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CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
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ORDER NO. R8-2022-0008
NPDES NO. CAS618000

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT AND WASTE DISCHARGE REQUIREMENTS FOR DISCHARGES OF POLLUTANTS IN URBAN RUNOFF FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS IN THE COUNTIES OF ORANGE, RIVERSIDE, AND SAN BERNARDINO WITHIN THE SANTA ANA REGION

SANTA ANA REGIONAL MS4 PERMIT

I. ADMINISTRATIVE INFORMATION

The following Discharger(s) are subject to waste discharge requirements as set forth in this Order:

Table 1: Permittees

Orange County Principal Permittee	County of Orange	
Permittees Attachment B Figure 2 depicts the jurisdictional boundaries of these Permittees.	Orange County Flood Control District	City of Lake Forest
	City of Anaheim	City of Los Alamitos
	City of Brea	City of Newport Beach
	City of Buena Park	City of Orange
	City of Costa Mesa	City of Placentia
	City of Cypress	City of Santa Ana
	City of Fountain Valley	City of Seal Beach
	City of Fullerton	City of Stanton
	City of Garden Grove	City of Tustin
	City of Huntington Beach	City of Villa Park
	City of Irvine	City of Westminster
	City of La Habra	City of Yorba Linda
	City of La Palma	
Riverside County Principal Permittee	Riverside County Flood Control and Water Conservation District	
Permittees Attachment B Figure 3 depicts the jurisdictional boundaries of these Permittees.	County of Riverside	City of Lake Elsinore
	City of Beaumont	City of Menifee
	City of Calimesa	City of Moreno Valley
	City of Canyon Lake	City of Norco
	City of Corona	City of Perris

	City of Eastvale	City of Riverside
	City of Hemet	City of San Jacinto
	City of Jurupa Valley	
San Bernardino County Principal Permittee	County of San Bernardino Flood Control District	
Permittees Attachment B Figure 4 depicts the jurisdictional boundaries of these Permittees	County of San Bernardino	City of Montclair
	City of Big Bear Lake	City of Ontario
	City of Chino	City of Rancho Cucamonga
	City of Chino Hills	City of Redlands
	City of Colton	City of Rialto
	City of Fontana	City of San Bernardino
	City of Grand Terrace	City of Upland
	City of Highland	City of Yucaipa
	City of Loma Linda	

The entities identified in Table 1 above are collectively referred to as the Permittees, which include the Principal Permittees.

Table 2: Administrative Information

This Order was adopted by the Santa Ana Water Board on:	**MONTH DATE, 2022**
This Order will become effective on:	**Adoption + 90 days**
This Order will expire on:	**Adoption + 5 years.**
The U.S. Environmental Protection Agency (USEPA) and the California Regional Water Quality Control Board, Santa Ana Region have classified this discharge as a major discharge.	
The Permittee must file a Report of Waste Discharge in accordance with title 23 of the California Code of Regulations, as application for issuance of new waste discharge requirements no later than 180 days in advance of the Order expiration date.	

IT IS HEREBY ORDERED that this Order supersedes Order Nos. R8-2009-0030, R8-2010-0033, and R8-2010-0036 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the California Water Code and regulations adopted there under, and the provisions of the federal Clean Water Act (CWA), and regulations and guidelines adopted there under, the Permittees must comply with the requirements in this Order.

I, Jayne Joy, Executive Officer, do hereby certify that this Order No. R8-2022-0008 with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on MONTH DATE, 2022.

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Jayne Joy, Executive Officer

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II. Findings

A. Jurisdiction

1. **MS4 Ownership or Operation.** Each of the Permittees listed in Table 1, above, owns or operates a municipal separate storm sewer system (MS4), through which it discharges stormwater and non-stormwater (collectively, urban runoff) into waters of the U.S. within the Santa Ana Region. Non-stormwater is a discharge that is not generated by precipitation. 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 services a population of less than 100,000; 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 U.S. Section 402(p) of the CWA requires that discharges of pollutants in Urban Runoff from MS4 be regulated under a National Pollutant Discharge Elimination System (NPDES) Permit.

2. **Executive Officer Delegation of Authority.** The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board), through Resolution No. R8-2019-0056, has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to Water Code sections 7 and 13223. Therefore, the Executive Officer is authorized to act on the Santa Ana Water Board's behalf on any matter within this Order unless such delegation is unlawful under Water Code section 13223 or this Order explicitly states otherwise. The Board authorizes the Executive Officer to make non-substantive changes to this Order to correct typographical errors, including correcting misspellings/grammar, ensuring correct cross-references, correcting formatting/numbering, and conforming changes made during the development and adoption of this Order that were inadvertently not carried through the entire Order. The Executive Officer shall provide public notice of any non-substantive changes.

3. **Designation of Board.**

   a. Water Code section 13228 authorizes the Executive Officer of a Regional Water Quality Control Board (Regional Water Board) to grant a written request, made by an entity that is subject to regulation by more than one Regional Water Board, that one Regional Water Board be designated to regulate the matter.

      i. In Orange County, written requests for designation have been received from the Cities of Laguna Hills (March 12, 2014), Laguna Woods (September 8, 2014), and Lake Forest (April 4, 2014). Cities of Laguna Hills and Laguna Woods requested designation to the San Diego Regional Water Quality Control Board. City of Lake Forest requested designation to the Santa Ana Water Board. These

requests for designation were granted by the respective Executive Officers.

ii. In Riverside County, written requests for designation have been received from the Cities of Menifee (June 25, 2015), Murrieta (June 22, 2015) and Wildomar (June 23, 2015). Cities of Murrieta and Wildomar requested designation to the San Diego Regional Water Quality Control Board. City of Menifee requested designation to the Santa Ana Water Board. These requests for designation were granted by the respective Executive Officers.

iii. Consequently, the Santa Ana Water Board is designated to regulate discharges of pollutants in urban runoff from the entire jurisdiction of the Cities of Lake Forest and Menifee, including those discharges into the San Diego Region.

iv. Likewise, the San Diego Regional Water Quality Control Board is designated to regulate discharges of pollutants in urban runoff from the entire jurisdictions of the Cities of Laguna Hills, Laguna Woods, Murrieta and Wildomar, including those discharges into the Santa Ana Region. These designations commence with the effective dates of those MS4 Permits adopted by the Regional Water Boards with terms and conditions that effectuate the Designation Agreements. For the Santa Ana Region, the designations commence with the effective date of this Order.

b. The cities of Claremont and Pomona are located within Los Angeles County, but their MS4 discharges flow to the Middle Santa Ana River. Written requests for designation have been received from the city of Pomona (September 19, 2012) and from the city of Claremont (September 20, 2012). Cities of Pomona and Claremont requested designation to the Santa Ana Water Board. These requests for designation were granted by the respective Executive Officers. Cities of Pomona and Claremont are not permittees under this Order but are covered under a separate NPDES Permit issued by the Santa Ana Water Board, Order No. R8-2013-0043, and therefore are designated to the SARWQCB, as outlined in the a May 31, 2013 designation agreement letter between the Los Angeles Water Board and the Santa Ana Water Board.

4. **Regulated Sources and Activities.** This Order regulates the discharge of pollutants from anthropogenic sources in urban runoff from MS4s or activities within the jurisdiction and control of the Permittees. This Order is not intended to obligate the Permittees to address background, naturally occurring or non-anthropogenic pollutants or flows in receiving waters.

5. **Legal and Regulatory Authority.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations (40

Code of Federal Regulations [CFR] part 122) adopted by the United States Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). This Order serves as a National Pollutant Discharge Elimination System (NPDES) Permit for discharges of pollutants in urban runoff from MS4s to waters of the U.S. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260). The Regional Water Board has the legal authority to issue a system wide MS4 Permit pursuant to its authority under CWA section 402(p)(3)(B) and 40 CFR section 122.26(a)(1)(v). The USEPA has established that the permitting authority, in this case the Santa Ana Water Board, has the flexibility to establish system- or region-wide permits affecting multiple Permittees (40 CFR § 122.26(a)(3)(ii)). The system- or region-wide nature of this Order will ensure consistency of regulation within watersheds and is expected to result in overall cost savings for the Permittees and the Santa Ana Water Board. The federal regulations make it clear that each Permittee need only comply with Permit conditions relating to discharges from the MS4s for which it is an operator (40 CFR § 122.26(a)(3)(vi)). This Order does not require the Permittees to manage stormwater that originated outside of their jurisdictional boundaries, but rather to work collectively to improve stormwater management within the Santa Ana Water Board jurisdiction (see Attachment B, Figure 1).

6. **CWA NPDES Permit Conditions.** Pursuant to CWA section 402(p)(3)(B), NPDES permits for discharges from MS4s must include: (1) requirements to effectively prohibit non-stormwater discharges into MS4s; (2) controls to reduce the discharge of pollutants to the maximum extent practicable (MEP), including management practices, control techniques and system, design and engineering methods; and (3) such other provisions as the Santa Ana Water Board determines appropriate for the control of such pollutants. This Order prescribes conditions to comply with the CWA requirements for owners and operators of MS4s to effectively prohibit non-stormwater discharges into the MS4s with some exceptions listed in Table 3 of this Order. This Order requires controls to reduce the discharge of pollutants in urban runoff from the MS4s to the MEP; including such other provisions that the Santa Ana Water Board has determined are appropriate to control pollutants.

7. **Monitoring Requirements.** CWA section 308(a) and 40 CFR sections 122.41(h), (j)-(l) and 122.48 require that NPDES permits specify monitoring and reporting requirements. Federal regulations applicable to large and medium MS4s also specify additional monitoring and reporting requirements in 40 CFR sections 122.26(d)(1)(iv)(D), 122.26(d)(1)(v)(B), 122.26(d)(2)(i)(F), 122.26(d)(2)(iii)(D), 122.26(d)(2)(iv)(B)(2) and 122.42(c). Water Code section 13383 authorizes a Regional Water Board to establish monitoring, inspection, entry, reporting and recordkeeping requirements. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

8. **Non-Stormwater and Stormwater Discharges.** The discharge of pollutants from the MS4 is subject to the MEP standard and other provisions necessary to reduce pollutants whether the pollutants are transported by stormwater or non-stormwater. In addition, this Order requires each Permittee to effectively prohibit discharges of non-stormwater into its MS4 unless such discharges are authorized by an NPDES Permit consistent with 40 CFR section 122.26(d)(2)(i)(B). Certain non-stormwater discharges may be permitted under various NPDES Permits adopted by the Santa Ana Water Board and the State Water Resources Control Board (State Water Board). These Permits include, but are not limited to, NPDES Permit No. CAG998001, *General Waste Discharge Requirements for Discharges to Surface Waters that Pose an Insignificant (De Minimis) Threat to Water Quality* (*De Minimis* Permit); NPDES Permit No. CAG990002, *General NPDES Permit for Discharges from Utility Vaults and Underground Structures to Waters of the United States* (General Utility Vaults Permit); NPDES Permit No. CAG140001, *Statewide NPDES Permit for Drinking Water System Discharges to Waters of the United States*; and NPDES Permit No. CAG918002, *General Waste Discharge Requirements for Discharges to Surface Waters Resulting from De Minimis Discharges, Groundwater Dewatering Operations, and/or Groundwater Cleanup/Remediation Operations at Sites within the Newport Bay Watershed*. Non-stormwater discharges permitted under these and other NPDES Permits are not subject to the discharge prohibitions herein.

9. **Limits of Permittees' Jurisdiction Over Urban Runoff.** The Permittees may lack or have limited legal jurisdiction over urban runoff into their MS4s from agricultural sources, some state and federal facilities, Native American tribal lands, utilities, special districts, and other entities. The Santa Ana Water Board recognizes that the Permittees can only be held responsible for discharges of pollutants from such entities to the extent that the Permittees have the authority to eliminate or control the pollutants. While these limitations are recognized, the Permittees are expected to control pollutants in discharges into their MS4s from such entities according to CWA section 402(p)(3)(B).

B. **Reasoning for Regional Permit**

The Santa Ana Water Board is authorized to issue a region-wide MS4 permit under section 402(p)(3)(B)(i) of the CWA, which states "Permits for discharges from municipal storm sewers…may be issued on a system- or jurisdiction-wide basis…". A region-wide permit promotes consistency across the Santa Ana Region and between the Permittees in carrying out their portfolio of projects and programs. This holistic approach provides a framework for addressing all stressors within a defined management area rather than focusing on individual sources. A region-wide permit provides the Permittees with a shared set of objectives, encourages them to share resources towards a common set of goals, and reduces the likelihood that programs will work at cross-purposes. The

issuance of a region-wide Permit allows for more efficient use of limited Santa Ana Water Board resources and staff time.

C. **Discharge Characteristics and Runoff Management**

1. **Potential Beneficial Use Impairment.** The discharge of pollutants from MS4s may cause or contribute to exceedances of applicable water quality standards. Discharges from MS4s may result in alterations to the hydrology of receiving waters that negatively impact their physical integrity. These conditions may impair or threaten to impair designated beneficial uses resulting in a condition of pollution, contamination, or nuisance.

2. **Pollutants Generated by Land Development.** Land development has created, and threatens to create, new sources of non-stormwater discharges and pollutants in stormwater discharges as human population increases. Land development increases the impervious surfaces, which is a significant factor in hydromodification. This also brings higher levels of automobile emissions, automobile maintenance wastes, municipal sewage, nutrients, pesticides, household hazardous wastes, pet wastes, and trash. Development typically converts natural ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots. Pollutants deposited on these surfaces are washed off by non-stormwater or stormwater flows into and from the MS4s. As a result of the increased imperviousness in urban areas, less rainwater can infiltrate through and flow over soil where physical, chemical, and biological processes can remove pollutants. Therefore, runoff leaving a developed area can contain greater pollutant loads and have significantly greater runoff volume, velocity, and peak flow rate than pre-development runoff conditions from the same area. Certain best management practices can minimize these impacts to water quality.

3. **Pollutants in Urban Runoff.** The most common pollutants in urban runoff include total suspended solids, sediment, selenium, pathogens (e.g., bacteria, viruses, protozoa), heavy metals (e.g., cadmium, copper, lead, and zinc), petroleum products and polynuclear aromatic hydrocarbons, synthetic organics (e.g., pesticides, herbicides, and PCBs), nutrients (e.g., nitrogen and phosphorus), oxygen-demanding substances (e.g., decaying vegetation, animal waste), detergents, and trash and debris. Pollutants in urban runoff are typically generated by persons or activities over which the Permittees typically have the authority to enact measures to control those pollutants. The Santa Ana Water Board recognizes that the Permittees' authority is not equal for all persons or activities in their jurisdictions. The limits of the Permittees' authority over some persons, such as school districts, are not clear. Nonetheless, the Permittees are required to exercise their authority consistent with the requirements of the Clean Water Act and this Order.

4. **Human Health and Aquatic Life Impairment.** Pollutants in runoff discharged from the MS4s may adversely affect human health and/or aquatic organisms. Adverse human health effects can include gastrointestinal

diseases and infections. Adverse physiological responses in aquatic organisms to pollutants in runoff include impaired reproduction, growth anomalies, decreased diversity, and mortality. These responses may be the result of different mechanisms, including bioaccumulation of toxins. During bioaccumulation, toxins move up the food chain and may affect both aquatic and non-aquatic organisms, including human health and wildlife. Increased volume, velocity, and duration of stormwater runoff greatly accelerate the erosion of downstream natural channels. These alter stream channels and habitats and can adversely affect aquatic and terrestrial organisms.

5. **Structural Treatment Control BMPs.** Certain structural treatment control BMPs, such as constructed wetlands, are or will be waters of the state and may support beneficial uses. The operation and maintenance of these BMPs may impact the beneficial uses of those waters. Section VIII.D. of this Order contains provisions to minimize impacts to those beneficial uses as the result of operating and maintaining structural treatment control BMPs. However, it is not the intent of the Santa Ana Water Board to regulate discharges *within* structural treatment control BMPs in a way that interferes with efforts to comply with the requirements of this Order.

6. **Long Term Planning and Implementation.** Federal regulations require municipal stormwater permits to expire five years from adoption, after which the permit must be renewed and reissued. The Santa Ana Water Board recognizes that water quality degradation and impacts to beneficial uses in the Santa Ana Region have occurred over several decades and will not be fully addressed during the five-year permit term.

7. **Iterative Process.** This Order is based on an iterative approach that, in summary, is comprised of planning, implementing, evaluating, and improving BMPs carried out as part of the Permittees' stormwater programs. Some iterations will occur during this Permit term, and are likely to occur over multiple Permit terms, to achieve water quality standards. This Order includes requirements that compel a methodical approach to implement the iterative process. This Order also includes requirements for conducting program effectiveness assessments (PEAs). PEAs are a necessary component of the iterative process. The purposes of conducting PEAs include:

   a. Assessing compliance with the requirements of this Order;

   b. Tracking progress towards meeting performance standards and/or water quality standards;

   c. Justifying the Permittees' commitment of resources, including the cessation of ineffective management practices;

   d. Providing feedback to Permittees' program managers, in part, to identify the best BMPs undertaken; and,

e. Assessing reductions in pollutant loads to receiving waters and any relationship to the BMPs.

Performance standards, which are developed exclusively by the Permittees as part of PEAs, shall not be used as the basis for enforcement action against any of the Permittees for failure to satisfy those standards. The intent of the Santa Ana Water Board is that the Permittees constructively use those performance standards, and the related monitoring, to iteratively improve the performance of their stormwater programs in a timely manner to remove pollutants in urban runoff to the maximum extent practicable. Permittees are also required to annually evaluate the validity of their performance standards and methods of measurement and make modifications accordingly.

D. Administrative Findings

1. **Standard Provisions.** Standard Provisions, which apply to all NPDES Permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in this Order.

2. **Fact Sheet.** The Fact Sheet (Attachment D) for this Order contains background information, regulatory and legal citations, references and additional explanatory information and data in support of the requirements of this Order. The Fact Sheet is consistent with Parts 40 CFR sections 124.8 and 124.56 of the Code of Federal Regulations. The Fact Sheet is hereby incorporated into this Order and constitutes part of the Findings of this Order. Attachments A through E and Appendices 1-12 are also incorporated into this Order.

3. **Public Notice.** In accordance with State and federal laws and regulations, the Santa Ana Water Board notified the Permittees, and interested agencies and persons of its intent to prescribe waste discharge requirements for the control of discharges into and from the MS4s to waters of the U.S. and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet.

4. **Public Hearing.** The Santa Ana Water Board held a public hearing on MONTH(S) DATE(S), 2022, and heard and considered all comments pertaining to the terms and conditions of this Order. Details of the public hearing are provided in the Fact Sheet.

5. **Effective Date.** This Order serves as an NPDES Permit pursuant to CWA section 402 or amendments thereto and becomes effective ninety (90) days after the date of its adoption, provided that the Regional Administrator, USEPA Region IX, does not object to this Order.

6. **Review by the State Water Board.** Any person aggrieved by this action of the Santa Ana Water Board may petition the State Water Board to review the action in accordance with Water Code section 13320 and California Code of Regulations, title 23, sections 2050, et seq. The State Water Board must receive the petition by 5:00 p.m., 30 days after the Santa Ana Water Board action, except that if the thirtieth day following the action falls on a Saturday, Sunday or State holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions will be provided upon request or may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality

PERMIT REQUIREMENTS

IT IS HEREBY ORDERED that the Permittees, in order to meet the provisions contained in division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act, as amended, and regulations and guidelines adopted thereunder, must comply with the following:

III. PERMITTEE RESPONSIBILITIES

A. General

The Permittees (inclusive of the Principal Permittees) shall be responsible for the management of storm drain systems within their jurisdictions. To carry out the requirements of this Order, the Permittees must:

1. Accurately document the BMPs, including the expected and achieved level of effort for implementation where applicable, that are employed within each of their respective jurisdictions.

2. Develop and apply objective performance measures to achieve continual improvement and demonstrate the effectiveness of their projects and programs. Permittees must use and document performance measures to track and assess the effectiveness of individual best management practices or systems of best management practices and execute timely program and project improvements. Valid performance measures should have certain basic characteristics. The performance measures should:

   a. Have a need or purpose.

   b. Provide useful information.

   c. Focus on a target or objective.

   d. Be measurable with reasonable accuracy and be verifiable.

e. Reflect the true status of the activity or project.

f. Not be subject to alternative conflicting interpretation.

g. Support proactive and adaptive management.

h. Assist in evaluating the likelihood of success or failure.

i. Be accepted by internal and external stakeholders as a tool for informed decision-making.

3. Annually evaluate the validity of performance measures and the validity of those methods used to measure achievement of performance measures.

4. Collaborate with one another in the development of necessary programs, plans, procedures, strategies, and reports that are of mutual interest.

5. Coordinate the relevant plans, policies, procedures, and standards of their internal agencies, departments, and divisions to comply with this Order.

6. Develop and execute necessary interagency agreements.

7. Maintain records, perform monitoring and analysis, and submit reports that are adequate to determine compliance with the requirements of this Order.

8. Prepare and submit information related to their respective programs and projects to the Principal Permittee that is necessary to develop an Annual Progress Report for submittal to the Executive Officer.

B. **Additional Responsibilities of the Principal Permittees**

In addition to the General Responsibilities in Section III.A above, the Principal Permittees are responsible for the overall management of the stormwater program for those receiving waters that they discharge to. To carry out the requirements of this Order, the Principal Permittees must:

1. Coordinate the planning, execution, and reporting of necessary common programs, plans, procedures, strategies, improvements, and reports, including the Annual Progress Report.

2. Monitor and report the progress of any plans, projects, and programs of mutual interest to the Permittees.

3. Compile information provided by the Permittees and determine the effectiveness of the overall program in attaining Receiving Water Quality Standards, complying with WQBELs, and achieving waste load allocations.

4. Conduct chemical, physical, and biological water quality monitoring as directed by the Executive Officer and authorized by this Order.

5. Solicit and coordinate public input on matters of mutual interest for changes to the Permittees' programs and projects.

C. **Implementation Agreements**

The Permittees must execute effective inter-agency and inter-Permittee agreements necessary to satisfy the requirements of this Order.

D. **Legal Authority/Enforcement**

Each Permittee must secure and maintain legal authority adequate to control the discharge of pollutants in urban runoff to their MS4s pursuant to the requirements of this Order.

1. Review and update existing local and/or municipal ordinances, plans, and policies to assure compliance with the requirements of this Order within 90 days of the effective date of this Order and as needed thereafter.

2. Each Permittee must document the legal authorities and mechanisms used to implement the various program elements required by this Order to reduce and mitigate potential pollutant sources within its jurisdiction.

3. Each Permittee must secure and maintain legal authority that is adequate to enter, inspect, and gather evidence (including pictures, video, samples, statements, and documents) from industrial and construction sites to determine compliance with the Permittee's ordinances, permits, conditions and other requirements related to the control of discharges of pollutants to their MS4s.

4. Each Permittee must maintain adequate legal authority to impose a series of effective, progressive sanctions to compel compliance with their regulatory requirements related to the control of pollutants to their MS4s.

5. **Legal Authority Assessment Report**: Each Permittee must track and evaluate challenges to their authority to control pollutants in urban runoff to their MS4s. This evaluation shall occur at least annually and must be presented in the Annual Progress Report.

    a. Where a formal or informal challenge indicates a weakness in the Permittees' authority, the Permittee must act within 60 days to make their authority adequate.

    b. The Permittees must report any confirmed weaknesses in their legal authority in their PEA. The report must include a plan, with a schedule of action(s), to make their authority adequate.

E. **Notification Requirements**

If Permittees or their representatives become aware of a known, suspected, or threatened violation of applicable waste discharge requirements (e.g. NPDES Permit No. CAS000002, *NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities* [Construction General Permit]; NPDES Permit No. CAS000001, *NPDES General Permit for Storm Water Discharges Associated with Industrial Activities* [Industrial General Permit]; and NPDES Permit No. CAG618001, *Sector-Specific General Permit for Storm Water Runoff Associated with Industrial Activities from Scrap Metal Recycling Facilities within the Santa Ana Region* [Scrap Metal Permit]), including requirements to file a Notice of Intent, No Exposure Certification, or Notice of Non-Applicability, the Permittee must provide notice to the Executive Officer according to the following:

1. When Permittees become aware of a site or incident within their jurisdiction that poses an imminent threat to human health or the environment, the Permittee(s) must take the following actions:

    a. Provide oral or electronic mail notification to the Santa Ana Water Board of the imminent threat within 24 hours of becoming aware.

    b. Submit a written report within five (5) business days following the initial notification to the Santa Ana Water Board. The report must provide the following information:

        i. Details of the location, nature, and circumstances of the threat to human health or the environment.

        ii. Details of any corrective action(s) taken or planned to mitigate the threat and prevent its reoccurrence.

        iii. Describe any enforcement actions taken or planned by the Permittee.

        iv. Identity all the responsible parties.

            1) Owner of the Site or Facility.

            2) Operator of the Site or Facility.

            3) Name of the Site or Facility.

2. For the purposes of this Section, sewage spills in excess of 1,000 gallons and all reportable quantities of hazardous waste spills, as per 40 CFR parts 117 and 302, constitute imminent threats to human health or the environment.

3. Responses to sewage spills shall be according to the requirements of the Statewide General Waste Discharge Requirements for Sanitary Sewer

Systems, Water Quality Order No. 2006-0003-DWQ, as amended or reauthorized.

4. Permittees must submit a quarterly report within 15 days of the end of each quarter of a calendar year. Notification shall not prevent or delay the Permittees from independently taking appropriate actions to bring facilities into compliance with their local ordinances, rules, and regulations as well as Water Quality Management Plans (WQMPs) specified in Section VIII.C.

   The quarterly report must include the following:

   a. Facilities without Permit Coverage.

      Permittees must include facilities that are known or suspected of not having authorization to discharge waste under an NPDES permit, including sites subject to Senate Bill 205. The report must include, at a minimum, the following documentation:

      i. Name of the facility;

      ii. Location of the facility;

      iii. Operator of the facility;

      iv. Owner of the facility;

      v. Construction or commercial/industrial activity being conducted at the site or facility that is subject to the Construction General Permit, Industrial General Permit, Scrap Metal Permit, and/or Clean Water Action Section 401 Water Quality Certification.

      vi. The estimated acreage of disturbed soil or the SIC Code of the facility (if available); and,

   b. Facilities with Known, Suspected, or Threatened Violations.

      If, during the course of a site inspection or complaint investigation, Permittees or their representatives become aware of a known, suspected, or threatened violation of applicable waste discharge requirements (e.g. Industrial General Permit, Construction General Permit, etc.) or local ordinances, the Permittee must include this information in the quarterly report. At a minimum, the following information must be provided:

      i. The WDID number of the facility, if applicable;

      ii. The location, nature and circumstance of the known, suspected, or threatened violation(s);

iii. Prior history of any relevant violations of state and local requirements; and,

iv. Action(s) taken or planned by the Permittee(s) to bring the site operator into compliance.

F. **Fiscal Analysis**

Each Permittee shall secure the financial resources necessary to meet the requirements of this Order. The Permittees must prepare and submit a unified fiscal analysis report to the Executive Officer of the Santa Ana Water Board. The analysis must be submitted with the Permittees' Annual Progress Report (see Attachment C, Monitoring and Reporting Program No. R8-2022-0008). The report must conform to fiscal reporting guidance issued by USEPA or the State Water Board when available.

G. **Special Studies**

The Permittees shall have an effective strategy for carrying out research to continually improve their stormwater program. This strategy shall include:

1. A strategic plan that identifies research priorities.

2. Specific management questions to be informed by the results of the special study and which, when answered, will affect decisions in the program.

3. Funding strategies which may include partnerships with other agencies, grants, etc.

4. An annual workplan for carrying out special study projects.

IV. DISCHARGE PROHIBITIONS

A. In accordance with 40 CFR section 122.26(d)(2)(i)(B) and (F), the Permittees must effectively prohibit non-stormwater discharges from entering into the MS4 unless such discharges are authorized by an NPDES Permit or are not prohibited according to Section IV.B., below.

B. The non-stormwater discharges in Table 3 below do not need to be prohibited by the Permittees unless such discharges are identified by the Permittee(s) or the Executive Officer as a significant source of pollutants.

C. Except for those discharges described in Table 3 below, non-stormwater discharges from Permittees' activities into waters of the U.S. are prohibited unless the discharge is authorized under an NPDES Permit or granted a waiver.

D. With the recommendation of the Permittees or based on Substantial Evidence, as defined in the Glossary, the Executive Officer is authorized to add or remove

types of discharges to Table 3 below, by way of written notice to the Permittees and after providing a minimum of 30 days for public comment.

E. Discharges of pollutants in urban runoff from MS4s owned or operated by the Permittees must be in compliance with the applicable discharge prohibitions contained in the Water Quality Control Plan for Ocean Waters of California (Ocean Plan), Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California (ISWEBE Plan), and in the Water Quality Control Plan for the Santa Ana Region (Basin Plan).

F. The discharge to waters of the U.S. of any substance(s) in concentrations that are toxic to animal or plant life is prohibited.

G. The discharge to waters of the U.S. of any radiological, chemical, or biological warfare agent, or high-level radiological waste, is prohibited.

H. If a Permittee fails to comply with the provisions in Section V of this Order, then the discharge of Trash, as defined in the Glossary, to surface waters of the state and the deposition of Trash where it may be discharged into surface waters of the state is prohibited.

I. The discharge of urban runoff from the MS4 to receiving waters containing Pollutants, including Trash, that have not been controlled using effective BMPs to the maximum extent practicable is prohibited.

Table 3: Types of Non-Stormwater Discharges Presumed to Not be a Significant Source of Pollutants

Air conditioning condensate
Passive foundation or footing drains
Water from crawl space pumps
Individual residential car washing
Dechlorinated water from freshwater swimming pools and fountains (except cleaning wastewater and filter backwash)
Diverted stream flow
Rising groundwater and natural springs
Uncontaminated groundwater infiltration (defined in 40 CFR § 35.2005(20)) to MS4s
Uncontaminated pumped groundwater
Flow from riparian habitats and wetlands

Temporary non-stormwater discharges authorized by USEPA pursuant to section 104(a) or (b) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
Emergency firefighting flows necessary for the protection of life and property
Water not otherwise containing waste, as defined in Water Code section 13050(d)

V. TRASH AND OTHER SOLID WASTE CONTROL

A. Effective Program

Each Permittee must implement an effective program to eliminate the discharge of trash and solid waste to waters of the U.S. in amounts that adversely affect beneficial uses or cause nuisance. Each Permittee has provided written notice to the Executive Officer of their intent to either install full capture systems (Track 1) or to pursue full capture equivalency (Track 2) in accordance with the Santa Ana Water Board's Order dated June 2, 2017 issued pursuant to Water Code section 13383. The installation of full capture systems or methods of compliance are outlined in State Board Resolution No. 2015-0019, *Amendment to the Water Quality Control Plan for Ocean Waters of California to Control Trash and Part 1 Trash Provisions of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (Trash Provisions).

1. Measures employed for the control of trash and solid waste must be reported and reviewed annually by the Permittees to objectively evaluate the measures' effectiveness. The results of the reviews must be provided in the Annual Progress Report.

2. Each Permittee must document in the Annual Progress Report that they have considered new technologies for the control of trash and solid waste, as they become aware of them. The Permittees should consider the new technology's effectiveness at removing trash and solid waste from stormwater runoff, its serviceability, and other factors.

3. Permittees may discontinue or substitute control measures for trash and solid waste that they deem to pose an unmitigable hazard or to be ineffective provided that the measure is replaced by an equal or more-effective measure.

4. The Executive Officer has the authority to designate specific land uses, including areas that generate substantial amounts of trash, as areas requiring compliance under the Trash Provisions and the requirements of this Order.

5. Permittees shall investigate third party complaints regarding the deposition of trash within their jurisdiction. Permittees shall, in a timely manner, eliminate or control the source of discharges. The results of the

investigations and actions taken shall be reported in the Annual Progress Report.

B. **Track** 1

Permittees who have chosen Track 1 as a compliance Track must comply with the prohibition regarding Trash in Section V of this Order, the Ocean Plan, and the ISWEBE Plan as follows:

1. Each Permittee must install, operate, track, and maintain full capture, recovery, and disposal systems (full capture systems), as defined in the Glossary of this Order, to control the discharge of trash from priority land use areas within 10 years from the adoption of this Order or by December 2, 2030, whichever date is sooner.

