



County of San Diego

RICHARD E. CROMPTON
DIRECTOR

DEPARTMENT OF PUBLIC WORKS

5510 OVERLAND AVE, SUITE 410
SAN DIEGO, CALIFORNIA 92123-1295
(858) 694-2212 FAX: (858) 694-3597
Web Site: www.sdcounty.ca.gov/dpw/

September 14, 2012

Ms. Laurie Walsh
9174 Sky Park Court, Suite 100
San Diego, CA 92123-4340

Dear Ms. Walsh:

SAN DIEGO COUNTY COPERMITTEE COMMENT SUBMITTAL ON THE ADMINISTRATIVE DRAFT MUNICIPAL SEPARATE STORM SEWER (MS4) PERMIT (TENTATIVE ORDER NO. R9-2012-0011)

Thank you for the opportunity to comment on the Administrative Draft Municipal Separate Storm Sewer (MS4) Permit that is proposed to cover portions of San Diego County, Orange County, and Riverside County (Tentative Order No. R9-2012-0011). The County of San Diego, as Principal Permittee, submits the attached comments on behalf of the 21 Copermittees subject to Regional Water Quality Control Board (Regional Board) Order 2007-0001, the existing San Diego County MS4 Permit. Our comments reflect a general consensus of the San Diego Copermittees. However, although we have strived to obtain unanimity in our proposed permit revisions, individual Copermittees do sometimes have differing opinions. These will be expressed in separate written comments provided by individual Copermittees.

The San Diego Copermittees commend the Regional Board for expanding public involvement in the development of a revised MS4 permit. We greatly appreciate that staff has provided an early draft for review as well as an opportunity to provide alternative language prior to the formal comment period. The focused meetings held between June and August of 2012 allowed the Copermittees and other stakeholders to share thoughts on how the permit can be structured to most effectively and efficiently improve water quality. We are confident that this will ultimately result in an improved permit for the region. The San Diego Copermittees' recommended edits to the Administrative Draft Permit are attached. The supporting rationale for each is provided

in a separate comment table. Most edits are in the form of redline-strikeout changes. However, as discussed during the focused meetings, we have in some cases developed entirely new language for certain permit provisions (Provision D – Water Quality Monitoring & Assessment, and major portions of Provision E – Jurisdictional Runoff Management Programs).

We understand that Regional Board staff will be considering input from a variety of parties, and that the recommendations provided here must be viewed in that overall context. We expect that additional explanation and discussion will be needed to fully understand the Copermitees' specific reasoning for many of these recommended edits. We look forward to continuing dialogue with Regional Board staff and stakeholders while revised Permit language is being drafted.

A few of the key areas of proposed input are highlighted below.

- 1. Provision A.** Modifications must be made to Provision A to ensure that implementation of the iterative process continues to serve as the basis for compliance with the MS4 Permit. In light of the recent 9th Circuit Court of Appeals opinion that Receiving Water Limitations are separately enforceable permit provisions, regardless of fulfillment of the iterative process, Copermitees face significant exposure to third party lawsuits in any instance that an MS4 is found to be "causing or contributing to a violation of water quality standards." Such exposure is unreasonable in cases where Copermitees are addressing prioritized issues through a Water Quality Improvement Plan that has been publically vetted and approved by the Regional Board Executive Officer. In recommending changes to Provision A, the San Diego Copermitees are requesting more certainty with regard to what constitutes permit compliance. Although we have provided recommended changes to Provision A language, we request Regional Board staff and counsel to actively participate in the pending statewide dialogue on this important issue. An initial workshop on Receiving Water Limitations language in MS4 permits has been scheduled for November 20, 2012, in Sacramento. The San Diego Copermitees recommend that any precedential language developed as part of this statewide process be incorporated into the proposed permit as soon as possible.
- 2. Adaptive Management.** Adaptive management provisions are critical to fostering ongoing program improvement during this and future permit cycles. Suggested edits have been made to clarify and simplify proposed adaptive management provisions. In particular, text has been added to the introductory portion of Provision E stating the conditions under which modifications to baseline jurisdictional requirements can be made. Other suggested language within Section B clarifies how such modifications can be made as part of a Water Quality Improvement Plan.

- 3. Numeric Targets and Action Levels.** Regional Board staff indicated during the focused meetings that numeric targets will be required as part of Water Quality Improvement Plans only to guide Copermittee activities, rather than as enforceable permit standards. Similarly, staff indicated that Non-Stormwater Action Levels (NALs) and Stormwater Action Levels (SALs) are intended as tools to support priority-setting and assessment; not as triggers for immediate follow-up action or enforceable permit standards. The Copermittees support this interpretation, and look forward to reviewing modified permit language that supports it.
- 4. Water Quality Monitoring.** The San Diego Copermittees were very encouraged to hear at the September 5th workshop that the revised permit will likely feature a monitoring program very similar to the one we proposed at the July 25th Focused Meeting. We very much appreciate staff's openness to considering a more strategic alternative. We believe that these changes will better complement the adaptive management approach supported by the Regional Board, Copermittees, and other stakeholders. As discussed, based on 15-20 years of monitoring experience, the Copermittees have an understanding of receiving water quality issues, and now want to focus on identifying and prioritizing sources and designing special studies to determine how to best implement solutions to address water quality problems.
- 5. Development Planning.** Revisions to the Development Planning section are proposed in a number of key areas to clarify these requirements and to allow Copermittees to more efficiently implement programs within their jurisdictions. Key items include: (1) the ability to exempt single family residential and street projects incorporating designated minimum BMPs from Priority Development Project processing requirements, (2) the addition of a second tier standard allowing equal pollutant removal to meet the retention standard prior to requiring mitigation, and (3) clarification of alternative compliance program timing and project types to improve the effectiveness of mitigation programs.
- 6. Existing Development.** Significant edits are proposed for this section. First, source inventory requirements are modified to strategically focus Copermittee inspection and oversight resources on the most important industrial, commercial, and municipal sources. Residential sources have also been given their own subsection. These changes maintain the increased emphasis on residential areas contained in the Administrative Draft, but provide the flexibility needed to more efficiently and effectively address them. Finally, Enforcement Response Plan requirements are simplified to eliminate redundancies and to allow Copermittees to best utilize existing approaches and documentation.

Ms. Walsh
September 14, 2012
Page 4

Again, the Copermittees thank the Regional Board for creating an open and transparent permit reissuance process and for encouraging public input on this early draft. Please contact Todd Snyder (858) 694-3482 if you have any questions on our suggested changes and to schedule meetings with Copermittee representatives to continue this important dialogue.

Sincerely,

A handwritten signature in blue ink, appearing to be "CID TESORO", written in a cursive style.

CID TESORO, LUEG Program Manager
Department of Public Works

CT:sm

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
Cover Page	1-2	Cover Page	<p>The Copermitees request clarification that waste discharge requirements are for their respective jurisdictions, in order to limit the entire permit to within each Copermitee’s jurisdictional boundaries and preempt any such clauses that would extend requirements beyond the Copermitee’s jurisdiction.</p>	<p>As shown in the attached revised Permit, revise the cover page as follows:</p> <p>“The San Diego County Copermitees in Table 1a are subject to waste discharge requirements <u>within their respective jurisdictions</u> set forth in this Order”</p> <p>This change is also requested for other sections of the Permit, including Provision A.</p> <p>Add the same language for Orange and Riverside County Copermitees.</p> <p>Also make this change to the cover page:</p> <p>This Order provides permit coverage for the Copermitee discharges described in Table 2. <u>“Copermitees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.26(a)(3)(vi).</u></p>
General Comment	Multiple	Multiple	<p>The term “prohibit” is broader than Clean Water Act requirements, and should be changed to “effectively prohibit.” CWA section 402(p) (3) (B) (ii) reads as follows:</p> <p style="padding-left: 40px;">(B) Municipal Discharge – Permits for discharges from municipal storm sewers –</p> <p style="padding-left: 80px;">(ii) shall include a requirement to</p>	<p>Revise language throughout the Permit to read as follows:</p> <p>Change “prohibit” to “effectively prohibit.”</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p style="text-align: center;"><u>effectively prohibit</u> non-stormwater discharges into the storm sewer; (<u>Emphasis</u> added)</p> <p>The provision does not provide any reference to exemptions. Rather the section may be read that a permit shall “effectively prohibit non-stormwater discharges” but may exempt certain discharges that are not significant sources of pollutants from the prohibition. The section does not require a <u>full</u> prohibition but rather an <u>effective</u> prohibition. The operative word is “effective”. The more precise and correct finding/provision should note that non-stormwater discharges are effectively prohibited (per 402 (p) (3) (B) (ii)). However discharges that are not significant sources of pollutants are exempted from the prohibition. In a practical sense the use of word “effective” provides flexibility to assess the impacts of relatively benign discharges such as landscape irrigation, air condition condensate, individual car washing, and non-emergency fire fighting flows or non-anthropogenic sources before instituting a prohibition.</p>	
General Comment	Multiple	Multiple	<p>Jurisdictional boundaries only partially define the geographic extent of areas where Copermittees can control, reduce, or prohibit stormwater pollutants. The other component that must be incorporated into the Permit language is</p>	<p>Clarify/Make distinction between different MS4 classifications:</p> <p>Throughout the Permit replace “MS4s” with “MS4s owned and operated by the Copermittee”.</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			ownership/operation. There can be multiple MS4s within a municipal boundary (e.g., Phase 2 MS4s), and some MS4 areas are neither owned nor operated by Copermittees, preventing them from controlling pollutants or flows. The Permit should clarify that Permit requirements apply to MS4s owned and operated by the Copermittees. Other MS4 permits in California, including the Los Angeles County MS4 permit, include the “owned and operated” distinction.	
I. FINDINGS				
8	2	Jurisdiction	40 CFR 131.10(a) is applicable to waters of the U.S. for beneficial use designations. Application to waters of the state, which the Regional Board has asserted includes the MS4, beyond beneficial use designations is too broad of an interpretation. It could mean that, for example, storm drain inlet drainage inserts are no longer allowed as they would be a TCBMP in a waters of the state. This finding also conflicts with other Provisions requiring TCBMPs.	<p>As shown in the attached revised Permit, revise the sentence as follows:</p> <p>Treatment control best management practices (BMPs) must not be constructed in waters of the U.S.</p>
9	2	Discharge Characteristics and Runoff Management	Discharges may contain waste or pollutants, but it should not be presumed that they necessarily always contain waste or pollutants.	<p>As shown in the attached revised Permit, revise the section to:</p> <p>“Discharges from the MS4s <u>may</u> contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the state. A discharge from an MS4 is a “discharge of pollutants from a point source” into waters of the U.S. as defined in the CWA. Storm water and non-storm water discharges from the MS4s <u>may</u> contain pollutants that cause or threaten to cause a</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				violation of surface water quality standards, as outlined in the Basin Plan.”
11	3	Discharge Characteristics and Runoff Management	This finding does not apply to developed area that is subject to SUSMP or HMP requirements. These requirements are specifically designed to reduce loads.	As shown in the attached revised Permit, revise the section to: “Therefore, runoff leaving a developed area <u>not subject to SUSMP or HMP requirements</u> contains greater pollutant loads and is significantly greater in runoff volume velocity, and peak flow rate than pre-development runoff from the same area.”
II. PROVISIONS				
A. Prohibitions and Limitations				
A	9	Prohibitions and Limitations	The goals of Provision A are multiple, and the Copermittees appreciate the Regional Board’s mission to “protect, preserve, enhance, and restore” water quality. For NPDES compliance purposes, however, a concise goal statement that is more central to MS4 permitting is requested. This goal statement provides context to several requested revisions to subsequent provisions. This goal statement is consistent with the intent of the permit program established by Section 402(p)(3)(B) of the Clean Water Act.	As shown in the attached revised Permit, revise the second sentence of the introductory paragraph of Provision A to: “The goal of this provision is to protect, preserve, enhance, and restore <u>the address the impacts of MS4 discharges so that such discharges do not impair</u> water quality and designated beneficial uses of waters of the state.”
A	9	Prohibitions and Limitations	The proposed Prohibitions and Limitation provisions may be construed as stand-alone provisions that could expose the Copermittees to state and federal enforcement actions, as well as to third party actions under the federal Clean Water Act’s citizen suit provisions.	As shown in the attached revised Permit, insert the following sentence at the end of the introductory paragraph of Provision A: “The process for determination of compliance with the Discharge Prohibitions (A.1), Receiving Water Limitations (A.2), and Effluent Limitations (A.3) is defined in Provision A.4.”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			Consistent with the recent 9 th Circuit Court of Appeal decision, each provision of the permit could be read separately so if provision A.2.a states that “the MS4 must not cause or contribute to a violations of a water quality standard” then that is the stand-alone provision, and the accompanying language found in A.4 (Compliance with Discharge Prohibitions) regarding compliance may be considered irrelevant. As such, a clear linkage between the compliance provisions and the prohibitions, receiving water limitations, and effluent limitations must be established.	In this manner, Provisions A.1, A.2, and A.3 are clearly linked to A.4, as opposed to being standalone provisions.
A.1.a	9	Prohibitions and Limitations	Provision A.1.a prohibits certain discharges into waters of the state. NPDES permits under the authority of the Clean Water Act regulate discharges into navigable (surface) waters. Expanding the scope of the Discharge Prohibitions to waters of the state would expand the scope of the Permit to protect groundwater. While the Board has legal authority to protect groundwater under Porter-Cologne, this exceeds federal requirements and would represent an unfunded mandate. Other MS4 permits in California, including the Los Angeles County MS4 permit, protect “waters of the United States.”	Throughout the Permit, change “waters of the state” to “waters of the United States”, where applicable. The change for Provision A.1.a is as follows: “...in receiving waters of the <u>United States</u> state are <u>effectively</u> prohibited.”
A.1.a	9	Prohibitions and Limitations	The Discharge Prohibitions do not establish a sufficient linkage with	As shown in the attached revised Permit:

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>approved compliance schedules for TMDLs that have been incorporated into the Basin Plan. TMDLs adopted within the region include a schedule to provide MS4 Permittees the time necessary to develop and implement a plan to achieve water quality standards in impaired waters. The compliance schedules for effective TMDLs have been incorporated into Attachment E and language is included in the RWLs provisions (A.2.c.) and the Effluent Limitations provisions (A.3.b.) pointing to the TMDL compliance schedules. However, by not including similar language within Discharge Prohibitions, these provisions could result in violations of the permit even though the implementation compliance dates have not yet passed. Without modification, the Discharge Prohibitions <i>conflict</i> with TMDL compliance schedules. Language should be included to clarify that in instances where a TMDL is in place, or a TMDL is being developed, the permittees shall achieve compliance with these provisions as outlined in Attachment E (Specific Provisions for Total Maximum Daily Loads).</p>	<p>Revise A.1.a and A.1.c by adding the following onto the end of the provision: “..., <u>unless the Copermitttee is addressing the discharges through Provision A.1.e or A.4 through the process set forth in Provision A.4.</u>”</p> <p>Add new part 1.e as follows: “For discharges associated with water body pollutant combinations addressed in a TMDL in Attachment E of this Order, the affected Copermitttees shall achieve compliance as outlined in Attachment E (Total Maximum Daily Load Provisions).</p>
A.1.d	9	Discharge Prohibitions	<p>The first sentence seems to conflict with the remainder of the paragraph and may create a conflict with the State Water Board’s policy if not clarified. The revised language clarifies authorized and</p>	<p>As shown in the attached revised Permit, revise A.1.d as follows: “Discharges from MS4s to ASBS are prohibited unless specifically authorized. Stormwater discharges from the City of</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>unauthorized discharges to the ASBS and limits the jurisdiction.</p> <p>Furthermore, this Discharge Prohibition covers MS4 impacts on ASBS, and thus the Receiving Water Limitation is unnecessary and conflicting.</p>	<p>San Diego's MS4 to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's MS4 to the Heisler Park ASBS are authorized under this Order subject to the Special Protections contained in Attachment B to State Water Board Resolution No. 2012-0012 applicable to these discharges, included in Attachment A to this Order. <u>All other discharges from MS4s to ASBS are prohibited, unless authorized by a subsequent order.</u></p> <p>In addition, A.2.c should be deleted.</p>
A.2.a, A.2.c	9-10	Receiving Water Limitations	<p>Without modification to the RWLs, they conflict with TMDL compliance schedules. Language should be included to clarify that in instances where a TMDL is in place, or a TMDL is being developed, the permittees shall achieve compliance with these provisions as outlined in Attachment E (Specific Provisions for Total Maximum Daily Loads).</p> <p>Without the requested change, the RWLs put the municipalities in immediate and ongoing non-compliance with the permit, as opposed to incorporating TMDL implementation schedules.</p>	<p>To provide a more direct tie in between Provision A.2.a, TMDL compliance schedules and A.4.a. the following language is proposed, as shown in the attached revised Permit.</p> <p>As shown in the attached revised Permit, replace 2.c with: “For receiving water limitations associated with a water body pollutant combination addressed in a TMDL in Attachment E of this Order, the Copermitees shall achieve compliance as outlined in Attachment E (Total Maximum Daily Load Provisions).”</p> <p>Provision A.2.a should also be revised to make clear that compliance with the Receiving Water Limitations is determined by compliance with the iterative process. However, the Copermitees have not proposed redline language at this time in anticipation of the State Board’s forthcoming November workshop on this important issue, which will presumably inform the development of state-wide language. The proposed language in Provision A.1.a provides an example of an approach for addressing this issue in Provision A.2.a. We request that Regional Board staff coordinate with the Copermitees to develop updated RWL language.</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
A.2.a.3.b	10	Receiving Water Limitations	The Sediment Quality Control Plan applies specifically to bays and estuaries and only and subtidal surficial sediments that have been deposited or emplaced seaward of the intertidal zone. Many Copermittees do not discharge to the intertidal zone. Text must be revised to clarify that this does not apply to inland MS4 discharges.	As shown in the attached revised Permit, revise A.2.a.3.b as follows: “Sediment Quality Control Plan which includes the following narrative objectives <u>for bays and estuaries:</u> ”
A.2.a.4.b.	10	Receiving Water Limitations	Footnote to A.2.a.4.b requires Copermittees to not cause or contribute to the more stringent of a water quality objective or a CTR criterion. Instances may exist where it has been determined that one or the other is more appropriate given site specific conditions or analysis (i.e., a TMDL has been established).	As shown in the attached revised Permit, attach the following to the end of footnote 3: “ <u>unless a previous regulatory action (i.e., TMDL) has specified otherwise.</u> ”
A.3	11	Effluent Limitations	Two types of effluent limitations, technology-based and water-quality based, are described in A.3, which should be reflected in the Permit.	As shown in the attached revised Permit, add subsections (a) and (b) for Technology-based and Water Quality-based Effluent Limitations, respectively.
A.3	11	Effluent Limitations	The effluent limitations and compliance with limitations should be more accurately linked to Attachment E; currently the language reads in a manner that is stand-alone from Attachment E. Instead, the language should reference Attachment E and the compliance determination language the Copermittees propose for inclusion therein. The language should say “as described in” Attachment E rather than “in.” In	As shown in the attached revised Permit, revised the WQBEL language in A.3 as follows to better reflect the role of Attachment E: “ <u>For a water body-pollutant combination addressed in a TMDL in Attachment E of this Order, Pollutants</u> pollutants in discharges from MS4s must be reduced to comply with any effluent limitations expressed as WQBELs required to meet the WLAs established for the <u>those TMDLs as described in Provision A.4</u> and Attachment E to this Order, pursuant to the applicable TMDL compliance schedules.”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			addition, compliance with effluent limitations should be linked to Provision A.4 as described in the next comment.	
A.3	11	Effluent Limitations	Similar to the WQBELs, the technology-based effluent limits should be linked to Provision A.4 as described in the comment below.	<p>As shown in the attached revised Permit, please add the following language to the end of the sentence that ends with “must be reduced to the MEP” in A.3.a:</p> <p>“through timely implementation of control measures and other actions as specified in Provisions B and E as described in Provision A.4.”</p>
A.4.a.1	11	Compliance with Discharge Prohibition and Receiving Water Limitations Compliance with Discharge Prohibitions, Receiving Water Limitations, <u>and Effluent Limitations</u> (Title Revision)	Provision A.4 describes the iterative process for MS4s to respond to exceedances of water quality standards that persist. However, the language in A.4 appears too broad and suggests the Copermittees should revise their WQIPs even in cases when (1) TMDL pollutant WLAs are exceeded but the TMDL compliance date has not yet occurred and (2) non-TMDL pollutant RWLs are exceeded and the pollutant is a WQIP priority but the BMP implementation schedule described in the WQIP has not yet been exhausted. In these two cases, the water quality standards exceedances are “expected” and no WQIP update is needed; instead the Copermittees should simply complete the implementation of actions identified in the WQIP.	<p>As shown in the attached revised Permit, insert the following language at the beginning of A.4.a.(1): “<u>For pollutants that are not in process of being addressed via specific, scheduled actions in the Water Quality Improvement Plan, ..</u>”</p> <p>Insert a new A.4.a.(2) as follows: “For pollutants in the process of being addressed via a specific, scheduled program in a Water Quality Improvement Plan, the Copermittee(s) shall continue to implement that program as described in the Water Quality Improvement Plan approved by the Regional Board.”</p>
A.4.a.1	11	Compliance with Discharge	Provision A.4.a.1 states that in the case of	As shown in the attached revised Permit, add an exception to Provision A.4.a.(1) to acknowledge forthcoming TMDLs, as follows:

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Prohibition and Receiving Water Limitations	persistent water quality standard exceedances, Copermittees shall update their WQIPs in their Annual Reports, “unless the San Diego Water Board directs an earlier submittal.” This provision should also consider the scenario where a TMDL is in the process of being developed. In this case, the Copermittees should update their numeric targets/goals to reflect the TMDL WLAs. However, until the TMDL is adopted, the Copermittees have no TMDL WLAs on which to base their numeric goals.	“Copermittees must submit the following updates to the Water Quality Improvement Plan required under Provision <u>B</u> as part of the Annual Report required under Provision <u>F.3.b</u> or <u>Water Quality Improvement Plan</u> update Provision <u>B.5.a</u> , unless the San Diego Water Board <u>either 1) directs an earlier submittal or 2) allows for the adoption of a forthcoming TMDL to establish wasteload allocations that will form the basis of revisions to the Water Quality Improvement Plan.</u> ”
A.4.a.1.b	11	Compliance with Discharge Prohibition and Receiving Water Limitations	Language clarification.	As shown in the attached revised Permit, revise wording, as follows: “ Additional w Water quality improvement strategies (e.g., BMPs, retrofitting projects, stream and/or habitat rehabilitation, restoration projects, etc.)”
A.4.a.2	12	Compliance with Discharge Prohibition and Receiving Water Limitations	Copermittees need more than 30 days to update and implement their plans. The San Diego Water Board should also provide a timeline for providing comments and requesting modifications. The timeline should be reasonable and consistent with the Copermittee implementation timeline. Most importantly, the revision process should be identical to the modification and submission process described in Provision B.	As shown in the attached revised Permit, revise section A.4.a.2., as follows: Replace the language in sub-bullets (e) and (f) with language that is identical to the language in Provision B, as follows: “As described in Provision B.6, Copermittees must submit requested modifications to the [insert either “Water Quality Improvement Plan” or “jurisdiction runoff management program”] either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b”
A.4.b	12	Compliance with		To match the language in Order 99-05, as shown in the

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Discharge Prohibition and Receiving Water Limitations Compliance with Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations (Title Revision)	Provision A.4.b notes that should water quality exceedances continue to occur even after the MS4 has engaged in the “iterative” process and is implementing enhanced water quality improvement strategies, the MS4 must still redo the “iterative” process unless the Regional Board decides otherwise. This approach is not consistent with other stormwater permits (e.g., the recent Caltrans permit) in which the Copermittee does not have to reinstitute the iterative process unless directed to do so by the Regional Board. This distinction is important, as the WQIP process will be underway throughout the course of the Permit, and being required to “re-iterate” when a process is already underway to address exceedances is unreasonable.	<p>attached Revised, replace A.4.b with the following language:</p> <p>“So long as the Copermittees have complied with the procedures set forth above and are implementing the revised Water Quality Improvement Plans, the Copermittees do not have to repeat the same procedure for continuing or recurring exceedances of the same discharge prohibitions, effluent limitations, and receiving water limitations unless directed to by the San Diego Water Board.”</p>
A.4.c	12	Compliance with Discharge Prohibition and Receiving Water Limitations Compliance with Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations (Title Revision)	The Copermittees envision WQIPs as the foundation for a BMP-based compliance approach for the Discharge Prohibitions and RWLs. However, the language in the Provision A does not clearly link compliance with the iterative process set forth in the WQIPs. In essence, the language suggests that even if Copermittees expend significant resources to develop and fully implement WQIPs that are progressing towards attainment of water quality standards, they may still be found to be out of compliance for single exceedances.	<p>As shown in the attached revised Permit, modify the opening paragraph to A.4 to reflect the 99-05 order, using the WQIP in place of the SWMP, as follows:</p> <ol style="list-style-type: none"> 1. Change the title of the section and first sentence in A.4 to also include effluent limitations (A.3) 2. Add the following language to the end of the paragraph: <p>“The Water Quality Improvement Plans described in Provision B shall be designed to achieve compliance with the discharge prohibitions, receiving water limitations, and effluent limitations. Copermittees shall be considered in compliance with A.1, A.2 and A.3 unless the Regional Board has denied approval of a Water Quality Improvement Plan or subsequent update as described in</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>The iterative process is a fundamental aspect of MS4 programs, as envisioned by State Water Board Order 99-05 and later reconfirmed in Order WQ 2001-15 (BIA Order), and is the mechanism by which MS4 Permittees should <u>demonstrate</u> compliance (i.e., implementation of the iterative process equals compliance). The WQIPs now provide a mechanism to “raise the bar” with regards to the detail and quantitative analyses used to identify pollutant sources, implement BMPs to address those sources, and increase the number or size of BMPs until water quality standards are attained.</p> <p>However, as Provision A.4 is written, the envisioned strategic compliance process falls short, and the WQIPs are simply documents that do not appear to have a meaningful linkage to MS4 compliance. An unintended but potentially significant consequence of this compliance uncertainty is that Copermittees will be faced with increased difficulty successfully securing program funding because even substantial increases in funding would not eliminate the potential for non-compliance.</p>	<p>Provision B and F.1.</p> <p>In addition to the above suggested changes, these changes must be coupled with changes to the Permit which define a Regional Board approval review and process for initial plan submittals and updates. These Regional Board approvals, when provided, will define a clear mechanism for compliance with Provision A.1 and A.3.</p> <p>Note that compliance with Provision A.2 could also follow the same determination process. We request that Regional Board staff coordinate with the Copermittees to develop updated RWL language. However, the Copermittees have not proposed redline language at this time in anticipation of the State Board’s forthcoming November workshop on this important issue, which will presumably inform the development of state-wide language. The proposed language in Provision A.4 could easily be expanded to also reference Provision A.2 (RWLs). We request that Regional Board staff coordinate with the Copermittees to develop updated RWL language.</p>
B. Water Quality Improvement Plans				
B	13	Water Quality	Similar to comments regarding the goal	As shown in the attached revised Permit, revise the second

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Improvement Plans	statement in Provision A, the Copermittees request a revision to the WQIP goal statement. A concise goal statement that is more central to MS4 permitting is requested. This goal statement provides context to several requested revisions to subsequent provisions.	sentence of the first paragraph of Provision B as follows: “The goal of the Water Quality Improvement Plan is to <u>1) effectively prohibit non-storm water discharges into the MS4s, 2) reduce pollutants in storm water discharges from the MS4s to the MEP, and 3) support the attainment and</u> reasonable protection, preservation, <u>and</u> enhancement and restoration of water quality and designated beneficial uses of waters of the state.”
B	13	Water Quality Improvement Plans	Similarly, the Copermittees request revisions to the required/critical elements of the WQIPs. These elements reflect several requested revisions to the WQIP process (e.g., B.2), described below.	As shown in the attached revised Permit, revise the second paragraph of Provision B as follows: The Copermittees must develop Water Quality Improvement Plans <u>for each Watershed Management Area</u> that 1) prioritize water quality issues conditions resulting from the Copermittee’s MS4 discharges to and from the MS4s within each Watershed Management Area, 2) identify MS4 pollutant sources and other stressors associated with these the water quality priorities, 3) define numeric targets goals and schedules to achieve improvement of address water quality priorities, 4) describe water quality improvement strategies to achieve numeric targets goals, and 5) develop and execute a coordinated monitoring and assessment program to facilitate adaptive management of the Water Quality Improvement Plans and determine progress towards achieving improved water quality those goals.
B	13	Water Quality Improvement Plans	The Copermittees envision the WQIPs as the foundation for a BMP-based compliance approach for the Discharge Prohibitions and RWLs. However, language needs to be added to Provision B to provide a clear linkage between Provision A and B.	As shown in the attached revised Permit, insert the following into the first paragraph of Provision B: Therefore, implementation of the WQIPs also provides the basis for complying with Provisions A.1 and A.3, as described in Provision A.4.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			Note that Provision A.2 is excluded to acknowledge the State’s November workshop regarding Receiving Water Limitations. However, it seems logical that RWLs would be included, and we request that Regional Board staff coordinate with the Copermittees to develop updated RWL language.	
B	13	Water Quality Improvement Plans	It is unclear whether the 12-month timeline identified in the third paragraph of Provision B applies to the development of the WQIP or the implementation of the BMPs identified in the WQIP. It would appear that the provision requires that the MS4s must <i>implement</i> all the requirements (including BMPs) of Provision B within 12 months of permit adoption.	<p>As shown in the attached revised Permit, revise the last introductory paragraph of Provision B, as follows:</p> <p>The Copermittees must submit Water Quality Improvement Plans for public review and Regional Board Executive Officer review and approval per the schedule outline in Provision B.</p>
B	13	Water Quality Improvement Plans	The development of a WQIP will require at a minimum of 18 months and BMP implementation will likely be staggered over a certain time frame. Once the permit is adopted, Copermittees will begin the planning process. However, Copermittees must have at least one full fiscal year budgeting cycle within which to seek additional funding to implement the WQIP from our governing bodies (i.e., City councils and County supervisors). Thus the more reasonable time schedule is to require the	<p>See the proposed changes to the last paragraph of the opening section of Provision B in the attached revised Permit.</p> <p>Also see the new Section B.6, which combines the submittal, modification, and implementation requirements.</p> <ol style="list-style-type: none"> 1. The complete WQIPs and corresponding jurisdiction measures are submitted within 18 months. (B.6.a) 2. WQIP implementation is initiated at the beginning of the next fiscal year. (B.6.a) 3. JRMPs are modified in accordance with WQIP modifications (B.6.b)

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			development of the WQIP within 18 months and the implementations of the BMPs to occur consistent with the final approved WQIP.	
B.1	13-14	Watershed Management Areas	Several changes to Table B-1 are requested. The Copermittees request addition of a tenth WMA, for Mission Bay which is entirely in the jurisdiction of the City of San Diego. Furthermore, the City of Poway is not a responsible Copermittee for San Diego River. City of Escondido is not a responsible Copermittee for San Luis Rey River. Finally, the waterbody Loma Alta Slough should be listed under the Carlsbad WMA. Penasquitos WMA includes Miramar Reservoir HA and Poway HA.	<p>Make the following changes to Table B-1, per the attached revised Permit:</p> <ol style="list-style-type: none"> 1. Add a WMA for Mission Bay which includes Scripps HA, Miramar HA, and Tecolote HA. 2. Remove Penasquitos HA and Mission Bay HA from Penasquitos WMA and insert Miramar Reservoir HA and Poway HA. 3. Remove City of Poway from San Diego River 4. Remove City of Escondido from San Luis Rey River. 5. Add the waterbody “Loma Alta Slough” to the Carlsbad WMA.
B.2	15-18	Identification of Water Quality Priorities	The Copermittees have fully embraced the concept of WQIPs and appreciate the Regional Board’s approach to identifying priorities, setting goals, and developing a strategy and schedule to meet those goals. The Copermittees have identified an alternative to Provision B.2, which follows the general approach proposed by the Regional Board but increases focus on addressing MS4 impacts.	<p>The following changes are requested, as detailed in the attached revised Permit section B and further described in subsequent comments:</p> <ol style="list-style-type: none"> 1. Revisions are proposed to section B.2.a to refine the purpose and add considerations for assessing receiving water conditions. 2. A new section B.2.b is proposed to provide a linkage between receiving water conditions and corresponding impacts from the MS4s (versus other sources). 3. Section B.2.c is expanded to describe the considerations when identifying priority receiving water conditions. 4. Section B.2.d is refined to focus on MS4 impacts and pollutant generating activities. 5. Section B.2.e is refined to elucidate the meaning of numeric goals and their implication for MS4 compliance.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				6. The schedule component of B.2.e is moved to a new section B.6 to improve organization of WQIP concepts.
B.2.a	15-16	Assessment of Receiving Water Conditions	The assessment of receiving water conditions is a critical first step to WQIP development. Changes to purpose of this step are proposed, to focus on water quality issues related to MS4s. Further, data quality and relevance are critical to this assessment, and requirement to consider “all available data” should be refined to address accessibility and quality control issues. Finally, whether a receiving water condition can be achieved and maintained should be assessed.	<p>As shown in the attached revised Permit, the following changes/revisions were made in Permit section B.2.a:</p> <p>Revise the opening paragraph: “The Copermitees must consider the following, at a minimum, to support the identification of water quality priorities based on the impacts of MS4 discharges on receiving water beneficial uses:”</p> <p>Under part (7): replace “All available data” with “Available, relevant, and appropriately collected...data meeting appropriate QA/QC standards”</p> <p>Insert a new part (10): “The potential for long-term achievement and maintenance of beneficial use attainment in the Watershed Management Area.”</p>
Language Addition B.2.b	16	Assessment of MS4 Discharge Quality and Impacts	For WQIP development, it is critical to differentiate between receiving water conditions and MS4 discharges and impacts. Many receiving water conditions are not driven by MS4 impacts, and Copermitees can have the greatest effect on receiving water quality by focusing on reduction of pollutants discharged by their MS4s.	<p>As shown in the attached revised Permit, add a new section B.2.b titled “Assessment of MS4 Discharge Quality and Impacts”, as follows:</p> <p>“To support the identification of priorities based on the impacts of MS4 discharges on receiving water beneficial uses, the Copermitees must review appropriately collected MS4 discharge quality data and consider the extent to which MS4s cause or contribute to the adverse impacts to receiving water beneficial uses identified in B.2.a. Considerations include:</p> <ol style="list-style-type: none"> (1) Locations of the Copermitees’ MS4 discharges with respect to receiving waters; (2) MS4 discharge quality results relevant to impacts in receiving waters and action levels, including the temporal and geographic variation of the results:

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				(3) The requirements of Provisions A.1 and A.3.; and (4) Whether MS4 discharge quality is sufficiently well known or other information is available to assess whether MS4 discharges are causing or contributing to specific receiving water conditions, or whether additional data need to be collected through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan.”
B.2.b	16-17	Identify Priority Pollutants and Receiving Water Conditions	We appreciate the Regional Board’s approach to identifying priorities for receiving water conditions. Our proposed revisions to the Permit add several elements that should be included by Copermittees when identifying priority receiving water conditions. Following the Regional Board’s approach, “priorities” are also differentiated from “highest priorities.” Note the proposed revision to the title of the section, which better reflects the envisioned effort/outcome.	Move Provision B.2.b down to B.2.c. As shown in the attached revised Permit, make two changes: #1: Revise the last paragraph of B.2.c as follows: The Copermittees must identify the highest water quality priorities to be addressed by the Water Quality Improvement Plan, <u>and describe the reasoning for selecting a subset of receiving water conditions as the highest priority(ies).</u> #2: Rename section to “Identification of Priority Receiving Water Conditions” and add the following to the end of the Section B.2., as follows: The Water Quality Improvement Plans shall describe the following for the highest priority receiving water condition(s): (1) The beneficial use(s) and pollutant(s) associated with the priority receiving water condition(s); (2) The geographic extent of the priority receiving water condition(s) within the WMA, if known; (3) The Copermittees with MS4s that contribute discharges to the priority water receiving condition(s); (4) The temporal extent of the priority receiving condition(s) (i.e., dry weather and/or wet weather); and

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				(5) Whether receiving waters have been monitored sufficiently to adequately characterize the priority receiving condition(s), including a consideration of spatial and temporal variation”
B.2.c	16-17	Pollutant Source and/or Stressor Identification	<p>The success of WQIPs will hinge on the ability of MS4s to identify and abate sources of pollutants within the MS4s. The pollutant source identification process proposed by the Regional Board is too broad and inhibits the Copermittees from focusing on the sources they are most able to control. In addition, some pollutants are poorly understood and need to be further investigated to allow for design of pollutant control strategies [new sub-bullet d.(4).(5)]. The proposed revisions to the Source ID section are intended to effectively focus the WQIP prioritization process.</p>	<p>As shown in the attached revised Permit, rename section to “MS4 Pollutant Source Identification” and revise the section, as follows:</p> <p>See the changes proposed in the attached revised Permit, which focuses the Source ID section on MS4 sources and impacts. The new section B.2.d follows:</p> <p>“The Copermittees must identify <u>and prioritize</u> known and suspected storm water and non-storm water pollutant sources within the MS4 associated with the highest priority receiving water conditions identified under B.2.c. The identification of known and suspected sources of the highest water quality priorities as identified for Provision B.2.c shall consider the following :</p> <ol style="list-style-type: none"> (1) Land uses and their potential contribution to the highest priority receiving water conditions; (2) Pollutant generating facilities, areas, and/or activities within the Watershed Management Area;: (3) Locations of the Copermittees’ MS4s outfalls. (4) Review of available data, including: <ol style="list-style-type: none"> (a) Findings from the Copermittees’ illicit discharge detection and elimination programs, (b) Findings from the Copermittees’ MS4 outfall monitoring, (c) Other available, relevant, and appropriately-collected data, information, or studies related to

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				<p style="text-align: center;">pollutant sources and pollutant-generating activities that contribute to the highest priority receiving water conditions identified in Provision B.2.</p> <p>(5) Whether MS4 sources are sufficiently well known to design an effective, directed control strategy, or whether additional source/stressor identification needs to be conducted through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan to identify and prioritize sources/stressors within the watershed.”</p>
B.2.d	17-18	Numeric Targets and Schedules	<p>We appreciate the Board staff efforts to allow the MS4s to prioritize their water quality issues and to develop a plan to address these issues. However, the terminology in Provision B.2.d regarding interim and final targets are terms used in TMDL program and their use here confuses the issue. In fact, Provision 2.d (3)(e) clearly ties the numeric “targets” with a TMDL. The WQIP should identify interim and final numeric “goals” to keep the distinction clear between a TMDL and a WQIP. It is entirely possible that the interim goal may in fact be the same as an interim TMDL target but not necessarily.</p>	<p>Replace “numeric target” with “numeric goal” throughout Provision B.</p>
B.2.d	17-18	Numeric Targets and Schedules	<p>It will be critical to quantify the expected outcomes of WQIP implementation efforts, and numeric goals serve to elucidate those expected outcomes. Based on the proposed revisions to the</p>	<p>As shown in attached revised Permit, revise section B.2.e.(1)-(2), as follows: The Copermittees must develop and incorporate interim and final numeric goals into the Water Quality Improvement Plans. Numeric goals and schedules are intended to support Water</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>WQIP goals and elements, revisions to the description of the purpose of numeric goals are also proposed.</p> <p>Furthermore the notation of “target” implies a compliance effluent limit and thereby subject to enforcement action, versus goals set by the Copermittees that do not trigger any enforcement action by themselves.</p>	<p>Quality Improvement Plan development and to measure progress towards addressing the highest priority receiving water conditions identified under B.2.b. Numeric goals are not enforceable compliance standards, effluent limitations, or receiving water limitations. When establishing numeric goals and corresponding schedules, the Copermittees must consider the following:</p> <ol style="list-style-type: none"> (1) Final numeric goals must be based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges for the highest priority receiving water conditions which will be capable of demonstrating progress toward the achievement of the restoration and/or protection of water quality standards in receiving waters; and (2) Interim numeric goals must be based on measureable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric goals in the receiving waters and/or MS4 discharges. <p>Footnote 7: “Interim and final numeric goals may take a variety of forms such as TMDL targets, TMDL wasteload allocations, TMDL based WQBELs incorporated in Attachment E of this Order, action levels, pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric goals are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators. To the extent that a goal is not based on an enforceable regulatory mechanism (i.e., TMDL, WLA), WQIP goals and schedules may be revised through the iterative process. Numeric goals are not subject to enforcement or non-compliance actions under this Order.”</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
B.3	18-19	Water Quality Improvement Strategies and Schedules	<p>The current version of B.3 requires that the MS4s have <u>all</u> of the following water quality improvement strategies in their WQIP (sub-bullets B.3.a.1 through B.3.a.4): structural and non-structural BMPs, retrofit projects, stream and/or habitat rehabilitation, and other water quality improvements associated with eliminating non-stormwater discharges to the MS4s. This may be an appropriate menu of actions to choose from, but pending the water quality issues and the watershed, the WQIP strategies may include all or only one of the strategies listed.</p>	<p>As shown in the revised Permit, revise section B.3, as follows:</p> <p>See the changes proposed in the attached revised Permit section B.3. Sub-bullets B.3.a.1 through a.4 are revised and condensed into two sub-bullets, one for JRMP activities and one for other structural and non-structural BMPs. The two sub-bullets (1) and (2) compose the universe of BMPs that would be implemented by the Copermittees to meet the WQIP numeric goals.</p> <p>a. WATER QUALITY IMPROVEMENT STRATEGIES</p> <p>The water quality improvement strategies must prioritize, based on their likely effectiveness and efficiency, and implement measures, as appropriate, to effectively prohibit non-storm water discharges into its MS4, reduce pollutants in storm water discharges from its MS4 to the MEP, and achieve the interim and final numeric goals in accordance with the schedules in Provision B.2.e. Measures include:</p> <ul style="list-style-type: none"> (1) Copermittee-selected activities identified in Provision E, either as described in the jurisdictional runoff management programs or as modified with justification, that will address priority receiving water conditions; and (2) Additional structural and/or non-structural BMPs, as selected by the Copermittee, that are designed to achieve the interim and final numeric goals identified in Provision B.2.e.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
B.3.b	19	Implementation Schedules	The requirement that “Final dates for achieving final numeric targets must not extend more than 10 years...” may be broadly misinterpreted as currently written with major implications. Based on conversations with Regional Board staff, it is understood that goals can take a number of forms and the “10 year” requirement is not intended as a requirement to attain all Basin Plan water quality standards within 10 years. However, to ensure this requirement is not misinterpreted by third parties, language should be added to make this clarification.	As shown in the attached revised Permit, add a footnote to sub-bullet (5), as follows: “Achievement of final numeric goals within 10 years represents progress towards attainment of water quality standards, but is not a requirement to fully attain all applicable water quality standards or all priority receiving water conditions within 10 years.”
B.4	19-20	Water Quality Improvement Monitoring and Assessment	<p>Monitoring and assessment will be a critical component of the WQIP process. The vision for WQIP monitoring and assessment is reflected in the proposed revised language for Permit section B.4. A major aspect of this vision is that monitoring requirements in Provision D will be fully integrated into the WQIPs and modified as the WQIPs evolve.</p> <p>The proposed language clarifies the Copermittee’s vision for purpose and components of WQIP monitoring and assessment. The requested linkage with Provision D is highlighted through the proposed revision.</p>	<p>As shown in the attached revised Permit revise section B.4, as follows:</p> <p>The Copermittees in each Watershed Management Area must develop an integrated Water Quality Improvement Plan Monitoring and Assessment Program that assesses: 1) progress toward achieving the numeric goals and schedules, 2) progress toward addressing the highest priority receiving water conditions for each Watershed Management Area, and 3) each Copermittee’s overall efforts implementing the requirements of Provision B¹⁰. The water quality improvement monitoring and assessment program must include the monitoring and assessment requirements of Provision <u>D</u>, which may be modified for consistency with the priority receiving water conditions of each Watershed Management Area and associated Copermittees. For Watershed Management Areas with applicable TMDLs, the water quality monitoring and assessment program must incorporate the specific monitoring and assessment requirements of Attachment E. For Watershed Management Areas with any ASBS, the water</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012 (see Attachment A).
B.5	20-21	Adaptive Management Process	<p>The WQIPs provide an opportunity to synchronize water quality improvement strategies (e.g. TMDL implementation) and jurisdictional runoff management programs. The Adaptive Management section B.5 proposed by the Regional Board has two components: WQIP adaptive management and JRMP adaptive management.</p> <p>With the proposed expanded scope of the WQIPs proposed by the Copermittees, the two components of the adaptive management process are not WQIP and JRMP, instead the components are (1) Priority Receiving Water Conditions and Numeric Goals and (2) Water Quality Improvement Strategies and Schedules. The proposed revisions to section B.5 reflect the Copermittee’s vision for WQIP implementation.</p> <p>Most of the components of the adaptive management process proposed by the Regional Board (sub-bullets B.5.a.1.a thru h and B.5.b.1.a thru e) are included. The proposed language adds clarification</p>	<p>As shown in the attached revised Permit revise section B.5, as follows:</p> <p>The Copermittees in each Watershed Management Area must implement the iterative process, adapting the Water Quality Improvement Plan, jurisdictional runoff management programs and monitoring and assessment programs, as necessary, to become more effective and meet the requirements of Provisions A, and shall consider the following:</p> <p>a. PRIORITY RECEIVING WATER CONDITIONS AND NUMERIC GOALS</p> <p>The priority receiving water conditions and numeric goals, developed pursuant to B.2.c. and B.2.e respectively, shall guide jurisdictional implementation efforts for the duration of this Order. Recommendations for changes to priority receiving water conditions and numeric goals shall be provided in the Report of Waste Discharge and shall consider the following:</p> <ol style="list-style-type: none"> (1) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan; (2) Progress toward achieving interim and final numeric goals in receiving waters and/or MS4 discharges for the highest water quality priorities

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>on the purpose of the adaptive management process and re-organizes into two alternative management categories: (1) Priority Receiving Water Conditions and Numeric Goals and (2) Water Quality Improvement Strategies and Schedules.</p> <p>Note that these two management categories are adapted on different timelines:</p> <ul style="list-style-type: none"> • Priority Receiving Water Conditions and Numeric Goals would be adapted, at a minimum, on a frequency that corresponds to Permit cycles (every 5 years). In this manner the ROWD for future permits is supported by the WQIP process. It is <u>not</u> expected that priority receiving water conditions and numeric goals would vary on a shorter frequency, and thus resources for adaptive management should be focused on the strategies/BMPs used to <i>achieve</i> the numeric goals. • Water Quality Improvement Strategies and Schedules would be adapted annually, allowing modification to the JRMP elements, structural BMPs, and non-structural BMPs for achieving numeric goals. 	<p>in the Watershed Management Area</p> <ul style="list-style-type: none"> (3) New scientific information or new or updated policies or regulations that affect identified numeric goals including revised water quality objectives or TMDLs; (4) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality problems and implementation measures to address the highest priority receiving water conditions; (5) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions implemented by the Copermittees; (6) The factors listed in Provision B.2.a.(1)-(10); (7) San Diego Water Board recommendations; and (8) Recommendations for modifications solicited through a public participation process. <p>b. WATER QUALITY IMPROVEMENT STRATEGIES AND SCHEDULES</p> <p>The water quality improvement strategies and schedules required pursuant to B.3 and B.4 shall be adapted as new information becomes available to inform more effective and efficient means of achieving the numeric goals established in B.2.e. Copermittees shall consider adaptation to jurisdictional programs and monitoring and assessment strategies and schedules at least</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>Finally, to improve organization, it is proposed that the requirements regarding WQIP and JRMP modification and submittals (sub-bullets B.5.a.2 thru 3 and B.5.b.2 thru 3) be moved to a new section B.6.</p>	<p>annually considering the following when applicable:</p> <ol style="list-style-type: none"> (1) Changes to priority receiving water conditions and numeric goals based on recommendations from B.5.a.; (2) Measurable or demonstrable reductions of non-storm water discharges to each Copermittée’s MS4; (3) Measurable or demonstrable reductions of pollutants in storm water discharges from each Copermittée’s MS4 to the MEP; (4) Information on the MS4 sources and/or pollutant-generating activities determined to be most significantly contributing to priority receiving water conditions; (5) Efficiency in implementing the Water Quality Improvement Plan; (6) San Diego Water Board recommendations; and (7) Recommendations for modifications solicited through a public participation process.
B.6	21	Water Quality Improvement Plan Implementation	<p>The development of a WQIP will require at a minimum of 18 months and BMP implementation will likely be staggered over a certain time frame. Once the permit is adopted, Copermittées will begin the planning process. However, Copermittées must have at least one full</p>	<p>As shown in the attached revised Permit revise section B.6, as follows:</p> <p>6. Water Quality Improvement Plan Submittal, Implementation, and Modifications</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>fiscal year budgeting cycle within which to seek additional funding to implement the WQIP from our governing bodies (i.e., City councils and County supervisors). Thus the more reasonable time schedule is to require the development of the WQIP within 18 months and the implementations of the BMPs to occur consistent with the final approved WQIP.</p> <p>Furthermore, adaptive management submittals (i.e., WQIP, JRMP and monitoring modifications) and modifications should be specified under Provision F. In this manner, submittal requirements will be organized and easier for Permittees to follow. As such, the submittal requirements that were previously described under section B.5.a.2 thru 3 and section B.5.b.2 thru 3 were modified and moved to Provision F.</p>	<p>Requirements for Water Quality Improvement Plan submittals and modifications are described in Provision F. Requirements for corresponding modifications to the jurisdictional runoff management programs and monitoring and assessment program are also described in Provision F.</p> <p>Copermittees must commence with implementation of the Water Quality Improvement Plan no later than the fiscal year (July 1) following San Diego Water Board approval of the Water Quality Improvement Plan.</p>
C. Action Levels				
C. (Intro)	22	Action Levels	<p>The Draft Order in Provision B states that the goal of the WQIP is to identify the highest water quality priorities within a watershed and implement strategies to achieve improvements in the quality of discharge and receiving waters. Furthermore in Provision B.2.d the Permittees are required to develop and</p>	<p>As shown in the attached revised Permit, revise introductory paragraphs of section C, as follows:</p> <p>“The purpose of this provision is for the Copermittees to incorporate numeric non-storm water and storm water action levels in the Water Quality Improvement Plans. The action levels shall be used to guide the following program planning efforts and measure progress towards attaining the reasonable protection,</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>use <i>interim and final numeric targets/goals</i> to measure progress towards the protection/enhancement of the receiving waters and beneficial uses. The choice of the target/goals of the watershed may be biological, chemical, or physical based and may include multiple criteria and/or indicators.</p> <p>The permit should provide a clear linkage between Provision B and Provision C and state that the WQIP should guide the customization of the NALs/SALs to meet the highest water quality priorities in a given watershed and that NALs/SALs will be used to assist Copermittees in reaching the goals specified in the WQIP. The introduction to Provision C indicates that the <i>action levels</i> (NALs and/or SALs) will be incorporated into the WQIPs (B.2.d) and used to:</p> <ul style="list-style-type: none"> a) Measure progress towards the protection/ enhancement of the receiving waters and beneficial uses (B.4) ; b) Direct and focus the JRMP implementation efforts for addressing MS4 discharges (D.4.a); and c) Detect and eliminate non-stormwater and illicit discharges to the MS4 (E.2) <p>Although action levels will be used for several different purposes, the action</p>	<p>preservation, and enhancement of water quality and designated beneficial uses of waters of the state:</p> <ul style="list-style-type: none"> 1) Support development and prioritization of water quality improvement strategies through the Water Quality Improvement Plans. Discharge data above action levels can be evaluated using a statistical approach considering the frequency, magnitude, and loading of discharges to the receiving waters to support development of actions and prioritization of their implementation. 2) Assist in the effective prohibition of non-stormwater discharges from the MS4 pursuant to Provision E.2. 3) Support the detection and elimination of illicit discharges to the MS4 pursuant to Provision E.2. <p>These goals will be accomplished through monitoring and assessing the quality of the MS4 discharges prior to and during the implementation of the Water Quality Improvement Plans. Exceedances of action levels are not subject to enforcement or non-compliance actions under this Order. ”</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>levels defined in Provision C.1 and C. 2 are chemically based and may be in conflict with the selected watershed metrics. As an example, if the watershed metric is improved IBI scores for a water body, then NALs and SALs associated with water chemistry are unlikely to be the best metric to evaluate progress towards improving IBI scores or for assessing our implementation efforts. Thus, the chemically based NALs/SALs may direct resources away from the watershed priorities.</p> <p>Since Provision C indicates that there are three different purposes for the action levels, the permit should recognize that the action levels for each permit provision (B.4, D.4.a, and/or E.2) may be based on different constituents, metrics, and/or may be different values.</p> <p>As a result, the permit should establish the purposes of the action levels and then allow the Copermittees to establish the numeric action levels. For our purpose we would submit that the action levels should be developed to support program planning and measure progress towards attaining the protection of the beneficial uses.</p>	

