

1. Each Copermittee must establish, maintain, and enforce adequate legal authority to control pollutant discharges into and from its MS4 through ordinance, statute, permit, contract or similar means. This legal authority must, at a minimum, authorize the Copermittee to:
 - a. Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites. 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 which do not. Grading ordinances must be updated and enforced as necessary to comply with this Order;
 - b. Prohibit all identified illicit discharges not otherwise allowed pursuant to section B.2 ~~including but not limited to:~~

Sewage;

~~Discharges of wash water resulting from the hosing or cleaning of gas stations, auto repair garages, or other types of automotive services facilities;~~

~~Discharges resulting from the cleaning, repair, or maintenance of any type of equipment, machinery, or facility including motor vehicles, cement-related equipment, and port-a-potty servicing, etc.;~~

~~Discharges of wash water from mobile operations such as mobile automobile washing, steam cleaning, power washing, and carpet cleaning, etc.;~~

~~Discharges of wash water from the cleaning or hosing of impervious surfaces in municipal, industrial, commercial, and residential areas including parking lots, streets, sidewalks, driveways, patios, plazas, work yards and outdoor eating or drinking areas, etc.;~~

~~Discharges of runoff from material storage areas containing chemicals, fuels, grease, oil, or other hazardous materials;~~

~~Discharges of pool or fountain water containing chlorine, biocides, toxic amounts of salt, or other chemicals; discharges of pool or fountain filter backwash water;~~

~~Discharges of sediment, pet waste, vegetation clippings, or other landscape or construction-related wastes; and~~

- c.** Prohibit and eliminate illicit connections to the MS4;
- d.** Control the discharge of spills, dumping, or disposal of materials other than storm water to its MS4;
- e.** Require compliance with conditions in Copermittee ordinances, permits, contracts or orders (i.e., hold dischargers to its MS4 accountable for their contributions of pollutants and flows);
- f.** Utilize enforcement mechanisms to require compliance with Copermittee storm water ordinances, permits, contracts, or orders;
- g.** Control the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements among Copermittees. Control of the contribution of pollutants from one portion of the shared MS4 to another portion of the MS4 through interagency agreements with other owners of the MS4 such as Caltrans, the Department of Defense, or Native American Tribes is encouraged;
- h.** Carry out all inspections, surveillance, and monitoring necessary to determine compliance and noncompliance with local ordinances and permits and with this Order, including the prohibition on illicit discharges to the MS4. This means the Copermittee must have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities discharging into its MS4, including construction sites;

- i. Require the use of BMPs to prevent or reduce the discharge of pollutants into MS4s from storm water to the MEP; and
 - j. Require documentation on the effectiveness of BMPs implemented to reduce the discharge of storm water pollutants to the MS4 to the MEP.
2. Each Copermittee must ~~include as part of its JURMP~~ submit within 365 days of adoption of this Order, a statement certified by its chief legal counsel that the Copermittee has taken the necessary steps to obtain and maintain full legal authority to implement and enforce each of the requirements contained in 40 CFR 122.26(d)(2)(i)(A-F) and this Order. This statement must include:
- a. Identification of all departments within the jurisdiction that conduct ~~urban~~ runoff related activities, and their roles and responsibilities under this Order. Include an up to date organizational chart specifying these departments and key personnel.
 - b. Citation of ~~urban~~ runoff related ordinances and the reasons they are enforceable;
 - c. Identification of the local administrative and legal procedures available to mandate compliance with ~~urban~~ runoff related ordinances and therefore with the conditions of this Order;
 - d. A description of how ~~urban~~ runoff related ordinances are implemented and appealed; and
 - e. Description of whether the municipality can issue administrative orders and injunctions or if it must go through the court system for enforcement actions.

F. JURISDICTIONAL ~~URBAN~~ RUNOFF MANAGEMENT PROGRAM (JURMP)

Each Copermittee must implement all requirements of section ~~D-F~~ of this Order no later than 365 days after adoption of the Order, unless otherwise specified in this Order. Prior to 365 days after adoption of the Order, each Copermittee must at a minimum implement its Jurisdictional ~~UR~~MP document, as the document was developed and amended to comply with the requirements of Order No. R9-2002-01.

Each Copermittee must develop and implement an updated ~~Jurisdictional Urban Runoff Management Program (JURMP)~~ for its jurisdiction. Each updated JURMP must meet the requirements of section ~~D-F~~ of this Order, reduce the discharge of storm water pollutants from the MS4 to the MEP, and prevent ~~urban~~ runoff discharges from the MS4 from causing or contributing to a violation of water quality standards.

1. DEVELOPMENT PLANNING COMPONENT

Each Copermittee must implement a program which meets the requirements of this section and (1) reduces Development Project discharges of storm water pollutants from the MS4 to the MEP, (2) prevents Development Project discharges from the MS4 from causing or contributing to a violation of water quality standards, (3) prevents illicit discharges into the MS4; and (4) manages increases in runoff discharge rates and durations from Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force.

a. GENERAL PLAN

Each Copermittee must revise as needed its General Plan or equivalent plan (e.g., Comprehensive, Master, or Community Plan) for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for all development and redevelopment projects.

b. ENVIRONMENTAL REVIEW PROCESS

Each Copermittee must revise as needed its current environmental review processes to accurately evaluate water quality impacts and cumulative impacts and identify appropriate measures to avoid, minimize and mitigate those impacts for all Development Projects.

c. APPROVAL PROCESS CRITERIA AND REQUIREMENTS FOR ALL DEVELOPMENT PROJECTS

For all proposed Development Projects, each Copermittee during the planning process, and prior to project approval and issuance of local permits, must prescribe the necessary requirements so that Development Project discharges of storm water pollutants from the MS4 will be reduced to the MEP, will not cause or contribute to a violation of water quality standards, and will comply with Copermittee's ordinances, permits, plans, and requirements, and with this Order.

Performance Criteria: Discharges from each approved development project must be subject to the following management measures: The requirements must include, but not be limited to, implementation by the project proponent or municipality of the following:

- (1) Source control BMPs that reduce storm water pollutants of concern in urban runoff, including prevention of illicit discharges into the MS4; minimization of preventing irrigation runoff; storm drain system stenciling or signage;

properly designed outdoor material storage areas; properly designed outdoor work areas; and properly designed trash storage areas;

- (2) ~~Site design BMPs where feasible which maximize infiltration, provide retention, slow runoff, minimize impervious footprint, direct runoff from impervious areas into landscaping, and construct impervious surfaces to minimum widths necessary. The following LID BMPs listed below shall be implemented at all Development Projects where applicable and feasible.~~
 - (a) Conserve natural areas, including existing trees, other vegetation, and soils.
 - (b) Construct streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided that public safety is not compromised and in accordance with section D.1.d.(4)(a)vi.
 - (c) Minimize the impervious footprint of the project.
 - (d) Minimize soil compaction to landscaped areas.
 - (e) Minimize disturbances to natural drainages (e.g., natural swales, topographic depressions, etc.)
 - (f) Disconnect impervious surfaces through distributed pervious areas.
- (3) Buffer zones for natural water bodies, where feasible. Where buffer zones are infeasible, require project proponent to implement other buffers such as trees, access restrictions, etc;
- (4) Measures necessary so that grading or other construction activities meet the provisions specified in section D.2 of this Order; and
- (5) Submittal of proof of a mechanism under which ongoing long-term maintenance of all structural post-construction BMPs will be conducted.
- (6) Infiltration and Groundwater Protection

To protect groundwater quality, each Copermitee must apply restrictions to the use of treatment control BMPs that are designed to primarily function as centralized infiltration devices (such as large infiltration trenches and infiltration basins). Such restrictions must be designed so that the use of such infiltration treatment control BMPs must not cause or contribute to an exceedance of groundwater quality objectives. At a minimum, each treatment control BMP designed to primarily function as a centralized infiltration device must meet the restrictions below, unless it is demonstrated that a restriction is not necessary to protect groundwater quality. The Copermitees may collectively or individually develop alternative restrictions on the use of treatment control BMPs which are designed to primarily function as centralized infiltration devices. Alternative restrictions developed by the Copermitees can partially or wholly replace the restrictions listed below. The restrictions are not intended to be applied to small infiltration systems

dispersed throughout a development project.

- (a) ~~Urban-R~~ runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;
 - (b) All dry weather flows containing significant pollutant loads must be diverted from infiltration devices;
 - (c) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;
 - (d) Infiltration treatment control BMPs must be adequately maintained so that they remove storm water pollutants to the MEP;
 - (e) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;
 - (f) The soil through which infiltration is to occur must have physical and chemical characteristics (such as appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of ~~urban~~ runoff for the protection of groundwater beneficial uses;
 - (g) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity; areas subject to high vehicular traffic (25,000 or greater average daily traffic on main roadway or 15,000 or more average daily traffic on any intersecting roadway); automotive repair shops; car washes; fleet storage areas (bus, truck, etc.); nurseries;³ and other high threat to water quality land uses and activities as designated by each Copermitttee; and
 - (h) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.
- (7) Where feasible, landscaping with native or low water species shall be preferred in areas that drain to the MS4 or to waters of the United States.

d. STANDARD ~~URBAN~~ STORM WATER MITIGATION PLANS (SUSMPs) – APPROVAL PROCESS CRITERIA AND REQUIREMENTS FOR PRIORITY DEVELOPMENT PROJECTS

³ Except with regard to treated nursery runoff or clean storm water runoff.

Each Copermittee must implement an updated local SUSMP, within twelve months of adoption of this Order, which meets the requirements of section D.1.d of this Order and (1) reduces Priority Development Project discharges of storm water pollutants from the MS4 to the MEP, (2) prevents Priority Development Project runoff discharges from the MS4 from causing or contributing to a violation of water quality standards, ~~and~~ (3) manages increases in runoff discharge rates and durations from Priority Development Projects that are likely to cause increased erosion of stream beds and banks, silt pollutant generation, or other impacts to beneficial uses and stream habitat due to increased erosive force and (4) implements the hydromodification requirements in section F.1.h.⁴

(1) Definition of Priority Development Project

Priority Development Projects are:

- (a) All new Development Projects that fall under the project categories or locations listed in section ~~DE~~.1.d.(2), and
- (b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site and the existing development and/or the redevelopment project falls under the project categories or locations listed in section ~~DE~~.1.d.(2). Where 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 SUSMP requirements, the numeric sizing criteria discussed in section ~~DE~~.1.d.(6) applies only to the addition or replacement, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development, the numeric sizing criteria applies to the entire development.
- (c) One acre threshold: In addition to the Priority Development Project Categories identified in section ~~DE~~.1.d.(2), Priority Development Projects must also include all other pollutant-generating Development Projects that

⁴ Updated SUSMP and hydromodification requirements must apply to all priority projects or phases of priority projects which have not yet begun grading or construction activities at the time any updated SUSMP or hydromodification requirement commences. If lawful prior approval of a project exists, whereby application of an updated SUSMP or hydromodification requirement to the project is illegal, the updated SUSMP or hydromodification requirement need not apply to the project. Updated Development Planning requirements set forth in Sections D.1. (a) through (h) of this Order must apply to all projects or phases of projects, unless, at the time any updated Development Planning requirement commences, the projects or project phases meet any one of the following conditions: (i) the project or phase has begun grading or construction activities; or (ii) a Permittee determines that lawful prior approval rights for a project or project phase exist, whereby application of the Updated Development Planning requirement to the project is legally infeasible. Where feasible, the Permittees must utilize the SUSMP and hydromodification update periods to ensure that projects undergoing approval processes include application of the updated SUSMP and hydromodification requirements in their plans.

result in the disturbance of one acre or more of land within three years of adoption of this Order.⁵ As an alternative to this one-acre threshold, the Copermitees may collectively identify a different threshold, provided the Copermitees' threshold is at least as inclusive of Development Projects as the one-acre threshold.

(2) Priority Development Project Categories

Where a new Development Project feature, such as a parking lot, falls into a Priority Development Project Category, the entire project footprint is subject to SUSMP requirements.

- (a) Housing subdivisions of 10 or more dwelling units. This category includes single-family homes, multi-family homes, condominiums, and apartments.
- (b) Commercial developments greater than one acre. This category is defined as any development on private land that is not for heavy industrial or residential uses where the land area for development is greater than one acre. The category includes, but is not limited to: hospitals; laboratories and other medical facilities; educational institutions; recreational facilities; municipal facilities; commercial nurseries; multi-apartment buildings; car wash facilities; mini-malls and other business complexes; shopping malls; hotels; office buildings; public warehouses; automotive dealerships; airfields; and other light industrial facilities.
- (c) Developments of heavy industry greater than one acre. This category includes, but is not limited to, manufacturing plants, food processing plants, metal working facilities, printing plants, and fleet storage areas (bus, truck, etc.).
- (d) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
- (e) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet. Restaurants where land development is less than 5,000 square feet must meet all SUSMP requirements except for structural treatment BMP and numeric sizing criteria requirement DE.1.d.(6) and hydromodification requirement DE.1.h.

⁵ Pollutant generating Development Projects are those projects that generate pollutants at levels greater than natural background levels.

- (f) All hillside development greater than 5,000 square feet. This category is defined as any development which creates 5,000 square feet of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
- (g) Environmentally Sensitive Areas (ESAs). All development located within or directly adjacent to or discharging directly to an ESA (where discharges from the development or redevelopment will enter receiving waters within the ESA), which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that is composed entirely of flows from the subject development or redevelopment site, and not commingled with flows from adjacent lands.
- (h) Parking lots 5,000 square feet or more or with 15 or more parking spaces and potentially exposed to ~~urban~~ runoff. Parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.
- (i) Street, roads, highways, and freeways. This category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
- (j) Retail Gasoline Outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.

(3) Pollutants of Concern

As part of its local ~~S~~USMP, each Copermittee must implement an updated procedure for identifying pollutants of concern for each Priority Development Project. The procedure must address, at a minimum: (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; and (3) Pollutants expected to be present on site.