2. Permittees may submit a plan to employ full capture systems for alternative land use areas subject to the Executive Officer's approval. The plan must be submitted prior to implementation. The Permittees must be able to demonstrate that application of the full capture systems to the alternative land use areas will achieve equal or better reductions than would be achieved with priority land use areas.

3. Each Permittee that elected to follow Track 1 must submit a report to the Santa Ana Water Board that documents the type and mapped locations of installations; the status of their operation and maintenance; and drainage areas served by each of the Permittee's full capture systems on an annual basis.

4. Each Permittee must install an average of 10% per year of the total number of full capture systems necessary for full compliance with the Trash Provisions. All installations must be complete and in service 10 years from the adoption of this Order or by December 2, 2030, whichever date is sooner.

5. Each Permittee first electing to follow Track 1 and then wishing to change to Track 2 must submit a trash implementation plan within 6 months after notifying the Santa Ana Water Board of the change. This plan is subject to the review and approval by the Executive Officer. The plan must include the following:

    a. The specific locations of its significant trash generating areas;

    b. If locations or land uses of significant trash generating areas are different than Priority Land Use areas, justification demonstrating that the selected land uses generate trash at higher or equivalent rates compared to Priority Land Use areas;

    c. The combination of controls selected and the rationale for the selection;

d. Description of the methods that will be used to demonstrate the achievement of full capture equivalency;

e. A time schedule of milestones necessary to implement the combination of BMPs; and

f. An explanation of how the combination of controls will achieve full capture system equivalency within 10 years of the adoption date of this Order or by December 2, 2030, whichever date is sooner.

6. Trash implementation plans must be fully implemented upon approval by the Executive Officer. Except for inconsequential technical or grammatical changes, amendments to the plans must be approved by the Executive Officer.

7. Permittees must submit evidence demonstrating progress towards achieving full capture system equivalency in the Annual Progress Report.

C. **Track 2**

Permittees that choose Track 2 as a compliance Track must comply with the prohibition regarding Trash in Section V of this Order, the Ocean Plan, and the ISWEBE Plan in addition to the following measures:

1. Each Permittee must have a trash implementation plan approved by the Executive Officer. The plan must include the following:

a. The specific locations of its significant trash generating areas;

b. If locations or land uses of significant trash generating areas are different than Priority Land Use areas, justification demonstrating that the selected land uses generate trash at higher or equivalent rates compared to Priority Land Use areas;

c. The combination of controls selected and the rationale for the selection;

d. Description of the methods that will be used to demonstrate the achievement of full capture equivalency;

e. A time schedule of milestones necessary to implement the combination of BMPs; and

f. An explanation of how the combination of controls will achieve full capture system equivalency within 10 years of the adoption date of this Order or by December 2, 2030, whichever date is sooner.

2. Trash implementation plans must be fully implemented upon approval by the Executive Officer. Except for inconsequential technical or grammatical

changes, amendments to the plans must be approved by the Executive Officer.

3. Each Permittee must develop and implement a monitoring plan that demonstrates the effectiveness of the full capture systems, Multi-Benefit Projects, other Treatment Controls, and/or Institutional Controls and compliance with Full Capture System Equivalency.

4. Monitoring reports shall be provided to the Santa Ana Water Board in the Annual Progress Report for this Order.

5. Each Permittee must reduce the average trash load by 10% per year until full capture equivalency is achieved. Full capture equivalency shall occur 10 years from the adoption of this Order or by December 2, 2030, whichever date is sooner.

6. If a Permittee first elects to follow Track 2 and then changes to Track 1 they must provide written notice to the Executive Officer of their intent to install full capture systems (Track 1). The Permittee must adhere to the Track 1 compliance deadline in Section V.B, above.

VI. RECEIVING WATER LIMITATIONS

Discharges of pollutants in urban runoff from the Permittees' MS4s must not cause or contribute to a condition of nuisance or exceedances of water quality standards (as defined by Beneficial Uses and Water Quality Objectives contained in Chapters 3 and 4 of the Basin Plan, and amendments thereto) for surface waters and groundwaters. Discharges from the MS4 that cause or contribute to the violation of receiving water limitations are prohibited.

A. Discharges of pollutants in urban runoff from the Permittees' MS4s must comply with Section VI through timely implementation of (BMPs) and other actions to reduce pollutants in discharges according to the conditions and provisions of this Order. If a condition of nuisance or exceedances of water quality standards persist, despite implementing BMPs and other actions, the responsible Permittees must achieve compliance with prohibitions and receiving waters limitations according to Subsections VI.C. below.

B. Determinations that discharges are causing or contributing to exceedances of water quality standards will be based, in part, on assessments of water quality data which are performed according to scheduled cycles of monitoring, analysis, and reporting required in attached Monitoring and Reporting Program No. R8-2022-0008 (Attachment C).

C. Permittees that have commingled MS4 discharges are jointly responsible for meeting the requirements of this Order. However, Permittees are only responsible for discharges from the MS4 for which they are owners and/or operators.

D. Any individual Permittee may either: 1) submit evidence that can demonstrate, to the satisfaction of the Executive Officer, that its discharge did not cause or contribute to the exceedance of the standard or 2) demonstrate compliance with the provisions in Section XII (Watershed Management Plans). A demonstration that the discharger did not cause or contribute to the exceedance of the receiving water limit or water quality standard may be made through any of the following methods:

1. Demonstrating that there was no discharge from the Permittee's MS4 into the affected receiving water during the relevant time period.

2. Demonstrating that the discharge from the Permittee's MS4 was controlled to a level that it did not cause or contribute to the exceedance in the receiving water.

3. Demonstrating that there is an alternative source of the pollutant that caused the exceedance; that the pollutant is not typically associated with the MS4 discharges; or that the pollutant was not discharged from the Permittee's MS4.

4. Providing objective evidence, acceptable to the Executive Officer, that there is a trend indicating that the relevant pollutant loads, or concentrations are decreasing and that the applicable water quality standard(s) are expected to be satisfied without further intervention.

E. The Executive Officer will provide a minimum of thirty (30) days of public review of evidence submitted pursuant to Subsection VI.C. above, before determining whether the evidence is satisfactory.

F. Permittees that have commingled MS4 discharges are jointly responsible for meeting the requirements of this Order. However, pursuant to 40 CFR section 122.26(a)(3)(vi), Permittees are only responsible for discharges from the MS4 for which they are owners and/or operators.

G. The Special Protections for Areas of Special Biological Significance (ASBS) contained in Attachment B to State Water Board Resolution No. 2012-0012, as amended or reauthorized by the State Water Board, are hereby incorporated into this Order as if fully set forth herein. The Special Protections are specifically applicable to discharges of pollutants in urban runoff from the City of Newport Beach's MS4 to Newport Coast and Crystal Cove (ASBS 32 and ASBS 33, respectively) which are authorized by this Order. Where there are conflicts between this Order and the Special Protections, the most protective requirements, as determined by the Executive Officer, shall prevail. The Special Protections are accessible at: http://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2012/rs2012_0012.pdf

VII. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations

1. **Technology Based Effluent Limitations.** Each Permittee shall reduce pollutants in stormwater discharges from the MS4 to the maximum extent practicable (MEP).

2. **Water Quality-Based Effluent Limitations.** Each Permittee shall comply with applicable water quality-based effluent limitations (WQBELs) as set forth in Appendices 2 through 12 of this Order, pursuant to applicable compliance schedules. The WQBELs in this Order implement Total Maximum Daily Loads (TMDLs) and are consistent with the assumptions and requirements of the TMDL waste load allocations (WLAs) assigned to discharges from MS4s.[1]

B. General Compliance Provisions for Total Maximum Daily Loads

1. The responsible Permittees identified in Appendix 1 must comply with the applicable WQBELs in Appendices 2 through 12 in accordance with the methods described in this Section.

2. Permittees responsible for complying with the WQBELs must demonstrate, to satisfaction of the Executive Officer, compliance through any one of the means identified in Subsections VII.B. through VII.E. below.

3. Permittees that have commingled MS4 discharges are jointly responsible for meeting the requirements of this Order. However, Permittees are only responsible for discharges from the MS4 for which they are owners and/or operators.

4. Where Permittees have commingled MS4 discharges to the receiving water, compliance at the outfall discharging to the receiving water or compliance in the receiving water shall be determined for the group of Permittees as a whole unless an individual Permittee demonstrates that its discharge did not cause or contribute to the exceedance as follows:

    a. Demonstrate that there are no exceedances of WQBELs using monitoring data that has been collected and analyzed pursuant to an approved Water Quality Monitoring Plan; or

[1] According to 40 CFR § 130.2, waste load allocations constitute a type of water quality-based effluent limitation. Pursuant to 40 CFR § 122.2, effluent limitation means any restriction imposed by the permitting authority on quantities, discharge rates, and concentrations of pollutants that are discharged from point sources.

b. Demonstrate that the cause of the exceedance is not under the Permittees' jurisdiction, is natural or background, or is not controllable; or

c. Demonstrate that there are no violations of receiving water limitations for the specific TMDL pollutant(s) at monitoring locations which have been designated pursuant to the requirements of Monitoring and Reporting Program R8-2022-0008 and/or the applicable Appendix; or

d. Demonstrate that there is no discharge from the responsible Permittees' MS4(s) to the receiving water during the period subject to the WQBEL.

5. For exceedances of WQBELs for indicator bacteria, demonstrate that sources within the Permittee's jurisdiction or MS4 have not caused or contributed to the exceedance. Demonstrations must be made using:

   a. Published and generally accepted source-identification protocols for identifying sources of the exceedances, or

   b. Protocols established under Water Code section 13178.

6. For a waterbody-pollutant combination subject to an adopted TMDL, full compliance with the WLAs in this Order will be regarded as compliance with the receiving water limitations for that waterbody-pollutant combination.

C. **Compliance with WLAs in State-Adopted TMDLs Where Final Compliance Deadlines Have Passed**

1. In cases where the deadlines for compliance with the WQBELs have passed, compliance with final WQBELs shall be demonstrated according to the approved Water Quality Monitoring Plan with the following methods:

   a. The responsible Permittees may demonstrate compliance with final WQBELs using monitoring data according to Subsection VII.B.4. above; or

   b. The responsible Permittees may demonstrate that the receiving water body is meeting the combined Waste Load Allocations and Load Allocations (Final Total TMDL), based on targets shown in the Appendices; or

   c. Permittee(s) may fully implement a Time Schedule Order (TSO) issued by the Santa Ana Water Board pursuant to Water Code section 13300 and/or 13385(j)(3). The responsible Permittees may request a TSO if they believe that additional time to comply with final WQBELs is necessary.

D. **Compliance with WLAs in State-Adopted TMDLs Where Final Compliance Deadlines Have Not Passed**

1. In cases where the deadlines for compliance with WQBELs have not passed, the responsible Permittees must achieve compliance with the WQBELs by the final compliance date. The Permittees must demonstrate compliance by one of the following methods:

   a. The responsible Permittees may demonstrate compliance with applicable WQBELs using monitoring data according to Subsection VII.B.4. above; or

   b. The responsible Permittees may demonstrate that the receiving water body is meeting the combined Waste Load Allocations and Load Allocations for the specific TMDL pollutant(s), based on relevant targets shown in the Appendices; or

   c. The responsible Permittees may initiate development and implementation of a Watershed Management Plan according to the requirements of Section XII and the following:

      i. For WQBELs where the related TMDL has an implementation plan that requires the Permittees to develop a compliance plan, a draft Watershed Management Plan (WMP) must be submitted consistent with the schedule specified in the TMDL implementation plan if applicable.

      ii. For WQBELs where a compliance plan has already been developed by a Permittee for the related TMDL and is currently being implemented, the responsible Permittees may request in their written notification that the Executive Officer approve the plan as a WMP satisfying the requirements of Section XII.

      iii. If the WMP is not approved, the Permittees must achieve compliance with the WQBELs by the final compliance date.

   d. If the Permittee(s) cannot meet the TMDL deadlines, Permittee(s) may fully implement a Time Schedule Order (TSO) issued by the Santa Ana Water Board pursuant to Water Code section 13300 and/or 13385(j)(3). The responsible Permittees may request a TSO if they believe that additional time to comply with final WQBELs is necessary.

E. **Compliance with Provisions for TMDLs Established by USEPA**

1. In cases where the WQBELs have been based on TMDLs promulgated by USEPA, which do not include an implementation plan adopted pursuant to Water Code section 13242, the responsible Permittees, subject to the

WQBELs, must achieve compliance with these WQBELs and demonstrate compliance by using one of the following methods:

a. The responsible Permittees may demonstrate compliance with applicable WQBELs using monitoring data according to Subsection VII.B.4. above; or

b. The responsible Permittees may demonstrate that the receiving water body is meeting the combined Waste Load Allocations and Load Allocation (Final Total TMDL), based on relevant targets shown in the Appendices; or

c. The responsible Permittees may initiate development and implementation of a Watershed Management Plan (WMP) according to the requirements of Section XII.

i. For WQBELs where a compliance plan (e.g., Comprehensive Nutrient Reduction Plans or Comprehensive Bacteria Reduction Plans) have already been developed for the related TMDL and is currently being implemented, the responsible Permittees may request in their written notification that the Executive Officer approve the plan as a WMP based on a determination that the plan satisfies the requirements of Section XII.

ii. If a WMP is not approved, the Permittees must achieve compliance with the WQBELs by the final compliance date.

VIII. NEW DEVELOPMENT (INCLUDING SIGNIFICANT REDEVELOPMENT)

Each Permittee must adopt and implement policies and procedures that are effective at integrating source control, site design and structural treatment control BMPs as early in the land-use planning and development process as practicable. To reduce the discharge of stormwater pollutants, effectively prohibit non-stormwater discharges, and protect receiving waters, the water quality impacts of development need to be addressed during each of the three major phases of planning, construction, and use. Accordingly, each Permittee must adopt and implement policies and procedures that are effective at integrating source control, site design and structural treatment control BMPs as early in the land-use planning and development process as practicable.

A. Planning Requirements

1. The Executive Officer (or their designee) must be given the appropriate notices where a Permittee initiates an amendment or update of their General Plan which may directly, indirectly, or cumulatively impact beneficial uses, consistent with the requirements of Government Code Section 65350 *et seq*.

This requirement is separate from, and in addition to, any other obligations of the Permittees to provide notice to the Santa Ana Water Board as a Responsible Agency pursuant to CEQA with respect to planning, land use, development, construction or site cleanup.

2. Permittees must review and update their existing plans and policies as needed to comply with the requirements of this Order.

3. A project for which the site-specific final Water Quality Management Plan (WQMP), (See Glossary and Section VIII.C), has been approved by a Permittee and which has been fully implemented according to the requirements of this Permit and the Permittees' Ordinances constitutes compliance with the Construction General Permit post construction standards.

4. Each Permittee must develop and implement strategies to overcome barriers to implementing low impact development (LID) BMPs at the project, sub-regional or regional scales. For example:

   a. Institutional Barriers – Developing sub-regional or regional facilities to treat runoff from areas where zero lot line allowances limit on-site BMPs.

   b. Physical Barriers – Developing sub-regional or regional facilities to treat runoff from areas where soil permeability on individual lots are low.

B. **Priority Projects**

1. Each Permittee must identify Priority Projects, as set forth in Section VIII.B.6. below, from among its development applications.

   a. Institutional Barriers – Developing sub-regional or regional facilities to treat run

   b. Priority Projects that are subject to discretionary approval must have site design and structural treatment control BMPs; the BMPs must be documented in a WQMP (Section VIII.C).

2. Priority Projects that require ministerial approval must have site design or source control BMPs incorporated through ordinances, building standards, or similar standardized requirements; or a WQMP.

3. The requirements of this Section and subsequent sub-sections apply to initial project applications received by the Permittees as of the effective date of this Order. The requirements apply to Permittees' projects where design has been initiated on the effective date of this Order and thereafter. For enforcement purposes, the relevant requirements of Order No. R8-2009-0030 for Orange County, Order No. R8-2010-0033 for Riverside County, and

R8-2010-0036 for San Bernardino County shall apply to initial project applications received by Permittees before the effective date of this Order.

4. Each Permittee must employ a standardized form, checklist, or similar mechanism to document the basis for classifying a project as a Priority Project. Each Permittee is responsible for ensuring the accuracy of information relied on in support of the Permittee's classification.

5. Permittees must consider the whole of the project in classifying a project; the Permittees must not parse out a project.

6. Each Permittee must regard projects, or any part thereof, that fit any of the following categories of projects as Priority Projects:

    a. Significant redevelopment projects that include the addition or replacement of 5,000 square feet or more of impervious surfaces on a developed site.

        i. Redevelopment projects do not include those areas where impervious surfaces are replaced as part of routine maintenance activities, or as part of activities that are conducted to maintain the original line and grade, hydraulic capacity, or original purpose of a facility.

        ii. Redevelopment projects do not include those areas where impervious surfaces are replaced as part of the replacement, upgrade, or installation of dry utilities (e.g. gas, electric, and telecommunications), sanitary sewer, petroleum pipelines, raw or potable water distribution lines in existing rights of way.

        iii. Where a redevelopment project results in the addition or replacement of 50% or less of the impervious surfaces of an existing developed site, and the existing development was not subjected to a properly-implemented and properly- approved WQMP, the numeric sizing requirements for structural treatment control BMPs apply only to runoff from the impervious areas added or replaced and not from the entire developed site.

        iv. Where a redevelopment project results in the addition or replacement of more than 50% of the impervious surfaces of an existing developed site, the numeric sizing requirements must be applied to runoff from the entire development.

    b. New developments that create a total of 10,000 square feet or more of impervious surfaces, including industrial and mixed-use developments; public and private capital improvement projects; and subdivisions for single and multi-family dwelling units. This category includes public or private land development projects subject to the planning and building

authorities of the Permittees. This category excludes public drainage improvement projects that do not involve new sources of pollution.

c. New automotive repair shops that engage in activities described by Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532 through 7534, and 7536 through 7539.

d. New restaurants (SIC 5812) where the area of land development is 5,000 square feet or more.

e. Hillside developments affecting 5,000 square feet or more, in areas with known erosive soil conditions or where the natural slope is 25% or more.

f. Development that includes the construction of 2,500 square feet or more of impervious surface that is located within 200 feet of, or which discharges the site's runoff into an Environmentally Sensitive Area where the discharge is not commingled with discharges from other sites.

g. Parking lots, or other land areas or facilities for the temporary storage of motor vehicles, that includes the construction of 5,000 square feet or more of impervious surface exposed to stormwater.

h. New retail gasoline outlets that are either 5,000 square feet or more with a projected average daily traffic of 100 or more vehicles per day.

i. Improvement of existing street, road, highway and freeway construction projects affecting 5,000 square feet or more of paved surface used for the transportation of vehicles. This category excludes routine maintenance to restore or preserve the surface type and line and grade.

C. **General Requirements for Discretionary Priority Projects**

1. Permittees must require Priority Projects subject to discretionary approval to use source control, site design, and structural treatment control BMPs to reduce pollutants in urban runoff discharged from the project site unless a waiver is granted according to Subsection VIII.H. The structural treatment controls may be on-site or off-site.

2. Source control, site design, and structural treatment control BMPs must be designed to maximize retention of the site's design capture volume unless such measures pose an unmitigable environmental hazard.

3. Project WQMPs must be prepared in substantial conformance with uniform written technical guidance. The technical guidance must implement the requirements of this Order and be written for the benefit of persons responsible for preparing, reviewing and approving, enforcing, and

implementing Final WQMPs.

4. Project WQMPs must be prepared by or under the supervision of a registered civil engineer or licensed landscape architect.

5. Final project WQMPs must be approved by or under the supervision of a registered civil engineer acting on behalf, and with the expressed permission, of the Permittee.

6. Each Permittee must employ effective, uniform mechanisms to provide efficiency and consistency in their WQMP-approval process. The mechanisms must be subject to a bi-annual review by the Permittees for the purpose of promoting the mechanisms' continual improvement and reported in the Annual Progress Report. Such mechanisms may include the following:

   a. Use of written standard instructions, processes, procedures, and methods.

   b. Use of standardized paper forms, checklists, and worksheets.

   c. Use of model language for project WQMPs or categories of project WQMPs.

   d. Use of standardized models, spreadsheets, web-based tools, and other software.

   e. Prepared maps, tables and other sources of information necessary for preparers and reviewers to evaluate the feasibility of structural treatment control BMPs.

7. The Permittees must provide and promote an effective mechanism for stakeholder input in the continual improvement process for the preparation, review, enforcement, and implementation of Final WQMPs.

8. Permittees must require project proponents to identify, in each approved project WQMP, a source of available funding and a party that will be legally responsible for the long-term performance, operation, and maintenance of source control, site design, and on-site or off-site structural treatment control BMPs over the life of the project.

9. Permittees must provide that approved Final WQMPs are maintained in public records in a manner that allows for their discovery by interested parties and facilitates the transfer of responsibility if the sale, lease, or other transfer of ownership or control of the affected site occurs.

10. Permittees must provide that any covenants, conditions, and restrictions, easements or other similar mechanisms necessary for the implementation of an approved Final WQMP are properly maintained in public records with the

County and/or the relevant city.

11. Permittees must maintain an electronic database adequate to identify sites affected by an approved Final WQMP.

    a. The database must be established within 6-months of the effective date of this Order. The database must include records identifying all structural treatment control BMPs installed after May 22, 2009 for Orange County, October 22, 2012 for Riverside County, and June 21, 2013 for San Bernardino County, which must include the following attributes:

        i. Type of structural treatment control. If a facility 'type' cannot be accurately identified using terminology found in published and generally accepted Engineering Design Manuals, the facility must be identified as undetermined.

        ii. For infiltration LID BMPs: depth of invert and screen interval, if applicable.

        iii. Standards applied to the design of the facility.

        iv. Location by watershed and by a scale sufficient for location in the field.

        v. Date first placed in service or date of initial issuance of occupancy permit.

        vi. Identifying information for the party responsible for maintenance and their contact information, including emergency contact information.

        vii. Actual or alleged performance, maintenance, or nuisance problems identified during any site inspections by the Permittees or brought to their attention.

    b. Information regarding Final WQMPs that were approved after May 22, 2009 for Orange County, October 22, 2012 for Riverside County, and June 21, 2013 for San Bernardino County must be included in the database. Information prior to these dates should be added within the term of this Order.

12. Permittees must refer vector nuisance problems associated with structural treatment control BMPs to the local vector control district within 5 business days of the problem becoming known. The Permittees must cooperate with the local vector control district to remedy any confirmed nuisance problems.

13. Each Permittee must require a preliminary WQMP, for Priority Projects that

are subject to discretionary approval as part of a complete application for a project. The preliminary WQMP must be subject to the Permittee's approval. A preliminary WQMP must be approved prior to the project's approval by the Permittee's decision-making body (e.g. staff, city council, Board of Supervisors, etc.).

14. A WQMP is not required for a project which, in its entirety, is necessary to mitigate an emergency.

15. The Permittees' staff, contractors, or vendors responsible for preparing, reviewing or approving WQMPs or for enforcing their implementation must be trained according to Section XI of this Order.

16. Each Permittee must employ an effective mechanism to inform potential project applicants of the need for a preliminary WQMP as part of a complete application prior to the submittal of an application.

17. A Permittee must not allow precise grading or final construction work to proceed on the subject phase of a project prior to approval of a project Final WQMP for that phase.

18. Each Permittee must have an effective process that enforces substantial conformance between relevant project plans (i.e. grading plans, drainage plans, landscaping plans, etc.) and the approved project Final WQMP.

19. Each project Final WQMP approved by the Permittees must contain sufficient information to demonstrate compliance with the requirements of this Order.

20. Each Permittee must have effective standard processes to ensure that the project Final WQMP is internally consistent and free of material contradictions.

21. As part of the project approval process, each Permittee must apply standard conditions of approval, or some other effective measure(s), that requires the proper operation and maintenance of all source control, site design, and structural treatment control BMPs by the project applicant, their successors and assigns over the life of the project according to the approved project Final WQMP. Each Permittee must effectively enforce the measure(s) accordingly.

22. Each Permittee must implement an effective mechanism to identify and correct missing, damaged, or deficient source control, site design, and structural treatment control BMPs during the construction of Priority Projects.

23. Each Permittee must develop, publish, and apply guidelines developed for the purpose of providing that site design and structural treatment control BMPs be readily inspected, serviceable and generally of a quality that is satisfactory to the Permittee.

24. Permittees are prohibited from permitting final occupancy or otherwise effectively issuing final approval of a Priority Project site until all source control, site design, and, where applicable, structural treatment control BMPs are constructed, serviceable, and satisfactory to the Permittee or otherwise certified as such by a licensed professional engineer and by the project applicant.

    a. Serviceable facilities must be in working order, maintainable, inspectable, and operate as intended.

    b. Where deficiencies exist, the Permittee may permit final occupancy or issue final approval only if written enforcement action is taken and a time schedule to bring the site into compliance with its Final WQMP has been approved by the Permittee.

    c. Permittees must require that certifications by the licensed professional engineer be affixed with said engineer's stamp and maintained as part of the Final WQMP.

25. Each Permittee must have effective standard processes that provide the following:

    a. Approved project Final WQMPs are retained using a system that allows for their ready retrieval for the life of the project.

    b. Approved Final WQMPs are protected by the Permittee's standard record protection practices if fire, information system failure or attack, or other loss or damage occurs.

    c. Documentation of a written acknowledgement of the obligations on the project proponent as established in the project Final WQMP and the related municipal ordinance(s).

D. **General Requirements for Structural Treatment Control BMPs**

The following provisions apply to structural treatment controls constructed at the Priority Project site or off-site. For off-site facilities see additional requirements in Section VIII.K.

1. Structural treatment control BMPs must:

    a. Be identified using standard terminology;

    b. Must not cause a condition of nuisance or pollution, as defined in CWC Section 13050;

    c. Must not cause or contribute to an exceedance of groundwater quality objectives;

d. Must not be approved in a WQMP if they are located within waters of the U.S. unless the related discharges have been authorized pursuant to a Clean Water Act Section 401 Water Quality Certification, waste discharge requirements, or waiver thereof.

e. Be sized to infiltrate, filter, or remove pollutants from the design capture volume or design capture flow from their respective tributary areas; and

f. Must be sized and designed in substantial conformance with non-proprietary standards and methods found in published and generally accepted engineering design manuals; unnecessary deviations from those standards and methods are prohibited. Where those manuals conflict with the requirements of this Order, this Order shall prevail; or

g. Have had their expected performance over their anticipated service life substantiated by qualified independent third parties in field tests using published and recognized protocols.

2. A singular or set of structural treatment control BMPs that are volume- based must be sized to infiltrate, filter, or remove pollutants from any of the following design capture volumes from their tributary area:

   a. The volume of runoff produced by a 24-hour, 85th percentile storm event. The volume must be calculated using the County's 85th Percentile Precipitation Isopluvial map.

   b. The volume of annual runoff produced by the 85th percentile, 24- hour rainfall event, determined as the maximized capture stormwater volume for the area, from the formula recommended in Urban Runoff Quality Management, WEF Manual of Practice No. 23/American Society of Civil Engineers Manual of Practice No. 87 (1998).

   c. 80% or more of the annual runoff volume, based on published and generally accepted methods (e.g. *California Stormwater Best Management Practices Handbook – Industrial/Commercial*).

   d. The volume of runoff, as determined from the local historical rainfall record, that achieves approximately the same reduction in pollutant loads and flows as would be achieved by treatment of the volume of runoff produced by an 85th percentile, 24-hour rain event.

   e. Additional requirements for volume-based structural treatment control BMPs are set forth below in Section VIII.I

3. A singular or set of structural treatment control BMPs that are flow-based must be sized to infiltrate, filter, or remove pollutants from any of the following design flows from their tributary area:

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.

b. The maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity, as determined from the local historical rainfall record, multiplied by a factor of two.

c. The maximum flow rate of runoff, as determined from the local historical rainfall record, which achieves approximately the same reduction in pollutant loads and flows as would be achieved by treatment of the flow produced by the 85th percentile hourly rainfall intensity multiplied by a factor of two.

4. Structural treatment control BMPs intended to retain the design capture volume must be designed to infiltrate, evaporate, evapotranspire, or use the volume over a period not to exceed 48-hours; this drawdown period may be extended or shortened provided that the combination of design capture volume and drawdown time achieve retention of 80% or more of the average annual stormwater runoff. Any remaining volume must be passed on to another structural treatment control BMP selected according to the requirements of this Order.

5. The design capture volumes and flows must be adjusted according to anticipated changes in hydrology over the facility's service life.

6. The design capture volume or flow, including run-on, may be treated by routing the runoff through multiple structural treatment control BMPs organized in series or parallel. Permittees must require that the design capture volume or flow be calculated for each area tributary to a structural treatment control or group of structural treatment control BMPs.

7. Permittees must require practical and durable mechanisms designed to indicate the need for maintenance of structural treatment control BMPs. The mechanisms must also be designed to benefit the party responsible for long-term maintenance. The mechanism(s) must be readily identifiable and located on, within, or in close proximity to structural treatment control BMPs; such mechanisms must be documented in the related approved project Final WQMP.

8. Structural treatment control BMPs must be sized and designed by, or under the direction of, a registered civil engineer.

9. Structural treatment control BMPs must incorporate design features to minimize the entrainment and bypass of captured pollutants in the course of routine maintenance, normal operation, or overflow.

E. **Non-conforming Structural Treatment Control BMPs: Demonstration Facilities**

1. The Permittees are prohibited from approving or allowing to be placed into service structural treatment control BMPs which do not substantially conform to published and generally accepted engineering design criteria or whose expected performance has not been substantiated in field tests by qualified independent third parties using published and recognized protocols (non-conforming structural treatment control) unless the following requirements are satisfied:

    a. The design of the non-conforming structural treatment control BMP must be based on sound principles of operation and pollutant-removal mechanisms exhibited by similar conforming structural treatment control BMPs.

    b. The tributary area of any single non-conforming structural treatment control BMP is three (3) acres or less.

    c. Collectively, the Permittees approve no more than ten (10) non-conforming structural treatment control BMPs in total during the term of this Order.

    d. Each non-conforming structural treatment control BMP must be subject to a performance monitoring plan designed and carried out to substantiate the expected performance of the facility using published and recognized protocols. The results must be evaluated by a qualified independent third party.

    e. The results of the performance monitoring plan must be submitted to the Executive Officer if the responsible Permittee concludes that the expected performance of the facility is similar or better as compared to the most similar conforming structural treatment control BMP.

    f. The non-conforming structural treatment control BMP is subject to all other requirements of this Order that do not conflict with the requirements of this Subsection.

2. The responsible Permittees must provide that a non-conforming structural treatment control BMP be replaced with a conforming BMP in the event that the facility's performance falls below the performance of 85% of a sample population of the most similar conforming BMPs or that the facility fails to perform to the Permittee's satisfaction. The Permittee must require financial assurance instruments that are adequate to carry out the replacement.

3. Permittees must report both the application for approval and approval of any non-conforming structural treatment control BMPs within their jurisdiction to the Principal Permittee in writing.

4. The Principal Permittee is responsible for coordinating the Permittees in complying with the requirements of this subsection.

F. **BMP Prioritization Hierarchy**

Structural Treatment Control BMPs shall be prioritized according to the following hierarchy:

1. **First Priority Consideration of Retention LID BMPs in WQMPs**

a. The Permittees must require that LID controls that employ harvest and use, evaporation/transpiration, infiltration (collectively, retention LID BMPs), or any combination thereof, of the entire design capture volume be given preference and first consideration in all WQMPs. That consideration must be demonstrated in the approved final WQMP in substantial conformance with uniform written technical guidance (see Section VIII.C.6).

b. The Permittees must require retention LID BMPs for the design capture volume, or the maximum portion thereof, unless such controls are:

i. Technically infeasible;

ii. Economically infeasible; or

iii. Where environmental and public health hazards cannot be mitigated to an acceptable level.

c. Permittees must document the specific basis for the rejection of retention LID BMPs in the approved final WQMP. The rejection of retention LID BMPs must be supported with Substantial Evidence, as defined in the Glossary.

d. The Permittees must require the project applicant to mitigate the environmental and public health hazards of retention LID BMPs.

i. Mitigation is limited to activities that may be reasonably undertaken as part of the development project and are within the authority of the Permittees to mandate.

ii. Mitigation is not necessary if the costs disproportionately outweigh the pollution control benefits; any such finding must be documented in the final WQMP and be supported with Substantial Evidence.