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
C. (Intro)	22	Action Levels	<p>The development of action levels, including the timeline should be clearly linked to the Water Quality Improvement Plans. A timeline that is separate and different from the development of the Water Quality Improvement Plans is not necessary. Previously developed action levels should serve as interim action levels until the Water Quality Improvement Plans are completed.</p>	<p>As shown in the attached revised Permit, revise concluding paragraph of section C, as follows:</p> <p>Action levels will be developed and incorporated into the Water Quality Improvement Plans (Provision B) including the Illicit Discharge Detection and Elimination (IDDE) Program (Provision E.2). Depending upon the goals/objectives for the use of the action levels and the priority receiving water conditions, the constituents and values at which they are set may differ between watersheds. Copermittees may develop Watershed Management Area specific numeric action levels for non-storm water and storm water MS4 discharges using an approach approved by the Regional Board or use the default non-stormwater and stormwater action levels prescribed within C.1 and C.2 below, respectively. The Copermittees will submit action levels as part of their Water Quality Improvement Plan(s). The action levels established as part of R9-2007-0001 will serve as the interim action levels until the Water Quality Improvement Plans are completed and approved.</p>
C.1	22-24	Non-Stormwater Action Levels	<p>Referencing the CTR as a “source” is misleading. It is unclear why the Board is excluding the conversion factor from the CMC and CCC Metals Criteria equations from the CTR to generate total recoverable metals criteria. Table notes need to be updated to explain how NALs were derived. It should be made clear that the MDALs and AMALs were calculated using State Implementation Standard (SIP) procedures.</p>	<p>Add appropriate references to the State Implementation Standard procedures and provide a narrative explanation for reasoning and application in the fact sheet, when provided.</p>
C.1	22-24	Non-Stormwater Action Levels	<p>Provision C.1.b of the permit requires that additional NALs must be</p>	<p>The permit should provide a clear linkage between Provision B and Provision C and allow the WQIP to guide the customization</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			incorporated into the Permit for any constituents causing or contributing to conditions associated with the highest non-stormwater related water quality priorities. However the provision does not identify other options for the development of NALs. The Copermittees believe it necessary to have the flexibility to develop NALs that are relevant to their watershed issues.	of the NALs based on the watershed needs. Furthermore the permit should identify past and current dry weather monitoring as a basis for the development of NALs that are watershed specific.
C.2	25	Storm Water Action Levels	Provision C.2.b requires that additional SALs must be incorporated into the Permit for any constituents causing or contributing to conditions associated with the highest non-stormwater related water quality priorities. The development of SALs may be based on one of 3 options: 1) water quality standards; 2) site specific conditions; and 3) numeric WQBELs. As noted previously the Copermittees believe that it is critical that flexibility be provided in the development and implementation of the SALs to allow the Copermittees to address their highest water quality issue(s). Consequently the Copermittees support other options for developing SALs.	<p>Other options that should be included for the development of the SALs in the Permit are the approaches identified in the California Storm Water Panel in its report, “The Feasibility of Numerical Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities” (June 2006).</p> <p>As previously noted, if the Copermittees do not establish action levels to support the WQIP then the Copermittees must use the SALs identified in Provision C.</p>
D. Monitoring and Assessment Requirements				
D	26-52	Monitoring and Assessment Requirements	Current provisions are overly prescriptive and constrain the efficient or best use of Copermittee resources or for adaptive management. Significant efforts have been invested by the State and Regional Boards as well as Copermittees to	Remove current Provision D and replace with the Provision D attached.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			develop a structured, question-driven monitoring approach. These efforts provide for the development of an effective and appropriate alternative to address the monitoring needs of the permit, which include an evaluation of the effective prohibition of non-stormwater discharges, attainment of MEP, evaluation of impacts to and improvements in receiving waters, and collection of data to support management of stormwater programs.	
D.1.a	26	Jurisdictional Non-Stormwater Monitoring	The Copermittees’ past monitoring results illustrate that chemical water quality monitoring data for dry weather inter-MS4 flows is not effective for eliminating dry weather discharges. The approach outlined in the Administrative Draft Tentative Order would generate a great deal of water quality data for dry weather flows and identify some IC/IDs. However, since the purpose of the program is to eliminate dry weather flows and IC/ID flows entirely, there is little value to collecting extensive dry weather water quality data for MS4 sites. Very little of the water quality data collected would support assessment of the stated program management objective to effectively prohibit non-storm water discharges to the MS4s. Consequently, this extremely resource intensive approach will be relatively inefficient in eliminating the MS4 flows and IC/IDs	<i>If Provision D is not replaced, modify language to allow greater flexibility in monitoring to eliminate IC/IDs based on Copermittees’ experience and understanding of how to effectively address non-stormwater discharges.</i>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>with any potential to adversely impact receiving waters.</p> <p><i>See the Dry Weather Outfall Monitoring and Discussion of IDDE Program Efficiency and Effectiveness Sections of the Alternative Provision D Supporting Documentation for additional details.</i></p>	
D.1.a.2	32	Dry Weather Ambient Receiving Water Monitoring Program	<p>TO Provision D does not take advantage of the current state of knowledge of receiving water conditions and does not integrate the many existing receiving water monitoring efforts. The proposed monitoring would result in a significant and unnecessary duplication of monitoring efforts by the Copermittees in receiving waters.</p> <p>Copermittees propose to integrate the numerous receiving waters programs at the WMA level.</p> <p><i>See the Receiving Water Monitoring Section of the Alternative Provision D Supporting Documentation for additional details.</i></p>	<p><i>If Provision D is not replaced, modify language to allow greater flexibility and coordination of monitoring to achieve program objectives considering existing receiving water programs that may already meet the goals of Provision D.</i></p>
D.1.a.2	32	Dry Weather Jurisdictional Receiving Water Boundary Monitoring	<p>Jurisdictional receiving water dry weather boundary monitoring proposed in the TO does not support the three key monitoring goals. Monitoring conducted by the Copermittees' and others have shown jurisdictional boundary monitoring of the type proposed in the TO to be ineffective in estimating water quality impacts and loading from MS4</p>	<p><i>If Provision D is not replaced, remove the jurisdictional receiving water boundary monitoring.</i></p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>discharges (particularly from one jurisdiction to the next). This is due to a combination of factors, including high variability of the constituent concentrations in receiving waters and discharges, typically small percentages of MS4 discharge flows and pollutant loads in the receiving waters, and uncertainty of the source of flow changes within jurisdictional boundaries. The combination of high variability and relatively small impacts or differences requires high numbers of samples to detect significant and programmatically relevant differences and would be unlikely to support programmatic changes or guide improvements to water quality.</p> <p><i>See the Discussion of Jurisdictional Boundary Monitoring of the Alternative Provision D Supporting Documentation for additional details.</i></p>	
D.1.a.2	32	Jurisdictional Monitoring Requirements	<p>It would be useful to call for the monitoring program to adhere to the design recommendations in the SWAMP Assessment Framework, which calls for structured, question-driven monitoring.</p>	<p>If Provision D is not replaced, the following language should be revised: “...within and through its jurisdiction. <u>The design of the receiving water monitoring program should follow the guidance on structured question-driven monitoring outlined in the SWAMP Assessment Framework. In addition, the design should be comparable with, to the extent practicable, regional scale monitoring designs and approaches being developed for the San Diego River watershed and coastal estuaries in the San Diego Region. Any available monitoring ...</u>”</p>
D.1.a.2.a.	32	Jurisdictional	Add an emphasis on improving	If Provision D is not replaced, the following language should be

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Monitoring Requirements	comparability of data and coordination of sampling.	revised: “...may be utilized as a dry weather ambient receiving water monitoring station, <u>with an emphasis on improving coordination among sampling efforts and the comparability of monitoring data.</u> ”
D.1.b	34-38	Jurisdictional Monitoring Requirements	Proposed monitoring of five MS4 outfalls in every jurisdiction is greatly in excess of the monitoring needed to characterize similar land uses and drainages. Monitoring of representative sites for homogeneous land uses or mixed-use land uses can be coordinated and the results shared among jurisdictions. <i>See the Wet Weather Outfall Monitoring section of the Alternative Provision D Supporting Documentation for additional details.</i>	<i>If Provision D is not replaced, modify language to allow greater flexibility and coordination of monitoring (i.e., site selection, frequency, and parameters) to achieve program objectives while focusing resources on receiving water priorities and supporting development and implementation of management actions.</i>
D.2	38-42	Watershed Monitoring Requirements	Section D.2 of the Tentative Order requires more reference watershed monitoring stations (one for each WMA) than are needed to assess receiving water conditions and establish reference conditions for the region. The Copermittees propose to use the results of the San Diego Region Stream Reference Study in lieu of this requirement. Regional reference sites that are based on similar geology and watershed size will provide an appropriate measure of the expected receiving water conditions achievable in Copermittees’ jurisdictions as a result of the future implementation of	<i>If Provision D is not replaced, modify language to allow for the use of the San Diego Region Stream Reference Study results to meet the reference watershed requirements.</i>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>their WQIPs.</p> <p><i>See the Receiving Water Monitoring Section of the Alternative Provision D Supporting Documentation for additional details.</i></p>	
D.2	38-42	Watershed Monitoring Requirements	<p>Monitoring proposed for MLS sites is more frequent than required to answer relevant management questions about trends in receiving water conditions. Wet weather mMonitoring at MLS sites can be reduced to once every five years, based on the statistical simulations conducted for development of the ROWD (2011 and included in Attachment 2-1).</p> <p><i>See the Receiving Water Monitoring Section of the Alternative Provision D Supporting Documentation for additional details.</i></p>	<p><i>If Provision D is not replaced, reduce wet weather monitoring frequency at MLS sites to once every five years.</i></p>
D.2.a	38	Watershed Monitoring Requirements	<p>There is no additional value to continuing the TWAS monitoring in its current form because the constituent concentrations and patterns are generally similar at the TWAS and MLS (and especially within a watershed), (See Attachment 2-1 from the ROWD (2011)). Additional focused receiving water monitoring to address information needs should be evaluated and addressed by Copermittee Program Managers in the WQIP Monitoring and Assessment Plans.</p> <p><i>See the Receiving Water Monitoring Section of the Alternative Provision D</i></p>	<p><i>If Provision D is not replaced, modify language to allow greater flexibility and coordination of monitoring to achieve program objectives consistent with the determination of receiving water priorities through the WQIP development process.</i></p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<i>Supporting Documentation for additional details.</i>	
D.2.a	38	Watershed Monitoring Requirements	The distinction between these stations and those called for in D.1.a.2 is not clear, partly because the channel types have not been more completely defined but also because no monitoring questions have been stated. There could be overlap between these two types of stations, especially because the receiving water stations are to be located in natural or undisturbed areas.	If Provision D is not replaced, Clarify the distinction between receiving water and watershed stations. Define management / monitoring questions that follow the SWAMP Assessment Framework guidance.
D.2.a.1	38	Watershed Monitoring Requirements	It is not clear how the data from the mass loading stations will be used; as there is no monitoring question or link to a management issue or decision.	If Provision D is not replaced, Define management / monitoring questions that follow the SWAMP Assessment Framework guidance. Show how the mass loading data will be used. Delete these stations if the value of the data cannot be demonstrated.
D.2.a.4	38	Watershed Monitoring Requirements	A single reference station is not very useful and has all sorts of statistical problems if used in isolation. It would be better to use regional reference data where available.	If Provision D is not replaced, use the San Diego Stream Reference Study for reference stations.
D.2.a.5	38	Watershed Monitoring Requirements	The rationale for this station is not clear. There is no management / monitoring question or link to a management issue or decisions. In addition, there is no readily obvious scientific reason why a midpoint station would be useful.	If Provision D is not replaced, Delete this requirement.
D.2.e and D.3	45-46	WMA Special Studies and Regional Special Studies	Reduce the number of Special Studies from 3 to 2 per WMA in consideration of the planning period required to develop the Monitoring and Assessment Plan	Reduce the number of Special Studies from 3 to 2 per WMA.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			required as part of the WQIP. <i>See the Source/Stressor ID and Special Studies section of the Alternative Provision D Supporting Documentation for additional details.</i>	
D.4.b and D.4.c	51-52	Assessment Requirements	See comment A.4. Language should be added to limit Copermittees responsibilities to within their jurisdiction.	<i>If Provision D is not replaced, the following language should be revised:</i> “The Copermittees, within <u>their respective jurisdictions of in</u> each Watershed Management Area, must...”
E. Jurisdictional Runoff Management Programs				
E	53-89	Jurisdictional Runoff Management Programs	Minor grammatical correction in the first sentence.	“The purpose of this provision is for each Copermittee to implement a program to control the contribution of pollutants to and the discharges from the MS4 <u>withi</u> n its jurisdiction.”
E	53-89	Jurisdictional Runoff Management Programs	As stated in the second introductory paragraph in Provision E “The jurisdictional runoff management programs implemented by each Copermittee must be consistent with the Water Quality Improvement Plan for the applicable Watershed Management Area required by Provision B.” Additionally, as stated in the introduction to the WQIP (Provision B) “The purpose of this provision is to develop Water Quality Improvement Plans that guide the Copermittees’ jurisdictional runoff management program implementation efforts...” However, the provisions do not clearly allow for the appropriate modification of the JRMP requirements contained in the permit.	Include language into the introductory paragraph that clearly indicates that the JRMP requirements contained in Provision E may be modified to allow for implementation of the JRMP consistent with the WQIP if appropriate justification is provided. Suggested language is provided in the attached strikeout version of Provision E.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E and Attachment C	Throughout	Jurisdictional Runoff Management Programs	Clarification.	Refer to Permanent BMPs as Structural BMPs and add a definition for structural BMPs into Attachment C.
E	Throughout	Jurisdictional Runoff Management Programs	Clarification for consistency.	Change “ Permanent BMP Sizing Criteria Design Manual ” to “ <u>BMP Design Manual</u> ” and make reference to the current design requirements under R9-2007-0001.
E.1.a.2	53	Legal Authority Establishment and Enforcement	Sites regulated under the Construction and Industrial General Permits are regulated elsewhere and through alternative means. Clarification is necessary for sites that are not regulated under the respective General Permits.	“Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites that do not, including industrial and construction sites which have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit), as well as to those sites which do not; “
E.1.a.4 and E.1.a.5	53-54	Legal Authority Establishment and Enforcement	The Copermittees do not have jurisdiction to control MS4 discharges outside of their respective MS4s and the Regional Board does not have the authority to require interagency agreements to grant such jurisdiction, particularly for those agencies not subject to the Order (Caltrans, Native American Tribes, Military installations, etc.)	Remove, reword, and/or combine the two subsections as follows : “Control through interagency agreements among Copermittees the contribution of pollutants from one portion MS4 to another portion of the MS4;” and “Control through interagency agreements with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes, where possible, the contribution of pollutants from one portion of the MS4 to another portion of the MS4;” “Coordinate, as possible, with other agencies to minimize the contribution of pollutant discharges from the Copermittee’s portion of the MS4 to portions of the MS4 under another agency’s jurisdiction and from other agency’s portions of the MS4 to the portion of the MS4 under the Copermittee’s jurisdiction”
E.2.a	54-57	Illicit Discharge Detection and	The addition of “to the extent allowable by law”, as referenced from the Phase II	“ <u>To the extent allowable by law, Each Copermittee must address all non-storm water discharges as illicit discharges, where the</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Elimination	Regulations, limits Copermittees responsibility to those that they have the legal authority to implement. Copermittees cannot implement programs outside of what they have legal authority to do. In addition, some non-storm water discharges are authorized under the permit unless the Copermittee or San Diego Water Board determines they are a source of pollutants in receiving waters. Language should be provided to account for subsection E.2.a.(3).	<u>likelihood exists that they are a source of pollutants to waters of the U.S.”</u>
E.2.a.1	55	Illicit Discharge Detection and Elimination	Uncontaminated pumped groundwater is the only category under this section that is required to be permitted under an NPDES Permit. It should be added to the initial paragraph and the remainder of the bullets should be added to E.2.a.(3), as they are impractical to be permitted and are currently not required to be permitted.	<p>“Discharges of non-storm water to the MS4 from <u>uncontaminated pumped groundwater</u> the following categories must be addressed as illicit discharges <u>where there is evidence that suggests that they are the source of pollutants to waters of the U.S.,</u> unless the discharge has coverage under NPDES Permit No. CAG919001 (Order No. R9-2007-0034, or subsequent order) for discharges to San Diego Bay, or NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters other than San Diego Bay:</p> <ul style="list-style-type: none"> (a) Uncontaminated pumped ground water; (b) Discharges from foundation drains; (c) Water from crawl space pumps; and (d) Water from footing drains.”
E.2.a.2	55	Illicit Discharge Detection and Elimination	Limit to within the Copermittee’s jurisdiction per prior comments and reword the applicable permitting portion to allow flexibility for any subsequent	Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges unless the discharge has coverage under <u>a valid NPDES Permit, No. CAG 679001</u> (Order No. R9-2010-0003, or <u>a subsequent</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			NPDES permits that may be issued.	order). This includes water line flushing and water main break discharges from water purveyors <u>under the Copermittee’s jurisdiction that has been</u> issued a water supply permit by the California Department of Public Health or federal military installations.
E.2.a.3	55	Illicit Discharge Detection and Elimination	Non-storm water sources should be limited to anthropogenic sources within the Copermittees jurisdiction to enable to Copermittees to address those sources in which they have control over. Also, see comment E.2.a.1.	Limit the source of pollutants in receiving waters to anthropogenic sources identified as an illicit discharge within the Copermittees jurisdiction and add discharges from foundation drains, water from crawl space pumps, and water from footing drains.
E.2.a.4	56	Illicit Discharge Detection and Elimination	See comment E.2.a.	Add “or similar means <u>where there is evidence that those discharges are a source of pollutants to waters of the U.S.</u> ”
E.2.a.4.a	56	Illicit Discharge Detection and Elimination	Individual buildings may require substantial structural modifications to redirect air conditioning condensation to landscaped areas. Redirection should be encouraged instead of required.	“The discharge of air conditioning condensation must <u>should</u> be directed to landscaped areas or other pervious surfaces where feasible;”
E.2.a.4.b	56	Illicit Discharge Detection and Elimination	Complete removal of residential car washing activities is unrealistic and resources would be better used to educate the public. Public outreach has proven to be also effective in minimizing water and detergent use and encouraging the use of commercial facilities.	“(i) The discharge of wash water must be <u>encouraged through public outreach and education</u> (i) <u>to be</u> directed to landscaped areas or other pervious surfaces where feasible, and (ii) <u>to minimize</u> the use of water for vehicle washing, use as little washing detergent and other vehicle wash products as possible, wash vehicles at commercial wash facilities, and implement other practices or behaviors that will prevent the discharge of pollutants associated with individual residential vehicle washing from entering the MS4; and”
E.2.a.4.c.ii	56	Illicit Discharge Detection and Elimination	Clarify. Discharges of saline water to the MS4 cannot be directed out of the MS4 once the discharge has occurred. Allow saline discharges to salt water receiving waters.	“The discharge of saline swimming pool water to the MS4 must be directed to the sanitary sewer, landscaped areas, or other pervious surfaces that can accommodate the volume of water <u>or to the MS4 if the MS4 discharges to a saltwater receiving water.</u> ”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E.2.a.5.a.1	56	Illicit Discharge Detection and Elimination	Building fire suppression system maintenance discharges should not be considered an illicit discharge if BMPs are implemented to prevent discharge of pollutants to the MS4.	Add <u>“where BMPs are implemented.”</u>
E.2.a.5.b	57	Illicit Discharge Detection and Elimination	Emergency firefighting discharges are exempted in the Clean Water Act. BMPs should be encouraged, not required to be implemented, particularly in emergency situations that may result in the destruction of life and property.	“Each Copermittee must <u>should</u> develop”
E.2.b.1.d	57	Illicit Discharge Detection and Elimination	MS4 and Private Outfalls should be clearly defined. The Clean Water Act definition of MS4 Outfalls limits outfalls to “major outfalls”, limiting the responsibility of Copermittees’ mapping of outfalls to “major outfalls” and clarifying the definition of what constitutes a “private outfall”.	“All known locations of MS4 outfalls <u>as defined by 40 CFR §122.26(b)(5-6)</u> and private outfalls, <u>as defined by 40 CFR 122.26(b)(9)</u> , that discharge runoff collected from areas within the Copermittee’s jurisdiction,”
E.2.b.1.e	58	Illicit Discharge Detection and Elimination	Clause is redundant and confusing.	(i.e., receiving water segments that are both a receiving water and part of the MS4),
E.2.b.2	58	Illicit Discharge Detection and Elimination	Clarification is necessary to limit employee responsibilities to within the terms of their employment.	“Each Copermittee must use Copermittee personnel and contractors to assist in identifying and reporting illicit discharges and connections, <u>if observed during the course of their daily employment activities;</u> ”
E.2.b.4	58	Illicit Discharge Detection and Elimination	The addition of language is necessary to limit Copermittees responsibility to standards that may reasonably be met.	“Each Copermittee must implement practices and procedures (including a notification mechanism) to prevent, respond to, contain, and clean up any spills that may discharge into the MS4 <u>within their jurisdiction</u> from any source. The Copermittee must coordinate with spill response teams to prevent <u>to the extent possible</u> entry of spills into the MS4, and prevent contamination of <u>waters of the U.S. surface water, ground water, and soil.</u> ”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E.2.b.5	58	Illicit Discharge Detection and Elimination: Prevent and Detect	Clarification is needed for circumstances where the source of an illicit connection and/or discharge is from another MS4. Add language to E.2.b(5) and move current E.2.b(5) to E.2.b(6).	Add language to clarify responsibility: <u>(5) Copermittees are responsible for control of discharges to their MS4. In the event that the source of an illicit discharge or connection is from another MS4, the Copermittee shall notify and, if necessary coordinate, with the upstream MS4 to implement and/or enforce corrective actions.</u> Move current E.2.b(5) to E.2.b(6).
E.2.c	58	Illicit Discharge Detection and Elimination: Field Screening and Monitoring	Visual observations should be acknowledged as a way to detect non-storm water and illicit discharges and connections.	Add “ <u>Visual Observations</u> ” to the provision header and acknowledge within the text.
E.2.d	58-61	Investigate and Eliminate Illicit Discharges and Connections	See the comments above for C.1. NALs should guide JRMP implementation and management actions through the iterative process set forth in the WQIP and may trigger follow up investigations, but may trigger other alternative actions. Actions taken based on NAL exceedances should be defined in the WQIP and/or JRMP based on the most effective actions to reach their watershed-based goals.	Clarify language to state that NAL exceedances during IDDE monitoring/investigations may trigger action levels, including but not limited to follow-up investigations based on the highest watershed priorities set forth and the iterative process provided in the WQIP. In addition, limit E.2.d.1.d to exclude identified natural sources.
E.2.d.2 and E.2.d.3	59 – 61	Illicit Discharge Detection and Elimination: Investigate and Eliminate	Sections 2 and 3 outline the procedures that Copermittees must have in place. Not all language under these headers speak to procedures. Additionally, some overlap exists between these two sections.	Edits were made to ensure that requirements addressed the development of procedures. Additional edits made for clarity and to reduce overlap between sections. See the strikeout document of the admin draft for specifics.
E.2.d.2	59	Illicit Discharge Detection and Elimination	TCBMPs may be part of the MS4 and specifically designed to receive and contain pollutants. The language, as written, is inconsistent with the TCBMP requirements prescribed in Provision E.3.a of the proposed permit. Limiting language should also be added for	“Each Copermittee must implement procedures to investigate and inspect portions of its MS4 that, based on reports or notifications, field screening and monitoring, or other appropriate information, indicate a reasonable potential of receiving, containing, or discharging pollutants <u>to receiving waters within the Copermittees jurisdiction</u> due to illicit discharges, illicit connections, or other sources of non-storm water.”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			discharges to receiving waters within the jurisdiction of the Copermittee.	
E.2.d.4	61	Illicit Discharge Detection and Elimination	Language used in the current Orange County Permit (Provision R9-2009-0002) provides clearer language regarding follow through.	Use Orange County permit language instead: If the Copermittee suspects the source of the non-storm water discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the Copermittee must collect the data and evidence necessary to demonstrate to the San Diego Water Board that it is natural in origin; and document the rationale for why the discharge does not need further investigation. <u>This documentation shall be included in the Annual Report.</u>
E.3	61	Permanent BMP Requirements for All Development Projects	No jurisdictional limitations are provided in this section. As a result, language in the subsections may be interpreted as expanding Copermittee requirements outside their MS4 jurisdiction. In addition how the Copermittees implement their program should be a decision left to each Copermittee.	Reword to “Each Copermittee, <u>within their respective jurisdictions,</u> must use their land use/planning authorities to implement a development planning program...”
E.3.a	61	Permanent BMP Requirements for All Development Projects	Added language to clarify that not all the prescribed BMPs in Section E.3.a. are applied to every project. These BMPs are applied as practical and feasible and as applicable based on the sites condition and nature of development.	“Each Copermittee, <u>as practical and feasible,</u> must prescribe the following BMP requirements during the planning process (i.e. prior to project approval and issuance of grading or building permits) for all development projects (regardless of project type or size) where local permits are issued, including unpaved roads and flood management projects, <u>except emergency projects implemented for the protection of persons and property:</u> ”
E.3.a.2	62	Permanent BMP Requirements for All Development Projects	Source control BMP requirements apply to all projects and should be located in one place in the Provision. Language regarding source control BMPs from E.3.c should be moved here. A definition of “properly designed” should also be provided in Attachment C.	Add “ <u>Each Copermittee must require each Priority Development Project to implement applicable source control BMPs.</u> ” A definition of properly designed has been added to Attachment C.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E.3.a.4 and E.3.a.5	63-64	Long-Term Permanent BMP Maintenance and Infiltration and Groundwater Protection	Structural BMP maintenance is required under PDPs and infiltration and groundwater protection are again only necessary under PDP requirements.	Both sections were moved under PDP requirements, after section Hydromodification Management BMP Requirements and before Alternative Compliance for Technical Infeasibility.
E.3.a.5.a.vi	64	Permanent BMP Requirements for All Development Projects	Treatment with infiltration BMPs should be allowed if no significant pollutant levels are present (e.g. light industrial building with all activities inside).	(moved under PDP) “Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless <u>runoff does not exceed Basin Plan water quality standards or runoff is first treated or filtered to remove pollutants prior to infiltration; and</u> ”
E.3.b.1.b	64-65	Definition of Priority Development Project	Limit requirements to projects that were not previously subject to prior PDP requirements.	Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development <u>and was not subject to previous Priority Project Development requirements</u> , the performance and sizing requirements apply to the entire development.
E.3.b.1.c	65	Definition of Priority Development Project	Clarify that regardless of the 50% threshold, portions of the site that were subject to and met previous Priority Development Project requirements and will remain undisturbed are not subject to the new requirements. Proposed language has been modified from Ventura County NPDES MS4 Permit (Order No. 00-108).	Add the following: <u>(c) Projects where redevelopment results in an increase of more than fifty percent of impervious surfaces of a previously existing development, and the existing development was subject to previous Priority Project Development Requirements, only the altered portion of development is subject to the new Priority Development Project requirements.</u>
E.3.b.2	65-66	Priority Development Project Categories	This provision establishes the scope of development projects subject to the post-construction controls. Sometimes the criterion is based on impervious area and other times it is based on surface area. Revision for consistency is proposed. Also, this is an increase in requirements from the prior permit, which was limited to much larger development projects.	In the interest of consistency, revise the criterion so that impervious area is the mechanism for determining applicability as it is an accurate surrogate for establishing project eligibility. Also, add language to E.3.b.2.e to clarify that applicable discharges to an ESA are “ <u>not commingled with flows</u> ”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
E.3.b.2.g	66	Priority Development Project	This requires streets, roads, highways, freeways, and residential driveways over 5,000 square feet be considered priority development projects. The residential driveways category was added under the proposed permit and will require additional Copermittee effort for Storm Water Management Plan review, TCBMP inventory, inspections, and maintenance verification without proportional water quality benefit. Residential driveways should be removed from this Provision as they carry much lower traffic volumes and therefore do not have the potential to generate the high levels of pollutants that streets and highways generate. Residential driveways would be subject to the requirements of residential development.	“Streets, roads, highways, <u>and</u> freeways, and residential driveways . This category is defined as any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles.”
E.3.b.3.c and E.3.b.3.d	66	Priority Development Project	An exemption for Priority Development Projects should be provided for driveways constructed with permeable surfaces.	Add driveways to (c) and (d). Add parking lots to (d).
E.3.b.3.e	66	Priority Development Project Categories	This exemption allows small individual residential projects to apply minimum BMPs that meet a minimum performance standards without the burden of preparing a full Storm Water Management Plan, , review cycles, and other burdensome administrative tasks that don’t benefit water quality. Under the current proposed language, single family residence as small as 5,000sf may be subject to PDP requirements, and is	Add language as follows: <u>(e) Single-family residential projects that are not part of a larger development or proposed subdivision and implement BMPs that meet minimum performance standards, as outlined in the BMP Design Manual.</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			lumped in with industrial and commercial development. The potential pollutants generated by small residential is not as significant as industrial or commercial and can be effectively reduced by effective source control and minimum permanent BMPs rather than going thru an extensive PDP and HMP analysis and BMP sizing.	
E.3.b.3.f	66	Priority Development Project Exemption	This exemption provides an alternative design standard for smaller roadway projects. Existing roads may provide a great retrofit opportunity, but have many challenges due to physical constraints. Existing roads are considered utility corridors, in addition to being adjacent to buildings and structures which makes it physically impossible to fit BMPs that meet PDP sizing criteria. Therefore, Green Street concepts is a great approach.	Add language as follows: <u>(f) Any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles, that follows the USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets¹ to the MEP.</u> <u>1:http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm</u>
E.3.c	66-71	PDP	Permanent BMPs which include source control (stenciling, trash lids, efficient irrigation) were being confused with structural BMPs (bioretention, basins, etc) that require inventory tracking and perpetual maintenance. Therefore two different terms are used in the different scenarios. A definition of Structural BMPs was added.	In places where it applied, Permanent was replaced with Structural
E.3.c.1	66	Source Control BMP Requirements	Source Control requirements apply to all projects and should be moved up. See comment E.3.a.(2)	Move Section language to Provision E.3.a.(2).
E.3.c.2.b	67	Priority Development	Retention should be limited to that which is found during undeveloped conditions	(Now E.3.c.(1)(b)) “Each Priority Development Project must be required to implement LID BMPs that are sized and designed to

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Project BMP Implementation and Oversight	Requiring strict retention of the 85 th percentile storm volume without consideration of the natural condition will result in lesser flows necessary for downstream habitats and may result in impacts to habitat and beneficial uses. The recommended language requires mimicking of natural hydrology while still providing improved pollution reduction.	retain the <u>difference in volume equivalent to between the runoff volume produced in the post-project condition as compared to the pre-project condition resulting from a 24-hour 85th percentile storm event (“design capture volume”).</u> A footnote should also be provided clarifying that the <u>“Design capture volume is a single event based volume available after an extended dry period”</u> .
E.3.c.2.c	67	Retention Standard	A second tier standard is proposed for sites where on site retention is not feasible due to adverse soils or other conditions. The proposed language allows projects to provide pollutant removal equal to the retention standard by capturing and treating a larger volume. Since equal pollutant removal is to be achieved, offsite mitigation should not be required if the second tier standard is met.	(Now E.3.c.(1)(c)) If onsite retention of the design capture volume using LID BMPs is technically infeasible per Provision E.3.c.(4), flow-thru LID and/or conventional treatment control BMPs must be implemented to provide equal pollutant removal for the portion of the design capture volume that is not retained onsite. Flow-thru LID treatment control BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP; or
E.3.c.2.d	67	Retention and Treatment Mitigation	The requirement for offsite mitigation should only apply to projects that do not meet predevelopment retention or equal pollutant load removal standards.	(Now E.3.c.(1)(d)) If retention and/or equivalent pollutant removal of the design capture volume to meet E.3.c.(2)(a) or E.3.c.(2)(b) are infeasible onsite, project applicants must perform mitigation for the portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, as described in Provision E.3.c.(6)
E.3.c.3	68	Hydromodification Management BMP Requirements	The Regional Board adopted the San Diego Hydromodification Management Plan (HMP) in July 2010. Significant work, technical analysis and input have gone into the development of the HMP and these requirements have been in effect for only 16 months. Rather than	(Now E.3.c.(2)) Each Copermittee must require each Priority Development Project disturbing greater than one acre to implement hydromodification management BMPs, as described in the Copermittees current HMP, as applicable.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>providing separate criteria, the permit should acknowledge implementation of the Regional Board approved HMP as a sufficient mechanism for meeting hydromodification requirements.</p> <p>The one acre threshold is consistent with the threshold recently established by the State Board for Phase II permits and discussed during the HMP workshop.</p>	
E.3.c.3.a	68	HMP Requirements	<p>The requirement to match naturally occurring pre-development runoff conditions holds redevelopment to a higher standard than new development. Redevelopment is widely accepted as benefiting water quality, Redevelopment should be incentivized to ensure an overall improvement of water quality.</p> <p>The main obstacle for removing concrete lining in existing channels is lack of space available to contain the peak flow (Q100). The HMP requirements target much smaller flow rates (Q2 to Q10); therefore, requiring this standard for redevelopment projects is unlikely to increase the ability for channels to be rehabilitated.</p>	<p>(Now E.3.c.(2)(a))</p> <p>Post-project runoff flow rates and durations do not exceed pre-development (naturally occurring) runoff flow rates and durations by more than 10 percent (for the range of flows that result in increased potential for erosion or degraded channel conditions downstream of Priority Development Projects).</p> <p>Added the EPA (64 Federal Register 68722, 68761) definition of Pre-development to the permit definitions.</p>
E.3.c.3.b	68	HMP Requirements	<p>Flexibility is to allow assessment, preservation and compensation for sediment supply losses due to development on a regional basis.</p>	<p>(Now E.3.c(2)(b))</p> <p>Projects shall preserve (where feasible) or provide compensation for significant losses of sediment supply anticipated as a result of development.</p>
E.3.a.4 and E.3.a.5 (moved)	63-64	Long-Term Permanent BMP	<p>Structural BMP maintenance is required under PDPs and infiltration and</p>	<p>(Now E.3.c.(4) and (5))</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
here)		Maintenance and Infiltration and Groundwater Protection	groundwater protection are again only necessary under PDP requirements.	Both sections Long-Term Structural BMP Maintenance and Infiltration and Groundwater Protection were moved here under PDP requirements.
E.3.c.4	69	Alternative Compliance for Technical Infeasibility: Mitigation	Allowing alternative compliance encourages innovative solutions that are not specifically called out in the permit. Alternatives are only valid if it is demonstrated that they can provide equal or better progress towards permit goals.	(Now E.3.c.(6)) Add <u>“Alternative compliance is an optional program for the Copermittees to utilize if it is determined to provide an equal or greater benefit than onsite compliance. Where alternative compliance is allowed, it is the sole responsibility of the project applicant to execute the alternative compliance and comply with the following requirements: subject to the following requirements:”</u>
E.3.c.4.b	69-70	Criteria for Technical Infeasibility	On some very small projects, required orifice sizes are so small that effective maintenance is not possible.	(Now E.3.c.(6)(b)) HMP flow rate requirements that result in BMP orifice sizes too small for efficient maintenance; and
E.3.c.4.c	70	Alternative Compliance for Technical Infeasibility: Mitigation	The permit should clearly provide Copermittees’ with the flexibility to identify and craft an alternative compliance program that meets their specific program needs.. For example, a retrofit project is likely to capture, retain, and treat a mix of land uses. As a result, an offsite project’s (i.e., regional retrofit) land uses (and associated EMCs) may not exactly line up with the land use of the new development.	(Now E.3.c.(6)(c)(i)) Modify language as follows: and/or increased pollutant loads <u>water quality equivalence</u> expected to be discharged from the site. <u>The Project applicant must perform offsite mitigation for:</u> <ul style="list-style-type: none"> [a] <u>The portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, and/or</u> [b] <u>The portion of the increased potential erosion of downstream receiving waters not fully controlled with hydromodification management BMPs onsite.</u> <ul style="list-style-type: none"> For the pollutant load in the volume of storm water not retained onsite with retention LID BMPs, or increased potential erosion of downstream receiving waters not fully controlled onsite with hydromodification management

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				BMPs, the Copermitttee must require the project applicant to either 1) implement an offsite mitigation project, and/or 2) provide sufficient funding for a public or private offsite mitigation project via a mitigation fund.
E.3.c.4.c.i	70-71	Mitigation Project Locations	Aligning project locations with the watershed management areas as detailed in the WQIPs.	(Now E.3.c.(6).(c).(ii)) Replace hydrologic unit with Watershed Management Area
E.3.c.4.c.ii	71	Mitigation Project Types	Groundwater recharge and downstream flows are necessary for healthy receiving waters. Allowing offsite groundwater replenishment encourages more regional facilities. Added groundwater recharge projects, and further defined that in stream impervious surfaces are not applicable for credit.	(Now E.3.c.(6).(c).(iii)) Offsite mitigation projects may include, where applicable and feasible, retrofitting opportunities and stream and/or habitat rehabilitation or restoration opportunities identified in the Water Quality Improvement Plans, identified pursuant to Provision B.3.. Other offsite mitigation projects may include green streets or infrastructure projects, <i>groundwater recharge projects</i> , or regional BMPs upstream of receiving waters. Mitigation credit will not be given to portions of in stream mitigation projects using impervious hardscape materials such as concrete. Project applicants seeking to utilize these alternative compliance provisions may propose other offsite mitigation projects, which the Copermitttees may approve if they meet the requirements of Provision E.3.c.(4).
E.3.c.4.c.iii	71	Mitigation Project Timing	The requirement that offsite mitigation projects “be completed upon the granting of occupancy for the first project that contributes funds towards the offsite mitigation project...” is not feasible. Due to the length of time it takes to acquire all of the necessary permits, this timeline is not realistic for regional facilities and will serve as a deterrent to	(Now E.3.c.(6).(c).(iv)) Modify as follows: <u>Offsite mitigation funding projects must be secured by the applicant and verified by the Copermitttee prior to granting construction permits or recording of maps, whichever comes first, for each completed upon the granting of occupaney for the first project that contributed funds toward the offsite mitigation project, unless a longer period is authorized by the San Diego</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			their construction as an alternative compliance mechanism. Additionally, it may take several years for a Copermittee to accumulate the funds necessary for the design, construction and permitting of a regional facility.	Water Board.
E.3.d	71	BMP Design Manual	Rename “Permanent BMP Sizing Criteria Design Manual” to simply the “BMP Design Manual”. Simplicity is best for project applicants.	Update BMP Design Manual
E.3.e.2.a	73	Priority Development Project BMP Implementation and Oversight	Removal of the term “continuously” is suggested so ensure Copermittees do not have to allocate resources for incessant updates to the database. Language should also be added to clarify that, although the database will be watershed-based, each Copermittee is responsible only for inventory under their jurisdiction.	“Each Copermittee must develop and continuously <u>regularly</u> maintain a watershed-based database to track and inventory all Priority Development Projects and associated <u>structural permanent BMPs within their jurisdiction</u> . Inventories must be accurate and complete beginning from January 2002 for the San Diego County Copermittees, February 2003 for the Orange County Copermittees, and July 2005 for the Riverside County Copermittees. The database must include, at a minimum, the following information:”
E.4	75	Construction Management	Storm Water Pollution Prevention Plan (SWPPP) is a State General Construction Permit term, and should not be used within the MS4 permit so that there is no confusion. Replace with Pollution Control Plan.	Replaced SWPPP with Pollution Control Plan.
E.4.	75	Construction Management	The language has been updated so that the Copermittee can define which construction projects will be inventoried within its jurisdictional program. Not all jurisdictions apply permits the same way, therefore each needs the ability to address their processes in regards to construction projects. This will eliminate projects in	a. Construction Program Management Each copermittee must define in the Jurisdictional Runoff Management Plan the following: <ol style="list-style-type: none"> (1) Define construction sites to be inventoried, such as sites that involve ground disturbance or soil disturbing activities. (2) Define a process for ensuring adequate construction BMP implementation for non-

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			the inventory that are issued local building or construction permits but have no ground disturbance, e.g. plumbing, electrical, mechanical, decks, patios, etc.	inventoried sites. Non-inventoried sites involve minor construction activities that are not anticipated to create storm water pollution such as interior improvements, small miscellaneous residential improvements such as patio covers, plumbing, electrical and mechanical work.
E.5	79-85	Existing Development Management	After years of implementation of existing development programs, the Copermittees have the knowledge and experience to implement programs consistent with the goals of the Order and the adaptive management process required under the Order. In order to accomplish this goal, the Copermittees have reorganized and provided a concise existing development section as an alternative to the current provision E.	Replace the current provision E.5 with the proposed Provision E.5 located in the strikeout version provided.
E.5.a	79	Existing Development Management	Adding the term “reasonable potential to discharge” allows flexibility for the Copermittees to determine priorities. Practically all existing properties have the potential to generate pollutant loads and the inspection program will be ineffective and impractical to implement as written. The focus needs to be on significant pollutant load discharges so inspections and enforcement can actually succeed in receiving water pollutant load reductions versus spending an exhaustive amount of time and money inspecting sites that discharge no pollutant loads, but have the potential to generate minimal loads.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “Each Copermittee must maintain an updated watershed-based inventory of all its existing development that <u>has the reasonable potential to may potentially generate discharge</u> a pollutant load to and from the MS4”.
E.5.a.1.c	79	Existing Development	The SIC Code system was replaced by the NAICS Code system in 1997. As a	<i>If the current Provision E.5 is not replaced, modify as follows:</i>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Management	result, the use of the SIC Code system is being phased out.	c) SIC Code or <u>NAICS Code</u> , if applicable;
E.5.a.4, E.5.a.7	79	Existing Development Management	Mobile home parks are outside the jurisdiction of Copermittees. Also, minor grammatical corrections.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “(4) Identification if a business is a <u>of mobile businesses</u> ; “ “(7) Identification if an area is a Common Interest Areas (CIAs) / Home Owner Associations (HOAs), or and mobile home parks; “
E.5.a.13	80	Existing Development Management	The continual requirement for map updating is excessive. Regularly updated maps should be sufficient for up-to-date information without requiring Copermittees to expend excessive resources.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “A continually <u>regularly</u> updated map showing the location of inventoried existing development, watershed boundaries, water bodies, and pollutants generated at the inventoried existing development.”
E.5.b	80	Retrofitting and Channel Rehabilitation in Areas of Existing Development	This is a new requirement, as compared to the prior permit, which only requires an evaluation of channels that may be retrofitted. In many instances, channel rehabilitation may not be feasible and other options for improving discharge water quality would need to be considered. Language should be clarified to indicate retrofit and channel rehabilitation are options the Copermittees have at their disposal, but are not necessarily obligatory.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> Remove this Provision entirely or include it as an option for compliance as stated below: “...and rehabilitate channels and/or receiving waters <u>to restore impaired beneficial uses of streams within its jurisdiction, as feasible.</u> ”
E.5.b.3	80	Existing Development Management	The proposed permit requires the Copermittees to “encourage” landowner retrofit to private property through the “Copermittee’s use of subsidies, penalties, or other incentives.” Copermittees will face serious enforcement (and possibly legal) issues if	<i>If the current Provision E.5 is not replaced, modify as follows:</i> Each Copermittee must implement retrofit and channel rehabilitation projects, <u>as feasible</u> , that address the highest water quality priorities identified in the Water Quality Improvement Plan pursuant to Provision B.3.a. <u>Ranking may also take into account water quality, project feasibility cost effectiveness, and</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			they attempt to penalize private landowners for failing to expend their own time, effort, and money retrofitting properties that landowners had no intention of altering in the first place. In addition, water quality, feasibility, cost effectiveness, and community acceptance should be considered when a strategy is developed for retrofit and/or channel rehabilitation.	<u>community acceptance</u> . The Copermitttee must <u>should</u> encourage private landowners to implement retrofit <u>designs, at minimum, through the use of public education and outreach, and channel rehabilitation projects whenever practical. Private landowners should be encouraged through the Copermitttee’s use of subsidies, penalties, or other incentives.</u>
E.5.b.5	81	Existing Development Management	See comments for Provision E.5.b.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “Where retrofitting and channel rehabilitation within specific areas of existing development <u>under the Copermitttees jurisdiction</u> are determined to be infeasible to restore and protect receiving waters from the highest water quality priorities identified in the Water Quality Improvement Plan, each Copermitttee must <u>may</u> identify, develop, and implement regional retrofitting and channel rehabilitation projects...”
E.5.b.7	81	Existing Development Management	Resource re-allocation will assist in neutralizing costs for any channel rehabilitation/retrofit projects undertaken by the Copermitttees and will have a more significant likelihood of improving water quality than monitoring. Add.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> <u>(7) Upon Regional Board approval and in lieu of monitoring during any given year, the Copermitttees may reallocate resources originally authorized for water quality monitoring for retrofit and/or rehabilitation project(s), for a maximum of two nonconsecutive years during the permit term.</u>
E.5.c.1	81	Existing Development Management	Required use of pollution prevention methods will be extremely difficult to enforce, particularly if residential land uses are included.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> Each Copermitttee must require <u>promote</u> the use of pollution prevention methods by the inventoried existing development <u>through public outreach</u> .
E.5.c.2	81	Existing Development	See comment E.5.a.	<i>If the current Provision E.5 is not replaced, modify as follows:</i>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		Management		“Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development <u>with the reasonable potential to discharge pollutant loads to their MS4</u> , including special event venues that have the potential to generate pollutants. ”
E.5.c.3	81	Existing Development Management	See comment E.5.a.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> Each Copermittee must implement, or require the implementation of, designated BMPs at inventoried existing development that have the <u>reasonable potential to generate discharge pollutants loads from their MS4.</u>
E.5.c.4	82	Existing Development Management	See comment E.5.a.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> Each Copermittee must operate and maintain, or require the operation and maintenance of designated BMPs at all inventoried existing development <u>that have been identified by the Copermittee as having the reasonable potential to discharge pollutant loads to their MS4.</u>
E.5.c.4.b	82	Existing Development Management	Clarification is necessary that Copermittees are only responsible for the work conducted within their jurisdiction and under their authority.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “Each Copermittee must implement procedures during the operation and maintenance of public streets, unpaved roads, paved roads, and paved highways and freeways, <u>conducted under their authority and within their jurisdiction,</u> that will reduce the contribution of storm water pollutants to the MEP and effectively prohibit <u>the discharge of non-storm water pollutants</u> from the MS4 to receiving water bodies. During maintenance of unpaved roads, each Copermittee must examine the feasibility of replacing existing culverts or designing new culverts/bridge crossings to maintain natural stream geomorphology.
E.5.c.5	82	Existing Development Management	See comment E.5.a.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “Each Copermittee must implement procedures, or require the