(4) Low Impact Development Site Design BMP Requirements

~~(a) Each Copermittee must require each Priority Development Project to implement site design BMPs which will collectively minimize directly connected impervious areas, limit loss of existing infiltration capacity, and~~

~~protect areas that provide important water quality benefits necessary to maintain riparian and aquatic biota, and/or are particularly susceptible to erosion and sediment loss.~~

~~(a) Each Copermittee must require each Priority Development Project to implement LID BMPs which will collectively minimize directly connected impervious areas, limit loss of existing infiltration capacity, and protect areas that provide important water quality benefits necessary to maintain riparian and aquatic biota, and/or are particularly susceptible to erosion and sediment loss.~~

(a) ~~(b) The following site design BMPs must be implemented at all Priority Development Projects as required below. The following LID sustainability measures must be implemented:~~

(i) ~~Maintain or restore natural storage reservoirs and drainage corridors (including depressions, areas of permeable soils, swales, and ephemeral and intermittent streams) in drainage networks in preference to pipes, culverts, and engineered ditches. Each Copermittee must require LID storm water practices or make a finding of infeasibility for each Priority Development Project.~~

(ii) ~~For Priority Development Projects with landscaped or other pervious areas, properly design and construct the pervious areas to effectively receive and infiltrate or treat storm water runoff to the MEP from impervious areas prior to discharge to the MS4. The amount of the impervious areas that are to drain to pervious areas must be based upon the total size, soil conditions, slopes, and other pertinent factors of the project. Each Copermittee must incorporate formalized consideration, such as thorough checklists, ordinances, and/or other means, of LID storm water practices into the plan review process for Priority Development Projects.~~

(iii) ~~For Priority Development Projects with low traffic areas and appropriate soil conditions, construct to the MEP walkways, trails, overflow parking lots, alleys, or other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials. The review of each Priority Development Project must include an assessment of potential collection of storm water for beneficial use on-site or off-site prior to discharging from the MS4.~~

(iv) ~~The review of each Priority Development Project must include an assessment of techniques to infiltrate, filter, store, evaporate, or detain runoff close to the source of runoff;~~

(v) ~~The review of each Priority Development Project must include an~~

assessment of alternatives to conventional storm water conveyance and management systems; and

- (vi) Within 365 days after adoption of this Order, each Copermittee must review its local codes and ordinances and identify barriers therein to implementation of LID storm water practices. Following the identification of these barriers to LID implementation, where feasible the Copermittee must take appropriate actions to remove barriers directly under Copermittee control by the end of the permit cycle.
- (b) ~~(c) The following site design BMPs listed below must be implemented at all Priority Development Projects where applicable and feasible. Each must require each Priority Development Project to demonstrate applicability and feasibility, or lack thereof, for each site design BMP listed below. The following LID BMPs must be implemented at all Priority Development Projects as required below:~~
- (i) Minimize disturbances to natural drainages (e.g., creeks, natural swales, topographic depressions, etc.); Maintain or restore natural storage reservoirs and drainage corridors (including depressions, areas of permeable soils, swales, and ephemeral and intermittent streams) in drainage networks in preference to pipes, culverts, and engineered ditches.
 - (ii) Conserve natural areas, including existing vegetation and soils; Projects with landscaped or other pervious areas shall drain a portion of impervious areas (rooftops, parking lots, sidewalks, walkways, patios, etc) into pervious areas prior to discharge to the MS4. The amount of runoff from impervious areas that is to drain to pervious areas shall correspond with the total capacity of the project's pervious areas to infiltrate or treat runoff, taking into consideration the pervious areas' soil conditions, slope, and other pertinent factors.
 - (iii) Protect slopes and channels; Projects with landscaped or other pervious areas shall properly design and construct the pervious areas to effectively receive and infiltrate or treat runoff from impervious areas, prior to discharge to the MS4. Soil compaction for these areas shall be minimized. The amount of the impervious areas that are to drain to pervious areas must be based upon the total size, soil conditions, slope, and other pertinent factors.
 - (iv) Minimize soil compaction of permeable soils; Projects with low traffic areas and appropriate soil conditions shall construct walkways, trails, overflow parking lots, alleys, or other low-traffic areas with permeable surfaces, such as pervious concrete, porous asphalt, unit pavers, and granular materials.
- ~~(v) Construct streets to the minimum widths necessary based on~~

- ~~anticipated usage and public safety;~~
- ~~(vi) Design parking lots to reduce the impervious land coverage of parking areas and to filter runoff before it reaches the storm drain system;~~
- ~~(vii) Minimize the impervious footprint of the project;~~
- ~~(viii) Disconnect impervious surfaces through distributed pervious areas;~~
- ~~(ix) Provide pervious areas for parking and walking; and~~
- ~~(x) Design the layout of buildings to reduce street length and preserve open space.~~

(5) Source Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement source control BMPs. The source control BMPs to be required must:

- (a) Prevent illicit discharges into the MS4;
- (b) Minimize storm water pollutants of concern in ~~urban~~ runoff;
- (c) ~~Minimize~~ Eliminate irrigation runoff;
- (d) Include storm drain system stenciling or signage;
- (e) Include properly designed outdoor material storage areas;
- (f) Include properly designed outdoor work areas;
- (g) Include properly designed trash storage areas; ~~and~~
- (h) Include water quality requirements applicable to individual priority project categories; and
- (i) Implement the hydromodification requirements in section F.1.h.

(6) Treatment Control BMP Requirements⁶

Each Copermittee must require each Priority Development Project to implement treatment control BMPs that meet the following requirements:

- (a) All treatment control BMPs for a single Priority Development Project must collectively be sized to comply with the following numeric sizing criteria:
 - (i) Volume-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) the volume of runoff produced from a 24-hour 85th percentile storm event, as determined from the County of Orange's 85th Percentile Precipitation Isopluvial Map⁷; or

⁶ Low-Impact Development (LID) and other site design BMPs that are correctly designed to effectively remove pollutants from runoff can be considered treatment control BMPs.

⁷ The isopluvial map is available from the County of Orange. The map can also be found as Figure A-1 Exhibit 7.II in the Model WQMP (September 2003), page 105 of 157 at http://www.ocwatersheds.com/StormWater/PDFs/2003_DAMP/2003_DAMP_Section_7_New_Development_Significant_Redevelopment.pdf.

- (ii) Flow-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) either: a) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or b) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.
- (b) Treatment control BMPs for all Priority Development Projects must mitigate (treat through infiltration, settling, filtration or other unit processes) the required volume or flow of runoff from all developed portions of the project, including landscaped areas.
- (c) All treatment control BMPs must be located so as to remove pollutants from runoff prior to its discharge to any waters of the U.S. Multiple Priority Development Projects may use shared treatment control BMPs as long as construction of any shared treatment control BMP is completed prior to the use or occupation of any Priority Development Project from which the treatment control BMP will receive runoff.
- (d) All treatment control BMPs for Priority Development Projects must, at a minimum:
 - (i) Be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern, as the pollutant removal efficiencies are identified in the Copermittees' Model SUSMP or in the Copermittees' local SUSMPs as they are updated. Treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.
 - (ii) Be correctly sized and designed so as to remove storm water pollutants to the MEP.
- (e) Target removal of pollutants of concern from ~~urban~~-runoff.
- (f) Be implemented close to pollutant sources ~~(where shared BMPs are not proposed)~~, and prior to discharging into waters of the U.S.
- (g) Not be constructed within a waters of the U.S. or waters of the State.
- (h) Include proof of a mechanism under which ongoing long-term

maintenance will be conducted to ensure storm water pollutants are reduced to the MEP for the life of the project. The mechanisms may be provided by the project proponent or Copermittee.

- (i) Be designed and implemented with measures to avoid the creation of nuisance or pollution associated with vectors, such as mosquitoes, rodents, and flies.
- (j) Be implemented in accordance with the hydromodification requirements in section F.1.h.

(7) Waiver Provision for Numeric Sizing of Treatment Control BMP Requirements

(a) A Copermittee may provide for a project to be waived from the requirement of implementing treatment BMPs with numeric sizing criteria (*section ~~DF~~.1.d.(6)*) if infeasibility can be established. A waiver of infeasibility must only be granted by a Copermittee when all available treatment BMPs have been considered and rejected as infeasible under the numeric sizing criteria. Copermittees must notify the Regional Board within five days of each waiver issued and must include the following information in the notification:

- (i) Name of the person granting each waiver;
- (ii) Name of developer receiving the waiver;
- (iii) Site location;
- (iv) Reason for waiver; and
- (v) Description of BMPs required.

(b) The Copermittees may collectively or individually develop a program to require project proponents who have received waivers to transfer the savings in cost, as determined by the Copermittee(s), to a storm water mitigation fund. This program may be implemented by all Copermittees that issue waivers. Funds may be used on projects to improve urban runoff quality within the watershed of the waived project. The waiver mitigation program should, at a minimum, identify:

- (i) The entity or entities that will manage the storm water mitigation fund (i.e., assume full responsibility for);
- (ii) The range and types of acceptable projects for which mitigation funds may be expended;
- (iii) The entity or entities that will assume full responsibility for each mitigation project including its successful completion; and
- (iv) How the dollar amount of fund contributions will be determined.

(8) Low Impact Development (LID) Site Design BMP Substitution Program

The Copermittees may develop a LID site design BMP substitution program for incorporation into local S~~U~~SMPs, which would allow a Priority Development Project to substitute implementation of a high level of site design BMPs for implementation of some or all treatment control BMPs. At a minimum, the program must meet the requirements below:

- (a) Prior to implementation, the program must clearly exhibit that it will achieve equal or better runoff quality from each Priority Development Project which participates in the program;
- (b) For each Priority Development Project participating, the program must require all applicable source control BMPs listed in section ~~DE~~.1.d.(5) to be implemented;
- (c) For each Priority Development Project participating, the program must require that runoff originating from exposed impervious parking areas, work areas, storage areas, staging areas, trash areas, and other similar areas where pollutants are generated and/or collected, must be routed through pervious areas prior to entering the MS4;
- (d) For each Priority Development Project participating, the program must require that all Low Impact Development site design BMPs listed in section ~~DE~~.1.d.(4) be implemented;
- (e) The program must only apply to Priority Development Projects and Priority Development Project categories with a relatively low potential to generate high levels of pollutants. The program must not apply to automotive repair shops or streets, roads, highways, or freeways that have high levels of average daily traffic;
- (f) The program must develop and utilize specific design criteria for each site design BMP to be utilized by the program;
- (g) The program must include mechanisms to verify that each Priority Development Project participating in the program is in compliance with all applicable S~~U~~SMP requirements; and
- (h) The program must develop and implement a review process which verifies that each LID site design BMP to be implemented meets the designated design criteria. The review process must also verify that each Priority Development Project participating in the program is in compliance with all applicable S~~U~~SMP requirements.

(9) Site Design and Treatment Control BMP Design Standards

As part of its local SUSMP, each Copermittee must develop and require Priority Development Projects to implement siting, design, and maintenance criteria for each site design and treatment control BMP listed in its local SUSMP to determine feasibility and applicability and so that implemented site design and treatment control BMPs are constructed correctly and are effective at pollutant removal, runoff control, and vector minimization. LID techniques, such as soil amendments, must be incorporated into the criteria for appropriate treatment control BMPs. Development of BMP design worksheets which can be used by project proponents is encouraged.

(10) Implementation Process

As part of its local SUSMP, each Copermittee must implement a process to verify compliance with SUSMP requirements. The process must identify at what point in the planning process Priority Development Projects will be required to meet SUSMP requirements. The process must also include identification of the roles and responsibilities of various municipal departments in implementing the SUSMP requirements, as well as any other measures necessary for the implementation of SUSMP requirements.

(11) Treatment BMP Review

- (a) The Copermittees must review and update the BMPs that are listed in their local SUSMPs as options for treatment control during the third year of implementation of this Order. At a minimum, the update must include removal of obsolete or ineffective BMPs and addition of LID BMPs that can be used for treatment, such as bioretention cells, bioretention swales, etc. The update must also add appropriate LID BMPs to any tables or discussions in the local SUSMPs addressing pollutant removal efficiencies of treatment control BMPs. In addition, the update must include review and revision where necessary of treatment control BMP pollutant removal efficiencies.
- (b) The update must incorporate findings from BMP effectiveness studies conducted by the Copermittees for projects funded wholly or in part by the State Board or Regional Board.
- (c) Each Copermittee must implement a mechanism for annually incorporating findings from local treatment BMP effectiveness studies (e.g., ones conducted by, or on-behalf of, public agencies in Orange County) into SUSMP project reviews and permitting.

e. BMP CONSTRUCTION VERIFICATION

Prior to occupancy of each Priority Development Project subject to SUSMP requirements, each Copermittee must inspect the constructed site design, source control, and treatment control BMPs to verify that they have been constructed in compliance with all specifications, plans, permits, ordinances, and this Order.

f. TREATMENT CONTROL BMP MAINTENANCE TRACKING

- (1) Each Copermittee must maintain a watershed-based database to track and inventory approved treatment control BMPs and treatment control BMP maintenance within its jurisdiction. At a minimum, the database must include information on treatment control BMP type, location, watershed, date of construction, party responsible for maintenance, maintenance certifications or verifications, inspections, inspection findings, and corrective actions, including whether the site was referred to the Vector Control District.
- (2) Each Copermittee must verify that approved treatment control BMPs are operating effectively and have been adequately maintained by implementing the following measures:
 - (a) An annual inventory of all approved treatment control BMPs within the Copermittee's jurisdiction. The inventory must also include all treatment control BMPs approved for Priority Development Projects since July 2001;
 - (b) The designation of high priority treatment control BMPs. High-priority designation must include consideration of treatment control BMP size, recommended maintenance frequency, likelihood of operational and maintenance issues, location, receiving water quality, and other pertinent factors;
 - (c) Verify implementation, operation, and maintenance of treatment BMPs by inspection, self-certification, surveys, or other equally effective approaches with the following conditions:
 - (i) The implementation, operation, and maintenance of at least 90 percent of approved final project public and private SUSMPs (a.k.a. WQMPs) must be verified annually;
 - (ii) Operation and maintenance verifications must be required prior to each rainy season;
 - (iii) All (100 percent) projects with treatment control BMPs that are high priority must be inspected annually prior to each rainy season;
 - (iv) All (100 percent) public agency projects with treatment control BMPs must be inspected annually;

- (v) At least 25 percent of projects with drainage insert treatment control BMPs must be inspected annually;
- (vi) At least 20 percent of the total number of projects with approved treatment control BMPs must be inspected annually;
- (vii) Appropriate follow-up measures (including re-inspections, enforcement, maintenance, etc.) must be conducted to ensure the treatment BMPs continue to reduce storm water pollutants to the MEP;
- (viii) All inspections must verify effective operation and maintenance of the treatment control BMPs, as well as compliance with all ordinances, permits, and this Order; and
- (ix) Inspections must note observations of vector conditions, such as mosquitoes. Where conditions are identified as contributing to mosquito production, the Copermittee must notify the Orange County Vector Control District.

g. ENFORCEMENT OF DEVELOPMENT SITES

Each Copermittee must enforce its storm water ordinance for all Development Projects and at all development sites as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms must include appropriate sanctions to achieve compliance. Sanctions must include the following or their equivalent: Non-monetary penalties, fines, bonding requirements, and/or permit or occupancy denials for non-compliance.

h. REQUIREMENTS FOR HYDROMODIFICATION AND DOWNSTREAM 7

Each Copermittee must ensure its local SUSMP/WQMP includes effective hydromodification requirements for Priority Development Projects so that local hydrologic conditions of concern are identified and addressed. Site-specific hydromodification management measures must be required to protect downstream beneficial uses and prevent physical changes to downstream stream channels that would adversely affect the physical structure, biologic condition, and water quality of streams.

As part of its local SUSMP, each Copermittee must develop and apply requirements to Priority Development Projects so that runoff discharge rates, durations, and velocities from Priority Development Projects are controlled to maintain or reduce downstream erosion conditions and protect stream habitat. During SUSMP reviews, each Copermittee must consider the downstream channel conditions and the proposed changes in duration of time that erosive flows would occur, as described in the following sections.

(1) Assessment of Downstream Erosion

Each Copermittee must require evaluation of the adjacent and downstream conditions of receiving waters (i.e., waters of the U.S. and State) when evaluating Priority Development Projects. Factors to evaluate must include the designated beneficial uses of the receiving waters, type of channel receiving discharges, the stage of channel adjustment/alteration, channel slope, composition of bed and bank materials, underlying geology, watershed position (e.g., stream order and location), and connections between the streams and adjacent floodplains.