2. **Second Priority Consideration of Biotreatment Control BMPs in WQMPs**

a. The Permittees must require that structural treatment control BMPs that employ biological uptake, transformation, or degradation of pollutants and incidental infiltration and evapotranspiration (biotreatment control BMPs) be given secondary consideration in the project final WQMP, unless any of the following conditions can be demonstrated based on Substantial Evidence:

   i. Retention LID BMPs have been demonstrated to be technically or economically infeasible;

   ii. The hazards of using retention LID BMPs cannot be mitigated to an acceptable level; or

   iii. A retention LID BMP is proposed but cannot be sized to treat the tributary area's entire design capture volume and a complementing biotreatment control BMP can be designed to treat the remainder of the design capture volume or flow or a portion thereof.

b. When retention LID BMPs are demonstrated to be infeasible the Permittees must require biotreatment control BMPs unless such controls are:

   i. Technically infeasible;

   ii. Economically infeasible; or

   iii. Where the environmental and public health hazards cannot be mitigated to an acceptable level.

c. Where biotreatment control BMPs meet the above criteria, the Permittees must document the specific basis for their rejection in the approved final WQMP. The rejection of biotreatment control BMPs must be based on Substantial Evidence.

d. The Permittees must mitigate the environmental and public health hazards of biotreatment control BMPs to an acceptable level. Mitigation is not necessary if the costs disproportionately outweigh the pollution control benefits; any such finding must be documented in the final WQMP and be supported with Substantial Evidence.

e. Biotreatment control BMPs must be designed to maximize the infiltration of the design capture volume or flow unless such measures pose an unmitigable environmental hazard.

f. Biotreatment control BMPs must be sized and designed to treat 1.5 times the design capture volume or using an alternative sizing factor acceptable to the Executive Officer.

3. **Third Priority Consideration of All Other Structural Treatment Control BMPs: Non-LID BMPs**

Non-LID BMPs shall be considered only after LID BMPs have been considered and rejected according to subsections VIII.E and VIII.F. above. Non-LID BMPs shall be considered as third priority BMPs and selected according to this section.

a. The Permittees must maintain and employ a common schedule which rates the expected performance of specific structural treatment control BMPs, or categories of structural treatment control BMPs.

i. The performance of structural treatment control BMPs must be rated based on the reasonably-expected level of removal of categories of pollutants. The performance ratings must be classified as high, medium, or low level of removal.

ii. Any category of structural treatment control BMPs must include only those controls that employ the same principal of operation; use similar treatment mechanisms, and which can reasonably be expected to exhibit similar performance in the removal of pollutants.

iii. The Permittees' assignment of the expected level of performance for the structural treatment control BMPs must be based on the best available objective evidence. The evidence must include field performance test data specific to the BMP and the data must have been collected according to published and recognized protocols and evaluated by a qualified independent third party.

iv. The categorizations of structural treatment control BMPs and their performance ratings must be reviewed and updated within 12-months of the effective date of this Order so that they are supported by the best available information.

b. Structural treatment control BMPs, which are not LID BMPs (non-LID BMPs) may be necessary to complement LID BMPs. Non-LID BMPs must not be accepted in an approved project WQMP in lieu of LID BMPs unless LID BMPs cannot be employed.

c. If non-LID BMPs, or systems of non-LID BMPs, are the only type of structural treatment control BMP employed to treat the design capture volume or flow from a tributary area of a project, the Permittees must only accept the use of non-LID BMPs, or systems of non-LID BMPs, that provide either a medium or high level of treatment for the expected pollutants.

i. The Permittees must use the performance rating schedule in Section VIII.E.1. above and the project category schedule in Section VIII.F.3.

above to identify acceptable non-LID BMPs for a project.

ii. Approved WQMPs must reflect the use of this prescribed methodology.

4. **Fourth Priority Consideration of Offsets through Retrofit of Existing Development**

Permittees must require that project proponents give fourth priority consideration to offsetting all or any portion of the untreated design capture volume or flow with treatment of the same or greater design capture volume or flow using structural treatment controls (according to Subsections VIII.F.1, VIII.F.2. and VIII.F.3. above) through retrofits of existing development at an off-site location.

a. The retrofit site must be located within the same watershed of the nearest receiving waters of the U.S.

b. The off-site location must not have a pending or submitted development application which would produce similar structural treatment controls on its own.

c. The structural treatment control(s) selection process at the off-site location must be subject to the requirements of Section VIII as applicable.

d. The operator of the structural treatment control(s) at the retrofit site must be subject to requirements in the project Final WQMP or another equally effective mechanism that provides for its proper operation and maintenance.

e. Future redevelopment projects on either the retrofit site or the project site using the retrofit option must consider incorporation of structural treatment controls according to the requirements of the Order in effect at the time.

f. The Executive Officer is authorized to prohibit offsets under this Section VIII.F.4. if the programs are found to be abused or risk causing or contributing to violations of receiving water standards.

G. **Credit Programs**

This Order authorizes the Permittees to allow the transfer of design capture volume or flow credits to priority projects. These credits may be used by a priority project to satisfy requirements in this Order to treat the design capture volume or flow from the project using structural treatment controls subject to the following limitations:

1. The credit shall only be generated when a structural treatment control LID BMP has been designed and is operated to treat the design capture volume or flow from a tributary area that does not include the area of a proposed project. The credit, as a unit of trade, must be directly related to a unit of design capture volume or flow treated by the structural treatment control LID BMP (e.g. acre-foot, cfs, etc.). Credits must be revocable in the event that the facility is abandoned or is not operated and maintained in substantial conformance with best practices.

2. Credits may only be generated based on the design capture volume or flow produced by the area tributary to, and treated by, the structural treatment control LID BMP – upsizing a facility to treat the design capture volume or flow from a fictitious area is not allowed. The installation of the structural treatment control LID BMP may occur independent of a development project; in this case, the entire design capture volume or flow may be traded. If the facility is installed in association with a priority project, only the design capture volume or flow from that area outside of the project boundary may be traded.

3. The credit must be generated by a structural treatment control LID BMP that is located on property which is owned or controlled by the proposed project proponent. The property on which the facility is located and the property where the project is located need not be contiguous. However, credits must not be allowed to be applied to projects outside of the watershed of the nearest receiving water of the U.S. in which the structural treatment control LID BMP is located.

4. The selection process for the structural treatment control LID BMP must give first priority consideration to retention LID BMPs according to the criteria in Subsection XII.F. The basis for selection must be documented in a plan accordingly, but not necessarily in a project WQMP. The plan must be subject to the same requirements in this Order related to providing that the plan is authentic, readily discoverable by interested parties, and protected over the life of the related projects.

5. The structural treatment control LID BMP must be subject to applicable provisions of Subsections XII.D, XII.F, XII.G, XII.K, and XII.L of this Order. Where there is a conflict, the provisions of this subsection prevail.

6. The structural treatment control LID BMP must be constructed, serviceable, and satisfactory to the responsible Permittee prior to final occupancy or use of the first project that is entitled to use the credit generated by the facility.

7. Prior to allowing credit trading, the Permittee(s) within whose jurisdiction(s) the affected projects are located must have and employ an effective system of accounting and controls to provide those credits are sold and used once,

to relate all uses of credits to the originating structural treatment control LID BMP, to track the ownership and use of credits, and to protect against fraud and abuse.

8. Long-term operation and maintenance of all credit generating stormwater LID BMPs must be ensured, whether owned by the Permittee(s) or other entity. To do so, adequate legal and financial safeguards must be in place to protect the project for the duration of its life. As long as the credit generating project is maintained and meets performance standards, the credits generated shall remain available for purchase.

9. A credit program must have measures in place to account for variables associated with a project, including but not limited to the following: risk of project failure, BMP effectiveness, measurement uncertainty, attenuation of a pollutant between the locations of the generator and the user of credits, temporal variability, pollutant equivalency, etc.

10. Permittee(s) must include credit trading implementation and performance over the past year in the Annual Progress Report to be submitted to the Santa Ana Water Board.

11. A credit trading program plan must be provided to the Executive Officer for approval prior to its implementation. The Executive Officer will provide a minimum of 30 days for public review before approval of a trading program. The Executive Officer may require a Permittee to make amendments to the trading program prior to approval of the credit trading program plan. Credit generation and use must be consistent with an approved credit trading program plan.

12. All credit generating projects shall be required to submit a Water Quality Management Plan or equivalent documents to the Permittee(s) for approval.

13. Credit generation and use must not result in adverse impacts and have sufficient standards in place to protect public health with an adequate margin of safety for the population within the area. Projects cannot have any disparate impacts.

14. Insufficient credit balances or failure to meet other credit program conditions as required by Section VIII.G of this Order constitutes a violation.

H. **Waiver of Structural Treatment Control BMPs**

Permittees are authorized to waive their requirement to provide structural treatment control BMPs (see Section VIII.D.1 above) to remove pollutants and subsequently approve a WQMP if all the following conditions are met:

1. The employment of structural treatment control BMPs has been demonstrated in the project Final WQMP to be technically and economically infeasible; or there is no structural treatment control BMP available for which the environmental and public health impacts can be mitigated to an acceptable level;

2. Source and site design BMPs have been incorporated to maximize the infiltration of urban runoff;

3. If a schedule of fees or services has been designed to mitigate the water quality impacts of the untreated design capture volume or flow and the schedule has been approved by the Executive Officer, the Permittee has collected the related impact fees or services from the project proponent;

4. The Executive Officer has been provided valid written notice of the Permittee's intent to issue the waiver, along with adequate supporting documentation, at least 30-days prior to issuance by the Permittee; and

5. The Executive Officer approves the proposed waiver or 60 days has elapsed without action by the Executive Officer on the proposed waiver, whereby it is deemed approved.

I. **Specific Requirements for Infiltration LID BMPs**

The requirements of this Section apply to retention LID BMPs that are intended to infiltrate the entire design capture volume or a portion thereof (infiltration LID BMPs). The requirements of this Section are not intended to apply to bio-treatment control or other structural treatment control BMPs that incidentally infiltrate a portion of the design capture volume or flow.

1. The vertical separation from the bottom of the infiltration LID BMPs to the seasonal high groundwater must be a distance of 10-feet or more unless the facility is known to pose a low risk of contaminating groundwater; if the facility is low risk, the vertical separation may be reduced to 5 feet according to criteria established in the Permittees' written technical guidance. Where the groundwater does not support, or does not have the potential to support, beneficial uses, the Permittee may approve infiltration LID BMPs with less vertical separation, provided that groundwater quality is maintained and that other potential hazards presented by such facilities can be mitigated to an acceptable level.

2. The approval of any infiltration LID BMP with a vertical separation from the bottom of the facility to groundwater that is less than 10-feet must be based on site-specific information on groundwater depth.

3. Infiltration LID BMPs must be located a minimum horizontal distance of 100-feet from any water supply wells.

4. The construction method must not result in the compaction of the subgrade of infiltration LID BMPs.

5. Infiltration LID BMPs must be designed to infiltrate in substantial conformance with minimum or maximum rates recommended in published and generally accepted engineering design manuals. This provision does not prohibit the use of engineered infiltration substrate or other methods used to bring the infiltration rate within the recommended design parameters.

6. Infiltration LID BMPs which are proposed to be located over known soil or groundwater contamination must not be approved without an evaluation of potential adverse impacts to groundwater conditions based on substantial evidence.

7. Infiltration LID BMPs used to treat stormwater runoff associated with industrial activity, stormwater runoff from areas subject to motorized vehicular traffic of 25,000 average annual daily traffic, motorized fleet vehicle storage, or other land uses or activities that pose a high-threat to ground water quality must employ design features that allow flow into the facility to be readily blocked if an accidental spill or release occurs.

8. Infiltration LID BMPs must incorporate one or more practical mechanisms to allow verification of the loss rate of the design capture volume. The mechanisms must be durable and useful over the life of the project and designed for the benefit of the party responsible for the operation of the facility.

9. Infiltration LID BMPs which constitute Class V Injection Wells must comply with all applicable County and municipal well construction or destruction ordinances and standards, and USEPA's Class V Rule, as amended or revised.

10. Structural treatment control BMPs must be provided to pre-treat and remove pollutants that could unreasonably diminish the performance of the infiltration LID BMP for the duration of the project unless pre-treatment mechanisms are incorporated into the facility design itself.

11. The Permittees must develop, publish, and employ a common factor(s) of safety in their written technical guidance that must be used to size infiltration facilities. The factor(s) of safety must be based on those recommended in published and generally accepted engineering design manuals.

12. The Permittees must develop, publish, and employ a uniform protocol in their written technical guidance for estimating the loss or draw-down rate used for designing LID BMPs that infiltrate.

a. The protocol must be consistent with those used in independent, published and generally accepted engineering design manuals.

b. The protocol must employ the best available information for estimating the loss rate.

c. The Permittees must require that the following categories of projects use relevant site-specific methods to estimate soil infiltration rates:

i. Residential projects affecting more than 10-acres or greater than 30 dwelling units.

ii. Commercial or institutional projects affecting more than 5- acres or greater than 50,000 square feet building footprint.

iii. Industrial projects affecting more than 2-acres or greater than 20,000 square feet of building footprint.

J. **Specific Requirements for Harvest and Use LID BMPs**

The Permittees must not accept insufficient demand for harvested stormwater as the sole basis for rejecting Harvest and Use LID BMPs (see Glossary) unless the basis is supported by water demand calculations. Calculated estimates must demonstrate that the expected wet season (November 1st - March 31st) water demand is insufficient to use the harvested design capture volume within a 48-hour period according to the following:

1. The Permittees must publish and employ tables of daily average wet season demand rates and objective project characteristics necessary to provide sufficient demand for harvested stormwater. The demand rates must be used for estimating anticipated non-potable uses of harvested stormwater.

a. The rates and thresholds must be based on independent, published and generally accepted rates or methods for calculating average daily demand of harvested stormwater for non-potable uses such as toilet and urinal flushing, landscape irrigation, industrial process supply, evaporative cooling, and vehicle washing.

b. The rates and thresholds must account for the off-setting effects of rainfall, reclaimed water, water conservation or the inconsistent nature of demand.

c. Reclaimed water supplies must be based on available supplies, not speculative supplies.

2. Where demand rates are dependent upon variable site occupancy, average daily occupancy during the wet season must be used.

K. **Off-Site Structural Treatment Control BMPs: Regional and Sub-Regional Facilities**

1. Permittees must require that structural treatment control BMPs be located on the project site except under the following conditions:

   a. A regional or sub-regional BMP has been planned and approved by the Permittees' land-use authority, or other public agency;

   b. A party responsible for the facility's performance (Operator) will maintain ownership or control over the facility over the life of projects located within the facility's tributary area;

   c. Any structural treatment control BMPs deemed necessary by the Operator to pre-treat and remove pollutants that could unreasonably diminish the performance of the facility or cause or contribute to a condition of nuisance over its service life have been provided in the project final WQMP;

   d. The regional or sub-regional facility is constructed, serviceable, and satisfactory to the Permittee, as soon as possible but no later than the following schedule;

      i. For infiltration LID BMPs; no later than two years following first occupancy of any project site in its tributary area.

      ii. For retention LID BMPs; no later than one year following first occupancy of any project site in its tributary area.

      iii. For all other LID BMPs; immediately upon first occupancy of any project site in its tributary area.

2. Where a structural treatment control BMP has been approved or constructed according to a final project WQMP, the Permittees are authorized to amend the relevant project WQMP(s) to replace the facility and, if applicable, decommission of the facility, only if:

   a. The facility's design capture volume or flow will be treated by an off-site facility that has been reviewed, designed, and approved according to the requirements of this Order and Section VII.K.1.

   b. The expected performance of the off-site facility in removing pollutants from its effluent is equal or better than the combined expected performance of the facilities that it will replace; and

   c. Permittees employ decommissioning standards and conditions which effectively address the hazards that the decommissioned facility may pose.

L. Hydrologic Conditions of Concern

Permittees must have an effective program that protects the physical, chemical, and biological integrity of waters receiving urban runoff from new development and significant redevelopment over the development's expected life.

1. Permittees must address the changes in a Priority Project site's hydrology over the expected life of the project in the project final WQMP according to the requirements of this Section except under any of the following conditions:

   a. The runoff volume and time of concentration for the two-year frequency, 24-hour storm event are not significantly affected by the project. A significant effect occurs where:

      i. The calculated runoff volume from the site increases by 10% or more over the pre-project condition and/or

      ii. The calculated time of concentration for runoff from the site decreases by 10% or more over the pre-project condition.

   b. The project has the demonstrated capacity to infiltrate, harvest and use, evaporate, or evapotranspire the change in volume of runoff produced by a two-year 24-hour storm event within a 48-hour period between pre- and post-development land use cover type.

   c. A Clean Water Act Section 401 Water Quality Certification, Waste Discharge Requirements or waiver thereof, has been issued authorizing discharges of fill associated with channel modifications that would accommodate the project's changes in hydrology while protecting beneficial uses through on site or off-site mitigation according to the conditions or provisions of the authorization.

   d. The Executive Officer grants an individual (for specific conveyance channels or reaches) or general (categories of conveyance channels or reaches) waiver in writing to the Permittee(s).

      i. The granting of such waivers must be supported by objective and relevant studies.

      ii. The Permittees must comply with any conditions placed on the issuance of the waiver by the Executive Officer.

      iii. The Executive Officer and the requesting Permittee(s) must provide the public an opportunity to comment on the proposed waiver for a period of not less than 30-days prior to its issuance.

      iv. The Executive Officer may withdraw granted waiver if new information indicates that the waiver is not effective in protecting the

physical and biological integrity of the affected waters.

2. For those Priority Projects that do not meet the exceptions in Subsection VII.K.1. above, the Permittees must apply the following conditions:

   a. The project final WQMP must include a hydrology study that quantifies the pre- and post-project runoff volumes, peak flow rates, and times of concentration for a 2-year, 24-hour storm event.

   b. Except for those conditions in Section VIII.K.2.c., the project final WQMP must provide BMPs that modify runoff volumes and times from the project site for the 2-year, 24-hour storm event such that:

      i. Post-project runoff volumes for the 2-year, 24-hour storm event do not increase by more than 10% compared to the pre-project runoff volumes for the 2-year, 24-hour storm event; and,

      ii. Post-project times of concentration for the 2-year, 24-hour storm event do not decrease by more than 10% compared to the pre-project times of concentration for the 2-year, 24-hour storm event.

   c. BMPs must be provided in accordance with Section VIII.K.2.b. above unless site design and/or structural treatment control BMPs proposed to reduce pollutants in urban runoff for the site already effectively modify runoff volumes and times of concentration such that they satisfy Section VIII.K.2.b. above.

IX. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM (IDDE)

Each Permittee must have a program that effectively prohibits illicit connections and illegal discharges into their respective MS4s.

A. General

1. Permittees must address the changes in a Priority Project site's hydrology over the expected life of the project in the project final WQMP according to the re Each Permittee must employ an effective mechanism for the public to report known or suspected illegal discharges, illicit connections, and illegal dumping.

   a. Each Permittee must provide that the reporting mechanism is continuously advertised to the public.

   b. Each Permittee must advertise the availability of services that allow residents to dispose of wastes that have the potential to be discharged to their MS4s (e.g. Household Hazardous Waste Program, electronics recycling, etc.).

2. Each Permittee must implement an effective program to detect illicit connections and illegal discharges; to abate illegal dumping that has the potential to result in a discharge of pollutants to their MS4s; to trace the source of illicit connections and illegal discharges; and to eliminate or permit such discharges and connections.

    a. Each Permittees' program may be part of or in support of a comprehensive program lead by the Principal Permittee.

    b. The Permittees' program must be fully described in written processes and procedures.

    c. Permittees must provide mutual assistance to one another in detecting known or suspected illicit connections, illegal discharges, and illegal dumping.

    d. Each Permittee must employ an information system that tracks instances of known or suspected illicit connections, illegal discharges, and illegal dumping within their respective jurisdictions.

        i. The database must be designed and used to document and track compliance with the requirements of this Section.

        ii. The database should be designed and used to guide the Permittees' most effective use of resources towards satisfying the requirements of this Section.

    e. The Permittees must maintain maps of their respective MS4s that contain information of sufficient detail and quality to trace the source of suspected illicit connections and illegal discharges in a timely manner.

        i. The maps must be distributed in a format that is readily available to personnel responsible for satisfying the requirements of Subsection VIII. of this Order.

        ii. The maps must be reviewed, updated, and uploaded to SMARTS annually.

3. The Permittees' program must develop and implement procedures for source investigation of illicit connections, illegal discharges, and illegal dumping. When the source of an illicit connection or illegal discharge is discovered, the Permittee(s) must take immediate action to eliminate the discharge or connection or require that it be subject to appropriate NPDES Permit(s) within 90 days of discovery.

B. **Sanitary Sewer Overflows**

Sanitary Sewer Overflows (SSOs) shall be treated as a sub-class of illegal

discharges subject to the following additional requirements:

1. The Permittees shall provide local sanitation districts 24-hour access to the MS4s to address sewage spills and shall provide updated contact information to enable such access.

2. The Permittees shall have effective policies and procedures in place to work cooperatively with the local sanitation districts to determine and control the impact of infiltration from leaking sanitary sewer systems on stormwater quality.

3. Each Permittee shall implement control measures necessary to minimize infiltration of seepage from sanitary sewers to the storm drain systems through routine preventive maintenance of the storm drain system.

4. For those Permittees that own or operate sanitary sewer systems over one mile in length, the State Water Board has established minimum requirements to prevent and mitigate SSOs in Order No. 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Wastewater Collection Agencies", which the MRP was amended by State Water Board Order WQ-2013-0058-EXEC.

5. The Permittees that are not subject to the requirements of Order No. 2006-0003-DWQ, or subsequent renewals, must implement an effective program to detect and mitigate SSOs. These Permittees' SSO program(s) must be comprised of the following elements:

    a. Written procedures for responding to SSOs.

    b. A hands-on field training program for Permittees' staff responsible for responding to SSOs.

    c. An awareness-level training program for Permittees' field staff most likely to initially detect SSOs.

    d. If necessary, executed Memorandum/Memoranda of Understanding (MOU) for delineating jurisdictional and financial responsibilities for the program.

    e. Where illicit connection or illegal discharge that is or is suspected of originating outside of the Permittee's jurisdiction are identified, the Permittees shall notify the responsible party and the Executive Officer of the discharge.

    f. Each Permittee shall cooperate and coordinate with the sewage collection/treatment agencies to respond to and contain sewage spills that may discharge into its MS4.

g. Permittees must respond to SSOs according to the written response procedures unless there is a cause to believe that such a response would not be most effective under the circumstances.

h. Permittees must maintain records adequate to demonstrate that they implemented the SSO program and its elements; records must be maintained for a minimum of five (5) years.

6. The Principal Permittee is responsible for documenting and reporting the program(s') outcomes in the Annual Progress Report.

7. Permittees with septic systems in their jurisdiction shall maintain a current inventory of septic systems to quickly identify the potential sources of illicit connections or illegal discharges.

X. PUBLIC EDUCATION AND OUTREACH

The Permittees must implement an effective public education and outreach program. The program must be designed to: 1) raise awareness of pollution-prevention best practices and 2) measurably cause the audience to take action(s) to reduce pollutants in urban runoff.

A. The audiences that the program must include:

1. The general audience, consisting of all residents that are school age and older and commercial and industrial establishments; and

2. Target audiences are selected from the general audience to address high-priority urban runoff pollution issues as identified by the Permittees in accordance with this Subsection. Target audiences may include, but are not limited to, mobile businesses, homeowner associations, universities and schools, disadvantaged communities, etc.

B. The Permittees must provide one or more methods for the public to report activities or conditions that could result in the discharge of pollutants in urban runoff (i.e. illegal dumping, illicit discharges, clogged storm drains, faded or missing catch basin stencils, etc).

The Principal Permittees are responsible for developing and coordinating a unified communication strategy and for monitoring and reporting the effectiveness in achieving the goals and objectives of the program.

C. The Permittees shall provide a report on the status of compliance with the requirements of this section and a description of changes to the program shall be included in the Annual Progress Report.

D. As part of implementing the program, the Permittees must implement one or more public education campaigns, according to a written plan, that address a minimum

of three high-priority urban runoff pollution issues over the term of this Order. A public education campaign does not need to begin or end during the term of this Order. A campaign may be a continuation of activities occurring before the adoption of this Order and continue after its expiration. The Permittees must:

1. Identify goals and related measurable objectives of the public education campaign(s). Issues must be identified for the entire permit area, for each watershed, or for each city;

2. Document the rationale for the selected high-priority urban runoff issues and related target audiences;

3. Identify and analyze target behaviors and target audiences to address the selected high-priority urban runoff pollution issues;

4. Create specific messages that are appropriate to the target audiences;

5. Develop educational content for media with the most potential to appeal to the audiences;

6. Determine the methods and processes of distributing the educational content;

7. Objectively evaluate the effectiveness of the program; and

8. Provide opportunities for public input, and demonstrate consideration of that input, in the development of the program.

E. The Permittees must ensure that effective written publications and website content are available to assist construction and industrial dischargers in controlling pollutants in stormwater runoff. Written publications must be available to the Permittees' inspectors for distribution to inspected facilities as needed.

F. Each Permittee must perform, or cause to be performed on their behalf, no later than 60 months from the effective date of this Order, a statistically valid survey that:

1. Measures the general audiences' knowledge regarding the sources of urban runoff pollution;

2. Measures specific changes in the general audiences' behavior(s) that have occurred to prevent urban runoff pollution; and

3. Is made available to the public through a press-release, web site, or similar method acceptable to the Executive Officer within 90-days of its completion.

XI. TRAINING PROGRAMS

Each Permittee must have an effective training program for their staff, contractors and

vendors whose duties or responsibilities directly or indirectly affect the Permittee's capacity to satisfy the requirements of this Order (collectively, personnel).

A. Those personnel include, but are not limited to, the following:

1. Stormwater program managers;

2. CEQA practitioners;

3. Inspectors;

4. Maintenance personnel;

5. Plan checkers;

6. Planners;

7. The division heads of all of the above staff; and

8. Contractors and vendors who perform duties similar to the above staff.

B. Each Permittee must maintain a roster of personnel or staff positions whose duties or responsibilities directly or indirectly affect the Permittee's capacity to satisfy the requirements of this Order.

C. Personnel must undergo training annually. New hires must receive their initial training within 6 months of their initial hire date.

D. The training program must be subjected to an annual review, for the purpose of achieving continual improvement of its effectiveness and must be updated accordingly.

E . Training materials must be written in plain, straightforward language, avoiding technical terms as much as possible, and using a coherent and easily readable style.

F. Each Permittee must employ a method that objectively demonstrates that personnel individually have the necessary level of knowledge and skill commensurate with their duties and responsibilities.

G. Each Permittee must maintain records demonstrating that personnel have satisfied the requirements of the training program; records must be maintained for a minimum of five (5) years.

H. Training records must be maintained for staff and contract vendors, as part of a region-wide training registry, or through another mechanism acceptable to the Executive Officer.

I. The Principal Permittee must establish a written training curriculum for use by the

Permittees. The contents of the curriculum must be commensurate with the duties and responsibilities of the affected personnel.

1. All affected personnel must be able to demonstrate proficient knowledge of the following subject matter:

    a. An overview of Federal, state and local water quality laws and regulations pertaining to urban runoff.

    b. The potential direct and indirect impacts of urban runoff on receiving waters.

    c. Current water quality impairments.

    d. The potential sources of pollutants in urban runoff.

    e. Specific actions that personnel are obligated to take to reduce pollutants in urban runoff.

2. At a minimum, personnel who are responsible for inspecting construction sites must be able to demonstrate proficient knowledge in the following subject matter:

    a. Federal, state and local water quality laws and regulations pertaining to construction and grading activities.

    b. The potential effects of construction and grading activities and urbanization on water quality.

    c. The effective application and use of erosion and sediment control BMPs.

    d. Methods for affecting compliance, including enforcement tools and procedures.

3. At a minimum, personnel responsible for inspecting industrial sites must be able to demonstrate proficient knowledge of the following subject matter:

    a. Federal, state and local water quality laws and regulations pertaining to industrial activities.

    b. The potential effects of industrial activities and urbanization on water quality.

    c. The effective application and use of non-structural and structural treatment control BMPs.

    d. Methods for affecting compliance, including enforcement tools and procedures.

4. At a minimum, personnel responsible for investigating, eliminating or permitting illegal discharges and illicit connections must be able to demonstrate proficient knowledge of the following subject matter:

    a. The potential effects of illegal discharges and illicit connections on water quality.

    b. SSO and general spill response and coordination procedures.

    c. Investigation techniques and procedures.

    d. Methods for affecting compliance, including enforcement tools and procedures.

5. At a minimum, personnel responsible for preparing, reviewing or approving Water Quality Management Plans or for ensuring their implementation must be able to demonstrate proficient knowledge of the following subject matter:

    a. The requirements found in Section VIII of this Order.

    b. The related written processes, procedures, and methods for selecting, sizing, and designing source control, site design, and structural treatment control BMPs.

    c. Investigation techniques and procedures.

    d. The Permittee's enforcement tools and procedures.

J. Each Permittee shall ensure all employees and contractors who use or have the potential to use pesticides and/or fertilizers are trained on an annual basis. Training programs shall address:

1. The potential for pesticide-related surface water toxicity;

2. Proper use, handling, and disposal of pesticides;

3. The least toxic methods of pest prevention and control; and

4. Reduction of pesticide use.

XII. WATERSHED MANAGEMENT PLANS

Participation in a Watershed Management Plan (WMP) is an alternative compliance option available to all Permittees. Specifically, the development and implementation of, and the Permittee's full compliance with, WMPs according to this Section will serve as an alternate method to comply with receiving water limitations in Section VI (Effluent Limitations and Discharge Specifications) and with WLAs that are expressed as WQBELs whose final deadlines have not yet passed in Section VII (Total Maximum Daily Load Implementation). If a Permittee or the Santa Ana Water Board

determines that a discharge of pollutants in stormwater runoff is causing or contributing to an exceedance of water quality standards (receiving water limitations) or a TMDL WLA, the responsible Permittee(s) may individually or collaboratively develop and implement a WMP. Permittees may also develop WMPs before a determination is made that stormwater runoff is causing or contributing to exceedances of water quality standards or exceeding WLAs. If a Permittee chooses to develop a WMP, then the failure to develop and implement a WMP in accordance with the requirements of this section means that the responsible Permittees must comply immediately with Sections VI and VII of this Order.

A. **WMP Development**

1. **Notice**

a. To initiate the process of developing a WMP, the responsible Permittees must provide written notice (Notice) to the Executive Officer. The Notice must indicate their intent to develop a Watershed Management Plan (WMP)WMP to achieve water quality standards and WQBELs within a watershed.

b. Reactive preparation of WMPs: If the WMP is developed in response to a violation of receiving water limits in Section VI of this Order, Permittees must provide Notice to the Executive Officer no more than 60 days after receiving notice of such violation.

c. Proactive preparation of WMPs: Permittees may develop a WMP as an alternative to comply with receiving water limitations in Section VI (Receiving Water Limitations) and a strategy to attain WLAs that are expressed as WQBELs whose final deadlines have not yet passed in Section VII (Effluent Limitations and Discharge Specifications). In the event that responsible Permittees develop a WMP proactively, the Permittee(s) need not wait to receive a notice of violation of receiving water limits in Section VI of this Order to submit a Notice to the Santa Ana Water Board. The Notice must be provided to the Executive Officer no later than 60 days after the effective date of this Order.

In the absence of the submission of a valid Notice, the responsible Permittees must comply with Section VI and Section VII.

2. A valid Notice must be submitted according to the following requirements:

a. A Notice shall include a schedule for the development of the WMP.

i. The schedule shall include a work breakdown structure that describes the completion of discrete tasks and the achievement of clear, specific milestones in the development of the draft plan. Of these milestones, the WMP development schedule must identify a minimum of three (3) critical milestones, excluding the final deadline.