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				implementation of procedures, to reduce the contribution of pollutants in storm water to the MEP and effectively prohibit non-storm water discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from inventoried existing development into and from the MS4s identified by the Copermittee as having the reasonable potential to discharge pollutant loads into or from their MS4.
E.5.d	83	Existing Development Management	See comment E.5.a.	<p><i>If the current Provision E.5 is not replaced, modify as follows:</i></p> <p>“Each Copermittee must conduct inspections of inventoried existing development <u>that have been identified by the Copermittee as having the reasonable potential to discharge pollutant loads from their MS4</u> to ensure compliance with applicable local ordinances and permits, and the requirements of this Order.”</p>
E.5.d.1	83	Existing Development Management	See comment E.5.a.	<p><i>If the current Provision E.5 is not replaced, modify as follows:</i></p> <p>“Each Copermittee must establish appropriate inspection frequencies for inventoried existing development based on the priorities set forth in the Water Quality Improvement Plan, and the potential for discharging pollutants via storm water and non-storm water runoff. At a minimum, inventoried existing development <u>that has been identified by the Copermittee as having the reasonable potential to discharge pollutant loads to and from their MS4</u> must be inspected once every five years <u>during the permit term</u>. Inventoried existing development must also be inspected within six months of any change in property ownership or change <u>increase in pollutant generating activity.</u>”</p>
E.5.d.2.d through E.5.d.2.f	83-84	Existing Development Management	The addition of “if present” is necessary for clarification.	<p><i>If the current Provision E.5 is not replaced, modify as follows:</i></p> <p>“(d)Visual observations of actual non-storm water discharges, <u>if present</u>;</p> <p>(e)Visual observations of actual or potential discharge of pollutants, <u>if present</u>;</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				(f) Visual observations of actual or potential illicit connections, <u>if present</u> ; and...”
E.5.e	85	Existing Development Management	Limiting language should be included for the Copermittee’s jurisdiction. The existing development inventory and enforcement should be limited to development with the reasonable potential to discharge pollutants.	<i>If the current Provision E.5 is not replaced, modify as follows:</i> “Each Copermittee must enforce its legal authority established pursuant to Provision <u>E.1</u> for all its inventoried existing development <u>identified by the Copermittee as having the reasonable potential to discharge pollutant loads from the MS4 within their jurisdiction</u> , as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision <u>E.6</u> .”
E.6	85	Enforcement Response Plans	Enforcement response plans are already codified in Copermittees’ municipal codes. This section increases requirements for enforcement response and should be made more concise.	Recommend replacement of Enforcement Response Plan Provision with Copermittee streamlined provision, contained in the strikeout provided.
E.6.b.5	87	Enforcement Response Plans	Two weeks compliance is an extremely short time period for maintenance of TCBMPs and reasonable only if the next rain event is within that two week period. One month is much more reasonable and realistic for confirmation of TCBMP maintenance and is consistent with Copermittee implementation experience and existing ordinances.	<i>If the current Provision E.6 is not replaced, modify as follows:</i> “For violations of permanent BMP maintenance requirements, all violations must be corrected in a timely manner with the goal of correcting them before the next rain event but no longer than than 40 business <u>30 calendar</u> days after the violations are discovered. If more than 40 business <u>30 calendar</u> days are required for compliance, a rationale must be recorded in the electronic database or equivalent tabular system used to track permanent BMP inspections. “
E.6.c.2	87-88	Enforcement Response Plans	Criminal penalties should be limited to intentional or criminally negligent acts.	<i>If the current Provision E.6 is not replaced, modify as follows:</i> The enforcement process must include, at a minimum, appropriate sanctions to compel compliance, such as: (a) Verbal and written notices of violation;

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				(b) Cleanup requirements; (c) Fines; (d) Bonding requirements; (e) Administrative and criminal <u>(if intentional or criminally negligent)</u> penalties; (f) Liens; (g) Stop work orders; and (h) Permit and occupancy denials.
E.6.c.4	88	Enforcement Response Plans	See comment E.6.b.5.	<i>If the current Provision E.6 is not replaced, modify as follows:</i> Change 10 business days to 30 calendar days.
E.6.d.1	88	Enforcement Response Plans	San Diego Water Board notice should be consistent with 40 CFR §122.41(l)(6) and the State of California Construction General Permit. Generally, the requirements should be 24 hour verbal notice and five day written notification. Also, email should suffice as written notice.	“Each Copermittee must notify the San Diego Water Board in writing within 48 hours <u>5 calendar days</u> of issuing high level <u>escalated</u> enforcement (as defined in the Copermittee’s Enforcement Response Plan) to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance with its permits and applicable local ordinances, and the requirements of this Order. <u>Written notification may be provided electronically in email form.</u> ”
E.7.b.	89	Public Education and Participation	Public participation activities are more closely related to education and outreach, and are inherently different from intergovernmental coordination. Therefore public participation should be included with outreach activities. Move from E.7.b. to E.7.a.	“Each Copermittee must implement a public education and <u>participation program</u> , as appropriate, to promote and encourage <u>the development of programs</u> , management practices, control techniques and systems, design and engineering methods, and behaviors that reduce the discharge of pollutants in storm water to the MEP, prevent controllable non-storm water discharges from entering the MS4, and protect water quality standards in receiving waters. The public education program must include, at minimum , the following:”
E.7.a.(1)	89	Public Education and Participation	There is specific emphasis on pesticides, herbicides and fertilizers. The rationale for the specificity of these topics is unclear. Given the emphasis on showing changes in water quality, education	Educational activities, public information activities, and other appropriate outreach activities intended to reduce pollutants associated with the application of pesticides, herbicides and fertilizer in storm water discharges <u>of concern</u> from the MS4 to the MEP. <u>Activities shall be determined and prioritized by</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			efforts should be focused on activities that address the pollutants of concern and behaviors that are tied to water quality issues. Therefore, each Copermittee, by jurisdiction and watershed, should identify, determine and prioritize the activities that address priorities consistent with Provision B.	<u>Copermittees by jurisdiction and/or watershed (Section 5.c.(5) to address the highest threats to water quality, such as pesticides, herbicides and fertilizers, used oil, toxic waste, etc.;</u>
E.7.a (2)	89	Public Education and Participation	There is specific emphasis on used oil and toxic material disposal. The rationale for the specificity in education topics is unclear. As stated above, Copermittees should be able to target education efforts on the pollutants and behaviors most commonly linked to the water quality issues within their respective jurisdictions and watersheds. Thus, this section is incorporated in the changes proposed above and would become part of E.7.a.1.	Move section E.7.a(2) into E.7.a(1).
E.7.a(3)	89	Public Education and Participation	There is specific emphasis on construction site operators as a target audience, with “other target audiences as determined by the Copermittee(s)”. The rationale for this is unclear. Per the justification above, each Copermittee should be able to determine target audiences in accordance with high risk activities and high priority pollutants within their jurisdiction and watershed(s). Once re-worded, this paragraph then becomes E.7.a (2), because the first two paragraphs have been combined per the comments above. .	“Appropriate education and training measures for construction site operators and other <u>specific target audiences, as determined and prioritized by the Copermittees by jurisdiction and watershed, based on high risk behaviors and pollutants of concern, such as construction site operators, residents, underserved target audiences and school-aged children.</u> ”
E.7.b	89	Public Education	Inclusion of evaluation and assessment	Include the following language as E.7.a(3):

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
		and Participation	<p>for education and outreach activities is a critical tool for adaptive management and should be addressed. Use of assessment is heavily cited in the development of the overall Water Quality Improvement Plan strategy. In addition, the purpose of intergovernmental coordination on respective JRMPs is unclear. Append to allow for watershed and regional collaboration of education and outreach activities based on effectiveness as determined by the Copermittees. Remove requirement for intergovernmental collaboration on jurisdictional runoff management programs.</p> <p>Add E.7.b as evaluation and assessment and move the current E.7.b to E.7.c.</p>	<p>b. <u>“Each Copermittee shall incorporate a mechanism for evaluation and assessment of educational and other outreach activities, as needed, to identify progress and incorporate modifications necessary to increase the effectiveness of the public education program.”</u></p> <p>c. <u>“Each Copermittee may determine, where appropriate and effective, mechanisms for intergovernmental coordination on education and outreach activities. must incorporate a mechanism for public participation and where necessary intergovernmental coordination in updating, developing, and implementing its jurisdictional runoff management program.</u></p>
F. Reporting				
F.1 and F.2	90	Reporting	Changes for consistency with Provision B.6.	Change timeframe from 12 to 18 months.
F.1	90	Reporting	Minor changes incorporated for consistency with Provision B.	Incorporate timeline consistent with Provision B.
F.2.a	90	Reporting	Additional language is necessary to clarify that modification of program elements of the jurisdictional runoff management program will include rationale for any changes to program elements prescribed in Provision E.	Add “Jurisdictional Runoff Management Program document updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.” Add similar language for the BMP design manual and the Water Quality Improvement updates.
F.2.b	90	Reporting	See F.2.a.	See F.2.a.
F.2.c	91	Reporting	See F.2.a.	See F.2.a.
F.3.b	91	Reporting	Clarification.	“...The first Annual Report must be prepared for the reporting period beginning <u>July 1 after adoption of the permit, and upon</u>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				San Diego Water Board determination that the date the San Diego Water Board determines that...
F.3.b.	91-92	Reporting	The San Diego Water Board should provide flexibility to allow updates to the Jurisdictional Runoff Management Program Annual Report Form (Attachment D).	Clarify “(Attachment D <u>or approved revision</u> ” throughout the Provision.
F.3.b.1 (a through c)	91	Reporting	Monitoring data should be discussed under proposed modifications of the WQIP.	Move a through c under (iii) in original document (now iv).
F.3.b.1.d	92	Reporting	See F.2.a.	Add: (iii) “Proposed modifications to water quality improvement or jurisdictional strategies with associated rationale for such modifications,”
F.3.b.2	92	Reporting	Each Copermittee must submit the report form for each WMA in which they have jurisdiction. Language has been clarified.	Add: <u>“Each Copermittee’s Annual Report form must summarize the jurisdictional activities in the WMAs in which the Copermittee has jurisdiction.”</u>
F.4	93	Reporting	The Copermittees require language clarification that the regional clearinghouse may be maintained by another agency.	Add a footnote: <u>“The Copermittee may elect to develop and maintain the clearinghouse(s) provided by other Copermittees or agencies.”</u>
F.5	93	Reporting	See F.4.	Add similar language from F.4.
G. Principal Watershed Copermittee Responsibilities				
G	96	Principal Watershed Copermittee Responsibilities	Coordinating and developing, with the other Copermittees, the requirements of Provisions F.3.c , F.4 , and F.5.b of this Order.	Remove requirement that Principal Copermittee can only be Principal Copermittee for 2 watersheds. Clarify that all Copermittees have some level of commitment, not just the Principal Watershed Copermittee.
H. Modification of Programs				
H	97	Modification of Programs	Modifications of programs are allowed under the WQIP as part of the iterative process and adaptive management. Language should be added to that effect or there may be annual amendments to	“Proposed modifications <u>outside of the WQIP process</u> that are not minor require amendment of this Order in accordance with this Order’s rules, policies, and procedures.”

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			the Order.	
I. Standard Permit Provisions and General Provisions				
			N/A	None.
Attachment A. Discharge Prohibitions				
Attachment A, 2	A-1	Attachment B to State Water Board Resolution 2012-001X	The Resolution has been adopted as 2012-0012 and should be updated accordingly throughout the document. Order should be incorporated by reference instead duplication.	Reference adopted SWRCB Resolution 2012-0012.
Attachment B. Standard Permit Provisions and General Provisions				
Attachment B	B1-B5	Standard Permit Provisions and General Provisions	This attachment incorporates the standard NPDES permit provisions as identified in 40 CFR 122.41. Although correctly transposed from the regulations the provisions are obviously developed for a traditional point source permit (i.e. wastewater permit). As such there are a number of standard provision that pose challenges to the Copermittees to comply with. Clarification is requested on a number of the provisions.	See specific changes noted below.
Attachment B, 1.m	B-7	Bypass	This provision requires the Copermittees to notify the Regional Board whenever an anticipated or unanticipated bypass will occur. Given the nature of storm events and the fact that stormwater treatment BMPs include bypass provisions to protect the BMP integrity it would appear that the Copermittees should notify the Regional Board anytime a storm is predicted to ensure compliance with the provision (whether anticipated or unanticipated). This provision was crafted for typical wastewater discharges	Delete this provision.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			and has little relevance to stormwater.	
Attachment C. Acronyms, Abbreviations and Definitions				
Attachment C	C1-C10	Definitions	<p>Definitions need to be added for: properly designed, BMP Design Manual, Public Education, Outreach, and Participation channel rehabilitation and improvement, and retrofit. As currently written, the permit authorizes subjective broad authority and deference to the Regional Board in interpretation of the definitions, if not included.</p> <p>Minor clarifications and grammatical corrections are also included.</p>	Suggested definitions are provided in the strikeout .
Attachment C	C-6	Definitions – MS4	The addition of CWA language to the definition of MS4 limits Copermittees’ responsibilities to within their jurisdiction and strengthens support that Copermittees are not responsible for discharges in MS4s that they do not operate.	Add <u>“Copermittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.21(a)(vi).</u>
Attachment C	C-7	Definitions – Pre-Development Runoff Conditions	The definition for Pre-Development Runoff Conditions should be the exact language codified in the Federal Register at 64 FR §68761.	Replace the definition as follows: <u>Pre-Development Runoff Conditions – “Runoff conditions that exist onsite immediately before the planned development activities occur. Pre-development is not intended to be interpreted as that period before any human-induced land disturbance activity has occurred.” 64 FR §68761.</u>
Attachment C	C-7	Definitions – Public Education, Outreach, and Participation	Neither Public Education and Outreach, nor Public Participation are mentioned in the definitions section of Attachment C. Please add definitions for these non-structural BMPs.	Add <u>“Public Education, Outreach and Participation</u> – Programs to educate residents, businesses and visitors about the importance of water quality and water quality programs so that they will support local efforts and understand their role in protecting receiving waters. The Education and Outreach Program will increase knowledge and awareness, improve attitudes toward

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				<u>storm pollution prevention, and provide a foundation for changing behaviors that contribute to storm water pollution.”</u>
Attachment C	C-10	Definitions – Waters of the state	Current permit language, citing the California Water Code, presupposes that all portions of the MS4 are considered waters covered by the definition of waters of the state, “Any water, surface or underground, including saline waters within the boundaries of the State [CWC Provision 13050 (e)].” This language should be limited based on the intent of the definition (natural water sources) and should not include dry man-made structures that collect runoff for the sole purpose of flow volume/velocity and/or pollutant reduction.	“Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [CWC Provision 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State regardless of circumstance or condition . Under this definition, <u>portions of a MS4 may be</u> is always considered to be a Waters of the State. However, <u>man-made portions of the MS4 constructed for the sole purpose of flow and/or pollutant reduction will not be considered Waters of the State.”</u>
Attachment D. Jurisdictional Runoff Management Program Annual Report Form				
			N/A	None.
Attachment E. Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2012-0011				
Attachment E	E-1 to E-30	Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2012-0011	Most requirements are outlined already in the TMDLs and the redundancy of this Attachment is unnecessary. In fact, Attachment E <i>adds</i> many TMDL requirements not provided in the TMDL Resolutions, circumventing the TMDL public process. Implementation will be inconsistent with previously adopted resolutions and CLRPs and MPs already drafted, submitted, approved, and/or implemented. A summary of inconsistencies between the TMDLs and Attachment E, where the City of San	On page E-1, reword to clarify that TMDL implementation must be incorporated into the WQIP and Monitoring sections by the Copermittees and reference the Resolution Numbers in the TMDL list and add recommended compliance language per comments below. Address all inconsistencies with the TMDL Resolutions (provided as attachment).

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			Diego is listed as a responsible party, are provided as an attachment to this table.	
Attachment E	E-1	Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2012-0011	The Rainbow Creek TMDL for Total Nitrogen and Phosphorous does not include Wasteload Allocations for the County of San Diego Copermittees. The TMDL only contains Load Allocations. Load allocations should not be implemented through an NPDES permit. It is inappropriate to simply “re-name” the Load Allocations as Wasteload Allocations.	Strike the following TMDL from Attachment E in its entirety: Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed
Attachment E	E-1 to E-30	Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2012-0011	State and federal law do not require the use of numeric effluent limitations for MS4 permittees, but rather encourage flexible implementation of best management practices through an iterative process. Specifically, the choice to include either management practices or numeric limitations in MS4 permits is within the regulatory agency’s discretion, and on the question of whether MS4 permits must contain numeric effluent limitations, the court upheld EPA’s use of iterative BMPs in place of numeric effluent limitations for storm water discharges. (See <i>Defenders of Wildlife v. Browner</i> , 191 F.3d 1159, 1166-1167 (9th Cir. 1999) ¹)	See recommended changes in the attached revised Permit to the following: <ul style="list-style-type: none"> • Provision A.4.c • Provision A.4.d • Provision B (first paragraph) • Provision B.3 Additionally, within the requirements for each individual TMDL in Attachment E, include language similar to the following: <p>Compliance may be demonstrated via any one of the following methods:</p> <ol style="list-style-type: none"> 1. There is no discharge from the MS4, or 2. Applicable effluent limitations are met, or 3. Receiving waters meet the applicable receiving water limitations or water quality objective, or 4. Loading from the MS4 is such that it does not cause water

¹ See also California Regional Water Quality Control Board San Diego Region - Fact Sheet / Technical Report For Order No. R9-2010-0016 / NPDES NO. CAS0108766.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>Given the challenges with meeting the numeric WQBELs (even with the implementation of a comprehensive suite of BMPs) and the flexibility allowed by State and federal regulations and guidance, a BMP-based WQBEL approach should be allowed for complying with TMDLs. Removing the numeric WQBELs is not proposed. Rather, inclusion of a WQIP-based “compliance path” is recommended.</p> <p>The WQIPs can and should be used as the basis for establishing WQBELs expressed as BMPs. The WQIPs can satisfy the necessary elements of BMP-based WQBELs. For example, the WQIPs would meet the requirements described in the 2010 EPA memo (which updated key aspects of the 2002 memorandum) regarding federal expectations for incorporation of TMDLs WLAs into NPDES stormwater permits as BMP-based WQBELs.</p>	<p>quality objective exceedances, or</p> <p>5. For Copermittee(s) that are implementing a Regional Board-approved WQIP, WQBELs will be implemented as BMPs and compliance will be based upon implementing all provisions of the WQIP in accordance with the approved milestones and schedule.</p>
Attachment E	E-1 to E-30	Specific Provisions for Total Maximum Daily Loads Applicable to Order No. R9-2012-0011	<p>The findings of California’s Stormwater Blue Ribbon Panel, which was convened specifically to examine the feasibility of incorporating numeric effluent limits in stormwater permits, ultimately concluded that numeric limits were generally infeasible across all three stormwater activities (municipal, industrial, and construction), with a few exceptions (<i>The</i></p>	<p>See recommended changes in the attached revised Permit to the following:</p> <ul style="list-style-type: none"> • Provision A.4.c • Provision A.4.d • Provision B (first paragraph) • Provision B.3 <p>Additionally, within the requirements for each individual TMDL in Attachment E, include language similar to the following:</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p><i>Feasibility of Numeric Effluent Limits Applicable to Discharges of Stormwater Associated with Municipal, Industrial and Construction Activities, June 19, 2006).</i></p> <p>Additionally, state law and policy does not require the use of numeric effluent limitations in MS4 permits. In 2009, the State Water Board affirmed this approach in a precedential order, stating:</p> <p style="padding-left: 40px;">[i]t is our intent that federally mandated TMDLs be given substantive effect. Doing so can improve the efficacy of California’s NPDES storm water permits. This is not to say that a wasteload allocation will result in numeric effluent limitations for municipal storm water dischargers. Whether a future municipal storm water permit requirement appropriately implements a storm water wasteload allocation will need to be decided on the regional water quality control board’s findings <i>supporting either the numeric or non-numeric</i> effluent limitations contained in the permit. (Order WQ 2009-0008, In the Matter of the Petition of County of Los Angeles and Los Angeles County Flood Control District, at p. 10</p>	<p>Compliance may be demonstrated via any one of the following methods:</p> <ol style="list-style-type: none"> 1. There is no discharge from the MS4, or 2. Applicable effluent limitations are met, or 3. Receiving waters meet the applicable receiving water limitations or water quality objective, or 4. Loading from the MS4 is such that it does not cause water quality objective exceedances, or 5. For Copermittee(s) that are implementing a Regional Board-approved WQIP, WQBELs will be implemented as BMPs and compliance will be based upon implementing all provisions of the WQIP in accordance with the approved milestones and schedule.

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			(emphasis added).)	
Attachment E. Part 1.b, 2.b, 3.b, 4.b, 5.b, and 6.b	E-2, E-4, E-6, E-9, E-13, and E-19	Water Quality Based Effluent Limitations	<p>Federal regulations (40 CFR 122.44(d)(1)(vii)(B)) require inclusion of effluent limits that are "consistent with the assumptions and requirements of any available wasteload allocation for the discharge prepared by the State and approved by EPA." Attachment E outlines the requirements of effective TMDLs and appears to incorporate numeric receiving water limitations (RWL) and effluent limitations, where the effluent limitations are set equal to the TMDL Waste Load Allocations (WLAs) and the RWLs are set equal to the TMDL numeric targets. This approach results in a situation where the Copermittees are in double jeopardy.</p> <p>Copermittees should not be put in double jeopardy by being required to meet both RWLs and effluent limitations. Rather, attainment of either RWLs <u>or</u> effluent limitations should represent compliance with the permit and the requirements of the TMDL.</p>	<p>See recommended changes in the attached revised Permit. Additional language should be added to the WQBELs sections for all TMDLs in Attachment E to clearly define compliance with WQBELs via any of the following methods:</p> <ul style="list-style-type: none"> - There is no discharge from the MS4, OR - Applicable effluent limitations are met, OR - Receiving waters meet the applicable receiving water limitations or water quality objective, OR - Loading from the MS4 is such that it does not cause water quality objective exceedances, OR - For Copermittee(s) that are implementing a Regional Board-approved WQIP, WQBELs will be implemented as BMPs and compliance will be based upon implementing all provisions of the WQIP in accordance with the approved milestones and schedule.
Attachment E	E-1 to E-30	Multiple	Attachment E specifies outfall monitoring requirements for several TMDLs, "in accordance with the requirements of Provisions D.1,	<p>Modify the Specific Monitoring and Assessment Requirements for the following TMDLs:</p> <ol style="list-style-type: none"> 1. Total Maximum Daily Load for Diazinon in Chollas

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>D.4.a.(1)(b), and D.4.a.(3)(b) of this Order.” Adding outfall monitoring to the TMDL provisions is inappropriate and unnecessary. Attachment E should focus on integrating the monitoring requirements <i>specified in the TMDL Basin Plan Amendments</i>. The monitoring requirements for TMDLs were developed through a public comment process and adopted by the Regional Board, and are the only monitoring requirements that should be specified in Attachment E. Furthermore, there is no reason to re-state the requirements from Provision D, which makes it likely that Attachment E and Provision D will have inconsistencies. Provision D requirements should only be listed in Provision D.</p>	<p>Creek Watershed</p> <ol style="list-style-type: none"> 2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin 3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek 4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay <p>Specifically, for each of these TMDLs, the sub-bullet under section (d) regarding effluent monitoring should be stricken and replaced with the following:</p> <p>“The Responsible Copermittees must implement the monitoring and assessment requirements issued under Order No. XXXX. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.”,</p> <p>where “XXXX” reflects the order numbers for each TMDL, shown in the attached revised Permit on Page E-1. For the Chollas Creek Metals and Diazinon TMDLs, the XXX refers to the order number for the issued Investigation Orders.</p> <p>For the Project I Bacteria TMDL, specific changes to the monitoring requirements are requested to reflect those specified in the TMDL Basin Plan Amendment, as described below.</p>
Attachment E. Part 4.b.	E-10	Water Quality Based Effluent Limitations	<p>The TMDL for Dissolved Copper, Lead, and Zinc in Chollas Creek states that “If all copper, lead, and zinc concentrations in urban runoff to Chollas Creek meet their respective TMDL concentrations, the loading capacity of the creek should</p>	<p>If WQBELs are to be expressed as numeric effluent limits consistent with the WLAs, then mass-based WQBELs should be included as a mechanism for demonstrating compliance to allow for options to demonstrate load-based pollutant reductions.</p> <p>As described above, the mass-based WQBELs should only be included with an “or” statement (not an “and” statement).</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			<p>not be exceeded” (Section 8). The TMDL further states that “because this WLA is concentration-based it will apply to each land use and each sub-watershed at all times and will not be specific to any land use or sub-watershed (Section 8.1).” Requiring all land uses and sub-watersheds to meet effluent limits consistent with RWLs is not a cost-effective or practicable approach to BMP strategy development. Volume reduction strategies such as Low Impact Development and Green Infrastructure should be a viable compliance path for the San Diego region. The WQBELs should include the mass-load based WLAs to consider the pollutant loads reduced, which will be impacted by both pollutant concentration reductions <i>and</i> stormwater volume reductions. Alternatives for load-based approaches should be included as effluent limitations, which will correspond to targets for meaningful CLRP and WQIP development.</p>	<p>The recommended Compliance Determination language in the attached revised Permit addresses this issue.</p>
Attachment E. Part 6.a	E-16 to E-19	Applicability	<p>Since adoption of the Project I Bacteria TMDL, the Copermittees have submitted data analysis to the Regional Board to demonstrate that 303(d) listings for San Marcos HA, San Dieguito River HA, and Los Penasquitos HA were incorrectly applied to REC beneficial uses. The</p>	<p>In Table 6.0, the San Dieguito River WMA and Carlsbad WMAs should be deleted. The Los Penasquitos WMA should be re-named to the Mission Bay WMA and Torrey Pines State Beach at Del Mar should be removed.</p> <p>The recommended language in the attached revised Permit addresses this issue by also adding the following to Specific Provision 6.a.(5):</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes												
			<p>Regional Board has concurred with the findings for each HA and stated that these HAs are “not subject to further action under Resolution No. R9-2010-0001.” Similar responses are expected for the other HAs.</p>	<p>“Subsequent to TMDL adoption, it has been established by the Regional Board that the following water bodies are not subject to further action under Resolution No. R9-2010-001, and therefore are not subject to Bacteria TMDL requirements described herein and are not included in Table 6.0:</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Watershed Management Area</th> <th style="text-align: center;">Water Body</th> <th style="text-align: center;">Segment or Area</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Carlsbad</td> <td style="text-align: center;">Pacific Ocean Shoreline</td> <td style="text-align: center;">at Moonlight State Beach</td> </tr> <tr> <td style="text-align: center;">San Dieguito River</td> <td style="text-align: center;">Pacific Ocean Shoreline</td> <td style="text-align: center;">at San Dieguito Lagoon mouth</td> </tr> <tr> <td style="text-align: center;">Penasquitos</td> <td style="text-align: center;">Pacific Ocean Shoreline</td> <td style="text-align: center;">Torrey Pines State Beach at Del Mar (Anderson Canyon)</td> </tr> </tbody> </table>	Watershed Management Area	Water Body	Segment or Area	Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)
Watershed Management Area	Water Body	Segment or Area														
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach														
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth														
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)														
Attachment E. Part 6.b	E-19	Receiving Water Limitations	<p>The Basin Plan Amendment for the Project I Bacteria TMDL contains Receiving Water Limitations. These Receiving Water Limitations should be incorporated directly into the Permit. However, Attachment E contains Receiving Water Limitations that do <u>not</u> match those from the TMDL. The Regional Board should not revise or translate the RWLs from the TMDL, they should be incorporated directly. The RWLs incorporated into Attachment E have several discrepancies with the</p>	<p>Replace entirely the RWLs in the Permit with those from the TMDL.</p> <p>The attached revised Permit incorporates RWLs for beaches (Table 6.1) and RWLs for Creeks (Table 6.2). Note these RWLs were <i>pasted directly</i> from the Basin Plan Amendment (Attachment A, page 52).</p>												

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			RWLs in the TMDL, including application of single sample targets to the dry weather RWLs and application of total coliform RWLs for inland waters.	
Attachment E. Part 6.b	E-19 and E-20	Water Quality Based Effluent Limitations	Attachment E specifies WQBELs for dry weather flows as both receiving water and effluent limitations for the Project I Bacteria TMDL, in terms of zero allowable exceedances of the single sample maximum and the 30-day geometric mean. However, the dry weather component of the TMDL only considered the 30-day geometric mean, and did not consider the single sample maximum within its calculation. Incorporating single sample effluent limitations into the Permit goes beyond the TMDL requirements. In addition, if the TMDL had included single sample limits, there would have been a corresponding allowable exceedance frequency, just as for wet weather. The 22% allowable exceedance rate for wet weather was based on a reference beach within the Los Angeles Region, and although not used in the technical approach for the San Diego Beaches and Creeks TMDL, the reference beach also exhibits exceedances during dry weather, which is incorporated into beach TMDLs in the Los Angeles region.	<p>It is recommended that the single sample maximum not be used for dry weather WQBELs. At a minimum, an acceptable dry weather exceedance frequency should be assumed and applied.</p> <p>Specific Provision 6.b.(2) of the attached revised Permit addresses this issue by (1) incorporating the RWLs directly from the TMDL, and (2) linking the receiving water limitations and effluent limitations.</p>
Attachment E.	E-20	Water Quality		If WQBELs are to be expressed as numeric effluent limits

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
Part 6.b		Based Effluent Limitations	<p>The Project I Bacteria TMDL applies mass-load based TMDLs to point sources. Many of the BMPs used for achieving pollutant reductions, such as structural BMPs and green infrastructure, emphasize infiltration and associated volume reduction as the primary mechanism for reducing urban runoff. A significant investment could be made to implement structural BMPs to reduce urban runoff to meet the mass-load based WLAs assigned in the TMDL. These reductions could result in meeting the mass-based WLA and have a positive impact on receiving waters by significantly reducing urban loads to receiving waters. However, even the small amount of flows remaining could exceed the numeric effluent limitations currently in the Permit, but <u>not</u> cause or contribute to WQO exceedances. In this manner, a violation of the numeric WQBELs would result in zero credit for the millions invested and penalty for discharges that did <u>not</u> negatively impact attainment of WQ standards.</p> <p>Volume reduction strategies such as Low Impact Development and Green Infrastructure should be a viable compliance path for the San Diego region. The WQBELs should include the mass-load based WLAs to consider the pollutant loads reduced, which will be</p>	<p>consistent with the WLAs, the mass based WLAs for both dry and wet weather presented in the TMDL should be included as a mechanism for demonstrating compliance to 1) be consistent with the assumptions of the WLAs and 2) allow for options to demonstrate load based pollutant reductions.</p> <p>The attached revised Permit addresses this issue by incorporating the mass-based wasteload allocations into Section 6.b.(2).</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			impacted by both pollutant concentration reductions <i>and</i> stormwater volume reductions.	
Attachment E. Part 6.b	E-19-E-20	Water Quality Based Effluent Limitations	The reference conditions and associated allowable exceedance frequencies for WQBELs addressing Project I Bacteria TMDL were based on a marine reference beach within Los Angeles, and are not necessarily applicable to fresh water flows in the San Diego Region. The Los Angeles reference beach was influenced by salt water (increasing bacterial die-off) and mixing/dilution from wave action that likely resulted in lower exceedances of REC-1 objectives than would be found in a freshwater stream. Freshwater TMDLs in the Los Angeles region now incorporate freshwater reference systems (instead of a marine reference system), and the marine beach exceedance rates have been updated through a recent TMDL reopener for Santa Monica Bay. In addition, a reference study is currently underway for the San Diego Region.	The permit should include language that allows for update of the allowable exceedance frequencies as these results become available. The attached revised Permit addresses this issue by added the following paragraph to Specific Provision 6.b.(1).(a): “The allowable exceedance frequencies in Table 6.1 and Table 6.2 can be updated by the Regional Board Executive Officer if sufficient data is provided regarding reference systems in the San Diego Region.”
Attachment E. Part 6.c	E-21	Compliance Schedule	Total coliform WQOs do not apply to inland waters.	As shown in the attached revised Permit, add a footnote to Table 6.3 as follows: “Total coliform receiving water limitations apply only to segments of areas of Pacific Ocean Shoreline listed in Table 6.0 .”
Attachment E. Part 6.c	E-21 to E-27	Compliance Schedule	The CLRPs to be submitted by Copermittees will propose interim compliance dates, as allowed by the	The interim compliance dates should not be specified in the Permit. Instead, the Permit should reference the submitted and

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			Project I Bacteria TMDL, generally 7 and 10 years, respectively, to meet the 50% reduction milestone for dry and wet weather. The CLRPs submitted by Copermittees may not all propose the same interim compliance dates and the Permit should acknowledge the flexibility allowed by the TMDL (see page 68 of Attachment A of the Basin Plan Amendment). In fact, this scheduling flexibility was a primary “incentive” for Copermittees to develop CLRPs instead of BLRPs.	<p>Regional Board-approved CLRPs. This approach will avoid conflict between the TMDL, Permit, and CLRPs.</p> <p>The attached revised Permit addresses this issue by revising the opening of Section 6.c.(2):</p> <p>“The Responsible Copermittees must comply with the following interim WQBELs by the interim compliance dates <u>submitted in the Regional Board-approved CLRPs and supported by Order No. R9-2010-0001.</u>”</p> <p>Table 6.5 should be deleted from Attachment E to allow the CLRPs the scheduling flexibility provided in the TMDL adopted by the Regional Board.</p>
Attachment E. Part 6.c	E-21 thru E-27	Compliance Schedule	Similar to the flexibility allowed for scheduling, the TMDL allows CLRPs flexibility in expressing and achieving TMDL milestones/interim requirements. Furthermore, the wet weather interim compliance dates are well-beyond the term of this Permit, and should be not included in Attachment E.	Delete Table 6.4 because (1) the CLRPs have flexibility to express interim milestones and (2) the wet weather interim requirements do not apply until 2022, well beyond the term of this Permit.
Attachment E. Part 6.c	E-27	Compliance Schedule	The Copermittees request an acknowledgement of the TMDL reopener scheduled for April 2016 which falls within the term of this Permit.	<p>Add a part (3) to Specific Provision 6.c:</p> <p>“(3) <u>Submittals to Support TMDL Basin Plan Amendment</u> The Responsible Copermittees are encouraged to submit data to support the TMDL reopener scheduled for April 2016 including but not limited to data related to reference watershed monitoring and beneficial use usage frequency.”</p>
Attachment E. Part 6.d	E-27	Compliance Determination	The BPA for the Project I Bacteria TMDL contains specific language regarding MS4 compliance determination	As shown in the attached revised Permit, add the following language to Section 6 of Attachment E, which is <i>pasted directly</i> from the BPA:

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011

Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
(new section added to revised)			in the case that receiving water limitations are not attained. This language should be added directly to the Permit.	<p>“The municipal MS4s may demonstrate that their discharges are not causing the exceedances in the receiving waters by providing data from their discharge points to the receiving waters, by providing data collected at jurisdictional boundaries, and/or by using other methods accepted by the San Diego Water Board. Otherwise, at the end of the wet weather TMDL compliance schedule, the municipal Phase I MS4s will be held responsible and considered out of compliance unless other information or evidence indicates another controllable or uncontrollable source is responsible for the exceedances in the receiving waters. If controllable sources other than discharges from the municipal Phase I MS4s are identified before or after the end of the wet weather TMDL Compliance Schedules as causing the exceedances, those controllable sources will be responsible for reducing their bacteria loads and/or demonstrating that discharges from those sources are not causing the exceedances. If controllable sources other than the Phase I MS4s are identified as causing the exceedances, and the Phase I MS4s have demonstrated they are not causing or contributing to the exceedances, the Phase I MS4s will not be considered out of compliance. The San Diego Water Board shall implement additional actions (e.g., issue enforcement actions, amend existing NPDES requirements or conditional waivers), as needed, to bring all those controllable sources into compliance with the wet weather TMDLs.”</p>
Attachment E. Part 6.d	E-27	Specific Monitoring and Assessment Requirements	As described above, the CLRPs envisioned in the Project I Bacteria TMDL include flexibility to develop certain components based on watershed-specific issues and conditions. Each CLRP submitted by the Copermittees will include a monitoring and assessment component. It is important to allow the	<p>As shown in the attached revised Permit, include the following at the beginning of the Monitoring and Assessment section:</p> <p>“The BLRPs and CLRPs to be submitted by the Copermittees and approved by the Regional Board Executive Officer contain monitoring programs. Implementation of those Regional Board-approved monitoring programs constitutes compliance with the</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
			CLRP process to drive the monitoring programs.	Monitoring Station and Monitoring Procedure requirements, described below.”
Attachment E. Part 6.d	E-27	Specific Monitoring and Assessment Requirements	The Project I Bacteria TMDL included specific beach monitoring requirements, which were subject to a public comment process and adopted by the Regional Board. Attachment E adds many additional components to these requirements, which undermines the TMDL adoption and public commenting process. Instead of re-interpreting and adding onto the TMDL monitoring requirements in the Basin Plan Amendment, the Permit should adopt those requirements directly (BPA Attachment A, page 50-51).	<p>As shown in the attached revised Permit, the beach monitoring requirement should be incorporated directly from the TMDL. The following language/requirement for beaches is <i>pasted directly</i> from the TMDL:</p> <p>“(1) Monitoring and Assessment Requirements for Beaches</p> <p>(a) Monitoring Stations For beaches addressed by these TMDLs, monitoring locations should consist of, at a minimum, the same locations used to collect data required under MS4 NPDES monitoring requirements and beach monitoring for Health and Safety Code section 115880.75 If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.</p> <p>(b) Monitoring Procedures</p> <p>(i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly.</p> <p>(ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations at least once within the first 24 hours of the end of a storm event that occurs during the rainy season (i.e., October 1 through April 30).</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				(iii) Samples must be analyzed for total coliform, fecal coliform, and <i>Enterococcus</i> indicator bacteria.”
Attachment E. Part 6.d	E-27	Specific Monitoring and Assessment Requirements	<p>Similarly, the creek monitoring requirements should reflect the TMDL that was approved and subject to public comment (BPA Attachment A, page 50-51).</p> <p>Note that total coliform should not be a requirement for creek monitoring, as creeks are not subject to total coliform WQOs, RWLs, or WLAs.</p>	<p>As shown in the attached revised Permit, the creek monitoring requirement should be incorporated directly from the TMDL. The following language/requirement for creeks is <i>pasted directly</i> from the TMDL:</p> <p>“Monitoring and Assessment Requirements for Creeks and Creek Mouths</p> <p>(a) Monitoring Stations For creeks addressed by these TMDLs, monitoring locations should consist of, at a minimum, a location at or near the mouth of the creek (e.g., Mass Loading Station or Mass Emission Station) and one or more locations upstream of the mouth (e.g., Watershed Assessment Stations). If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.</p> <p>(b) Monitoring Procedures</p> <p>(i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly.</p> <p>(ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations within the first 24 hours of the end of a storm event that occurs</p>

SAN DIEGO COPERMITTEE COMMENTS ON TENTATIVE ORDER NO. R9-2012-0011				
Permit Section	Permit Page (Original)	Section Title	Reason for Proposed Changes/Comments	Proposed Changes
				during the rainy season (i.e., October 1 through April 30) (iii) Samples collected from receiving water monitoring stations must be analyzed for fecal coliform and <i>Enterococcus</i> indicator bacteria.”

|

Final Draft

Final Draft

ADMINISTRATIVE DRAFT

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**TENTATIVE
ORDER NO. R9-2012-0011
NPDES NO. CAS0109266**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION**

The San Diego County Copermittees in [Table 1a](#) are subject to waste discharge requirements [within their respective jurisdictions](#) set forth in this Order.

Table 1a. San Diego County Copermittees

City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	Unified Port District of San Diego
City of National City	

The Orange County Copermittees in [Table 1b](#) are subject to waste discharge requirements [within their respective jurisdictions](#) set forth in this Order upon expiration of Order No. R9-2009-0002, NPDES No. CAS0108740 on December 16, 2014.

Table 1b. Orange County Copermittees

City of Aliso Viejo	City of Ranch Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Lake Forest	Orange County Flood Control District
City of Mission Viejo	

ADMINISTRATIVE DRAFT

The Riverside County Copermittees in [Table 1c](#) are subject to waste discharge requirements [within their respective jurisdictions](#) set forth in this Order upon expiration of Order No. R9-2010-0016, NPDES No. CAS0108766 on November 10, 2015.

Table 1c. Riverside County Copermittees

City of Murrieta	County of Riverside
City of Temecula	Riverside County Flood Control and Water Conservation District
City of Wildomar	

The Orange County Copermittees and Riverside County Copermittees may enroll under this Order at a date earlier than the expiration date of their current Orders subject to the conditions described in Provision [F.6](#) of this Order and the Copermittees in the respective county receive a Notice of Enrollment (NOE) from the San Diego Water Board.

The term Copermittee in this Order refers to any San Diego County, Orange County, or Riverside County Copermittee enrolled under this Order, unless specified otherwise.

This Order provides permit coverage for the Copermittee discharges described in [Table 2](#). [“Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.26\(a\)\(3\)\(vi\).](#)

Table 2. Discharge Locations and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Municipal Separate Storm Sewer System (MS4) Discharges
Receiving Waters	Waters of the U.S. : Inland Surface Waters, Enclosed Bays and Estuaries, and Coastal Ocean Waters of the San Diego Region

Table 3. Administrative Information

This Order was adopted by the San Diego Water Board on:	Month Day, 2012
This Order will become effective on:	Month Day, 2012
This Order will expire on:	Month Day, 2017
The Copermittees must file a Report of Waste Discharge (ROWD) in accordance with Title 23, 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.	

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on Month Day, 2012.

TENTATIVE

 David W. Gibson
 Executive Officer

ADMINISTRATIVE DRAFT

TABLE OF CONTENTS

I. FINDINGS 1

 Jurisdiction 1

 Discharge Characteristics and Runoff Management..... 2

 Water Quality Standards 6

 Considerations Under Federal Law..... 7

 Considerations Under State Law 8

 State Water Board Decisions 8

 Administrative Findings 9

II. PROVISIONS..... 10

A. Prohibitions and Limitations 10

 1. Discharge Prohibitions 11

 2. Receiving Water Limitations 11

 3. Effluent Limitations..... 13

 4. Compliance with Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations..... 13

B. Water Quality Improvement Plans 16

 1. Watershed Management Areas 16

 2. Identification of Water Quality Priorities 18

 3. Water Quality Improvement Strategies and Schedules..... 24

 4. Water Quality Improvement Monitoring and Assessment 26

 5. Iterative and Adaptive Management Process 26

 6. Water Quality Improvement Plan Submittal, Implementation, and Modifications..... 28

C. Action Levels..... 30

 1. Non-Storm Water Action Levels 31

 2. Storm Water Action Levels 35

D. Monitoring and Assessment Requirements 37

 1. Receiving Waters Monitoring..... 39

 2. MS4 Outfall Discharge Monitoring..... 48

 3. Source/Stressor Identification 57

 4. Special Studies..... 58

 5. Assessment Requirements..... 60

E. Jurisdictional Runoff Management Programs..... 70

 1. Legal Authority Establishment and Enforcement..... 71

 2. Illicit Discharge Detection and Elimination 72

 3. Development Planning..... 82

 4. Construction Management..... 101

 5. Existing Development Management..... 105

 6. Enforcement Response Plans 120

 7. Public Education and Participation 126

 8. Fiscal Analysis..... 126

F. Reporting..... 128

 1. Water Quality Improvement Plans..... 128

 2. Updates 129

 3. Progress Reporting 130

ADMINISTRATIVE DRAFT

**TABLE OF CONTENTS
(Cont'd)**

- 4. Regional Clearinghouse..... 132
- 5. Report of Waste Discharge..... 133
- 6. Application for Early Enrollment..... 133
- 7. Reporting Provisions 135
- G. Principal Watershed Copermittee Responsibilities..... 136
 - 1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1 of this Order. 136
 - 2. The Principal Watershed Copermittee is responsible for, at a minimum, the following:..... 136
- H. Modification of Programs..... 137
 - 1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the San Diego Water Board. 137
 - 2. Minor modifications to the Order may be made by the San Diego Water Board where the proposed modification complies with all the prohibitions and limitations, and other requirements of this Order..... 137
 - 3. Proposed modifications outside of the WQIP process that are not minor require amendment of this Order in accordance with this Order’s rules, policies, and procedures. 137
- I. Standard Permit Provisions and General Provisions 138
- Attachment A Discharge Prohibitions 1
 - 1. Basin Plan Waste Discharge Prohibitions..... 1
 - 2. Attachment B to State Water Board Resolution 2012-0012 3
- Attachment B Standard Permit Provisions and General Provisions..... 1
 - 1. Standard Permit Provisions 1
 - 2. General Provisions..... 12
- Attachment C ACRONYMS AND ABBREVIATIONS..... 1
 - 1. Acronyms and Abbreviations 1
 - 2. Definitions..... 2
- Attachment D Jurisdictional Runoff Management Program Annual Report Form 0
- Attachment E SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS APPLICABLE TO ORDER NO. R9-2012-0011 1
 - 1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed 2
 - 2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin 5
 - 3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek 12

ADMINISTRATIVE DRAFT

**TABLE OF CONTENTS
(Cont'd)**

4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay..... 17

5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) 23

ADMINISTRATIVE DRAFT**I. FINDINGS**

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

JURISDICTION

- 1. MS4 Ownership or Operation.** Each of the Copermittees owns or operates an MS4, through which it discharges storm water and non-storm water into waters of the U.S. within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.
- 2. Legal and Regulatory Authority.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations (Code of Federal Regulations [CFR] Title 40, Part 122 [40 CFR 122]) adopted by the United States Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). This Order serves as an NPDES permit for discharges from MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).
- 3. CWA Technology Based Standards and Prohibitions.** Pursuant to CWA section 402(p)(3)(B), NPDES permits for storm water discharges from MS4s must include requirements to effectively prohibit non-storm water discharges into MS4s, and require controls to reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP).
- 4. CWA NPDES Permit Conditions.** Pursuant to CWA section 402(a)(2), NPDES permits must prescribe conditions to assure compliance with CWA section 402(p)(3)(B) and 40 CFR 122.26(d)(2)(iv)(B). This Order prescribes conditions to assure compliance with the CWA requirements for owners and operators of MS4s to effectively prohibit non-storm water discharges in to the MS4s, and require controls to reduce the discharge of pollutants in storm water from the MS4s to the MEP.
- 5. CWA and CWC Monitoring Requirements.** Pursuant to 40 CFR 122.48, NPDES permits must specify requirements for recording and reporting monitoring results. In addition, CWC sections 13267 and 13383 authorize the San Diego Water Board to require technical and monitoring reports. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

ADMINISTRATIVE DRAFT

6. **Total Maximum Daily Loads.** CWA section 303(d)(1)(A) requires that “[e]ach state shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard applicable to such waters.” The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads (TMDLs) for such waters. This priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, commonly referred to as the 303(d) List. The CWA requires the 303(d) List to be updated every two years. Requirements of this Order implement the TMDLs adopted by the San Diego Water Board and approved by USEPA.
7. **Non-Storm Water Discharges.** Pursuant to CWA section 402(p)(3)(B)(ii), this Order requires each Copermittee to effectively prohibit discharges of non-storm water into its MS4. Nevertheless, non-storm water discharges into and from the MS4s continue to be reported to the San Diego Water Board by the Copermittees and other persons. Monitoring conducted by the Copermittees, as well as the 303(d) List, have identified dry weather, non-storm water discharges from the MS4s as a source of pollutants causing or contributing to receiving water quality impairments in the San Diego Region. The federal regulations [40 CFR 122.26(d)(2)(iv)(B)] require the Copermittees to have a program to prevent all types of non-storm water discharges, or illicit discharges, from entering the MS4. The federal regulations, however, allow for specific categories of non-storm water discharges or flows to be addressed as illicit discharges only where such discharges are identified as sources of pollutants to waters of the U.S.
8. **In-Stream Treatment Systems.** Pursuant to federal regulations [40 CFR 131.10(a)], in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of a runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Runoff treatment must occur prior to the discharge of runoff into receiving waters. Treatment control best management practices (BMPs) must not be constructed in waters of the U.S. ~~or state.~~ Construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body.

DISCHARGE CHARACTERISTICS AND RUNOFF MANAGEMENT

9. **Point Source Discharges of Pollutants.** Discharges from the MS4s may contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the state. A discharge from an MS4 is a “discharge of pollutants from a point source” into waters of the U.S. as defined in the CWA. Storm water and non-storm water discharges from the MS4s may contain pollutants that cause or threaten to cause a violation of surface water quality standards, as outlined in the Basin Plan. Storm water and non-storm water discharges from the MS4s are subject to the

ADMINISTRATIVE DRAFT

conditions and requirements established in the Basin Plan for point source discharges.