(2) Assessment of Discharge Hydrology

Each Copermittee must require evaluation of the proposed post-construction hydrology and hydraulics of Priority Development Projects in order to assess effects on adjacent and downstream conditions of receiving waters (i.e., waters of the U.S. and State). Factors to evaluate must include the local natural flow regime and the proposed flow regime of discharges from the MS4. Evaluation of factors for proposed discharges must include proposed changes in the discharge volumes, frequency of erosive discharges, duration of erosive discharges, and patterns of flow variability.

(3) Implement Hydromodification Management Strategy

Each Copermittee must implement, or require implementation of, a suite of management measures within each Priority Development Project to protect downstream beneficial uses and prevent adverse physical changes to downstream stream channels.

- (a) The measures must be based on the assessments of downstream channel conditions and proposed discharge hydrology.
- (b) The management measures must be based on a sequenced consideration of site design measures, on-site management controls, and then in-stream controls.
 - (i) Site design measures for hydromodification must be implemented on all Priority Development Projects.
 - (ii) Preference must be given to on-site controls over in-stream controls in situations where beneficial uses within the channels have not been adversely affected by hydromodification.
 - (iii) Implementation of in-stream controls must not adversely affect beneficial uses or result in sustained degradation of water quality of

waters of the U.S./State.

(c) On-site hydromodification control waivers: Copermittees may develop a strategy for waiving hydromodification requirements for on-site controls (not site design BMPs) in situations where assessments of downstream channel conditions and proposed discharge hydrology clearly indicate that adverse hydromodification effects to present and future beneficial uses are unlikely. The waivers must be based on the following determinations:

(i) Lack of discharge-caused hydrology changes: Waivers may be implemented where the total impervious cover on a site is increased up to 5 percent of the project area in new developments and decreased by at least 10 percent in redevelopments. These numeric criteria may be revised to be consistent with findings from reports from the Storm Water Monitoring Coalition, Southern California Coastal Waters Research Program, and other local studies. Alternatively, directly-connected impervious area or effective impervious cover may be used as an indicator, provided that numeric criteria for the indicators are used and are based on hydromodification studies conducted in southern California.

~~(ii) Degraded stream channel condition: Conditional waivers may be implemented in situations where receiving waters are severely degraded (highly unstable due to irrevocable changes to its form); concrete-lined or significantly hardened (e.g., with rip-rap, sackcrete, etc.) downstream to their outfall in bays or the ocean; or the project would discharge into underground storm drains discharging directly to bays or the ocean.~~

~~(a) Dry weather discharges: All conditional waivers must include site design and on-site control measures for dry weather discharges.~~

~~(b) Modified channel conditions: Conditional waivers in situations where receiving waters are severely degraded or significantly hardened must include requirements for in-stream measures designed to improve the beneficial uses adversely affected by hydromodification. The measures must be implemented within the same watershed as the Priority Development Project.~~

~~(4) Develop and Implement Hydromodification Management Plan-Develop and Implement Specific Hydromodification Criteria~~

~~Within three years of adoption of this Order, each Copermittee must revise its SUSMP/WQMP (see Section D.1.d) to implement updated hydromodification criteria for all Priority Development Projects. Criteria must~~

~~be based upon findings from local and regional hydromodification studies with explicit consideration for any descriptive or numeric criteria applicable to the San Juan Hydrologic Unit described therein. As part of this update, numeric criteria may also be developed for on-site hydromodification control waivers to supercede numeric criteria in D.1.h.3.c.~~

Each Copermitttee must revise its SSMP/WQMP to implement a watershed specific Hydromodification Management Plan (HMP) to include specific criteria for minimizing and mitigating hydrologic modification at all development and redevelopment projects. Criteria must be based on findings from local and regional hydromodification studies with explicit consideration for any descriptive or numeric criteria applicable to the San Juan Hydrologic Unit described therein. The HMP shall identify:

- (a) Stream classifications;
- (b) Flow rate and duration control methods;
- (c) Sub-watershed mitigation strategies; and
- (d) Stream restoration measures which will maintain the stream and tributary Erosion Potential at 1 unless an alternative value can be shown to be protective of the natural drainage systems from erosion, incision, and sedimentation that can occur as a result of flow increases from impervious surfaces.
- (e) Areas where historic hydromodification has resulted in a negative impact to benthic macroinvertebrate and benthic periphyton scores of ecological health, in comparison to other chemical, biological, and toxicological data.

In addition, the HMP shall include:

- (f) Hydromodification Management Standards;
- (g) Natural Drainage Areas and Hydromodification Management Areas;
- (h) Implementation requirements for all PDPs; ;
- (i) Description of authorized Hydromodification Management BMPs;
- (j) Hydromodification Management BMP Design Criteria;
- (k) For flow duration control methods, the range of flows to control for, and goodness of fit criteria;
- (l) Allowable low critical flow, Q_c , which initiates sediment transport;
- (m) Description of the approved Hydromodification Model;
- (n) Stream restoration measures design criteria;
- (o) Measures to improve Index of Biotic Integrity scores in areas identified per section F.1.h(4)(e) above; and
- (p) Monitoring and Effectiveness Assessment; and Record keeping.

(5) HMP Implementation

- (a) Within 2 years of adoption of the Order, the Copermitttees shall submit to

the Regional Board a draft HMP that has been reviewed by the public, including the analysis that identifies the appropriate limiting range of flow rates.

- (b) Within 180 days of receiving Regional Board comments on the draft HMP, the Copermittees shall submit a final HMP that addressed the Regional Board comments.
- (c) Within 90 days of Regional Board approval of the final HMP, each Copermittee shall incorporate and implement the HMP for all Priority Development Projects.
- (d) Prior to approval of the HMP by the Regional Board, the early implementation of measures likely to be included in the HMP shall be encouraged by the Copermittees in addition to the interim requirements in section D.1.h.(6).

(6) ~~(5)~~ Interim Requirements for Large Projects

(a) Within one year of adoption of this Order, each municipality must ensure that all PDPs projects disturbing 20 acres or more include and implement the following management measures.

- (i) Disconnect impervious areas by reducing the percentage of Effective Impervious Area (EIA) to less than five percent of total project area; also disconnect impervious area from receiving waters using on-site or off-site storm water reuse, evapotranspiration, and/or infiltration for small precipitation events, based on limitations imposed by soil conditions, groundwater contamination potential and considerations for the use of amendments to improve soil conditions;
~~Disconnect impervious areas from receiving waters using on-site or off-site storm water reuse, evapotranspiration, and/or infiltration for small precipitation events, based on limitations imposed by soil conditions, groundwater contamination potential, and considerations for the use of amendments to improve soil conditions;~~

(ii) Where stream channels are adjacent to, or are to be modified as part of, the development, establish buffer zones and setbacks for channel movement. Where in-stream controls are necessary, use geomorphically-referenced channel design techniques.

(iii) Control runoff through hydrograph matching for a range of return periods from 1 year to 10 years. Interim criteria for hydrograph matching must demonstrate that the pattern of storm water discharges over time (hydrograph) during evaluated storm events in the post-construction environment will closely mimic that which occurs in the pre-construction condition; or

Control runoff by matching the pre-development flows and durations for the continuous range of return periods from 10 percent of the two year to the 10-year storms, based on long-term records. Within this range, the post-project flow duration curve must not deviate above the pre-project flow duration curve flows by more than 10 percent and must not deviate above the pre-project flow duration curve flows more than 10 percent of the length of the curve. A site specific critical flow may substitute for the lower return period (10 percent of the two-year) if available; or

Control runoff through the use of a local implementation tool based on flow duration control, derived from continuous simulation modeling, in the form of nomographs relating percent impervious area and soil type (representing infiltration rates) to BMP volume and land area requirements. If this method is used, the Copermittee must closely collaborate with the Regional Board in the development of the nomograph tool.

i. TRAINING AND EDUCATION

(1) Municipal Departments and Personnel Education

Municipal Development Planning: Each Copermittee must implement an education program so that its planning and development review staffs and contractors (and Planning Boards and Elected Officials, if applicable) have an understanding of:

- (a) Federal, state, and local water quality laws and regulations applicable to Development Projects;
- (b) The connection between land use decisions and short and long-term water quality impacts (i.e., impacts from land development and urbanization); and
- (c) Methods of minimizing impacts to receiving water quality resulting from development, including:
 - (i) Storm water management plan development and review;
 - (ii) Local sensitive water bodies, including 303(d)-impairments and ESAs;
 - (iii) Methods to control downstream erosion impacts;
 - (iv) Identification of pollutants of concern;
 - (v) Site design BMP techniques;
 - (vi) Source control BMPs;
 - (vii) Selection of the most effective treatment control BMPs for the pollutants of concern; and
 - (viii) Public health concerns related to storm water management infrastructure.

(2) Project Applicants, Developers, Contractors, Property Owners, and other Responsible Parties

- (a) Each Copermittee must implement a New Development / Redevelopment education program using all media as appropriate to:
- (i) Measurably increase the knowledge of the target communities regarding MS4s, impacts of ~~urban~~ runoff on receiving waters, and potential BMP solutions for the target audience; and
 - (ii) To measurably change the behavior of target communities and thereby reduce pollutant releases to MS4s and the environment.
- (b) Each Copermittee must educate each target community on the following topics where appropriate:
- (i) The importance of educating all construction workers in the field about stormwater issues and BMPs through formal or informal training;
 - (ii) Federal, state, and local water quality laws and regulations applicable to new development and redevelopment activities;
 - (iii) Site design, source control, pollution prevention, and treatment BMPs;
 - (iv) General ~~urban~~ runoff concepts; and
 - (v) Other topics of local importance, including local water quality conditions, impaired waterbodies and environmentally sensitive areas.

2. CONSTRUCTION COMPONENT

Each Copermittee must implement a construction program which meets the requirements of this section, prevents illicit discharges into the MS4, implements and maintains structural and non-structural BMPs to reduce pollutants in stormwater runoff from construction sites to the MS4, reduces construction site discharges of storm water pollutants from the MS4 to the MEP, and prevents construction site discharges from the MS4 from causing or contributing to a violation of water quality standards.

a. ORDINANCE UPDATE

Within 365 days of adoption of this Order, each Copermittee must review and update its grading ordinances and other ordinances as necessary to achieve full

compliance with this Order, including requirements for the implementation of all designated BMPs and other measures.

b. SOURCE IDENTIFICATION

Each Copermittee must maintain an updated watershed based inventory of all construction sites within its jurisdiction. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended.

c. SITE PLANNING AND PROJECT APPROVAL PROCESS

Each Copermittee must incorporate consideration of potential water quality impacts prior to approval and issuance of construction and grading permits.

- (1) Each construction and grading permit must require proposed construction sites to implement designated BMPs and other measures so that illicit discharges into the MS4 are prevented and stormwater pollutants discharged from the site will be reduced to the maximum extent practicable and will not cause or contribute to a violation of water quality standards.
- (2) Prior to permit issuance, the project proponent's erosion and sediment control plan (or equivalent construction BMP plan) must be required and reviewed to verify compliance with the local grading ordinance, other applicable local ordinances, and this Order.
- (3) Prior to permit issuance, each Copermittee must verify that project proponents subject to California's statewide General NPDES Permit for Storm Water Discharges Associated With Construction Activities, (hereinafter General Construction Permit), have existing coverage under the General Construction Permit.

d. BMP IMPLEMENTATION

- (1) Designate BMPs: Each Copermittee must designate a minimum set of BMPs and other measures to be implemented at all construction sites. The designated minimum set of BMPs must include:

(a) General Site Management:

- (i) Pollution prevention, where appropriate;
- (ii) Development and implementation of a site-specific storm water management plan;
- (iii) Minimization of areas that are cleared and graded to only the portion of the site that is necessary for construction;

- (iv) Minimization of exposure time of disturbed soil areas;
 - (v) Minimization of grading during the wet season and correlation of grading with seasonal dry weather periods to the extent feasible;
 - (vi) Limitation of grading to a maximum disturbed area as determined by each Copermittee before either temporary or permanent erosion controls are implemented to prevent storm water pollution. The Copermittee has the option of temporarily increasing the size of disturbed soil areas by a set amount beyond the maximum, if the individual site is in compliance with applicable storm water regulations and the site has adequate control practices implemented to prevent storm water pollution;
 - (vii) Temporary stabilization and reseeded of disturbed soil areas as rapidly as feasible;
 - (viii) Wind erosion controls;
 - (ix) Tracking controls;
 - (x) Non-stormwater management measures to prevent illicit discharges and control stormwater pollution sources;
 - (xi) Waste management measures;
 - (xii) Preservation of natural hydrologic features where feasible;
 - (xiii) Preservation of riparian buffers and corridors where feasible;
 - (xiv) Evaluation and maintenance of all BMPs, until removed; and
 - (xv) Retention, reduction, and proper management of all storm water pollutant discharges on site to the MEP standard.
- (b) Erosion and Sediment Controls:
- (i) Erosion prevention. Erosion prevention is to be used as the most important measure for keeping sediment on site during construction;
 - (ii) Sediment controls. Sediment controls are to be used as a supplement to erosion prevention for keeping sediment on-site during construction;
 - (iii) Slope stabilization must be used on all active slopes during rain events regardless of the season and on all inactive slopes during the rainy season and during rain events in the dry season; and
 - (iv) Permanent revegetation or landscaping as early as feasible.
- (c) Designate enhanced BMPs⁸ for 303(d) impairments and ESAs: Each Copermittee must implement, or require implementation of, enhanced measures to address the exceptional threat to water quality posed by all construction sites tributary to CWA section 303(d) water body segments impaired for sediment or turbidity. Each Copermittee must also

⁸ Enhanced BMPs are control actions specifically targeted to the pollutant or condition of concern and of higher quality and effectiveness than the minimum control measures otherwise required. Enhanced in this Order means better, not simply more, BMPs.

implement, or require implementation of, enhanced, site-specific measures for construction sites within or adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas (as defined in section Attachment C of this Order).

- (i) Active Sediment Treatment: Each Copermittee must require implementation of advanced treatment for sediment at construction sites (or portions thereof) that are determined by the Copermittee to be an exceptional threat to water quality. In evaluating the threat to water quality, the following factors must be considered by the Copermittee:

- [a] Soil erosion potential or soil type;
- [b] The site's slopes;
- [c] Project size and type;
- [d] Sensitivity of receiving water bodies;
- [e] Proximity to receiving water bodies;
- [f] Non-storm water discharges;
- [g] Ineffectiveness of other BMPs;
- [h] Proximity and sensitivity of aquatic threatened and endangered species of concern;
- [i] Known effects of ATS chemicals; and
- [h][i] _____ Any other relevant factors.

- (d) Implement BMPs: Each Copermittee must implement, or require the implementation of, the designated minimum BMPs and any additional measures necessary to comply with this Order at each construction site within its jurisdiction year round. However, BMP implementation requirements can vary based on wet and dry seasons. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season.

e. INSPECTION OF CONSTRUCTION SITES

Each Copermittee must conduct construction site inspections for compliance with its ordinances (grading, storm water, etc.), permits (construction, grading, etc.), and this Order. Priorities for inspecting sites must consider the nature and size of the construction activity, topography, and the characteristics of soils and receiving water quality.