Critical milestones and the final deadline are enforceable. The combination of enforceable critical milestones and unenforceable non-critical milestones must be sufficiently detailed to allow early detection of any deviations in the schedule that may cause the Permittees to miss critical milestones or the final deadline for submitting the final WMP.

ii. The WMP development schedule shall be as short as practical, but the final deadline for submitting a final WMP must not exceed 12-months from the date of the Notice. The Executive Officer may approve extensions of time for meeting critical milestones.

b. A valid Notice must also:

i. Identify the responsible Permittees who will be participating in the development of the WMP.

ii. Include copies of any available executed or draft agreements that are necessary to develop the WMP.

iii. Provide the contact information for representatives for each of the responsible Permittees.

iv. Describe the management area (watershed or sub-watershed) over which the WMP will apply.

v. Describe any models or similar analyses that may be used to prepare the WMP according to Section XII.F.8. below.

vi. The Executive Officer is authorized to accept or reject a Notice and to designate critical milestones.

vii. The Executive Officer will provide at least a 30-day public review period prior to approval by the Executive Officer or Santa Ana Water Board of a Notice.

B. **Implementation of Development Schedule**

1. The responsible Permittees must implement the development schedule for the WMP according to the critical milestones and the final deadline for compliance with applicable TMDLs or water quality standards (hereafter, final deadlines), except as follows:

a. Milestones that are not identified as critical milestones should be achieved but are not enforceable. All critical milestones and final deadlines are enforceable.

b. Any changes to the critical milestones and the final deadline must be requested in writing and are subject to the approval of the Executive Officer or the Water Board.

c. For the duration where the extension period causes a Permittee to deviate from the original critical milestones and final deadlines, the responsible Permittee must demonstrate compliance with Receiving Water Limitations in Section VI and with applicable WQBELs according to Section VII.

d. Any written request for a change in the critical milestones or the final deadline in a development schedule must include a statement of the purpose and need for the change.

e. The Executive Officer will provide a minimum of 30 days for public review of a request for a change to the development schedule(s) prior to approving the request. Written requests must be received not less than 30-days prior to the affected scheduled deadline.

f. Non-critical milestones may be changed at the discretion of the Permittees subject to the following conditions:

i. The deviation from the non-critical milestone in the schedule is not expected to result in a violation of critical milestones or the final deadline.

ii. The Executive Officer must be notified in writing of the change within 14 days.

iii. The notification must include an explanation for the deviation and a description of the revised schedule.

iv. The Permittees can demonstrate that the revised schedule will provide equivalent water quality improvement.

C. **Watershed Management Plan Contents**

1. WMPs may be developed for more than one pollutant. The responsible Permittee(s) must describe programs and projects in their Watershed Management Plan(s) which prioritize the pollutants which are known or suspected of causing or contributing to exceedances of water quality standards and WLAs. The projects and programs must be designed to reduce those pollutants in urban runoff according to a measurable and verifiable schedule and a process for continual improvement of the projects and programs.

2. Prioritization of Pollutants: The responsible Permittee(s) must prioritize pollutants to be addressed in the WMP based on any available information that is relevant to actual or probable exceedances of water quality standards and WLAs, including, but not limited to the following:

    a. Water quality information collected as part of efforts to detect illegal discharges and illicit connections;

    b. Information collected as part of inspections of industrial, and construction sites;

    c. Reports regarding pollutant source investigations;

    d. The results of watershed modeling studies;

    e. Analyses of outfall monitoring data or receiving water monitoring data; and,

    f. The presence and status of the receiving water on the Clean Water Act Section 303(d) list of impaired waters.

3. Projects and Programs: The WMP's projects and programs must be designed by the responsible Permittees to cause discharges of pollutants in urban runoff from their MS4s to comply with the Receiving Water Limitations and TMDL WLAs. Failure to submit a valid WMP, the responsible Permittees must comply with Section VI and Section VII. All WMPs must include the following:

    a. A description of the pollutant(s) that are most likely to cause or contribute or are known or suspected of causing or contributing to exceedance(s) of water quality standards and/or WLAs and a description of the supporting information and rationale used to identify the pollutant(s).

    b. A description of the persons or activities known or suspected of being the source of the pollutant(s); a description of other potential sources which were considered and excluded; and a description of the supporting information and rationale.

    c. A description of the existing BMPs that are being employed to control the pollutant(s). The description must be adequate to fully characterize the baseline conditions under which exceedances have occurred or may occur.

    d. Execution of studies or pilot programs that fill information gaps in stormwater pollution control science and support the effective employment of BMPs.

e. **New or Modified BMPs:** A description of any proposed new BMPs or modifications of currently employed BMPs. **BMPs may include but are not limited to**:

i. Modification or substitution of procedures or practices at facilities owned or controlled by the responsible Permittees.

ii. Modifications of the messages and target audiences of public education campaigns.

iii. Adoption and enforcement of ordinances or standards designed to reduce certain pollutants.

iv. Incentive programs or land use practices designed to discourage, substitute, or preempt certain polluting practices.

v. Incentive programs designed to encourage source control, site design, and structural treatment control BMPs in existing development (retrofit programs).

vi. Planning and execution of stream or habitat restoration or rehabilitation projects that provide or contribute to objectively demonstrable and sustainable improvements in the physical, chemical, and biological integrity of the receiving waters.

vii. Planning and implementation of regional or sub-regional structural treatment controls such as retention, detention and infiltration basins.

viii. Adoption and pursuit of land-use or transportation planning goals and objectives that implement and support LID.

f. **Schedule.** A schedule for the implementation of new BMPs or modifications of currently employed BMPs to comply with WLAs or receiving water limitations. The schedule shall set forth the dates on which the completion of discrete tasks and the achievement of clear, specific milestones will be achieved.

i. **Critical milestones:** Of these milestones, the plan development schedule must identify a minimum of three (3) critical milestones (see Glossary), excluding the final deadline for TMDL compliance. Critical milestones, together with the final deadline for TMDL WLA compliance, are enforceable. The final deadline for BMP implementation or modification must be as short as practicable, taking into account the technological, operation, and economic factors that affect the design, development, and implementation of BMPs; or otherwise must not exceed any applicable final deadline

for TMDL WLAs in Appendices 2 through 12. The time frame between each critical milestone must not exceed one year, unless otherwise approved by the Executive Officer.

ii. **Non-critical milestones:** Each WMP shall also contain non critical milestones (see Glossary). Together with enforceable critical milestones, the non-critical milestones in the schedule for implementation of BMPs must be sufficiently detailed to allow early detection of any deviations in the schedule that may cause the Permittees to miss critical milestones or the final deadline for TMDL compliance.

iii. BMPs that implement a WQBEL must be carried out according to the implementation schedule specified in the related TMDL, if applicable.

g. **A detailed strategy for financing implementation of the plan**. The strategy shall be completed by qualified persons such as accountants using suitable standard practices (e.g. discounting, sensitivity analysis, disclosure of assumptions and limitations, etc.).

h. **Reasonable Assurance Analysis (RAA)**: RAA is an objective, quantifiable analysis which provides a reasonable assurance that the existing, modified and new BMPs can be expected to cause discharges to achieve the applicable WLAs or water quality standards within the applicable time frames.

i. An analysis must be performed for each pollutant unless the pollutants' sources, their fate and transport, or method of control correlates so that the conclusions of an analysis for one pollutant can reasonably be extrapolated to other pollutants. The justifications for extrapolating must be provided in the analysis.

ii. The analysis must be supported, in part, by peer-reviewed models that are in the public domain unless a determination can be made, to the satisfaction of the Executive Officer, that an appropriate model and/or a suitable dataset for use in a model are not available.

iii. The analysis must include an assessment of the internal strengths and weaknesses of the plan, including entities responsible for its implementation, and the external opportunities and threats which may affect the likelihood of successfully achieving and/or maintaining compliance with water quality standards and WQBELs.

iv. The analysis must be in substantial conformance with written guidance developed or referenced, such as the Guidance for Conducting Reasonable Assurance Analysis for Watershed

Management Program prepared by the Los Angeles Water Board staff.

v. Any necessary revisions to the Monitoring and Reporting Program designed to evaluate the effect of implementing the Watershed Management Plan on receiving water quality.

D. WMPs shall include management programs consistent with 40 CFR section 122.26(d)(2)(iv)(A)-(D).

E. The WMP is subject to review and approval by the Executive Officer. The Executive Officer is authorized to approve the WMP, subject to conditions. The Executive Officer may also elect to seek consideration by the Santa Ana Water Board of the WMP.

F. The Executive Officer will provide at least a 30-day public review period prior to approval of any WMP or any proposed amendments to critical milestones or final deadlines in an already-approved WMP.

G. The WMP and any proposed amendments become final upon approval by the Executive Officer. The WMP must be fully implemented by the responsible Permittees according to critical milestones and final deadlines identified in the plan or as part of conditions of approval specified by the Executive Officer.

H. The Permittees must provide any information that is missing from their WMP and any proposed amendments, or submit changes to the plan or amendments pursuant to a written request by the Executive Officer by a date specified in the request. After the date specified in the written request, if the Permittees have not provided the requested information or submitted a request for additional time to respond, the Permittees must comply with receiving water limitations in Section VI (Receiving Water Limitations) and with WLAs whose final deadlines have not yet passed in Section VII (Effluent Limitations and Discharge Specifications).

I. The development, review and approval process of a WMP will occur according to the schedule shown in Table 4 below:

Table 4: Schedule for the Development, Review, and Approval of Watershed Management Plans

Task	Deadline
The Permittees submit notice of intent to develop a plan to comply with water quality standards and/or WLAs.	In accordance with Section XII.A.1 of this Order: Within 60-days of becoming aware of a violation (reactive) or within 60 days of the Effective Date of this Order (proactive).
The Executive Officer provides the notice of intent to develop a plan to comply with water quality standards and/or WQBELs for public notice.	Not less than 30-days prior to the expected date of approval of the notice.
Final draft Watershed Management Plan is submitted to the Executive Officer.	Not more than one year from the date the Water Board receives the written notice of intent to prepare a WMP.
The responsible Permittees provide any missing information to complete the initial draft plan and/or provide a second draft amended according to the Executive Officer's written instructions.	By the date specified in the Executive Officer's written notice.
The Executive Officer provides the complete, amended draft plan and any proposed conditions of approval for public notice.	Not less than 30 days prior to the expected date of approval of the draft plan.

J. The responsible Permittees must make the final WMP, as later amended or revised, accessible to the public by posting the plan to their web site(s), the Principal Permittee's web site, or another method acceptable to the Executive Officer.

K. Except for non-substantive grammatical or technical corrections and non-critical milestones, the final WMP may be amended by the Permittees only with the approval of the Executive Officer following a 30-day public notice and comment period.

L. WMP amendments must be requested in writing and are subject to the approval of the Executive Officer. All proposed amendments must include an explanation of the purpose and need for the amendments. The Executive Officer may either: (1) request additional information, (2) approve the proposed amendments as is, (3) approve, subject to conditions, or (4) reject the proposed amendments.

M. The effective requirements of the approved WMPs shall replace in whole the requirements of Sections VI and VII. If there is a conflict between the approved WMP and Sections other than Sections VI and VII of this Order, the Order shall prevail.

N. The responsible Permittees must provide a written notification to the Executive Officer, no later than 14 days following each critical milestone or final deadline specified in an approved WMP, of the status of compliance or non-compliance thereof.

O. Where regional and sub-regional structural treatment control BMPs are proposed in the WMPs and such facilities are not subject to requirements pertaining to project WQMPs, the responsible Permittees must provide that regional and sub-regional structural treatment control BMPs comply with the requirements of Section VIII.D. (General Requirements for Structural Treatment Control BMPs) of this Order and, if applicable, Sections VIII.I. (Specific Requirements for Infiltration LID BMPs) and Section VIII.J. (Specific Requirements for Harvest and Use LID BMPs).

P. If, despite the implementation of the final approved WMP, cycles of monitoring, analysis, and reporting continue to result in determinations that there are continuing or recurring exceedances of water quality standards or WQBELs that are caused or contributed to by discharges of pollutants in urban runoff, the responsible Permittees must propose an amendment to the WMP within 60-days of the determination subject to the requirements of Section XII.B.

Q. **Compliance Determination**

1. A submitted notice to prepare a WMP, compliance with the critical milestones and final deadline in a WMP development schedule, or implementation of an approved final WMP according to the requirements of this Order serves as an alternative to comply with receiving water limitations in Section VI (Receiving Water Limitations) and with WLAs whose final deadlines have not yet passed in Section VII (Effluent Limitations and Discharge Specifications).

2. The responsible Permittee must comply directly with the receiving water limitations in Section VI and achieve the WQBELs in Appendices 2 through 12 according to the requirements of Section VII unless the Permittee alternatively complies with Section XII. Compliance must be verified through a process developed for this purpose in the Water Quality Monitoring Plan.

3. If the Executive Officer determines that a Permittee has failed to comply with any of the provisions in this Section related to developing a draft plan, or to fully implement a final plan, the Executive Officer may provide written Notice to the responsible Permittees and provide not more than 90-days from the date of the Notice of Violation (NOV) to correct the deficiencies.

    a. If, after issuance of written NOV(s), a Permittee repeatedly fails to come into compliance with the requirements of this Section, either through performance of the requirement or by pursuing an acceptable amendment of the WMP, the Executive Officer may conclude that the Permittee has constructively abandoned development or implementation of the WMP.

b. Upon concluding that the WMP has been constructively abandoned, the Executive officer will provide written notice to the responsible Permittee that they have not developed or implemented a WMP and inform the Permittees of their responsibility to immediately comply with the receiving water limitations and WQBELs.

c. Once the Executive Officer has issued any written NOV to the responsible Permittee, any action taken by the responsible Permittee(s) as a means to come back into compliance does not preclude any additional enforcement action by the Executive Officer for violations of the requirement(s) in effect at the time of the Notice. The Executive Officer will make NOVs issued according to this Subsection available for public review.

R. **Time Schedule Order Applicability**

1. If the deadline to comply with WLAs in the TMDL passes while responsible Permittee(s) are implementing an approved WMP, or if Permittees participating in a WMP believe that additional time is necessary to comply with receiving water limitations, a Permittee may apply for a TSO pursuant to Water Code sections 13300 and/or 13385(j)(3). TSO requests may be made either individually or jointly, and may be made in addition to the statutory requirements set forth in Water Code sections 13300 and/or 13385(j)(3), TSOs are subject to all the following conditions:

   a. The request for an extension must be in writing and include all of the following information:

      i. A statement of the purpose and justification for the time schedule that the Permittee(s) propose to achieve the final WQBEL(s) and/or receiving water limitations;

      ii. A detailed time schedule of specific actions that the Permittee(s) will take to achieve the final WQBEL(s) and/or receiving water limitations;

      iii. Data which demonstrates the current quality of the relevant MS4 discharge(s) to the receiving waters in terms of concentration and/or load;

      iv. A detailed description and chronology of structural controls and source control efforts, since the effective date of the TMDL, to reduce the discharge of the pollutant(s) from the MS4 to the receiving waters subject to the TMDL;

      v. The analysis must be in substantial conformance with written guidance developed or referenced, such as the Guidance for Conducting Reasonable Assurance Analysis for Watershed

Management Program prepared by Los Angeles Water Board staff; and,

vi. A demonstration that the proposed time schedule is as short as possible, taking into account the technological, operational, and economic factors that affect the design, development, and implementation of the control measures that are necessary to comply with the final WQBEL(s) and/or receiving water limitations.

b. The request for a TSO must be provided to the Executive Officer and for public review not less than 90 days prior to the deadline for the WLA.

c. If the term of the requested TSO exceeds one year, the request should also include proposed interim requirements and a time schedule for their achievement. The proposed interim requirements must include:

i. Effluent limitation(s) for the pollutant(s) of concern; and,

ii. A detailed time schedule of specific actions the Permittee(s) will take to achieve the effluent limitations.

XIII. MUNICIPAL INSPECTIONS

Each Permittee must have an effective program for inspecting construction, industrial, and commercial sites to minimize or reduce the discharge of pollutants to the MS4. Inspections and related enforcement actions must be carried out to enforce compliance with applicable ordinance(s), plans, permits, or other requirements related to the control of discharges of pollutants to their MS4s.

A. General

1. Each Permittee must have written policies and procedures that describe how inspections and related enforcement actions are carried out.

2. Each Permittee must have an inventory of construction, industrial, and commercial sites subject to inspection. Each Permittees' inventory of sites must be maintained in an electronic-format database.

3. The inventory must be updated through multiple mechanisms. The inventory must be comprehensively updated annually through reconciliation with other database inventories of businesses in each Permittee's jurisdiction. From all other sources, the inventory must be updated within 15 business days of the Permittee first becoming aware of the presence of a new site. The database records must include information on the following attributes:

a. Site/business ownership;

b. Site area;

c. Any related approved Water Quality Management Plans and associated structural treatment control BMPs; and

d. Location (address and latitude/longitude or equivalent location information).

4. The database must be organized in a manner that is adequate for the permittees and Santa Ana Water Board staff to determine compliance with the requirements of this Order.

5. The Executive Officer must be notified of any known, suspected, or threatened violation of applicable waste discharge requirements (i.e. State-wide Construction General Permit, etc.), discovered during inspections according to Section III. E. of this Order. Such violations include, but are not limited to:

   a. Failure to obtain coverage under the applicable waste discharge requirements.

   b. Unauthorized discharges.

6. Perceived non-filers for the General Stormwater Permits shall be reported consistent with Section III.E.2.

7. Except as provided for in Section III. E. of this Order, Permittees must investigate complaints regarding potential or alleged discharge(s) of pollutants from construction, industrial, and commercial sites, received by internal departments or divisions, external agencies, or the public, within three (3) business days of the complaint being brought to their attention.

8. Permittee inspectors must be trained according to Section XI of this Order; inspectors must undergo training once per two years.

9. Permittees must address non-compliance with a series of effective, progressive actions to compel compliance.

10. Permittees must conduct inspections of all approved structural treatment control BMPs according to the following schedule:

    a. All privately-owned or operated structural treatment control BMPs must be inspected a minimum of once every 5 years.

    b. All Permittee-owned or operated structural treatment control BMPs must be inspected annually prior to October 1st.

B. **Construction Sites**

1. The Permittee's construction site inventory must include sites where building or grading permits are applicable and where activities at the site include the

following:

a. Soil movement;

b. Uncovered storage of materials or wastes, such as construction materials, dirt, sand, fertilizer, or landscaping materials;

c. Exterior mixing of cementitious products (i.e. concrete, mortar, or stucco).

2. All construction sites shall be included in the Permittees' inventory regardless of whether the site is subject to the Statewide Construction General Permit (NPDES No. CAS000002) or an individual NPDES Stormwater Permit.

3. The inventory of construction sites must be updated, at a minimum:

   a. Twice during April 1st through October 31st

   b. Once per month during the November 1st through March 31st.

4. Each Permittee must inspect construction sites in their inventory which have an expected or actual duration of more than two weeks.

   a. Permittees must categorize all construction sites in their inventory as either a high-priority, medium-priority, or low-priority. Construction sites with an expected or actual duration of more than two weeks must be inspected according to the following schedule:

      i. June 1st through September 30th of each year: all construction sites must be inspected at a frequency where sediment and other pollutants are properly controlled, and that unauthorized, non-stormwater discharges are prevented.

      ii. October 1st through May 31st of each year:

         1) High-priority sites must be inspected once every two (2) months in their entirety.

         2) Medium-priority sites must be inspected twice during this period.

         3) Low-priority sites must be inspected once during this period.

      iii. Where a Permittee determines that BMPs or their maintenance are inadequate or out of compliance, the site must be re-inspected weekly until the deficiency is corrected except if the deficiency is corrected before the first follow-up inspection.

   b. A construction site must be considered high-priority if it meets any of the

following criteria:

i. The site is 20 acres or more of disturbed soil;

ii. The site is over one acre and tributary to a water body listed according to Clean Water Act Section 303(d), as being impaired by nutrients, sediment or turbidity;

iii. The site meets risk level 3 criteria as defined in NPDES Permit No. CAS000002 (Construction General Permit, as amended or revised); or

iv. The site is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS).

c. A construction site must be considered medium-priority if it consists of between 5 and 20 acres and is not otherwise a high-priority site.

d. All other sites may be considered low-priority.

5. Permittees must consider other factors or circumstances that could cause a construction site to fall into a higher priority. These factors include, but are not limited to, soil erosion potential, site slope, proximity to a receiving water, and the sensitivity of the receiving water to potential pollutants from the site.

6. The Executive Officer is authorized to direct a Permittee to designate a site as high-priority based on consideration of factors or circumstances in Provision XIII.B.5.

7. Permittees must inspect construction sites according to a checklist. The checklist must document, at a minimum, that the inspector:

a. Verified that the site has been covered by the Construction General Permit, if applicable, during the initial inspection and if a change in ownership occurs;

b. Verify that the onsite BMPs are appropriate to control erosion and sediments for the phase of construction;

c. Identified, through visual observation, any non-stormwater discharges and potential pollutant sources;

d. Assessed the effectiveness of BMPs implemented at the site;

e. Documents evidence of non-compliance or threatened non-compliance with requirements related to the control of discharges of pollutants to the Permittee's MS4s; and

f. Identifies and communicates to the site representative non-compliance

with requirements related to the control of discharges of pollutants to the Permittee's MS4s.

8. Inspection records must be maintained a minimum of five (5) years from the date of the project's completion.

C. **Industrial Sites**

1. Each Permittee must maintain an inventory of all industrial sites. Industrial sites shall be included in the Permittees' inventory regardless of whether the site is subject to the Statewide Industrial General Permit (NPDES No. CAS000001), Scrap Metal Permit (NPDES Permit No. CAG618001), or other Individual NPDES Stormwater Permits.

2. Each Permittee must inspect industrial sites in their inventory according to the following:

   a. Permittees must categorize all industrial sites in their inventory as either high-priority, medium-priority, or low-priority. Industrial sites must be inspected according to the following schedule:

      i. High-priority sites must be inspected once per year in their entirety.

      ii. Medium-priority sites must be inspected once every two years.

      iii. Low-priority sites must be inspected once every five years.

      iv. An inspection of an industrial site that is covered by the Industrial General Permit, Scrap Metal Permit, or other Individual NPDES Stormwater Permit and performed by Santa Ana Water Board staff may be substituted for any one of the above-required inspections for the same site.

      v. Where a Permittee determines that a site is out of compliance with requirements, the industrial site must be re-inspected monthly until the site is in compliance.

   b. An industrial site must be prioritized as high-priority if the site meets any of the following criteria:

      i. The site is subject to Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA);

      ii. The site requires coverage under the General Industrial Permit, the Scrap Metal Permit, or has coverage under an Individual NPDES Stormwater Permit;

      iii. The site has a history of unauthorized non-stormwater discharges;

iv. The site is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance (ASBS);

v. Facilities that handle or generate pollutants for which the receiving water is impaired; and,

vi. Facilities that have a demonstrated or significant potential to release pre-production plastic or nurdles into the environment.

c. Permittees must consider additional site-specific risk factors that could cause an industrial site to be categorized into a higher priority. These risk factors include, but are not limited to:

i. Quantity of materials or wastes used or stored outside;

ii. The potential for pollutants to be mobilized by stormwater;

iii. Facility size;

iv. Proximity to a receiving water;

v. The presence of an infiltration LID BMP that accepts stormwater associated with industrial activity; or

vi. Any other relevant factors.

d. The Executive Officer is authorized to direct a Permittee to designate a site as high-priority based on consideration of factors or circumstances in Provision XIII.C.2.c.

e. Any Permittee may propose an alternative priority category distribution of their industrial sites and implement the related inspection schedule within their jurisdiction subject to the written approval of the Executive Officer.

i. The approved alternative distribution and schedule must be implemented in lieu of the distribution and inspection schedule prescribed in this Section subject to any conditions of approval established by the Executive Officer.

ii. The Executive Officer may rescind that approval for cause with written notification to the Permittee(s).

f. Permittees must conduct inspections of industrial sites according to a checklist. The checklist must document, at a minimum, that:

i. During the initial inspection, the inspector verified that the site has been covered by the Industrial General Permit, the Scrap Metal Permit, or other Individual NPDES Stormwater Permits, if

applicable;

ii. The inspector identified, through visual observation, any non-stormwater discharges and potential pollutant sources;

iii. The inspector assessed the effectiveness of BMPs implemented at the site;

iv. The inspector documents evidence of non-compliance or threatened non-compliance with requirements related to the control of discharges of pollutants to the Permittee's MS4s; and

v. The inspector identifies and communicates to the site representative non-compliance with requirements related to the control of discharges of pollutants to the Permittee's MS4s.

g. Inspection records for a facility operator must be maintained for a minimum five (5) years following termination of business at the site.

D. **Commercial Sites**

1. Each Permittee must maintain an inventory of commercial sites listed in Subsection XIII.D.1.c. below within its jurisdiction.

a. The inventory of commercial sites must be updated through multiple mechanisms. The inventory must be updated yearly through reconciliation with other database inventories of businesses in each Permittee's jurisdiction. From all other sources, the inventory must be updated within 15 business days of the Permittee first becoming aware of the presence of a new site.

b. Each Permittees' inventory of commercial sites must be maintained in an electronic-format database. The database records must include information on the following attributes:

i. Site/business ownership;

ii. Site area;

iii. Any related approved Water Quality Management Plans and associated structural treatment control BMPs; and

iv. Location (latitude/longitude in decimal-degrees or NAD83/WGS84 format).

c. Commercial sites include, but are not limited to those engaged in the following:

i. Aircraft maintenance, fueling, or cleaning;

ii. Animal care facilities such as petting zoos and boarding and training facilities;

iii. Automobile and other motor vehicle body repair or painting;

iv. Automobile impound and storage facilities;

v. Automobile mechanical repair, maintenance, fueling, or cleaning;

vi. Botanical or zoological gardens;

vii. Building material retail and storage facilities;

viii. Cemeteries;

ix. Eating or drinking establishments, including food markets and restaurants;

x. Golf courses, parks, and other recreational areas or facilities;

xi. Landscape and hardscape installation;

xii. Machinery and equipment repair, maintenance, fueling, or cleaning;

xiii. Marina operations;

xiv. Nurseries and greenhouses;

xv. Painting and coating;

xvi. Pest control service facilities;

xvii. Pool, lake and fountain cleaning;

xviii. Portable sanitary service facilities;

xix. Transportation services for passengers, parcels or freight;

xx. Watercraft maintenance, fueling, or cleaning;

xxi. Any commercial sites that is tributary to, and within 500-feet of, an area defined by the Ocean Plan as an Area of Special Biological Significance; and

xxii. Other commercial sites that the Co-permittee determines may be a significant contributor of pollutants to the MS4.

2. Each Permittee must inspect commercial sites in their inventory. Inspections must occur according to written processes and procedures, and in a manner to enforce compliance with ordinance(s), plans, permits, WQMPs, or other requirements related to the control of discharges of pollutants to their MS4s.

   a. Permittees must prioritize all commercial sites (except for eating or drinking establishments, see Subsection XIII.D.3. below) in their inventory as either “high-priority”, “medium-priority” or “low-priority”.

   Prioritized commercial sites must be inspected according to the following schedule:

   High-priority sites must be inspected once per year in their entirety.

   i. Medium-priority sites must be inspected once every two years.

   ii. Low-priority sites must be inspected once every five (5) years.

   b. Any Permittee may propose an alternative priority category distribution of their commercial sites and implement the related inspection schedule within their jurisdiction subject to the written approval of the Executive Officer.

   i. The approved alternative distribution and schedule must be implemented in lieu of the distribution and inspection schedule prescribed in this Section subject to any conditions of approval established by the Executive Officer.

   ii. The Executive Officer may rescind that approval for cause with written notification to the Permittee(s).

   c. Where a Permittee determines that BMPs or their maintenance is inadequate or out of compliance, the commercial site must be re-inspected within two weeks until BMPs and their maintenance is adequate or in compliance.

   d. If Santa Ana Water Board staff inspects a commercial site, the Permittee may substitute Santa Ana Water Board staff’s inspection for an inspection required under this Order for the same site.

   e. Permittees must exercise their discretion and consider site-specific factors that could cause a commercial site to be categorized into a higher priority. These factors include, but are not limited to, soil erosion potential, site slope, proximity to a receiving water, and the sensitivity of the receiving water to potential pollutants from the site.

f. Permittees must conduct inspections of commercial sites according to a checklist. The Permittees must use the checklist to document, at a minimum, that:

i. The inspector identified, through visual observation, any non-storm water discharges, evidence of non-storm water discharges, and potential pollutant sources;

ii. The inspector assessed the effectiveness of BMPs implemented at the site;

iii. The inspector documented evidence of non-compliance or threatened non-compliance;

iv. If the inspector identifies non-compliance or a threat of non-compliance with relevant requirements, or determines that BMPs are ineffective; the inspector notified the site operator and provided the applicable BMP Fact Sheet(s) and any other relevant published educational materials.

g. Permittees must conduct inspections of commercial sites according to a checklist. The Permittees must use the checklist to document, at a minimum, that:

i. The inspector identified, through visual observation, any non-storm water discharges, evidence of non-storm water discharges, and potential pollutant sources;

ii. The inspector assessed the effectiveness of BMPs implemented at the site;

iii. The inspector documented evidence of non-compliance or threatened non-compliance;

iv. If the inspector identifies non-compliance or a threat of non-compliance with relevant requirements, or determines that BMPs are ineffective; the inspector notified the site operator and provided the applicable BMP Fact Sheet(s) and any other relevant published educational materials.

h. Commercial site inspections must be recorded in an electronic-format database in a manner that is adequate to determine compliance with the requirements of this Order. Inspection records for a site operator must be maintained for a minimum of five (5) years while in business and three (3) years following the termination of business at the site.

i. Permittees must address non-compliance with a series of effective, progressive actions to ultimately compel compliance.

j. Commercial site inspectors must be trained according to Section XI of this Order; inspectors must undergo training once per year.

k. The Executive Officer must be notified of any known, suspected, or threatened violation of applicable waste discharge requirements (i.e. Statewide Construction General Permit, etc.), discovered during inspections of commercial sites.

l. Permittees must investigate complaints regarding potential or alleged discharges of pollutants from commercial sites, received by internal departments or divisions, external agencies, or the public, within three (3) business days of the complaint being brought to their attention.

3. The Permittees must inspect eating or drinking establishments annually or cause such inspections to occur on their behalf by another party such as consultants. These third-party inspections are anticipated to occur, for example as part of the Orange County Health Care Agency (OCHCA) restaurant inspection program.

   a. The inspections must occur, in part, to enforce the local Permittee's requirements related to the control of discharges of pollutants to their MS4s.

   b. Where the inspecting agency staff observes known or suspected violations of a local Permittee's requirements related to the control of discharges of pollutants to their MS4s, the known or suspected violation must be referred to the Co-permittee within two (2) business days of the inspection date.

   c. Permittees must respond to referrals from a health care agency (HCA) or other third-party within three (3) business days of the matter being brought to their attention.

   d. Mobile Businesses: The Permittees must implement an enforcement and outreach program for mobile businesses operating in the permit area such as automobile wash/detail services, carpet cleaners, and pet services. The purpose of the program must be to identify potential dischargers and eliminate illicit non-storm water discharges into the MS4.

XIV. MUNICIPAL FACILITIES/ACTIVITIES

Each Permittee must implement an effective program for their operation and maintenance activities for fixed facilities, their field operations, and drainage facilities for the purpose of ensuring that such activities do not adversely impact water quality.

A. Encroachment Permits

Each Permittee must ensure that applicants for encroachment permits for permanent connection to its MS4 facilities are notified in writing of their obligations to comply with Stormwater Ordinances, WQMP, and General Stormwater Permit requirements.

B. **Fixed Facilities**

Each Permittee must maintain an inventory of fixed facilities, that are owned or controlled by the Permittee, that have the potential to discharge pollutants in urban runoff.