- 10. Potential Beneficial Use Impairment.** The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses resulting in a condition of pollution, contamination, or nuisance.
- 11. Pollutants Generated by Land Development.** Land development has created and continues to create new sources of non-storm water discharges and pollutants in storm water discharges as human population density increases. This brings higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, and trash. Pollutants from these sources are dumped or washed off the surface by non-storm water or storm water flows into and from the MS4s. When development converts natural vegetated pervious ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Therefore, runoff leaving a developed area [not subject to SUSMP or HMP requirements](#) contains greater pollutant loads and is significantly greater in runoff volume, velocity, and peak flow rate than pre-development runoff from the same area.
- 12. Runoff Discharges to Receiving Waters.** The MS4s discharge runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the eleven hydrologic units comprising the San Diego Region. Numerous receiving water bodies and water body segments have been designated as impaired by the San Diego Water Board pursuant to CWA section 303(d).
- 13. Pollutants in Runoff.** The most common pollutants in runoff discharged from the MS4s include total suspended solids, sediment, 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 (decaying vegetation, animal waste), detergents, and trash.
- 14. Human Health and Aquatic Life Impairment.** Pollutants in runoff discharges from the MS4s can threaten and adversely affect human health and aquatic organisms. Adverse responses of organisms to chemicals or physical agents in runoff range from physiological responses such as impaired reproduction or growth anomalies to mortality. Increased volume, velocity, rate, and duration of storm water runoff greatly accelerate the erosion of downstream natural channels. This alters stream channels and habitats and can adversely affect aquatic and terrestrial organisms.
- 15. Water Quality Effects.** The Copermittees' water quality monitoring data submitted to date documents persistent exceedances of Basin Plan water quality objectives for runoff-related pollutants at various watershed monitoring stations. Persistent toxicity

ADMINISTRATIVE DRAFT

has also been observed at several watershed monitoring stations. In addition, bioassessment data indicate that the majority of the monitored receiving waters have Poor to Very Poor Index of Biotic Integrity (IBI) ratings. These findings indicate that runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in the San Diego Region. Non-storm water discharges from the MS4s have been shown to contribute significant levels of pollutants and flow in arid, developed Southern California watersheds, and contribute significantly to exceedances of applicable receiving water quality objectives.

16. Non-Storm Water Discharges. ~~Non-storm water discharges from the MS4s are not considered storm water discharges and therefore are not subject to the MEP standard from CWA 402(p)(3)(B)(iii), which is explicitly for “Municipal ... Stormwater Discharges (emphasis added)” from the MS4s.~~ Pursuant to CWA 402(p)(3)(B)(ii), non-storm water discharges into the MS4s must be effectively prohibited.

17. Best Management Practices. Pollutants can be effectively reduced in runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best “first line of defense”. Source control BMPs (both structural and non-structural) minimize the contact between pollutants and runoff, therefore keeping pollutants onsite and out of receiving waters. Treatment control BMPs remove pollutants that have been mobilized by storm water or non-storm water flows.

18. BMP Implementation. Runoff needs to be addressed during the three major phases of development (planning, construction, and use) in order to reduce the discharge of storm water pollutants to the MEP, effectively prohibit non-storm water discharges, and protect receiving waters. Development which is not guided by water quality planning policies and principles can result in increased pollutant load discharges, flow rates, and flow durations which can negatively affect receiving water beneficial uses. Construction sites without adequate BMP implementation result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing development can generate substantial pollutant loads which are discharged in runoff to receiving waters.

19. Long Term Planning and Implementation. Federal regulations require municipal storm water permits to expire 5 years from adoption, after which the permit must be renewed and reissued. The San Diego Water Board recognizes that the degradation of water quality and impacts to beneficial uses of the waters in the San Diego Region occurred over several decades. The San Diego Water Board further recognizes that a decade or more may be necessary to realize demonstrable improvement to the quality of waters in the Region. This Order includes a long term planning and implementation approach that will require more than a single permit term to complete.

ADMINISTRATIVE DRAFT

ADMINISTRATIVE DRAFT**WATER QUALITY STANDARDS**

20. Basin Plan. The San Diego Water Board adopted a Water Quality Control Plan for the San Diego Basin (Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the plan. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. Requirements of this Order implement the Basin Plan.

The Basin Plan identifies the following existing and potential beneficial uses for inland surface waters in the San Diego Region: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH), Hydropower Generation (POW), and Preservation of Biological Habitats of Special Significance (BIOL). The following additional existing and potential beneficial uses are identified for coastal waters of the San Diego Region: Navigation (NAV), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

21. Ocean Plan. The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Requirements of this Order implement the Ocean Plan.

The Ocean Plan identifies the following beneficial uses of ocean waters of the state to be protected: Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting

22. Sediment Quality Control Plan. On September 16, 2008, the State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Sediment Quality Control Plan). The Sediment Quality Control Plan became effective on August 25, 2009. The Sediment Quality Control Plan establishes 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health, and 2) a program of implementation using a multiple lines of evidence approach to interpret

ADMINISTRATIVE DRAFT

the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Control Plan.

23. National Toxics Rule and California Toxics Rule. USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the National toxics Rule (NTR) applied in California. On May 18, 2000, USEPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants

24. Antidegradation Policy. This Order is in conformance with the federal Antidegradation Policy described in 40 CFR 131.12, and State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Federal regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

CONSIDERATIONS UNDER FEDERAL LAW

25. Coastal Zone Act Reauthorization Amendments. Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This Order addresses the management measures required for the urban category, with the exception of septic systems. The runoff management programs developed pursuant to this Order fulfill the need for coastal cities to develop a runoff non-point source plan identified in the Non-Point Source Program Strategy and Implementation Plan. The San Diego Water Board addresses septic systems through the administration of other programs.

26. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 USCA sections 1531 to 1544). This Order requires compliance with receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Copermitees are responsible for meeting all requirements of the applicable Endangered Species Act.

ADMINISTRATIVE DRAFT*CONSIDERATIONS UNDER STATE LAW*

27. Unfunded Mandates. This Order does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section (6) of the California Constitution for several reasons, including, but not limited to, the following:

- a. This Order implements federally mandated requirements under CWA section 402. (33 USC 1342(p)(3)(B).)
- b. The local agency Copermittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental and new dischargers who are issued NPDES permits for storm water and non-storm water discharges.
- c. The local agency Copermittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order.
- d. The Copermittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in CWA section 301(a) (33 USC 1311(a)) and in lieu of numeric restrictions on their MS4 discharges (i.e. effluent limitations).
- e. The local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under State law predates the enactment of Article XIII B, Section (6) of the California Constitution.
- f. The provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 USC 1313(d).) Once the USEPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable wasteload allocation. (40 CFR 122.44(d)(1)(vii)(B).)

28. California Environmental Quality Act. The issuance of WDRs and an NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with CWC section 13389.

STATE WATER BOARD DECISIONS

29. Compliance with Prohibitions and Limitations. The receiving water limitation language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ-99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Water Board on June 17, 1999. The receiving water limitation language in this Order requires compliance with water quality standards, which for storm water discharges is to be achieved through an iterative approach requiring the

ADMINISTRATIVE DRAFT

implementation of improved and better-tailored BMPs over time. Implementation of the iterative approach to comply with receiving water limitations based on applicable water quality standards is necessary to ensure that storm water discharges from the MS4 ultimately will not cause or contribute to violations of water quality standards and the creation of conditions of pollution, contamination, or nuisance.

30. Special Conditions for Areas of Special Biological Significance. On March 20, 2012, the State Water Board approved Resolution No. 2012-0012~~X~~ approving an exception to the Ocean Plan prohibition against discharges to Areas of Special Biological Significance (ASBS) for certain nonpoint source discharges and NPDES permitted municipal storm water discharges. The Resolution requires monitoring and testing of marine aquatic life and water quality in several ASBS to protect California's coastline during storms when rain water overflows into coastal waters. Specific terms, prohibitions, and special conditions were adopted to provide special protections for marine aquatic life and natural water quality in ASBSs. The City of San Diego's municipal storm water discharges to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's municipal storm water discharges to the Heisler Park ASBS are subject terms and conditions of the Resolution. The Special Protections contained in Attachment B to the Resolution applicable to these discharges are hereby incorporated in this Order as if fully set forth herein.

ADMINISTRATIVE FINDINGS

31. Executive Officer Delegation of Authority. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under CWC section 13223 or this Order explicitly states otherwise.

32. Standard Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in [Attachment B](#) to this Order.

33. Fact Sheet. The Fact Sheet 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 hereby incorporated into this Order and constitutes part of the Findings of this Order.

34. Public Notice. The San Diego Water Board notified the Copermitttees, and interested agencies and persons of its intent to prescribe WDRs for MS4 discharges of pollutants 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.

35. Public Hearing. The San Diego Water Board held a public hearing on Month Day, 2012 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.

ADMINISTRATIVE DRAFT**II. PROVISIONS**

THEREFORE, IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, must each comply with the following:

A. PROHIBITIONS AND LIMITATIONS

[NOTE: The receiving water limitations language contained in provision A raises significant legal and policy issues that require further discussion and revision. The receiving water limitations language in Provision A generally follows the language required by the State Board's precedential Order WQ 99-05. In the State Board's precedential order WQ 2001-15, the State Board determined that the mandatory receiving water limitations language found in Order 99-05 "does not require strict compliance with water quality standards." Instead, the State Board concluded that compliance with water quality standards is "to be achieved over time, through an iterative approach requiring improved BMPs." Despite this policy statement from the State Board, in 2011, the 9th Circuit interpreted the State Board's mandatory language in a manner that requires strict and immediate compliance with water quality standards. The State Board has recently scheduled a workshop for November 20 to address the receiving water limitations language. The San Diego Copermittees support revisions to the receiving water limitations language that align the language with the State Board's policy that compliance with water quality standards is "to be achieved over time, through an iterative approach requiring improved BMPs." Storm water organizations such as CASQA have already submitted language to the State Board designed to address this conflict between the State Board's policy and the 9th Circuit decision. The redlines submitted below are not designed to address all the issues raised by this conflict. Instead, the redlines address, for this draft permit, how compliance with water quality standards will be achieved for water bodies covered by an adopted TMDL or covered in the WQIPs. The San Diego Copermittees will participate in the State Board process regarding the larger issues involving the receiving water limitations language, and encourage the Regional Board to do so as well. The San Diego Copermittees reserve the right to submit additional language intended to align all of the receiving water limitations language in this draft permit with State Board policy as the State Board workshop process evolves. At this time, however, the San Diego Copermittees believe it is premature to submit such language given the pending State Board process and the proposed CASQA language.]

The purpose of this provision is to describe the conditions under which storm water and non-storm water discharges into and from MS4s are prohibited or limited. The goal of this provision is to ~~protect, preserve, enhance, and restore~~ address the impacts of MS4 discharges so that such discharges do not impair water quality and designated beneficial uses of waters of the U.S. This goal will be accomplished through implementation of control measures that effectively prohibit non-storm water discharges into and from the Copermittees' MS4s, and reduce pollutants in storm water discharges

ADMINISTRATIVE DRAFT

from the Copermittees' MS4s to the MEP. The process for determination of compliance with the Discharge Prohibitions (A.1), Receiving Water Limitations (A.2), and Effluent Limitations (A.3) is defined in Provision A.4.

1. Discharge Prohibitions

- a. Discharges ~~into and~~ from MS4s owned and operated by a Copermittee in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters of the ~~state-U.S.~~ are effectively prohibited, unless the Copermittee is addressing the discharges through Provision A.1.e or A.4 through the process set forth in Provision A.4.
- b. Non-storm water discharges ~~into and from~~ MS4s are effectively prohibited, unless such discharges are either authorized by a separate NPDES permit, or the discharge is a category of non-storm water discharges or flows that must be addressed pursuant to Provisions E.2.a.(1)-(5) of this Order.
- c. Discharges from MS4s are subject to all waste discharge prohibitions in the Basin Plan, included in Attachment A to this Order, unless the Copermittee is addressing the discharges through Provision A.1.e or A.4 through the process set forth in Provision A.4.
- d. ~~Discharges from MS4s to ASBS are prohibited.~~ Storm water discharges from the City of San Diego's MS4 to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's MS4 to the Heisler Park ASBS are authorized under this Order subject to the Special Protections contained in Attachment B to State Water Board Resolution No. 2012-001~~2X~~ applicable to these discharges, included in Attachment A to this Order. All other discharges from MS4s to ASBS are prohibited, unless authorized by a subsequent order.
- e. For discharges associated with water body pollutant combinations addressed in a TMDL in Attachment E of this Order, the affected Copermittees shall achieve compliance as outlined in Attachment E (Total Maximum Daily Load Provisions).

2. Receiving Water Limitations

- a. Discharges from MS4s owned and operated by a Copermittee must not cause or contribute to the violation of water quality standards in any receiving waters, including ~~but not limited to~~ all applicable provisions contained in the list below including any modifications unless the Copermittee is addressing the discharges through Provision A.2.b or A.4 through the process set forth in Provision A.4:
 - (1) The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans;
 - (2) State Water Board plans for water quality control including the following:

ADMINISTRATIVE DRAFT

- (a) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries (Thermal Plan), and
 - (b) The Ocean Plan, including beneficial uses, water quality objectives, and implementation plans;
- (3) State Water Board policies for water and sediment quality control including the following:
- (a) Water Quality Control Policy for the Enclosed Bays and Estuaries of California,
 - (b) Sediment Quality Control Plan which includes the following narrative objectives [for bays and estuaries](#):
 - (i) Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities, and
 - (ii) Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health,
 - (c) The Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Water Board Resolution No. 68-16).
- (4) Priority pollutant criteria promulgated by the USEPA through the following:
- (a) National Toxics Rule (NTR)¹ (promulgated on December 22, 1992 and amended on May 4, 1995), and
 - (b) California Toxics Rule (CTR)^{2,3}

~~a. Discharges from MS4s composed of storm water runoff must not alter natural ocean water quality in an ASBS.~~

~~b. Discharges from MS4s must not cause or contribute to the violation of any receiving water limitations expressed as water quality based effluent limitations (WQBELs) required to meet the WLAs established for the TMDLs in to this Order, pursuant to the applicable TMDL compliance schedules.~~

b. For receiving water limitations associated with a water body pollutant combination addressed in a TMDL in Attachment E of this Order, the Copermittees shall achieve compliance as outlined in Attachment E (Total

¹ 40 CFR 131.36

² 65 Federal Register 31682-31719 (May 18, 2000), adding Section 131.38 to 40 CFR

³ If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies, [unless a previous regulatory action \(i.e., TMDL\) has specified otherwise.](#)

ADMINISTRATIVE DRAFT

[Maximum Daily Load Provisions](#)).

3. Effluent Limitations**a. Technology Based Effluent Limits**

Pollutants in storm water discharges from MS4s must be reduced to the MEP⁴, [through timely implementation of control measures and other actions as specified in Provisions B and E as described in Provision A.4.](#)

b. Water Quality Based Effluent Limits

[For a water body-pollutant combination addressed in a TMDL in Attachment E of this Order,](#) ~~P~~pollutants in discharges from MS4s must be reduced to comply with ~~any~~ effluent limitations expressed as WQBELs required to meet the WLAs established for those TMDLs [as described in Provision A.4 and Attachment E](#) to this Order, pursuant to the applicable TMDL compliance schedules.

4. Compliance with Discharge Prohibitions, and Receiving Water Limitations, and Effluent Limitations

Each Copermittee must comply with the discharge prohibitions [\(A.1\), and](#) receiving water limitations [\(A.2\), and effluent limitations \(A.3\)](#) of this Order through timely implementation of [strategies,](#) control measures, and other actions as specified in Provisions B and E of this Order, including any modifications. [The Water Quality Improvement Plans described in Provision B shall be designed to achieve compliance with the discharge prohibitions, receiving water limitations, and effluent limitations. Copermittees shall be considered in compliance with A.1, A.2, and A.3 unless the Regional Board has denied approval of a Water Quality Improvement Plan or subsequent update as described in Provisions B and F.1.](#)

- a.** If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:

- (1) [For pollutants that are not in the process of being addressed via specific scheduled actions in a Water Quality Improvement Plan,](#) ~~U~~pon a determination by either the Copermittees or the San Diego Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable water quality standard, the Copermittees must submit the following updates to the Water Quality Improvement Plan required under Provision B as part of the Annual Report required under Provision [F.3.b,](#) ~~or~~ [Water Quality Improvement Plan update Provision B.5.a,](#) unless the San Diego Water Board

⁴ This does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants in storm water discharges to the MEP prior to entering receiving waters (e.g., low flow diversions to the sanitary sewer). Runoff treatment must occur prior to the discharge of runoff into receiving waters per Finding 8.

ADMINISTRATIVE DRAFT

either: 1) directs an earlier submittal; or 2) allows for the adoption of a forthcoming TMDL to establish wasteload allocations that will form the basis of revisions to the Water Quality Improvement Plan:

- (a) The water quality improvement strategies being implemented that are effective and will continue to be implemented;
- (b) Additional water quality improvement strategies (i.e.g. BMPs, retrofitting projects, stream and/or habitat rehabilitation, ~~or~~ restoration projects, etc.) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards;
- (c) Updates to the schedule for implementation of the existing and additional water quality improvement strategies; and
- (d) Updates, when necessary, to the schedule for achieving compliance with the discharge prohibitions and receiving water limitations of this Order;
- (e) As described in Provision B.6, Copermittees must submit requested modifications to the Water Quality Improvement Plan either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. ;The San Diego Water Board may require the incorporation of additional modifications to the Water Quality Improvement Plan required under Provision B. The applicable Copermittees must submit any modifications to the update to the Water Quality Improvement Plan within 30 days of notification that additional modifications are required by the San Diego Water Board, or as otherwise directed;
- (f) As described in Provision B.6, upon Within 30 days of the San Diego Water Board determination that the update to the Water Quality Improvement Plan meets the requirements of this Order, the Copermittees must submit requested modifications to the jurisdictional runoff management programs either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b, revise the jurisdictional runoff management program documents to incorporate the updated water quality improvement strategies that have been and will be implemented, the implementation schedule, and any additional monitoring required; and
- (g) The Copermittees must implement the revised jurisdictional runoff management programs and updated jurisdictional monitoring and assessment component of the Water Quality Improvement Plan.

ADMINISTRATIVE DRAFT

(2) For pollutants in the process of being addressed via a specific, scheduled program in a Water Quality Improvement Plan, the Copermittee(s) shall continue to implement that program as described in the Water Quality Improvement Plan approved by the Regional Board;

- b.** So long as the Copermittees have complied with the procedures set forth above and are implementing the Water Quality Improvement Plan(s) approved by the Regional Board, the Copermittees ~~must do not have to~~ repeat the same procedure ~~set forth above to comply with~~ for continuing or recurring exceedances of the same discharge prohibitions, effluent limitations, and receiving water limitations of this Order for continuing or recurring exceedances of the same water quality standard(s) following implementation of scheduled actions unless directed to ~~do otherwise~~ by the San Diego Water Board.
- ~~a. Nothing in Provisions A.4. and A.4. prevents the San Diego Water Board from enforcing any provision of this Order while the applicable Copermittees prepare and implement the above update to the Water Quality Improvement Plan and jurisdictional runoff management programs.~~

ADMINISTRATIVE DRAFT**B. WATER QUALITY IMPROVEMENT PLANS**

The purpose of this provision is to develop Water Quality Improvement Plans that guide the Copermittees' jurisdictional runoff management program implementation efforts towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. The goal of the Water Quality Improvement Plan is to 1) effectively prohibit non-storm water discharges into the MS4s, 2) reduce pollutants in storm water discharges from the MS4s to the MEP, and 3) support attainment and the reasonable protection, preservation, and enhancement, and restoration of water quality and designated beneficial uses of waters of the state. Therefore, implementation of the WQIPs also provides the basis for complying with Provisions A.1 and A.3, as described in Provision A.4. This goal will be accomplished through an adaptive planning and management process that identifies the highest water quality priorities within a watershed and implements strategies, control measures, and BMPs to achieve improvements in the quality of discharges from the MS4s and receiving waters.

The Copermittees must develop Water Quality Improvement Plans for each Watershed Management Area that 1) prioritize water quality issuesconditions resulting from the Copermittee's MS4 discharges to and from the MS4s within each Watershed Management Area, 2) identify MS4 pollutant sources and other stressors associated with thesethe water quality priorities, 3) define numeric targetsgoals and schedules to achieve improvement ofaddress water quality priorities, 4) describe water quality improvement strategies to achieve numeric targetsgoals, and 5) develop and execute a coordinated monitoring and assessment program to facilitate adaptive management of the Water Quality Improvement Plans and determine progress towards achieving improved water quality in MS4 discharges and receiving waters improved water quality.

The Copermittees must implement allsubmit Water Quality Improvement Plans for public review and Regional Board Executive Officer review and approval per the requirements of schedule outline in Provision no later than 12 months after the adoption of this Order, or in accordance with Provision F.5B.6 of this Order.

~~1.~~

2.1. Watershed Management Areas

The Copermittees must develop Water Quality Improvement Plans for each of the Watershed Management Areas in Table B-1. A total of ninteten Water Quality Improvement Plans must be developed for the San Diego Region.

ADMINISTRATIVE DRAFT**Table B-1. Watershed Management Areas**

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
South Orange County	San Juan (901.00)	Aliso Creek San Juan Creek San Mateo Creek Pacific Ocean	- City of Aliso Viejo ¹ - City of Dana Point ¹ - City of Laguna Beach ¹ - City of Laguna Hills ¹ - City of Laguna Niguel ¹ - City of Laguna Woods ¹ - City of Lake Forest ¹ - City of Mission Viejo ¹ - City of Rancho Santa Margarita ¹ - City of San Clemente ¹ - City of San Juan Capistrano ¹ - County of Orange ¹ - Orange County Flood Control District ¹
Santa Margarita River	Santa Margarita (902.00)	Murrieta Creek Temecula Creek Santa Margarita River Santa Margarita Lagoon Pacific Ocean	- City of Murrieta ² - City of Temecula ² - City of Wildomar ² - County of Riverside ² - County of San Diego ³ - Riverside County Flood Control and Water Conservation District ²
San Luis Rey River	San Luis Rey (903.00)	San Luis Rey River San Luis Rey Estuary Pacific Ocean	- City of Escondido - City of Oceanside - City of Vista - County of San Diego
Carlsbad	Carlsbad (904.00)	Loma Alta Slough Buena Vista Lagoon Agua Hedionda Lagoon Batiqitos Lagoon San Elijo Lagoon Pacific Ocean	- City of Carlsbad - City of Encinitas - City of Escondido - City of Oceanside - City of San Marcos - City of Solana Beach - City of Vista - County of San Diego
San Dieguito River	San Dieguito (905.00)	San Dieguito River San Dieguito Lagoon Pacific Ocean	- City of Del Mar - City of Escondido - City of Poway - City of San Diego - City of Solana Beach - County of San Diego
Penasquitos	Penasquitos Reservoir HA (906.0010) Poway HA (906.20) Miramar HA (906.40)	Los Penasquitos Lagoon Mission Bay Pacific Ocean	- City of Del Mar - City of Poway - City of San Diego - County of San Diego
Mission Bay	Scripps HA (906.30) Miramar HA (906.40) Tecolote HA (906.50)	Mission Bay Pacific Ocean	- City of San Diego
San Diego River	San Diego (907.00)	San Diego River Pacific Ocean	- City of El Cajon - City of La Mesa - City of Poway - City of San Diego - City of Santee - County of San Diego

ADMINISTRATIVE DRAFT**Table B-1. Watershed Management Areas**

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
San Diego Bay	Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)	Sweetwater River Otay River San Diego Bay Pacific Ocean	- City of Chula Vista - City of Coronado - City of Imperial Beach - City of La Mesa - City of Lemon Grove - City of National City - City of San Diego - County of San Diego - San Diego County - Regional Airport Authority - Unified Port of San Diego
Tijuana River	Tijuana (911.00)	Tijuana River Tijuana Estuary Pacific Ocean	- City of Imperial Beach - City of San Diego - County of San Diego

Notes:

1. The Orange County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2009-0002, or earlier if the Orange County Copermittees meet the conditions in Provision [F.6](#).
2. The Riverside County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2010-0016, or earlier if the Riverside County Copermittees meet the conditions in Provision [F.6](#).
3. The County of San Diego will not be required to implement the requirements of Provision [B](#) for the Santa Margarita River Watershed Management Area until the Riverside County Copermittees are enrolled under this Order. Until then, the County of San Diego is responsible for implementing and complying with the requirements of Provisions [D.1](#), [D.4.a.\(1\)&\(3\)](#), [E](#), [F.2.a-b](#), [F.3.b](#), and [F.4](#) for the areas of the Santa Margarita River Watershed Management Area within its jurisdiction.

3.2. Identification of Water Quality Priorities

The Copermittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Water Quality Improvement Plan. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and jurisdictional [runoff management program](#) implementation efforts by receiving water.

a. ASSESSMENT OF RECEIVING WATER CONDITIONS

The Copermittees must [review pollutant sources, discharges, and receiving water conditions and assess](#) consider the following, at a minimum, to [determine support](#) the [degree identification](#) of [adverse water quality priorities based on the](#) impacts [to of MS4 discharges on](#) receiving water beneficial uses:

- (1) Receiving waters listed as impaired on the CWA Section 303(d) List of Water Quality Limited Segments (303(d) List);
- (2) TMDLs adopted and under development by the San Diego Water Board;

[\(3\) The requirements of Provision A.2:](#)

- ~~(3)~~(4) Receiving waters recognized as sensitive or highly valued by the Copermittees, including estuaries designated under the National Estuary Program under CWA section 320, wetlands defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands, and

ADMINISTRATIVE DRAFT

receiving waters identified as ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012X (Attachment A);

~~(4)~~(5) Water quality standards established in the Basin Plan;

~~(5)~~(6) Known historical versus current physical, chemical, and biological water quality conditions;

~~(6)~~(7) All available Available, relevant, and appropriately collected physical, chemical, and biological receiving water monitoring data meeting appropriate QA/QC standards, including ~~but not limited to,~~ data describing:

(a) Chemical constituents;

(b) Water quality parameters (i.e. pH, temperature, conductivity, etc.);

(c) Toxicity Identification Evaluations for both receiving water column and sediment;

(d) Trash impacts;

(e) Bioassessments; and

(f) Physical habitat.

~~(7)~~(8) Available evidence of erosional impacts in receiving waters due to accelerated flows (i.e. hydromodification); ~~and~~

~~(8)~~(9) Available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters ~~;~~ and

(10) The potential for long-term achievement and maintenance of beneficial use attainment in the Watershed Management Area.

b. ASSESSMENT OF MS4 DISCHARGE QUALITY AND IMPACTS

To support the identification of priorities based on the impacts of MS4 discharges on receiving water beneficial uses, the Copermittees must review appropriately collected MS4 discharge quality data and consider the extent to which MS4s cause or contribute to the adverse impacts to receiving water beneficial uses identified in B.2.a. Considerations include:

(1) Locations of the Copermittees' MS4 discharges with respect to receiving waters;

(2) MS4 discharge quality results relevant to impacts in receiving waters and action levels, including the temporal and geographic variation of the results;

ADMINISTRATIVE DRAFT

(3) The requirements of Provisions A.1 and A.3.; and

(4) Whether MS4 discharge quality is sufficiently well known or other information is available to assess whether MS4 discharges are causing or contributing to specific receiving water conditions, or whether additional data need to be collected through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan.

b-c. IDENTIFICATION OF ~~IDENTIFY~~ PRIORITY POLLUTANTS AND RECEIVING WATER
CONDITIONS

The Copermittees must use the information gathered in Provision B.2.a. and B.2.b. to develop a list of water quality priorities as pollutants and/or receiving water conditions that are the highest threat to receiving water quality or that most adversely affect the physical, chemical, and biological integrity of receiving waters. The Copermittees must identify the highest water quality priorities to be addressed by the Water Quality Improvement Plan, and describe the reasoning for selecting a subset of receiving water conditions as the highest priority(ies). The Water Quality Improvement Plans shall describe the following for the highest priority receiving water condition:

(1) The beneficial use(s) and pollutant(s) associated with the priority receiving water condition(s);

(2) The geographic extent of the priority receiving water condition(s) within the WMA, if known;

(3) The Copermittees with MS4s that contribute discharges to the priority water receiving condition(s);

(4) The temporal extent of the priority receiving condition(s) (i.e., dry weather and/or wet weather); and

(5) Whether receiving waters have been monitored sufficiently to adequately characterize the priority receiving condition(s), including a consideration of spatial and temporal variation.

e-d. MS4 ~~POLLUTANT SOURCE AND/OR STRESSOR~~ IDENTIFICATION

The Copermittees must identify and prioritize known and suspected storm water and non-storm water pollutant sources and any other stressors causing or contributing to within the MS4 associated with the highest priority receiving water conditions identified under B.2.c ~~quality priorities.~~ The identification of known

ADMINISTRATIVE DRAFT

and suspected sources of the highest water quality priorities as identified for Provision B.2.c ~~must~~ shall consider the following:

(1) Land uses and their potential contribution to the highest priority receiving water conditions;

~~(9)~~ (2) Pollutant generating facilities or areas, and/or activities within the Watershed Management Area, ~~including;~~

~~(10) Each Copermittee's inventory of construction, municipal, commercial, industrial, and residential facilities, areas, and/or activities;~~

~~(11) —~~

~~(12) Publicly owned parks and/or recreational areas;~~

~~(13) —~~

~~(14) Open space areas;~~

~~(15) —~~

~~(16) All currently operating or closed municipal landfills or other treatment, storage or disposal facilities for municipal waste, and~~

~~(17) —~~

~~(18) Areas not within the Copermittees' jurisdictions (e.g., tribal lands, state lands, federal lands) that may be pollutant sources related to the highest water quality priorities within the Watershed Management Area;~~

~~(19) —~~

~~(20) Locations of the Copermittees' MS4s, including the following:~~

~~(21) —~~

~~(22)~~ (3) All MS4 outfalls that discharge to receiving waters, and

~~(23) Locations of major structural controls for storm water and non-storm water (e.g., retention basins, detention basins, major infiltration devices, etc.);~~

~~(24) —~~

~~(25) Other known and suspected sources of non-storm water or pollutants in storm water discharges to receiving waters within the Watershed Management Area, including the following:~~

~~(26) —~~

~~(27) Other MS4 outfalls (e.g., Phase II Municipal and Caltrans);~~

~~(28) —~~

~~(29) Other NPDES permitted discharges;~~

~~(30) —~~

~~(31) Any other discharges that may be considered point sources (e.g., private outfalls), and~~

~~(32) —~~

~~(33) Any other discharges that may be considered non-point sources (e.g., agriculture, wildlife or other natural sources);~~

~~(34) —~~

~~(35)~~ (4) Review of available data, including but not limited to:

ADMINISTRATIVE DRAFT

(a) Findings from the Copermittees' illicit discharge detection and elimination programs,

(b) Findings from the Copermittees' MS4 outfall monitoring,

~~(c) Findings from the Copermittees' receiving water monitoring,~~

~~(d)~~

~~(e) Findings from the Copermittees' MS4 discharges and receiving water assessments, and~~

~~(f)~~

~~(g)~~(c) Any other~~Other~~ available, relevant, and appropriately-collected data, information, or studies related to pollutant sources and conditions pollutant-generating activities that contribute to the highest priority receiving water quality priorities as~~conditions~~ identified ~~for in~~ Provision B.2.~~ce~~.

(5) Whether MS4 sources are sufficiently well known to design an effective, efficient⁵, directed control strategy, or whether additional source/stressor identification needs to be conducted through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan to identify and prioritize sources/stressors within the watershed.

~~d.e.~~ NUMERIC TARGETS AND SCHEDULES GOALS

The Copermittees must develop and incorporate interim and final numeric targets⁶ and schedules goals⁷ into the Water Quality Improvement Plans. Numeric targetsgoals and schedules must be used~~are intended to support Water Quality Improvement Plan development and~~ to measure progress towards addressing the highest priority receiving water conditions identified under B.2.c~~water quality priorities and an ultimate outcome of protections, preservation, enhancement, and restoration of.~~ Numeric goals are not enforceable compliance standards, effluent limitations, or receiving water beneficial uses.~~limitations.~~

⁵ Copermittees are encouraged to use a sustainability analysis, or Triple Bottom Line analysis, that considers environmental, social and economic factors when estimating the potential efficiency of control strategies.

⁶ Interim and final numeric targets may take a variety of forms such as pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric targets are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators.

⁷ Interim and final numeric goals may take a variety of forms such as TMDL targets, TMDL wasteload allocations, TMDL based WQBELs incorporated in Attachment E of this Order, action levels, pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric goals are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators. To the extent that a goal is not based on an enforceable regulatory mechanism (i.e., TMDL, WLA), WQIP goals and schedules may be revised through the iterative process. Numeric goals are not subject to enforcement or non-compliance actions under this Order.

ADMINISTRATIVE DRAFT

When ~~developing~~establishing numeric ~~targets~~goals and corresponding schedules, the Copermittees must consider the following:

ADMINISTRATIVE DRAFT

- (1) Final numeric ~~targets~~goals must be based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges for the highest ~~priority receiving~~ water ~~quality priorities~~conditions which will ~~result in~~ be capable of demonstrating progress toward the achievement of the restoration and/or protection of water quality standards in receiving waters; and
- (2) Interim numeric ~~targets~~goals must be based on measureable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric ~~targets~~goals in the receiving waters and/or MS4 discharges; and
- (3) Schedules must be adequate for measuring progress toward achieving the interim and final numeric ~~targets~~goals required for Provisions ~~B.2.d.~~ and B.2.d. Schedules must incorporate the following:
 - (a) Interim dates for achieving the interim numeric ~~goal~~targets,
 - (b) Compliance schedules for any applicable TMDLs in Attachment E to this Order,
 - (c) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001 ~~2X~~ (see Attachment A),
 - (d) Achievement of the final numeric ~~goals~~ targets in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and
 - ~~(d)~~(e) Final dates for achieving the final numeric ~~goals~~ targets must not extend more than 10 years beyond the date this Order is adopted, unless the schedule includes an applicable TMDL in Attachment E to this Order⁸.

4.3. Water Quality Improvement Strategies and Schedules

The Copermittees must develop specific water quality improvement strategies to address the highest ~~water quality~~ priority ~~ies~~ receiving water conditions identified within a Watershed Management Area. The water quality improvement strategies must address the highest water quality priorities by preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

⁸ Achievement of final numeric goals within 10 years represents progress towards attainment of water quality standards, but is not a requirement to fully attain all applicable water quality standards or all priority receiving water conditions within 10 years.

ADMINISTRATIVE DRAFT

a. WATER QUALITY IMPROVEMENT STRATEGIES

The Copermittees must prioritize water quality improvement strategies, must prioritize based on their likely effectiveness and efficiency, and implement the following measures, as appropriate, to effectively prohibit non-storm water discharges into its MS4, reduce pollutants in storm water discharges from its MS4 to the MEP, and achieve the interim and final numeric targetsgoals in accordance with the schedules required forin Provision B.2.∴.e. Measures include:

(1) Copermittee-selected activities identified in Provision E ,either as described in the jurisdictional runoff management programs or as modified with justification, that will address priority receiving water conditions; and

(4) Additional Sstructural and/or non-structural BMPs (to include public outreach and participation programs), as selected by the Copermittee, that are designed to achieve the interim and final numeric goals identified in Provision B.2.e.targets in the receiving waters and/or MS4 discharges;

(2)

(3) Retrofitting projects for areas of existing development known or suspected to contribute to the highest water quality priorities, and where retrofitting will contribute to reducing or eliminating non-storm water discharges to the MS4 and/or reducing pollutants in storm water discharges from the MS4 to the MEP;

(4)

(5)(2) Stream and/or habitat rehabilitation or restoration projects where stream and/or habitat rehabilitation or restoration are necessary for, or will contribute to demonstrable improvements in the physical, chemical, and biological receiving water conditions and restoration and/or protection of water quality standards in receiving waters; and

Other water quality improvement strategies that will result in preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

b. IMPLEMENTATION SCHEDULES

(6) The Copermittees must develop schedules for implementing the water quality improvement strategies identified under Provision B.3.a to achieve the interim and final numeric targetsgoals identified in the receiving waters and/or MS4 discharges for the highest water quality prioritiesB.2.e in the Watershed Management Area. Schedules must be developed for both the water quality improvement strategies implemented by each Copermittee within its

ADMINISTRATIVE DRAFT

- jurisdiction and for strategies that ~~will be implemented by multiple Copermittees~~ Copermittees' choose to implement on a collaborative basis.
- ~~(1) .~~
 - ~~(2)~~
 - ~~(3) Interim dates for achieving the interim numeric targets;~~
 - ~~(4)~~
 - ~~(5) Compliance schedules for any applicable TMDLs in Attachment E to this Order;~~
 - ~~(6)~~
 - ~~(7) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001X (see Attachment A);~~
 - ~~(8)~~
 - ~~(9) Achievement of the final numeric targets in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and~~
 - ~~(10)~~~~(2)~~ Final dates for achieving the final numeric targets must not extend more than 10 years beyond the date this Order is adopted, unless the schedule includes an applicable TMDL in Attachment E to this Order. The Copermittees must incorporate the implementation compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-001X~~2~~ (see Attachment A).

5.4. Water Quality Improvement Monitoring and Assessment

The Copermittees in each Watershed Management Area must develop an integrated ~~program to assess the~~ Water Quality Improvement Plan Monitoring and Assessment Program that assesses: 1) progress toward achieving the numeric ~~targets~~goals and schedules, and 2) the progress toward addressing the highest priority receiving water quality prioritiesconditions for each Watershed Management Area, and 3) each Copermittee's overall efforts implementing the requirements of Provision B. The water quality improvement monitoring and assessment program must include the monitoring and assessment requirements of Provision ~~D~~, which may be modified for consistency with the priority receiving water conditions of each Watershed Management Area and associated Copermittees. For Watershed Management Areas with applicable TMDLs, the water quality monitoring and assessment program must incorporate the specific monitoring and assessment requirements of Attachment E. For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-001~~2~~X (see Attachment A).

6.5. Iterative and Adaptive Management Process**a. WATER QUALITY IMPROVEMENT PLAN ADAPTIVE MANAGEMENT PROCESS**

The Copermittees in each Watershed Management Area must implement the iterative

ADMINISTRATIVE DRAFT

process, ~~at least once every 3 years,~~ adapting the Water Quality Improvement Plan, jurisdictional runoff management programs and monitoring and assessment programs, as necessary, to become more effective, ~~based on, but not limited to and meet the requirements of Provisions A, and shall consider~~ the following ~~considerations~~:

a. PRIORITY RECEIVING WATER CONDITIONS AND NUMERIC GOALS

The priority receiving water conditions and numeric goals, developed pursuant to B.2.c. and B.2.e respectively, shall guide jurisdictional implementation efforts for the duration of this Order. Recommendations for changes to priority receiving water conditions and numeric goals shall be provided in the Report of Waste Discharge and shall consider the following:

- (1) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan;
- (2) Progress toward achieving interim and final numeric ~~targets~~goals in receiving waters and/or MS4 discharges for the highest water quality priorities in the Watershed Management Area;
- ~~(3) Appropriateness of the highest water quality priorities identified for the Watershed Management Area;~~
- ~~(4)~~
- ~~(5) Progress toward achieving outcomes according to established schedules;~~
- ~~(6)~~
- (3) New scientific information or new or updated policies or regulations that affect identified numeric goals including revised water quality objectives or TMDLs;
- ~~(7)~~(4) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality problems and implementation measures to address the highest priority receiving water quality problems conditions;
- ~~(8)~~(5) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions implemented by the Copermittees;
- (6) The factors listed in Provision B.2.a.(1)-(10);
- ~~(9)~~(7) San Diego Water Board recommendations; and
- ~~(10)~~(8) Recommendations for modifications to the Water Quality Improvement Plan solicited through a public participation process.

b. ~~BASED ON THE RESULTS OF THE ITERATIVE PROCESS~~ WATER QUALITY IMPROVEMENT STRATEGIES AND SCHEDULES

ADMINISTRATIVE DRAFT

- (1) ~~The water quality improvement strategies and schedules~~ required pursuant to ~~Provision B.5.a., the Provisions B.3 and B.4 shall be adapted as new information becomes available to inform more effective and efficient means of achieving the numeric goals established in Provision B.2.e.~~ Copermittees ~~must report any modifications necessary shall consider adaptation to improve the effectiveness of the Water Quality Improvement Plan in the Annual Report required pursuant to Provision , or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5..~~
- (2) ~~The Copermittees must implement any modifications to the Water Quality Improvement Plan in accordance with the schedules developed pursuant to Provisions B.2. and B.3., unless directed otherwise by the San Diego Water Board.~~

b. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM ADAPTIVE MANAGEMENT PROCESS

~~Each Copermittee in the Watershed Management Area must implement the iterative process, jurisdictional runoff management programs and monitoring and assessment strategies and schedules at least annually, adapting its jurisdictional runoff management program to become more effective, based on, but not limited to considering the following:~~

~~(1) Changes to priority receiving water conditions and numeric goals based on recommendations from B.5.a.;~~

~~(11)(2) _____ Measurable or demonstrable reductions of non-storm water discharges to and from each Copermittee's MS4;~~

~~(12)(3) _____ Measurable or demonstrable reductions of pollutants in storm water discharges from each Copermittee's MS4 to the MEP;~~

~~(4) Information on the MS4 sources and/or pollutant-generating activities determined to be most significantly contributing to priority receiving water conditions;~~

~~(13)(5) _____ Efficiency in implementing the Water Quality Improvement Plan;~~

~~(14)(6) _____ San Diego Water Board recommendations; and~~

~~(15)(7) _____ Recommendations for modifications to each Copermittee's jurisdictional runoff management program solicited through a public participation process.~~

6. Water Quality Improvement Plan Submittal, Implementation, and Modifications

ADMINISTRATIVE DRAFT

Requirements for Water Quality Improvement Plan submittals and modifications are described in Provision F. Requirements for corresponding modifications to the jurisdictional runoff management programs and monitoring and assessment program are also described in Provision F.

The Copermittees must commence with implementation of the Water Quality Improvement Plan no later than 180 days after submission, unless otherwise directed in writing by the San Diego Water Board. the fiscal year (July 1) following San Diego Water Board approval of the Water Quality Improvement Plan.

(1) modifications necessary to improve the effectiveness its jurisdictional runoff management program document in the Annual Report required pursuant to Provision , or as part of the ROWD required pursuant to Provision F.5..

Each Copermittee must implement any modifications to its jurisdictional runoff management program in accordance with the schedules developed pursuant to Provisions B.2. and B.3., unless directed otherwise by the San Diego Water Board.

7. Water Quality Improvement Plan Implementation

Copermittees must commence with implementation of the Water Quality Improvement Plan no later than 180 days after submission, unless otherwise directed in writing by the San Diego Water Board.

ADMINISTRATIVE DRAFT**C. ACTION LEVELS**

The purpose of this provision is for the Copermittees to incorporate numeric non-storm water and storm water action levels in the Water Quality Improvement Plans. The action levels ~~will~~shall be used to guide the following program planning efforts and measure progress towards attaining the reasonable protection, preservation, and enhancement, and restoration of water quality and designated beneficial uses of waters of the state. ~~This goal will be accomplished through monitoring and assessing the quality of the MS4 discharges during the implementation of the Water Quality Improvement Plans.:~~

1. ~~The Copermittees must incorporate numeric action levels in the Support development and prioritization of water quality improvement strategies through the~~ Water Quality Improvement Plans ~~to direct and focus.~~ Discharge data above action levels can be evaluated using a statistical approach considering the Copermittees' jurisdictional runoff management program implementation efforts for addressing MS4 frequency, magnitude, and loading of discharges to the receiving waters. The numeric action levels will be used as part of the MS4 to support development of actions and prioritization of their implementation.
2. ~~Assist in the effective prohibition of non-stormwater discharges assessments required under from the MS4 pursuant to~~ Provision ~~,~~ and each Copermittee's program to detect and eliminate non-storm water E.2.
3. ~~Support the detection and elimination of illicit discharges to the MS4 required under~~ pursuant to Provision ~~.~~ Numeric E.2.

These goals will be accomplished through monitoring and assessing the quality of the MS4 discharges prior to and during the implementation of the Water Quality Improvement Plans. Exceedances of action levels are not subject to enforcement or non-compliance actions under this Order.

Action levels will be developed and incorporated into the Water Quality Improvement Plans (Provision B) including the Illicit Discharge Detection and Elimination (IDDE) Program (Provision E.2). Depending upon the goals/objectives for the use of the action levels must be developed and the priority receiving water conditions, the constituents and values at which they are set may differ between watersheds. Copermittees may develop Watershed Management Area specific numeric action levels for non-storm water and storm water MS4 discharges, using an approach approved by the Regional Board or use the default non-stormwater and stormwater action levels prescribed within C.1 and C.2 below, respectively. The Copermittees will submit action levels as part of their Water Quality Improvement Plan(s). The action levels established as follows: part of R9-2007-0001 will serve as the interim action levels until the Water Quality Improvement Plans are completed and approved.

ADMINISTRATIVE DRAFT**8.1. Non-Storm Water Action Levels**

- a. The following non-storm water action levels (NALs) must be incorporated ~~in the Water Quality Improvement Plan:~~

(1) Non-Storm Water Discharges from MS4s to Ocean Surf Zone

Table C-1. Non-Storm Water Action Levels for Discharges from MS4s to Ocean Surf Zone

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000/1,000 ¹	OP
Fecal Coliform	MPN/100 ml	200 ²	-	400	OP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	OP

Abbreviations/Acronyms

AMAL – average monthly action level
OP – Ocean Plan water quality objective

MDAL – maximum daily action level
MPN/100 ml – most probable number per 100 milliliters

Notes:

- Total coliform density ~~shall not exceed NAL is~~ 1,000 MPN/100 ml when the fecal/total coliform ratio exceeds 0.1
- Fecal coliform density ~~may not exceed NAL is~~ 200 MPN per 100 ml during any 30 day period
- This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas”

ADMINISTRATIVE DRAFT~~(3)~~~~(4)~~(2) Non-Storm Water Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries**Table C-2. Non-Storm Water Action Levels for Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries**

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level
 OP – Ocean Plan water quality objective
 NTU – Nephelometric Turbidity Units
 ug/L – micrograms per liter

MDAL – maximum daily action level
 BP – Basin Plan water quality objective
 MPN/100 ml – most probable number per 100 milliliters

Notes:

1. Based on a minimum of not less than five samples for any 30-day period
2. ~~No~~NAL is reached if more than 10 percent of total samples ~~may~~ exceed 400 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas” and is not applicable to waterbodies that are not designated REC-1.

ADMINISTRATIVE DRAFT

Table C-3. Non-Storm Water Action Levels for Priority Pollutants

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		MDAL	AMAL	MDAL	AMAL
Cadmium	ug/L	**	**	16	8
Copper	ug/L	*	*	5.8	2.9
Chromium III	ug/L	**	**	-	-
Chromium VI	ug/L	16	8.1	83	41
Lead	ug/L	*	*	14	2.9
Nickel	ug/L	**	**	14	6.8
Silver	ug/L	*	*	2.2	1.1
Zinc	ug/L	*	*	95	47

Abbreviations/Acronyms:

CTR – California Toxic Rule

ug/L – micrograms per liter

AMAL – average monthly action level

MDAL – maximum daily action level

Notes:

* Action levels developed on a case-by-case basis (see below)

** Action levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels (MCLs) under the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

The Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc NALs for MS4 discharges to freshwater receiving waters will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, the following equations (40 CFR 131.38.b.2) will be required:

- Cadmium (Total Recoverable) = $\exp(0.7852[\ln(\text{hardness})] - 2.715)$
- Chromium III (Total Recoverable) = $\exp(0.8190[\ln(\text{hardness})] + .6848)$
- Copper (Total Recoverable) = $\exp(0.8545[\ln(\text{hardness})] - 1.702)$
- Lead (Total Recoverable) = $\exp(1.273[\ln(\text{hardness})] - 4.705)$
- Nickel (Total Recoverable) = $\exp(.8460[\ln(\text{hardness})] + 0.0584)$
- Silver (Total Recoverable) = $\exp(1.72[\ln(\text{hardness})] - 6.52)$
- Zinc (Total Recoverable) = $\exp(0.8473[\ln(\text{hardness})] + 0.884)$

ADMINISTRATIVE DRAFT**(5)(3) Non-Storm Water Discharges from MS4s to Inland Surface Waters****Table C-4. Non-Storm Water Action Levels for Discharges from MS4s to Inland Surface Waters**

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BP
Turbidity	NTU	-	20	See MDAL	BP
pH	Units	Within limit of 6.5 to 8.5 at all times			BP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	33	-	61 ³	BP
Total Nitrogen	mg/L	-	1.0	See MDAL	BP
Total Phosphorus	mg/L	-	0.1	See MDAL	BP
MBAS	mg/L	-	0.5	See MDAL	BP
Iron	mg/L	-	0.3	See MDAL	BP
Manganese	mg/L	-	0.05	See MDAL	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level
 BP – Basin Plan water quality objective
 COLD – cold freshwater habitat beneficial use
 NTU – Nephelometric Turbidity Units
 mg/L – milligrams per liter

MDAL – maximum daily action level
 WARM – warm freshwater habitat beneficial use
 MBAS – Methylene Blue Active Substances
 MPN/100 ml – most probable number per 100 milliliters
 ug/L – micrograms per liter

Notes:

1. Based on a minimum of not less than five samples for any 30-day period
2. [No NAL is reached if](#) -more than 10 percent of total samples [may](#)-exceed 400 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for freshwater “designated beach areas” [and is not applicable to waterbodies that are not designated REC-1.](#)

b. If not identified in Provision [C.1.a](#), NALs must be identified and incorporated in the Water Quality Improvement Plan for any pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the [state-U.S.](#) associated with the highest water quality priorities related to non-storm water discharges from the MS4s. NALs must be based on:

- (1) Applicable water quality standards which may be dependent upon site-specific or receiving water-specific conditions or assumptions to be identified by the Copermittees; or
- (2) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in [Attachment E](#) to this Order.