- (1) During the wet season, each Copermittee must inspect at least biweekly (every two weeks), all construction sites within its jurisdiction meeting any of the following criteria:

- (a) All sites 30 acres or more in size with rough grading or active slopes occurring during the wet season;
 - (b) All sites one acre or more, and tributary to a CWA section 303(d) water body segment impaired for sediment or within or directly adjacent to, or discharging directly to, the ocean or a receiving water within an ESA; and
 - (c) Other sites determined by the Copermittees or the Regional Board as a significant threat to water quality. In evaluating threat to water quality, the following factors must be considered: (1) soil erosion potential; (2) site slope; (3) project size and type; (4) sensitivity of receiving water bodies; (5) proximity to receiving water bodies; (6) non-storm water discharges; (7) past record of non-compliance by the operators of the construction site; and (8) any other relevant factors.
- (2) During the wet season, each Copermittee must inspect at least monthly, all construction sites with one acre or more of soil disturbance not meeting the criteria specified above in section ~~DF~~.2.e.(1).
 - (3) During the wet season, each Copermittee must inspect construction sites less than one acre in size as needed to ensure compliance with its ordinances and this Order.
 - (4) Each Copermittee must inspect all construction sites as needed during the dry season. Sites meeting the criteria in section ~~DF~~.2.e.(1) must be inspected at least once in August or September each year.
 - (5) Re-inspections: Based upon site inspection findings, each Copermittee must implement all follow-up actions (i.e., reinspection, enforcement) necessary to comply with this Order. Reinspection frequencies must be determined by each Copermittee based upon the severity of deficiencies, the nature of the construction activity, and the characteristics of soils and receiving water quality.
 - (6) Inspections of construction sites must include, but not be limited to:
 - (a) Check for coverage under the General Construction Permit (Notice of Intent (NOI) and/or Waste Discharge Identification No.) during initial inspections;
 - (b) Assessment of compliance with Copermittee ordinances and permits related to ~~urban~~-runoff, including the implementation and maintenance of designated minimum BMPs;
 - (c) Assessment of BMP effectiveness;

- (d) Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff;
 - (e) Education and outreach on storm water pollution prevention, as needed; and
 - (f) Creation of a written or electronic inspection report.
- (7) The Copermittees must track the number of inspections for each inventoried construction site throughout the reporting period to verify that each site is inspected at the minimum frequencies required.

f. ENFORCEMENT OF CONSTRUCTION SITES

- (1) Each Copermittee must develop and implement an escalating enforcement process that achieves prompt corrective actions at construction sites for violations of the Copermittee's water quality protection permit requirements and ordinances. This enforcement process must include authorizing the Copermittee's construction site inspectors to take immediate enforcement actions when appropriate and necessary. The enforcement process must include appropriate sanctions such as stop work orders, non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.
- (2) Each Copermittee must be able to respond to complaints received from third-parties and to ensure the Regional Board that corrective actions have been implemented.

g. REPORTING OF NON-COMPLIANT SITES

- (1) In addition to the notification requirements in Attachment B, each Copermittee must notify the Regional Board when the Copermittee issues a stop work order or other high level enforcement to a construction site in its jurisdiction as a result of storm water violations.
- (2) Each Copermittee shall annually notify the Regional Board, prior to the commencement of the wet season, of all construction sites with potential violations. Information provided shall include, but not be limited to, the following:
 - (a) WDID number if enrolled under the General Construction Permit
 - (b) Site Location, including address

(c) Current violations or potential violations

h. TRAINING AND EDUCATION

(1) Municipal Staff and Contractors: Requirements for municipal staff and contractors are described in the Municipal Component section of this Order.

(2) Construction Site Owner / Operator Responsibilities:

As early in the planning and development process as possible and all through the permitting and construction process, each Copermittee must implement a program to educate project applicants, developers, contractors, property owners, and other responsible parties. The education program must provide an understanding of the topics listed below, as appropriate for the audience being educated.

- (a) The importance of educating all construction workers in the field about stormwater issues and BMPs through formal or informal training;
- (b) Federal, state, and local water quality laws and regulations applicable to construction and grading activities;
- (c) Site design, source control, pollution prevention, and treatment BMPs;
- (d) General ~~urban~~ runoff concepts; and
- (e) Other topics of local importance, including local water quality conditions, impaired waterbodies and environmentally sensitive areas.

3. EXISTING DEVELOPMENT COMPONENT

a. MUNICIPAL

Each Copermittee must implement a municipal program which meets the requirements of this section, prevents illicit discharges into the MS4, reduces municipal discharges of storm water pollutants from the MS4 to the MEP, and prevents municipal discharges from the MS4 from causing or contributing to a violation of water quality standards.

(1) Source Identification / Inventory

Each Copermittee must maintain an updated watershed-based inventory of municipal areas and activities. The inventory must include the name, address

(if applicable), and a description of the area/activity; which pollutants are potentially generated by the area/activity; whether the area/activity is adjacent to an ESA; and identification of whether the area/activity is tributary to a CWA section 303(d) water body segment and generates pollutants for which the water body segment is impaired. The use of an automated database system, such as Geographical Information System (GIS) is highly recommended when applicable, but not required.

(2) General BMP Implementation

- (a) Pollution Prevention: Each Copermitttee must implement pollution prevention methods in its municipal program and must require their use by appropriate municipal departments, personnel, and contractors, where appropriate.
- (b) Designate Minimum BMPs: Each Copermitttee must designate a minimum set of BMPs for all municipal areas and activities. The designated minimum BMPs for municipal areas and activities must be area or activity specific as appropriate. BMPs must be designated for special events that are expected to generate significant trash and litter.
- (c) Designate BMPs for ESAs and 303(d) Impairments: Each Copermitttee must designate enhanced measures for municipal areas and activities tributary to CWA section 303(d) impaired water body segments when an area or activity generates pollutants for which the water body segment is impaired. Each Copermitttee must also designate additional controls for municipal areas and activities within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).
- (d) Implement BMPs: Each Copermitttee must implement, or require the implementation of, the designated minimum and enhanced BMPs and any additional measures necessary based on its inventory to comply with this Order for each municipal area or activity within its jurisdiction.

(3) BMP Implementation for Management of Pesticides, Herbicides, and Fertilizers

Each Copermitttee must implement BMPs to reduce the contribution of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from municipal areas and activities to MS4s. Such BMPs must include, at a minimum:

- (a) Educational activities, permits, certifications and other measures for municipal applicators and distributors;

- (b) Integrated Pest Management (IPM) measures that rely on non-chemical solutions;
- (c) The use of native vegetation;
- (d) Schedules for irrigation and chemical application; and
- (e) The collection and proper disposal of unused pesticides, herbicides, and fertilizers.

(4) BMP implementation for Flood Control Structures

- (a) Each Copermittee must implement procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies.
- (b) Each Copermittee must include water quality protection measures, where feasible, when retrofitting existing flood control structural devices.
- (c) Each Copermittee must evaluate its existing flood control devices, identify devices causing or contributing to a condition of pollution, identify measures to reduce or eliminate the structure's effect on pollution, and evaluate the feasibility of retrofitting the structural flood control device. The inventory and evaluation must be completed by May 1, 201009 and submitted to the Regional Board with the Fall 201009 annual report.

(5) BMP Implementation for Sweeping of Municipal Areas

Where municipal area sweeping is implemented as an MS4 BMP for municipal roads, streets, highways, and parking facilities, each Copermittee must design and implement the program based on the following criteria:

- (a) Optimize pickup of trash and debris based on land uses, trash collection schedules, seasonal factors (e.g., special events, tourism, etc.) and inspections of municipal areas/activities.

(6) Operation and Maintenance of Municipal Separate Storm Sewer System (MS4) and Structural Controls

- (a) Treatment Controls: Each Copermittee must implement a schedule of inspection and maintenance activities to verify proper operation of all municipal structural treatment controls designed to reduce pollutant discharges to or from its MS4s and related drainage structures.
- (b) MS4 and Facilities: Each Copermittee must implement a schedule of maintenance activities for the MS4 and MS4 facilities (catch basins, storm drain inlets, open channels, etc). The maintenance activities must, at a minimum, include:

- (i) Inspection and removal of accumulated waste at least once a year between May 1 and September 30 of each year for all MS4 facilities;
- (ii) Additional cleaning as necessary between October 1 and April 30 of each year for facilities that receive or collect high volumes of trash and debris;
- (iii) Following two years of inspections, any MS4 facility that requires inspection and cleaning less than annually may be inspected as needed, but not less than every other year;
- (iv) Open channels must be cleaned of observed anthropogenic litter in a timely manner;
- (v) Record keeping of the maintenance and cleaning activities including the overall quantity of waste removed;
- (vi) Proper disposal of waste removed pursuant to applicable laws; and
- (vii) Measures to eliminate waste discharges during MS4 maintenance and cleaning activities.

(7) Infiltration From Sanitary Sewer to MS4/Provide Preventive Maintenance of Both

- (a) Each Copermittee must implement controls and measures to prevent and eliminate infiltration of seepage from municipal sanitary sewers to MS4s through thorough, routine preventive maintenance of the MS4. Each Copermittee that operates both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate infiltration of seepage from the municipal sanitary sewers to the MS4s that must include overall sanitary sewer and MS4 surveys and thorough, routine preventive maintenance of both.
- (b) Each Copermittee must implement controls to limit infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems where necessary. Such controls must include:
 - (i) Adequate plan checking for construction and new development,
 - (ii) Incident response training for municipal employees that identify sanitary sewer spills;
 - (iii) Code enforcement inspections;
 - (iv) MS4 maintenance and inspections;
 - (v) Interagency coordination with sewer agencies; and
 - (vi) Proper education of municipal staff and contractors conducting field operations on the MS4 or municipal sanitary sewer (if applicable).

(8) Inspection of Municipal Areas and Activities

- (a) At a minimum, each Copermittee must inspect the following high priority

municipal areas and activities annually:

- (i) Roads, Streets, Highways, and Parking Facilities;
 - (ii) Flood Management Projects and Flood Control Devices;
 - (iii) Areas and activities tributary to a CWA section 303(d) impaired water body segment, where an area or activity generates pollutants for which the water body segment is impaired.
 - (iv) Areas and activities within or adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order);
 - (v) Municipal Facilities:
 - [a] Active or closed municipal landfills;
 - [b] Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewage collection systems;
 - [c] Solid waste transfer facilities;
 - [d] Land application sites;
 - [e] Corporate yards including maintenance and storage yards for materials, waste, equipment and vehicles; and
 - [f] Household hazardous waste collection facilities.
 - (vi) Municipal airfields;
 - (vii) Parks and recreation facilities;
 - (viii) Special event venues following special events (festivals, sporting events, etc.);
 - (ix) Power washing; and
 - (x) Other municipal areas and activities that the Copermittee determines may contribute a significant pollutant load to the MS4.
- (b) Other municipal areas and activities must be inspected as needed and in response to water quality data, valid public complaints, and findings from municipal or contract staff.
- (c) Based upon site inspection findings, each Copermittee must implement all follow-up actions necessary to comply with this Order.

(9) Enforcement of Municipal Areas and Activities

Each Copermittee must enforce its storm water ordinance for all municipal areas and activities as necessary to maintain compliance with this Order.

(10) Training and Education

Each Copermittee must ensure that all municipal personnel and contractors that have responsibilities for selecting, implementing, and evaluating BMPs for municipal areas and activities are adequately trained and educated to

perform such tasks.

(a) Municipal Departments and Personnel Education

- (i) Municipal Construction Activities: Each Copermittee must implement an education program that includes annual training prior to the rainy season so that its construction, building, code enforcement, and grading review staffs, inspectors, and other responsible construction staff have, at a minimum, an understanding of the following topics, as appropriate for the target audience:
 - [a] Federal, state, and local water quality laws and regulations applicable to construction and grading activities;
 - [b] The connection between construction activities and water quality impacts (i.e., impacts from land development and urbanization and impacts from construction material such as sediment);
 - [c] Proper implementation of erosion and sediment control and other BMPs to minimize the impacts to receiving water quality resulting from construction activities;
 - [d] The Copermittee's inspection, plan review, and enforcement policies and procedures to verify consistent application;
 - [e] Current advancements in BMP technologies;
 - [f] SUSMP Requirements including treatment options, site design, source control, and applicable tracking mechanisms; and
 - [g] Other topics of local importance, including local water quality conditions, impaired water bodies, environmentally sensitive areas, and public health and disease vector issues associated with urban runoff.
- (ii) Municipal Industrial/Commercial Activities: Each Copermittee must train staff responsible for conducting storm water compliance inspections and enforcement of industrial and commercial facilities at least once a year. Training must cover inspection and enforcement procedures, BMP implementation, and reviewing monitoring data
- (iii) Municipal Other Activities: Each Copermittee must implement an education program so that municipal personnel and contractors performing activities which generate pollutants have an understanding of the activity specific BMPs for each activity to be performed.

b. COMMERCIAL / INDUSTRIAL

Each Copermittee must implement a commercial / industrial program that meets the requirements of this section, prevents illicit discharges into the MS4, reduces

commercial / industrial discharges of storm water pollutants from the MS4 to the MEP, and prevents commercial / industrial discharges from the MS4 from causing or contributing to a violation of water quality standards.

(1) Source Identification

- (a) Each Copermittee must maintain an updated watershed-based inventory of all industrial and commercial sites/sources within its jurisdiction (regardless of ownership) that could contribute a significant pollutant load to the MS4. The inventory must include the following minimum information for each industrial and commercial site/source: name; address; pollutants potentially generated by the site/source; and identification of whether the site/source is tributary to a Clean Water Act section 303(d) water body segment and generates pollutants for which the water body segment is impaired; and a narrative description including SIC codes which best reflects the principal products or services provided by each facility.

At a minimum, the following sites/sources must be included in the inventory:

(i) Commercial Sites/Sources:

- [a] Automobile repair, maintenance, fueling, or cleaning;
- [b] Airplane repair, maintenance, fueling, or cleaning;
- [c] Boat repair, maintenance, fueling, or cleaning;
- [d] Equipment repair, maintenance, fueling, or cleaning;
- [e] Automobile and other vehicle body repair or painting;
- [f] Mobile automobile or other vehicle washing;
- [g] Automobile (or other vehicle) parking lots and storage facilities;
- [h] Retail or wholesale fueling;
- [i] Pest control services;
- [j] Eating or drinking establishments, including food markets;
- [k] Mobile carpet, drape or furniture cleaning;
- [l] Cement mixing or cutting;
- [m] Masonry;
- [n] Painting and coating;
- [o] Botanical or zoological gardens and exhibits;
- [p] Landscaping;
- [q] Nurseries and greenhouses;
- [r] Golf courses, parks and other recreational areas/facilities;
- [s] Cemeteries;
- [t] Pool and fountain cleaning;
- [u] Marinas;
- [v] Portable sanitary services;

- [w] Building material retailers and storage;
- [x] Animal facilities;
- [y] Power washing services; and
- [z] Other sites and sources with a history of un-authorized discharges to the MS4.

(ii) Industrial Sites/Sources:

- [a] Industrial Facilities, as defined at 40 CFR § 122.26(b)(14), including those subject to the General Industrial Permit or other individual NPDES permit;
- [b] Operating and closed landfills;
- [c] Facilities subject to SARA Title III; and
- [d] Hazardous waste treatment, disposal, storage and recovery facilities.