1. The inventory must include the following at a minimum:

    a. Catch basins, storm drain inlets/outlets, and open channels;

    b. Municipal landfills;

    c. Waste incinerators;

    d. Solid waste transfer facilities;

    e. Land application sites;

    f. Sewage collection and treatment facilities;

    g. Potable water distribution facilities;

    h. Hazardous waste treatment, disposal, and recovery facilities;

    i. Corporation, maintenance, and storage yards;

    j. Airfields;

    k. Parks, golf courses, and recreation areas;

    l. Cemeteries;

    m. Public buildings (police and fire stations and training facilities, libraries, etc.)

    n. Stadiums and other special event venues;

    o. Equestrian facilities;

    p. Animal shelters and kennels;

    q. Boat yards and marinas;

    r. Public parking facilities; and

s. Areas or facilities that discharge directly to lagoons, the ocean, or Environmentally Sensitive Areas.

2. Each Permittee must annually report their inventory of fixed facilities and each priority category in the Annual Progress Report in a searchable electronic format consistent with a directive provided by the Executive Officer.

3. The Principal Permittee may propose a schedule for visual inspection and mechanical or physical cleaning of open channels, catch basins, storm drain inlets, and stormwater basins (collectively referred to as systems in this Section) under the Permittees' control.

   a. The proposed schedule must be justified by observed field information.

   b. The proposed schedule is subject to the approval of the Executive Officer.

   c. If approved, the schedule will serve as an alternative to the schedule prescribed by Provision XIV.B.4. below.

4. Each Permittee shall at a minimum inspect and mechanically or physically clean at least 80% of its open channels, catch basins, storm drain inlets, and stormwater basins on an annual basis, with 100% of the facilities addressed in a two-year period. The MS4 clean out schedule and accomplishments shall be included in the Annual Progress Report.

   a. Solid waste must be physically removed from the systems in a timely manner when found and consistent with Section X., above.

   b. Where other agencies' authorization is required to remove solid waste from the systems (i.e. CWA Section 404 permit), the Permittee must make a good faith effort to secure the necessary authorizations and remove the accumulated solid waste in a timely manner.

5. Except for the systems described in XIV.3. above, each Permittee must categorize fixed facilities that they own or control into high-priority, medium-priority, and low-priority sites.

6. The Permittee must inspect each fixed facility according to the following schedule:

   a. High-priority sites must be inspected once per year.

   b. Medium-priority sites must be inspected once every two years.

   c. Low-priority sites must be inspected once every five years.

7. The following fixed facilities must be categorized as high-priority sites:

a. Municipal landfills;

b. Publicly owned treatment works;

c. Waste incinerators;

d. Solid waste transfer facilities;

e. Land application sites;

f. Corporation, maintenance, and storage yards;

g. Hazardous waste treatment, disposal, and recovery facilities;

h. Land-side areas of airfields;

i. Facilities that are located adjacent or within an Environmentally Sensitive Area or that discharge directly to an Environmentally Sensitive Area.

8. Permittees must categorize all other fixed facilities according to a uniform objective ranking system developed by the Principal Permittee. The ranking system must be based on the following factors:

   a. The degree to which potentially polluting activities occur in areas exposed to stormwater.

   b. The quantity of potentially polluting materials used or stored at the facility.

   c. Whether or not the activities at a site could produce pollutants that cause or contribute to the impairment of a water body listed according to CWA Section 303(d).

   d. The risk of a release of a pollutant.

   e. The occurrence of known or suspected non-stormwater discharges.

   f. The size of a facility, the number of employees assigned to the facility, and the number of visitors.

9. Permittees must carry out inspections of fixed facilities to: identify and correct observed violations of the municipal ordinance or other requirements related to the control of pollutants to the MS4; identify and correct unnecessary deviations from standard operating procedures (see Section XIV.B.10., below); internally enforce relevant discharge requirements; and identify and eliminate known or suspected unauthorized non-stormwater discharges.

10. Permittees must implement an effective program to prevent the discharge of pollutants from Permittees' field activities and fixed facilities.

a. The program must include the written BMPs to prevent or minimize the discharge of pollutants to be implemented by person(s) performing field activities on behalf of Permittees.

b. The program must include written standard operating procedures for Permittees' staff who engage in field activities and activities at fixed facilities that have the potential to discharge pollutants in urban runoff.

i. The standard operating procedures must incorporate BMPs to prevent or minimize such discharges of pollutants.

ii. The standard operating procedures must be written in plain, straightforward language, avoiding technical terms as much as possible, and using a coherent and easily readable style.

iii. The standard operating procedures must be subject to an annual review to verify their relevance and effectiveness. Each standard operating procedure must display the date of the last review, the identity of the reviewing personnel, and the due date for the next review.

11. The program must include a training program to provide Permittees' staff with an awareness of the responsibilities described in standard operating procedures relevant to their duties (See Section XI, above).

12. The program must include an inspection program for field activities to: identify and correct observed violations of the municipal code or ordinance related to protecting water quality; identify and correct unnecessary deviations from standard operating procedures; internally enforce compliance with relevant waste discharge requirements; and identify and eliminate or minimize known or suspected non-stormwater discharges.

13. Each Permittee shall comply with pesticide regulations pertaining to the use, application, and disposal of Pesticides in California Code of Regulations (CCR), Chapter 4, Subchapters 3, 4, and 5 and shall implement an Integrated Pesticide Management (IPM) program.

14. Each Permittee must implement an effective program: to reduce the use of unwarranted or excessive applications of pesticide and fertilizer at facilities that they own or control; to ensure that pests are controlled using the best available methods while protecting water quality; and to ensure that pesticides are used according to with Federal, State, and local laws and regulations.

a. The term "pesticide" includes herbicides, rodenticides, insecticides, etc., consistent with the common meaning of the term.

b. Each Permittee must develop and implement an IPM in strict conformance with the guidelines in "A Guide to Pesticide Regulation in California (2017)" by the Department of Pesticide Regulation for Pesticides and Fertilizers.

c. Ensure that no banned or unregistered pesticides are stored or applied.

d. Ensure that all staff applying pesticides are certified in the appropriate category by the California Department of Pesticide Regulation or are under the direct supervision of a pesticide applicator certified in the appropriate category.

e. Each Permittee must conduct annual integrated pest management audits for chemicals known or suspected of impairing water quality. The audit must enforce the use Integrated Pest Management BMPs to reduce their potential entry into MS4s.

f. Each Permittee must conduct annual fertilizer use audits to verify that application rates do not exceed those recommended by University of California Integrated Pest Management Research, or similarly qualified organizations, and to enforce fertilizer application methods that eliminate or minimize fertilizer entry into MS4s.

XV. PROGRAM EFFECTIVENESS ASSESSMENT

Each Permittee must have a program in place to objectively assess the effectiveness of best management practices or groups of best management practices employed in each of the elements of their stormwater program and any approved Watershed Management Plan as defined in Section XII. The assessment program must be documented in writing.

A. The Principal Permittees must develop model effectiveness assessment programs. Each Permittees must perform assessments in substantial conformance with the method unless the method conflicts with the requirements of this Order. In the event of any conflict, the requirements of this Order prevail.

B. Methods used to monitor, measure, and analyze program activities must be carried out in a manner that is representative of the monitored activity.

C. Each Permittees' assessment program must be comprised of the following elements:

1. Conceptual generalized model(s) representing a hypothesis of the process of how each pollutant, or functionally similar group of pollutants, are released to the environment and transported to the receiving water(s).

2. A description of each of the best management practices (BMPs), where and at what level of effort they are intended to be applied in the pollution process,

and how they will reduce or prevent pollutants from being transported to the receiving water(s).

3. A system to objectively measure the performance of each BMP or group of BMPs. The system must include valid performance metrics (or measures), the method(s) to measure and analyze the metrics, and a method to track and document outcomes.

4. An evaluation and assessment of the effectiveness of the program. The evaluation and assessment must evaluate the following:

   a. How effective the BMPs are in achieving the desired outcomes;

   b. If the performance metrics are valid;

   c. If the method(s) for measuring outcomes are effective; and,

   d. Any changes found necessary to improve the effectiveness of the BMPs or the overall process.

5. A description of any barriers to implementing changes to improve the effectiveness of BMPs.

D. Each Permittee must perform assessments of the effectiveness of their program annually or according to a schedule approved by the Executive Officer. The results must be included in the Annual Progress Report (see Monitoring and Reporting Program No. R8-2022-0008). Reported outcomes must be expressly compared to:

1. The objective requirements of this Order (prescribed performance standards or measures) where they are provided;

2. The performance standards or measures developed by the Permittees; and

3. Performance standards and measures established in a Watershed Management Plan which has been approved by the Executive Officer.

E. Where a Watershed Management Plan has been approved, the responsible Permittees' report must include:

1. The status of completion of proposed structural treatment control BMPs.

2. The status of implementation of non-structural BMPs.

3. Information related to the validity of the reasonable assurance analysis performed in support of the Watershed Management Plan and any underlying assumptions and risks.

4. The results of any monitoring undertaken to evaluate the impact of

implementation of the Watershed Management Plan on receiving water quality.

F. Each Permittee must have an effective mechanism that solicits input from stakeholders in the development and implementation of the program effectiveness assessments.

XVI. MONITORING AND REPORTING PROGRAM

The Permittees must comply with Monitoring and Reporting Program (MRP) No. R8-2022-0008, Attachment C, and any revisions thereto, which are hereby made a part of this Order. Additionally, the Permittees must comply with specific TMDL monitoring and reporting requirements in Appendices 2 through 12, as applicable.

A. The Annual Progress Report is due by November 15th of each year.

B. The requirements of the MRP are subject to revision under the direction of the Executive Officer.

1. Any proposed revisions to the MRP must be submitted in writing to the Executive Officer for approval.

2. The Principal Permittee must provide public notice of any proposed revisions. The public notice must include direct notice given to potential and known interested stakeholders.

3. The Executive Officer will provide a minimum of 30-days to interested parties to comment before approving any revisions.

4. The Permittees must make available to the public the results of field and laboratory analyses performed on all samples collected pursuant to the MRP.

C. Dates for completion and implementation of certain program elements and reporting requirements are outlined in Attachment C.

XVII. STANDARD PROVISIONS

A. All reports that are submitted by the Permittees according to the requirements of this Order and which are subject to the approval of the Executive Officer will be publicly noticed and made available at the Santa Ana Water Board's web site or through other means. Noticed reports will be subject to public review and comment. The Executive Officer will consider all comments received prior to approval of the reports. Any unresolved, significant issues will be scheduled for a public hearing at a Santa Ana Water Board meeting prior to approval by the Executive Officer.

B. The NPDES program requirements contained in 40 CFR 122.21(a), (b), (d)(2), (f), (p), (h), (i), (j), (k), and (l); and 40 CFR 122.42(c) are incorporated into this order by reference.

C. The Permittees must report to the Executive Officer of the Santa Ana Water Board any known discharges of stormwater or non-stormwater which may have an impact on human health or the environment.

D. The Permittees must report to the Executive Officer any suspected or known activities on federal, state, or other entity's land or facilities where the Permittees do not have jurisdiction, where the activities may be contributing pollutants to waters of the U.S.

E. **Duty to Comply**

1. The Permittee(s) must comply with all conditions and provisions of this Order. Any noncompliance with the requirements of this Order constitutes a violation of the CWA and the CWC. Noncompliance is grounds for enforcement action and/or removal from Permit coverage.

2. Any failure to take appropriate corrective action(s) as specified in this Order or as directed by the Executive Officer is also a violation of this Order.

3. The Permittee(s) must comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants. Compliance must be achieved within the time provided in the regulations that establish these standards or prohibitions, even if this Permit has not yet been modified to incorporate the requirement.

4. Unless a Permittee chooses to participate in a WMP, the Santa Ana Water Board may enforce any provision of this Order while the Permittee(s) prepare and implement plans to achieve water quality standards.

F. **Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

G. **Duty to Mitigate**

The Permittee(s) must take all responsible steps to minimize or prevent any discharge which has a reasonable likelihood of adversely affecting human health or the environment.

H. **Proper Operation and Maintenance**

The Permittee(s) must at all times properly operate and maintain all facilities and systems of treatment and control (and related equipment and apparatuses) which are installed or used by the Permittee or function to achieve compliance with the conditions of this Permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. Proper operation and maintenance may require the operation of back-up or auxiliary facilities or similar systems installed by a Permittee when necessary to achieve compliance with the conditions of this Permit.

I. **Property Rights**

This Permit does not convey any property rights of any sort, or any exclusive privilege. The issuance of this Permit does not authorize any injury to persons or property or invasion of other personal rights, or any infringement of Federal, State, or local laws or regulations in accordance with 40 CFR 122.5(c).

J. **Duty to Provide Information**

The Permittee(s) must provide, within a reasonable time established by an Executive Officer of the Santa Ana Water Board or State Water Board or Director of the USEPA, any requested information to determine compliance with this Permit. The Permittees must also furnish, upon request, copies of records required to be kept by this Permit.

K. **Inspection and Entry**

1. The Permittee(s) must allow Santa Ana Water Board staff, State Water Board staff, USEPA staff, and/or an authorized representative of the municipal operator of the MS4 receiving the discharge, upon presentation of credentials and other documents as may be required by law, to:

    a. Enter upon the Permittees premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this Permit;

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Permit;

    c. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Permit; and,

    d. Sample or monitor at reasonable times, for the purpose of assuring Permit compliance or as otherwise authorized by the CWA or the CWC, any substances or parameters at any location.

L. **Monitoring and Records**

1. Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

2. Records of monitoring information must include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individual(s) who performed the sampling or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

   e. The analytical techniques or methods used; and

   f. The results of such analysis.

3. The Permittees must maintain a paper or electronic copy of all stormwater monitoring information, copies of all reports (including the Annual Progress Reports), SWPPPs, and all other required records, including a copy of this Permit, for a period of at least five (5) years from the date generated or date submitted, whichever is later.

M. **Electronic Signature and Certification Requirements**

All Annual Progress Reports or other information required by this Permit or requested by the Santa Ana Water Board, State Water Board, USEPA, or local stormwater management agency must be signed and certified by each Permittees' Legally Responsible Person (LRP) or the Duly Authorized Representative (DAR).

N. **Certification**

Any person signing documents under Section XVI.M. above, must make the following certification:

"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 or persons who manage the system or those persons directly responsible for information submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

O. **Anticipated Noncompliance**

The Permittee(s) must give notice to the Santa Ana Water Board and local stormwater management agency of any planned changes in any municipal activity which may result in noncompliance with this Permit's requirements.

P. **Penalties for Falsification of Reports**

Section 309(4) of the CWA provides that any person who knowingly makes a false material statement, representation, or certification in any record or other document submitted or required to be maintained under this Permit, including reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than $10,000 or by imprisonment for not more than two years, or by both.

Q. **Oil and Hazardous Substance Liability**

Nothing in this Permit shall be construed to preclude the institution of any legal action or relieve the Permittee(s) from any responsibilities, liabilities, or penalties to which the Permittee(s) is or may be subject to Section 311 of the CWA.

R. **Severability**

The provisions of this Permit are severable; and, if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

S. **Penalties for Violations of Permit Conditions**

Section 309 of the CWA provided significant penalties for any person who violated a permit condition that implements Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under section 401. Any person who violated any permit condition of this Permit is subject to civil penalty not to exceed $37,500 per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties, which in some cases are greater than those under the CWA.

T. **Transfers (not applicable)**

U. **Continuation of Expired Permit**

1. This Permit continues in full force and effect until a new Permit is issued or the Santa Ana Water Board rescinds this Permit.

2. Only those Permittees authorized to discharge under the expiring Permit are covered by the continued Permit.

V. **Other Federal Requirements**

All other requirements of 40 CFR 122.41 and 40 CFR 122.42 are incorporated into this Permit by reference.

XVIII. REOPENER AND PERMIT MODIFICATION

The following describes the conditions in which the Permit may be reopened, modified, or revoked.

A. This Order may be modified, revoked, reissued prior to its expiration date for cause, in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 122.64, 124.5, 125.62, and 125.64. Cause for taking such action includes, but is not limited to:

1. Address significant changes in conditions identified in the technical reports required by the Water Board which were unknown at the time of the issuance of this Order;

2. Address changed conditions identified or other sources deemed significant by the Santa Ana Water Board

3. Incorporate applicable requirements of state-wide water quality control plans adopted by the State Water Board or any amendments to the Basin Plan approved by the Santa Ana Water Board, the State Water Board, and, if necessary, by the OAL;

4. Incorporate changes needed for consistency with standard provisions and precedential Orders adopted by the State Water Board.

5. Comply with any applicable requirements, guidelines, or regulations issued or approved under the Clean Water Act, if the requirements, guidelines, or regulations contain different conditions or additional requirements than those included in this Order.

6. Incorporate any requirements imposed upon the Permittees through the TMDL process.

7. Endangerment to human health or the environment resulting from the permitted activity, including information that the discharge(s) regulated by this Order may have the potential to cause or contribute to adverse impacts on water quality and/or beneficial uses.

8. Incorporate effluent limitations for toxic constituents determined to be present in significant amount in the discharge through a more comprehensive monitoring program included as part of this Order.

9. Upon the consent of the Permittee(s), this Order may be modified to make

corrections or allowances for changes in the permitted activity, following the procedures at 40 CFR section 122.63, if processed as a minor modification. Minor modifications include but is not limited to:

a. Correct typographical errors;

b. Require more frequent monitoring or reporting by a Permittee; or

c. Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement.

10. If any toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under section 307(a) of the CWA for a toxic pollutant which is present in a Permittee's discharge, and that standard or prohibition is more stringent than any limitation on the pollutant in this Permit, this Permit shall be modified or revoked and reissued to conform to the toxic effluent standard or prohibition and the Permittees so notified.

B. The filing of a request by the Permittees for modification, revocation, and reissuance or termination or a notification of planned changes or anticipated noncompliance does not stay any conditions of this Order.

XIX. PERMIT EXPIRATION AND RENEWAL

A. This Order will expire on MONTH DAY, 20XX. The Permittees, individually or jointly, must file a report of waste discharge (permit application) no later than 180 days in advance of the expiration of this Order after which this Order may be administratively extended (40 CFR § 122.6). The submittal of a report of waste discharge will constitute an application for issuance of new waste discharge requirements (40 CFR § 122.41(b)).

B. Except for enforcement purposes, Order Nos. R8-2009-0030, R8-2010-0033, and R8-2010-0036 are hereby withdrawn upon the effective date of this Order.

C. This Order shall serve as a National Pollutant Discharge Elimination System (NPDES) Permit pursuant to section 402(p) of the Clean Water Act, or amendments thereto. This Order shall become effective ninety (90) days after the date of its adoption, provided that the Regional Administrator of the USEPA has no objections. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.

Appendix 1

Appendix 1

APPLICABLE TMDL REQUIREMENTS FOR PERMITTEES

Table 1.1: TMDLs Applicable to Orange County Permittees

	San Diego Creek and Newport Bay Watershed TMDLs							
Permittee	**Newport Bay Nutrient TMDL**	**Fecal Coliform TMDL**	**Organo-chlorine TMDL**	**Diazinon & Chlorpyrifos TMDL**	**Metals TMDL**	**Sediment TMDL**	**Selenium TMDL**	**Coyote Creek Metals TMDL**
County of Orange	X	X	X	X	X	X	X	X
Orange County Flood Control District	X	X	X	X	X	X	X	X
City of Anaheim								X
City of Brea								X
City of Buena Park								X
City of Costa Mesa	X	X	X	X	X	X	X	
City of Cypress								X
City of Fountain Valley								
City of Fullerton								X
City of Garden Grove								X
City of Huntington Beach								
City of Irvine	X	X	X	X	X	X	X	
City of La Habra								X
City of La Palma								X
City of Lake Forest	X	X	X	X	X	X	X	
City of Los Alamitos								X
City of Newport Beach	X	X	X	X	X	X	X	
City of Orange	X	X	X	X	X		X	
City of Placentia								X
City of Santa Ana	X	X	X	X	X	X	X	
City of Seal Beach								X
City of Stanton								
City of Tustin	X	X	X	X	X	X	X	X
City of Villa Park								
City of Westminster								
City of Yorba Linda								X

Table 1.2: TMDLs Applicable to Riverside County Permittees

	Middle Santa Ana River Bacterial TMDL	LE/CL Nutrient TMDLs
Riverside, County	X	X
RCFC&WCD	X	X
City of Beaumont		X
City of Calimesa		
City of Canyon Lake		X
City of Corona	X	
City of Claremont*	X	
City of Eastvale	X	
City of Hemet		X
City of Jurupa Valley	X	
City of Lake Elsinore		X
City of Menifee		X
City of Moreno Valley		X
City of Norco	X	X
City of Perris		X
City of Pomona*	X	
City of Riverside	X	X
City of San Jacinto		X

* Covered under a separate NPDES Permit.

Table 1.3: TMDLs Applicable to San Bernardino County Permittees

Permittee	Nutrient TMDL	Nutrient TMDL for Dry Hydrological conditions for Big Bear Lake	Middle Santa Ana River Bacterial TMDL
County of San Bernardino	X	X	X
San Bernardino Flood Control District	X		X
City of Big Bear Lake	X	X	
City of Chino Hills	X		
City of Chino	X		
City of Colton			X
City of Fontana			
City of Grand Terrace			X
City of Highland			X
City of Montclair			X
City of Ontario	X		
City of Rancho Cucamonga	X		
City of Redlands			X
City of Rialto			X
City of San Bernardino			
City of Upland			

Appendix 2

Appendix 2

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR NUTRIENTS IN THE NEWPORT BAY/SAN DIEGO CREEK WATERSHED

The following water quality-based effluent limitations (WQBELs) apply to discharges of urban runoff from MS4s owned or controlled by those Permittees discharging into Newport Bay as indicated in Appendix 1. The WQBELs in this Appendix are based on the waste load allocations (WLAs) in the Nutrient TMDLs for the Newport Bay/San Diego Creek. The compliance date of December 31, 2012 has passed.

Permittees must carry out an effective portfolio of projects and programs for the control of nutrients in stormwater and authorized non-stormwater runoff from their MS4s. Compliance with the WQBELs in this Appendix will be determined according to methods described in Section VII of Order No. R8-2022-0008. The following WQBELs apply to discharges of nutrients to Newport Bay/San Diego Creek:

I. Nitrogen, Total

A. Discharges of urban runoff into Reach 2 of San Diego Creek must not transport more than 5.5 pounds of total nitrogen per day to Newport Bay, subject to the following conditions:

1. This only applies to flows less than 25 cubic feet per second (cfs) and those flows above 25 cfs that are not the result of precipitation.

2. Flow must be measured in San Diego Creek at Culver Drive.

B. Discharges of urban runoff into San Diego Creek at Campus Drive must not transport more than 55,442 pounds of total nitrogen into Newport Bay each year.

This wet season limit applies to discharges between Oct 1 and March 31.

1. This wet season limit applies to discharges where the mean daily flow rate in San Diego Creek is less than 50 cfs and to mean daily flow rates in excess of 50 cfs that are not the result of precipitation.

C. Discharges of urban runoff into San Diego Creek at Campus Drive must not transport more than 16,628 pounds of total nitrogen into Newport Bay from April 1 to September 31 each year.

II. Phosphorus, Total

A. Discharges of urban runoff must not transport more than 2,960 pounds of total phosphorous per year into Newport Bay.

Appendix 3

Appendix 3

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR FECAL COLIFORM IN NEWPORT BAY

The water quality-based effluent limitations (WQBELs) apply to discharges of fecal coliform in urban runoff from MS4s owned or controlled by those Permittees discharging into Newport Bay as indicated in Appendix 1. The WQBELs in this Appendix are based on the waste load allocations in the Fecal Coliform TMDLs for Newport Bay. The compliance deadline of December 30, 30, 2014 for REC1 has passed. However, the compliance deadline of December 31, 2022 for SHEL has not passed.

Permittees must carry out an effective portfolio of projects and programs for the control of fecal coliform in stormwater and in authorized non-stormwater runoff from their MS4s. The projects and programs must be designed to achieve compliance with the following WQBELs:

I. Fecal Coliform

A. The geometric mean concentration of fecal coliform in urban runoff discharged to Newport Bay must not exceed 200 organisms/100 milliliters (mL).

B. The geometric mean concentration of fecal coliform in urban runoff discharged to Newport Bay must be calculated based on a minimum of 5 representative samples of urban runoff taken over a 30-day period.

C. Of the representative samples taken of urban runoff, not more than 10% can exceed 400 organisms/100mL for any 30-day period.

D. As soon as possible, but no later than December 31, 2022:

1. The monthly median of representative samples of fecal coliform in urban runoff flowing into Newport Bay must not exceed 14 most probable number (“MPN”)/100 mL; and

2. Of the representative samples taken of fecal coliform in urban runoff, not more than 10% can exceed 43 MPN/100 mL.

Appendix 4

Appendix 4

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR SEDIMENT IN THE NEWPORT BAY/SAN DIEGO CREEK WATERSHED

The following water quality-based effluent limitations (WQBELs) apply to discharges of sediment in urban runoff from MS4s owned or controlled by those Permittees discharging into Upper Newport Bay as indicated in Appendix 1. The compliance deadline of April 17, 2009 (10 years from the date of sediment TMDL approval by USEPA) for meeting the TMDLs has passed.

Permittees must carry out an effective portfolio of projects and programs for the control of sediment in stormwater and authorized non-stormwater runoff from their MS4s. The responsible Permittees shall comply with the waste load allocations below, or the targets in Section II of this Appendix.

I. Sediment WLAs

A. Discharge of sediment into Newport Bay and San Diego Creek and its tributaries must not exceed 62,500 tons of sediment per year, calculated as a 10-year running average.

B. Discharges from urban sources into Newport Bay and San Diego Creek and its tributaries must not exceed 2,500 tons of sediment per year, calculated as a 10-year running average.

II. Alternate Sediment Targets

Alternatively, Permittees may achieve all the following targets in lieu of Section I above:

A. The depths of Units I/III and II Sediment Basins must be maintained at a minimum of 7 feet below mean sea level.

B. Bathymetric and vegetation surveys must be performed by the responsible Permittees and reported no less than once every three years, or as agreed to by the Executive Officer, in a manner to determine compliance with the above requirements for sediment. Bathymetric and vegetation surveys must be conducted by the responsible Permittees by July 1st of the year that they are performed and must be submitted to the Executive Officer by December 31 of the same year. The next survey report is due by December 31, 2021.

C. Bathymetric and vegetation surveys must be performed by the responsible Permittees within one year following any monitoring period in which monitoring at San Diego Creek at Jamboree Boulevard and Campus Drive (Site ID:

SDMF05) shows that more than 62,500 tons of sediment were discharged into Newport Bay during the monitoring period. The survey report must be submitted by December 31 of the same year.

D. All in-channel and foothill sediment-control basins tributary to Newport Bay must have an available sediment capacity of 50% or more of the basin's designed capacity prior to November 15th of each year.

E. Sediment in discharges from the responsible Permittees' MS4s must not alter the distribution of habitat types in the 700-acre Upper Newport Bay Ecological Reserve, in Table below or as revised by the California Department of Fish and Wildlife, by more than 1%.

Table 4.1: Baseline Distribution of Habitat Types in the Upper Newport Bay Ecological Reserve

Habitat Type	Acres	Permissible Change (acres)
Marine aquatic	210	2.1
Mudflat	214	2.1
Salt marsh	277	2.8
Riparian	31	0.31

Appendix 5

Appendix 5

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR ORGANOCHLORINE COMPOUNDS IN SAN DIEGO CREEK, UPPER AND LOWER NEWPORT BAY

The following water quality-based effluent limitations (WQBELs) apply to discharges of urban runoff from MS4s owned or controlled by those Permittees discharging into Newport Bay and San Diego Creek as indicated in Appendix 1. The WQBELs in this Appendix are based on the waste load allocations (WLAs) in the Organochlorine Compounds TMDL for San Diego Creek, Upper and Lower Newport Bay, and Rhine Channel.

Permittees must carry out an effective portfolio of projects and programs for the control of pollutants in stormwater and authorized non-stormwater runoff from their MS4s. The deadline of December 31, 2020 for the WQBELs have passed.

The responsible Permittees must comply with the methods described in Section VII of Order No. R8-2022-0008 to demonstrate compliance with the following waste load allocations (summarized in Table 5.1).

I. Chlordane

A. Discharges of urban runoff must not transport more than 30.1 grams per year (g/year) of chlordane into Upper Newport Bay.

B. Discharges of urban runoff must not transport more than 11 g/year of chlordane into Lower Newport Bay.

C. Discharges of urban runoff must not transport more than 0.1 gram of chlordane into the Rhine Channel per year.

II. DDT, Total

A. Discharges of urban runoff must not transport more than 51.8 g/year of total DDT into Upper Newport Bay.

B. Discharges of urban runoff must not transport more than 19.1 g/year of total DDT into Lower Newport Bay.

C. Discharges of urban runoff must not transport more than 128.3 g/year of total DDT into the San Diego Creek and its tributaries.

D. Discharges of urban runoff must not transport more than 0.7 gram of total DDT into the Rhine Channel per year.

III. Dieldrin

A. Discharges of urban runoff must not transport more than 0.13 gram of Dieldrin into the Rhine Channel per year.

IV. PCBs, Total

A. Discharges of urban runoff must not transport more than 29.8 g/year of total PCBs into Upper Newport Bay.

B. Discharges of urban runoff must not transport more than 78.1 g/year of total PCBs into Lower Newport Bay.

C. Discharges of urban runoff must not transport more than 4.1 grams of total PCB into the Rhine Channel per year.

V. Toxaphene

A. Discharges of urban runoff must not transport more than 1.9 g/year of Toxaphene into the San Diego Creek and its tributaries.

Table 5.1: Summary of WQBELs by Receiving Water for Organochlorine Compounds (grams per year).

Receiving Water	Total DDT (g/year)	Chlordane (g/year)	Total PCBs (g/year)	Dieldrin (g/year)	Toxaphene (g/year)
San Diego Creek and Tributaries	128.3	--	--	--	1.9
Upper Newport Bay	51.8	30.1	29.8	--	--
Lower Newport Bay	19.1	11.0	78.1	--	--
Rhine Channel	0.7	0.1	4.1	0.13	--

Appendix 6

Appendix 6

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR THE DIAZINON & CHLORPYRIFOS TMDL FOR SAN DIEGO CREEK AND UPPER NEWPORT BAY

The following water quality-based effluent limitations (WQBELs) apply to discharges of urban runoff from MS4s owned or controlled by those Permittees discharging into Upper Newport Bay and its tributaries, or San Diego Creek as indicated in Appendix 1. The WQBELs in this Appendix are based on the waste load allocations in the Diazinon & Chlorpyrifos TMDLs for San Diego Creek and Upper Newport Bay. The compliance deadline of December 1, 2007 has passed.

As part of the 2014 and 2016 California Integrated Report, Diazinon and Chlorpyrifos were considered by State Water Board for removal from the CWA section 303(d) List under section 4.1 of the State Water Board's Listing Policy. The data and information available indicated that there is sufficient justification for removing the water segment-pollutant combination from the CWA section 303(d) List.

On April 6, 2018, USEPA approved the State Water Board's 2014 and 2016 California Integrated Report. As such, the Upper Newport Bay and San Diego Creek were delisted for diazinon and chlorpyrifos.

I. General

A. For the purpose of this Appendix 6, acute concentration shall mean the average of concentrations measured in samples collected over a 24-hour period.

B. For the purpose of this Appendix 6, chronic concentration shall mean the average of concentrations measured in samples collected over a 96-hour period.

II. Chlorpyrifos

A. Discharges of Chlorpyrifos in urban runoff into Upper Newport Bay and its tributaries shall not exceed the acute concentration of 18 nanograms per liter (ng/L).

B. Discharges of Chlorpyrifos in urban runoff into Upper Newport Bay and its tributaries shall not exceed the chronic concentration of 8.1 ng/L.

C. Discharges of Chlorpyrifos in urban runoff into San Diego Creek shall not exceed the acute concentration of 18 ng/L.

D. Discharges of Chlorpyrifos in urban runoff into San Diego Creek shall not exceed the chronic concentration of 12.6 ng/L.

Table 6.1: Summary of WQBELs (Maximum Concentrations) for Urban Runoff from MS4 Permittees for Discharges of Chlorpyrifos into Upper Newport Bay and its Tributaries, and into San Diego Creek (ng/L).