[c. Dry weather monitoring and assessment data from MS4 outfalls collected in accordance with Provision D.1 may be used to develop or revise NALs based upon watershed-specific data. Revision of NALs is subject to Regional Board EO approval.](#)

ADMINISTRATIVE DRAFT**10.****11.2. Storm Water Action Levels**

- a. The following storm water action levels (SALs) for discharges of storm water from the MS4 must be incorporated ~~in the Water Quality Improvement Plan;~~

Table C-5. Storm Water Action Levels for Discharges from MS4s to Receiving Waters

Parameter	Units	Action Level
Turbidity	NTU	126
Nitrate & Nitrite (Total)	mg/L	2.6
Phosphorus (Total P)	mg/L	1.46
Cadmium (Total Cd)*	µg/L	3.0
Copper (Total Cu)*	µg/L	127
Lead (Total Pb)*	µg/L	250
Zinc (Total Zn)*	µg/L	976

Abbreviations/Acronyms:

NTU – Nephelometric Turbidity Units

mg/L – milligrams per liter

ug/L – micrograms per liter

Notes:

* The sampling must include a measure of receiving water hardness at each MS4 outfall. If a total metal concentration exceeds the corresponding metals SAL in [Table C-5](#), that concentration must be compared to the California Toxics Rule criteria and the USEPA 1-hour maximum concentration for the detected level of receiving water hardness associated with that sample. If it is determined that the sample's total metal concentration for that specific metal exceeds that SAL, but does not exceed the applicable USEPA 1-hour maximum concentration criterion for the measured level of hardness, then the sample result will not be considered ~~as an excursion~~ above the SAL for that measurement.

- b. If not identified in Provision [C.2.a](#), SALs must be identified and incorporated in the Water Quality Improvement Plan for pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the state associated with the highest water quality priorities related to storm water discharges from the MS4s. SALs must be based on:

(1) Federal and State water quality guidance and/or water quality standards;
~~and/or~~

(2) Site-specific or receiving water-specific conditions; or

(3) One of the approaches recommended by the California Water Board's Storm Water Panel in its report, "The Feasibility of Numerical Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities" (June 2006).

~~(3)~~(4) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in [Attachment E](#) to this Order.

- c. Wet weather monitoring and assessment data from MS4 outfalls collected in accordance with Provision [D.1.b](#) may be used to develop or revise SALs based upon watershed-specific data. Revision of SALs is subject to San Diego Water

ADMINISTRATIVE DRAFT

Board approval.

ADMINISTRATIVE DRAFT**C.D. MONITORING AND ASSESSMENT REQUIREMENTS**

[NOTE: This section has been replaced with a proposed alternative version of provision D.]

Water quality monitoring and assessment shall be question-driven and designed to support adaptive storm water management and the iterative process outlined in Provision B. The monitoring and assessment activities shall be based on a logical hierarchy in which overall management goals help define clear management questions, which are addressed by specific monitoring activities designed to produce data targeted to defined assessment needs. The monitoring and assessment activities shall follow relevant and applicable guidance provided in the SWAMP Assessment Framework (Bernstein, 2010⁹), A Framework for Monitoring and Assessment in the San Diego Region (SDRWQCB, 2011¹⁰), and the Southern California Stormwater Monitoring Coalition's (SMC) Model Monitoring Program (SMC, 2004¹¹).

The monitoring and assessment shall be designed in two phases. A transitional program shall be implemented beginning the first day of October in the year following permit adoption, and continue until the first day of October following commencement of Water Quality Improvement Plan implementation, pursuant to Provision B. The transitional ("pre-WQIP") program shall build on the experience gained implementing water quality monitoring programs under previous Orders and shall address the SMC questions as described below. The second ("post-WQIP") phase of the Monitoring and Assessment Program shall address the watershed priorities identified in the Water Quality Improvement Plans as developed for each watershed pursuant to Provision B. This phase of monitoring shall begin with implementation of the approved WQIPs. The transitional (pre-WQIP) phase of monitoring and assessment applies only to the San Diego County Copermittees; the Orange County and Riverside County permittees affected by this regional permit are expected to participate during the post-WQIP phase, after officially enrolling under the regional permit.

As a starting point, the Monitoring and Assessment Program shall be designed to address the overarching management questions developed by the SMC:

⁹ Bernstein, Brock, 2010. "SWAMP Assessment Framework." Prepared for the Surface Water Ambient Monitoring Program (SWAMP). December, 2010).

http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/reports/app_c_assess_frmwrk.pdf.

¹⁰ SDRWQCB, 2011. "A Framework for Monitoring and Assessment in the San Diego Region." California Regional Water Quality Control Board, San Diego Region, Staff Report, Working Draft. May 2012. Prepared by Lilian Busse and Bruce Posthumus.

http://www.waterboards.ca.gov/sandiego/board_info/agendas/2012/Jun/item9/eosr0612MonitoringFramework.SD1.pdf

¹¹ SMC, 2004. "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California." A report from the Stormwater Monitoring Coalition's Model Monitoring Technical Committee. August 2004. Technical Report #419.

http://www.lmtf.org/FoLM/Poliact/EColi/419_smc_mm.pdf

ADMINISTRATIVE DRAFT

1. Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? This question will be addressed by comparing indicator values to the relevant benchmarks or objectives and/or to background conditions.
2. What is the extent and magnitude of the current or potential receiving water problems? This question will be addressed by mapping the spatial extent and/or temporal persistence of problems, the severity of impacts, and/or the degree to which benchmarks are exceeded.
3. What is the relative urban runoff contribution to the receiving water problem(s)? This question will be addressed by comparing concentrations and loads of priority constituents to those from other sources, including background.
4. What are the sources of urban runoff that contribute to receiving water problem(s)? This question will be addressed by characterizing and prioritizing discharges and using targeted source identification protocols to track the origin of specific constituents.
5. Are conditions in receiving waters getting better or worse? This question will be addressed by time series analyses of individual indicators and/or of aggregate or cumulative indices of condition.

Given that substantial work has already been accomplished and other work is ongoing to address the questions related to receiving water condition assessment (questions 1, 2, 5), the Copermittees shall focus their efforts principally on questions 3 and 4. All five questions need not be addressed simultaneously to the same degree. As watershed problems are identified, effort should shift to diagnosis (questions 4 and 5) until the problems have been addressed, at which point effort may shift back to broader assessment (questions 1 and 2) in search of other problems to address.

During the transitional (pre-WQIP) period, where feasible the Copermittees shall develop more specific monitoring questions to guide the design of specific monitoring activities and address specific assessment needs. The information so generated will be used to guide management actions, based on the results of the monitoring data assessments.

As part of each WQIP, the Copermittees shall develop a water quality Monitoring and Assessment Program (Monitoring and Assessment Program) for each Watershed Management Area (WMA), as provided in Table B-1. Using the overarching SMC management questions as guidance, each Monitoring and Assessment Program shall include specific monitoring questions appropriate to address the assessment needs of each specific WMA. The monitoring activities shall be designed to generate data needed to address priority issues identified in the WQIPs, and the resulting monitoring data and assessments shall be supplied to program planners to help inform management actions. If a WMA has an approved Comprehensive Load Reduction Plan (CLRP), the CLRP shall be incorporated into the WQIP.

ADMINISTRATIVE DRAFT

Each Copermittee covered by this permit shall participate in development and implementation of the Monitoring and Assessment Program for each WMA in which they have jurisdiction. The Copermittees shall consider the needs of regional monitoring and assessment activities in the development of each Monitoring and Assessment Program and make allowances as needed for regional coordination.

1. Receiving Waters Monitoring

Until approval and implementation of the WQIPs, the Copermittees shall perform receiving water monitoring to address management questions and specific questions, as specified in Provisions D.1.a-D.1.g below:

a. SMC REGIONAL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall participate in the SMC Regional Monitoring Program through its planned completion. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large scale regional monitoring program for southern California's coastal streams and rivers. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The SMC Regional Monitoring Program involves a probabilistic design for characterization of coastal watersheds using bioassessment metrics and related analyses, including, but may not be limited to: physical habitat characterization, Southern California Index of Biological Integrity scoring, macroinvertebrate and algal taxonomy, algal biomass, water chemistry, and toxicity. The study incorporates both reference and non-reference streams and may identify additional biological and/or chemical stressors affecting stream health, such as channel alteration and presence of invasive species.

b. SOUTHERN CALIFORNIA BIGHT REGIONAL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall participate in the Southern California Bight Regional Monitoring program as a trade-off with other routine monitoring requirements. The Bight program involves detailed characterization of coastal and offshore receiving waters, as well as targeted special studies. The Bight regional monitoring effort is designed to build upon the data collected during the previous Bight regional

ADMINISTRATIVE DRAFT

programs, to assess the extent of contamination in the Southern California Bight. Receiving water samples are collected in or near coastal areas, bays, estuaries, offshore islands, and open water/deep ocean within the Bight. Water quality and sediment samples may be collected to provide data for model input, to assess long-term trends, and to answer management questions developed by the diverse group of stakeholders in the Southern California Bight Region as part of the program. In addition, special studies such as potential new technology implementation (i.e. bioanalytical screening and/or genetic coding) may be conducted as part of the Bight Regional Monitoring.

c. SEDIMENT QUALITY MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What is the condition of sediments in enclosed bays and estuaries with respect to the statewide sediment quality objectives?

Copermittees shall perform monitoring of bay and lagoon sediments, as applicable, under the Copermittees' responsibility to conform to the requirements of the Statewide Sediment Quality Objectives regulatory program, per State Water Resources Control Board Resolution No. 2008-0070 – Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality.

d. HYDROMODIFICATION MANAGEMENT PLAN (HMP) MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall perform receiving water monitoring as required per their Hydromodification Management Plan Monitoring Plans, as approved by the California Regional Water Quality Control Board, San Diego Region.

e. TMDL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

Specific question: What is the progress in achieving and complying with adopted TMDL targets?

The Copermittees shall conduct receiving water monitoring to address monitoring requirements associated with TMDLs as specified below.

ADMINISTRATIVE DRAFT

- (1) The Copermittees shall perform water quality monitoring as required per the Implementation Plans or approved CLRPs of effective TMDLs, including compliance monitoring for the following TMDLs:
 - (a) TMDL for Diazinon in Chollas Creek Watershed Resolution No. R9-2002-0123; Effective as of September 11, 2003.
 - (b) TMDLs for Dissolved Copper in Shelter Island Yacht Basin Resolution No. R9-2005-0019; Effective as of December 2, 2005.
 - (c) TMDLs for Dissolved Copper, Lead, and Zinc in Chollas Creek Resolution No. R9-2007-0043; Effective as of October 22, 2008.
 - (d) TMDLs for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay Resolution No. R9-2008-0027; Effective as of September 15, 2009.
 - (e) Revised TMDLs for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) Resolution No. R9-2010-0001; Effective as of April 4, 2011.
- (2) TMDL monitoring shall be coordinated and/or integrated with monitoring specified in an approved CLRP or equivalent implementation plan.

f. ASBS SPECIAL PROTECTIONS MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

The Copermittees responsible for discharges to Areas of Special Biological Significance (ASBS) as regulated per the Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges, State Water Resources Control Board Resolution No. 2012-0012, shall perform receiving water monitoring as required, per the adopted ASBS Special Protections.

g. SAN DIEGO REGIONAL REFERENCE STREAM STUDY

Management Question: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What are the concentrations/loads of bacteria, nutrients, and metals in reference streams in Southern California?

ADMINISTRATIVE DRAFT

The Copermittees shall participate in reference stream receiving water monitoring and data analysis under the San Diego Regional Reference Stream Study as a Regional Study. The San Diego Regional Reference Stream Study is intended to characterize background concentrations of bacteria, nutrients, and metals in natural streams within the jurisdiction of the San Diego Water Board (Region 9). Samples shall be collected during wet and dry weather at sites considered representative of natural conditions (a contributing drainage area at least 95 percent undeveloped) and that vary in regards to hydrology, catchment size, and geology. The results of the study may be used to assist determination of scientifically-based reference stream numeric goals for indicator bacteria, nutrients, and metals.

h. LONG-TERM RECEIVING WATER MONITORING, POST-WQIP ADOPTION

Management Question: Are conditions in receiving waters getting better or worse?

Following adoption of the WQIPs, the Copermittees shall conduct long-term receiving water monitoring to be performed in each WMA during WQIP implementation, for assessment of long-term trends, as specified below:

- (1) The Copermittees in each Watershed Management Area shall select one long-term receiving water station from among the existing mass loading stations (MLS) and temporary watershed assessment stations (TWAS) to be representative of receiving water quality within the WMA.
- (2) During the permit term, the Copermittees shall perform monitoring during three wet weather events and three dry weather events at each of the long-term stations selected by the Copermittees and approved by the San Diego Water Board.
- (3) Dry Weather Receiving Water Monitoring

During the permit term, the Copermittees shall perform monitoring during three dry weather events, at minimum, at each of the long-term stations. One event must be conducted during the dry season (May 1-September 30) and one event must be conducted during a dry weather period during the wet season (October 1 –April 30), after the first wet weather event of the season, with an antecedent dry period of at least 72 hours following any storm event producing measurable rainfall of greater than 0.1 inch.

- (a) For each dry weather receiving water monitoring event, the Copermittees must record field observations consistent with Table D-1 at each monitoring station.

ADMINISTRATIVE DRAFT**Table D-1. Field Observations for Dry Weather Ambient Receiving Water Monitoring Stations**

Field Observations
<ul style="list-style-type: none"> • Station identification and location. • Presence of flow, or pooled or ponded water. • If flow is present: <ul style="list-style-type: none"> - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), • If pooled or ponded water is present: <ul style="list-style-type: none"> - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color). • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station.

- (b) If flow is present during the dry weather watershed monitoring event, and conditions allow the collection of the data, the Copermittee must monitor and record the parameters in Table D-2.

Table D-2. Field Monitoring Parameters for Receiving Water and Persistent MS4 Monitoring Stations

Parameters
<ul style="list-style-type: none"> • pH • Temperature • Specific conductivity • Dissolved oxygen • Turbidity

- (c) Samples must be collected and analyzed as follows:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, indicator bacteria, and toxicity. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques: time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over a typical 24 hour period. Only one analysis of the composite of aliquots is required.

ADMINISTRATIVE DRAFT

(d) Samples shall be collected for analysis of the following parameters: TMDL or CLRP constituents in watersheds where the Copermittees are responsible parties in an adopted TMDL Implementation Plan, constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges, applicable NAL constituents, and constituents identified by the Copermittees as the watershed priorities in their respective WQIPs, as well as the constituents listed in Table D-3.

Table D-3. Analytical Monitoring Constituents for Receiving Water Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Pesticides	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity¹ • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus¹ • Orthophosphate • Nitrite^{1,2} • Nitrate^{1,2} • Total Kjeldahl Nitrogen • Ammonia 	<ul style="list-style-type: none"> • Arsenic • Cadmium¹ • Chromium • Copper¹ • Iron • Lead¹ • Mercury • Nickel • Selenium • Thallium • Zinc¹ 	<ul style="list-style-type: none"> • Organo-phosphate pesticides • Pyrethroid pesticides 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform³ • <i>Enterococcus</i>

Notes:

1. Constituent with a storm water action level (SAL) specified under Provision [C.2](#).
2. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
3. *E. Coli* may be substituted for Fecal Coliform.

(e) Dry Weather Receiving Water Toxicity Monitoring:

For each dry weather monitoring event, grab or composite samples from each monitoring station must be collected and analyzed for toxicity in accordance with Table D-4.

ADMINISTRATIVE DRAFT**Table D-4. Toxicity Testing for Receiving Water Monitoring Stations**

Freshwater Organism	Test Approach per Event	EPA Protocol¹
<i>Pimephales promelas</i> (fathead minnow)	Wet: 1 acute Dry: 1 acute and chronic	<u>EPA-821-R-02-012</u>
<i>Hyalella azteca</i>	Wet: 1 acute Dry: 1 acute and chronic	EPA-821-R-02-012
<i>Psuedokirchneriella subcapitata</i> (formerly <i>Selenastrum capricornutum</i> , unicellular algae)	Wet: 1 acute Dry: 1 acute and chronic	EPA-821-R-02-013

Notes:

- EPA protocols shall be utilized for toxicity testing unless alternate toxicity testing protocols have been approved by the San Diego Regional Water Quality Control Board. Chronic toxicity testing will also be conducted at dry weather mass loading stations unless the channel flows are diverted year-round during dry weather conditions to the sanitary sewer for treatment

(f) Receiving Water Bioassessment Monitoring:

Copermittees shall perform Bioassessment monitoring once during the permit term in accordance with the SMC Model Monitoring Program "Triad" assessment approach (SMC, 2004). Copermittees shall conduct sampling, analysis, and reporting of specified in-stream biological and habitat data according to the protocols specified in the SCCWRP Tech Report No. 539, or subsequent protocols, if developed, that have been widely-accepted as an appropriate alternative for Southern California receiving waters. Bioassessment monitoring may be conducted in conjunction with SMC Regional Monitoring and/or other dry weather receiving water monitoring. A physical assessment shall be conducted that will include details of the channel condition including channel dimensions, hydrologic and geomorphic conditions, and presence and condition of vegetation and habitat.

(4) Wet Weather Receiving Water Monitoring

During the permit term, Copermittees shall perform monitoring during three wet weather events at each of the long-term receiving water monitoring stations. Each monitoring station must be monitored during the wet season beginning October 1 and ending April 30.

- For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each monitoring station:

ADMINISTRATIVE DRAFT

- (i) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;
 - (ii) The flow rates and volumes measured or estimated. Data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;
 - (iii) Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and
 - (iv) Presence and assessment of trash in and around station.
- (b) For each wet weather receiving water monitoring event, the parameters in Table D-2 must be monitored and recorded in the field.
- (c) Samples must be collected and analyzed as follows:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, indicator bacteria, and toxicity. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques: time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter. Only one analysis of the composite of aliquots is required.
 - (iii) Copermittees should implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods.
- (d) Samples shall be collected for analysis of the following parameters: TMDL or CLRP constituents in watersheds where the Copermittees are responsible parties in an adopted TMDL Implementation Plan, constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges,

ADMINISTRATIVE DRAFT

applicable SAL constituents, and constituents identified by the Copermittees as the watershed priorities in their respective WQIPs, as well as the constituents listed in Table D-3.

(e) Wet Weather Receiving Water Toxicity Monitoring

Grab samples or composites from each monitoring station must be collected and analyzed for toxicity in accordance with Table D-4.

i. OTHER RECEIVING WATER MONITORING, POST-WQIP ADOPTION

After adoption of the WQIPs, the Copermittees shall conduct monitoring based on the approved WQIPs, in addition to long-term receiving water monitoring as described in Provision D.1.h, to include constituents identified by the Copermittees as the watershed priorities in their respective WQIPs. Nothing in this Provision is intended to prevent Copermittee collection of additional receiving water data, as necessary, to support and implement respective WQIPs. This monitoring shall include, at minimum, integration of the following receiving water requirements within the WQIPs, as appropriate for specific watersheds:

- (a) Participation in SMC Regional Monitoring Program, where applicable
- (b) Sediment Quality Monitoring in applicable estuaries
- (c) Hydromodification Management Plan (HMP) Monitoring as applicable
- (d) TMDL Monitoring where implementation plans have been approved and are under implementation, and
- (e) ASBS Special Protections Monitoring, where applicable.

j. RECEIVING WATER MONITORING REPORTING

The Copermittees shall report on the progress of the receiving water monitoring and the results or findings of such monitoring, when completed, in the Annual Report pursuant to Provision F.3.b.

ADMINISTRATIVE DRAFT**2. MS4 Outfall Discharge Monitoring**

Discharge monitoring shall involve both Non-Storm Water (Dry Weather) and Storm Water (Wet Weather) components. The Copermittees shall perform monitoring, as necessary, to identify non-storm water discharges and illegal connections/illicit discharges (IC/IDs) pursuant to Provision E.2 of this Order. To accomplish this, the monitoring may include a variety of water quality and other monitoring techniques, including visual and other observations. Copermittees shall investigate dry weather flows and prioritize outfalls with observed flows for follow-up action as detailed below.

a. STORM WATER OUTFALL INVENTORY

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

- Each Copermittee shall identify all major outfalls, as defined by 40 CFR §122.26(b)(5-6), that discharge directly to named receiving waters within its jurisdiction, and geo-locate those outfalls on a map of the MS4 pursuant to Provision E.2.b of this Order. This information shall be compiled in a storm water outfall inventory, which also shall include applicable information including HSA, jurisdiction, outlet size, and approximate drainage area. Only MS4 outfalls with safe access and for which access is gained without disturbing critical habitat will be considered in the number of eligible major MS4 outfalls.

b. NON-STORM WATER TRANSIENT FLOW (DRY WEATHER) MONITORING, IDDE INVESTIGATION

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which non-storm water discharges are transient and which are persistent? Which discharges should be investigated as potential IDDEs? Which outfalls exhibit persistent dry weather flows?

The Copermittees shall perform non-storm transient flow discharge monitoring to address the above management and specific questions as follows:

- (1) Each Copermittee shall prioritize the major MS4 outfalls within its jurisdiction from the list of major outfalls developed pursuant to Provision D.a., based on criteria and rationale that include potential threat to water quality.

ADMINISTRATIVE DRAFT

- (2) Copermitees with less than 125 major MS4 outfalls that discharge to a receiving water shall visually inspect 80% of the outfalls twice per year during dry weather.
- (3) Copermitees with 125 or more but less than 250 major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized list of major MS4 outfalls that discharge to a receiving water annually. The total number of inspections per Copermitees with 125 or more but less than 250 major MS4s will be a minimum of the total number of all major MS4 outfalls locations once with annual visual inspections. Major MS4 outfalls shall be prioritized based on threat to water quality and will consider factors such as:
- Assessment of connectivity of the discharge to a flowing receiving water
 - Reported exceedances in water quality data
 - Surrounding land use
 - Presence of watershed priority constituents, TMDLs & CWA 303(d) list of impaired water bodies
 - Flow rate
- (4) Copermitees with 250 or more major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized list of major MS4 outfalls that discharge to a receiving water annually. The total number of inspections per Copermitees with 250 or greater major MS4s will be a minimum of 250 to a maximum of 500 locations with annual visual inspections. Where possible, inspections will be conducted year round. Major MS4 outfalls shall be prioritized based on threat to water quality and will consider factors such as:
- Assessment of connectivity of the discharge to a flowing receiving water
 - Reported exceedances in water quality data
 - Surrounding land use
 - Presence of watershed priority constituents, TMDLs & CWA 303(d) list of impaired water bodies
 - Flow rate
- (5) Obvious illicit discharges (i.e., unusual color, unusual odor, or high flow) shall be investigated immediately pursuant to Provision E.2.
- (6) An antecedent dry period of at least 72 hours following any storm event producing measurable rainfall of greater than 0.1 inch is required prior to conducting dry weather visual inspections.
- (7) During a visual inspection, field personnel shall note visual and other

ADMINISTRATIVE DRAFT

observations, including those provided in Table D-5 of this Order.

- (a) During a visual inspection, an inspection form will be filled out documenting observations in conformance with table D-5.
- (b) Inspections of major outfalls conducted pursuant to Provision E of this order, including but not limited to complaint follow-ups, may be accounted for as the visual inspection for the major outfall under this Provision.

Table D-5. Field Observations for Non-Storm Water MS4 Monitoring Stations

Field Observations
<ul style="list-style-type: none"> • Station identification and location. • Presence of flow, or pooled or ponded water from the outfall. • If flow is present: <ul style="list-style-type: none"> - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), - Flow source(s) suspected or identified from non-storm water source investigation, and - Flow source(s) eliminated during non-storm water source identification. • If pooled or ponded water is present: <ul style="list-style-type: none"> - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color), and - Known or suspected source(s) of pooled or ponded water. • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station. • Evidence or signs of illicit connections or illegal dumping.

- (8) Evidence of obvious illegal discharges, such as obvious odor, discoloration, or floating foam or scum, shall be followed up immediately.
- (9) The field observations shall be evaluated together with existing information available from prior inspections and prior monitoring results to determine whether the non-storm water (dry weather) discharge flow is likely to be transient or persistent¹².

¹² Persistent flow, as modified from the SMC Model Monitoring Program definition of persistent WQO exceedance, is defined as “the presence of flow, pooled, or ponded water more than 72 hours after a measureable rainfall event of 0.1 inch of precipitation during three consecutive monitoring and/or inspection events”. All other flow is considered transient.

ADMINISTRATIVE DRAFT

- (a) If the flow is deemed to be transient, observations shall be used to conduct IDD E investigations where warranted pursuant to Provision E.2.
- (b) If the nature and source of the observed flow is already known, this shall be noted on the field log, including whether the observed flow results from a non-storm water discharge conditionally allowed per Provision E.2.a.
- (10) Where the non-storm water (dry weather) discharge flow is deemed to be persistent in Provision D.2.a.(8), the outfall shall be referred to the characterization and prioritization process described in Provision D.2.c. .
- (11) The framework developed in the transitional monitoring program shall be used as a basis to design a continuing IDDE monitoring program as part of the Monitoring and Assessment Program in each WQIP.

c. NON-STORM WATER PERSISTENT FLOW (DRY WEATHER) OUTFALL MONITORING

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which outfalls exhibit persistent dry weather flows? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during dry weather?

The Copermittees shall perform non-storm water persistent flow discharge monitoring to address the above-listed management and specific questions as follows:

- (1) Based upon the results of the investigation conducted pursuant to Provision D.2.b., each Copermittee shall add to the storm water outfall inventory compiled pursuant to Provision D.2.a., a classification of whether the outfall produces persistent discharge flow, transient flow, or no dry weather flow. The inventory shall provide notations on the basis for that classification; the classification may be based on historical data and/or contemporary observations, including information generated per Provision D.2.b..
- (2) The Copermittees shall prioritize the outfalls identified as having persistent dry weather in the stormwater outfall inventory, pursuant to Provision D.2.c.(1). Historical data may be used to assist prioritization, where available. The prioritization shall be prepared based on criteria to be developed by the Copermittees, and a brief rationale for the prioritization shall be provided to accompany the map.
- (3) Based on the prioritization of major outfalls developed under Provision

ADMINISTRATIVE DRAFT

- D.2.c.(2), the Copermittees shall identify, at minimum, a number of major outfalls to monitor within each watershed management area equivalent to the number of urbanized HSAs within the WMA.. The selected outfalls shall be listed by urbanized HSA and indicated on the map prepared pursuant to Provision D.2.a..
- (4) The Copermittees shall monitor each major outfall identified in Provision D.2.c.(3) two times annually under dry weather conditions until one of the following occurs, at which point the outfall may be removed from the list:
- (a) Flows are reduced to near-zero for three consecutive visits, or
 - (b) The source(s) of flows are determined to be derived from a non-storm water discharge source conditionally allowed per Provision E.2.a, or
 - (c) The source of the discharge is determined to be covered by a separate NPDES permit.
 - (d) The Copermittees shall document any such removal of sites from the outfall monitoring list in their annual report. Outfalls so removed must be replaced with then next highest prioritized MS4 outfall in the WMA per Provision D.2.c.(3), unless there are no remaining qualifying outfalls within the urbanized HSAs of the WMA.
 - (e) Where these criteria are not met but the threat to water quality is reduced, the outfall may be prioritized accordingly for continued follow up activity.
- (5) During each semi-annual visit, the Copermittee must record field observations consistent with Table D-5 at each non-storm water MS4 monitoring station within its jurisdiction.
- (6) Prior to WQIP approval, each semi-annual visit in which measurable flow is present from an outfall listed under Provision D.2.c.(3) must include the following:
- (a) Grab samples shall be collected for analysis for the constituents listed in Table D-6, unless the Copermittee has historical data that can demonstrate or provide justification that the analysis of the constituent is not necessary.

ADMINISTRATIVE DRAFT

Table D-6. Analytical Monitoring Constituents for Non-Storm Water MS4 Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Total Phosphorus • Ortho-phosphate • Nitrite¹ • Nitrate¹ • Total Kjeldahl Nitrogen • Ammonia as N • Chlorine 	<ul style="list-style-type: none"> • Cadmium • Copper • Lead • Zinc 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform² • <i>Enterococcus</i>

Notes:

1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

(b) Field measurements shall be collected for the parameters listed in Table D-2.

(c) If the Copermittee identifies and eliminates the source of non-storm water discharge, analysis of the sample is not required.

(7) As part of the WQIP, Copermittees must develop a program to characterize the persistent non-storm water discharges and pollutant loads from the Copermittee’s major MS4 outfalls. As part of the development of the Monitoring and Assessment Program for each WMA, the number and selection of outfalls shall be re-evaluated and determined anew for each WMA, along with the appropriate monitoring frequency and methods.

(8) After WQIP approval, each visit in which measurable flow is present from an outfall listed under Provision D.2.c.(3), as modified by approved changes pursuant to Provision D.2.c.(7) must include the following:

(a) Samples shall be collected for analysis of the following parameters:

- (i) Constituents identified by the Copermittees as highest watershed priorities,
- (ii) TMDL constituents in watersheds where the Copermittees are responsible parties in an effective TMDL Implementation Plan for the receiving water body reach to which the outfall discharges,
- (iii) Constituents listed as a cause of impairment on a CWA Section

ADMINISTRATIVE DRAFT

303(d) listing for the receiving water body reach to which the outfall discharges, and

(iv) Applicable NAL constituents.

(b) Field measurements shall be collected for the parameters listed in Table D-2.

(9) Annually, the Copermittees shall evaluate the data produced by the persistent flow outfall monitoring and inspections, rank the outfalls according to potential threat to receiving water quality, and produce a prioritized list of major outfalls for follow-up action. The prioritized list shall be used to update the WQIP, with the goal of reducing flows and/or loads in order of the ranked priority list through targeted programmatic actions and source investigations.

d. STORM WATER (WET WEATHER) OUTFALL MONITORING

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which MS4 outfalls impact receiving water quality during wet weather? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? How do representative MS4 outlet discharge concentrations, loads, and flows change over time?

The Copermittees shall perform storm water discharge monitoring to address the above-listed management and specific questions as follows:

- (1) Prior to adoption of the WQIPs, the San Diego Copermittees shall continue the MS4 outfall monitoring program implemented under Order No. R9-2007-0001 per RWQCB approved plan through its planned completion to continue to obtain data from a representative cross-section of discharges.
- (2) Prior to adoption of the WQIPs, the San Diego Copermittees shall perform storm water discharge monitoring based on representative outfalls to address the above-listed management questions as follows:
 - (a) The Copermittees shall select, at minimum, three monitoring stations at representative major MS4 outfalls with homogenous land use types and/or typical mixed-use drainage areas per WMA from the map developed pursuant to Provision D.2.a. Historical data may be used to assist site selection, where available. These outfalls shall be geo-located on a map showing the urban hydrologic sub-areas (HSAs), land use drainage areas, and jurisdictional boundaries within the permitted area.
 - (b) Each selected monitoring station must be monitored twice during the wet season, beginning October 1 and ending April 30.

ADMINISTRATIVE DRAFT

- (c) For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each monitoring station:
- (i) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;
 - (ii) The flow rates and volumes measured or estimated. Data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the [USEPA Storm Water Sampling Guidance Document](#) (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;
- (d) For each wet weather monitoring event, the parameters in Table D-2 must be monitored and recorded in the field. Samples shall be collected for analysis of parameters listed in Table D-7, according to the following methods:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, and indicator bacteria. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques:
 - [a] Through use of automated equipment to collect time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter. Only one analysis of the composite of aliquots is required.
 - [b] If automated compositing is not feasible, a composite sample may be collected using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours. Only one analysis of the composite of aliquots is required.
 - (iii) Copermittees should implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods.

ADMINISTRATIVE DRAFT

Table D-7. Analytical Monitoring Constituents for Wet Weather MS4 Outfall Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity¹ • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus¹ • Orthophosphate • Nitrite^{1,2} • Nitrate^{1,2} • Total Kjeldahl Nitrogen • Ammonia 	<ul style="list-style-type: none"> • Arsenic • Cadmium¹ • Chromium • Copper¹ • Iron • Lead¹ • • Nickel • Selenium • Thallium • Zinc¹ 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform³ • <i>Enterococcus</i>

Notes:

1. Constituent with a storm water action level (SAL) specified under Provision [C.2](#).
2. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
3. *E. Coli* may be substituted for Fecal Coliform.

(3) After adoption of the WQIPs, the Copermittees shall perform storm water discharge monitoring based on representative major MS4 outfalls to address the above-listed management questions, and according to the needs for outfall monitoring as defined in the monitoring and assessment sections of the WQIPs. Samples shall be collected for analysis of parameters identified by the Copermittees as watershed priorities in the WQIP. Copermittees shall consider constituents based on factors including, but not limited to:

- (a) Constituents identified as the highest water quality priorities.
- (b) TMDL constituents in watersheds where the Copermittees are responsible parties in an effective TMDL Implementation Plan for the receiving water body reach to which the outfall discharges,
- (c) Constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges, and
- (d) Applicable SAL constituents.

ADMINISTRATIVE DRAFT

e. MS4 OUTFALL DISCHARGE MONITORING REPORTING

The Copermittees shall report on the progress of the MS4 outfall monitoring and the results or findings of such monitoring, when completed, in the Annual Report pursuant to Provision F.3.b.

3. Source/Stressor Identification

Management Question: What are the sources of urban runoff that contribute to receiving water problem(s)?

The Copermittees shall perform Source/Stressor Identification studies as needed to investigate sources of pollutants or stressors in cases where MS4 discharges are deemed to be causing or contributing to receiving water priorities, based on monitoring performed under Provisions D.1 and D.2. The results of the Stressor/Source Identification studies may be shared regionally among the Copermittees to provide information useful in improving adaptive management of urban runoff through implementation of the WQIPs.

The principal role of Source/Stressor Identification is to identify and prioritize pollutant generating activities and source categories. Identification of high-priority sources is an important step in support of the WQIP process, to help inform the development of effective pollutant reduction strategies for particular priority constituents on a watershed-specific basis.

Source identification shall be conducted on a constituent-specific basis. The source identification efforts shall focus on constituents identified as watershed priorities, and include prioritization of sources based on magnitude, controllability, and other factors. The constituent-specific source identification process shall include, at a minimum, the following steps:

- Step 1: Compile known information on the specific priority constituent. This information includes data on potential sources and movement of a particular constituent within the urban watershed. Data generated by the Copermittees and others, as well as information available from a literature research on the priority constituent shall be compiled and analyzed as appropriate.
- Step 2: Based on the compiled information generated on the priority constituent, identify data gaps, if any. Targeted studies may be planned where appropriate to fill identified data gaps; such studies would be performed as Special Studies per Provision D.4. For example, targeted studies may be performed to quantify the relative loading of a priority constituent from a particular pollutant generating activity, or to improve understanding of the fate of a constituent in the environment.

ADMINISTRATIVE DRAFT

- Step 3: Based on the information compiled, develop an inventory of sources and consider how to prioritize them within the watershed for potential follow-up action. Examples of prioritization criteria for sources include relative magnitude in discharges, geographical distribution (i.e., regional or localized), frequency of occurrence in discharges, human health risk, and controllability.
- Step 4: Develop a prioritized list of sources for the priority constituent and deliver to the Copermittee staff responsible for implementing WQIPs.

Prior to adoption of the WQIPs, the San Diego Copermittees shall continue source identification studies pertaining to compliance with TMDLs and the development of the CLRP implemented under Order No. R9-2007-0001.

Following adoption of the WQIPs, the Copermittees shall conduct source/stressor identification studies as necessary to support the WQIP watershed priorities and strategies. The plans for source/stressor ID studies must be submitted as part of the Monitoring and Assessment Programs included as part of the WQIPs required pursuant to Provision B of this Order.

The Copermittees shall report on the progress of the source/stressor ID studies and the results or findings of such studies, when completed, in the Annual Report pursuant to Provision F.3.b.

4. Special Studies

The Copermittees shall conduct Special Studies to address information needs as identified for receiving waters per monitoring performed pursuant to Provision D.1, for MS4 outfall discharges per monitoring performed pursuant to Provision D.2, and in Source/Stressor Identification studies per Provision D.3; to provide information on BMP effectiveness; and otherwise as needed to support implementation or evaluation of the WQIP strategies for the identified highest water quality priorities.

Within the permit term, two Special Studies shall be conducted within each Watershed Management Area, to address specific questions developed for each Watershed Management Area, and two regional special studies shall be conducted to answer regional questions.

- a. The monitoring plans for the special studies must be submitted as part of the Monitoring and Assessment Programs included as part of the Water Quality Improvement Plans required pursuant to Provision [B](#). The special studies must, at a minimum, be in conformance with the following criteria:
 - (1) The special studies must be related to water quality priorities identified by the Copermittees within the Watershed Management Area or San Diego Region, and the monitoring plans for the special studies must address specific watershed or regional questions;

ADMINISTRATIVE DRAFT

- (2) The special studies must be implemented within specific Watershed Management Areas or regionally within the San Diego Region;
 - (3) The special studies must include some form of participation by all Copermitees within the Watershed Management Area or San Diego Region, as applicable;
 - (4) One of the two required special studies within each Watershed Management Area may be replaced by a regional special study pursuant to D.4.a. (1) through D.4.a.(3); and
 - (5) A special study done pursuant to D.4.a. (1) through D.4.a.(4) that is started prior to the submittal of the WQIP, but is completed during the permit term, shall meet the requirements of a special study for a Watershed Management Area or San Diego Region, as applicable.
- b.** The Copermitees shall report on the progress of the special studies and the results or findings of such studies, when completed, in the Annual Report pursuant to Provision F.3.b.

Examples of special studies include:

- Enhance outreach & education by expanding residential BMP rebate programs (irrigation, rainwater harvesting and turf conversion) to multi-family housing
- Enhance outreach & education by increasing enforcement of over-irrigation regulation
- Conduct Catch Basin Inlet Cleaning Study assessment
- Implement Residential & Commercial Area Patrolling
- Implement Targeted Aggressive Street Sweeping Study
- Develop Watershed Urban Runoff Management Program Inspection Program (separate from commercial/industrial inspections, targets all businesses in specific areas)
- Conduct an investigation to improve the understanding of the linkage between groundwater and surface water hydrology and potential impacts to receiving water beneficial uses
- Conduct targeted field investigations to provide additional spatial or temporal information on the highest priority constituents or activities to inform or improve the efficiency of implementation efforts in the WMA.

The Regional Reference Stream Study is an example of a regional special study.

ADMINISTRATIVE DRAFT**5. Assessment Requirements**

The Copermittees must report the progress and findings of the following assessments, when available and as applicable to each WMA, as part of the Annual Report for each WMA, as required pursuant to Provision F. Assessments that occur only once per permit term, or are based on monitoring that occurs only once per permit term, shall be reported as part of the applicable Annual Report, or included within the Copermittees' Report of Waste Discharge, prior to commencement of the subsequent permit term.

a. RECEIVING WATER MONITORING

The Copermittees shall perform analysis and assessments of data and information produced per Provision D.1, addressing for each Receiving Water Monitoring element the management and specific questions as shown in Provision D.1 and below. The analysis and assessments shall relate the monitoring data compiled for each component to the conditions of affected receiving waters and status of relevant receiving water beneficial uses.

(1) SMC Regional Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the SMC Regional Monitoring Program, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The SMC Program is designed to provide a representative sampling of receiving water quality in coastal rivers and streams in the region's watersheds, based on a probabilistic design for characterization of coastal watersheds, using bioassessment metrics and related analyses. The analysis and assessments of the data shall relate the SMC monitoring data to the condition of receiving waters and status of receiving water beneficial uses.

(2) Bight Regional Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the Bight Regional Monitoring Program, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The Bight regional monitoring effort involves detailed characterization of coastal and offshore receiving waters, as well as targeted special studies. The analysis and assessments of the data shall relate the Bight monitoring data to the condition of receiving waters and status of receiving water beneficial uses.

ADMINISTRATIVE DRAFT**(3) Sediment Quality**

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What is the condition of sediments in enclosed bays and estuaries with respect to the statewide sediment quality objectives?

The Copermittees shall incorporate results of the sediment quality monitoring of bay and estuarine sediments, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the data shall relate sediment quality data to the condition of receiving waters and status of receiving water beneficial uses.

The analysis of sediment quality data also shall conform to the requirements of the Statewide Sediment Quality Objectives regulatory program, per State Water Resources Control Board Resolution No. 2008-0070 – Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(4) Hydromodification Management Plan (HMP) Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the receiving water monitoring required per their Hydromodification Management Monitoring Plans, as approved by the California Regional Water Quality Control Board, San Diego Region, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the data shall relate HMP monitoring data to the condition of receiving waters and status of receiving water beneficial uses. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(5) TMDL Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

Specific question: What is the progress in achieving and complying with

ADMINISTRATIVE DRAFT

adopted TMDL targets?

The Copermittees shall incorporate results of TMDL monitoring, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the TMDL monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees shall annually evaluate receiving water data produced per Provision D.1.e. to determine whether TMDL targets are being met, for applicable receiving waters as specified in adopted TMDLs and include the results of this evaluation, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

The analysis of TMDL monitoring data also shall conform to the requirements of the adopted TMDLs and associated Implementation Plans, to demonstrate compliance with the applicable terms of adopted TMDLs and Implementation Plans.

(6) ASBS Special Protections Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

The Copermittees responsible for discharges to Areas of Special Biological Significance (ASBS) as regulated per the Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges, State Water Resources Control Board Resolution No. 2012-0012, shall incorporate results of ASBS monitoring, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the ASBS monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees for whom ASBS monitoring is required under the terms of the adopted ASBS Special Protections shall evaluate the data as required per State Water Resources Control Board Resolution No. 2012-0012, and include the results of this evaluation, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(7) Long-Term Receiving Water Monitoring

Management Question: Are conditions in receiving waters getting better or

ADMINISTRATIVE DRAFT

worse?

The Copermittees shall incorporate the results of the Long-Term Receiving Water Monitoring into the analysis and assessments conducted as part of the adaptive management process. The analysis and assessments of the Long-Term monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees shall evaluate the data produced by the receiving water monitoring pursuant to Provision D.1.g, and incorporate new receiving water data into time series plots for each long-term monitoring constituent, for each WMA. Once per permit term the Copermittee shall perform statistical trends analysis on the cumulative long-term receiving water data set.

(8) Integrated Receiving Water Assessment

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems? Are conditions in receiving waters getting better or worse?

Once during the permit term, for each watershed management area, the Copermittees shall integrate the analyses and assessments of the results of the SMC Regional Monitoring Program, Bight Regional Monitoring Program, Sediment Quality monitoring, HMP Monitoring, TMDL monitoring, ASBS monitoring, and Long-term receiving water monitoring, as performed per Provisions D.5.a.(1)-D.5.a.(7), as well as other data as available and applicable, to assess the condition of receiving waters and status of receiving water beneficial uses, and identify data or information gaps. The integrated assessment shall include, as appropriate to address any identified data gaps, recommendations for additional monitoring as may be required to adequately characterize conditions in receiving waters, or where special studies may be needed to address specific information needs.

b. MS4 OUTFALL DISCHARGE MONITORING

The Copermittees shall perform analysis and assessments of data and information produced per Provision D.2, addressing the management and specific questions as shown in Provision D.2 and below. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(1) Transient Non-Storm Water (Dry Weather) Monitoring, IC/ID Investigation

Management Questions: What is the relative urban runoff contribution to

ADMINISTRATIVE DRAFT

receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which non-storm water discharges are transient and which are persistent? Which discharges should be investigated as potential IC/IDs? Which outfalls exhibit persistent dry weather flows?

- (a) Where the presence of non-storm water (dry weather) flow is noted from an outfall during a visual inspection, field personnel shall note visual and other observations (including approximate/estimated flow rate, changes in flow rate during inspection, changes in flow rate over previous inspections, color, presence of foam or sheen, and odor) on a field log. Inspectors also shall note where there is evidence of past flow and record pertinent observations at all sites visited.
- (b) The field observations shall be evaluated together with existing information available from prior inspections and prior monitoring results to determine whether the non-storm water (dry weather) discharge flow is likely to be transient or persistent. If the flow is deemed to be transient as indicated by pooled or ponded water or other evidence of recent flow, and there is evidence of an illicit discharge such as obvious odor, discoloration, foam or scum, the observations shall be used to conduct IC/ID investigations pursuant to Provision E.2. If the nature and source of the observed flow is already known, this shall be noted on the field log, including whether the observed flow results from a non-storm water discharge conditionally allowed per Provision E.2.a.
- (c) Where the non-storm water (dry weather) discharge flow is deemed to be persistent in Provision D.2.b.(9), the outfall shall be referred to the characterization and prioritization process described in Provision D.2.c.

(2) Persistent Non-Storm Water (Dry Weather) Outfall Monitoring

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which outfalls exhibit persistent dry weather flows? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during dry weather?

(a) Identification and Prioritization of Outfalls with Persistent Flow

Annually, the Copermittees shall evaluate the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., rank the outfalls according to potential threat to receiving water quality, and produce a

ADMINISTRATIVE DRAFT

prioritized list of outfalls for follow-up action. The Copermittees must analyze the non-storm water monitoring data collected pursuant to Provision D.2.c. and consider NAL exceedances in prioritizing outfalls. The prioritized list shall be provided in the Annual Report for each WMA pursuant to Provision F.3.b. The prioritized list shall be used to update the WQIPs with the goal of reducing flows/ loads in order of the ranked priority list, through targeted programmatic actions and source investigations.

(b) Evaluate Potential Impacts to Receiving Waters from Persistent Non-Storm Water Outfall Flows

Annually, the Copermittees shall evaluate the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., and compare the outfall monitoring data to relevant receiving water quality data, to identify outfalls that may cause or contribute to receiving water quality problems.

(c) Calculate Loadings to Receiving Waters from Persistent Non-Storm Water Outfall Flows

Annually, the Copermittees shall estimate discharge loadings from the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., and rank the monitored outfalls in order from highest to lowest loading, to identify outfalls that may cause or contribute to receiving water quality problems. As part of this annual estimation, the Copermittees shall identify areas where program implementation is thought to have resulted in reductions or elimination of loads from MS4 outfalls.

(d) The Copermittees in each Watershed Management Area must review the non-storm water flow and pollutant load analyses required pursuant to Provision [D.4.b.\(2\)\(d\)](#) on an annual basis to:

- (i) Identify the pollutant load reductions that are thought to be attributable to water quality management actions within the high priority outfall drainage areas
- (ii) Assess the effectiveness of the water quality improvement strategies being implemented within the Watershed Management Area toward reducing or eliminating non-storm water discharges and pollutant loads discharging from the MS4 to receiving waters; and
- (iii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing or eliminating non-storm water discharges and pollutant loads discharging from the MS4 to receiving waters.

ADMINISTRATIVE DRAFT**(3) Storm Water (Wet Weather) Outfall Monitoring**

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during wet weather? How do representative MS4 outlet discharge concentrations, loads, and flows change over time?

(a) Comparisons of Wet Weather Outfall Quality to Storm Water Action Levels

The Copermittees shall analyze the storm water monitoring data collected pursuant to Provision D.2.c and consider SAL exceedances in prioritizing outfalls for further investigation, and assessing progress towards addressing WQIP priorities.

(b) Evaluate Potential Impacts to Receiving Waters

Annually, the Copermittees shall evaluate the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c, and compare the outfall monitoring data to relevant receiving water quality data, to identify outfalls that may cause or contribute to receiving water quality problems.

(c) Calculate Loadings to Receiving Waters from Storm Water Outfall Flows

Annually, the Copermittees shall estimate discharge loadings from the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c. As part of this annual estimation, the Copermittees shall identify areas where program implementation is thought to have resulted in reductions or elimination of loads from MS4 outfalls.

(d) The Copermittees in each Watershed Management Area must review the storm water flow and pollutant load analyses required pursuant to Provision [D.5.b.\(3\)\(c\)](#) on an annual basis to:

- (i) Identify the pollutant load reductions that are thought to be attributable to water quality management actions within the monitored outfall drainage areas
- (ii) Assess the effectiveness of the water quality improvement strategies being implemented within the Watershed Management Area toward reducing storm water pollutant loads discharging from the MS4 to receiving waters; and
- (iii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing storm water

ADMINISTRATIVE DRAFT

pollutant loads discharging from the MS4 to receiving waters.

(e) Characterization of Trends Over Time

The Copermittees shall evaluate the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c, and incorporate new outfall monitoring data into time series plots for each long-term monitoring constituent, for each WMA. Once per permit term the Copermittee shall perform statistical trends analysis on the cumulative long-term MS4 outfall water quality data set.

c. SOURCE IDENTIFICATION

Management Question: What are the sources of urban runoff that contribute to receiving water problem(s)?

The principal role of Source/Stressor Identification is to identify and prioritize pollutant generating activities and source categories. Identification of high-priority sources is an important step in support of the WQIP process, to help inform the development of effective pollutant reduction strategies for particular priority constituents on a watershed-specific basis.

Source identification shall be conducted on a constituent-specific basis. The source identification efforts shall focus on constituents identified as watershed priorities, and include prioritization of sources based on magnitude, controllability, and other factors.

Following WQIP approval and implementation, source identification studies shall be used to improve WQIP effectiveness. For each Watershed Management Area, the Copermittees shall perform the investigation pursuant to Provision D.3, as necessary to address identified watershed priorities, including production of a prioritized list of sources or potential sources that warrant additional investigation and/or development of control strategies through the WQIPs.

Annually, the Copermittees shall evaluate the results and findings produced by the source/stressor identification studies conducted pursuant to Provision D.3, and inform Copermittee staff responsible for WQIP implementation of the relative magnitudes and/or priority rankings of identified sources. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

ADMINISTRATIVE DRAFT

d. SPECIAL STUDIES

Following WQIP approval and implementation, special studies shall be identified to fill data gaps and provide targeted information to improve WQIP effectiveness. Upon completion of each Special Study conducted pursuant to Provision D.4, the Copermittees shall evaluate the study results and apply the results to the implementation of WQIPs within each Watershed Management Area as applicable.