(iii) ESAs and 303(d) Listed Waterbodies: All other commercial or industrial sites/sources tributary to a CWA Section 303(d) impaired water body segment, where the site/source generates pollutants for which the water body segment is impaired. All other commercial or industrial sites/sources within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).

(iv) All other commercial or industrial sites/sources that the Copermittee determines may contribute a significant pollutant load to the MS4.

(2) General BMP Implementation

- (a) Pollution Prevention: Each Copermittee must require the use of pollution prevention methods by industrial and commercial sites/sources.
- (b) Designate / Update Minimum BMPs: Each Copermittee must designate a minimum set of BMPs for all industrial and commercial sites/sources. Where BMPs have already been designated, each Copermittee must review its existing BMPs for adequacy. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.
- (c) Designate Enhanced BMPs for ESAs and 303(d) Impairments: Each Copermittee must designate enhanced measures for industrial and commercial sites/sources tributary to CWA section 303(d) impaired water body segments (where a site/source generates pollutants for which the water body segment is impaired). Each Copermittee must also designate

additional controls for industrial and commercial sites/sources within or directly adjacent to or discharging directly to coastal lagoons, the ocean, or other receiving waters within environmentally sensitive areas (as defined in Attachment C of this Order).

- (d) Implement BMPs: Each Copermittee must implement, or require the implementation of, the designated minimum and enhanced BMPs and any additional measures necessary based on inspections, incident responses, and water quality data to comply with this Order at each industrial and commercial site/source within its jurisdiction.

(3) BMP Implementation for Mobile Businesses

- (a) Each Copermittee must develop and implement a program to reduce the discharge of storm water pollutants from mobile businesses to the MEP. Each Copermittee must keep as part of their commercial source inventory a listing of mobile businesses known to operate within its jurisdiction. The program must include:
 - (i) Development and implementation of minimum standards and BMPs to be required for each of the various types of mobile businesses;
 - (ii) Development and implementation of an enforcement strategy which specifically addresses the unique characteristics of mobile businesses;
 - (iii) Notification of those mobile businesses known to operate within the Copermittee's jurisdiction of the minimum standards and BMP requirements and local ordinances;
 - (iv) Development and implementation of an outreach and education strategy; and
 - (v) Inspection of mobile businesses as needed to implement the program.
- (b) If they choose to, the Copermittees may cooperate in developing and implementing their programs for mobile businesses, including sharing of mobile business inventories, BMP requirements, enforcement action information, and education.

(4) Inspection of Industrial and Commercial Sites/Sources

Each Copermittee must conduct industrial and commercial site inspections for compliance with its ordinances, permits, and this Order.

- (a) Inspection Procedures: Inspections must include but not be limited to:
 - (i) Review of BMP implementation plans, if the site uses or is required to use such a plan;

- (ii) Review of facility monitoring data, if the site monitors its runoff;
- (iii) Check for coverage under the General Industrial Permit (Notice of Intent (NOI) and/or Waste Discharge Identification Number), if applicable;
- (iv) Assessment of compliance with Copermittee ordinances and permits related to ~~urban~~-runoff;
- (v) Assessment of BMP implementation, maintenance and effectiveness;
- (vi) Visual observations for non-storm water discharges, potential illicit connections, and potential discharge of pollutants in storm water runoff; and
- (vii) Education and training on storm water pollution prevention, as conditions warrant.

(b) Each Copermittee shall annually notify the Regional Board, prior to the commencement of the wet season, of all Industrial Sites and Industrial Facilities subject to the General Industrial Permit or other individual NPDES permit with potential violations. Information provided shall include, but not be limited to, the following:

(i) WDID number if enrolled under the General Industrial Permit;

(ii) Site Location, including address;

(iii) Current violations or potential violations; and

(iv) Past Violation history.

(b)(c) Frequencies: At a minimum, 20 percent of the sites inventoried as required in section ~~DE~~.3.b.(1) above (excluding mobile sources and food facilities) must be inspected each year. Mobile businesses must be inspected pursuant to the enforcement strategy developed pursuant to section ~~DE~~.3.b.(3). Other inspection frequencies must be based upon findings of the Copermittee's existing program and the following factors:

- (i) Type of activity (SIC code);
- (ii) Materials used at the facility;
- (iii) Wastes generated;
- (iv) Pollutant discharge potential;
- (v) Non-storm water discharges;
- (vi) Size of facility;
- (vii) Proximity to receiving water bodies;

- (viii) Sensitivity of receiving water bodies;
- (ix) Whether the facility is subject to the General Industrial Permit or an individual NPDES permit;
- (x) Whether the facility has filed a No Exposure Certification/Notice of Non-Applicability;
- (xi) Facility design;
- (xii) Total area of the site, area of the site where industrial or commercial activities occur, and area of the site exposed to rainfall and runoff;
- (xiii) The facility's compliance history; and
- (xiv) Any other relevant factors.

~~(e)~~(d) Food Facilities: Each food facility must be inspected annually for compliance with the Copermittee's water quality ordinances and this Order. Each inspection of a food facility must, at a minimum, address the following concerns:

- (i) Trash storage and disposal;
- (ii) Grease storage and disposal;
- (iii) Washwater discharges to the MS4 (e.g., from floor mats, driveways, sidewalks, etc.);
- (iv) Identification of outdoor sewer and MS4 connections; and
- (v) Education of property managers when grease and/or trash facilities are shared by multiple facilities.

~~(d)~~(e) Third-Party Inspections: Each Copermittee may develop and implement a third party inspection program for verifying industrial and commercial site/source compliance with its ordinances, permits, and this Order. To the extent that third party inspections are conducted to fulfill the requirements of this Order, the Copermittee will be responsible conducting and documenting quality assurance and quality control of the third-party inspections.

- (i) Each inspection conducted by a third-party must, at a minimum, result in the following:
 - [a] Photo documentation of potential storm water violations identified during the third party inspection;
 - [b] Reporting to the Copermittee of identified significant potential violations, including imminent or observed illegal discharges, within 24 hours of the third party inspection;
 - [c] Reporting to the Copermittee of all inspection findings within one week of the inspection being conducted; and
 - [d] Copermittee follow-up and/or enforcement actions for identified potential storm water violations within two business days of the inspection or potential violation report receipt.

~~(e)~~(f) Based upon site inspection findings, each Copermittee must implement all follow-up actions and enforcement necessary to comply with this Order.

~~(f)~~(g) To the extent that the Regional Board has conducted an inspection of an industrial site during a particular year, the requirement for the responsible Copermittee to inspect this facility during the same year will be satisfied.

~~(g)~~(h) The Copermittees must track the number of inspections for the inventoried industrial and commercial sites/sources throughout the reporting period to verify that the sites/sources are inspected at the minimum frequencies listed in this Order.

(5) Enforcement of Industrial and Commercial Sites/Sources

Each Copermittee must enforce its storm water ordinance for all industrial and commercial sites/sources as necessary to maintain compliance with this Order. Copermittee ordinances or other regulatory mechanisms must include appropriate sanctions to achieve compliance. Sanctions must include the following or their equivalent: Non-monetary penalties, fines, bonding requirements, and/or permit denials for non-compliance.

(6) Training and Education for Owners and Operators of Commercial and Industrial Activities

(a) Each Copermittee must implement an education program using all media as appropriate to (1) measurably increase the knowledge of owners and operators of commercial and industrial activities regarding MS4s, impacts of ~~urban~~ runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce storm water pollutant releases and eliminate prohibited non-storm water discharges to MS4s and the environment. At a minimum, the education program must meet the requirements of this section and address the following issues:

- (i) Laws, regulations, permits, & requirements;
- (ii) Best management practices;
- (iii) General ~~urban~~ runoff concepts; and
- (iv) Other topics, including public reporting mechanisms, water conservation, low-impact development techniques.

(b) BMP Notification: At least twice during the five-year period of this Order, each Copermittee must notify the owner/operator of each inventoried industrial and commercial site/source of the BMP requirements applicable

to the site/source.

C. RESIDENTIAL

Each Copermittee must implement a residential program which meets the requirements of this section, prevents illicit discharges into the MS4, reduces residential discharges of storm water pollutants from the MS4 to the MEP, and prevents residential discharges from the MS4 from causing or contributing to a violation of water quality standards.

(1) Threat to Water Quality Prioritization

Each Copermittee must identify residential areas and activities that pose a high threat to water quality. At a minimum, these must include:

- (a) Automobile repair, maintenance, washing, and parking;
- (b) Home and garden care activities and product use (pesticides, herbicides, and fertilizers);
- (c) Disposal of trash, pet waste, green waste, and household hazardous waste (e.g., paints, cleaning products);
- (d) Any other residential source that the Copermittee determines may contribute a significant pollutant load to the MS4;
- (e) Any residential areas tributary to a CWA section 303(d) impaired water body, where the residence generates pollutants for which the water body is impaired; and
- (f) Any residential areas within or directly adjacent to or discharging directly to a coastal lagoon, the ocean, or other receiving waters within an environmentally sensitive area (as defined in Attachment C of this Order).

(2) BMP Implementation

- (a) Pollution Prevention: Each Copermittee must actively encourage the use of pollution prevention methods by residents.
- (b) Designate BMPs: Each Copermittee must designate minimum BMPs for high threat to water quality residential areas and activities. The designated minimum BMPs for high threat to water quality residential areas and activities must be area or activity specific.
- (c) Hazardous Waste BMPs: Each Copermittee must facilitate the proper management and disposal of used oil, toxic materials, and other household hazardous wastes. Such facilitation must include educational activities, public information activities, and establishment of collection sites operated by the Copermittee or a private entity. Curbside collection of household hazardous wastes is encouraged.

- (d) Implement BMPs: Each Copermittee must implement, or require implementation of, the designated minimum BMPs and any additional measures necessary to comply with Sections A and B of this Order. ~~for high threat to water quality residential areas and activities.~~
- (e) Each Copermittee must implement, or require implementation of, BMPs for residential areas and activities that have not been designated a high threat to water quality, as necessary.

(3) Enforcement of Residential Areas and Activities

Each Copermittee must enforce its storm water ordinance for all residential areas and activities as necessary to maintain compliance with this Order.

(4) Evaluation of Oversight of Residential Areas and Activities

Each Copermittee must annually review the effectiveness of efforts to reduce residential discharges of storm water pollutants from the MS4 and eliminate illicit residential discharges into the MS4. The evaluation must consider findings from monitoring data, municipal employee comments, inspections, complaints, and other appropriate sources.

(5) Common Interest Areas (CIA) / Homeowner Association (HOA) Areas

Each Copermittee must implement measures specifically to ensure that urban runoff within common interest developments, including areas managed by associations, meets the objectives of this section and Order.

- (a) BMP Implementation: Each Copermittee must implement management measures based on a review of pertinent factors, including:
 - (i) Current maintenance duties and procedures used by CIA / HOA maintenance associations within its jurisdiction;
 - (ii) Whether streets and storm drains are publicly or privately owned within the CIA/HOA;
 - (iii) Whether the CIA/HOA area has been identified as a high priority residential area;
 - (iv) Proximity to 303(d)-listed waterbodies, the ocean, environmentally sensitive areas;
 - (v) Evaluation of water quality monitoring data;
 - (vi) Evaluation of existing illegal discharge/illicit connection activities;
 - (vii) Other activities conducted or authorized by the HOA that may pose a significant risk to inland or coastal receiving waters.

- (b) Legal Authority and Enforcement: Within ~~two~~one -years of adoption of this Order, each Copermittee must review its Municipal Code to determine the most appropriate method to implement and enforce ~~urban~~-runoff management measures within CIA/HOA areas.

(6) Residential Education Program

- (a) Each Copermittee must implement a Residential Education Program using all media as appropriate to (1) measurably increase the knowledge regarding MS4s, impacts of ~~urban~~-runoff on receiving waters, and potential BMP solutions for the target audience; and (2) to measurably change the behavior of target communities and thereby reduce storm water and eliminate prohibited non-storm water pollutant releases to MS4s and the environment.
- (b) Copermittee educational programs must emphasize underserved target audiences, residents and managers of CIA/HOA areas, high-risk behaviors, and “allowable” behaviors and discharges. At a minimum, the education program must meet the requirements of this section and address the following issues:
- (i) Laws, regulations, permits, & requirements;
 - (ii) Best management practices;
 - (iii) General ~~urban~~-runoff concepts;
 - (iv) Existing water quality, including local water quality conditions, impaired waterbodies and environmentally sensitive areas; and
 - (v) Other topics, including public reporting mechanisms, water conservation, low-impact development techniques, and public health and disease vector issues associated with ~~urban~~-runoff.

d. Retrofitting Existing Development

Each Copermittee must implement a retrofitting program which meets the requirements of this section, solves chronic flooding problems, reduces impacts from hydromodification, incorporates LID, supports stream restoration, systematically reduces downstream channel erosion, reduces the discharges of storm water pollutants from the MS4 to the MEP, and prevents discharges from the MS4 from causing or contributing to a violation of water quality standards.

(1) Source Identification

The Copermittee must identify and inventory existing developments (i.e. municipal, industrial, commercial, residential) as candidates for retrofitting. Potential retrofitting candidates must include but are not limited to:

- (a) Development that contributes pollutants to a TMDL or a ESA,
 - (b) Development contributing flows to downstream frequent flooding,
 - (c) Receiving waters channelized or otherwise hardened,
 - (d) Development tributary to receiving waters that are channelized or otherwise hardened,
 - (e) Developments tributary to receiving waters that are significantly eroded,
 - (f) Developments tributary to an ASBS or SWQPA,
 - (g) Development that causes hydraulic constriction.
- (2) Each Copermittee shall evaluate and rank the inventoried existing developments to prioritize retrofitting. Criteria for evaluation must include:
- (a) Feasibility,
 - (b) Cost effectiveness,
 - (c) Pollutant removal effectiveness,
 - (d) Impervious area potentially treated,
 - (e) Maintenance requirements,
 - (f) Landowner cooperation,
 - (g) Neighborhood acceptance, and
 - (h) Aesthetic qualities,
 - (i) Efficacy at addressing concern.
- (3) Based on the results of the evaluation and rankings, each Copermittee must require select, qualified existing developments to implement source control and treatment control BMPs in accordance with the SSMP requirements within sections D.1.d.(3) through D.1.d.(8). In addition, the Copermittee shall encourage retrofit projects to implement where feasible the Hydromodification requirements in section D.1.h.
- (4) When requiring retrofitting on existing development, the Copermittees will cooperate with private landowners to encourage retrofitting projects. The Copermittee may consider the following practices in cooperating and encouraging private landowners to retrofit their existing development:
- (a) Demonstration retrofit projects;
 - (b) Retrofits on public land and easements;
 - (c) Education and outreach;
 - (d) Subsidies for retrofit projects;
 - (e) Requiring retrofit projects as mitigation or ordinance compliance;
 - (f) Public and private partnerships; and
 - (g) Fees for existing discharges to the MS4.
- (5) The retrofit BMPs shall be tracked and inspected in accordance with section D.1.f. Treatment Control BMP Maintenance Tracking.
- (6) Where a project or projects cannot feasibly retrofit due to existing constraints,

the Copermittee may propose a regional mitigation project to improve water quality. Such regional projects may include but are not limited to:

- (a) Regional water quality treatment BMPs,
- (b) Urban creek or wetlands restoration and preservation,
- (c) Daylighting and restoring underground creeks,
- (d) Localized rainfall storage and reuse, and
- (e) Removal of invasive plant species.