Receiving Water	Acute Concentration (ng/L)	Chronic Concentration (ng/L)
Upper Newport Bay	18	8.1
San Diego Creek	18	12.6

III. Diazinon

A. Discharges of Diazinon in urban runoff into San Diego Creek shall not exceed the acute concentration of 72 ng/L.

B. Discharges of Diazinon in urban runoff into San Diego Creek shall not exceed the chronic concentration of 45 ng/L.

Table 6.2: Summary of WQBELs (Maximum Concentrations) for Urban Runoff from MS4 Permittees for Diazinon into Upper Newport Bay and its Tributaries, and into San Diego Creek (ng/L).

Receiving Water	Acute Concentration (ng/L)	Chronic Concentration (ng/L)
San Diego Creek	72	45

Appendix 7

Appendix 7

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR TOXIC POLLUTANTS (METALS) IN SAN DIEGO CREEK AND NEWPORT BAY

The following water quality-based effluent limitations (WQBELs) apply to discharges of metals in urban runoff from MS4s owned or controlled by those Permittees discharging into San Diego Creek and Newport Bay as indicated in Appendix 1. The WQBELs in this Appendix are based on the waste load allocations (WLAs) in the TMDL for Toxic Pollutants (Metals) in San Diego Creek and Newport Bay. There are also specific WLAs for Rhine Channel, a small, closed-ended navigation channel located in the western part of Newport Bay. These TMDLs were all effective upon promulgation by USEPA.

I. General

A. As applied in this Appendix 7, acute concentration shall mean the average concentration of dissolved metals measured in representative samples taken in a 24-hour period.

B. As applied in this Appendix 7, chronic concentration shall mean the average concentration of dissolved metals measured in representative samples taken in a 96-hour period.

II. Cadmium, Dissolved

A. Responsible Permittees must prevent discharges of urban runoff from transporting more than 9,589 pounds of dissolved cadmium into Upper Newport Bay per year.

B. Responsible Permittees must implement an effective portfolio of projects and programs that achieve the following:

1. Prevent acute concentrations of dissolved cadmium, discharged in urban runoff to Upper Newport Bay, from exceeding 42 micrograms per liter (µg/L).

2. Prevent chronic concentrations of dissolved cadmium, discharged in urban runoff to Upper Newport Bay, from exceeding 9.3 micrograms per liter (µg/L).

C. Responsible Permittees must implement an effective portfolio of projects and programs that prevent discharges of dissolved cadmium, measured in urban runoff in San Diego Creek at Campus Drive, from exceeding the concentrations shown in Table 7.1 below under the indicated flow conditions.

Table 7.1: Summary of Hardness-based Waste Load Allocations for Dissolved Cadmium in San Diego Creek

Flow	Base <20 cfs	Small 21 to 181 cfs	Medium 182 to 815 cfs	Large >815 cfs
Hardness	400 mg/L	322 mg/L	236 mg/L	197 mg/L
Acute (µg/L)	19.1	15.1	10.8	8.9
Chronic (µg/L)	6.2	5.3	4.2	--

cfs = cubic feet per second

III. Chromium

A. Discharges of stormwater must not transport more than 5.66 kg/year of chromium into Rhine Channel.

IV. Copper, Dissolved

A. Responsible Permittees must prevent discharges of urban runoff from transporting more than 3,043 pounds of dissolved copper into Newport Bay per year.

B. Responsible Permittees must implement an effective portfolio of projects and programs that achieve the following:

1. Prevent acute concentrations of dissolved copper, discharged in urban runoff to Newport Bay, from exceeding 4.8 micrograms per liter (µg/L).

2. Prevent the discharge of chronic concentrations of dissolved copper, discharged in urban runoff to Newport Bay, from exceeding 3.1 µg/L.

C. Responsible Permittees must implement an effective portfolio of projects and programs that prevent discharges of dissolved copper, measured in urban runoff in San Diego Creek at Campus Drive, from exceeding the concentrations shown in Table 7.2 below under the indicated flow conditions.

Table 7.2: Summary of Hardness-based Dissolved Copper Waste Load Allocations for San Diego Creek

Flow	Base <20 cfs	Small 21 to 181 cfs	Medium 182 to 815 cfs	Large >815 cfs
Hardness	400 mg/L	322 mg/L	236 mg/L	197 mg/L
Acute (µg/L)	50	40	30.2	25.5
Chronic (µg/L)	29.3	24.3	18.7	--

cfs = cubic feet per second

V. Lead, Dissolved

A. Responsible Permittees must prevent discharges of urban runoff from transporting more than 17,638 pounds of dissolved lead into Newport Bay per year.

B. Responsible Permittees must implement an effective portfolio of projects and programs that achieve the following:

1. Prevent acute concentrations of dissolved lead, discharged in urban runoff to Newport Bay, from exceeding 210 micrograms per liter (µg/L).

2. Prevent the discharge of chronic concentrations of dissolved lead, discharged in urban runoff to Newport Bay, from exceeding 8.1 µg/L.

C. Responsible Permittees must implement an effective portfolio of projects and programs that prevent discharges of dissolved lead, measured in urban runoff in San Diego Creek at Campus Drive, from exceeding the concentrations shown in Table 7.3 below under the indicated flow conditions.

Table 7.1: Summary of Hardness-based Dissolved Lead Waste Load Allocations for San Diego Creek

Flow	Base <20 cfs	Small 21 to 181 cfs	Medium 182 to 815 cfs	Large >815 cfs
Hardness	400 mg/L	322 mg/L	236 mg/L	197 mg/L
Acute (µg/L)	281	224	162	134
Chronic (µg/L)	10.9	8.8	6.3	--

cfs = cubic feet per second

VI. Mercury

A. Discharges of stormwater must not transport more than 0.0171 kg/year of mercury into Rhine Channel.

VII. Zinc, Dissolved

A. Responsible Permittees must prevent discharges of urban runoff from transporting more than 174,057 pounds of dissolved zinc into Newport Bay per year.

B. Responsible Permittees must implement an effective portfolio of projects and programs that achieve the following:

1. Prevent acute concentrations of dissolved zinc, discharged in urban runoff to Newport Bay, from exceeding 90 micrograms per liter (µg/L).

2. Prevent the discharge of chronic concentrations of dissolved zinc, discharged in urban runoff to Newport Bay, from exceeding 81 µg/L.

C. Responsible Permittees must implement an effective portfolio of projects and programs that to prevent discharges of dissolved zinc, measured in urban runoff in San Diego Creek at Campus Drive, from exceeding the concentrations shown in Table 7.4 below under the indicated flow conditions.

Table 7.2: Summary of Hardness-based Dissolved Zinc Waste Load Allocations for San Diego Creek

Flow	Base <20 cfs	Small 21 to 181 cfs	Medium 182 to 815 cfs	Large >815 cfs
Hardness	400 mg/L	322 mg/L	236 mg/L	197 mg/L
Acute (µg/L)	379	316	243	208
Chronic (µg/L)	382	318	244	--

cfs = cubic feet per second

Appendix 8

Appendix 8

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR METALS IN SAN GABRIEL RIVER AND IMPAIRED TRIBUTARIES

The following water quality-based effluent limitations (WQBELs) apply to discharges of Metals in urban runoff from MS4s owned or controlled by those Permittees discharging into Coyote Creek, which is located within the jurisdiction of the Los Angeles Regional Water Quality Control Board. The WQBELs are based on the waste load allocations and requirements in the TMDLs for Metals into San Gabriel River and Impaired Tributaries promulgated by the USEPA on March 26, 2007.

Permittees must carry out an effective portfolio of projects and programs for the control of metals in stormwater and authorized non-stormwater runoff from their MS4s. The projects and programs must achieve compliance with the TMDL waste load allocations below:

I. General

A. Urban runoff samples and flow volumes must be taken at the Los Angeles County Department of Public Works (LACDPW) flow gauge station F354-R, located just above the Long Beach Water Reclamation Plant.

B. Wet weather WQBELs apply when the maximum daily flow in the creek is equal to or greater than 156 cubic feet per second (cfs), as measured at station F-354-R.

II. Copper

A. Discharges of urban runoff during dry weather in Coyote Creek must not transport more than 0.941 kilogram per day (kg/d) of total recoverable copper.

B. Total recoverable copper in discharges of urban runoff during wet weather into Coyote Creek must not exceed a mass calculated using the following formula.

24.71µg/L x daily storm volume (L) = WLA for total recoverable copper

III. Lead

A. Total recoverable lead in discharges of urban runoff during wet weather into Coyote Creek must not exceed a mass calculated using the following formula.

96.99 µg/L x daily storm volume (L) = WLA for total recoverable lead

IV. Zinc

A. Total recoverable zinc in discharges of urban runoff during wet weather into Coyote Creek must not exceed a mass calculated using the following formula.

144.57 µg/L x daily storm volume (L) = WLA for total recoverable zinc

Table 8.1: Summary of WQBELs for Discharges of Urban Runoff into Coyote Creek

	Copper, total recoverable	Lead, total recoverable	Zinc, total recoverable
Dry Weather	0.941 (kg/day)	--	--
Wet Weather[2]	24.71 µg/L X daily storm volume (L)	96.99 µg/L X daily storm volume (L)	144.57 µg/L X daily storm volume (L)

[2] As measured at LACDPW Station F-354-R.

Appendix 9

Appendix 9

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR SELENIUM IN FRESHWATER, NEWPORT BAY WATERSHED

The water quality-based effluent limitations (WQBELs) apply to discharges of selenium in urban runoff from MS4s owned or controlled by those Permittees discharging into the Newport Bay watershed as indicated in Appendix 1. The compliance deadline of June 20, 2049 has not passed.

Permittees must adhere to the TMDL tasks and compliance schedule set forth in the Basin Plan, designed to achieve the targets in Tables 9.1 or 9.2 as soon as possible, but no later than June 20, 2049. Compliance shall be achieved through one of the methods listed in this Appendix.

I. Selenium

A. Receiving Water and MS4 Outfall Targets

1. Targets in Table 9.1 apply to receiving waters or MS4 outfalls into San Diego Creek, Santa Ana Delhi Channel, and Big Canyon Wash sub-watersheds.

2. Targets in Table 9.1 are expressed as an arithmetic mean that is calculated semi-annually. The first semi-annual period is April 1 through September 30. The second semi-annual period is October 1 through March 31.

Table 9.1: Waste Load Allocations for Receiving Waters into Newport Bay Sub-watersheds

	San Diego Creek Sub-watershed µg Se/L	Santa Ana-Delhi Channel µg Se/L	Big Canyon Wash Sub-watershed µg Se/L	Other Sub-watersheds in Newport Bay µg Se/L
Concentration	10	11	1	5

II. Tissue-based Targets

The fish-tissue target that applies depends on if the bird egg tissue target is attained or not, as outlined in Table 9.2 below.

A. Where bird egg tissue target is attained, the fish tissue target of 8.1 µg/ Se/g dry weight applies.

B. Where bird egg tissue target is not attained, the fish tissue target of 5 µg/ Se/g dry weight applies.

Table 9.2: Freshwater Tissue-based Numeric Targets Based on Dry Weight (dw)

Bird Egg Tissue	Bird Egg Tissue Target	Fish Tissue Target
Target Not Attained	8 µg/ Se/g dw	5 µg/ Se/g dw
Target Attained	8 µg/ Se/g dw	8.1 µg/ Se/g dw

III. Offset and Trading Program

Permittees may carry out an effective Offset and Trading Program designed to reduce selenium loads from non-point sources (primarily rising groundwater) in lieu of achieving WQBELs in Tables 9.1 or 9.2 as soon as possible, but no later than June 20, 2049.

A. Permittees must meet one of the following eligibility requirements to participate in the Offset and Trading Program. Permittees must demonstrate to the Executive Officer that:

1. There are no reasonably feasible or practicable treatment technologies available that can achieve compliance with the applicable Water Quality Objective for selenium at the point of discharge, or

2. It is not feasible or practicable to eliminate the discharge because it would pose unreasonable risk to human health, public safety, the natural environment, or cause economic hardship on the surrounding community.

3. The discharge is not expected to unreasonably or adversely affect the beneficial uses of the receiving water downstream of the discharge.

B. Permittees must prepare and submit a plan and schedule according to the Offset and Trading Program requirements of the Santa Ana Region Basin Plan, starting with page 6-95, within 90 days from the effective date of Order No. R8-2022-0008.

C. The plan must be approved by the Santa Ana Water Board Executive Officer prior to implementation.

Appendix 10

Appendix 10

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR BACTERIAL INDICATOR TMDL IN THE MIDDLE SANTA ANA RIVER WATERSHED

The water quality-based effluent limitations (WQBELs) apply to discharges of bacteria in urban runoff from MS4s owned or controlled by those Permittees discharging into the Middle Santa Ana River (MSAR) Watershed as indicated in Appendix 1, which includes the cities of Clairmont and Pomona (covered under a separate NPDES Permit). The WQBELs in this Appendix are based on the waste load allocations in the Bacterial Indicator TMDLs for MSAR Watershed.

Permittees must carry out an effective portfolio of projects and programs for the control of bacteria in stormwater and in authorized non-stormwater runoff from their MS4s. The projects and programs must be designed to achieve compliance with the deadlines specified below:

I. Escherichia coli

A. For discharges from an MS4 during *wet weather conditions* (November 1 through March 31), achieve the following waste load allocation as soon as possible, but not later than December 31, 2025:

1. The 5-sample, 30-day logarithmic mean of Escherichia coli are less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100 mL for any 30-day period.

B. For discharges from an MS4 during *dry weather conditions* (April 1 through October 31), achieve the following waste load allocation immediately since the compliance deadline of December 31, 2015 has passed:

1. The 5-sample, 30-day logarithmic mean of Escherichia coli are less than 113 organisms/100 mL and not more than 10% of the samples exceed 212 organisms/100 mL for any 30-day period.

II. Comprehensive Bacterial Reduction Plan

To carry out their projects and programs for the control of bacteria, Permittees must:

A. Revise or amend their Comprehensive Bacterial Reduction Plan (CBRP) to comply with the requirements of this Order. The initial draft CBRP or amendment must be submitted to the Executive Officer for approval within 60-days of the effective date of this Order, or as prescribed by the Executive Officer. The Executive Officer is authorized to approve the draft or amendments as submitted, require additional information, or approve them subject to conditions.

1. Except for grammatical or inconsequential technical corrections, subsequent updates or amendments to CBRP are subject to the review and approval of the Executive Officer. Updates or amendments must be submitted for approval not less than 30-days prior to implementation of the proposed changes.

2. The revised or amended CBRP must include those best management practices that are or will be implemented within their jurisdiction for the control of bacteria and the method(s) for evaluating the effectiveness of those practices according to the requirements of Order No. R8-2022-0008.

B. Participate in watershed-wide projects and programs where the Permittee deems that there is a mutual interest or benefit to achieving bacterial indicator waste load allocations in Section I.A. above.

C. Develop and apply valid objective performance measures to track and assess the effectiveness of individual best management practices or systems of best management practices described in the Permittee's CBRP.

After adoption of new or revised TMDLs, the Permittees must update their existing CBRPs or submit new ones for control of bacterial indicators in the Middle Santa Ana River watershed. The updated or new CBRPs are subject to the Executive Officer's approval not less than 30-days prior to implementation of the proposed changes, and must describe the Permittees' projects and programs for the attainment of the wet weather and dry weather waste load allocations for *Escherichia coli* in the newly-adopted TMDL.

A. The Executive Officer will issue a written notice to the Permittees, directing them to submit draft updates or new CBRPs according to the newly-adopted TMDLs for Bacterial Indicators. The initial draft updates or new CBRPs must be submitted by a deadline specified in that notice.

B. The updated or new CBRPs are subject to the approval of the Executive Officer. The Executive Officer will provide a minimum of 30 days for public review prior to approving the updated or new CBRPs.

C. Except for grammatical or inconsequential technical corrections, subsequent updates or amendments to CBRPs are subject to the review and approval of the Executive Officer. Subsequent updates or amendments to CBRPs must be submitted to the Executive Officer for approval not less than 30-days prior to implementation of the proposed changes.

Appendix 11

Appendix 11

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR NUTRIENT TMDL IN LAKE ELSINORE AND CANYON LAKE

The water quality-based effluent limitations (WQBELs) apply to discharges of nutrients in urban runoff from MS4s owned or controlled by those Permittees discharging into Canyon Lake and Lake Elsinore as indicated in Appendix 1. These WQBELs are based on the Lake Elsinore and Canyon Lake Nutrient TMDLs. The compliance deadline of December 31, 2020 has passed.

Phosphorus and nitrogen are cited as the primary cause of poor water quality in Lake Elsinore and Canyon Lake. The waste load allocations for phosphorus and nitrogen are based on a 10-year running average of nutrient loads.

Permittees must carry out an effective portfolio of projects and programs for the control of nutrients in stormwater and authorized non-stormwater runoff from their MS4s. Compliance with the WQBELs in this Appendix will be determined according to methods described in Section VII of Order No. R8-2022-0008. The compliance deadline of the TMDLs has passed. Permittees must design their projects and programs to achieve compliance with the following WLAs:

I. Canyon Lake

A. Responsible Permittees must implement an effective portfolio of projects and programs designed to prevent discharges of urban runoff from transporting more than 306 kg of total Phosphorus and 3,974 kg of total nitrogen into Canyon Lake per year. The nutrient loads shall be calculated using a running average of ten (10) consecutive estimates of annual loads.

B. Responsible Permittees must implement an effective portfolio of projects and programs designed to prevent septic systems within their jurisdictions from discharging more than 139 kg of total Phosphorous and 4,850 kg of total nitrogen into Canyon Lake per year.

Table 11.1: Summary of Nutrient Waste Load Allocations for Urban Runoff and Load Allocations for Septic Systems into Canyon Lake

WQBEL	Total Phosphorus (kg/yr)	Total Nitrogen (kg/yr)
Urban Runoff	306	3,974
Septic Systems	139	4,850

II. Lake Elsinore

A. Responsible Permittees must implement an effective portfolio of projects and programs designed to prevent discharges of urban runoff from transporting more than 124 kg of total Phosphorus and 349 kg of total nitrogen into Lake Elsinore

per year. The nutrient loads shall be calculated using a running average of ten (10) consecutive estimates of annual loads.

B. Responsible Permittees must implement an effective portfolio of projects and programs designed to prevent septic systems within their jurisdictions from discharging more than 69 kg of total Phosphorous and 608 kg of total nitrogen into Lake Elsinore per year.

Table 11.2: Summary of Nutrient Waste Load Allocations for Urban Runoff and Load Allocations for Septic Systems into Lake Elsinore

WQBEL	Total Phosphorus (kg/yr)	Total Nitrogen (kg/yr)
Urban Runoff	124	349
Septic Systems	69	608

III. Comprehensive Nutrient Reduction Plan

The Permittees must have an implementation plan for projects and programs for the control of nutrients that complies with the requirements of this Order and that has been approved by the Executive Officer. The Permittees must:

A. Revise or amend their Comprehensive Nutrient Reduction Plan (CNRP) to comply with the requirements of this Order. The initial draft CNRP or amendment must be submitted to the Executive Officer for approval within 60-days of the effective date of this Order, or as prescribed by the Executive Officer. The Executive Officer is authorized to approve the draft or amendments as submitted, require additional information, or approve them subject to conditions.

1. Except for grammatical or inconsequential technical corrections, subsequent updates or amendments to CNRP are subject to the review and approval of the Executive Officer and submitted for approval not less than 30-days prior to implementation of the proposed changes.

2. The revised or amended CNRP must include those best management practices that are or will be implemented within their jurisdiction for the control of nutrients and the method(s) for evaluating the effectiveness of those practices according to the requirements of Order No. R8-2022-0008.

B. Participate in watershed-wide projects and programs where the Permittee deems that there is a mutual interest or benefit to achieving nutrient waste load allocations.

Appendix 12

Appendix 12

WATER QUALITY-BASED EFFLUENT LIMITATIONS FOR NUTRIENT TMDL FOR DRY HYDROLOGICAL CONDITIONS IN BIG BEAR LAKE

The following water quality-based effluent limitations (WQBELs) apply to discharges of urban runoff from MS4s owned or controlled by those Permittees discharging into Big Bear Lake as indicated in Appendix 1. These WQBELs are based on the TMDL for discharges of Total Phosphorus during dry hydrological conditions in Big Bear Lake. The deadline of December 31, 2015 has passed.

There was not sufficient nutrient data (in the watershed and in-lake) to support development of TMDLs, load allocations, and waste load allocations (WLAs) for average and/or wet hydrologic conditions; therefore, the TMDL applies only to dry hydrological conditions which are defined below.

Permittees must carry out an effective portfolio of projects and programs for the control of nutrients in stormwater and authorized non-stormwater runoff from their MS4s. Permittees must design their projects and programs to achieve compliance with the following WLAs:

I. Phosphorus, Total

A. The Responsible Permittees' annual average discharge into Big Bear Lake during dry hydrological conditions must not exceed 475 pounds.

1. Dry hydrological conditions shall mean a period of time where the average annual inflow from tributaries to Big Bear Lake ranges from 0 to 3,049 acre-feet, average lake levels range from 6,671 to 6,735 feet and annual precipitation range from 0 to 23 inches.

2. Tributary inflow must be measured when collecting water quality samples to calculate total phosphorus loads.

3. The Responsible Permittees must determine the rate of influx of sediment and particulate nutrients to Big Bear Lake to calculate total phosphorus loads at the mouths of Rathbun, Summit, Knickerbocker, and other outfalls within the jurisdiction of the Permittees.

Attachment A

Glossary

Attachment A

GLOSSARY

This Glossary has been prepared for the convenience of the reader. This Glossary is not an exhaustive catalog of terminology used in this Order. Additional terminology is defined in the Clean Water Act, USEPA regulations, and the California Water Code; all such terms not appearing below are incorporated into this Permit by reference.

Annual Progress Report – Report summarizing compliance information required to be submitted annually to the Santa Ana Water Board on or before each November 15th.

Authorized Non-Stormwater Discharges – Non-stormwater discharges authorized pursuant to an NPDES permit.

Basin Plan – The Water Quality Control Plan for the Santa Ana River Basin, as amended or revised.

Beneficial Uses – The uses of water necessary for the survival or well-being of man, plants, and wildlife. These uses of water serve to promote the tangible and intangible economic, social, and environmental goals. "Beneficial Uses" that may be protected include, but are not limited to: domestic, municipal, agricultural and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves. Existing beneficial uses are uses that were attained in the surface or ground water on or after November 28, 1975; and potential beneficial uses are those that would probably develop in future years through the implementation of various control measures. "Beneficial Uses" are equivalent to "Designated Uses" under federal law. California Water Code Section 13050(f) Beneficial Uses for the receiving waters are identified in the Basin Plan.

Best Management Practices (BMP) – Also known as stormwater control measures and defined in 40 CFR 122.2. BMPs means schedules of activities, prohibitions of practices, maintenance procedures, policies and other management practices that are effective to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage (40 CFR 122.2). In the case of MS4 permits, BMPs are typically used in place of Numeric Effluent Limits.

Biological Integrity – Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on water quality goals. Environmental Management 5:55-68 as: "A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region." Also referred to as ecosystem health.

Bioassessment – The use of biological community information to evaluate the biological integrity of a water body and its watershed. With respect to aquatic ecosystems, bioassessment is the collection and analysis of samples of the benthic macroinvertebrate community together with physical/habitat quality measurements associated with the sampling site and the watershed to evaluate the biological condition (i.e. biological integrity) of a water body.

Biotreatment Control BMP – A sub-category of structural treatment control BMPs that employ biological uptake, transformation, or degradation of pollutants as their principal mechanism(s) of pollutant removal. Although a significant portion of the design capture volume or flow will incidentally infiltrate, evaporate, or evapotranspire, the principal of operation involves the discharge of the treated stormwater after detention in a densely-vegetated basin and after passing through porous, biologically active medium, dense vegetation or both.

California Toxics Rule (CTR) – Numeric water quality criteria for certain Priority Toxic Pollutants and other water quality standards provisions promulgated by the USEPA for waters in the state of California. The California Toxics Rule is found in 40 CFR 131.

Clean Water Act Section 303(d)-Listed Water Body – An impaired water body; a water body in which water quality does not meet applicable water quality standards and/or is not expected to meet water quality standards, even after the application of technology-based pollution controls required by the CWA.

Clean Water Act Section 402(p) – The federal statute, codified at 33 USC 1342(p), requiring municipal and industrial Permittees to obtain NPDES permits for their discharges of stormwater.

Commercial Facilities – Businesses that have the potential to discharge Pollutants to the MS4 not otherwise covered by the Industrial General Permit. Examples of Commercial Facilities include businesses based in a Permittee's jurisdiction that perform mobile carpet, drape, or furniture cleaning; mobile automobile or other vehicle washing and mobile high pressure or steam cleaning.

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

Contamination – As defined in the Porter-Cologne Water Quality Control Act, contamination is "an Impairment of the quality of waters of the State by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease." Contamination includes any equivalent effect resulting from the disposal of waste whether or not waters of the State (inclusive of waters of the U.S.) are affected. (California Water Code Section 13050(k))

Conventional Pollutants – Biochemical Oxygen Demand (BOD), Total suspended solids (nonfilterable)(TSS), pH, Fecal coliform, Oil and grease. (40 CFR 401.16 (list of conventional pollutants))

County of Orange – County of Orange, a legal subdivision of the State of California.

County of Riverside – County of Riverside, a legal subdivision of the State of California.

County of San Bernardino – County of San Bernardino, a legal subdivision of the State of California.

Criteria – The numeric values and the narrative standards that represent contaminant concentrations that are not to be exceeded in the receiving environmental media (surface water, groundwater, sediment) to protect beneficial uses.

Critical Milestones – An action or event marking a significant stage in the progress of a project. A critical milestone is chosen by a Permittee or designated by the Executive Officer and is subject to enforcement if the milestone is not met. Non-critical milestones are not subject to enforcement. This distinction between types of milestones is intended to facilitate transparent and more detailed disclosure of the progress of a project and allow early detection of deviations in a schedule that could lead to violations.

DAMP (Drainage Area Management Plan) – The DAMP is a programmatic document developed by the Permittees and approved by the Executive Officer that outlines the major programs and policies that the Permittees individually and/or collectively implement to manage Urban Runoff in the Permit Area.

Debris – The remains of anything destroyed or broken or accumulated loose fragments of rock.

Design Capture Flow – The calculated flow rate of stormwater runoff, typically expressed as cubic feet per second (cfs), that must be treated in one or more structural treatment control BMPs according to the requirements of this Order.

Design Capture Volume – (See Permit, Section VIII.D.3.)

The calculated volume of stormwater runoff, typically expressed in gallons or cubic feet, that must be treated in one or more structural treatment control BMPs according to the requirements of this Order.

Development Projects – New development or redevelopment with land disturbing activities; structural development, including construction or installation of a building or structure, the creation of impervious surfaces, public agency projects, and land subdivision.

Discretionary Project – Per Section 15357 of the Guidelines for CEQA "Discretionary Project" means a project which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity, as

distinguished from situations where the public agency or body merely has to determine whether there has been conformity with applicable statutes, ordinances, or regulations. A timber harvesting plan submitted to the State Forester for approval under the requirements of the Z'berg-Nejedly Forest Practice Act of 1973 (Pub. Res. Code Sections 4511 et seq.) constitutes a discretionary project within the meaning of the California Environmental Quality Act. Section 21065(c).

Direct Discharge – A discharge directly from an MS4 to a receiving water such that the MS4 discharge does not first co-mingle with waters from another receiving water or conveyance.

Duly Authorized Representative (DAR) – All reports required by this permit, and other information by the Executive Officer shall be signed by the legally responsible party (LRP) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made electronically submitted by either a principal executive officer or ranking elected official; and,

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated activity such as a position of plant manager, superintendent, position of equal responsibility, or an individual or position having overall responsibility for environmental matters for the municipality (A duly authorized representative may thus be either a named individual or any individual occupying a named position).

Ecological perspective on water quality goals – Environmental Management 5:55-68 as: “A balanced, integrated, adaptive community of organisms having a species composition, diversity, and functional organization comparable to that of natural habitat of the region.” Also referred to as ‘ecosystem health’.

Effluent – Any discharge of water either to the receiving water or beyond the property boundary controlled by the discharger.

Effluent Limit/Limitations – Means any restriction on quantities, discharge rates, and concentrations of pollutants which are discharged from point sources into Waters of the United States, waters of the “contiguous zone,” or the ocean (40 CFR 122.2).

Emergency – A sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

Environmentally Sensitive Areas (ESAs) – An area “in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which would be easily disturbed or degraded by human activities and developments” (Public Resources Code Section 30107.5). These areas include, but are not limited to: water bodies designated with the RARE beneficial use in the Basin Plan

(Water Quality Control Plan for the Santa Ana River Basin [1995] and amendments); an area designated in the Ocean Plan as an Area of Special Biological Significance; Marine Protected Areas designated as such pursuant to the Marine Life Protection Act; a water body listed as being impaired pursuant to CWA Section 303(d); areas designated as preserves or their equivalent under the Natural Communities Conservation Program (Multiple Species Habitat Conservation Plan, MSHCP) within the Cities and Counties of Orange, Riverside and San Bernardino; or any area designated as such by a public agency with designation powers.

Equivalent Alternative land use areas – The final Trash Amendments define priority land uses as land uses that are actually developed (i.e., not simply zoned) as high density residential, industrial, commercial, mixed urban, and public transportation stations4. In addition, the final Trash Amendments provide that an MS4 may request that its permitting authority approve an equivalent alternative land use (i.e., an alternative to the land uses listed above) if that MS4 has land use(s) within its jurisdiction that generate trash at rates that are equivalent to or greater than one or more of the priority land uses listed This alternative option would help MS4s and their permitting authorities focus on controlling trash in each MS4's highest trash generating areas. The intent of this prioritization of land uses is to allow MS4s to allocate trash-control resources to the developed areas that generate the highest sources of trash.

Equivalent Alternate Land Uses – An MS4 permittee with regulatory authority over priority land uses may issue a request to the applicable permitting authority that the MS4 permittee be allowed to substitute one or more land uses identified above with alternates land use within the MS4 permittee's jurisdiction that generates rates of Trash that are equivalent to or greater than the priority land use(s) being substituted subject to approval by the Executive Officer. The land use area requested to substitute for a priority land use need not be an acre-for-acre substitution but may involve one or more priority land uses, or a fraction of a priority land use, or both, provided the total trash generated in the equivalent alternative land use is equivalent to or greater than the total Trash generated from the priority land use(s) for which substitution is requested. Comparative Trash generation rates shall be established through the reporting of quantification measures such as street sweeping and catch basin cleanup records; mapping; visual trash presence surveys, such as the "Keep America Beautiful Visible Litter Survey"; or other information as required by the permitting authority.

Erosion – The process whereby material (such as sediment) is detached and entrained in water or air and can be transported to a different location. Chemical erosion involves materials that are dissolved and removed and transported.

Erosion and Sediment Control Plan (ESCP) – These are water quality protection plans that include control measures for erosion prevention and sediment controls that would minimize the mobilization of sediment from the project site.

Executive Officer – The Executive Officer of the Santa Ana Regional Water Quality Control Board.

Fixed Facility – A stationary facility that is owned or controlled by a Permittee. A fixed facility includes, but is not limited to, corporate yards, public parks, cemeteries, or airfields, libraries, fire and police stations, and public power generation, sewer, or water utilities.

Full Capture System – A Full Capture System is a treatment control, or series of treatment controls that traps all particles that are 5 mm or greater, and has a design treatment capacity that is either:

1. Not less than the peak flow rate resulting from a one-year, one-hour, storm in the sub-drainage area, or

2. Appropriately sized to, and designed to carry at least the same flows as, the corresponding storm drain.

Prior to installation, full capture systems must be certified by the Executive Director, or designee, of the State Water Board. Uncertified full capture systems will not satisfy the requirements of the Trash Amendments to the Ocean Plan and the ISWEBE Plan. To request certification, a Permittee shall submit a certification request letter that includes all relevant supporting documentation to the State Water Board's Executive Director. The Executive Director, or designee, shall issue a written determination approving or denying the certification of the proposed full capture system or conditions of approval, including a schedule to review and reconsider the certification.