Annually, the Copermittees shall evaluate the results and findings produced by the special studies conducted pursuant to Provision D.4, and assess their relevance to the Copermittees' efforts to better characterize WMAs and receiving water conditions, to understand urban runoff pollutant sources, and to control and limit the discharges of pollutants from MS4 outfalls to the maximum extent practicable. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

e. INTEGRATED EVALUATION OF WATER QUALITY IMPROVEMENT STRATEGIES

Once during the permit term, for each watershed management area, the Copermittees shall integrate the analyses and results of the monitoring performed pursuant to Provisions D.1-D.4, and the results of the assessments performed pursuant to Provision D.5.a.-D.5.d, as well as other data as available and applicable, to assess: 1) progress towards achieving the numeric goals and schedules established per the approved WQIPs, 2) progress toward addressing the highest priority receiving water conditions established for each Watershed Management Area, and 3) water quality improvements that are thought to be attributable to the Copermittees' implementation of the requirements of Provision B. For Watershed Management Areas with applicable TMDLs, the integrated evaluation must incorporate the specific monitoring and assessment requirements of [Attachment E](#). For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012. The integrated evaluation shall include the following:

- (1) The conditions of receiving waters and status of receiving water beneficial uses,
- (2) The extent to which MS4 discharges cause or contribute to receiving water problems during both dry weather and wet weather,
- (3) The estimated reductions in loadings from MS4 discharges attributable to the Copermittees' stormwater management activities, for both dry and wet weather,
- (4) The principal identified sources of pollutants that are responsible for constituents in MS4 discharges that cause or contribute to receiving water

ADMINISTRATIVE DRAFT

problems,

- (5) The results of the cumulative special studies and their application to improvement of the WQIPs for the Watershed Management Areas,
- (6) Progress toward achieving the interim and final numeric targets for restoring impacted beneficial uses in receiving waters with adopted TMDL Implementation Plans;
- (7) Any identified data or information gaps, along with recommendations for additional monitoring, special studies, or other investigations to address the data and information needs.

ADMINISTRATIVE DRAFT**D.E. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS**

The purpose of this provision is for each Copermittee to implement a program to control the ~~contribution discharge~~ of pollutants to and ~~the discharges from the MS4 with its~~ respective MS4 to receiving waters within its jurisdiction. The ~~goals~~ goals of this ~~provision~~ program is are to: 1) effectively prohibit non-storm water discharges into the MS4s, 2) reduce pollutants in storm water discharges from the MS4s to the MEP, and 3) to reduce the discharge of pollutants in storm water to the MEP and effectively prohibit non-storm water discharges to provide support the attainment and the reasonable protection, preservation, ~~and~~ and enhancement, ~~and restoration of~~ water quality and designated beneficial uses of waters of the ~~state~~ U.S. These ~~goals~~ goals will be accomplished through compliance with the jurisdictional runoff management program requirements of this Provision, and as modified or supplemented per Provision B (Water Quality Improvement Plans).

Each Copermittee must implement all the requirements of Provision E no later than 12 18 months after the adoption of this Order, or in accordance with Provision F.5.a. Each Copermittee must update its jurisdictional runoff management program document, in accordance with Provision F.2.a, to include all the requirements of Provision E. The jurisdictional runoff management programs implemented by each Copermittee must be consistent with the Water Quality Improvement Plan for the applicable Watershed Management Area required by Provision B. Until the Copermittee has updated its jurisdictional runoff management program document with the requirements of Provision E, the Copermittee must continue implementing its current jurisdictional runoff management program.

Modification of Jurisdictional Runoff Management Program Requirements

The requirements of this section apply to each Copermittee on a jurisdiction-wide basis. Copermittees that are in multiple WMAs may implement any activity or requirement at a level different than a specified minimum within any individual WMA so long as the requirement (as specified below) is met for the jurisdiction as a whole and compliance with all other applicable permit directives is maintained jurisdictionally and within each WMA.

Upon approval of the Executive Officer, specific requirements may be reduced or waived on a jurisdictional basis only where the following conditions have been met:

- The Copermittee's proposed JRMP modifications must be submitted to the San Diego Water Board for a 30 day public review and comment period. The San Diego Water Board will issue a public notice and solicit public comments on the JRMP modification for a minimum of 30 days. Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittee that the JRMP modification has been approved

ADMINISTRATIVE DRAFT

following its review and determination that it meets the requirements of this Order;

- On RWQCB approval, the Copermittee's JRMP must be amended per Section II.F.2.a. to incorporate the modification(s);
- Applicable portions of any WQIP to which an approved modification applies must be modified to reference or incorporate it, and the updated WQIP made available on the Regional Clearinghouse pursuant to Provision F.4.

1. Legal Authority Establishment and Enforcement

- a. Each Copermittee must establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order, or similar means to the extent allowable by law. This legal authority must ~~, at a minimum,~~ authorize the Copermittee to:

- (1) Effectively Pp prohibit and eliminate all illicit discharges and illicit connections to its MS4;
- (2) Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites, including industrial and construction sites which that do not have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit), ~~as well as to those sites which do not;~~
- (3) Control the discharge of spills, dumping, or disposal of materials other than storm water into its MS4;
- ~~(4) Control through interagency agreements among Copermittees~~ Coordinate, as possible, with other agencies to minimize the contribution of ~~pollutants~~ pollutant discharges from ~~one portion MS4 to another portion of the MS4;~~
- ~~(5)~~
- ~~(6)~~ (4) Control through interagency agreements with other owners of the MS4 such as Caltrans, the U.S. federal government, or sovereign Native American Tribes, where possible, the contribution of pollutants from one Copermittee's portion of the MS4 to another portion of portions of the MS4 under another agency's jurisdiction and from the other agency's portions of the MS4 to the MS4 portion of the MS4 under the Copermittee's jurisdiction;

ADMINISTRATIVE DRAFT

~~(7)~~(5) Require compliance with conditions in its statutes, ordinances, permits, contracts, orders, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows;

~~(8)~~(6) Require the use of BMPs to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;

~~(9)~~(7) Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;

~~(10)~~(8) Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means; and

~~(11)~~(9) Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of this Order, including the prohibition of illicit discharges and connections to its MS4; the Copermittee must also have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4.

- b. With the first Annual Report required by Provision [F.3.b](#), each Copermittee must submit a statement certified by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative that the Copermittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in this Order.

2. Illicit Discharge Detection and Elimination

Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. The illicit discharge detection and elimination program must include, at a minimum, the following requirements:

a. Non-Storm Water Discharges

To the extent allowable by law, ~~E~~each Copermittee must address all non-storm water discharges as illicit discharges, [where the likelihood exists that they are a source of pollutants to waters of the U.S.](#), unless a non-storm water discharge is either identified as a discharge authorized by a separate NPDES permit, or identified as a category of non-storm water discharges or flows that must be addressed pursuant to the following requirements:

ADMINISTRATIVE DRAFT

(1) Discharges of non-storm water to the MS4 from uncontaminated pumped groundwater the following categories must be addressed as illicit discharges where there is evidence that suggests that they are the source of pollutants to waters of the U.S., unless the discharge has coverage under NPDES Permit No. CAG919001 (Order No. R9-2007-0034, or subsequent order) for discharges to San Diego Bay, or NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters other than San Diego Bay:

~~(a) Uncontaminated pumped ground water;~~

~~(b) Discharges from foundation drains;~~

~~(c) Water from crawl space pumps; and~~

~~(d) Water from footing drains.~~

(2) Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges unless the discharge has coverage under a valid NPDES Permit ~~No. CAG 679001 (~~ Order No. R9-2010-0003, or a subsequent order~~).~~ This includes water line flushing and water main break discharges from water purveyors under the Copermittee's jurisdiction that has been issued a water supply permit by the California Department of Public Health or federal military installations. Discharges from recycled or reclaimed water lines to the MS4 must be addressed as illicit discharges, unless the discharges have coverage under a separate NPDES permit.

(3) Discharges of non-storm water to the MS4 from the following categories must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a anthropogenic source of pollutants to receiving waters within the Copermittee's jurisdiction:

(a) Discharges from foundation drains;

(b) Water from crawl space pumps;

(c) Water from footing drains.

~~(a)(d)~~ Diverted stream flows;

~~(b)(e)~~ Rising ground waters;

~~(c)(f)~~ Uncontaminated ground water infiltration to MS4s;

~~(d)(g)~~ Springs;

ADMINISTRATIVE DRAFT

~~(e)~~(h) _____ Flows from riparian habitats and wetlands; and

~~(f)~~(i) _____ Discharges from potable water sources.

ADMINISTRATIVE DRAFT

(4) Discharges of non-storm water to the MS4 from the following categories must be controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means where there is evidence that those discharges are a source of pollutants to waters of the U.S. Discharges of non-storm water to the MS4 from the following categories not controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means must be addressed by the Copermittee as illicit discharges.

(a) Air conditioning condensation

The discharge of air conditioning condensation must should be directed to landscaped areas or other pervious surfaces where feasible;

(b) Individual residential vehicle washing

The discharge of wash water must be directed to landscaped areas or other pervious surfaces where feasible, and encouraged through public outreach and education:

(i) To be directed to landscaped areas or other pervious surfaces where feasible, and

(ii) To Minimize the use of water for vehicle washing, use as little washing detergent and other vehicle wash products as possible, wash vehicles at commercial wash facilities, and implement other practices or behaviors that will prevent the discharge of pollutants associated with individual residential vehicle washing from entering the MS4; and

(c) Dechlorinated swimming pool discharges

(i) Eliminate residual chlorine, algaecide, filter backwash, or other pollutants from swimming pools prior to discharging to the MS4, and

(ii) The discharge of saline swimming pool water to the MS4 must be directed to the sanitary sewer, landscaped areas, or other pervious surfaces that can accommodate the volume of water, or to the MS4 if the MS4 discharges to a saltwater receiving water.

(5) Firefighting discharges to the MS4 must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a significant source of pollutants to receiving waters. Firefighting discharges to the MS4 not identified as a significant source of pollutants to receiving waters, must be addressed, at a minimum, as follows:

ADMINISTRATIVE DRAFT

(a) Non-emergency firefighting discharges

- (i) Building fire suppression system maintenance discharges (e.g. sprinkler line flushing) to the MS4 must be addressed as illicit discharges where BMPs are not implemented.
- (ii) Non-emergency firefighting discharges (i.e., discharges from controlled or practice blazes, firefighting training, and maintenance activities not associated with building fire suppression systems) must be addressed by a program, to be developed and implemented by the Copermittee, to reduce or eliminate pollutants in such discharges from entering the MS4.

(b) Emergency firefighting discharges

Each Copermittee must-should develop and encourage implementation of BMPs to reduce or eliminate pollutants in emergency firefighting discharges to the MS4s and receiving waters within its jurisdiction. During emergency situations, priority of efforts should be directed toward life, property, and the environment (in descending order). BMPs should-shall not interfere with immediate emergency response operations or impact public health and safety.

- (6) If the Copermittee or San Diego Water Board identifies any category of non-storm water discharges listed under Provisions E.2.a.(1)-(4) as a source of pollutants to receiving waters, the category must be prohibited through ordinance, order, or similar means and addressed as an illicit discharge.

b. Prevent and Detect Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to prevent and detect illicit discharges to the MS4:

- (1) Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas. The accuracy of the MS4 map must be confirmed during non-storm water MS4 monitoring events. The MS4 map must be included as part of the jurisdictional runoff management program document. Any geographic information system (GIS) layers or files used by the Copermittee to maintain the MS4 map must be made available to the San Diego Water Board upon request. The MS4 map must identify the following:
 - (a) All segments of the MS4 owned, operated, and maintained by the Copermittee,
 - (b) All known locations of inlets that discharge and/or collect runoff into the Copermittee's MS4,

ADMINISTRATIVE DRAFT

- (c) All known locations of connections with other MS4s not owned or operated by the Copermittee (e.g. Caltrans MS4s),
 - (d) All known locations of MS4 outfalls as defined by 40 CFR §122.26(B)(5-6) and private outfalls as defined by 40 CFR §122.26(B)(9) that discharge runoff collected from areas within the Copermittee's jurisdiction,
 - (e) All segments of receiving waters within the Copermittee's jurisdiction that receive and convey runoff discharged from the Copermittee's MS4 outfalls (i.e., receiving water segments that are both a receiving water and part of the MS4), and
 - (f) Locations of the non-storm water MS4 monitoring stations, identified pursuant to Provision D.2.b, within its jurisdiction;
- (2) Each Copermittee must use Copermittee personnel and contractors to assist in identifying and reporting illicit discharges and connections, if observed, during the course of their daily employment activities;
- (3) Each Copermittee must promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges to or from the MS4. Each Copermittee must facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by the Copermittees. All public hotlines must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week;
- (4) Each Copermittee must implement practices and procedures (including a notification mechanism) to prevent, respond to, contain, and clean up any spills that may discharge into the MS4 within their jurisdiction from any source. The Copermittee must coordinate with spill response teams to prevent to the extent possible entry of spills into the MS4, and prevent contamination of surface water, ground water, and soilwaters of the U.S. The Copermittee must coordinate spill prevention, containment, and response activities throughout all appropriate Copermittee departments, programs, and agencies; ~~and~~
- ~~(4)~~(5) Copermittees are responsible for control of discharges to their MS4. In the event that the source of an illicit discharge or connection is from another MS4, the Copermittee shall notify and, if necessary coordinate, with the upstream MS4 to implement and/or enforce corrective actions; and
- ~~(5)~~(6) Each Copermittee must implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4.
- c. Visual Observations, Field Screening, And/or Monitoring

ADMINISTRATIVE DRAFT

Each Copermittee must conduct [visual observations](#), field screening and/or monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4 in accordance with the jurisdictional non-storm water MS4 monitoring program requirements in Provision [D.2.b](#).

d. Investigate and Eliminate Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to investigate and eliminate illicit discharges to the MS4:

ADMINISTRATIVE DRAFT

- (1) Each Copermittee must prioritize and determine when follow-up investigations will be performed in response to visual observations and/or water quality monitoring data collected during an investigation of a detected non-storm water or illicit discharge to or from the MS4. The criteria for follow-up investigations must include the following:
- (a) Pollutants identified as causing or contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;
 - (b) Pollutants identified as causing or contributing, or threatening to cause or contribute to impairments in water bodies on the 303(d) List and/or in environmentally sensitive areas (ESAs), located within its jurisdiction;
 - (c) Pollutants identified from sources or land uses known to exist within the area, drainage basin, or watershed that discharges to the portion of the MS4 within its jurisdiction included in the investigation; and
 - (d) Pollutants identified as causing or contributing to and exceedance of an NAL¹³ where the source has not been identified as natural described in Provision C.1; and
 - (e) Pollutants identified as a threat to human health or the environment.
- (2) Each Copermittee must implement procedures to investigate and inspect portions of its MS4 that, based on reports or notifications, visual observations, field screening and, monitoring, or other appropriate information, indicate a reasonable potential of receiving, containing, or discharging pollutants to receiving waters within the Copermittees jurisdiction due to illicit discharges, illicit connections, or other sources of non-storm water. ~~The procedures must include the following:~~
- (a) The Copermittee may develop criteria to assess the validity of, and prioritize the response to, each report or notification received. Each Copermittee must respond to each report or notification (e.g., public hotline reports, staff or contractor reports and notifications, etc.) of an incident in a timely manner. ~~The Copermittee may develop criteria to assess the validity of, and prioritize the response to, each report or notification received;~~
 - (b) Each Copermittee must immediately investigate and seek Procedures should address field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been

¹³ NAL exceedances discovered during the course of IDDE monitoring and/or investigations may trigger action levels, including but not limited to, follow-up investigations based on the highest watershed priorities set forth and the iterative process provided in the WQIP.

ADMINISTRATIVE DRAFT

identified during previous investigations. The criteria established in Provision E.d.(2)(a) shall be used to prioritize response based on highest watershed priorities as established for the iterative process and determined in the Water Quality Improvement Plan, including:

(i) Obvious illicit discharges must be immediately investigated to identify the source(s) of discharges of non-storm water where flows are observed in and from the MS4 during the field screening and monitoring required pursuant to Provision D.2.b:-

(ii) The investigation must include field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been identified during previous investigations;

(iii) The investigation may include field investigations, reviewing Copermittee inventories, and other land use data to identify potential sources of the discharge; and

~~(i)(iv) Procedures should address tracking of illicit discharges and connections.~~

~~(i) Each Copermittee must investigate and seek to identify the source(s) of non-storm water discharges from the MS4 where there is evidence of non-storm water having been discharged into or from the MS4 (e.g., pooled water). The investigation may include field investigations, reviewing Copermittee inventories, and other land use data to identify potential sources of the discharge; and~~

- (3) Each Copermittee must maintain records and a database of the investigations, including the following information:
- (a) Location of incident, including hydrologic subarea, portion of MS4 receiving the non-storm water or illicit discharge, and point of discharge or potential discharge from MS4 to receiving water,
 - (b) Source of information initiating the investigation (e.g., public hotline reports, staff or contractor reports and notifications, monitoring data, etc.),
 - (c) Date the information used to initiate the investigation was received,
 - (d) Date the investigation was initiated,
 - (e) Dates of follow-up investigations,
 - (i) Identified or suspected source of the illicit discharge or connection, if determined,
 - (f) Known or suspected related incidents, if any,

ADMINISTRATIVE DRAFT

- (g) Result of the investigation, and
- (h) If a source cannot be identified and the investigation is not continued, a rationale for why a discharge does not pose a threat to water quality and/or does not require additional investigation.
- (4) Each Copermittee must initiate the implementation of procedures, in a timely manner, to eliminate all detected and identified illicit discharges and connections within its jurisdiction. The procedures must include the following:
- ~~Each Copermittee must enforce its~~
- (a) ~~Procedures outlined by the Copermittee should address~~ legal authority, as required under Provision E.1, to ~~eliminate/enforce the elimination of~~ illicit discharges and connections to ~~its/the~~ MS4. If the Copermittee identifies the source as a controllable source of non-storm water or illicit discharge or connection, the Copermittee must implement its Enforcement Response Plan pursuant to Provision E.6 and enforce its legal authority ~~to prohibit to effectively prohibit~~ and eliminate illicit discharges and connections to its MS4; Responses to discharges may include:
- (i) If the Copermittee identifies the source of the discharge as a category of non-storm water discharges in Provision E.2.a, and the discharge ~~to or from the MS4 is~~ in exceedance of NALs developed ~~under Provision, in the Water Quality Implementation Plan,~~ then the Copermittees must determine if this is an isolated incident or set of circumstances, or if the category of discharge must be addressed through the prohibition of that category of discharge as an illicit discharge pursuant to Provision E.2.a.(6);
- (ii) If the Copermittee suspects the source of the non-storm water discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the Copermittee must ~~collect the data and evidence necessary to demonstrate to the San Diego Water Board that it is natural in origin; and document the rationale for why the discharge does not need further investigation.~~ This documentation shall be included in the Annual Report.
- (iii) If the Copermittee is unable to identify and document the source of a recurring non-storm water discharge to or from the MS4, then the Copermittee must address the discharge as an illicit discharge and update its jurisdictional runoff management program to address the common and suspected sources of the non-storm water discharge within its jurisdiction in accordance with the Copermittee's priorities.
- (5) Each Copermittee must submit a summary of the non-storm water discharges and illicit discharges and connections investigated and eliminated within its

ADMINISTRATIVE DRAFT

jurisdiction with each Annual Report required under Provision F.3.b of this Order.

3. Development Planning

Each Copermittee ~~must use, within their land use/planning authorities to its respective jurisdiction, must~~ implement a development planning program that includes, at a minimum, the following requirements.

a. Permanent BMP Requirements for All Development Projects

Each Copermittee ~~, as practical and feasible,~~ must prescribe ~~the following~~ BMP requirements during the planning process (i.e. prior to project approval and issuance of grading or building permits) for all development projects ~~(regardless of project type or size),~~ where local permits are issued, including unpaved roads and flood management projects, except emergency projects implemented for the protection of persons and property:

(1) General Requirements

- (a) All BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible;
- (b) Multiple development projects may use shared permanent BMPs as long as construction of any shared BMP is completed prior to the use or occupation of any development project from which the BMP will receive runoff; and
- (c) Permanent BMPs must not be constructed within ~~a~~ waters of the U.S. ~~or waters of the state.~~

(2) Source Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement applicable source control BMPs. The following source control BMPs must be implemented at all development projects where applicable and feasible:

- (a) Prevention of illicit discharges into the MS4;
- (b) Storm drain system stenciling or signage;
- (c) Properly designed outdoor material storage areas;
- (d) Properly designed outdoor work areas;

ADMINISTRATIVE DRAFT

- (e) Properly designed trash storage areas; and
- (f) Any additional BMPs necessary to minimize pollutant generation at each project.

(3) Low Impact Development (LID) BMP Requirements

The following LID BMPs must be implemented at all development projects where applicable and feasible:

- (a) Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams);¹⁴
- (b) Buffer zones for natural water bodies (where buffer zones are technically infeasible, require project applicant to include other buffers such as trees, access restrictions, etc.);
- (c) Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils;
- (d) Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised;
- (e) Minimization of the impervious footprint of the project;
- (f) Minimization of soil compaction to landscaped areas;
- (g) Disconnection of impervious surfaces through distributed pervious areas;
- (h) Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharge to the MS4;
- (i) Small collection strategies located at, or as close as possible to, the source (i.e. the point where storm water initially meets the ground) to minimize the transport of runoff and pollutants to receiving waters;
- (j) Use of permeable materials for projects with low traffic areas and appropriate soil conditions;
- (k) Landscaping with native or drought tolerant species; and

¹⁴ Development projects proposing to dredge or fill materials in waters of the U.S. must obtain a CWA Section 401 Water Quality Certification. Projects proposing to dredge or fill waters of the State must obtain Waste Discharge Requirements.

ADMINISTRATIVE DRAFT

(l) Harvesting and using precipitation.

~~(4) Long-Term Permanent BMP Maintenance~~

~~Each Copermittee must require the project applicant to submit proof of the mechanism under which ongoing long-term maintenance of all permanent BMPs will be conducted.~~

~~(5) Infiltration and Groundwater Protection~~

~~(a) Infiltration and treatment control BMPs designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins) must not cause or contribute to an exceedance of an applicable groundwater quality objective. At a minimum, such infiltration and treatment control BMPs must be in conformance with the design criteria listed below, unless the development project applicant demonstrates to the Copermittee that one or more of the specific design criteria listed below are not necessary to protect groundwater quality. The design criteria listed below do not apply to small infiltration systems dispersed throughout a development project.~~

- ~~(i) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;~~
- ~~(ii) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;~~
- ~~(iii) Infiltration treatment control BMPs must be adequately maintained to remove pollutants in storm water to the MEP;~~
- ~~(iv) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;~~
- ~~(v) The soil through which infiltration is to occur must have physical and chemical characteristics (e.g., appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;~~
- ~~(vi) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless first treated or filtered to remove pollutants prior to infiltration; and~~
- ~~(vii) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.~~

ADMINISTRATIVE DRAFT

~~(b) The Copermitees may collectively or individually develop alternative mandatory design criteria to that listed above for infiltration and treatment control BMPs which are designed to primarily function as centralized infiltration devices. Before implementing the alternative design criteria in the development planning process the Copermitee(s) must:~~

- ~~(i) Notify the San Diego Water Board of the intent to implement the alternative design criteria submitted; and~~
- ~~(ii) Comply with any conditions set by the San Diego Water Board.~~

b. Priority Development Projects**(1) Definition of Priority Development Project**

Priority Development Projects include the following:

- (a) All new development projects that fall under the Priority Development Project categories listed under Provision [E.3.b.\(2\)](#). Where a new development project feature, such as a parking lot, falls into a Priority Development Project category, the entire project footprint is subject to Priority Development Project requirements; and
- (b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site, ~~or and~~ the redevelopment project is a Priority Development Project category listed under Provision [E.3.b.\(2\)](#). Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Priority Development Project requirements, the performance and sizing requirements discussed in Provisions [E.3.c.\(2\)](#) and [E.3.c.\(3\)](#) apply only to the addition or replacement, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development and was not subject to previous Priority Project Development requirements, the performance and sizing requirements apply to the entire development.
- (c) Projects where redevelopment results in an increase of more than fifty percent of impervious surfaces of a previously existing development, and the existing development was subject to previous Priority Project Development requirements, only the altered portion of development is subject to the Priority Development Project requirements in this Order.

(2) Priority Development Project Categories

ADMINISTRATIVE DRAFT

- (a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public development projects on public or private land which fall under the planning and building authority of the Copermittee.
- (b) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
- (c) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is 5,000 square feet or more- of impervious surface.
- (d) Hillside development projects. This category includes any development which creates 5,000 square feet or more of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
- (e) Environmentally sensitive areas (ESAs). This category includes any development located within, directly adjacent to, or discharging directly to an ESA, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring condition. "Directly adjacent to" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that collects runoff from the subject development or redevelopment site and which terminates at or in receiving waters within the ESA and is not comingled with flows from adjacent lands.
- (f) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce that has 5,000 square feet or more of impervious surface.

ADMINISTRATIVE DRAFT

- (g) Streets, roads, highways, and freeways, ~~and residential driveways~~. This category is defined as any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
- (h) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more of impervious surface or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
- (i) Large development projects. This category includes any post-construction pollutant-generating new development projects that result in the disturbance of one acre or more of land.

(3) Priority Development Project Exemptions

Each Copermittee has the discretion to exempt the following projects from being defined as Priority Development Projects:

- (a) Sidewalks constructed as part of new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;
- (b) Bicycle lanes that are constructed as part of new streets or roads but are not hydraulically connected to the new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;
- (c) Impervious trails and driveways constructed and designed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas;
- (d) Sidewalks, bicycle lanes, driveways, parking lots, or trails constructed with permeable surfaces.
- (e) Single-family residential projects that are not part of a larger development or proposed subdivision and implement BMPs that meet minimum performance standards, as outlined in the BMP Design Manual.¹⁵
- (f) Any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles that follows the USEPA guidance regarding Management Wet Weather with Green Infrastructure: Green Streets¹⁶ to the MEP.

¹⁵ The BMP Design Manual was formerly known as the Standard Urban Storm Water Mitigation Plan under Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016.

¹⁶ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

ADMINISTRATIVE DRAFT**c. Priority Development Project Permanent Structural BMP Performance and Sizing Requirements**

In addition to the BMP requirements listed for all development projects under Provision E.3.a, Priority Development Projects must also implement permanent structural BMPs that conform to performance and sizing requirements.

(1) Source Control BMP Requirements

~~Each Copermittee must require each Priority Development Project to implement applicable source control BMPs listed under Provision E.3.a.(2).~~

(1) Retention and Treatment Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement BMPs to retain and treat pollutants onsite in the following order:

- (a) Each Priority Development Project must be required to implement LID BMPs as described in Provision E.3.a.(3); ~~and-~~
- (b) Each Priority Development Project must be required to implement LID BMPs that are sized and designed to retain the difference in volume ~~equivalent to~~ between the runoff volume produced in the post-development condition as compared to the pre-development runoff condition resulting from a 24-hour 85th percentile storm event¹⁷ (“design capture volume¹⁸”); or
- (c) If onsite retention of the design capture volume using LID BMPs is technically infeasible per Provision E.3.c.(4), flow-thru LID and/or conventional treatment control BMPs must be implemented to provide equal pollutant removal for ~~treat~~ the portion of the design capture volume that is not retained onsite. Flow-thru LID treatment control BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP; or-
- ~~(e)~~(d) If retention and/or equivalent pollutant removal of the design capture volume to meet E.3.c.(2)(a) or E.3.c.(2)(b) are infeasible

¹⁷ This volume is not a single volume to be applied to all areas covered by this Order. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermittees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction. In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees must describe their method for using isopluvial maps in its BMP Design Manuals.

¹⁸ Design capture volume is a single event based volume occurring after an extended dry period.

ADMINISTRATIVE DRAFT

onsite ~~Additionally~~, project applicants must perform mitigation for the portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, as described in Provision E.3.c.(54)(c).

~~(d)~~(e) All onsite treatment control BMPs must:

- (i) Be correctly sized and designed so as to remove pollutants from storm water to the MEP;
- (ii) Be sized to comply with the following numeric sizing criteria:
 - [a] Volume-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) the remaining portion of the design capture volume that was not retained onsite; or
 - [b] Flow-based treatment control BMPs must be designed to mitigate (filter or treat) either: 1) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or 2) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.
- (iii) Be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern. Treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.

(2) Hydromodification Management BMP Requirements

Each Copermittee must require each Priority Development ~~Project~~ Project disturbing greater than one acre to implement hydromodification management BMPs, ~~so that~~ as described in the Copermittees current HMP, as applicable.

- (a) Post-project runoff flow rates and durations do not exceed pre-development ~~(naturally occurring)~~ runoff flow rates and durations by more than 10 percent (for the range of flows that result in increased potential for erosion or degraded channel conditions downstream of Priority Development Projects).

- (i) In evaluating the range of flows that results in increased potential for erosion of natural (non-hardened) channels, the lower boundary must correspond with the critical channel flow that produces the

ADMINISTRATIVE DRAFT

critical shear stress that initiates channel bed movement or that erodes the toe of channel banks.

- (ii) For artificially hardened channels, analysis to identify the lower boundary must use characteristics of a natural stream segment similar to that found in the watershed. The lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or erodes the toe of the channel banks.
- (i)(iii) The Copermittees may use monitoring results pursuant to Provision [D.5.a.\(4\)](#) to re-define the range of flows resulting in increased potential for erosion or degraded channel conditions, as warranted by the data.
- (b) ~~Projects shall preserve (where feasible) or provide compensation for significant losses of sediment supply anticipated as a result of development. Post-project runoff flow rates and durations must compensate for the loss of sediment supply due to the development project, should loss of sediment supply occur as a result of the development project.~~
- (c) If hydromodification management BMPs are technically infeasible per Provision [E.3.c.\(54\)](#), project applicants must perform mitigation for the portion of the runoff volume that is not controlled and will cause or contribute to increased potential for erosion of receiving waters downstream of the Priority Development Project, as described in Provision [E.3.c.\(54\)\(c\)](#).

ADMINISTRATIVE DRAFT

(d) Exemptions

Each Copermittee has the discretion to exempt a Priority Development Project from the hydromodification management BMP requirements where the project:

- (i) Discharges storm water runoff into underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean;
- (ii) Discharges storm water runoff into conveyance channels whose bed and bank are stabilized (e.g. concrete lined, -an engineered interlocking paver, gabion system etc...) all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean; or
- (iii) Discharges storm water runoff into other areas identified by the San Diego Water Board as exempt from the requirements of Provisions E.3.c.(3) ₇₂

(3) Long-Term Structural BMP Maintenance

Each Copermittee must require the project applicant to submit proof of the mechanism under which ongoing long-term maintenance of all structural BMPs will be conducted.

ADMINISTRATIVE DRAFT(4) Infiltration and Groundwater Protection

- (a) Infiltration and treatment control BMPs designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins) must not cause or contribute to an exceedance of an applicable groundwater quality objective. At a minimum, such infiltration and treatment control BMPs must be in conformance with the design criteria listed below, unless the development project applicant demonstrates to the Copermittee that one or more of the specific design criteria listed below are not necessary to protect groundwater quality. The design criteria listed below do not apply to small infiltration systems dispersed throughout a development project.
- (i) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;
 - (ii) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;
 - (iii) Infiltration treatment control BMPs must be adequately maintained to remove pollutants in storm water to the MEP;
 - (iv) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;
 - (v) The soil through which infiltration is to occur must have physical and chemical characteristics (e.g., appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;
 - (vi) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless runoff does not exceed Basin Plan water quality standards or runoff is first treated or filtered to remove pollutants prior to infiltration; and
 - (vii) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.
- (b) The Copermittees may collectively or individually develop alternative mandatory design criteria to that listed above for infiltration and treatment control BMPs which are designed to primarily function as centralized

ADMINISTRATIVE DRAFT

infiltration devices. Before implementing the alternative design criteria in the development planning process the Copermittee(s) must:

- (i) Notify the San Diego Water Board of the intent to implement the alternative design criteria submitted; and
- (ii) Comply with any conditions set by the San Diego Water Board.

~~(3)~~(5) Alternative Compliance for Technical Infeasibility

At the discretion of each Copermittee, alternative compliance may be allowed for certain Priority Development Projects to comply with Provisions E.3.c.(12) and E.3.c.(23); Alternative compliance is an optional program for the Copermittees to utilize if it is determined to provide an equal or greater benefit than onsite compliance. Where alternative compliance is allowed, it is the sole responsibility of the project applicant to execute the alternative compliance and comply with the following requirements; subject to the following requirements:

ADMINISTRATIVE DRAFT

(a) Applicability

Priority Development Projects may be allowed alternative compliance if:

- (i) The Copermittee reviews and ~~approves~~ accepts site-specific hydrologic and/or design analysis performed by a registered professional engineer, geologist, architect, or landscape architect;
- (ii) The project applicant demonstrates, and the Copermittee determines and documents, that ~~retention LID and/or hydromodification management~~ BMPs per Provisions E.3.c.(12) and E.3.c.(23) were incorporated into the project design to the maximum extent technically feasible given the project site conditions;
- (iii) The project applicant is required to perform mitigation described in Provision E.3.c.(54)(c)(e) with a net result of at least the same level of water quality protection as would have been achieved if the Priority Development Project had fully implemented the ~~retention LID and hydromodification management~~ BMP requirements under Provisions E.3.c.(12) and E.3.c.(23) onsite.

(b) Criteria For Technical Infeasibility

Each Copermittee must develop, or develop in collaboration with the other Copermittees, criteria to determine technical infeasibility for fully implementing the ~~retention LID and hydromodification management~~ BMP requirements under Provisions E.3.c.(21) and E.3.c.(23) and include these requirements in the ~~Permanent BMP Sizing Criteria~~ Design Manual pursuant to Provision E.3.d. Technical infeasibility may result from conditions including, but not limited to:

- (i) Locations that cannot meet the infiltration and groundwater protection requirements in Provision E.3.ca.(45) due to the presence of shallow bedrock, contaminated soils, near surface groundwater, underground facilities, or utilities;
- (ii) Brownfield development sites or other locations where pollutant mobilization is a documented concern;
- (iii) The design of the site precludes the use of soil amendments, plantings of vegetation, or other designs that can be used to infiltrate and evapotranspire runoff;
- (iv) Soils cannot be sufficiently amended to provide for the requisite infiltration rates;
- (v) Locations with geotechnical hazards;
- (vi) Insufficient onsite and/or offsite demand for storm water use;

ADMINISTRATIVE DRAFT

(vii) Modifications to an existing building to manage storm water are not feasible due to structural or plumbing constraints;

~~(vii)~~(viii) HMP flow rate requirements that result in BMP orifice sizes too small for efficient maintenance; and

~~(viii)~~(ix) Smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with Provisions E.3.c.(2) and E.3.c.(3) onsite.

(c) Mitigation

Priority Development Projects that meet the Copermittee's technical infeasibility criteria developed pursuant to Provision E.3.c.(54)(b)(b) must be required to mitigate for the increased flow rates, increased flow durations, and/or increased pollutant loadswater quality equivalence expected to be discharged from the site.

(i) The Project applicant must perform offsite mitigation for:

[a] The portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, and/or

[b] The portion of the increased potential erosion of downstream receiving waters not fully controlled with hydromodification management BMPs onsite.

~~For the pollutant load in the volume of storm water not retained onsite with retention LID BMPs, or increased potential erosion of downstream receiving waters not fully controlled onsite with hydromodification management BMPs, the Copermittee must require the project applicant to either 1) implement an offsite mitigation project, and/or 2) provide sufficient funding for a public or private offsite mitigation project via a mitigation fund.~~

~~(i)~~(ii) Mitigation Project Locations

Offsite mitigation projects must be implemented within the same ~~hydrologic unit~~Watershed Management Area as the Priority Development Project, and preferably within the same hydrologic subarea. Mitigation projects outside of the hydrologic subarea but within the same ~~hydrologic unit~~Watershed Management Area may be approved provided that the project applicant demonstrates that mitigation projects within the same hydrologic subarea are infeasible and that the mitigation project will address similar potential impacts expected from the Priority Development Project.

~~(ii)~~(iii) Mitigation Project Types

ADMINISTRATIVE DRAFT

Offsite mitigation projects ~~must~~ may include, where applicable and feasible, retrofitting opportunities and stream and/or habitat rehabilitation or restoration opportunities identified in the Water Quality Improvement Plans, identified pursuant to Provision B.3.. Other offsite mitigation projects may include green streets or infrastructure projects, groundwater recharge projects, or regional BMPs upstream of receiving waters. Mitigation credit will not be given to portions of in stream mitigation projects using impervious in-stream rehabilitation or restoration measures to protect or prevent adverse physical changes to creek bed and banks must not include the use of non-naturally occurring hardscape materials such as concrete, riprap, or gabions. Project applicants seeking to utilize these alternative compliance provisions may propose other offsite mitigation projects, which the Copermittees may approve if they meet the requirements of Provision E.3.c.(4).

~~(iii)~~(iv) Mitigation Project Timing

The Copermittee and/or project applicant must develop a schedule for the completion of offsite mitigation projects, including milestone dates to identify, fund, design, and construct the projects. Offsite mitigation ~~funding projects~~ must be secured by the applicant and verified by the Copermittee prior to granting construction permits or recording of maps, whichever comes first, completed upon the granting of occupancy for the first project that contributed funds toward the offsite mitigation project, unless a longer period is authorized by the San Diego Water Board.

~~(iv)~~(v) Mitigation Fund

A Copermittee may choose to implement additional mitigation programs (e.g., pollutant credit system, mitigation fund) as a means for developing and implementing offsite mitigation projects, provided the projects conform to the requirements for project locations, types, and timing described above.

d. Update ~~Permanent BMP Sizing Criteria Design Manual (BMP Design Manual)~~

Each Copermittee must update its ~~Permanent BMP Sizing Criteria Design Manual (BMP Design Manual)~~⁴⁹ pursuant to Provision F.2.b or Provision F.5.a. Until the Copermittee has updated its BMP Design Manual with the requirements of Provision E.3.c, the Copermittee must continue implementing its current BMP Design Manual. Unless directed otherwise by the San Diego Water Board, the Copermittee must implement the BMP Design Manual within 180 days of completing the update. The update of the BMP Design Manual must include the

⁴⁹ ~~The Permanent BMP Sizing Criteria Design Manual was formerly known as the Standard Storm Water Mitigation Plan under Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016.~~

ADMINISTRATIVE DRAFT

following:

- (1) Updated procedures to determine the nature and extent of storm water requirements applicable to a potential development or redevelopment project. These procedures must inform project applicants of the storm water management requirements applicable to their project including, but not limited to, general requirements for all development projects, LID and conventional BMP design procedures and requirements, hydromodification management requirements, requirements specific to phased projects, and procedures specific to private developments and public improvement projects;
- (2) Updated procedures to identify pollutants and conditions of concern for selecting the most appropriate permanent-structural BMPs that consider, at a minimum, the following:
 - (a) Receiving water quality (including pollutants for which receiving waters are listed as impaired under CWA section 303(d));
 - (b) Priority pollutants or receiving water conditions contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;
 - (c) Land use type of the project and pollutants associated with that land use type; and
 - (d) Pollutants expected to be present onsite.
- (3) Updated procedures for designing permanent-structural BMPs, including any updated performance and sizing requirements to be consistent with the requirements of Provision E.3.c for all BMPs listed in the BMP Design Manual;
- (4) Long-term maintenance criteria for each BMP listed in the BMP Design Manual; and
- (5) Criteria and mitigation requirements, in accordance with the requirements under Provision E.3.c.(4), if the Copermittee elects to allow alternative compliance for technical infeasibility within its jurisdiction.

e. Priority Development Project BMP Implementation and Oversight

Each Copermittee must implement a program to ensure structural-permanent BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

- (1) StructuralPermanent BMP Approval and Verification Process

ADMINISTRATIVE DRAFT

- (a) Each Copermittee must ensure that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by 182 months after the adoption of this Order, or pursuant to Provision F.5.aa, the requirements of Provision E.3 are implemented. For project applications that have received prior lawful approval by 182 months after the adoption of this Order, or pursuant to Provision F.5.aa, the Copermittee may allow previous land development requirements to apply.
- (b) Each Copermittee must identify the roles and responsibilities of various municipal departments in implementing the structuralpermanent BMP requirements, including each stage of a project from application review and approval through BMP maintenance and inspections.
- (c) Each Copermittee must ensure that appropriate easements and ownerships are properly recorded in public records and the information is conveyed to all appropriate parties when there is a change in project or site ownership.
- (d) Each Copermittee must ensure that prior to occupancy and/or intended use of any portion of the Priority Development Project, each permanent structural BMP must be inspected to verify that they have been constructed and are operating in compliance with all of its specifications, plans, permits, ordinances, and the requirements of this Order.
- (2) Priority Development Project Inventory and Prioritization
- (a) Each Copermittee must develop and continuouslyregularly maintain a watershed-based database to track and inventory all Priority Development Projects and associated structuralpermanent BMPs within their jurisdiction. Inventories must be accurate and complete beginning from January 2002 for the San Diego County Copermittees, February 2003 for the Orange County Copermittees, and July 2005 for the Riverside County Copermittees, where data is available. The database must include, at a minimum, the following information:
- (i) Priority Development Project location (address and hydrologic subarea);
 - (ii) Descriptions of structural BMP type(s);
 - (iii) Date(s) of construction;
 - (iv) Party responsible for permanent structural BMP maintenance;
 - (v) Dates and findings of permanent structural BMP maintenance verifications; and
 - (vi) Corrective actions and/or resolutions.

ADMINISTRATIVE DRAFT

- (b) Each Copermittee must prioritize the Priority Development Projects with permanent structural BMPs within its jurisdiction. The designation of Priority Development Projects as high priority must consider the following:
- (i) The highest water quality priorities identified in the Water Quality Improvement Plan;
 - (ii) Receiving water quality;
 - (iii) Number and sizes of permanent structural BMPs;
 - (iv) Recommended maintenance frequency of permanent structural BMPs;
 - (v) Likelihood of operation and maintenance issues of structural permanent BMPs;
 - (vi) Land use and expected pollutants generated; and
 - (vii) Compliance record.

(3) Structural Permanent BMP Maintenance Verifications and Inspections

Each Copermittee is required to verify that structural permanent BMPs on each Priority Development Project are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP through inspections, self-certifications, surveys, or other equally effective approaches.

- (a) All (100 percent) of the structural permanent BMPs at Priority Development Projects that are designated as high priority must be inspected directly by the Copermittee annually prior to each rainy season;
- (b) For verifications performed through a means other than direct Copermittee inspection, adequate documentation must be required by the Copermittee to provide assurance that the required maintenance of structural permanent BMPs at each Priority Development Project has been completed; and
- (c) Appropriate follow-up measures (including re-inspections, enforcement, etc.) must be conducted to ensure that structural permanent BMPs at each Priority Development Project continue to reduce pollutants in storm water to the MEP as originally designed.

f. Development Project Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all development projects, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement

ADMINISTRATIVE DRAFT

Response Plan pursuant to Provision [E.6](#).

ADMINISTRATIVE DRAFT**4. Construction Management**

Each Copermittee must implement a construction management program that includes, ~~at a minimum,~~ the following requirements:

a. Construction Program Management

Each Copermittee must define in the Jurisdictional Runoff Management Plan the following:

- (1) Define construction sites to be inventoried, such as sites that involve ground disturbance or soil disturbing activities; and
- (2) Define a process for ensuring adequate construction BMP implementation for non-inventoried sites. Non-inventoried sites involve minor construction activities that are not anticipated to create storm water pollution such as interior improvements, small miscellaneous residential improvements such as patio covers, plumbing, electrical, and mechanical work.

a.b. _____ Project Approval Process

Prior to ~~approval and~~ issuance of any local permit that allows commencement of construction, grading, or building permits activities for any inventoried construction site, a project each Copermittee must:

- (1) Require a ~~project~~site-specific ~~storm water pollution prevention plan (SWPPP)~~Pollution Control Plan, or equivalent construction BMP or erosion control plan, to be submitted by the project applicant ~~for to~~ the Copermittee's approval;
 - (2) ~~Ensure~~Confirm the ~~Pollution Control Plan~~SWPPP, or equivalent construction BMP or erosion control plan, complies with the local grading ordinance, other applicable local ordinances, and the requirements of this Order; and
 - (3) ~~Ensure~~Confirm the ~~Pollution Control Plan~~SWPPP, or equivalent construction BMP or erosion control plan, includes seasonally appropriate and effective BMPs and management measures described in Provision E.4.c, as applicable to the project.
- (1) Verify that the project applicant has obtained coverage under applicable permits, including, but not limited to the Construction General Permit, Clean Water Act Section 401 Water Quality Certification and Section 404 Permit, and California Department of Fish and Game Streambed Alteration Agreement.

b.c. _____ Construction Site Inventory and Tracking

ADMINISTRATIVE DRAFT

- (1) Each Copermittee must maintain, and update at least monthly, a watershed-based inventory of all applicable construction sites ~~requiring construction, grading, or building permits~~ within its jurisdiction. The inventory must include:
 - (a) Relevant contact information for each site (e.g., name, address, phone, and email for the owner and contractor);
 - (b) The basic site information including location (address and hydrologic subarea), Waste Discharge Identification (WDID) number (if applicable), size of the site, and approximate area of disturbance;
 - (c) Whether or not the site is considered a high threat to water quality, as defined in Provision E.4.b.(2) below;
 - ~~(a) The project start and anticipated completion dates;~~
 - (d) Current construction phase;
 - (e) The required inspection frequency, as defined in the Copermittee's jurisdictional runoff management program document;
 - (f) The date the Copermittee approved-accepted the project-specific Pollution Control Plan SWPPP, or equivalent construction BMP or erosion control plan; and
 - (g) Whether or not there are ongoing enforcement actions administered to the site.
- (2) Each Copermittee must identify all construction sites within its jurisdiction that represent a high threat to downstream surface water quality. At a minimum, high threat to water quality sites must include:
 - (a) Sites located within a hydrologic subarea where sediment is known or suspected to contribute to the highest water quality priorities identified in the Water Quality Improvement Plan;
 - (b) Sites located within the same hydrologic subarea and tributary to a CWA section 303(d) water body segment impaired for sediment;
 - (c) Sites located within, directly adjacent to, or discharging directly to a receiving water within an ESA; and
 - (d) Other sites determined by the Copermittees or the San Diego Water Board as a high threat to water quality.

ADMINISTRATIVE DRAFT**e.d.** Construction Site BMP and Management Measure Implementation

Each Copermittee must implement, or require the implementation of effective BMPs to reduce discharges of pollutants in storm water from construction sites to the MEP, and prevent non-storm water discharges into the MS4. These BMPs must be site specific, seasonally appropriate, and construction phase appropriate. BMPs and management measures must be implemented at each construction site year round. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30). Copermittees must implement, or require the implementation of, BMPs and management measures in the following categories:

- (1) Project Planning;
- (2) Good Site Management "Housekeeping", including waste management;
- (3) Non-storm Water Management;
- (4) Erosion Control;
- (5) Sediment Control;
- (6) Run-on and Run-off Control; and
- (7) Active/Passive Sediment Treatment Systems, where applicable.

e.e. Construction Site Inspections

Each Copermittee must conduct construction site inspections to ensure-confirm compliance with its permits and applicable local ordinances, and the requirements of this Order. Priority for site inspections must consider threat to water quality pursuant to Provision E.4.b as well as the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

(1) Inspection Frequency

- (a) Each Copermittee must conduct inspections at all inventoried sites, including high threat to water quality sites, at an appropriate frequency for each phase of construction to ensure-confirm the site reduces the discharge of pollutants in storm water from construction sites to the MEP, and prevents non-storm water discharges from entering the MS4.
- (b) Each Copermittee must establish appropriate inspection frequencies for high threat to water quality sites, and all other sites, for each phase of construction. Inspection frequencies appropriate for addressing the highest water quality priorities identified in the Water Quality Improvement Plan, and for complying with the requirements of this Order must be

ADMINISTRATIVE DRAFT

identified in each Copermittee's jurisdictional runoff management program document.

- (c) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e., re-inspection, enforcement) necessary to [ensure confirm](#) site compliance with its permits and applicable local ordinances, and the requirements of this Order.

(2) Inspection Content

Inspections of construction sites by the Copermittee must include, at a minimum:

- (a) Verification of coverage under the Construction General Permit (Notice of Intent (NOI) and/or WDID number) during initial inspections, when applicable;
- (b) Assessment of compliance with its permits and applicable local ordinances related to pollution prevention, including the implementation and maintenance of applicable BMPs;
- (c) Assessment of BMP adequacy and effectiveness;
- (d) Visual observations of actual non-storm water discharges;
- (e) Visual observations of actual or potential discharge of sediment and/or construction related materials from the site;
- (f) Visual observations of actual or potential illicit connections; and
- (g) If any violations are found and BMP enhancements are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision [E.6](#).

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried construction sites. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must include, at a minimum:

- (a) Site name, location (address and hydrologic subarea), and WDID number (if applicable);
- (b) Inspection date;
- (c) Weather conditions during inspection;

ADMINISTRATIVE DRAFT

- ~~(a) Approximate amount of rainfall since last inspection;~~
- (d) Description ~~and photo documentation~~ of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;
- (e) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time-;
- (f) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6; and
- (g) Resolution of problems noted and date problems fixed.

e.f. Construction Site Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried construction sites, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

5. Existing Development Management

[NOTE: This section is provided as an alternate to the original language.]