(7) A retrofit project may qualify as a Watershed Water Quality Activity provided it meets the requirements in section E. Watershed Runoff Management Program.

4. ILLICIT DISCHARGE DETECTION AND ELIMINATION

Each Copermittee must implement a program which meets the requirements of this section to actively detect and eliminate illicit discharges and disposal into the MS4. The program must address all types of illicit discharges and connections excluding those non-storm water discharges not prohibited by the Copermittee in accordance with section B of this Order.

a. PREVENT AND DETECT ILLICIT DISCHARGES AND CONNECTIONS

Each Copermittee must implement measures to prevent and detect illicit discharges to the MS4.

- (1) Legal Authority: Each Copermittee must retain legal authority to prevent and eliminate illicit discharges and connections to the MS4.
- (2) Inspections: Each Copermittee must include use of appropriate municipal personnel and contractors to assist in identifying illicit discharges and connections during their daily activities.
 - (a) Inspections for illegal discharges and connections must be conducted during routine maintenance of all MS4 facilities.
 - (b) Municipal staff and contractors conducting non-MS4 field operations must be trained to report suspected illegal discharges and connections to proper municipal staff.

b. MAINTAIN MS4 MAP

Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas within its jurisdiction. The use of a GIS is highly

recommended. The accuracy of the MS4 map must be confirmed during dry weather field screening and analytical monitoring and must be updated at least annually. The GIS layers of the MS4 map must be submitted with the updated Jurisdictional Runoff Management Plan within 365 days after adoption of this Order.

c. FACILITATE PUBLIC REPORTING OF ILLICIT DISCHARGES AND CONNECTIONS - PUBLIC HOTLINE

Each Copermittee must promote, publicize and facilitate public reporting of illicit discharges or water quality impacts associated with discharges into or from MS4s. Each Copermittee must facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by Copermittees. All storm water hotlines must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week.

d. DRY WEATHER FIELD SCREENING AND ANALYTICAL MONITORING

Each Copermittee must conduct dry weather field screening and analytical monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect illicit discharges and connections in accordance with Receiving Waters and ~~Urban~~ Runoff Monitoring and Reporting Program No. R9-200~~98~~-000~~21~~.

e. INVESTIGATION / INSPECTION AND FOLLOW-UP

Each Copermittee must implement procedures to investigate and inspect portions of the MS4 that, based on the results of field screening, analytical monitoring, or other appropriate information, indicate a reasonable potential of containing illicit discharges, illicit connections, or other sources of pollutants in non-storm water.

- (1) Develop response criteria for data: Each Copermittee must develop, update, and use numeric criteria action levels (or other actions level criteria where appropriate) to determine when follow-up investigations will be performed in response to water quality monitoring. The criteria must include consideration of 303(d)-listed waterbodies and environmentally sensitive areas (ESAs) as defined in Attachment C.
- (2) Respond to data: Each Copermittee must investigate portions of the MS4 for which water quality data or conditions indicates a potential illegal discharge or connection.
 - (a) Obvious illicit discharges (i.e. color, odor, or significant exceedances of action levels) must be investigated immediately.
 - (b) Field screen data: Within two business days of receiving dry weather field screening results that exceed action levels, the Copermittees must either

conduct an investigation to identify the source of the discharge or document the rationale for why the discharge does not pose a threat to water quality and does not need further investigation. This documentation shall be included in the Annual Report.

- (c) Analytical data: Within two business days of receiving analytical laboratory results that exceed action levels, the Copermittees must either conduct an investigation to identify the source of the discharge or document the rationale for why the discharge does not pose a threat to water quality and does not need further investigation. This documentation shall be included in the Annual Report.

- (3) Respond to notifications: Each Copermittee must respond to and resolve each reported incident (e.g., public hotline, staff notification, etc.) in a timely manner. Criteria may be developed to assess the validity of, and prioritize the response to, each report.

f. ELIMINATION OF ILLICIT DISCHARGES AND CONNECTIONS

Each Copermittee must take immediate action to initiate steps necessary to eliminate all detected illicit discharges, illicit discharge sources, and illicit connections ~~as soon as practicable~~ after detection. Elimination measures may include an escalating series of enforcement actions for those illicit discharges that are not a serious threat to public health or the environment. Illicit discharges that pose a serious threat to the public's health or the environment must be eliminated immediately.

g. ENFORCE ORDINANCES

Each Copermittee must implement and enforce its ordinances, orders, or other legal authority to prevent illicit discharges and connections to its MS4 and to eliminate detected illicit discharges and connections to it MS4.

h. PREVENT AND RESPOND TO SEWAGE SPILLS (INCLUDING FROM PRIVATE LATERALS AND FAILING SEPTIC SYSTEMS) AND OTHER SPILLS

- (1) Each Copermittee must implement management measures and procedures to prevent, respond to, contain and clean up all sewage and other spills that may discharge into its MS4 from any source (including private laterals and failing septic systems). Spill response teams must prevent entry of spills into the MS4 and contamination of surface water, ground water and soil ~~to the maximum extent practicable~~. Each Copermittee must coordinate spill prevention, containment and response activities throughout all appropriate departments, programs and agencies so that maximum water quality protection is available at all times.

- (2) Each Copermittee must develop and implement a mechanism whereby it is notified of all sewage spills from private laterals and failing septic systems into its MS4. Each Copermittee must implement management measures and procedures to prevent, respond to, contain and clean up sewage from any such notification.

i. EDUCATION AND TRAINING

Each Copermittee must implement educational activities, public information activities, and other appropriate activities to facilitate the proper management and disposal of used oil and toxic materials.

5. PUBLIC PARTICIPATION COMPONENT

Each Copermittee must incorporate a mechanism for public participation in the updating, development, and implementation of the Jurisdictional ~~Urban~~ Runoff Management Program.

G. WATERSHED ~~URBAN~~ RUNOFF MANAGEMENT PROGRAM

1. Update the Watershed ~~Urban~~ Runoff Management Program

Each Copermittee must participate in implementing and updating a Watershed ~~Urban~~ Runoff Management Program (Watershed ~~UR~~RMP), as described in this Section, with other Copermittees in the Watershed Management Area(s) (WMA) in Table ~~3-5~~ to coordinate management efforts for the highest priority watershed water quality problems. Each Copermittee must implement all requirements of this section no later than 365 days after adoption of this Order, unless otherwise specified. Prior to 365 days after adoption of this Order, each Copermittee must collaborate with the other Copermittees within its Watershed Management Area(s) to at a minimum implement its Watershed ~~UR~~RMP document, as the document was developed and amended to comply with the requirements of Order No. 2002-01. At a minimum, each updated Watershed ~~UR~~RMP must include the elements described below:

Table 35. Watershed Management Areas and Watershed Copermittees

| WATERSHED MANAGEMENT AREA | RESPONSIBLE WATERSHED COPERMITTEE (S) | HYDROLOGIC AREA (HA) OR HYDROLOGIC SUBAREA (HSA) | MAJOR RECEIVING WATER BODIES |
|---------------------------|--|--|--|
| Aliso Creek | Aliso Viejo County of Orange Laguna Beach Laguna Hills Laguna Niguel Laguna Woods Lake Forest Mission Viejo Orange County Flood Control District | Aliso HSA | Aliso Creek, Pacific Ocean |
| San Juan Creek | County of Orange Dana Point Laguna Hills Laguna Niguel Mission Viejo Orange County Flood Control District San Juan Capistrano Rancho Santa Margarita | Mission Viejo HA | San Juan Creek, Trabuco Creek, Oso Creek, Canada Gobernadora, Bell Canyon, Verdugo Canyon, Pacific Ocean |

Note: The designated Lead Watershed Copermittee for each watershed is bolded.

a. LEAD WATERSHED COPERMITTEE IDENTIFICATION

Watershed Copermittees may identify the Lead Watershed Copermittee for their WMA. In the event that a Lead Watershed Copermittee is not selected and identified by the Watershed Copermittees, by default the Copermittee identified in Table 3 as the Lead Watershed Copermittee for that WMA must be responsible for implementing the requirements of the Lead Watershed Copermittee in that WMA. The Lead Watershed Copermittees must serve as liaisons between the Copermittees and Regional Board, where appropriate.

b. WATERSHED MAP

Watershed Copermittees must develop and periodically update a map of the WMA to facilitate planning, assessment, and collaborative decision-making. As determined appropriate, the map must include features such as receiving waters (including the Pacific Ocean); Environmentally Sensitive Areas-Clean Water Act

section 303(d) impaired receiving waters; land uses, MS4s; major highways; jurisdictional boundaries; and inventoried commercial, industrial, and municipal sites. The Copermittees must submit the GIS layers containing the watershed map to the Regional Board with their updated JRMP within 365 days of adoption of this Order.

C. ANNUAL WATERSHED WATER QUALITY ASSESSMENT

- (1) Assess Conditions: Watershed Copermittees must annually assess the water quality of receiving waters in their WMA and use the information to set priorities and to effectively update BMP implementation. This assessment must use applicable water quality data, reports, and analyses generated in accordance with the requirements of this Order and the Receiving Waters and ~~Urban~~ Runoff Monitoring and Reporting Program, as well as applicable information available from Copermittees and other public and private organizations.
- (2) Identify Problems and Select Priority Pollutant(s): The assessment and analysis must annually identify the WMA's water quality problems that are partially or fully attributable to MS4 discharges. Identified water quality problems must include CWA section 303(d) listings, persistent violations of water quality standards, toxicity, degraded biological conditions, hydromodification, violations of permit prohibitions, impacts to beneficial uses, and other pertinent conditions. From the list of water quality problems, the high priority water quality problems of the WMA must be identified. High priority problems selected must include those water quality problems that most significantly exceed or affect water quality standards (water quality objectives, ~~and~~ beneficial uses, and the State Policy for maintaining high quality waters⁹).
- (3) Identify Sources of Pollutants: The annual assessments must include identification of the likely sources of the WMA's high priority water quality problems that have caused or contributed to exceedances of water quality objectives, or that if unaddressed, may result in exceedances of water quality objectives. The Annual Assessment must include, but is not limited to, focused water quality and sediment quality monitoring, watershed modeling of ambient constituents, flows, and pollutants. The Annual Assessments shall identify sources or source areas, linkages, waste loadings within the watersheds, and where necessary (i.e. exceedances of water quality objectives), waste load allocations needed to return to compliance with water quality objectives.

⁹ State Water Resources Control Board, Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California.

d. WATERSHED STRATEGY: EVALUATION AND SELECTION OF MANAGEMENT OPTIONS

Watershed Copermittees must develop a collective watershed strategy to abate the sources and reduce the discharges causing the high priority water quality problems of the WMA based on their assessment in section G.1.c. The strategy must guide Watershed Copermittee selection and implementation of Watershed URMP Activities, so that the Watershed Activities selected and implemented are appropriate for each Watershed Copermittee's contribution to the WMA's high priority water quality problems.

- (1) Evaluation of Management Options: Watershed Copermittees within a WMA must evaluate management options in response to each annual watershed water quality assessment. Copermittees must identify actions necessary to reduce priority pollutant discharges from the MS4, including actions to resolve key uncertainties and to verify assumptions.
- (2) Selection of Management Options / Watershed Activities List: Each Watershed Copermittee within a WMA must select management practices to implement in response to the annual evaluation of management options. Each Copermittee must establish an implementation schedule for the selected management options.

~~(3) Role of Lead Permittee~~

- ~~(a) The Lead Watershed Permittee must maintain results of the management option evaluations. For structural and nonstructural management practices evaluated, the assessment must contain a description of the practice(s), conclusions from the evaluation, and whether and when the practice is planned for implementation by a Permittee or group of Permittees.~~
- ~~(b) The Lead Watershed Permittee must maintain the updated schedule of actions to be taken by each Watershed Permittee. Each activity on the Watershed Activities List must include the following information:
 - ~~(i) A description of the activity;~~
 - ~~(ii) A time schedule for implementation of the activity, including key milestones;~~
 - ~~(iii) An identification of the specific responsibilities of Watershed Permittees in completing the activity;~~
 - ~~(iv) A description of how the activity will address the identified high priority water quality problem(s) of the watershed;~~
 - ~~(v) A description of how the activity is consistent with the collective watershed strategy;~~
 - ~~(vi) A description of the expected effectiveness and benefits of~~~~

~~implementing the activity; and
(vii) A description of how implementation effectiveness will be measured.~~

e. BMP IMPLEMENTATION AND ASSESSMENT

The Watershed Copermittees must implement and assess Watershed Activities that ~~address~~ improve the high priority water quality problems in the WMA. ~~Watershed Activities include both “Water Quality Activities” and “Education Activities” that each specifically target the high priority water quality problems in the WMA.~~ Water Quality Activities are structural or non-structural measures, ~~other than education.~~ ~~Education Activities are outreach and training activities.~~

- (1) BMP Implementation: Each Watershed Copermittee must implement Watershed Activities pursuant to established schedules in the Watershed ~~URMP~~. During each reporting period, no less than two Watershed Water Quality Activities ~~and one Watershed Education Activity~~ must be put into effect that can be reasonably expected to provide quantifiable benefits to discharge or receiving water quality within each WMA as part of the iterative process for reducing storm water pollutants to the MEP and/or eliminating non-storm water runoff and pollutants (Additional Aliso Creek provisions are in Section E.5 below.) Watershed Activities may be implemented individually or collectively, and may be implemented at the watershed or jurisdictional level. Results from Watershed Activities shall be used in the design and implementation of future Watershed Activities as part of the iterative process. ~~A Watershed Water Quality Activity implemented on a jurisdictional basis must be organized and implemented to target a watershed’s must exceed the baseline jurisdictional requirements of the jurisdictional URMP requirements (section D) of this Order.~~ ~~Watershed Activities do not include projects that are otherwise required by the Regional Board such as for JRMP or other NPDES permit requirements. The one exception is retrofitting sites, which can be considered a watershed activity.~~
- (2) BMP Assessment: Watershed Copermittees must annually assess the success of each implemented BMP through monitoring, surveillance, and other effective means. The assessments must include consideration of the individual practice, expectations of the activity, adjacent receiving waters, and the WMA.
- (3) BMP Summaries: For structural and nonstructural management practices implemented, the Watershed Copermittees must develop annual summaries that contain a description of the practice, capital and maintenance costs, expectations for effectiveness, date implemented, and any observed results.

f. INFORMATION EXCHANGE

- (1) Copermittee Collaboration and Meetings: Watershed Copermittees must collaborate to develop and implement the Watershed ~~Urban~~-Runoff Management Programs. Watershed Copermittee collaboration must include frequent regularly scheduled meetings.
- (2) Public Participation: Watershed Copermittees must implement a watershed-specific public participation mechanism within each watershed. The mechanism must encourage participation from other organizations within the watershed (such as water/sewer districts, Orange County Vector Control District, Caltrans, non-governmental organizations, etc.).
- (3) The Lead Watershed Copermittee must make publicly available the management option evaluations, watershed activities list, and implemented BMP summaries.

g. WATERSHED ~~U~~RMP REVIEW AND UPDATES

Each Watershed ~~U~~RMP must be reviewed annually to identify needed modifications and improvements based on the BMP evaluations and assessments of water quality data, BMPs, and other pertinent information. Individual Watershed Copermittees must also review and modify their jurisdictional activities and ~~J~~~~U~~RMPs as necessary so that they are consistent with the Watershed ~~U~~RMP findings.

h. WATERSHED-BASED LAND USE PLANNING

The Watershed Copermittees must develop, implement, and modify, as necessary, a program for encouraging collaborative, watershed-based, land use planning in their jurisdictional planning departments.