Full Capture System Equivalency – Full capture system equivalency is the Trash load that would be reduced if full capture systems were installed, operated, and maintained for all storm drains that capture runoff from priority land use areas). The full capture system equivalency is a Trash load reduction target that the Permittee quantifies by using an approach, and technically acceptable and defensible assumptions and methods for applying the approach, subject to the approval of permitting authority. Examples of such approaches include, but are not limited to, the following:

1. Trash Capture Rate Approach. Directly measure or otherwise determine the amount of Trash captured by full capture systems for representative samples of all similar types of land uses, facilities, or areas within the relevant areas of land over time to identify specific trash capture rates. Apply each specific Trash capture rate across all similar types of land uses, facilities, or areas to determine full capture system equivalency. Trash capture rates may be determined either through a pilot study or literature review. Full capture systems selected to evaluate Trash capture rates may cover entire types of land uses, facilities, or areas, or a representative subset of types of land uses, facilities, or areas. With this approach, full capture system equivalency is the sum of the products of each type of land use, facility, or area multiplied by Trash capture rates for that type of land use, facility, or area.

2. Reference Approach. Determine the amount of Trash in a reference receiving water in a reference watershed where full capture systems have been installed for all storm drains that capture runoff from all relevant areas of land. The reference

watershed must be comprised of similar types and extent of sources of trash and land, facilities, or areas as the Co-permittee's watershed. With this approach, full capture system equivalency would be demonstrated when the amount of Trash in the receiving water is equivalent to the amount of Trash in the reference receiving water.

General Utility Vaults Permit – State Water Board Order No. 2014-0174-DWQ, NPDES No. CAG990002.

Grading – The cutting and/or filling of the land surface to a desired slope or elevation.

Harvest and Use Low-Impact Development Best Management Practice (Harvest and Use LID BMP) – A sub-category of retention LID BMPs that uses harvest and use of the design capture volume or quantified portion thereof. The captured volume is typically used for non-potable uses such as toilet-flushing, industrial process supply, and landscape irrigation.

Hazardous Substance – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity; any substance designated under 40 CFR 116 pursuant to Section 311(b)(2) of the Clean Water Act (40 CFR 122.2).

Hazardous Waste – defined as "any waste, which, under Section 600 of Title 22 of this code, is required to be managed according to Chapter 30 of Division 4.5 of Title 22 of this code." [CCR Title 22, Division 4.5, Chapter 11, Article1]

Hydrologic Condition of Concern (HCOC) – A condition of a stream or channel, or some reach thereof; or a condition of some other water body (e.g. a vernal pool), where its hydrology is, or is proposed to be, altered by past or future development such that there has been, or could be, cumulatively significant adverse impacts to the physical or biological integrity of the water body. A condition where a proposed development site discharges directly or indirectly to a water body where such conditions are known or suspected to exist based on Substantial Evidence.

Hydromodification – The "alteration of the hydrologic characteristics of coastal and non-coastal waters, which in turn could cause degradation of water resources." (USEPA 2007)

Illicit Discharge – Defined at 40 CFR 122.26(b)(2) as any discharge to the MS4 that is not composed entirely of stormwater, except discharges pursuant to an NPDES permit, discharges that are identified in Section VII.A. of this Order, and discharges authorized by the Executive Officer.

Illicit Connection – Any connection to the MS4 that is prohibited under local, state, or federal statutes, ordinances, codes, or regulations. The term Illicit Connection includes all non-storm-water discharges and connections except discharges pursuant to an NPDES permit, discharges that are identified in Section VI, Effluent Limitations and Discharge Specifications, of this Order, and discharges authorized by the Executive Officer.

Impaired – Relates to waterbodies where it is presumed Beneficial Uses are not attained.

Impaired Water body / Impaired Waters – Section 303(b) of the CWA requires each of California's Regional Water Quality Control Boards to routinely monitor and assess the quality of waters of their respective regions. If this assessment indicates that Beneficial Uses are not met, then that water body must be listed under Section 303(d) of the CWA as an Impaired Water body.

Impairment – A waterbody condition where Beneficial Uses are not attained.

Impervious Surface – That part of a developed parcel that has been modified to reduce the land's natural ability to absorb and hold rainfall. It includes hard surfaces which cause water to run off the surface in greater quantities or at an increased rate of flow from the flow that existed under natural conditions prior to development. For example, common impervious surfaces include, but are not limited to, rooftops, walkways, patios, courtyards, driveways, parking lots, storage areas, concrete or asphalt paving, gravel roads, or any cleared, graded, graveled, paved, or compacted surfaces, or other surfaces which similarly impede the natural infiltration of surface water into the soil.

Implementation Agreement – The Implementation Agreement establishes the responsibilities of each Permittee and a procedure for funding the shared costs.

Industrial Facility – Facilities defined in Attachment A of the Industrial General Permit, or a facility that has industrial activity that is regulated under the Region 8 Scrap Metal Permit (Order No R8-2018-0069).

Industrial General Permit – State Water Board Order No. 2014-0057-DWQ (NPDES No. CAS000001) or the most recent General Permit for Stormwater Discharges Associated with Industrial Activities issued by the State Water Board subsequent to issuance of this Order.

Infiltration – The flow of water into the soil by crossing the soil surface.

Infiltration Low-Impact Development Best Management Practice (Infiltration LID BMP) – A type of retention LID BMP that employs infiltration at the principal mechanism for the loss of the design capture volume or quantified portion thereof.

Isopluvia – A line on a map drawn through geographical points having the same pluvial (rain, precipitation) index.

Land Disturbance – The clearing, grading, excavation, stockpiling, or other construction activity that results in the possible mobilization of soils or other pollutants into the MS4. This specifically does not include routine maintenance activity to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. This also does not include emergency construction activities required to protect public health and safety.

Load Allocations (LA) – Distribution or assignment of TMDL Pollutant loads to entities or sources for existing and future Non-Point Sources, including background loads attributed to natural conditions.

Legally Responsible Person (LRP) – For a municipality: a principal executive officer or ranking elected official. The LRP designates the duly authorized representative.

LID BMPs – LID BMPs are a subcategory of Structural Treatment Control BMPs. They are further sub-classified into Retention LID BMPs that employ harvest and use, evaporation/ transpiration, infiltration, or any combination thereof, and Biotreatment Control BMPs that employ biological uptake, transformation, or degradation of pollutants and incidental infiltration and evapotranspiration. LID BMPs are subject to general and specific requirements in this Order.

Low Impact Development (LID) – A stormwater management and land development strategy that combines a hydrologically functional site design with pollution prevention measures to compensate for land development impacts on hydrology and water quality. LID techniques mimic the site's predevelopment hydrology by using site design techniques that store, infiltrate, evapotranspire, bio-filter, or detain runoff close to its source.

Monitoring and Reporting Period – For purposes of this Order, the monitoring and reporting period is July 1 to June 30 with a reporting deadline of the following November 15th of each year for Annual Progress Report.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances designed to collect and/or transport urban runoff (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes; (ii) Designated or used for collecting of conveying stormwater; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40CFR 122.2 (40CFR 126.26(b)(8)).

National Pollutant Discharge Elimination System (NPDES) Permit – A national program under section 402 of the Clean Water Act for regulation of discharges of pollutants from point sources to waters of the United States. Discharges of pollutants are prohibited unless specifically exempted or authorized by an NPDES permit.

New Development – The categories of development identified in Section XI.D of this Order. New Development does not include routine maintenance to maintain original line and grade, hydraulic capacity, or original purpose of a facility, nor does it include emergency New Development required to protect public health and safety. Dischargers should confirm with Santa Ana Water Board staff whether or not a particular routine maintenance activity is subject to this Order.

Non-Critical Milestone – An action or event marking a significant stage in the progress of a project. Unlike critical milestones, non-critical milestone are not subject to enforcement. This distinction between types of milestones is intended to facilitate transparent and more detailed disclosure of the progress of a project and allow early detection of deviations in a schedule that could lead to violations.

Non-Point Source – Non-point sources are any source that doesn't meet the definition of a point source under CWA section 502(14).

Non-stormwater – All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges to a MS4 other than stormwater). Non-stormwater includes Illicit Discharges, non-prohibited discharges and NPDES permitted discharges.

Nuisance – Anything which meets all of the following requirements: 1) Is injurious to health, or is indecent, or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property. 2) Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal. 3) Occurs during, or as a result of, the treatment or disposal of wastes (CWC Section 13050(m)).

Nurdles – A plastic pellet, also known as pre-production plastic pellet or plastic resin pellet.

Open Space – Any parcel or area of land or water that is essentially unimproved or devoted to an open-space use for the purposes of (1) the preservation of natural resources, (2) the managed production of resources, (3) outdoor recreation, or (4) public health and safety. [Riverside County General Plan adopted October 7, 2003. Technical Appendix A, Glossary]

Outfall – A point source as defined by 40 CFR 122.2, at the point where a MS4 discharges to waters of the United States. An outfall does not include open conveyances connecting two municipal separate storm sewers. An outfall does not include pipes, tunnels, or other conveyances which connect segments of the same stream or other waters of the U.S. and are used to convey waters of the U.S. [40 CFR 122.26 (b)(9)]

Permit Area – Areas that are under the jurisdiction of the Santa Ana Regional Water Quality Control Board. These include north and northwestern portions of Orange County, north and western portions of Riverside County and western portions of San Bernardino County. See the Basin Plan for a detailed description of the Santa Ana Water Board boundaries. The Permit Area is identified on Attachment B.

Permittees –The Cities and County Agencies listed in Table 1 of this Order (Order No. R8-2022-0008).

Point Source – Any discernible, confined, and discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling

stock, runoff from concentrated animal feeding operations, landfill leachate collection systems, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural stormwater runoff (CWA 502(14)).

Pollutant – Any agent that may cause or contribute to the degradation of water quality such that a condition of pollution or contamination is created or aggravated. It includes any type of industrial, municipal, and agricultural waste discharged into water. The term "pollutant" is Pollution defined in section 502(6) of the Clean Water Act as follows: "The term 'pollutant' means dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt and industrial, municipal, and agricultural waste discharged into water." It has also been interpreted to include water characteristics such as toxicity or acidity.

Pollution – The alteration of the quality of the Waters of the U.S. by waste, to a degree that unreasonably affects either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses. Pollution may include contamination (CWC Section 13050(l)).

Pollutants of Concern – Pollutants expected to be present on the project site. In developing this list, consideration should be given to the chemicals and potential Pollutants available for stormwater to pick-up or transport to receiving waters and legacy Pollutants at the project site. Pollutants of Concern for New Development and Significant Redevelopment projects are those Pollutants identified above for which a downstream water body is also listed as Impaired under the CWA Section 303(d) list or by a TMDL.

Pollution Prevention – Practices and processes that prevent or reduce the generation of potential pollutants; in contrast to source control, treatment, or disposal. Pollution prevention is the first line of defense.

Post Construction BMPs – A subset of BMPs including Site Design, Source Control, and Treatment Control BMPs which detain, retain, filter or educate to prevent the release of Pollutants to surface waters during the final functional life of development.

Principal Permittee – County of Orange for Orange County, Riverside County Flood Control and Water Conservation District (RCFC&WCD) for Riverside County; and San Bernardino County Flood Control District (SBCFCD) for San Bernardino County.

Priority Land Use Areas – Priority land uses are those developed sites, facilities, or land uses (i.e., not simply zoned land uses) within the MS4 Permittee's jurisdiction as follows:

1. High-density residential: all land uses with at least ten (10) developed dwelling units/acre.

2. Industrial: land uses where the primary activities on the developed parcels involve product manufacture, storage, or distribution (e.g., manufacturing businesses,

warehouses, equipment storage lots, junkyards, wholesale businesses, distribution centers, or building material sales yards).

3. Commercial: land uses where the primary activities on the developed parcels involve the sale or transfer of goods or services to consumers (e.g., business or professional buildings, shops, restaurants, theaters, vehicle repair shops, etc.)

4. Mixed urban: land uses where high-density residential, industrial, and/or commercial land uses predominate collectively (i.e., are intermixed).

5. Public transportation stations: facilities or sites where public transit agencies' vehicles load or unload passengers or goods (e.g., bus stations and stops).

Priority Projects – New development and redevelopment project categories listed in Section VIII.B of Order No. R8-2022-0008.

Priority Toxic Pollutant – A pollutant identified in the California Toxics Rule.

Program Effectiveness Assessment – A process that critically examines a program and its outcomes. The assessment provides feedback on the effectiveness of the program and results in changes and improvements to the program and its elements.

Public Education Committee – Committee established by the Permittees to provide oversight and guidance for the implementation of the public education program.

Rainy Season – See Wet Season.

Receiving Waters – Waters of the United States within the Permit area.

Receiving Water Limitations – Waste discharge requirements issued by the Regional Board typically include both: (1) "Effluent Limitations" (or Discharge Limitations) that specify the technology-based or water-quality-based effluent limitations; and (2) "Receiving Water Limitations" that specify the water quality objectives in the Basin Plan as well as any other limitations necessary to attain those objectives. In summary, the "Receiving Water Limitations" provision is the provision used to implement the requirement of CWA SECTION 301(b)(1)(C) that NPDES permits must include any more stringent limitations necessary to meet water quality standards.

Santa Ana Water Board – California Regional Water Quality Control Board, Santa Ana Region.

Retention Low-Impact Development Best Management Practice (Retention LID BMP) – A sub-category of structural treatment control BMPs that employ retention of the design capture volume or a quantified portion thereof. The retained volume is infiltrated, evaporated, evapotranspired, or used (typically for non-potable uses).

Report of Waste Discharge (**ROWD)** – Application for issuance or re-issuance of WDRs.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system.

Santa Ana Region – Area under the jurisdiction of the Santa Ana Water Board.

Scrap Metal Permit – Santa Ana Water Board Order No. R8-2018-0069 (NPDES No. CAG618001) or the most recent Sector-Specific Scrap Metal Recycler NPDES Stormwater Permit issued by the Santa Ana Water Board subsequent to issuance of this Order.

Sediment – Soil, sand, and minerals washed from land into water. Sediment resulting from anthropogenic sources (i.e. human induced land disturbance activities) is considered a pollutant. This Order regulates only the discharges of sediment from anthropogenic sources and does not regulate naturally occurring sources of sediment. Sediment can destroy fish-nesting areas, clog animal habitats, and cloud waters so that sunlight does not reach aquatic plants.

Standard Industrial Classification (SIC) Code – Four-digit industry code, as defined by the US Department of Labor, Occupational Safety and Health Administration. The SIC Code is used to identify if a facility requires coverage under the General Industrial Activities Stormwater Permit.

Significant Redevelopment – As defined in Section XI.D.3.a.

State Implementation Plan (SIP) – Formally known as the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California. The SIP implements the California Toxics Rule.

Site Design BMPs – Any project design feature that reduces the creation or severity of potential pollutant sources or reduces the alteration of the project site's natural flow regime. Redevelopment projects that are undertaken to remove Pollutant sources (such as existing surface parking lots and other impervious surfaces) or to reduce the need for new roads and other impervious surfaces (as compared to conventional or low-density New Development) by incorporating higher densities and/or mixed land uses into the project design, are also considered site design BMPs.

Source Control BMPs – In general, activities or programs to educate the public or provide low cost non-physical solutions, as well as facility design or practices aimed to eliminate or minimize the contact between potential pollutants and stormwater or authorized Non-Stormwater in order to prevent the transport of pollutants to receiving waters. Examples include: activity schedules, prohibitions of practices, street sweeping, facility maintenance, detection and elimination of IC/IDs, and other non-structural measures. Facility design (structural) examples include providing attached lids to trash containers, canopies for fueling islands, secondary containment, or roof or awning over material and trash storage areas to prevent direct contact between water and Pollutants.

Southern California Monitoring Coalition (SMC) – A regional group working to improve monitoring program design, parameter test methods, calibrate labs, evaluate the effectiveness of BMPs, and/or advance the science and understanding of Urban Runoff impacts on receiving waters.

State Water Board – California State Water Resources Control Board

Stormwater – Stormwater runoff and snow melt runoff from urban, open space, and agricultural areas consisting only of those discharges that originate from precipitation events. Stormwater is that portion of precipitation that flows across a surface to the MS4 or receiving waters. Examples of this phenomenon include: the water that flows off a building's roof when it rains (runoff from an impervious surface); the water that flows into streams when snow on the ground begins to melt (runoff from a semi-pervious surface); and the water that flows from a vegetated surface when rainfall is in excess of the rate at which it can infiltrate into the underlying soil (runoff from a pervious surface). When all other factors are equal, runoff increases as the perviousness of a surface decreases. During precipitation events in urban areas, rain water may pick up and transports Pollutants through stormwater conveyance systems, and ultimately to Waters of the U.S.

Stormwater General Permits – Industrial General Permit (State Water Board Order No. 2014-0057-DWQ, NPDES No. CAS000001), Construction General Permit (State Water Board Order No. 2009-0009-DWQ, NPDES No. CAS000002), and Sector-specific Scrap Metal Permit (Order No. R8- 2018-0069) as amended or revised.

Stormwater Ordinance – The Stormwater/Urban Runoff Management and Discharge Control Ordinances and ordinances addressing grading and erosion control adopted by each of the Permittees.

Structural treatment control BMPs – Any system designed and constructed according to published and generally-accepted engineering criteria to reduce or remove pollutants from urban runoff. Pollutants are removed by simple gravity settling of particulate pollutants, filtration, biological uptake, media adsorption or any other physical, biological, or chemical process. In this Order, structural treatment control BMPs treat the design capture volume or flow or a portion thereof. They are classified as LID BMPs and non-LID BMPs. LID BMPs are further sub-classified into Retention LID BMPs and Biotreatment Control BMPs. All of these classes of structural treatment control BMPs are subject to general and specific requirements in this Order. Examples include secondary containment, treatment measures, (e.g. first flush diversion, detention/retention basins, and oil/grease separators), run-off controls (e.g., grass swales, infiltration trenches/basins, etc.), and engineering and design modification of existing structures.

Substantial Evidence – Facts, reasonable assumptions predicated on facts, or expert opinion supported by facts. Substantial Evidence does not include argument, speculation, unsubstantiated opinion or narrative, or evidence which is clearly erroneous or inaccurate (Public Resources Code Section 21080(e)).

Stormwater Pollution Prevention Plan Construction General Permit (SWPPP) – A plan developed to minimize and control the discharge of pollutants from the industrial site to stormwater conveyance systems. The plan shall identify pollutant sources, control measures for each pollutant source, good housekeeping practices and employee training programs.

Total Maximum Daily Load (TMDL) – Numerical calculations of the maximum amount of a pollutant that can be discharged into a water body from all contributing loads (point source, non-point source, background contribution, margin of safety) and still maintain water quality standards. Under Clean Water Act 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

TMDL Implementation Plan – Component of a TMDL that describes actions, including monitoring, needed to reduce pollutant loadings and a timeline for implementation. TMDL implementation plans can include a monitoring or modeling plan and milestones for measuring progress, plans for revising the TMDL if progress toward cleaning up the waters is not made, and the date by which water quality standards will be met (USEPA Final TMDL Rule: Fulfilling the Goals of the CWA, EPA 841-F-00-008, July 2000).

Toxic Pollutant – A pollutant that can cause Toxicity.

Toxicity – Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies.

Trash – Trash means all improperly discarded solid material from any production, manufacturing, or processing operation including, but not limited to, products, product packaging, or containers constructed of plastic, steel, aluminum, glass, paper, or other synthetic or natural materials. Trash is not considered to be leaf litter or plant material.

Treatment Control BMPs – See Structural treatment control BMPs

Tributary – A stream, river, or MS4 which flows into downstream receiving water, MS4 or BMP.

Urban Runoff – Urban runoff is defined as all flows in a stormwater conveyance system from urban areas which include residential, commercial, industrial, and construction areas. Urban runoff consists of the following components: (1) stormwater runoff and (2) authorized non-stormwater discharges (See Section IV of this Order). Urban runoff does not include runoff from undeveloped open space, feedlots, dairies, farms, and agricultural fields.

Waste – Waste includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. (CWC Section 13050(d)) Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste

classification system that applies to solid and semi-solid waste that cannot be discharged directly or indirectly to water of the state and which therefore must be discharged to land for treatment, storage, or disposal in accordance with Chapter 15. There are four classifications of waste (listed in order of highest to lowest threat to water quality): hazardous waste, designated waste, nonhazardous solid waste, and inert waste.

Waste Discharge Identification (WDID) – Identification number provided by the State when Permit Registration Documents are submitted.

Waste Discharge Requirements (WDRs) – As defined in section 13374 of the California Water Code, the term "Waste Discharge Requirements" is the equivalent of the term "permits" as used in the Federal Water Pollution Control Act, as amended. The Santa Ana Water Board usually uses the term "permit" and Order to refer to Waste Discharge Requirements for discharges to waters of the U.S.

Waste Load Allocations (WLAs) – WLA is the distribution or assignment of pollutant loads to entities or sources for existing and future point sources according to a State adopted and EPA approved TMDL or an EPA promulgated TMDL; the maximum quantity of pollutants a discharger is allowed to release into a particular waterway, as set by a regulatory authority. Discharge limits usually are required for each specific water quality criterion being, or expected to be, violated.

Water Code – California Water Code

Water Quality Objective – The limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses of water or the prevention of nuisance within a specific area [California Water Code Section 13050(h)).

Water Quality Standards – Consists of beneficial uses, water quality objectives to protect those uses, an anti-degradation policy, and policies for implementation. Water quality standards are found in Regional Water Quality Control Plans and statewide water quality control plans. The USEPA has also adopted water quality criteria (the same as objectives) for California in the National Toxics Rule and California Toxics Rule.

Waters of the State – Any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code Section 13050(e)). Waters of the State includes waters of the United States.

Waters of the United States – Waters of the United States can be broadly defined as navigable surface waters and tributaries thereto Groundwater is not considered to be waters of the United States. As defined in 40 CFR 122.2, the waters of the U.S. are defined as: (a) All waters, which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide; (b) All interstate waters, including interstate "wetlands;" (c) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sand flats, "wetlands," sloughs, prairie potholes, wet

meadows, playa lakes, or natural ponds the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters: (1) Which are or could be used by interstate or foreign travelers for recreational or other purposes; (2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (3) Which are used or could be used for industrial purposes by industries in interstate commerce; (d) All impoundments of waters otherwise defined as waters of the U.S. under this definition; (e) Tributaries of waters identified in paragraphs (a) through (d) of this definition; (f) The territorial seas; and (g) "Wetlands" adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) through (f) of this definition. Waters of the U.S. do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act (CWA), the final authority regarding CWA jurisdiction remains with the USEPA.

Watershed – That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (a drainage area, catchment, or river basin).

Watershed Management Plan (WMP) – A watershed management plan is a document that outlines strategies to best protect and improve the water quality in a watershed through land use management actions and best management practices to eliminate or reduce the discharge of pollutants to the waters of the State. Watershed management plans provide an analytical framework for managing and restoring water quality in degraded areas and to protect overall watershed health.

Water Quality-Based Effluent Limitations (WQBELs) – A type of effluent limitation that is based on a site-specific evaluation of a discharge and its effect on the receiving water. A WQBEL is designed to protect the quality of the receiving water by ensuring that State water quality standards and WLAs are met. When a WLA is inserted into a regulating document (waiver, permit, etc), it is then considered a WQBEL but a WQBEL can be a BMP as well.

Water Quality Management Plan (WQMP) – A WQMP documents mitigation of the stormwater pollutants and hydrological impacts of a priority project that is subject to a Permittee's discretionary approval. A WQMP contains information related to site characteristics, expected pollutants, hydrology impacts, incorporated structural and non-structural best management practices (BMPs), Low Impact Development (LID) design features, operation and maintenance, and public education and training. The collective information is intended to describe how the project will minimize water quality impacts to downstream water bodies. WQMPs have been required for priority projects in MS4 permits issued in the Santa Ana Region starting in 2002 and are subject to permit requirements.