Each Copermittee must implement an existing development management program that includes the following requirements:

a. Industrial, Commercial, and Municipal Sources**(4)(1) Source Identification and Prioritization**

Each Copermittee must identify sources and maintain an updated watershed-based inventory of its existing industrial, commercial, and municipal development that has the reasonable potential to discharge a pollutant load to and from the MS4. The use of an automated database system, such as GIS, is highly recommended. The inventory must, at a minimum, include:

- (a) Name, location (address and hydrological subarea) of each source;
- (b) A designation of the source as municipal, commercial, or industrial;
- (c) SIC Code or NAICS Code, if applicable;
- (d) Industrial General Permit NOI and/or WDID number, if applicable;

ADMINISTRATIVE DRAFT

- (e) Identification of pollutants generated or potentially generated by the source;
- (f) Whether the source is adjacent to an ESA;
- (g) Whether the source is tributary to and within the same hydrologic subarea as a CWA section 303(d) water body segment and generates or potentially generates pollutants for which the water body segment is impaired; and
- (h) Whether the source contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan;

~~(5)~~(2) BMP Implementation and Maintenance

Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development with the reasonable potential to discharge pollutant loads from their MS4, including special event venues. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.

(a) Pollution Prevention

Each Copermittee must promote the use of pollution prevention methods, where appropriate.

(b) BMP Operation and Maintenance

- (i) Each Copermittee must properly operate and maintain, or require the proper operation and maintenance of designated BMPs at sources within its jurisdiction.
- (ii) Each Copermittee must implement a schedule of operation and maintenance activities for its MS4 and related structures (including but not limited to catch basins, storm drain inlets, detention basins, etc.), and verify proper operation of all its municipal structural treatment controls. Operations and maintenance activities may include:
 - [a] Inspections of MS4 and related structures;
 - [b] Cleaning of MS4 and related structures; and
 - [c] Proper disposal of materials removed from cleaning of MS4 and related structures.

ADMINISTRATIVE DRAFT

(iii) Each Copermittee must implement a schedule of operation and maintenance activities for public: streets, unpaved roads, paved roads, and paved highways and freeways within its jurisdiction.

(iv) Each Copermittee must implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers. Copermittees that operate both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate seeping sewage from infiltrating the MS4. Copermittees that do not operate both a municipal sanitary sewer system and a MS4 are encouraged to coordinate with sewerage agencies to keep themselves informed of relevant and appropriate maintenance activities and capital projects in their jurisdiction.

(c) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must implement procedures, or require the implementation of procedures, as appropriate, to reduce discharges of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers at sources within its jurisdiction.

~~(6)~~(3) Measures to Address Highest Water Quality Priorities

Each Copermittee must conduct or require measures as necessary to address sources or areas that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. These measures must be identified as applicable in each WQIP strategy, and may include any of the following:

(a) Copermittee Program Activities

Each Copermittee may make modifications to its program activities (e.g. increased or focused education, inspections, etc.) to address sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

(b) Additional Control Measures

Each Copermittee may require additional pollution prevention measures and control measures at sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan, including consideration of retrofit and channel rehabilitation and improvement opportunities, as identified in Provision 5.a.2.(c)

(c) Retrofit

Each Copermittee must develop a strategy to facilitate the implementation of

ADMINISTRATIVE DRAFT

retrofit projects. Existing development in high priority areas should be assessed for inclusion in the retrofit plan. Retrofit plans should focus on pollutants and areas identified as high priority within the Water Quality Improvement Plans, with the highest priority projects included in the Water Quality Improvement Plans.

- (i) Retrofit projects may be prioritized based on their relative benefit to water quality, feasibility, cost effectiveness, and community acceptance.
- (ii) Retrofit projects in the highest priority areas should be included in the review for the Water Quality Improvement Plan to provide additional pollutant removal from storm water discharges.

(d) Channel Rehabilitation and Improvement

Each Copermittee must develop a strategy to facilitate the implementation of channel rehabilitation and improvement projects. Existing channels in high priority areas should be assessed for inclusion in the channel rehabilitation and improvement plan. Channel rehabilitation and improvement plans should focus on pollutants and areas identified as high priority within the Water Quality Improvement Plans.

- (i) Channel rehabilitation and improvement projects may be selected to address hydromodification, restore wetland and riparian habitat, or to address other water quality issues prioritized in the Water Quality Improvement Plan.
- (ii) Channel rehabilitation and improvement projects may be prioritized based on their relative benefit to water quality, feasibility, cost effectiveness, and community acceptance.
- (iii) Channel rehabilitation and improvement projects in the highest priority areas should be included in the review for the Water Quality Improvement Plan to provide additional pollutant removal from storm water discharges.

(7)(4) Inspection Requirements:

(a) Inspection Frequency

- (i) Each Copermittee must establish appropriate inspection frequencies for inventoried industrial, commercial, and municipal sources based on the potential for discharging pollutants via storm water and non-storm water discharges, and should reflect the priorities set forth in the Water Quality Improvement Plan.

ADMINISTRATIVE DRAFT

- (ii) Each Copermittee must conduct inspections annually with a level of effort equivalent to 20% of their industrial, commercial, and municipal inventory combined²⁰²¹. If facilities require multiple inspections during any given year, those additional inspections may count towards this total.
- (iii) Inventoried existing development must be inspected, as needed, in response to valid public complaints and findings from the Copermittee's municipal and contract staff inspections.
- (iv) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e. education and outreach, re-inspection, enforcement) as necessary to confirm compliance in accordance with its enforcement response plan pursuant to Provision E.6.

(b) Inspection Content

Inspections of industrial, commercial, and municipal facilities by the Copermittee may include the following:

- (i) Industrial, commercial, and municipal facilities name and location (address and hydrologic subarea);
- (ii) Inspection and re-inspection date(s);
- (iii) Assessment of compliance with its applicable local ordinances and permits related to non-storm water and storm water discharges and runoff;
- (iv) Assessment of BMPs implementation;
- (v) Verification of coverage under the Industrial General Permit (NOI and/or WDID number), when applicable;
- (vi)
- (vii) Visual observations of actual non-storm water discharges, if present;
- (viii) Visual observations of actual or potential discharge of pollutants, if present; and
- (ix) Visual observations of actual or potential illicit connections, if present.

²⁰ Excludes linear facilities (MS4 and roads).

ADMINISTRATIVE DRAFT**(c) Inspection Tracking and Records**

Each Copermittee must track all inspections and re-inspections at all inventoried industrial, commercial, and municipal facilities. The Copermittee must maintain all inspection records in an electronic database or tabular format, either in paper or electronic inspection records files, which must be made available to the San Diego Water Board upon request.

Inspection records must include the information necessary to effectively manage and implement the industrial, commercial, and municipal facilities inspection program, as described in each Copermittee's jurisdictional runoff management plan

b. Residential Sources**(1) Source Identification and Prioritization:**

An inventory of residential sources within each Copermittees jurisdiction must be developed as follows:

(a) Designation of Residential Management Areas

Each Copermittee must divide areas of residential development into Residential Management Areas. Residential Management Areas may be designated by one or more of the following: Hydrologic Sub Area, land use (e.g. single family, multi family, rural, Common Interest Areas, ~~or~~ Home Owner Associations), and/or residential target audiences, and/or other accepted methods to be included in each Copermittee-approved jurisdictional runoff management plan.

(b) Prioritization of Residential Management Areas

Copermittees must prioritize Residential Management Areas for the purposes of ~~prioritizing and~~ directing their residential programs. Prioritization must consider whether the Residential Management Area contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan, and consideration of other program information or information from other relevant programs:

(c) A regularly updated map must be developed showing the locations of the highest priority inventoried Residential Management Areas, watershed boundaries, and water bodies at or near them.

ADMINISTRATIVE DRAFT

(2) BMP Implementation and Maintenance

(a) Designate BMPs

Each Copermittee must designate and ~~require-encourage~~ the implementation of a minimum set of BMPs for all residential sources or residential target audiences with the reasonable potential to discharge significant pollutant loads from their MS4. The designated minimum BMPs must be source-specific, and must address each of the following as appropriate.

(i) Pollution Prevention

Each Copermittee must promote the use of pollution prevention methods, where appropriate.

(ii) BMP Operation and Maintenance

Each Copermittee must ~~operate-designate~~ and ~~maintain, or~~ require the operation and maintenance of designated BMPs for residential sources within its jurisdiction.

(iii) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must ~~require-designate~~ and encourage, as appropriate, the implementation of practices to reduce discharges of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers at residential sources within its jurisdiction.

(3) Measures to Address Highest Water Quality Priorities

Each Copermittee must ~~conduct-designate~~ or require measures as necessary to address residential sources or ~~areas-residential target audiences~~ that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. These measures must be identified as applicable in each WQIP strategy, and may include any of the following:

(a) Copermittee Program Activities

Each Copermittee may make modifications to its program activities (e.g. increased or focused education, inspections, etc.) to address residential sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

ADMINISTRATIVE DRAFT**(b) Additional Control Measures**

Each Copermittee may require additional pollution prevention and control measures at sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

(c) Retrofit

Each Copermittee must encourage through education or other means the implementation of retrofit projects at residential sources or areas.

(4) Residential Management Area Oversight:**(a) Residential Area Assessment**

Each Copermittee must conduct representative evaluations (e.g. visual observations, water use analysis, and other historical data) of its high prioritized-priority Residential Management Areas as defined in the Water Quality Improvement Plan to update implementation strategies. Each Copermittee must develop a program to facilitate oversight and assessment in residential areas. Oversight may include complaint investigation, IDDE Activities, follow-up on monitoring observations, visual observations, outreach and education, water use analysis, or other methods deemed necessary to facilitate BMP implementation. Each Copermittee should conduct assessment of its oversight activities in prioritized residential areas to inform any updates to the WQIP.

~~(b) Residential Program Update~~

~~Within two years, each Copermittee must develop and submit for Regional Board approval an updated residential program strategy based on assessment findings. Until Copermittees implement an updated residential program, they must continue performing their existing programs.~~

~~(e)(b) Follow up Actions~~

Each Copermittee must prioritize ~~and implement~~ its follow up actions and enforcement (e.g. education and outreach, re-assessment, ~~enforcement~~) in accordance with its Enforcement Response Plan pursuant to Provision E.6.

~~(d)(c) Assessment Tracking and Record-keepings~~

~~Assessment r~~Records must be ~~tracked and~~ sufficiently detailed in order to determine compliance with the requirements of this Order and any progress made toward the modification of residential management

ADMINISTRATIVE DRAFT

strategies, or addressing the highest water quality priorities identified in the Water Quality Improvement Plan.

- ~~1) The following municipal facilities:
 - ~~(a) Flood management and flood control devices and structures;~~
 - ~~(b) Operating or closed municipal landfills;~~
 - ~~(c) Publicly owned treatment works (including water and wastewater treatment plants) and sanitary sewer collection systems;~~
 - ~~(c) Corporate yards, including maintenance and storage yards for materials, waste, equipment, and vehicles;~~
 - ~~(e) Hazardous waste collection facilities; and~~
 - ~~(f) Other treatment, storage or disposal facilities for municipal waste;~~~~
- ~~2) Identification if a business is a mobile business;~~
- ~~3) SIC Code, if applicable;~~
- ~~4) Industrial General Permit NOI and/or WDID number, if applicable;~~
- ~~5) Identification if an area is a Common Interest Area (CIA) / Home Owner Association (HOA), or mobile home park;~~
- ~~6) Identification of pollutants generated and potentially generated by the facility, area, and/or activity;~~
- ~~7) Status of facility, area, and/or activity as active or inactive;~~
- ~~8) Whether the facility, area, and/or activity is adjacent to an ESA;~~
- ~~9) Whether the facility, area, and/or activity is tributary to and within the same hydrologic subarea as a CWA section 303(d) water body segment and generates pollutants for which the water body segment is impaired;~~
- ~~10) Whether the facility, area, and/or activity contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan; and~~
- ~~11) A continually updated map showing the location of inventoried existing development, watershed boundaries, water bodies, and pollutants generated at the inventoried existing development.~~

~~c. Retrofitting and Channel Rehabilitation in Areas of Existing Development~~

ADMINISTRATIVE DRAFT

~~Each Copermittee must develop and implement a program to retrofit areas of existing development to reduce the discharge of pollutants in storm water from the MS4 to the MEP and effectively prohibit non-storm water discharges into its MS4, and rehabilitate channels to restore impaired beneficial uses of streams within its jurisdiction.~~

~~(1) Each Copermittee must identify areas of existing development as candidates for retrofitting, and channels in areas of existing development as candidates for rehabilitation within its jurisdiction. Areas of existing development must be selected based on a likelihood that retrofitting and channel rehabilitation will address the highest water quality priorities identified in the Water Quality Improvement Plan prepared pursuant to Provision B.~~

~~(2) Each Copermittee must evaluate and rank the areas of existing development identified pursuant to Provisions E.5.a and E.5.b.(1) for retrofitting and channel rehabilitation. The evaluation must include an assessment of those areas where pollutant removal from storm water and effective prohibition of non-storm water discharges through retrofitting existing development will provide the most benefit to water quality. The evaluation must also include an assessment of the channels within its jurisdiction where channel rehabilitation will improve beneficial uses of streams within the Copermittee's jurisdiction. Data collected during the implementation of the Water Quality Improvement Plan must be used to inform each area assessment and rank determination.~~

~~(3) Each Copermittee must implement retrofit and channel rehabilitation projects that address the highest water quality priorities identified in the Water Quality Improvement Plan pursuant to Provision B.3.a. The Copermittee must encourage private landowners to implement retrofit and channel rehabilitation projects whenever practical. Private landowners should be encouraged through the Copermittee's use of subsidies, penalties, or other incentives.~~

~~(4) Each Copermittee must evaluate the flood management and flood control devices and structures in its inventory to determine if it is feasible to retrofit the device or structure, to provide additional pollutant removal from storm water. A Copermittee must consider the highest water quality priorities identified in their Water Quality Improvement Plan as part of each assessment.~~

~~(5) Where retrofitting and channel rehabilitation within specific areas of existing development are determined to be infeasible to restore and protect receiving waters from the highest water quality priorities identified in the Water Quality Improvement Plan, each Copermittee must identify, develop, and implement regional retrofitting and channel rehabilitation projects (i.e. projects that can receive and/or treat storm water from one or more areas of existing development and will result in a net benefit to water quality and the environment) adjacent to and/or downstream of the areas of existing development. The Copermittees may collaborate and cooperate with each~~

ADMINISTRATIVE DRAFT

~~other to develop regional retrofitting and channel rehabilitation projects. The Copermittees are also encouraged to partner with existing efforts in other Watershed Management Areas, and the Integrated Regional Water Management (IRWM) Groups in San Diego County, South Orange County, and Southwest Riverside County.~~

~~d. Existing Development BMP Implementation and Maintenance~~**~~1) Pollution Prevention~~**

~~Each Copermittee must require the use of pollution prevention methods by the inventoried existing development.~~

~~2) Designate BMPs~~

~~Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development, including special event venues, that have the potential to generate pollutants. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.~~

~~3) BMP Implementation~~

~~Each Copermittee must implement, or require the implementation of, designated BMPs at inventoried existing development that have the potential to generate pollutants. A Copermittee must require additional pollution prevention measures and enhanced BMPs at inventoried existing development that discharges pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.~~

ADMINISTRATIVE DRAFT**4) BMP Operation and Maintenance**

~~Each Copermittee must operate and maintain, or require the operation and maintenance of designated BMPs at all inventoried existing development.~~

~~(b) Each Copermittee must implement a schedule of operation and maintenance activities for its MS4 and related structures (including but not limited to catch basins, storm drain inlets, detention basins, etc.), and verify proper operation of all its municipal structural treatment controls designed to reduce pollutants (including floatables) in storm water discharges to or from its MS4s and related drainage structures.~~

~~(c) Each Copermittee must implement procedures during the operation and maintenance of public streets, unpaved roads, paved roads, and paved highways and freeways that will reduce the contribution of storm water pollutants to the MEP and effectively prohibit non-storm water pollutants from the MS4 to receiving water bodies. During maintenance of unpaved roads, each Copermittee must examine the feasibility of replacing existing culverts or designing new culverts/bridge crossings to maintain natural stream geomorphology.~~

~~(d) Each Copermittee must implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers. Copermittees that operate both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate seeping sewage from infiltrating the MS4. Copermittees that do not operate both a municipal sanitary sewer system and a MS4 must keep themselves informed of relevant and appropriate maintenance activities and sanitary sewage projects in their jurisdiction that may cause or contribute to seepage of sewage into the MS4.~~

5) Pesticides, Herbicides, and Fertilizers BMPs

~~Each Copermittee must implement procedures, or require the implementation of procedures, to reduce the contribution of pollutants in storm water to the MEP and effectively prohibit non-storm water discharges associated with the application, storage, and disposal of pesticides, herbicides and fertilizers from inventoried existing development into and from the MS4s. The Copermittee must require additional pollution prevention measures and enhanced BMPs at inventoried existing development that discharges pesticides, herbicides, or fertilizers identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. Such BMPs must include, as appropriate educational activities, permits, certifications and other measures for applicators and distributors.~~

ADMINISTRATIVE DRAFT**e. Existing Development Inspections**

~~Each Copermitttee must conduct inspections of inventoried existing development to ensure compliance with applicable local ordinances and permits, and the requirements of this Order.~~

(1) Inspection Frequency

~~(a) Each Copermitttee must establish appropriate inspection frequencies for inventoried existing development based on the priorities set forth in the Water Quality Improvement Plan, and the potential for discharging pollutants via storm water and non-storm water runoff. At a minimum, inventoried existing development must be inspected once every five years. Inventoried existing development must also be inspected within six months of any change in property ownership or change in pollutant generating activity. The frequency of inspection at inventoried existing development must be appropriate to ensure that applied BMPs are sufficient to reduce the discharge of pollutants in storm water from the MS4 to the MEP and effectively prohibit non-storm water discharges to the MS4.~~

~~(b) Inventoried existing development must be inspected, as needed, in response to valid public complaints and findings from the Copermitttee's municipal and contract staff inspections.~~

~~(c) Based upon inspection findings, each Copermitttee must implement all follow-up actions (i.e. re-inspection, enforcement) necessary to ensure compliance with its applicable local ordinances and permits, the most current jurisdictional runoff management program document, the Water Quality Improvement Plan, and the requirements of this Order.~~

(2) Inspection Content

~~Inspections of existing development by the Copermitttee must include, at a minimum:~~

~~(a) Assessment of compliance with its applicable local ordinances and permits related to non-storm water and storm water discharges and runoff;~~

~~(b) Assessment of the implementation, maintenance and effectiveness of the designated minimum and/or enhanced BMPs;~~

~~(c) Verification of coverage under the Industrial General Permit (NOI and/or W DID number), when applicable;~~

~~(d) Visual observations of actual non-storm water discharges;~~

ADMINISTRATIVE DRAFT

- ~~(e) Visual observations of actual or potential discharge of pollutants;~~
- ~~(f) Visual observations of actual or potential illicit connections; and~~
- ~~(g) If any violations are found and BMP enhancements are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision E.6.~~

~~(3) Inspection Tracking and Records~~

~~Each Copermitttee must track all inspections and re-inspections at all inventoried existing development. The Copermitttee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must be sufficiently detailed in order to determine compliance with the requirements of this Order and any progress made towards addressing the highest water quality priorities identified in the Water Quality Improvement Plan. Inspection records must include, at a minimum:~~

- ~~(a) Existing development name and location (address and hydrologic subarea);~~
- ~~(b) Inspection and re-inspection date(s);~~
- ~~(c) Weather conditions during inspection;~~
- ~~(d) Description and photo documentation of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;~~
- ~~(e) Description of actions to reduce pollutants in storm water runoff to the MEP and actions to effectively prohibit non-storm discharges into the MS4 at the inventoried existing development;~~
- ~~(f) Photo documentation of observed actions or BMPs to reduce pollutants in storm water runoff to the MEP and actions to effectively prohibit non-storm discharges into the storm drain;~~
- ~~(g) If the facility, area, and/or activity has been designated or identified as a contributor to the highest water quality priorities identified in the Water Quality Improvement Plan, then the inspection report must include a description of any specific or additional actions taken to reduce or eliminate the contribution of the facility, area, and/or activity to the highest water quality priorities;~~
- ~~(h) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time;~~

ADMINISTRATIVE DRAFT

~~(i) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision E.6; and~~

~~(j) Resolution of problems noted and date problems fixed.~~

f.c. Existing Development Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried existing development identified by the Copermittee as having the reasonable potential to discharge pollutant loads from the MS4 within their jurisdiction, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision E.6.

ADMINISTRATIVE DRAFT**5.6. Enforcement Response Plans**

Each Copermittee must develop and implement an Enforcement Response Plan as part of its jurisdictional runoff management program document. The Enforcement Response Plan must ~~include the protocols for progressively stricter responses, including timeframes allowed for corrections of problems, and for various field violation scenarios~~ describe the applicable protocols and options for enforcing compliance with the provisions of this Order. The Enforcement Response Plan must include ~~, at a minimum,~~ the following requirements:

a. ENFORCEMENT RESPONSE PLAN COMPONENTS

The Enforcement Response Plans shall include the following individual components:

- (1) The Illicit Discharge Detection and Elimination Enforcement Components provided in Provision E.2;
- (2) The Development Planning Enforcement Component provided in Provision E.3;
- (3) The Construction Management Enforcement Component provided in Provision E.4; and
- (4) The Existing Development Management Enforcement Component provided in Provision E.5.

Existing enforcement plans or procedures may be used to partially or wholly satisfy the requirements of any Enforcement Response Plan component.

b. ENFORCEMENT APPROACHES AND OPTIONS

Each Enforcement Response Plan component must describe the Copermittee's approach to correcting noncompliance with its permits, applicable local ordinances, and this Order. It must describe protocols for progressively stricter responses, including, as applicable, timeframes allowed to bring areas or facilities into compliance. The enforcement process must include appropriate sanctions to compel compliance, such as:

- (1) Verbal and written notices of violation;
- (2) Cleanup requirements;
- (3) Fines
- (4) Bonding requirements;
- (5) Administrative and criminal (if intentional or criminally negligent) penalties;
- (6) Liens;
- (7) Stop work orders; and

ADMINISTRATIVE DRAFT(8) Permit and occupancy denials.c. CORRECTION OF VIOLATIONS

- (1) Violations must be corrected in a timely manner with the goal of correcting them within 30 calendar days after the violations are discovered, and prior to the next predicted rain event, when possible.
- (2) If more than 30 calendar days are required for compliance, then a rationale must be recorded in the applicable electronic database or tabular system used to track compliance.

d. ESCALATED ENFORCEMENT PRIORITIES

- (1) Each Enforcement Response Plan must include a definition of “escalated enforcement priorities”. Escalated enforcement priorities shall be defined to include any enforcement scenario where a violation or other non-compliance is determined to constitute a significant contribution to any of the highest water quality priorities identified in the Water Quality Improvement Plan. Escalated enforcement priorities may be defined differently for development planning; construction sites; commercial, industrial, and municipal sources; and residential management areas.
- (2) Where a violation involving a pollutant or stressor that has been identified as a highest water quality priority is not determined to represent an escalated enforcement priority, a rationale must be recorded in the applicable electronic database or tabular system used to track compliance.
- (3) Escalated enforcement actions must continue to increase in severity, as necessary, to compel compliance as soon as possible.

a. Illicit Discharge Detection and Elimination Enforcement Component

~~The Enforcement Response Plan must describe required enforcement actions to eliminate non-storm water discharges and illicit discharges or connections to the Copermitttee's MS4.~~

- ~~(1) The Enforcement Response Plan must include a definition of “high level enforcement” for non-storm water discharges and illicit discharges or connections. “High level enforcement” for non-storm water discharges and illicit discharges or connections may be defined differently for construction sites, municipal, commercial, industrial, and residential areas of existing development.~~
- ~~(2) Non-storm water discharges and illicit discharges or connections must be addressed with an escalating series of enforcement actions as follows:~~

ADMINISTRATIVE DRAFT

- ~~(a) If the non-storm water discharge and illicit discharge or connection is a source of pollutants contributing to the highest water quality priorities identified in the Water Quality Improvement Plan, then high level enforcement actions must be immediately issued, and subsequent high level enforcement actions must continue to escalate, as necessary, to compel the elimination of the discharge or connection as soon as possible; or~~
- ~~(b) If the non-storm water discharge and illicit discharge or connection is not a source of pollutants contributing to the highest water quality priorities identified in the Water Quality Improvement Plan, then escalating enforcement actions must be issued, and enforcement actions must result in the elimination of the discharge or connection as quickly as the Copermittee's available resources allow.~~
- ~~(3) If the Copermittee identifies the source, and the source is a controllable non-storm water discharge (i.e. anthropogenically influenced) or a controllable illicit discharge or connection, then the Copermittee must implement the following:~~
- ~~(a) Immediately enforce its legal authority to eliminate controllable sources of non-storm water and illicit discharges or connections upon identifying the source; and~~
- ~~(b) For controllable sources of non-storm water discharges and illicit discharges or connections that cannot be eliminated immediately upon identification, the discharge or connection must be eliminated in a timely manner with the goal of eliminating the discharge or connection within 10 business days after the source is identified. If more than 10 business days are required to eliminate the discharge or connection, a rationale must be recorded in the electronic database or equivalent tabular system used to track the investigations of non-storm water and illicit discharges and connections.~~
- ~~(4) If the Copermittee identifies the source as a non-storm water discharge to or from the MS4 that is in exceedance of NALs developed pursuant to Provision C.1, and in violation or threatened violation of an existing separate NPDES permit (e.g. the groundwater dewatering NPDES permit), then the Copermittee must report, within three business days, the findings to the San Diego Water Board including all pertinent information regarding the discharger and discharge characteristics.~~

~~b. Development Projects Enforcement Component~~

~~The Enforcement Response Plan must describe required enforcement actions to compel compliance with the Copermittee's BMP Design Manual requirements for~~

ADMINISTRATIVE DRAFT

development projects.

- ~~(1) The Enforcement Response Plan must include a definition of “high level enforcement” for development projects.~~
- ~~(2) The enforcement process must include appropriate sanctions to compel compliance with requirements of the Copermittee’s BMP Design Manual or this Order. Sanctions must include, at a minimum, the following tools or their equivalent:
 - ~~(a) Non-monetary penalties;~~
 - ~~(b) Fines;~~
 - ~~(c) Bonding requirements;~~
 - ~~(d) Administrative and criminal penalties;~~
 - ~~(e) Liens; and~~
 - ~~(f) Permit or occupancy denials.~~~~
- ~~(3) Occupancy must be denied until a development project is in full compliance with the Copermittee’s BMP Design Manual requirements. Documentation of full compliance with the Copermittee’s BMP Design Manual requirements must be recorded in the electronic database or equivalent tabular system used to track development projects.~~
- ~~(4) Violations or other non-compliance that contribute or potentially contribute to the highest water quality priorities identified in the Water Quality Improvement Plan must be issued high level enforcement actions. High level enforcement actions must continue to escalate, as necessary, to compel compliance as soon as possible.~~
- ~~(5) For violations of permanent BMP maintenance requirements, all violations must be corrected in a timely manner with the goal of correcting them before the next rain event but no longer than 10 business days after the violations are discovered. If more than 10 business days are required for compliance, a rationale must be recorded in the electronic database or equivalent tabular system used to track permanent BMP inspections.~~

~~a. Construction / Existing Development Enforcement Component~~

~~The Enforcement Response Plan must describe required enforcement actions to compel compliance with its permits and applicable local ordinances, and the requirements of this Order, at construction sites and areas of existing development.~~

ADMINISTRATIVE DRAFT

- ~~(1) The Enforcement Response Plan must include a definition of “high level enforcement” for construction sites and areas of existing development. “High level enforcement” may be defined differently for construction sites, municipal, commercial, industrial, and residential areas of existing development.~~
- ~~(2) The enforcement process must include, at a minimum, appropriate sanctions to compel compliance, such as:~~
- ~~(a) Verbal and written notices of violation;~~
 - ~~(b) Cleanup requirements;~~
 - ~~(c) Fines;~~
 - ~~(d) Bonding requirements;~~
 - ~~(e) Administrative and criminal penalties;~~
 - ~~(f) Liens;~~
 - ~~(g) Stop work orders; and~~
 - ~~(h) Permit and occupancy denials.~~
- ~~(3) Violations or other non-compliance that contribute or potentially contribute to the highest water quality priorities identified in the Water Quality Improvement Plan must be issued high level enforcement actions. High level enforcement actions must continue to escalate, as necessary, to compel compliance as soon as possible.~~
- ~~(4) All violations must be corrected in a timely manner with the goal of correcting them before the next rain event but no longer than 10 business days after the violations are discovered. If more than 10 business days are required for compliance, then a rationale must be recorded in the electronic database or equivalent tabular system used to track construction site and existing development inspections.~~

~~g-e.~~ _____ REPORTING OF NON-COMPLIANT SITES

- (1) Each Copermitee must notify the San Diego Water Board verbally within 24 hours and in writing within 48 hours-5 calendar days of issuing high levelescalated enforcement (as defined in the Copermitee’s Enforcement Response Plan) to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance with its permits and applicable local ordinances, and the requirements of this Order. Written notification may be provided electronically in email form.

- (2) Each Copermittee must notify the San Diego Water Board of non-filers under the Industrial General Permit and Construction General Permit by email to Nonfilers_R9@waterboards.ca.gov.

Internal Draft

PROVISION E: JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS
E.6. Enforcement Response Plans
E.7. Public Education and Participation
E.8. Fiscal Analysis

ADMINISTRATIVE DRAFT**6.7. Public Education and Participation**

a. Each Copermittee must implement a public education and participation program, as appropriate, to promote and encourage the development of programs, management practices, control techniques and systems, design and engineering methods, and behaviors that reduce the discharge of pollutants in storm water to the MEP, prevent controllable non-storm water discharges from entering the MS4, and protect water quality standards in receiving waters. The public education program must include ~~_, at a minimum,~~ the following:

(1) Educational activities, public information activities, and other appropriate outreach activities intended to reduce pollutants ~~associated with the application of pesticides, herbicides and fertilizer in storm water discharges to and of concern~~ from its MS4 to the MEP. Activities shall be determined and prioritized by Copermittees by jurisdiction and/or watershed (Section 5.c.(5) to address the highest threats to water quality (e.g. pesticides, herbicides and fertilizers, used oil, toxic waste, etc.);

~~(1) Educational activities, public information activities, and other appropriate outreach activities to facilitate the proper management and disposal of used oil and toxic materials; and~~

(2) Appropriate education and training measures for ~~construction site operators and other specific~~ target audiences, as determined and prioritized by the Copermittee(s) by jurisdiction and watershed, based on high risk behaviors and pollutants of concern, such as construction site operators, residents, underserved target audiences and school-aged children.

~~b. Each Copermittee shall incorporate a mechanism for evaluation and assessment of educational and other outreach activities, as needed, to identify progress and incorporate modifications necessary to increase the effectiveness of the public education program.~~

~~b-c. Each Copermittee may determine, where appropriate and effective, mechanisms for intergovernmental coordination on education and outreach activities. must incorporate a mechanism for public participation and where necessary intergovernmental coordination in updating, developing, and implementing its jurisdictional runoff management program.~~

7.8. Fiscal Analysis

a. Each Copermittee must secure the resources necessary to meet all the requirements of this Order.

b. Each Copermittee must conduct an annual fiscal analysis of their jurisdictional runoff management programs in their entirety. The fiscal analysis must include the following:

ADMINISTRATIVE DRAFT

Identification of the various categories of expenditures necessary to implement the requirements of this Order, including a description of the specific items to be accounted for in each category of expenditures:

~~(1) The capital and operation and maintenance expenditures necessary to implement the requirements of this Order;~~

(1) The staff resources needed and allocated to meet the requirements of this Order, including any development, implementation, and enforcement activities required;

(2) The fiscal analysis must provide estimated expenditures for Provisions E.8.b.0 and E.8.b.(1) for each Copermittee's jurisdictional runoff management program budget for the current reporting period, during the reporting period, the preceding reporting period, and the next reporting period; and

(3) The source(s) of funds that are proposed to meet the necessary expenditures described in Provisions E.8.b.0 and E.8.b.(1), including legal restrictions on the use of such funds.

- c. Each Copermittee must submit a summary of the annual fiscal analysis with each Annual Report required pursuant to Provision F.3.b.
- d. Each Copermittee must provide the documentation used to develop the summary of the annual fiscal analysis upon request by the San Diego Water Board.

ADMINISTRATIVE DRAFT**E.F. REPORTING**

The purpose of this provision is to determine and document compliance with the requirements set forth in this Order. The goal of this provision is to communicate to the San Diego Water Board and the people of the State of California the implementation status of each jurisdictional runoff management program and compliance with the requirements of this Order. This goal is to be accomplished through the submittal of specific deliverables to the San Diego Water Board by the Copermittees.

1. Water Quality Improvement Plans

The Copermittees for each Watershed Management Area must develop and submit a complete Water Quality Improvement Plan in accordance with the requirements of Provision B, no later than 42-18 months after the adoption of this Order for a 30 day public review and comment period. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 30 days. -Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittees that the Water Quality Improvement Plan has been accepted as complete following its review and determination that the Water Quality Improvement Plan meets the requirements of this Order Water Quality Improvement Plans are deemed approved if no response is provided to the Copermittees within 2 months of the submittal date. Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

a. WATER QUALITY IMPROVEMENT PLAN SUBMITTAL AND IMPLEMENTATION

Copermittees must submit requested modifications to the Water Quality Improvement Plan either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. Once approved by the San Diego Water Board Executive Officer, the Copermittees must implement any modifications to the Water Quality Improvement Plan in accordance with the schedules developed pursuant to Provisions B.2 and B.3.b. Requests for modification are deemed approved if no response is provided to the requesting Copermittee(s) within 2 months of the request date.

b. CORRESPONDING MODIFICATIONS TO JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS AND MONITORING AND ASSESSMENT PROGRAMS

Copermittees must submit requested modifications to the jurisdictional runoff management programs and monitoring and assessment programs either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. Once approved by the San Diego Water Board Executive Officer, the Copermittees must implement any modifications to the Water Quality Improvement Plan in

ADMINISTRATIVE DRAFT

accordance with the schedules developed pursuant to Provisions B.3.b. Requests for modification are deemed approved if no response is provided to the requesting Copermittee(s) within 2 months of the request date.

2. Updates**a. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES**

Each Copermittee must update its jurisdictional runoff management program document to incorporate the requirements of Provision E. The update must be completed no later than ~~42~~18 months after the adoption of this Order. Updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports, and updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse.

Jurisdictional Runoff Management Program document updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

b. ~~PERMANENT BMP SIZING CRITERIA~~ DESIGN MANUAL UPDATES

Each Copermittee must update its BMP Design Manual to incorporate the requirements of Provision E.3.d. The update must be completed no later than ~~1842~~ months after the adoption of this Order. Updated BMP Design Manuals must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports. Updated BMP Design Manuals must be made available on the Regional Clearinghouse.

BMP Design Manual updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

c. WATER QUALITY IMPROVEMENT PLAN UPDATES

The Copermittees for each Watershed Management Area must submit updates to the Water Quality Improvement Plan as part of the Annual Reports. Updated Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

Water Quality Improvement Plan updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

ADMINISTRATIVE DRAFT**3. Progress Reporting**

a. PROGRESS REPORT PRESENTATIONS

The Copermittees for each Watershed Management Area must appear before the San Diego Water Board, as requested by the San Diego Water Board, to provide progress reports on the implementation of the Water Quality Improvement Plan and jurisdictional runoff management programs.

b. ANNUAL REPORTS

(1) The Copermittees for each Watershed Management Area must submit an Annual Report for each reporting period, which begins July 1 and ends June -30 in the following year, no later than ~~October~~ January 31 of the following the end of the reporting period year. This is to accommodate the monitoring year from October 1 to September 30 of the subsequent year. The first Annual Report must be prepared for the reporting period beginning ~~from July 1 after adoption of the date the permit, and upon~~ determines determination that the Water Quality Improvement Plan meets the requirements of this Order to June 30 in the following year. Annual Reports must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Each Annual Report must include the following:

~~(a) The jurisdictional and watershed monitoring data collected pursuant to Provisions D.1 and D.2, summarized and presented in tabular and graphical form;~~

~~(b) Progress of the special studies required pursuant to Provisions D.2 and D.3, and the results or findings when a special study, or each phase of a special study, is completed;~~

~~(c) The findings from the assessments required pursuant to Provision D.4;~~

(a) The progress of implementing the Water Quality Improvement Plan, including, but not limited to, the following:

(i) The progress toward achieving the interim and final numeric targetsgoals for the highest water quality priorities for the Watershed Management Area,

(ii) The water quality improvement strategies that were implemented and/or no longer implemented by each of the Copermittees during the reporting period and previous reporting periods, and are planned to be implemented during the next reporting period,

ADMINISTRATIVE DRAFT

- (iii) Proposed modifications to water quality improvement or jurisdictional strategies with associated rationale for such modifications.
 - (iv) Previously proposed modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area,
 - [a] The monitoring data collected pursuant to Provision D, summarized and presented in tabular and graphical form;
 - [b] Progress of the special studies required pursuant to Provision D, and the results or findings when a special study, or each phase of a special study, is completed;
 - [c] The findings from the assessments required pursuant to Provision D; and~~[a] and~~
 - (v) Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document;
- (b) A completed Jurisdictional Runoff Management Program Annual Report Form (Attachment D or approved revision) for each Copermittee in the Watershed Management Area, certified by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative.
- (2) Each Copermittee must complete and submit a Jurisdictional Runoff Management Program Annual Report Form (Attachment D or approved revision) no later than October 31 of each year until the first Annual Report is required to be submitted. Each Copermittee's Annual Report form must summarize the jurisdictional activities in the WMAs in which the Copermittee has jurisdiction.
- (3) Each Copermittee must provide any data or documentation utilized in developing the Annual Report upon request by the San Diego Water Board. Any monitoring data utilized in developing the Annual Report must be uploaded to the California Environmental Data Exchange Network (CEDEN).²² Any monitoring and assessment data utilized in developing the

²² Data must be uploaded to CEDEN Southern California Regional Data Center (<http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx>) using the templates provided on the CEDEN website.

ADMINISTRATIVE DRAFT

Annual Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

c. REGIONAL MONITORING AND ASSESSMENT REPORT

- (1) The Copermittees must submit a Regional Monitoring and Assessment Report no later than 180 days in advance of the expiration date of this Order. The Regional Monitoring and Assessment Report may be submitted as part of the ROWD required pursuant to Provision F.5.b. The Copermittees must review the jurisdictional and watershed monitoring data, data analyses, and assessments required pursuant to Provision D.4, to assess the following:
 - (a) The beneficial uses of the receiving waters within the San Diego Region that are protected or must be restored;
 - (b) The progress toward restoring impacted beneficial uses in the receiving waters within the San Diego Region; and
 - (c) Pollutants or conditions of emerging concern that may impact beneficial uses in the receiving waters within the San Diego Region.
- (2) The Regional Monitoring and Assessment Report must include recommendations for improving the implementation and assessment of the Water Quality Improvement Plans and jurisdictional runoff management programs.
- (3) Each Copermittee must provide any data or documentation utilized in developing the Regional Monitoring and Assessment Report upon request by the San Diego Water Board. Any monitoring and assessment data utilized in developing the Regional Monitoring and Assessment Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

4. Regional Clearinghouse

The Copermittees²³ must develop, update, and maintain an internet-based Regional Clearinghouse that can be used to store, disseminate, and share the Copermittees' Water Quality Improvement Plans, Annual Reports, jurisdictional runoff management program documents, monitoring data, special studies, and any other data or information generated by the Copermittees during the implementation of this Order. Monitoring data collected pursuant to Provision D must be uploaded to CEDEN,²⁴

²³ [The Copermittee may elect to develop and maintain the clearinghouse\(s\) provided by other Copermittees or agencies.](#)

²⁴ Data must be uploaded to CEDEN Southern California Regional Data Center (<http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx>) using the templates provided on the CEDEN website.

ADMINISTRATIVE DRAFT

with links to the uploaded data available on the Regional Clearinghouse. The Regional Clearinghouse may be linked to other internet-based data portals and databases where the original documents and data are stored. The Regional Clearinghouse must be available and accessible to members of the public. The Regional Clearinghouse must be developed and made available to the public no later than 182 months after the adoption of this Order.

5. Report of Waste Discharge

- a. The Orange County Copermittees and the Riverside County Copermittees, are required to submit a complete ROWD pursuant to the requirements of their current Orders and are enrolled under this Order upon expiration of their current Orders. Upon expiration of their current Orders, the Copermittees in each county must comply with the requirements of this Order by July 1 after enrollment under this Order, unless early enrollment is granted pursuant to Provision F.6 of this Order. The current Orders for the Orange County Copermittees and Riverside County Copermittees are rescinded upon their expiration date except for enforcement purposes.
- b. The Copermittees must submit to the San Diego Water Board a complete ROWD as an application for the re-issuance of this NPDES permit. The ROWD must be submitted no later than 180 days in advance of the expiration date of this Order. The Copermittee may elect to develop and submit the in conjunction with or provided by another Copermittee. The ROWD must contain the following minimum information:
 - (1) Names and addresses of the Copermittees;
 - (2) Names and titles of the primary contacts of the Copermittees;
 - (1) Proposed changes to the Copermittees' Water Quality Improvement Plans and the supporting justification;
 - (3) Proposed changes to the Copermittees' jurisdictional runoff management programs and the supporting justification;
 - (4) Any other information necessary for the re-issuance of this Order; and
 - (5) Any other information required by federal regulations for NPDES permit reissuance.

6. Application for Early Enrollment

- a. The Orange County Copermittees, collectively, or Riverside County Copermittees, collectively, may apply for early enrollment under this Order by submitting a Report of Waste Discharge Form 200 for each individual

ADMINISTRATIVE DRAFT

Copermittee in the respective county, with a written request for early enrollment under this Order that certifies the following conditions have been met:

- (1) A Water Quality Improvement Plan has been developed in accordance with the requirements of Provision B, which can and will be implemented immediately upon enrollment under this Order;
- (2) Each Copermittee in the county has updated its jurisdictional runoff management program document to incorporate the requirements of Provision E, which can and will be implemented immediately upon enrollment under this Order; and
- (3) Each Copermittee in the county has updated its BMP Design Manual to incorporate the requirements of Provision E.3.d, which can and will be implemented immediately upon enrollment under this Order.

ADMINISTRATIVE DRAFT

- b.** The San Diego Water Board will review the application for early enrollment and associated documents for completeness. A Notice of Enrollment (NOE) under this Order will be issued to the Copermittees in the respective county by the San Diego Water Board upon completion of the early enrollment application requirements. The effective enrollment date will be specified in the NOE and the Copermittees in the respective county are authorized to have MS4 discharges pursuant to the requirements of this Order starting on the date specified in the NOE. The existing Order for that county is rescinded upon the effective enrollment date specified in the NOE except for enforcement purposes.

7. Reporting Provisions

Each Copermittee must comply with all the reporting and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in [Attachment B](#) to this Order.

ADMINISTRATIVE DRAFT**F.G. PRINCIPAL WATERSHED COPERMITTEE RESPONSIBILITIES**

1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. ~~An individual Copermittee should not be designated a Principal Watershed Copermittee for more than two Watershed Management Areas.~~ The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1 of this Order.
2. The Principal Watershed Copermittee is responsible for, at a minimum, the following:
 - a. Serving as liaison between the Copermittees in the Watershed Management Area and the San Diego Water Board on general permit issues, and when necessary and appropriate, representing the Copermittees in the Watershed Management Area before the San Diego Water Board.
 - b. Facilitating the development of the Water Quality Improvement Plan in accordance with the requirements of Provision B of this Order
 - c. Coordinating the submittal of the deliverables required by Provisions F.1, F.2, F.3.a, and F.3.b of this Order.
 - d. Coordinating and developing, with the other ~~Principal Watershed~~ Copermittees, the requirements of Provisions F.3.c, F.4, and F.5.~~bb~~ of this Order.

ADMINISTRATIVE DRAFT**G.H. MODIFICATION OF PROGRAMS**

1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the San Diego Water Board.
2. Minor modifications to the Order may be made by the San Diego Water Board where the proposed modification complies with all the prohibitions and limitations, and other requirements of this Order.
3. Proposed modifications [outside of the WQIP process](#) that are not minor require amendment of this Order in accordance with this Order's rules, policies, and procedures.

ADMINISTRATIVE DRAFT

H.I. STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

Each Copermittee must comply with all the Standard Permit Provisions and General Provisions contained in [Attachment B](#) to this Order.

ADMINISTRATIVE DRAFT

ATTACHMENT A

DISCHARGE PROHIBITIONS

1. Basin Plan Waste Discharge Prohibitions

California Water Code Section 13243 provides that a Regional Water Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following waste discharge prohibitions in the Water Quality Control Plan for the San Diego Basin (Basin Plan) are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.
4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues a NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Department of Health Services (DHS) and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.
5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

ADMINISTRATIVE DRAFT

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.
8. Any discharge to a storm water conveyance system that is not composed entirely of "*storm water*" is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [§122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].
9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.
11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.
12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.
14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.
16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.
17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.
18. The discharge of treated sewage from vessels, which do not have a properly functioning ~~US~~ U.S. Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

ADMINISTRATIVE DRAFT**2. Attachment B to State Water Board Resolution 2012-0012~~X~~**

Copermitees that discharge into Areas of Special Biological Significance must comply with State Water Board Resolution No. 2012-0012.

Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges**I. PROVISIONS FOR POINT SOURCE DISCHARGES OF STORM WATER AND NONPOINT SOURCE WASTE DISCHARGES**

The following terms, prohibitions, and special conditions (hereafter collectively referred to as special conditions) are established as limitations on point source storm water and nonpoint source discharges. These special conditions provide Special Protections for marine aquatic life and natural water quality in Areas of Special Biological Significance (ASBS), as required for State Water Quality Protection Areas pursuant to California Public Resources Code Sections 36700(f) and 36710(f). These Special Protections are adopted by the State Water Board as part of the California Ocean Plan (Ocean Plan) General Exception.

The special conditions are organized by category of discharge. The State Water Resources Control Board (State Water Board) and Regional Water Quality Control Boards (Regional Water Boards) will determine categories and the means of regulation for those categories [e.g., Point Source Storm Water National Pollutant Discharge Elimination System (NPDES) or Nonpoint Source].

A. PERMITTED POINT SOURCE DISCHARGES OF STORM WATER**1. General Provisions for Permitted Point Source Discharges of Storm Water**

a. Existing storm water discharges into an ASBS are allowed only under the following conditions:

(1) The discharges are authorized by an NPDES permit issued by the State Water Board or Regional Water Board;

(2) The discharges comply with all of the applicable terms, prohibitions, and special conditions contained in these Special Protections; and

(3) The discharges:

(i) Are essential for flood control or slope stability, including roof, landscape, road, and parking lot drainage;

(ii) Are designed to prevent soil erosion;

(iii) Occur only during wet weather;

(iv) Are composed of only storm water runoff.

b. Discharges composed of storm water runoff shall not alter natural ocean water quality in an ASBS.