2. Reporting

Each Copermittee must contribute to the development of an annual watershed ~~U~~RMP report to be submitted to the Regional Board annually by the Lead Watershed Copermittee. The annual watershed ~~U~~RMP report must contain the following information:

- a. Annual water quality assessment with identification of highest priorities;
- b. Updated watershed strategy;
- c. Record of watershed meetings and collaborative progress;
- ~~c.d.~~ _____ Evaluation of BMPs considered to implement the watershed strategy;
- ~~d.e.~~ _____ Updated watershed ~~U~~RMP activities list, including the status and timeframe on all selected activities;

f. Estimated pollutant reductions from proposed and implemented Watershed Activities;

- e.g. BMP assessments of implemented watershed URMP activities;
- f.h. Summaries of implemented BMPs; how the BMPs addressed the identified high priority water quality problems; and the measured pollutant reduction;
- g.i. Summary of progress toward abating sources and reducing pollutant discharges causing the identified high priority water quality problems in the WMA; and
- h.j. Summary of progress toward achieving short-term and long-term goals; and-
- k. Detailed schedules for adding and/or modifying BMPs to address the identified high priority problems.

3. Work Plan

The Watershed Permittees must develop, implement, and update annually, a Watershed Water Quality Work Plan that ranks each watershed's highest priority issues. The Watershed Water Quality Work plan shall identify planned watershed assessment, BMP evaluation, BMP selection, and BMP implementation efforts for each watershed planning area for the full 5-year Permit cycle. The goal of the work plan to is to demonstrate a responsive and adaptive approach for the judicious and effective use of available resources to attack the highest priority problems on a watershed basis.

3.4. Aliso Creek Watershed URMP Provisions

The following provisions apply to the Aliso Creek watershed URMP. Requirements in this subsection must supersede requirements prescribed by the Regional Board on October 18, 2005.¹⁰

- a. Each Copermittee within the Aliso Creek Watershed must implement the monitoring and reporting program described in *Aliso Creek 13325 Directive, Revised Monitoring Program Design – Integration with NPDES Program*, December 2004 (Revised Aliso Creek Program).
- b. Each Copermittee must provide annual reports by March 1 of each year beginning in 2008 for the preceding annual period of January through December. The annual reports must contain the following information:
 - (1) Water quality data and assessment from the Revised Aliso Creek Program. Each municipality must implement the monitoring and reporting program described in the Revised Aliso Creek Program. All information submitted in the report must conform to a SWAMP-Compatible Quality Assurance Project

¹⁰ On October 12, 2005, the Regional Board accepted proposed changes to the bacteria monitoring program that had been conducted since Spring 2001 pursuant to an Investigative Order from the Regional Board's executive officer. The October 18, 2005, letter from the Regional Board's executive officer revised the Investigative Order and instituted the new monitoring and reporting requirements.

- Plan¹¹. The report must contain an assessment of compliance with applicable water quality standards for each monitoring station. The report must include data in tabular and graphical form, and electronic data must be submitted to the Regional Board upon request.
- (2) Program Assessment. A description and assessment of each municipality's program implemented within the high-priority storm drain locations (as identified Revised Aliso Creek Program) to reduce discharges of indicator fecal bacteria/pathogens. Monitoring alone is not sufficient to assess progress of the municipal programs. Municipalities must demonstrate each year that their programs are effective and resulting in a reduction of bacteria sources.
- (i) For structural and nonstructural management practices implemented, the assessment must contain a description of the practice, capital and maintenance costs, expectations for effectiveness, date implemented, and any observed results.
- (ii) For structural and nonstructural management practices evaluated, the assessment must contain a description of the practice(s), conclusions from the evaluation, and whether and when the practice is planned for implementation by the municipality or group of municipalities.
- (3) Status Reports. Updates on high-priority storm drain areas. Status reports must be provided by each municipality that discuss the causes of impairment and subsequent management activities implemented within the reporting period in the high priority areas and the planned activities for the next reporting period.
- (4) Certification Statement. The technical reports submitted to the Regional Board must include the following certification statement signed by either the principal executive officer, ranking elected official, or duly authorized representative of that person:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person(s) directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there

¹¹ The State Water Resource Control Board (State Board) has prepared an electronic template for Quality Assurance Project Plans (QAPP) to assist in QAPP development, to provide a common format that will allow for review to be expedited, and to provide information on Surface Water Ambient Monitoring (SWAMP) consistency. Additional information and the template are available on-line at <http://www.waterboards.ca.gov/swamp/qapp.html>.

are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

- c. The annual reports must be submitted until the Regional Board determines they are no longer warranted. If requested by a municipality, the monitoring program may be modified or reduced by the Regional Board. The monitoring program and annual reporting may be modified in response to adopted TMDLs and additional Clean Water Act 303(d) listings for impairment.
- d. Municipalities must continue meeting on a quarterly basis to discuss efforts to reduce bacteria in the Aliso Creek watershed.

H. FISCAL ANALYSIS

1. Secure Resources: Each Copermittee must secure the resources necessary to meet all requirements of this Order.
2. Annual Analysis: Each Copermittee must conduct an annual fiscal analysis of the necessary capital and operation and maintenance expenditures necessary to accomplish the activities of the programs required by this Order. The analysis must include estimated expenditures for the reporting period, the preceding period, and the next reporting period.
 - a. Each analysis must include a description of the source of funds that are proposed to meet the necessary expenditures, including legal restrictions on the use of such funds.
 - b. Each analysis must include a narrative description of circumstances resulting in a 25 percent or greater annual change for any budget line items.
3. Business Plan: Prior to expiration of this Order (five years after adoption), each Copermittee must submit to the Regional Board a Municipal Storm Water Funding Business Plan that identifies a long-term funding strategy for program evolution and funding decisions. The Business Plan must identify planned funding methods and mechanisms for municipal storm water management. It should identify the following items:
 - a. Program components of the municipal storm water program;
 - b. Linkages and dependencies among program components.
 - c. Problems addressed by the storm water program;
 - d. Storm water program priorities;
 - e. Services provided by the storm water program;
 - f. Public participation;
 - g. Available funding methods and mechanisms and associated legal constraints;
 - h. Partnerships with other public agencies;

- i. Partnerships with the private sector;
 - j. Use of technology to improve efficiency; and
 - k. Anticipated local, state, and federal regulations that affect storm water management or funding options.
4. Annual Reporting: Each Copermittee must submit its annual fiscal analysis with the annual JURMP report.

I. **TOTAL MAXIMUM DAILY LOADS**

This section will incorporate adopted TMDL WLAs as numeric limits on a pollutant by pollutant, watershed by watershed basis. Reduction schedules and monitoring requirements for each pollutant will be inserted into this Order as individual Cleanup and Abatement Orders (CAOs), adopted by the Regional Board. CAOs for adopted TMDLs with compliance dates beyond the length of this permit will be incorporated into this Order as developed by the Regional Board. Early TMDL requirements, including monitoring, may be required and inserted into this Order pursuant to Finding E.12

J. PROGRAM EFFECTIVENESS ASSESSMENT AND REPORTING

1. Jurisdictional Program Effectiveness Assessments

a. OBJECTIVES OF EFFECTIVENESS ASSESSMENTS

Beginning with the Annual Report due in ~~2009~~2010, each Copermittee must annually assess the effectiveness of its Jurisdictional Urban-Runoff Management Program (JURMP) implementation at meeting the following objectives:

(1) Objective for 303(d) Waterbodies: Reduce pollutant loadings.

(a) Each Copermittee must establish annual assessment measures or methods specifically for reducing discharges of storm water pollutants from its MS4 into each downstream 303(d)-listed water body for which that waterbody is impaired. Assessment measures must be developed for each of the six outcome levels described by CASQA.¹²

(b) Each Copermittee must annually conduct each established assessment measure or method and evaluate the outcome. Each outcome must then be used to assess the effectiveness of implemented management measures toward reducing MS4 discharges of the specific pollutants

¹² Effectiveness assessment outcome levels as defined by CASQA are defined in Attachment C of this Order. See “Municipal Stormwater Program Effectiveness Assessment Guidance” (CASQA, May 2007) for guidance for assessing program activities at the various outcome levels.

causing or contributing to conditions of impairment.

- (c) The assessment measures must target both water quality outcomes and the results of municipal enforcement activities.
- (2) Objective for Environmentally-Sensitive Areas: Prevent MS4 discharges from causing or contributing to conditions of pollution, nuisance, or contamination.
- (a) Each Copermittee must establish annual measures or methods specifically for assessing the effectiveness of its management measures for protecting downstream ESAs from adverse effects caused by discharges from its MS4. Assessment measures must be developed for each of the six outcome levels described by CASQA.
 - (b) Each Copermittee must annually implement each established assessment measure or method and evaluate the outcome. Each outcome must be used to assess the effectiveness of implemented management measures toward reducing MS4 discharges of the specific pollutants causing or contributing to conditions of impairment.
 - (c) The assessment measures must target both water quality outcomes and the results of municipal enforcement activities.
- (3) Objectives for major program component outcomes: Determined by Each Copermittee.
- (a) Each Copermittee must annually develop objectives for each program component in Section ~~D-F~~ and the overall JURMP. The objectives must be established as appropriate in response to program implementation and evaluation of water quality and management practices.
 - (b) Assessment approaches for program implementation must include a mix of specific activities, general program components, and water quality data.
 - (c) The assessment measures must target both water quality outcomes and the results of municipal enforcement activities.
- (4) Objectives for actions taken to protect receiving water limitations in accordance with Section A.3this Order.
- (a) Each Copermittee must develop and implement an effectiveness assessment strategy for each measure conducted in response to a determination to implement the “iterative” approach to prevent or reduce any pollutants that are causing or contributing to the exceedance of water

quality standards as outlined in ~~Section A.3 of~~ this Order

b. ASSESSMENT REVIEW

- (1) Based on the results of the effectiveness assessments, each Copermittee must annually review its jurisdictional activities and BMPs to identify modifications and improvements needed to maximize JURMP effectiveness, as necessary to achieve compliance with ~~Section A of~~ this Order.
- (2) Each Copermittee must develop and annually conduct an Integrated Assessment¹³ of each effectiveness assessment objective above (Section ~~GJ.1.a~~) and the overall JURMP using a combination of outcomes as appropriate to the objectives.¹⁴

2. Program Modifications

- a. Each Copermittee must develop and implement a plan and schedule to address program modifications and improvements identified during annual effectiveness assessments.
- b. Jurisdictional activities/BMPs that are ineffective or less effective than other comparable jurisdictional activities/BMPs must be replaced or improved upon by implementation of more effective jurisdictional activities/BMPs. Where monitoring data exhibits persistent water quality problems that are caused or contributed to by MS4 discharges, jurisdictional activities or BMPs applicable to the water quality problems must be modified and improved to correct the water quality problems.

3. Effectiveness Assessment and Program Response Reporting

- a. Each Copermittee must include a description and summary of its annual and long-term effectiveness assessments within each Annual Report. Beginning with the Annual Report due in ~~2009~~2010, the Program Effectiveness reporting must include:
 - (1) 303(d) waterbodies: A description and results of the annual assessment measures or methods specifically for reducing discharges of pollutants from its MS4 into each 303(d)-listed waterbody;
 - (2) ESAs: A description and results of the annual assessment measures or methods specifically for managing discharges of pollutants from its MS4 into

¹³ Integrated assessment is defined in Attachment C. It is the process of evaluating whether program implementation is resulting in the protection or improvement of water quality. Integrated assessment combines assessments of program implementation and water quality.

¹⁴ Not all program components need be addressed at each of the six outcome levels.

each downstream ESA;

- (3) Other Program Components: A description of the objectives and corresponding assessment measures and results used to evaluate the effectiveness of each general program component. The results must include findings from both program implementation and water quality assessment where applicable;
- (4) Receiving water protection: A description and results of the annual assessment measures or methods employed specifically for actions taken to protect receiving water limitations in accordance with Section A.3 of this Order;
- (5) A description of the steps taken to use dry-weather and wet-weather monitoring data to assess the effectiveness of the programs for 303(d) impairments, ESAs, and general program components;
- (6) A description of activities conducted in response to investigations of illicit discharge and illicit connection activities, including how each investigation was resolved and the pollutant(s) involved;
- (7) Responses to effectiveness assessments: A description of each program modification, made in response to the results of effectiveness assessments conducted pursuant to Section GJ.1.a, and the basis for determining (pursuant to Section GJ.2.b.) that each modified activity and/or BMP represents an improvement with respect to reducing the discharge of pollutants from the MS4.
- (8) A description of the steps that will be taken to improve the Copermittee's ability to assess program effectiveness using measurable targeted outcomes, assessment measures, assessment methods, and outcome levels 1-6. Include a time schedule for when improvement will occur; and
- (9) A description of the steps that will be taken to identify aspects of the Copermittee's Jurisdictional ~~Urban~~ Runoff Management Program that will be changed based on the results of the effectiveness assessment.

4. Work Plan

Each Copermittee must develop a work plan to address their high priority water quality problems in an iterative manner over the life of the permit. The goal of the work plan is to demonstrate a responsive and adaptive approach for the judicious and effective use of available resources to attack the highest priority problems. The work plan shall include, at a minimum, the following:

- a. The problems and priorities identified during the Annual Watershed Water Quality Assessment;
- b. A list of priority pollutants and known or suspected sources;
- c. A brief description of the strategy employed to reduce, eliminate or mitigate the negative impacts;
- d. A description and schedule for new and/or modified BMPs. The schedule is to include dates for significant milestones;
- e. A description of how the selected activities will address an identified high priority problem. This will include a description of the expected effectiveness and benefits of the new and/or modified BMPs;
- f. A description of implementation effectiveness metrics;
- g. A description of how efficacy results will be used to modify priorities and implementation; and
- h. A review of past activities implemented, progress in meeting water quality standards, and planned program adjustments.

The Copermittee shall submit the work plan to the Regional Board within 365 days of adoption of the Order. Annual updates are also required and shall be included with the annual JRMP report. The Regional Board will assess the work plan for compliance with the specific and overall requirements of the Order. To increase effectiveness and efficiencies, Copermittees may combine their implementation efforts and work plans within a hydrologic area or sub area. Each Copermittee, however, maintains individual responsibility for developing and implementing an acceptable work plan.