Attachment B

Figures

Figure B.1: Santa Ana Water Board Watershed Managements Areas

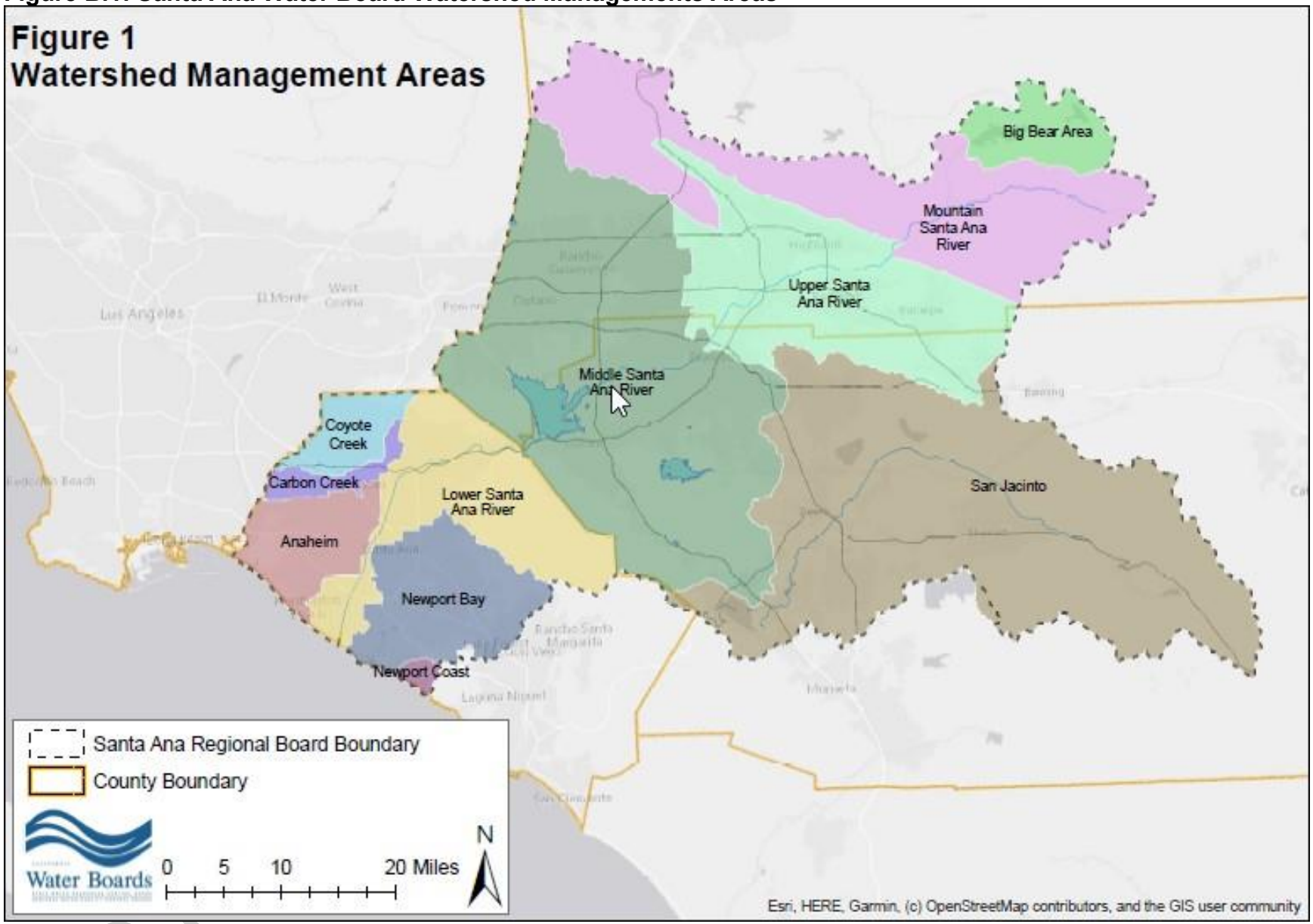


Figure B.2: Orange County Permittees

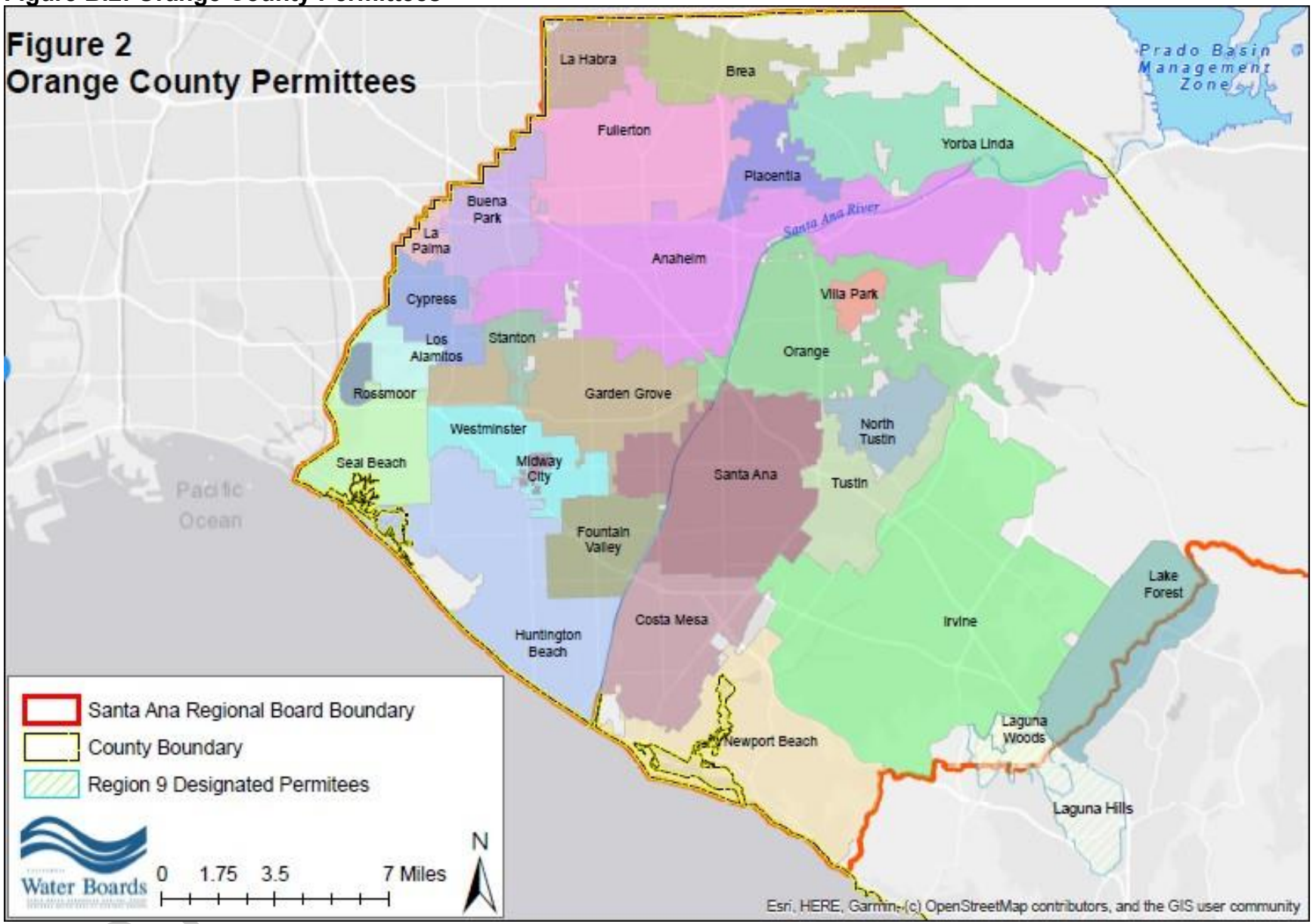


Figure B.3: Riverside County Permittees

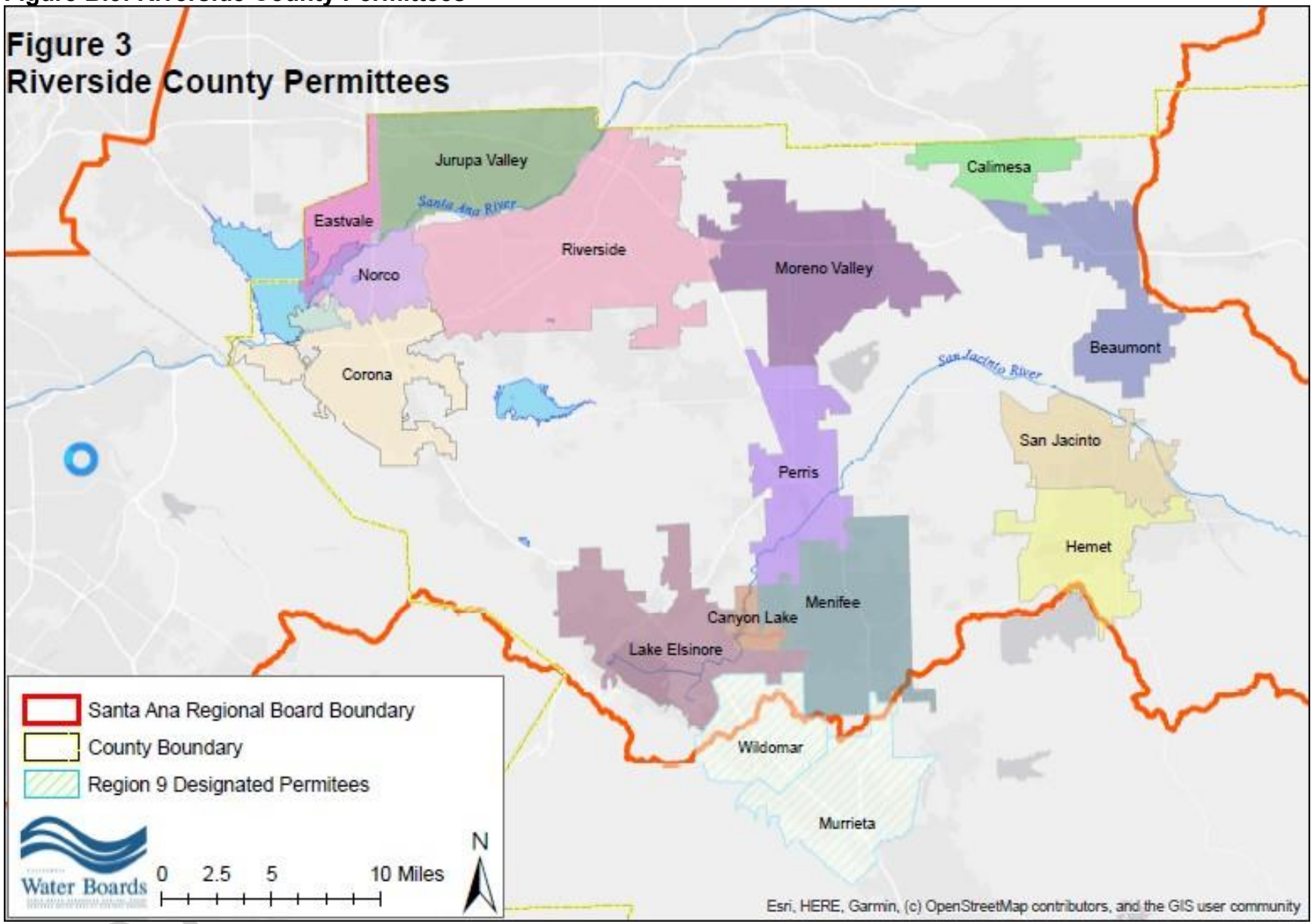
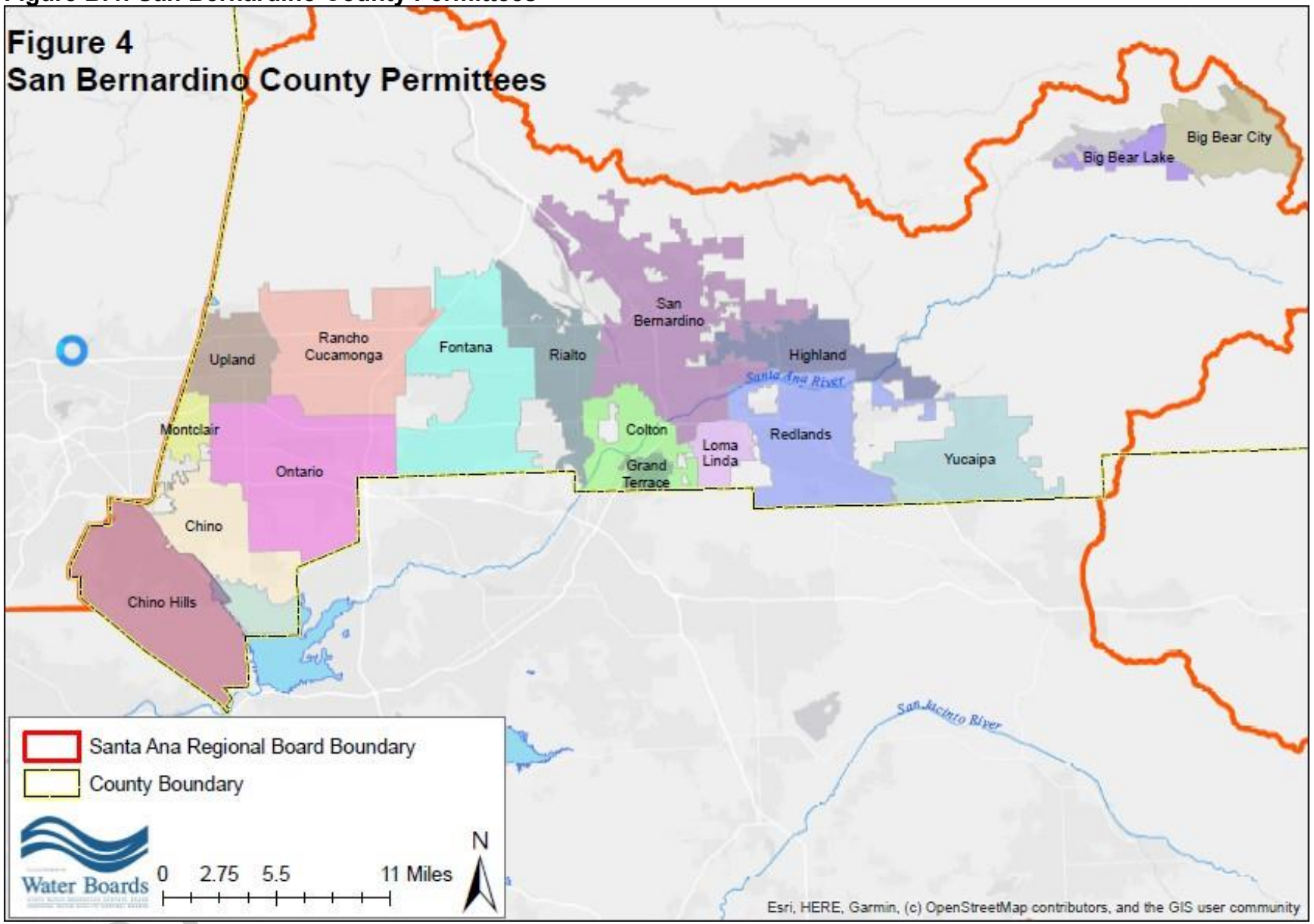


Figure B.4: San Bernardino County Permittees



Attachment C

Monitoring & Reporting Program

Attachment C

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SANTA ANA REGION

3737 Main Street, Suite 500, Riverside, CA 92501-3348
(951) 782-4130 ◆ Fax (951) 781-6288
http://www.waterboards.ca.gov/santaana

MONITORING AND REPORTING PROGRAM NO. R8-2022-0008

FOR

ORDER NO. R8-2022-0008
NPDES PERMIT NO. CAS618000

XXXX XX, 20XX

Revision No.	Date Requested	Approval Date

I. GENERAL

A. The requirements of this Monitoring and Reporting Program (MRP), as presented or later amended, may be met through the Permittees' collaborative efforts and participation in national, state-wide, regional or local monitoring programs, subject to the discretion of the Executive Officer. The Permittees shall continue to cooperate with other MS4 Permittees, Southern California Coastal Water Research Project (SCCWRP), POTW operators, the dairy industry, the Santa Ana Watershed Project Authority (SAWPA), and other public and private organizations in the watershed to develop coordinated surface water quality monitoring programs, databases, and special studies, as appropriate. The Permittees may use coordinated monitoring efforts such as the Middle Santa Ana River (MSAR) and Lake Elsinore/Canyon Lake (LE/CL) TMDL Task Forces, SCCWRP and Stormwater Monitoring Coalition (SMC) regional monitoring programs to address partially, or in full, the requirements of this MRP.

B. The Executive Officer is authorized to review and approve proposed changes to the MRP. Changes may include redistribution of monitoring resources to address TMDL needs, a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or monitoring locations, or the number of samples collected. The Executive Officer will provide a minimum of 30-days for public review prior to approving any proposed changes.

C. To avoid duplication of efforts, monitoring work performed by parties other than the Permittees or work carried out by the Permittees in support of other programs may be substituted for work described in the MRP provided that the work meets the requirements of the MRP and Order No. R8-2022-0008.

D. The Permittees may supplement monitoring data that is required to be collected as part of this MRP and subsequent amendments with other data sources for the purpose of improving any related analysis subject to the approval of the Executive Officer.

E. Except for Priority Toxic Pollutants identified in the California Toxics Rule, all sample collection, handling, storage, and analysis must be completed in conformance with 40 CFR 136; with adopted guidance developed by the State Water Resources Control Board (State Water Board) pursuant to California Water Code Section 13383.5; or with other methods satisfactory to the Executive Officer.

F. Unless otherwise specified, the Permittees shall use the Minimum Levels (MLs) published in Appendix 4 of the "Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California" for the reporting of all sample results.

G. Each Permittee is responsible for the accuracy and completeness of the monitoring program(s) and related products for the watershed(s) to which the Permittee discharges. However, the Principal Permittee(s) may develop and

implement those programs and submit related work products on behalf of the Permittees within their jurisdiction.

H. Unless otherwise specified, the Permittees shall upload all ambient monitoring data and associated field, station, and quality assurance data into the CEDEN or its successor, not less than annually. Information adequate to verify the successful data upload shall be included in the Annual Progress Report.

I. The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this Order shall, upon conviction, be punished by a fine of not more than $10,000, or by imprisonment for not more than two years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than $20,000 per day of violation, or by imprisonment of not more than four years, or both. [40 CFR 122.41(j)(5)]

J. Permittees must submit all information and materials necessary to comply with the requirements of this Order to the Principal Permittees in a timely manner.

K. All reports submitted to the Santa Ana Water Board pursuant to the requirements of Order No. R8-2022-0008 must include a statement identifying the provision(s) for which the report is intended to comply with.

L. Unless paper copies are expressly requested by Santa Ana Water Board staff, all reports and submittals must be provided in a searchable electronic format consistent with guidance provided by the Executive Officer.

M. To the extent practicable, all monitoring data and monitoring locations should be integrated into the Permittees' database system.

II. GOALS

The Permittees must perform monitoring and analyze subsequent data to achieve the following goals:

A. To evaluate the effectiveness of existing urban runoff management programs and BMPs currently implemented to reduce pollutants in urban runoff consistent with the requirements of Order No. R8-2022-0008.

B. To assess the chemical, physical, and biological impacts of urban runoff on the receiving waters.

C. To characterize the water quality condition in receiving waters with respect to water quality standards; identify trends; and identify pollutants found in urban runoff that may cause or contribute to impairments or exceedances of the water quality standards of the receiving waters.

D. To develop useful information in support of an effective urban runoff management program to control the discharge of pollutants in urban runoff.

E. To quantify pollutant loads or concentrations in discharges from the MS4s to demonstrate compliance with water quality-based effluent limitations (WQBELs), inclusive of attainment of waste load allocations.

F. To identify and quantify other sources of pollutants to the maximum extent possible (e.g. atmospheric deposition, legacy pollutants, etc.) that may adversely affect the beneficial uses of the receiving waters.

G. To identify the sources of and to prohibit illicit connections/illegal discharges.

H. To identify those waters, which without additional action to control pollution from urban runoff, cannot reasonably be expected to attain or maintain applicable water quality standards.

I. To objectively evaluate the effectiveness of BMPs implemented according to the Permittees' related programs, including, to the extent possible, quantifying the reasonably achievable reductions of pollutants in discharges or in the receiving waters that are attributable to the BMP(s).

J. To evaluate and describe the costs and benefits of BMPs, implemented according to the Permittees' related programs.

K. To demonstrate the effectiveness of the full capture systems or the full capture equivalency systems designed to comply with the Trash Amendments of the Ocean Plan and the ISWEBE Plan.

III. WATER QUALITY MONITORING PLAN DEVELOPMENT

A. The Permittees must develop and implement an approved Water Quality Monitoring Plan (Plan) or revise the existing monitoring plans to satisfy the goals, requirements, and specifications described in this MRP and Order No. R8-2022-0008. To the extent practical, the Plan should be comprised of a single document, however, it may be composed of different components subject to the Permittees' discretion.

The Plan must be written in an instructive manner for the benefit of persons responsible for its implementation.

1. The initial draft or revised Plan must be submitted for approval to the Executive Officer within 6 months of the effective date of Order No. R8-2022-0008.

2. The responsible Permittees shall provide any information that is missing, or requested by the Executive Officer, by the date identified in the request.

3. The Executive Officer will provide a minimum public review period of 30-days prior to approving the Plan.

B. The Plan must include, at a minimum, objectives, descriptions of the locations for receiving and outfall monitoring, the sampling frequencies, the parameters to be analyzed, the sampling methods, analytical methods, reporting limits, and required reporting units.

C. The Plan shall establish measurement quality objectives, standard operating procedures for sample collection, sample analysis, data review and verification and other topics as needed. The Plan shall also include a decision tree for data use and qualifying data when measurement quality objectives are not achieved. Data that do not meet the measurement quality objectives established in the Plan shall be qualified with standardized data quality flags (e.g, CEDEN QA codes).

D. The Plan shall contain all the elements of a quality assurance project plan as outlined in Section 6.1.4 of the Water Quality Control Policy for Developing California's Clean Water Act Section 303(d) List to ensure that data of known quality and quantity are collected to satisfy the goals, requirements and specifications described in this MRP and Order No. R8-2022-0008.

E. The Plan must include a description of the processes used for reporting conclusions on the attainment of the WQBELs in Appendices 2 through 12 of Order No. R8-2022-0008 and the processes used to identify and report exceedances of applicable water quality standards. The description must include:

1. The statistical analyses that will be performed, the purpose of each analysis, the data sets and sub-sets that will be analyzed, and the time periods or thresholds at which each analysis will be performed.

2. The schedule of analyses must satisfy schedules specified in this MRP, monitoring plans established as part of TMDLs, and this Order.

3. The Plan must include the supporting rationale for the schedule.

F. Cycles of monitoring, analysis, and reporting for each of the WQBELs that are waste load allocations and for applicable water quality standards shall conform to the following:

1. A complete cycle must be as short as practicable, conform to applicable TMDL deadlines and assessment periods found in the Basin Plan and must not exceed 5 years.

2. A complete cycle should consider the availability of data and a reasonable period after which BMPs may affect water quality.

G. The Plan shall include a Data Management Section that provides at a minimum:

1. Details of the data lifecycle from sample collection to data submission.

2. The Water Board's databases to which the data will be submitted, and information needed to query and retrieve data from the databases.

3. A data submission schedule.

H. Quality Assurance Project Plan (QAPP) or monitoring plan documents for any joint monitoring programs shall be consistent with the Water Quality Monitoring Plan submitted for this approved MRP.

I. Until the draft Plan is approved, the Permittees must continue their existing monitoring program as described in the most recent Annual Progress Report. Changes to the monitoring are prohibited except with the approval of the Executive Officer.

J. The Permittees must evaluate the effectiveness of the Plan in meeting the requirements of this MRP and propose changes annually. Any proposed changes must be submitted by November 15th of each year following the approval of the Water Quality Monitoring Plan. The proposed changes to the Plan must be approved by the Executive Officer. If no changes are proposed, the Executive Officer must be notified so in writing by November 15th of each year.

K. Except for inconsequential grammatical or technical corrections, the Plan may be amended by the Permittees only with the approval of the Executive Officer.

L. The Permittees must fully implement the Plan and any subsequent changes as approved by the Executive Officer. The Executive Officer is authorized to approve the plan, subject to conditions.

M. The Executive Officer will allow a minimum of 30 days for public review and comment before approving a Plan or any proposed changes.

N. The Principal Permittees must post notice of the availability of the approved Plan on each County's public website or using other media acceptable to the Executive Officer. The posted Plan must be full, true, and accurate.

IV. GENERAL WATER QUALITY MONITORING REQUIREMENTS

A. Except for Priority Toxic Pollutants identified in the California Toxics Rule, all sample collection, handling, storage, and analysis must be completed in conformance with 40 CFR 136; with adopted guidance developed by the State Water Board pursuant to California Water Code Section 13383.5; or with other methods satisfactory to the Executive Officer.

B. All chemical, biological, and toxicity analyses shall be conducted at a State certified laboratory or other qualified laboratory.

C. Calculations for all limitations shall be performed using published and generally accepted methods.

D. The sampling method, practice, and analysis must minimize bias.

E. Field instruments used to test water quality parameters must be calibrated according to the manufacturers' instructions.

F. Water quality parameters that are tested using valid field instruments are not required to be analyzed by a laboratory.

G. Wet weather monitoring events must be separated by a minimum of 72 hours of dry weather (no precipitation) in accordance with 40 CFR 122.21(g)(7)(ii).

H. The Permittees must employ sample collection methods that support regional comparisons of data, unless site conditions make alternate methods necessary.

I. For each monitoring location and event, the Permittees must record observed conditions or circumstances that may influence monitoring results or affect conclusions made from the monitoring data.

J. Locations and frequencies of monitoring performed to determine achievement of the WQBELs in Appendices 2 through 12 of Order No. R8-2022-0008 must be consistent with the locations and frequencies specified in the relevant TMDL and approved TMDL monitoring plans.

K. Permittees must test for additional parameters that are known or suspected to contribute to the impairment of the beneficial uses of the receiving waters at the direction of the Executive Officer.

L. The Plan must include toxicity testing, which shall be evaluated using the USEPA's National Pollutant Discharge Elimination System Test of Significant Toxicity Implementation Document (EPA 833-R-10-003, 2010), Appendix A, Figure A-1, and Table A-1.

M. The Plan must include, at a minimum, all parameters enumerated for sediment monitoring in the Sediment Quality Provisions of the ISWEBE.

V. OUTFALL MONITORING REQUIREMENTS

A. The Plan must include representative monitoring of urban runoff at selected outfalls and/or alternative locations approved by the Executive Officer during wet and dry weather conditions.

B. Stream gauges, or equally effective methods, must be deployed during sampling events for the purpose of estimating loading of pollutants at each of the monitoring locations.

C. Permittees must document the date and duration of the storm event(s) sampled, rainfall estimates of the storm event which generated the sampled discharge, and the duration between the storm events sampled and the end of the previous measurable storm event.

VI. RECEIVING WATERS MONITORING REQUIREMENTS

The Plan must include monitoring in the receiving waters to which the outfalls, which are monitored according to Section V (above), discharge.

VII. BACTERIAL INDICATORS

If exceedances of WQBELs for indicator bacteria occur and a Permittee wishes to demonstrate that sources within the Permittees' jurisdiction or MS4 have not caused or contributed to the exceedance, the Permittee must use published and generally-accepted source-identification protocols approved as part of the Plan, or, if applicable, protocols established under California Water Code Section 13178.

VIII. BIOASSESSMENT MONITORING

A. Each Principal Permittee must conduct bioassessments within their counties to identify stressors of biological conditions and to enable the identification of specific actions to be taken to meet the Goals identified in Section II.

B. Bioassessment monitoring must be conducted in conformance with the Surface Water Ambient Monitoring Program (SWAMP)'s, Quality Assurance Program including the QAPrP, and applicable QAPPs and SOPs.

C. Stressors must be identified using USEPA Stressor Identification Guidance Document (2000), the web-based Causal Analysis/Diagnosis Decision Information System (CADDIS), or a published and generally accepted method acceptable to the Executive Officer.

D. In lieu of developing an independent bioassessment program, the Permittees may participate (through a memorandum of understanding and cooperative agreements) with the Stormwater Monitoring Coalition (SMC) in conducting bioassessment on a regional basis.

E. Bioassessment monitoring must be completed at the monitoring locations specified by the most recent SMC monitoring plan. The monitoring locations and parameters may be adjusted during the monitoring year according to recommendations from the SMC so that they are consistent with the SMC monitoring plan.

F. Each Principal Permittee must complete a minimum of one Causal Assessment during the term of Order No. R8-2022-0008 to identify the likely causes of the degraded biological conditions at one or more of the selected monitoring locations. Causal Assessments must be conducted according to guidance

acceptable to the Executive Officer or where appropriate, the USEPA's Causal Analysis/Diagnosis Decision Information System (CADDIS).

G. The results of the Causal Assessment must be submitted to the Executive Officer of the Santa Ana Water Board within 60-days of completion.

IX. ILLICIT DISCHARGE DETECTION AND ELIMINATION (IDDE)

A. The Plan must include monitoring to effectively detect illicit connections and illegal discharges.

B. The Permittees must use odor, color, clarity, unusual wildlife morbidity or mortality, sheen, staining, corrosion, unnatural deposits, and other subjective indicators to identify suspected illicit connections or illegal discharges.

C. The Permittees must initiate (or cause to be initiated) an investigation to identify the known or most likely source(s) of the suspected illicit connection or illegal discharges.

D. The source investigation must occur within three (3) business days of the Permittee becoming aware of a suspected illicit connection or illegal discharge, and in substantial conformance with a common set of written techniques and procedures developed by the Permittees as part of the IDDE program.

E. A source investigation may only be regarded as concluded after the cause(s) of the illicit discharge has been identified or additional monitoring fails to detect a subsequent exceedance of the same parameter(s) after 180 days. In the interim, the Permittee that is the local jurisdiction must put forth a good faith effort to identify the source(s) of a suspected illicit discharge or illicit connection.

X. DATA ANALYSES

A. All analyses must be in conformance with published and generally accepted methods unless an alternative method is accepted by the Executive Officer.

B. If the analysis of monitoring results is inconclusive or reveals opportunities for improvements to the monitoring plan, the Permittees must include recommendations to improve the effectiveness of the monitoring program in the Annual Progress Report.

C. All analyses must include an assessment of the reliability of its methods and conclusions. The assessment must be performed by or under the direction of qualified persons.

D. The Permittees must disclose areas of uncertainty in the analysis of monitoring data and related conclusions. The disclosure must be adequate to allow a reasonable independent assessment of the validity of the methods and conclusions. Areas of uncertainty include but are not limited to variance in

sample or population data; error in measurements, calculations or estimates; levels of confidence in the accuracy of values; and factors that are unmeasured or unmeasurable.

E. The status of the schedule of monitoring, analyses, and reporting and the results of the performed analyses must be reported in the Annual Progress Report.

XI. SPECIAL STUDIES

Permittees must provide documentation of any special studies to be performed in support of their stormwater program. The documentation must be provided via the Annual Progress Report or an alternate reporting mechanism acceptable to the Executive Officer. The documentation must include a schedule of proposed actions, a description of work products to be completed, and the achievement of milestones along with any changes or updates for any special studies being carried out.

XII. PROGRAM EFFECTIVENESS ASSESSMENTS AND REPORTING

A. Data transmittals on the results of water quality monitoring to the Santa Ana Water Board must be in the form for the purpose of providing a standard format for all data transfers and allow data to be universally shared and evaluated as part of various programs.

B. The Permittees must submit an Annual Progress Report to the Executive Officer of the Water Board no later than November 15th of each year. The Executive Officer may grant an extension of up to 60-days with cause upon the receipt of a written request from the Permittees. The Annual Progress Report must include the following:

1. A schedule of all actions required by Order No. R8-2022-0008 during the reporting period, any outstanding actions required by Order Nos. R8-2009-0030, R8-2010-0033, and R8-2010-0036, and the status of efforts to carry out the scheduled actions and satisfy the related requirements.

2. The status of achievement of critical and non-critical milestones and final deadlines described in Notices to prepare Watershed Management Plans and in approved Watershed Management Plans according to section XII of Order No. R8-2022-0008.

3. A summary of changes to an approved WMP.

4. The results of each Permittees' program effectiveness assessment. These results must be submitted by each Permittee to the Principal Permittee for submission to the Santa Ana Water Board.

5. The results of the Principal Permittee's overall evaluation of the results of the program effectiveness assessments which are of mutual interest to the Permittees.

6. The results of water quality monitoring; the results of scheduled analyses of the water quality monitoring data; and any related conclusions reached by the Permittees.

7. The results of water quality monitoring that may have occurred beyond the requirements of Order No. R8-2022-0008.

8. The status of special studies carried out by the Permittees and a schedule of future special studies needed to comply with this Order.

9. The status of each Permittees' efforts to reduce and/or eliminate the discharge of trash and solid waste.

10. The status of efforts to detect and mitigate SSOs (See Subsection IX.B.5. of Order No. R8-2022-0008).

11. The unified fiscal analysis (See Section III.F. of Order No. R8-2022-0008).

XIII. TRASH MONITORING

A. Track 1

Permittees that elect to comply with Track 1 as a compliance Track must demonstrate and report on an annual basis the following:

1. The type, number, and location of full capture system devices installed, operated and maintained by the Permittees or others in their respective jurisdictions during the previous year.

2. A map showing the location and drainage area served by each device or system of devices.

3. Assessment of the effectiveness of devices and the amount of trash captured compared to the previous year.

B. Track 2

Permittees that elect to comply with Track 2 of the Trash Provisions must demonstrate and report on an annual basis the following:

1. Mapped location, type, and number of devices, controls, or projects installed or used by the Permittees to comply with Order No. R8-2022-0008.

2. An Assessment of the effectiveness of the combination of devices, controls, or projects that have been implemented in terms of attaining full capture system equivalency.

3. The amount of Trash captured from the devices, controls, or projects compared to the previous year.

XIV. REPORTING SCHEDULE SUMMARY

Table below, summarizes the information that must be reported to the Executive Officer and their deadlines. Deliverables are in the order of appearance in Order No. R8-2022-0008. The Table is provided for the convenience of the reader and should not be used as a substitute for reviewing the contents of Order No. R8-2022-0008, this MRP, or the Fact Sheet. In the event of a conflict between the provisions and the Summary Table, the provisions shall prevail.

A. Deliverables with no formal nomenclature may be identified in a manner suitable to the Permittees, but they must be identified by a written statement of purpose, declaring which Provision(s) they are intended to comply with.

B. Deliverables that are submitted with the Annual Progress Report do not need to consist of separate documents; they may be incorporated into the Annual Progress Report, but they must be readily identifiable, denoted elements (e.g. separate chapters) and include a statement of purpose as described above.

C. Permittees must submit deliverables in an electronic format acceptable to the Executive Officer. The electronic documents must not be readily alterable. The documents must be searchable and viewable using widely available software.

D. Permittees shall submit the required information in accordance with the following schedule:

Table C.1: Reporting Schedule Summary Table

Deliverables	Source Provision(s)	Deadline
Report of Waste Discharge	Section I. Table 2 and Section II.D	180-days before expiration of this Order.
Legal authority assessment report	III.D	Reported as needed as part of Annual Progress Report.
Initial imminent threat notice	III.E.1.a	24 hours after the Permittees becoming aware.
Imminent threat report	III.E.1.b	5 business days after initial imminent threat notice.
Quarterly report	III.E.4	15 days of the end of each quarter of a calendar year.
Unified fiscal analysis	III.F	Reported as part of the Annual Progress Report
Draft Plans	XII.C	Varies, but generally triggered by water quality monitoring results and analyses. Due within 6 months of the Permittees becoming aware of an exceedance of water quality standards. If requested in writing by the Executive Officer, due as specified in the written request.
For WQBELs where related TMDL has an implementation plan	VII.C	Watershed Management Plan submitted consistent with the schedule specified in the TMDL Implementation Plan.
WQBELs not being achieved.	VII.C.1.c	Watershed Management Plan due 60 days of becoming aware of situation.
Create a WQMP database	VIII.C.11	6 months from Order effective date.
Review Categorizations of structural treatment control BMPs and their performance ratings.	VIII.F.3.a.iv	12 months from date of adoption.
Structural treatment control BMP waiver notice	VIII.H.e	30-days prior to Permittee's issuance of the waiver.
Update watershed maps	XII	Reported as part of Annual Progress Report.

Deliverables	Source Provision(s)	Deadline
Trash and solid waste BMP report	V.A.1	Reported as part of Annual Progress Report.
Trash and solid waste technology evaluation report	V.A.2	Reported as part of Annual Progress Report.
Submit Monitoring Reports	V.C.4	As part of the Annual Progress Report. Include GIS mapped locations and drainage area served for each of the Full Capture Systems, Multi-Benefit Projects, other Treatment Controls, and/or institutional Controls installed or utilized by the Permittee
Achieve Full Trash Capture	V.C.5	10 years from the adoption of this Order and prior to December 2, 2030, whichever date is sooner.
General audience survey	X.G	60 months from the date of adoption.
Provide an inventory of fixed facilities.	XIV.B.2	Annually in the Annual Progress Report starting 180 Days of the effective date of this Order.
Water Quality Monitoring Plan	XVI,.XII.Table 4, Att. C III.A.1 and Att. C III.H	6 months from date of adoption; proposed revisions due November 15th, each year
Annual Progress Report	XV. and Att. C XII.B.	Annually by November 15th of each year.
Program Effectiveness Assessment	XV	Reported as part of the Annual Progress Report
Causal Assessment	Att. C. XII	Within 60 days of completion

ORDERED BY:

Jayne Joy
Executive Officer

Date

Attachment E

Acronyms

Attachment E

ACRONYMS

APN – Assessor's parcel number

ASBS – Area of Special Biological Significance

BMP – Best Management Practice

CCR – California Code of Regulations (State Water Board regulations are in Title 23)

CERCLA – Comprehensive Environmental Response, Compensation, and Liability Act

CEQA – California Environmental Quality Act (Section 21000 et seq. of the California Public Resources Code).

CFR – Code of Federal Regulations

CFU – Colony Forming Units

CMP – Consolidated Program for Water Quality Monitoring, Riverside County Flood Control and Water Conservation District, October 2008.

CBRP – Comprehensive Bacteria Reduction Plan

CNRP – Comprehensive Nutrient Reduction Plan

CGP – Construction General Permit

CTR – California Toxics Rule

CWA – Federal Clean Water Act

CWC – California Water Code

CZARA – Coastal Zone Act Reauthorization Amendments

DAMP – Drainage Area Management Plan

DDT – Dichlorodiphenyltrichloroethane

DAR – Duly Authorized Representative

ESAs – Environmentally Sensitive Areas

EO – Executive Officer

GIS – Geographical Information System.

HCOC – Hydrologic Condition of Concern

IC/ID – Illicit Connections/Illegal Discharges

IDDE – Illicit Discharge Detection and Elimination

IGP – Industrial General Permit

ISWEBE – Inland Surface Waters, Enclosed Bays, and Estuaries of California

LA – Load Allocation

LID – Low Impact Development

LRP – Legally Responsible Person

MEP – Maximum Extent Practicable

MPN – Most Probable Number

MOU – Memorandum of Understanding

MRP – Monitoring and Reporting Program

MSAR – Middle Santa Ana River

MS4 – Municipal Separate Storm Sewer System

NPDES – National Pollutant Discharge Elimination System

NGOs – Non-governmental Organizations

NOI – Notice of Intent

NTR – National Toxics Rule

POTW – Publicly Owned Treatment Works

QAPP – Quality Assurance Project Plan

RCFC&WCD – Riverside County Flood Control and Water Conservation District

REC – Recreational Beneficial Use.

ROWD – Report of Waste Discharge

SAR – Santa Ana Region

SARA – Superfund Amendments and Reauthorization Act

SAWPA – Santa Ana Watershed Project Authority

SBCFCD – San Bernardino County Flood Control District

SCCWRP – Southern California Coastal Water Research Project

SIC – Standard Industrial Classification

SIP – State Implementation Plan

SMC – Southern California Monitoring Coalition

SMP – Scrap Metal Permit

SSO – Sanitary Sewer Overflow

SWAMP – Surface Water Ambient Monitoring Program

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USEPA – United States Environmental Protection Agency

WDID – Waste Discharge Identification

WDRs – Waste Discharge Requirements

WLAs – Waste Load Allocations

WMP – Watershed Management Plan

WQBELs – Water Quality-Based Effluent Limitations

WQMP – Water Quality Management Plan