K. REPORTING

1. ~~Urban~~ Runoff Management Plans

a. JURISDICTIONAL ~~URBAN~~ RUNOFF MANAGEMENT PLANS

- (1) Copermittees: The written account of the overall program to be conducted by each Copermittee to meet the jurisdictional requirements of section ~~D-F~~ of this Order is referred to as the Jurisdictional ~~URBAN~~ Runoff Management Plan (JURMP). Each Copermittee must revise and update its existing ~~(JURMP)~~ so that it describes all activities the Copermittee will undertake to implement the requirements of this Order. Each Copermittee must submit its updated and revised ~~(JURMP)~~ to the Regional Board 365 days after adoption of this Order.
- (2) At a minimum, each Copermittee's JURMP must be updated and revised to demonstrate compliance with each applicable section of this Order.

b. WATERSHED ~~URBAN~~ RUNOFF MANAGEMENT PLANS

- (1) Copermittees: The written account of the program conducted by each

watershed group of Copermittees is referred to as the Watershed ~~Urban~~ Runoff Management Plan. The Copermittees within each watershed are be responsible for updating and revising each Watershed ~~Urban~~ Runoff Management Plan, as specified in Table ~~3-5~~ above. Each Watershed ~~Urban~~ Runoff Management Plan must be updated and revised to describe all activities the watershed Copermittees will undertake to implement the Watershed ~~Urban~~ Runoff Management Plan requirements of section E of this Order.

- (2) Lead Watershed Copermittee: Each Lead Watershed Copermittee is responsible for producing its respective Watershed ~~Urban~~ Runoff Management Plan, as well as for coordination and meetings amongst all member watershed Copermittees. Each Lead Watershed Copermittee is further responsible for the submittal of the Watershed ~~Urban~~ Runoff Management Plan to the Principal Copermittee by the date specified by the Principal Copermittee.
- (3) Principal Copermittee: The Principal Copermittee must assemble and submit updated Watershed ~~Urban~~ Runoff Management Plans to the Regional Board on January 31, 200~~10~~9 in the form of the W~~U~~RMP annual report.

2. Other Required Reports and Plans

a. ~~S~~USMP UPDATES

- (1) Each Copermittee must submit its updated local ~~S~~USMP in accordance with the applicable requirements of section ~~D~~F.1 with the J~~U~~RMP 365 days after adoption of this Order.
- (2) For ~~S~~USMP-related requirements of Section ~~D~~F.1 with subsequent implementation due dates, updated ~~S~~USMPs must be submitted with the J~~U~~RMP annual report covering the applicable reporting period.

b. REPORT OF WASTE DISCHARGE

The Principal Copermittee must submit to the Regional Board, no later than 210 days in advance of the expiration date of this Order, a Report of Waste Discharge (ROWD) as an application for issuance of new waste discharge requirements. The fourth annual report for this Order may serve as the ROWD, provided it contains the minimum information below.

At a minimum, the ROWD must include the following: (1) Proposed changes to the Copermittees' ~~urban~~-runoff management programs; (2) Proposed changes to monitoring programs; (3) Justification for proposed changes; (4) Name and mailing addresses of the Copermittees; (5) Names and titles of primary contacts

of the Copermittees; and (6) Any other information necessary for the reissuance of this Order.

3. Annual Reports

a. JURISDICTIONAL ~~URBAN~~ RUNOFF MANAGEMENT PROGRAM (JURMP) ANNUAL REPORTS

- (1) Copermittees: Each Copermittee must generate individual JURMP Annual Reports which cover implementation of its jurisdictional activities during the past annual reporting period. Each Annual Report must verify and document compliance with this Order as directed in this section. Each Copermittee must retain records through 2015, available for review, that document compliance with each requirement of this Order. Each Copermittee must submit to the Principal Copermittee its individual JURMP Annual Report by the date specified by the Principal Copermittee. The reporting period for these annual reports must be the previous fiscal year. For example, the report submitted September 30, ~~2008-2010~~ must cover the reporting period July 1, 200~~97~~ to June 30, ~~2008~~2010.
- (2) Principal Copermittee: The Principal Copermittee is responsible for collecting and assembling each Copermittee's individual JURMP Annual Report. The Principal Copermittee must submit Unified JURMP Annual Reports to the Regional Board by September 30 of each year, beginning on September 30, 200910. The Unified JURMP Annual Report must contain the 13 individual JURMP Annual Reports.
- (3) Each JURMP Annual Report must contain, at a minimum, the following information:
 - (a) Information required to be reported annually in Section ~~F-H~~ (Fiscal Analysis) of this Order;
 - (b) Information required to be reported annually in Section ~~G-J~~ (Program Effectiveness) of this Order; ~~and~~
 - (c) The Reporting Checklist Requirement found in Attachment D, and (e)(d) Information for each program component by watershed as described in the following Table 64:

Table ~~4-6~~. Annual Reporting Requirements

| Program Component | Reporting Requirement |
|-------------------|---|
| New Development | 1. Updated relevant sections of the General Plan and environmental review process and a description of planned updates within the next annual reporting period, if applicable |

| Program Component | Reporting Requirement |
|-------------------|--|
| | <p>2. Revisions to the local SSMP, including where applicable: (a) Identification and summary of where the SSMP fails to meet the requirements of this Order; (b) Updated procedures for identifying pollutants of concern for each Priority Development Project; (c) Updated treatment BMP ranking matrix; and (d) Updated site design and treatment control BMP design standards;</p> <p>3. Verification that site design, source control, and treatment BMPs were required on all applicable Priority Development Projects;</p> <p>4. Description of the application of LID and site design BMPs in the planning and approval process;</p> <p>5. Description of projects subject to the local waiver provision for numeric sizing of treatment control BMP requirements;</p> <p>6. Description and summary of LID site design BMP substitution program, if applicable;</p> <p>7. Description and summary of the process to verify compliance with SSMP requirements;</p> <p>8. Updates to the BMPs that are listed in the local SSMP as options for treatment control;</p> <p>9. Description of the treatment control maintenance tracking process and verification that the requirements of this Order were met during the reporting period; (a) Updated watershed-based database of approved treatment control BMPs and treatment control BMP maintenance within its jurisdiction, including updates to the list of high-priority treatment BMPs;</p> <p>10. Description of the process for identifying and evaluating hydrologic conditions of concern and requiring a suite of management measures within all Priority Development Projects to protect downstream beneficial uses and prevent adverse physical changes to downstream stream channels;</p> <p>11. Description of enforcement activities applicable to the new development and redevelopment component and a summary of the effectiveness of those activities;</p> |
| Construction | <p>1. Updated relevant ordinances and description of planned ordinance updates within the next annual reporting period, if applicable;</p> <p>2. A description of procedures used for identifying priorities for inspecting sites and enforcing control measures which consider the nature of the construction activity, topography, and the characteristics of soils and receiving water quality;</p> <p>3. Designated minimum and enhanced BMPs;</p> |

| Program Component | Reporting Requirement |
|-------------------|--|
| | 4. Summary of the inspection program, including the following information: <ul style="list-style-type: none"> (a) Number <u>and date</u> of inspections conducted <u>at each facility including the facility address and number of facilities inspected</u>; (b) Number of facilities lacking adequate BMPs; (c) The most common types of BMP violations <u>identified during the inspection by facility</u>; (d) Number, <u>date</u>, and types of enforcement actions <u>by facility</u>; (e) Narrative description of inspection findings and follow-up activities <u>for each facility</u>; |
| Municipal | 1. Updated source inventory; 2. Changes to the designated municipal BMPs 3. Descriptions of procedures to assure that flood management projects assess the impacts on the water quality of receiving water bodies; 4. Summary and assessment of BMPs implemented at retrofitted flood control structures, including: <ul style="list-style-type: none"> (a) List of projects with BMP retrofits; and (b) List and description of structures retrofitted without BMPs; 5. Description and assessment of the municipal structural treatment control operations and maintenance activities, including: <ul style="list-style-type: none"> (a) Number of inspections and types of facilities; and (b) Summary of findings; 6. Description of the municipal areas/facilities operations and maintenance activities, including: <ul style="list-style-type: none"> (a) Number and types of facilities maintained; (b) Amount of material removed and how that material was disposed; and (c) List of facilities planned for bi-annual inspections and the justification; 7. Description of the municipal areas/programs inspection activities, including: <ul style="list-style-type: none"> (a) Number <u>and date</u> of inspections conducted <u>at each facility and number of facilities inspected</u>; (b) Number of facilities lacking adequate BMPs; (c) The most common types of BMP violations <u>identified during the inspection by facility</u>; (d) Number, <u>date</u> and types of enforcement actions <u>by facility</u>; (e) Narrative description of inspection findings and follow-up activities <u>for each facility</u>; 8. Description of activities implemented to address sewage infiltration into the MS4; |
| Commercial / | 1. Annual inventory of commercial / industrial sources; |

| Program Component | Reporting Requirement |
|---|---|
| Industrial | 2. Summary of the inspection program, including the following information: (a) Number <u>and date</u> of inspections conducted <u>at each facility including the facility address and number of facilities inspected</u> ; (b) Number of facilities lacking adequate BMPs; (c) The most common types of BMP violations <u>identified during the inspection by facility</u> ; (d) Number, <u>date</u> , and types of enforcement actions <u>by facility</u> ; (e) Narrative description of inspection findings and follow-up activities <u>for each facility</u> ; 3. Changes to designated minimum and enhanced BMPs; 4. A list of industrial sites, including each name, address, and SIC code, that the Copermittee suspects may require coverage under the General Industrial Permit for which a NOI has not been filed. |
| Residential | 1. Updated minimum BMPs required for residential areas and activities; |
| | 2. Quantification and summary of applicable urban -runoff and storm water enforcement actions within residential areas and activities |
| | 3. Description of efforts to manage urban -runoff and storm water pollution in common interest areas; |
| Illicit Discharge Detection and Elimination | 1. Changes to the legal authority to implement Illicit Discharge Detection and Elimination activities; 2. Changes to the established investigation procedures; 3. Public reporting mechanisms, including phone numbers and web pages; 4. All data and assessments from the Dry Weather <u>Effluent Field Screening and</u> Analytical Monitoring activities; 5. Response criteria developed for water quality data and notifications; 6. Summaries of illicit discharges (including spills and water quality data events) and how each significant case was resolved; 7. A description of instances when field screening and analytical data exceeded action levels, but for which no investigation was conducted; 8. A description of enforcement actions taken in response to investigations of illicit discharges and a description of the effectiveness of those enforcement measures; 9. A description of controls to <u>prevent limit</u> infiltration of seepage from municipal sanitary sewers to municipal separate storm sewer systems. |
| <u>Work Plan</u> | <u>Priorities, strategy, implementation schedule and effectiveness evaluation.</u> |

- (4) Each JURMP Annual Report must also include the following information regarding non-storm water discharges (see Section B.2. of this Order):
 - (a) Identification of non-storm water discharge categories identified as a source of pollutants to waters of the U.S;
 - (b) A description of whether non-storm water discharge categories identified under section B.2 above will be prohibited or required to implement appropriate control measures to prevent ~~reduce~~ the discharge of pollutants ~~to the MEP~~;
 - (c) Identification of any control measures to be required and implemented for non-storm water discharge categories identified under section (a) above; and
 - (d) A description of a program to reduce pollutants from non-emergency fire fighting flows identified by the Copermittee to be significant sources of pollutants.

b. WATERSHED ~~URBAN~~-RUNOFF MANAGEMENT PROGRAM (WURMP) ANNUAL REPORTS

- (1) Lead Watershed Copermittee: Each Lead Watershed Copermittee must generate watershed-specific WURMP Annual Reports for its respective watershed(s), as they are outlined in Table ~~3-5~~ of Order No. R9-200~~89~~-000~~12~~. Copermittees within each watershed must collaborate with the Lead Watershed Copermittee to generate the WURMP Annual Reports.
- (2) Each WURMP Annual Report must, at a minimum, contain the information required in sections ~~EG.2~~ and ~~EG.3~~ of this Order for the reporting period. Each WURMP Annual Report must also serve as an update to the WURMP.
- (3) Principal Copermittee: The Unified WURMP Annual Report must contain the nine separate Watershed ~~Urban~~-Runoff Management Program Annual Reports. Each Lead Watershed Copermittee must submit to the Principal Copermittee a WURMP Annual Report by the date specified by the Principal Copermittee. The Principal Copermittee must assemble and submit the Unified WURMP Annual Report to the Regional Board by January 31, 201009 and every January 31 thereafter. The reporting period for these annual reports is the previous fiscal year. For example, the report submitted January 31, 20~~1009~~ must cover the reporting period July 1, 200~~87~~ to June 30, 200~~98~~.

4. Interim Reporting Requirements

For the July 200~~78~~-June 200~~89~~ reporting period, Jurisdictional URMP and Watershed URMP Annual Reports must be submitted on January 31, 200~~89~~. Each Jurisdictional URMP and Watershed URMP Annual Report submitted for this

reporting period must, at a minimum, include comprehensive descriptions of all activities conducted to fully implement the Copermittees' Jurisdictional ~~UR~~MP and Watershed ~~UR~~MP documents, as those documents were developed to comply with the requirements of Order No. 2002-01. The Principal Copermittee must submit these documents in a unified manner, consistent with the unified reporting requirements of Order No. 2002-01.

5. Universal Reporting Requirements

All submittals must include an executive summary, introduction, conclusion, recommendations, and signed certified statement. Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal. The Principal Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.

L. MODIFICATION OF PROGRAMS

Modifications of Jurisdictional ~~Urban~~-Runoff Management Programs and/or Watershed ~~Urban~~-Runoff Management Programs may be initiated by the Executive Officer of the Regional Board or by the Copermittees. Requests by Copermittees must be made to the Executive Officer, and must be submitted during the annual review process. Requests for modifications should be incorporated, as appropriate, into the Annual Reports or other deliverables required or allowed under this Order.

1. Minor Modifications: Minor modifications to Jurisdictional ~~Urban~~-Runoff Management Programs, and/or Watershed ~~Urban~~-Runoff Management Programs, may be accepted by the Executive Officer where the Executive Officer finds the proposed modification complies with all discharge prohibitions, receiving water limitations, and other requirements of this Order.
2. Modifications Requiring an Amendment to this Order: Proposed modifications that are not minor must require amendment of this Order in accordance with this Order's rules, policies, and procedures.

M. PRINCIPAL COPERMITTEE RESPONSIBILITIES

Within 180 days of adoption of this Order, the Copermittees must designate the Principal Copermittee and notify the Regional Board of the name of the Principal Copermittee. The Principal Copermittee must, at a minimum:

1. Serve as liaison between the Copermittees and the Regional Board on general permit issues, and when necessary and appropriate, represent the Copermittees

before the Regional Board.

2. Coordinate permit activities among the Copermittees and facilitate collaboration on the development and implementation of programs required under this Order.
3. Integrate individual Copermittee documents and reports into single unified documents and reports for submittal to the Regional Board as required under this Order.
4. Produce and submit documents and reports as required by section ~~H-K~~ of this Order and Receiving Waters Monitoring and Reporting Program No. R9-200~~98~~-000~~12~~.

N. RECEIVING WATERS AND ~~URBAN~~-RUNOFF MONITORING AND REPORTING PROGRAM

Pursuant to CWC section 13267, the Copermittees must comply with all the requirements contained in Receiving Waters and ~~Urban~~-Runoff Monitoring and Reporting Program No. R9-200~~98~~-000~~21~~.

O. STANDARD PROVISIONS, REPORTING REQUIREMENTS, AND NOTIFICATIONS

1. Each Copermittee must comply with Standard Provisions, Reporting Requirements, and Notifications contained in Attachment B of this Order. This includes 24 hour/5 day reporting requirements for any instance of non-compliance with this Order as described in section 5.e of Attachment B.
2. All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermittees must be adequate to implement the requirements of this Order.

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on (**DATE**).

TENTATIVE

John H. Robertus
Executive Officer