ADMINISTRATIVE DRAFT

~~c. The discharge of trash is prohibited.~~

~~d. Only discharges from existing storm water outfalls are allowed. Any proposed or new storm water runoff discharge shall be routed to existing storm water discharge outfalls and shall not result in any new contribution of waste to an ASBS (i.e., no additional pollutant loading). "Existing storm water outfalls" are those that were constructed or under construction prior to January 1, 2005. "New contribution of waste" is defined as any addition of waste beyond what would have occurred as of January 1, 2005. A change to an existing storm water outfall, in terms of re-location or alteration, in order to comply with these special conditions, is allowed and does not constitute a new discharge.~~

~~e. Non-storm water discharges are prohibited except as provided below:~~

~~(1) The term "non-storm water discharges" means any waste discharges from a municipal separate storm sewer system (MS4) or other NPDES permitted storm drain system to an ASBS that are not composed entirely of storm water.~~

~~(2) The following non-storm water discharges are allowed, provided that the discharges are essential for emergency response purposes, structural stability, slope stability or occur naturally:~~

~~(i) Discharges associated with emergency fire fighting operations.~~

~~(ii) Foundation and footing drains.~~

~~(iii) Water from crawl space or basement pumps.~~

~~(iv) Hillside dewatering.~~

~~(v) Naturally occurring groundwater seepage via a storm drain.~~

~~(vi) Non-anthropogenic flows from a naturally occurring stream via a culvert or storm drain, as long as there are no contributions of anthropogenic runoff.~~

~~(3) Authorized non-storm water discharges shall not cause or contribute to a violation of the water quality objectives in Chapter II of the Ocean Plan nor alter natural ocean water quality in an ASBS.~~

~~2. Compliance Plans for Inclusion in Storm Water Management Plans (SWMP) and Storm Water Pollution Prevention Plans (SWPPP).~~

~~The discharger shall specifically address the prohibition of non-storm water runoff and the requirement to maintain natural water quality for storm water discharges to an ASBS in an ASBS Compliance Plan to be included in its SWMP or a SWPPP, as appropriate to permit type. If a statewide permit includes a SWMP, then the discharger shall prepare a stand-alone compliance plan for ASBS discharges. The ASBS Compliance Plan is subject to approval by the Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (for permits issued by Regional Water Boards).~~

~~a. The Compliance Plan shall include a map of surface drainage of storm water runoff, showing areas of sheet runoff, prioritize discharges, and describe any structural Best~~

ADMINISTRATIVE DRAFT

~~Management Practices (BMPs) already employed and/or BMPs to be employed in the future. Priority discharges are those that pose the greatest water quality threat and which are identified to require installation of structural BMPs. The map shall also show the storm water conveyances in relation to other features such as service areas, sewage conveyances and treatment facilities, landslides, areas prone to erosion, and waste and hazardous material storage areas, if applicable. The SWMP or SWPPP shall also include a procedure for updating the map and plan when changes are made to the storm water conveyance facilities.~~

- ~~b. The ASBS Compliance Plan shall describe the measures by which all non-authorized non-storm water runoff (e.g., dry weather flows) has been eliminated, how these measures will be maintained over time, and how these measures are monitored and documented.~~
- ~~c. For Municipal Separate Storm Sewer System (MS4s), the ASBS Compliance Plan shall require minimum inspection frequencies as follows:~~
- ~~(1) The minimum inspection frequency for construction sites shall be weekly during rainy season;~~
 - ~~(2) The minimum inspection frequency for industrial facilities shall be monthly during the rainy season;~~
 - ~~(3) The minimum inspection frequency for commercial facilities (e.g., restaurants) shall be twice during the rainy season; and~~
 - ~~(4) Storm water outfall drains equal to or greater than 18 inches (457 mm) in diameter or width shall be inspected once prior to the beginning of the rainy season and once during the rainy season and maintained to remove trash and other anthropogenic debris.~~
- ~~d. The ASBS Compliance Plan shall address storm water discharges (wet weather flows) and, in particular, describe how pollutant reductions in storm water runoff, that are necessary to comply with these special conditions, will be achieved through BMPs. Structural BMPs need not be installed if the discharger can document to the satisfaction of the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that such installation would pose a threat to health or safety. BMPs to control storm water runoff discharges (at the end-of-pipe) during a design storm shall be designed to achieve on average the following target levels:~~
- ~~(1) Table B Instantaneous Maximum Water Quality Objectives in Chapter II of the Ocean Plan; or~~
 - ~~(2) A 90% reduction in pollutant loading during storm events, for the applicant's total discharges. The baseline for the reduction is the effective date of the Exception. The baseline for these determinations is the effective date of the Exception, and the reductions must be achieved and documented within four (4) years of the effective date.~~

ADMINISTRATIVE DRAFT

- ~~e. The ASBS Compliance Plan shall address erosion control and the prevention of anthropogenic sedimentation in ASBS. The natural habitat conditions in the ASBS shall not be altered as a result of anthropogenic sedimentation.~~
- ~~f. The ASBS Compliance Plan shall describe the non-structural BMPs currently employed and planned in the future (including those for construction activities), and include an implementation schedule. The ASBS Compliance Plan shall include non-structural BMPs that address public education and outreach. Education and outreach efforts must adequately inform the public that direct discharges of pollutants from private property not entering an MS4 are prohibited. The ASBS Compliance Plan shall also describe the structural BMPs, including any low impact development (LID) measures, currently employed and planned for higher threat discharges and include an implementation schedule. To control storm water runoff discharges (at the end of pipe) during a design storm, permittees must first consider using LID practices to infiltrate, use, or evapotranspire storm water runoff on-site.~~
- ~~g. The BMPs and implementation schedule shall be designed to ensure that natural water quality conditions in the receiving water are achieved and maintained by either reducing flows from impervious surfaces or reducing pollutant loading, or some combination thereof.~~
- ~~h. If the results of the receiving water monitoring described in IV.B. of these special conditions indicate that the storm water runoff is causing or contributing to an alteration of natural ocean water quality in the ASBS, the discharger shall submit a report to the State Water Board and Regional Water Board within 30 days of receiving the results.~~
- ~~(1) The report shall identify the constituents in storm water runoff that alter natural ocean water quality and the sources of these constituents.~~
- ~~(2) The report shall describe BMPs that are currently being implemented, BMPs that are identified in the SWMP or SWPPP for future implementation, and any additional BMPs that may be added to the SWMP or SWPPP to address the alteration of natural water quality. The report shall include a new or modified implementation schedule for the BMPs.~~
- ~~(3) Within 30 days of the approval of the report by the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits), the discharger shall revise its ASBS Compliance Plan to incorporate any new or modified BMPs that have been or will be implemented, the implementation schedule, and any additional monitoring required.~~
- ~~(4) As long as the discharger has complied with the procedures described above and is implementing the revised SWMP or SWPPP, the discharger does not have to repeat the same procedure for continuing or recurring exceedances of natural ocean water quality conditions due to the same constituent.~~
- ~~(5) Compliance with this section does not excuse violations of any term, prohibition, or condition contained in these Special Protections.~~

3. Compliance Schedule

ADMINISTRATIVE DRAFT

- ~~a. On the effective date of the Exception, all non-authorized non-storm water discharges (e.g., dry weather flow) are effectively prohibited.~~
- ~~b. Within one year from the effective date of the Exception, the discharger shall submit a written ASBS Compliance Plan to the State Water Board Executive Director (statewide permits) or Regional Water Board Executive Officer (Regional Water Board permits) that describes its strategy to comply with these special conditions, including the requirement to maintain natural water quality in the affected ASBS. The ASBS Compliance Plan shall include a time schedule to implement appropriate non-structural and structural controls (implementation schedule) to comply with these special conditions for inclusion in the discharger's SWMP or SWPPP, as appropriate to permit type.~~
- ~~c. Within 18 months of the effective date of the Exception, any non-structural controls that are necessary to comply with these special conditions shall be implemented.~~
- ~~d. Within four (4) years of the effective date of the Exception, any structural controls identified in the ASBS Compliance Plan that are necessary to comply with these special conditions shall be operational.~~
- ~~e. Within four (4) years of the effective date of the Exception, all dischargers must comply with the requirement that their discharges into the affected ASBS maintain natural ocean water quality. If the initial results of post-storm receiving water quality testing indicate levels higher than the 85th percentile threshold of reference water quality data and the pre-storm receiving water levels, then the discharger must re-sample the receiving water, pre- and post-storm. If after re-sampling the post-storm levels are still higher than the 85th percentile threshold of reference water quality data, and the pre-storm receiving water levels, for any constituent, then natural ocean water quality is exceeded. See attached Flowchart.~~
- ~~f. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may only authorize additional time to comply with the special conditions d. and e., above if good cause exists to do so. Good cause means a physical impossibility or lack of funding.~~

~~If a discharger claims physical impossibility, it shall notify the Board in writing within thirty (30) days of the date that the discharger first knew of the event or circumstance that caused or would cause it to fail to meet the deadline in d. or e. The notice shall describe the reason for the noncompliance or anticipated noncompliance and specifically refer to this Section of this Exception. It shall describe the anticipated length of time the delay in compliance may persist, the cause or causes of the delay as well as measures to minimize the impact of the delay on water quality, the measures taken or to be taken by the discharger to prevent or minimize the delay, the schedule by which the measures will be implemented, and the anticipated date of compliance. The discharger shall adopt all reasonable measures to avoid and minimize such delays and their impact on water quality.~~

~~The discharger may request an extension of time for compliance based on lack of funding. The request for an extension shall require:~~

- ~~(1) for municipalities, a demonstration of significant hardship to discharger ratepayers, by showing the relationship of storm water fees to annual household income for~~

ADMINISTRATIVE DRAFT

~~residents within the discharger's jurisdictional area, and the discharger has made timely and complete applications for all available bond and grant funding, and either no bond or grant funding is available, or bond and/or grant funding is inadequate; or (2) for other governmental agencies, a demonstration and documentation of a good faith effort to acquire funding through that agency's budgetary process.~~

~~B. NONPOINT SOURCE DISCHARGES~~

~~[NOT INCLUDED]~~

~~[PROVISIONS FOR NONPOINT SOURCE DISCHARGES NOT APPLICABLE]~~

~~II. ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES~~

~~[NOT INCLUDED]~~

~~[ADDITIONAL REQUIREMENTS FOR PARKS AND RECREATION FACILITIES NOT APPLICABLE]~~

~~III. ADDITIONAL REQUIREMENTS — WATERFRONT AND MARINE OPERATIONS~~

~~[NOT INCLUDED]~~

~~[ADDITIONAL REQUIREMENTS FOR WATERFRONT AND MARINE OPERATIONS NOT APPLICABLE]~~

~~IV. MONITORING REQUIREMENTS~~

~~Monitoring is mandatory for all dischargers to assure compliance with the Ocean Plan. Monitoring requirements include both: (A) core discharge monitoring, and (B) ocean receiving water monitoring. The State and Regional Water Boards must approve sampling site locations and any adjustments to the monitoring programs. All ocean receiving water and reference area monitoring must be comparable with the Water Boards' Surface Water Ambient Monitoring Program (SWAMP).~~

~~Safety concerns: Sample locations and sampling periods must be determined considering safety issues. Sampling may be postponed upon notification to the State and Regional Water Boards if hazardous conditions prevail.~~

~~Analytical Chemistry Methods: All constituents must be analyzed using the lowest minimum detection limits comparable to the Ocean Plan water quality objectives. For metal analysis, all samples, including storm water effluent, reference samples, and ocean receiving water samples, must be analyzed by the approved analytical method with the lowest minimum detection limits (currently Inductively Coupled Plasma/Mass Spectrometry) described in the Ocean Plan.~~

~~A. CORE DISCHARGE MONITORING PROGRAM~~

~~1. General sampling requirements for timing and storm size:~~

ADMINISTRATIVE DRAFT

~~Runoff must be collected during a storm event that is greater than 0.1 inch and generates runoff, and at least 72 hours from the previously measurable storm event. Runoff samples shall be collected when post-storm receiving water is sampled, and analyzed for the same constituents as receiving water and reference site samples (see section IV B) as described below.~~

~~2. Runoff flow measurements~~

- ~~a. For municipal/industrial storm water outfalls in existence as of December 31, 2007, 18 inches (457mm) or greater in diameter/width (including multiple outfall pipes in combination having a width of 18 inches, runoff flows must be measured or calculated, using a method acceptable to and approved by the State and Regional Water Boards.~~
- ~~b. This will be reported annually for each precipitation season to the State and Regional Water Boards.~~

~~3. Runoff samples — storm events~~

- ~~a. For outfalls equal to or greater than 18 inches (0.46m) in diameter or width:~~

- ~~(1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination; and~~
- ~~(2) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS~~
- ~~(3) If an applicant has no outfall greater than 36 inches, then storm water runoff from the applicant's largest outfall shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates).~~

- ~~b. For outfalls equal to or greater than 36 inches (0.91m) in diameter or width:~~

- ~~(1) samples of storm water runoff shall be analyzed during the same storm as receiving water samples for oil and grease, total suspended solids, and, within the range of the southern sea otter indicator bacteria or some other measure of fecal contamination; and~~
- ~~(2) samples of storm water runoff shall be further analyzed during the same storm as receiving water samples for Ocean Plan Table B metals for protection of marine life, Ocean Plan polynuclear aromatic hydrocarbons (PAHs), current use pesticides (pyrethroids and OP pesticides), and nutrients (ammonia, nitrate and phosphates) and~~
- ~~(3) samples of storm water runoff shall be analyzed for critical life stage chronic toxicity (one invertebrate or algal species) at least once during each storm season when receiving water is sampled in the ASBS.~~

ADMINISTRATIVE DRAFT

- ~~c. For an applicant not participating in a regional monitoring program [see below in Section IV (B)] in addition to (a.) and (b.) above, a minimum of the two largest outfalls or 20 percent of the larger outfalls, whichever is greater, shall be sampled (flow weighted composite samples) at least three times annually during wet weather (storm event) and analyzed for all Ocean Plan Table A constituents, Table B constituents for marine aquatic life protection (except for toxicity, only chronic toxicity for three species shall be required), DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, and Ocean Plan indicator bacteria. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one (the largest) such discharge shall be sampled annually in each Region.~~
- ~~4. The Executive Director of the State Water Board (statewide permits) or Executive Officer of the Regional Water Board (Regional Water Board permits) may reduce or suspend core monitoring once the storm runoff is fully characterized. This determination may be made at any point after the discharge is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.~~

B. OCEAN RECEIVING WATER AND REFERENCE AREA MONITORING PROGRAM

~~In addition to performing the Core Discharge Monitoring Program in Section II.A above, all applicants having authorized discharges must perform ocean receiving water monitoring. In order to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS, dischargers may choose either (1) an individual monitoring program, or (2) participation in a regional integrated monitoring program.~~

- ~~1. Individual Monitoring Program: The requirements listed below are for those dischargers who elect to perform an individual monitoring program to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within the affected ASBS. In addition to Core Discharge Monitoring, the following additional monitoring requirements shall be met:~~
- ~~a. Three times annually, during wet weather (storm events), the receiving water at the point of discharge from the outfalls described in section (IV)(A)(3)(c) above shall be sampled and analyzed for Ocean Plan Table A constituents, Table B constituents for marine aquatic life, DDT, PCBs, Ocean Plan PAHs, OP pesticides, pyrethroids, nitrates, phosphates, salinity, chronic toxicity (three species), and Ocean Plan indicator bacteria.~~
- ~~The sample location for the ocean receiving water shall be in the surf zone at the point of discharges; this must be at the same location where storm water runoff is sampled. Receiving water shall be sampled at approximately the same time prior to (pre-storm) and during (or immediately after) the same storm (post storm). Reference water quality shall also be sampled and analyzed for the same constituents pre-storm and post-storm, during the same storms when receiving water is sampled. Reference stations will be determined by the State Water Board's Division of Water Quality and the applicable Regional Water Board(s).~~
- ~~b. Sediment sampling shall occur at least three times during every five (5) year period. The subtidal sediment (sand or finer, if present) at the discharge shall be sampled and analyzed for Ocean Plan Table B constituents for marine aquatic life, DDT, PCBs, PAHs,~~

ADMINISTRATIVE DRAFT

- ~~pyrethroids, and OP pesticides. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed.~~
- ~~c. A quantitative survey of intertidal benthic marine life shall be performed at the discharge and at a reference site. The survey shall be performed at least once every five (5) year period. The survey design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The results of the survey shall be completed and submitted to the State Water Board and Regional Water Board at least six months prior to the end of the permit cycle.~~
- ~~d. Once during each five (5) year period, a bioaccumulation study shall be conducted to determine the concentrations of metals and synthetic organic pollutants at representative discharge sites and at representative reference sites. The study design is subject to approval by the Regional Water Board and the State Water Board's Division of Water Quality. The bioaccumulation study may include California mussels (*Mytilus californianus*) and/or sand crabs (*Emerita analoga* or *Blepharipoda occidentalis*). Based on the study results, the Regional Water Board and the State Water Board's Division of Water Quality, may adjust the study design in subsequent permits, or add or modify additional test organisms (such as shore crabs or fish), or modify the study design appropriate for the area and best available sensitive measures of contaminant exposure.~~
- ~~e. Marine Debris: Representative quantitative observations for trash by type and source shall be performed along the coast of the ASBS within the influence of the discharger's outfalls. The design, including locations and frequency, of the marine debris observations is subject to approval by the Regional Water Board and State Water Board's Division of Water Quality.~~
- ~~f. The monitoring requirements of the Individual Monitoring Program in this section are minimum requirements. After a minimum of one (1) year of continuous water quality monitoring of the discharges and ocean receiving waters, the Executive Director of the State Water Board (statewide permits) or Executive officer of the Regional Water Board (Regional Water Board permits) may require additional monitoring, or adjust, reduce or suspend receiving water and reference station monitoring. This determination may be made at any point after the discharge and receiving water is fully characterized, but is best made after the monitoring results from the first permit cycle are assessed.~~
- ~~2. Regional Integrated Monitoring Program: Dischargers may elect to participate in a regional integrated monitoring program, in lieu of an individual monitoring program, to fulfill the requirements for monitoring the physical, chemical, and biological characteristics of the ocean receiving waters within their ASBS. This regional approach shall characterize natural water quality, pre- and post-storm, in ocean reference areas near the mouths of identified open space watersheds and the effects of the discharges on natural water quality (physical, chemical, and toxicity) in the ASBS receiving waters, and should include benthic marine aquatic life and bioaccumulation components. The design of the ASBS stratum of a regional integrated monitoring program may deviate from the otherwise prescribed individual monitoring approach (in Section IV.B.1) if approved by the State Water Board's Division of Water Quality and the Regional Water Boards.~~
- ~~a. Ocean reference areas shall be located at the drainages of flowing watersheds with minimal development (in no instance more than 10% development), and shall not be located in CWA Section 303(d) listed waterbodies or have tributaries that are 303(d)~~

ADMINISTRATIVE DRAFT

- ~~listed. Reference areas shall be free of wastewater discharges and anthropogenic non-storm water runoff. A minimum of low threat storm runoff discharges (e.g. stream highway overpasses and campgrounds) may be allowed on a case-by-case basis. Reference areas shall be located in the same region as the ASBS receiving water monitoring occurs. The reference areas for each Region are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean reference water samples must be collected from each station, each from a separate storm. A minimum of one reference location shall be sampled for each ASBS receiving water site sampled per responsible party. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.~~
- ~~b. ASBS ocean receiving water must be sampled in the surf zone at the location where the runoff makes contact with ocean water (i.e. at "point zero"). Ocean receiving water stations must be representative of worst-case discharge conditions (i.e. co-located at a large drain greater than 36 inches, or if drains greater than 36 inches are not present in the ASBS then the largest drain greater than 18 inches.) Ocean receiving water stations are subject to approval by the participants in the regional monitoring program and the State Water Board's Division of Water Quality and the applicable Regional Water Board(s). A minimum of three ocean receiving water samples must be collected during each storm season from each station, each from a separate storm. A minimum of one receiving water location shall be sampled in each ASBS per responsible party in that ASBS. For parties discharging to ASBS in more than one Regional Water Board region, at a minimum, one reference station and one receiving water station shall be sampled in each region.~~
- ~~c. Reference and receiving water sampling shall commence during the first full storm season following the adoption of these special conditions, and post-storm samples shall be collected when annual storm water runoff is sampled. Sampling shall occur in a minimum of two storm seasons. For those ASBS dischargers that have already participated in the Southern California Bight 2008 ASBS regional monitoring effort, sampling may be limited to only one storm season.~~
- ~~d. Receiving water and reference samples shall be analyzed for the same constituents as storm water runoff samples. At a minimum, constituents to be sampled and analyzed in reference and discharge receiving waters must include oil and grease, total suspended solids, Ocean Plan Table B metals for protection of marine life, Ocean Plan PAHs, pyrethroids, OP pesticides, ammonia, nitrate, phosphates, and critical life stage chronic toxicity for three species. In addition, within the range of the southern sea otter, indicator bacteria or some other measure of fecal contamination shall be analyzed.~~
- ~~3. Waterfront and Marine Operations: In addition to the above requirements for ocean receiving water monitoring, additional monitoring must be performed for marinas and boat launch and pier facilities:~~
- ~~a. For all marina or mooring field operators, in mooring fields with 10 or more occupied moorings, the ocean receiving water must be sampled for Ocean Plan indicator bacteria, residual chlorine, copper, zinc, grease and oil, methylene blue active substances (MBAS), and ammonia nitrogen.~~

ADMINISTRATIVE DRAFT

- ~~(1) For mooring field operators opting for an individual monitoring program (Section IV.B.1 above), this sampling must occur weekly (on the weekend) from May through October.~~
- ~~(2) For mooring field operators opting to participate in a regional integrated monitoring program (Section IV.B.2 above), this sampling must occur monthly from May through October on a high use weekend in each month. The Water Boards may allow a reduction in the frequency of sampling, through the regional monitoring program, after the first year of monitoring.~~
- ~~b. For all mooring field operators, the subtidal sediment (sand or finer, if present) within mooring fields and below piers shall be sampled and analyzed for Ocean Plan Table B metals (for marine aquatic life beneficial use), acute toxicity, PAHs, and tributyltin. For sediment toxicity testing, only an acute toxicity test using the amphipod Eohaustorius estuarius must be performed. This sampling shall occur at least three times during a five (5) year period. For mooring field operators opting to participate in a regional integrated monitoring program, the Water Boards may allow a reduction in the frequency of sampling after the first sampling effort's results are assessed.~~

ADMINISTRATIVE DRAFT

ATTACHMENT B

STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

1. Standard Permit Provisions

Code of Federal Regulations Title 40 Section 122.41 (40 CFR 122.41) includes conditions, or provisions, that apply to all National Pollutant Discharge Elimination System (NPDES) permits. Additional provisions applicable to NPDES permits are in 40 CFR 122.42. All applicable provisions in 40 CFR 122.41 and 40 CFR 122.42 must be incorporated into this Order and NPDES permit. The applicable 40 CFR 122.41 and 40 CFR 122.42 provisions are as follows:

a. DUTY TO COMPLY [40 CFR 122.41(a)]

The Copermittee must comply with all of the provisions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (1) The Copermittee must comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]
- (2) The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal

ADMINISTRATIVE DRAFT

penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

[40 CFR 122.41(a)(2)]

- (3) Any person may be assessed an administrative penalty by the San Diego Regional Water Quality Control Board (San Diego Water Board), State Water Resources Control Board (State Water Board), or United States Environmental Protection Agency (USEPA) for violating Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

[40 CFR 122.41(a)(3)]

- b. DUTY TO REAPPLY [40 CFR 122.41(B)]

If a Copermittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Copermittee must apply for and obtain a new permit.

- c. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE [40 CFR 122.41(C)]

It shall not be a defense for a Copermittee 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.

- d. DUTY TO MITIGATE [40 CFR 122.41(D)]

The Copermittee must take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

- e. PROPER OPERATION AND MAINTENANCE [40 CFR 122.41(E)]

ADMINISTRATIVE DRAFT

The Copermittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Copermittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a Copermittee only when the operation is necessary to achieve compliance with the conditions of this permit.

f. PERMIT ACTIONS [40 CFR 122.41(F)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Copermittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

g. PROPERTY RIGHTS [40 CFR 122.41(G)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

h. DUTY TO PROVIDE INFORMATION [40 CFR 122.41(H)]

The Copermittee must furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USPEA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Copermittee must also furnish to the San Diego Water Board, State Water Board, or USPEA upon request, copies of records required to be kept by this permit.

i. INSPECTION AND ENTRY [40 CFR 122.41(I)]

The Copermittee must allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representative (including an authorized contractor acting as their representative), upon presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the Copermittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; [40 CFR 122.41(i)(1)]
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; [40 CFR 122.41(i)(2)]
- (3) Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; [40 CFR 122.41(i)(3)] and

ADMINISTRATIVE DRAFT

(4) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location. [40 CFR 122.41(i)(4)]

j. MONITORING AND RECORDS [40 CFR 122.41(j)]

(1) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [40 CFR 122.41(j)(1)]

(2) Except for records of monitoring information required by this permit related to the Copermitttee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR Part 503), the Copermitttee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time. [40 CFR 122.41(j)(2)]

(3) Records for monitoring information must include: [40 CFR 122.41(j)(3)]

(a) The date, exact place, and time of sampling or measurements; [40 CFR 122.41(j)(3)(i)]

(b) The individual(s) who performed the sampling or measurements; [40 CFR 122.41(j)(3)(ii)]

(c) The date(s) analyses were performed; [40 CFR 122.41(j)(3)(iii)]

(d) The individual(s) who performed the analyses; [40 CFR 122.41(j)(3)(iv)]

(e) The analytical techniques or methods used; [40 CFR 122.41(j)(3)(v)] and

(f) The results of such analyses. [40 CFR 122.41(j)(3)(vi)]

(4) Monitoring must be conducted according to test procedures under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O.

[40 CFR 122.41(j)(4)]

In the case of pollutants for which there are no approved methods under 40 CFR Part 136 or otherwise required under 40 CFR Subchapters N and O, monitoring must be conducted according to a test procedure specified in the permit for such pollutants. [40 CFR 122.44(i)(1)(iv)]

(5) 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 permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 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

ADMINISTRATIVE DRAFT

more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. [40 CFR 122.41(j)(5)]

k. SIGNATORY REQUIREMENT [40 CFR 122.41(k)]

(1) All applications, reports, or information submitted to the San Diego Water Board, State Water Board, or USEPA must be signed and certified. (See 40 CFR 122.22) [40 CFR 122.41(k)(1)]

(a) *For a municipality, State, Federal, or other public agency.* [All applications must be signed] [b]y either a principal executive officer or ranking elected official. [40 CFR 122.22(a)(3)]

(b) All reports required by permits, and other information requested by the San Diego Water Board, State Water Board, or USEPA must be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if: [40 CFR 122.22(b)]

(i) The authorization is made in writing by a person described in paragraph (a) of this section; [40 CFR 122.22(b)(1)]

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR 122.22(b)(2)] and,

(iii) The written authorization is submitted to the San Diego Water Board and State Water Board. [40 CFR 122.22(b)(3)]

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. [40 CFR 122.22(c)]

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section shall 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

ADMINISTRATIVE DRAFT

responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, 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." [40 CFR 122.22(d)]

- (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

I. REPORTING REQUIREMENTS [40 CFR 122.41(L)]

- (1) *Planned changes.* The Copermittee must give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when: [40 CFR 122.41(l)(1)]
- (a) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
[40 CFR 122.41(l)(1)(i)] or
- (b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
[40 CFR 122.41(l)(1)(ii)]
- (c) The alteration or addition results in a significant change in the Copermittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. [40 CFR 122.41(l)(1)(iii)]
- (2) *Anticipated noncompliance.* The Copermittee must give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
[40 CFR 122.41(l)(2)]
- (3) *Transfers.* This permit is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the permit to change the name of the Copermittee and incorporate such other requirements as may be necessary under the CWA.
[40 CFR 122.41(l)(3)]

ADMINISTRATIVE DRAFT

- (4) Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit. [40 CFR 122.41(l)(4)]
- (a) Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. [40 CFR 122.41(l)(4)(i)]
- (b) If the Copermittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or another method required for an industry-specific waste stream under 40 CFR Subchapters N or O, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board or State Water Board.
[40 CFR 122.41(l)(4)(ii)]
- (c) Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified in the permit.
[40 CFR 122.41(l)(4)(iii)]
- (5) *Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. [40 CFR 122.41(l)(5)]
- (6) Twenty-four hour reporting.
- (a) The Copermittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission must also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)(i)]
- (b) The following must be included as information which must be reported within 24 hours under this paragraph: [40 CFR 122.41(l)(6)(ii)]
- (i) Any unanticipated bypass that exceeds any effluent limitation in the permit (See 40 CFR 122.41(g)). [40 CFR 122.41(l)(6)(ii)(A)]

ADMINISTRATIVE DRAFT

- (ii) Any upset which exceeds any effluent limitation in the permit.
[40 CFR 122.41(l)(6)(ii)(B)] and,
 - (iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the San Diego Water Board in the permit to be reported within 24 hours. (See 40 CFR 122.44(g))
[40 CFR 122.41(l)(6)(ii)(C)]
- (c) The San Diego Water Board may waive the above-required written report on a case-by-case basis if the oral report has been received within 24 hours. [40 CFR 122.41(l)(6)(iii)]
- (7) *Other noncompliance.* The Copermittee must report all instances of noncompliance not reported in accordance with the standard provisions required under 40 CFR 122.41(l)(4), (5), and (6), at the time monitoring reports are submitted. The reports must contain the information listed in the standard provisions required under 40 CFR 122.41(l)(6). [40 CFR 122.41(l)(7)]
- (8) *Other information.* When the Copermittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Copermittee must promptly submit such facts or information.
[40 CFR 122.41(l)(8)]

~~a. BYPASS~~ [40 CFR 122.41(m)]~~(1) Definitions.~~

~~(a) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. [40 CFR 122.41(m)(1)(i)] or~~

~~(b) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
[40 CFR 122.41(m)(1)(ii)]~~

~~(2) Bypass not exceeding limitations. The Copermittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the standard provisions required under 40 CFR 122.41(m)(3) and (4).
[40 CFR 122.41(m)(2)]~~

~~(3) Notice.~~

~~(a) Anticipated bypass. If the Copermittee knows in advance of the need for a bypass, it must submit a notice, if possible at least ten days before the date of the bypass. [40 CFR 122.41(m)(3)(i)] or~~

ADMINISTRATIVE DRAFT

~~(b) — *Unanticipated bypass.* The Copermittee must submit notice of an unanticipated bypass in accordance with the standard provisions required under 40 CFR 122.41(l)(6) (24-hour notice). [40 CFR 122.41(m)(3)(ii)]~~

~~(4) — *Prohibition of Bypass.*~~

~~(a) — Bypass is prohibited, and the San Diego Water Board may take enforcement action against a Copermittee for bypass, unless: [40 CFR 122.41(m)(4)(i)]~~

~~(i) — Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; [40 CFR 122.41(m)(4)(i)(A)]~~

~~(ii) — There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; [40 CFR 122.41(m)(4)(i)(B)] and,~~

~~(iii) — The Copermittee submitted notice in accordance with the standard provisions required under 40 CFR 122.41(m)(3). [40 CFR 122.41(m)(4)(i)(C)]~~

~~(b) — The San Diego Water Board may approve an anticipated bypass, after considering its adverse effects, if the San Diego Water Board determines that it will meet the three conditions listed above. [40 CFR 122.41(m)(4)(ii)]~~

m. UPSET [40 CFR 122.41(N)]

(1) *Definition.* “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Copermittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [40 CFR 122.41(n)(1)]

(2) *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the standard provisions required under 40 CFR 122.41(n)(3) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. [40 CFR 122.41(n)(2)]

ADMINISTRATIVE DRAFT

(3) *Conditions necessary for a demonstration of upset.* A Copermittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

[40 CFR 122.41(n)(3)]

(a) An upset occurred and that the Copermittee can identify the cause(s) of the upset; [40 CFR 122.41(n)(3)(i)]

(b) The permitted facility was at the time being properly operated;

[40 CFR 122.41(n)(3)(ii)] and

(c) The Copermittee submitted notice of the upset in accordance with the standard provisions required under 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice).

[40 CFR 122.41(n)(3)(iii)]

(d) The Copermittee complied with any remedial measures pursuant to the standard provisions required under 40 CFR 122.41(d).

[40 CFR 122.41(n)(3)(iii)]

(4) *Burden of proof.* In any enforcement proceeding, the Copermittee seeking to establish the occurrence of an upset has the burden of proof.

[40 CFR 122.41(n)(4)]

n. **STANDARD PERMIT PROVISIONS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS**

[40 CFR 122.42(c)]

The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the San Diego Water Board or State Water Board under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report must include:

(1) The status of implementing the components of the storm water management program that are established as permit conditions; [40 CFR 122.42(c)(1)]

(1) ~~Proposed changes to the storm water management programs that are established as permit conditions. Such proposed changes must be consistent with 40 CFR 122.26(d)(2)(iii); [40 CFR 122.42(c)(2)] and~~

(2) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(iv) and (v); [40 CFR 122.42(c)(3)]

(3) A summary of data, including monitoring data, that is accumulated throughout the reporting year; [40 CFR 122.42(c)(4)]

(4) Annual expenditures and budget for year following each annual report; [40 CFR 122.42(c)(5)]

ADMINISTRATIVE DRAFT

- (5) A summary describing the number and nature of enforcement actions, inspections, and public education programs; [40 CFR 122.42(c)(6)]

- (6) Identification of water quality improvements or degradation.
[40 CFR 122.42(c)(7)]

ADMINISTRATIVE DRAFT

o. STANDARD PERMIT PROVISIONS FOR STORM WATER DISCHARGES [40 CFR 122.42(D)]

The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR 122.26(e)(7) must require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

2. General Provisions

In addition to the standard provisions required to be incorporated into the Order and NPDES permit pursuant to 40 CFR 122.41 and 40 CFR 122.42, several other general provisions apply to this Order. The general provisions applicable to this Order and NPDES permit are as follows:

a. DISCHARGE OF WASTE IS A PRIVILEGE

No discharge of waste into the waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights. [CWC Section 13263(g)]

b. DURATION OF ORDER AND NPDES PERMIT

(1) *Effective date.* This Order and NPDES permit becomes effective on the date of its adoption provided the USEPA has no objection. If the USEPA objects to its issuance, this Order shall not become effective until such objection is withdrawn. This Order supersedes Order No. R9-2007-0001 upon the effective date of this Order, and supercedes Order Nos. R9-2009-0002 and R9-2010-0016 upon their expiration.

(2) *Expiration.* This Order and NPDES permit expires five years after adoption. [40 CFR 122.46(a)]

(3) *Continuation of expired order.* After this Order and NPDES permit expires, the terms and conditions of this Order and NPDES permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits (40 CFR 122.6) are complied with.

c. AVAILABILITY

A copy of this Order must be kept at a readily accessible location and must be available to on-site personnel at all times.

ADMINISTRATIVE DRAFT

d. CONFIDENTIALITY OF INFORMATION

Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this Order will be considered confidential, and all such information and documents shall be available for review by the public at the San Diego Water Board office.

Claims of confidentiality for the following information will be denied:
[40 CFR 122.7(b)]

- (1) The name and address of any permit applicant or Copermittee;
[40 CFR 122.7(b)(1)] and
- (2) Permit applications and attachments, permits, and effluent data.
[40 CFR 122.7(b)(2)]

e. EFFLUENT LIMITATIONS

- (1) *Interim effluent limitations.* The Copermittee must comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by the San Diego Water Board.
- (2) *Other effluent limitations and standards.* If any applicable 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 and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the San Diego Water Board shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. [40 CFR 122.44(b)(1)]

f. DUTY TO MINIMIZE OR CORRECT ADVERSE IMPACTS

The Copermittee must take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

g. PERMIT ACTIONS

The filing of a request by the Copermittee for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order. (See 40 CFR 122.41(f)) In addition, the following provisions apply to this Order:

- (1) Upon application by any affected person, or on its own motion, the San Diego Water Board may review and revise the requirements in this Order. All requirements must be reviewed periodically. [CWC Section 13263(e)]

ADMINISTRATIVE DRAFT

- (2) This Order may be terminated or modified for cause, including, but not limited to, all of the following: [CWC Section 13381]
- (a) Violation of any condition contained in the requirements of this Order. [CWC Section 13381(a)]
 - (b) Obtaining the requirements in this Order by misrepresentation, or failure to disclose fully all relevant facts. [CWC Section 13381(b)]
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC Section 13381(c)]
- (3) When this Order is transferred to a new owner or operator, such requirements as may be necessary under the CWC may be incorporated into this Order.

h. NPDES PERMITTED NON-STORM WATER DISCHARGES

The San Diego Water Board has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to MS4s. The San Diego Water Board or State Water Board may in the future, upon prior notice to the Copermittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to an MS4.

i. MONITORING

In addition to the standard provisions required under 40 CFR 122.41(j) and (l)(4), the following general monitoring provisions apply to this Order:

- (1) Where procedures are not otherwise specified in Order, sampling, analysis and quality assurance/quality control must be conducted in accordance with the Quality Assurance Management Plan (QAMP) for the State of California's Surface Water Ambient Monitoring Program (SWAMP), adopted by the State Water Resources Control Board (State Water Board).
- (2) Pursuant to 40 CFR 122.41(j)(2) and CWC Section 13383(a), each Copermittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time.
- (3) All chemical, bacteriological, and toxicity analyses must be conducted at a laboratory certified for such analyses by the California Department of Public Health or a laboratory approved by the San Diego Water Board.
- (4) For priority toxic pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Copermittees must instruct their laboratories to establish

ADMINISTRATIVE DRAFT

calibration standards that are equivalent to or lower than 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 (SIP). If a Copermittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Copermittee must submit documentation from the laboratory to the San Diego Water Board for approval prior to raising the ML for any priority toxic pollutant.

j. ENFORCEMENT

- (1) The San Diego Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, CWC Sections 13385, 13386, and 13387.
- (2) Nothing in this Order shall be construed to protect the Copermittee from its liabilities under federal, state, or local laws.
- (3) The CWC provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.
- (4) Except as provided in the standard conditions required under 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Copermittee from civil or criminal penalties for noncompliance.
- (5) Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties to which the Copermittee is or may be subject to under Section 311 of the CWA.
- (6) Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

k. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

l. APPLICATIONS

Any application submitted by a Copermittee for reissuance or modification of this Order must satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the CWC and the California Code of Regulations.

ADMINISTRATIVE DRAFT

m. IMPLEMENTATION

All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermittees must be adequate to implement the requirements of this Order.

n. REPORT SUBMITTALS

- (1) All report submittals must include an executive summary, introduction, conclusion, recommendations, and signed certified statement.
- (2) Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal.
- (3) The Principal Watershed Copermittee(s) must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.
- (4) Unless otherwise directed, the Copermittees must submit one hard copy and one electronic copy of each report required under this Order to the San Diego Water Board, and one electronic copy to the USEPA.
- (5) The Copermittees must submit reports and provide notifications as required by this Order to the following:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO CA 92123-4340
Telephone: (858) 467-2952 Fax: (858) 571-6972

EUGENE BROMLEY
US ENVIRONMENTAL PROTECTION AGENCY
REGION IX
PERMITS ISSUANCE SECTION (W-5-1)
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105

ADMINISTRATIVE DRAFT

ATTACHMENT C

ACRONYMS AND ABBREVIATIONS

1. Acronyms and Abbreviations

AMAL	Average Monthly Action Level
ASBS	Area(s) of Special Biological Significance
BMP	Best Management Practice
BMP Design Manual	Permanent BMP Sizing Criteria Design Manual
Basin Plan	Water Quality Control Plan for the San Diego Basin
CEQA	California Environmental Quality Act
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWC	California Water Code
CZARA	Coastal Zone Act Reauthorization Amendments of 1990
ERP	Enforcement Response Plan
ESAs	Environmentally Sensitive Areas
GIS	Geographic Information System
IBI	Index of Biotic Integrity
LID	Low Impact Development
MDAL	Maximum Daily Action Level
MEP	Maximum Extent Practicable
ML	Minimum Level
MS4	Municipal Separate Storm Sewer System
NAL	Non-Storm Water Action Level
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ROWD	Report of Waste Discharge (application for NPDES reissuance)
SAL	Storm Water Action Level
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification Code
State Water Board	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency
Waters of the U.S.	Waters of the United States

ADMINISTRATIVE DRAFT

WDID	Waste Discharge Identification Number
WLA	Waste Load Allocation
WQBEL	Water Quality Based Effluent Limitation

DEFINITIONS**2. Definitions**

Active/Passive Sediment Treatment - Using mechanical, electrical or chemical means to flocculate or coagulate suspended sediment for removal from runoff from construction sites prior to discharge.

Anthropogenic Litter – Trash generated from human activities, not including sediment.

Average Monthly Action Level – The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month [or the geometric mean for bacteria, as applicable.](#)

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 tangible and intangible economic, social, and environmental goals. “Beneficial Uses” of the waters of the State 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 uses 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)].

Best Management Practices (BMPs) - Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices 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. [In the case of municipal storm water discharge](#) permits, BMPs may be used in place of numeric effluent limits.

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. biotic integrity) of a water body.

Biocriteria - Under the CWA, numerical values or narrative expressions that define a desired biological condition for a water body that are legally enforceable. The USEPA defines biocriteria as: “numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use... (that)...describe the characteristics of water body segments least impaired by human activities.”

Biofiltration - Practices that use vegetation and amended soils to detain and treat runoff from impervious areas. Treatment is through filtration, infiltration, adsorption, ion exchange, and biological uptake of pollutants.

ADMINISTRATIVE DRAFT

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.

BMP Design Manual – A plan developed to eliminate, reduce, or mitigate the impacts of runoff from development projects, including Priority Development Projects.

Channel Rehabilitation and Improvement – Remedial measures or activities for the purpose of improving or restoring the environmental health of streams, channels or river systems. Techniques may vary from in-stream restoration techniques to off-line stormwater management practices installed in the system corridor or upland areas. Rehabilitation techniques may include, but are not limited to the following: riparian zone restoration, constructed wetlands, bank stabilization, channel modifications, and daylighting of drainage systems. Effectiveness may be measured in various manners, including: assessments of habitat, reduced streambank erosion, and restoration of water and sediment transport balance.

Clean Water Act Section 303(d) Water Body - An impaired 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. The discharge of runoff to these water bodies by the Copermitees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

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. This does not include minor construction activities such as interior remodeling, plumbing, electrical, or mechanical work.

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 are affected."

Copermittee – An incorporated city within the County of Orange, County of Riverside, or County of San Diego in the San Diego Region (Region 9), the County of Orange, the County of Riverside, the County of San Diego, the Orange County Flood Control District, the Riverside County Water Conservation and Flood Control District, the San Diego Regional Airport Authority, or the Unified Port District of San Diego.

Copermittees – All of the individual Copermittees, collectively.

Critical Channel Flow (Qc) – The channel flow that produces the critical shear stress that initiates bed movement or that erodes the toe of channel banks. When measuring Qc, it should be based on the weakest boundary material – either bed or bank.

Daily Discharge – Defined as either: (1) the total mass of the constituent discharged over the calendar day or any 24 hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a

ADMINISTRATIVE DRAFT

constituent with limitations expressed in other units of measurement (e.g. concentration.)

The Daily Discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day, or other 24 hour period other than a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of a day.

Development Projects - Construction, rehabilitation, redevelopment, or reconstruction of any public or private projects involving land disturbance activities. residential project, industrial, commercial, or any other projects.

Dry Season – ~~The period of time from~~ May 1 to September 30, ~~when rainfall is not expected to occur the San Diego.~~

Dry Weather – Weather is considered dry if the preceding 72 hours has been without measurable precipitation (>0.1 inch).

Enclosed Bays – Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost bay works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays do not include inland surface waters or ocean waters.

Erosion – When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

Environmentally Sensitive Areas (ESAs) - Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; areas designated as preserves or their equivalent under the Natural Communities Conservation Program within the Cities and County of Orange; and any other equivalent environmentally sensitive areas which have been identified by the Copermitees.

Estuaries – Waters, including coastal lagoons, located at the mouth of streams that serve as areas of mixing fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and ocean water. Estuaries do not include inland surface waters or ocean waters.

Existing Development – Any area that has been developed and exists for municipal, commercial, industrial, or residential purposes, uses, or activities. May include areas that are not actively used for its originally developed purpose, but may be re-purposed or redeveloped for another use or activity.

Flow Duration – The long-term period of time that flows occur above a threshold that causes significant sediment transport and may cause excessive erosion damage to creeks and streams

ADMINISTRATIVE DRAFT

(not a single storm event duration). The simplest way to visualize this is to consider a histogram of pre- and post-project flows using long-term records of hourly data. To maintain pre-development flow duration means that the total number of hours (counts) within each range of flows in a flow-duration histogram cannot increase between the pre- and post-development condition. Flow duration within the range of geomorphologically significant flows is important for managing erosion.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA in 40 CFR 116 to be reported if a designated quantity of the material is spilled into the waters of the U.S. or emitted into the environment.

Hazardous Waste - Hazardous waste is 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, Article 1].

Household Hazardous Waste – Paints, cleaning products, and other wastes generated during home improvement or maintenance activities.

Hydromodification – The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, such as stream channelization, concrete lining, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Illicit Connection – Any connection to the MS4 that conveys an illicit discharge.

Illicit Discharge - Any discharge to the MS4 that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities [40 CFR 122.26(b)(2)].

Inactive Areas – Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow [40 CFR 35.2005(20)].

Inland Surface Waters – Includes all surface waters of the [State-U.S.](#) that do not include the ocean, enclosed bays, or estuaries.

Jurisdictional Runoff Management Program Document – A written description of the specific jurisdictional runoff management measures and programs that each Copermittee will implement to comply with this Order and ensure that storm water pollutant discharges in runoff are reduced to the MEP and do not cause or contribute to a violation of water quality standards.

ADMINISTRATIVE DRAFT

Low Impact Development (LID) – A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions.

Low Impact Development Best Management Practices (LID BMPs) – LID BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States through storm water management and land development strategies that emphasize conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow runoff, such as infiltration, rain water harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as biofiltration that may have some discharge of storm water following pollutant reduction.

Major Outfall – As defined in the Code of Federal Regulations, a major outfall is a MS4 outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (i.e. discharge from a single conveyance other than a circular pipe which is associated with a drainage area of more than 50 acres); or, for MS4s that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or equivalent), a MS4 outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (i.e. discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

Maximum Daily Action Level (MDAL) –The highest allowable daily discharge of a pollutant, over a calendar day (or 24 hour period). For pollutants with action levels expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with action levels expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP) – The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) for storm water that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their runoff management programs. Their total collective and individual activities conducted pursuant to the runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the San Diego Water Board, the San Diego Water Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

“To achieve the MEP standard, municipalities must employ whatever Best Management

ADMINISTRATIVE DRAFT

Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:

- a. Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
- b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?*
- c. Public Acceptance: Does the BMP have public support?*
- d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
- e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?*

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented.”

Monitoring Year – The monitoring year begins annually on July 1st and ends on June 30th.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (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, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.26. [“Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.26\(a\)\(3\)\(vi\).](#)

National Pollutant Discharge Elimination System (NPDES) - The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of

ADMINISTRATIVE DRAFT

the CWA.

Non-Storm Water - All discharges to and from a MS4 that do not originate from precipitation events (i.e., all discharges from a MS4 other than storm water). Non-storm water includes illicit discharges and NPDES permitted discharges.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act, a nuisance is “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.”

Ocean Waters – the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Board’s California Ocean Plan.

Order – Unless otherwise specified, refers to this Order, Order No. R9-2012-0011 (NPDES No. CAS0109266).

~~**Permanent BMP Sizing Criteria Design Manual** – A plan developed to eliminate, reduce, or mitigate the impacts of runoff from development projects, including Priority Development Projects.~~

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof [40 CFR 122.2].

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, 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 storm water runoff.

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.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is “the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses.” Pollution may include contamination.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.

Permanent BMPs - A subset of BMPs including structural and non-structural controls which detain, retain, filter, remove, or educate to prevent the release of pollutants to surface waters from development projects in perpetuity, after construction of a project is completed.

~~**Pre-Development Runoff Conditions (Discharge Rates, Durations, Etc.)** – “Runoff conditions that existed onsite immediately before the existing development was constructed, or exists onsite before planned development activities occur. Pre-development is not intended to~~

ADMINISTRATIVE DRAFT

be interpreted as that period before any human-induced land disturbance activity has occurred.” 64 FR 68761. This definition includes natural watershed hydrology before any human induced land alterations.

Priority Development Projects - New development and redevelopment projects defined under Provision E.3.b of Order No. R9-2012-0011.

Properly Designed – Designed in accordance with the Copermitttee’s BMP Design Manual and/or any appropriate design requirements set forth by the Copermitttee and based on widely accepted design criteria.

Public Education, Outreach and Participation – Programs to educate residents, businesses and visitors about the importance of water quality and water quality programs so that they will support local efforts and understand their role in protecting receiving waters. The Education and Outreach Program will increase knowledge and awareness, improve attitudes toward storm pollution prevention, and provide a foundation for changing behaviors that contribute to storm water pollution.

Rainy Season (aka Wet Season) – The period of time from October 1 to April 30, when the San Diego Region experiences the most rainfall.

Receiving Waters – Waters of the United States U.S.

Receiving Water Limitations - Waste discharge requirements issued by the San Diego Water 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.

Redevelopment - The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; parking lots; resurfacing existing roadways; cutting and reconfiguring of surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Retain –Keep or hold in a particular place, condition, or position without discharge to surface waters.

Retrofit – Retrofit is defined as a stormwater management practice (usually structural) put into place after development has occurred in watersheds where practices previously did not exist or are ineffective. The purpose of retrofits is to improve water quality, protect downstream channels, reduce flooding, or meet other specific objectives. Some examples of retrofits include, but are not limited to the following: green roofs, downspout and impervious cover disconnection,

ADMINISTRATIVE DRAFT

[permeable pavement, bioretention, rain barrels, rain gardens, vacant lot stabilization, trash area enclosures, additional trash and waste disposal containers.](#)

Runoff - All flows in a storm water conveyance system that consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water including dry weather flows.

San Diego Water Board – As used in this document the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego Region as specified in Water Code Section 13200.

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.

Shared Treatment Control BMP - BMPs used by multiple developments to infiltrate, filter, or treat the required volume or flow prior to discharge to a receiving water. This could include, for example, a treatment BMP at the end of an enclosed storm drain that collects runoff from several commercial developments.

Source Control BMP – Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and runoff.

State Water Quality Protection Area – A nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Board through its water quality control planning process. Areas of special biological significance are a subset of State Water Quality Protection Areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the California Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the State Water Board.

Storm Water – Per 40 CFR 122.26(b)(13), means storm water runoff, snowmelt runoff and surface runoff and drainage. ~~Surface runoff and drainage pertains to runoff and drainage resulting from precipitation events.~~

[Structural BMP – Any structural control which detains, retains, or filters, to reduce the release of pollutants to surface waters from development projects \(e.g. treatment control BMPs\) which remains after construction.](#)

Total Maximum Daily Load (TMDL) - The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under CWA section 303(d), TMDLs must be developed for all water bodies

ADMINISTRATIVE DRAFT

that do not meet water quality standards after application of technology-based controls.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Basin Plan, state in part...“All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life....The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge”.

Treatment Control BMP – Any engineered system designed to remove pollutants by simple gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unpaved Road – Any long, narrow stretch without pavement used for traveling by motor passenger vehicles between two or more points. Unpaved roads are generally constructed of dirt, gravel, aggregate or macadam and may be improved or unimproved.

Waste - As defined in CWC Section 13050(d), “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.”

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste, which 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, non-hazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California’s water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne’s definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the CWA.)

Water Quality Standards - Water quality standards, as defined in Clean Water Act section 303(c) consist of the beneficial uses (e.g., swimming, fishing, municipal drinking water supply,

ADMINISTRATIVE DRAFT

etc.,) of a water body and criteria (referred to as water quality objectives in the California Water Code) necessary to protect those uses. Under the Water Code, the water boards establish beneficial uses and water quality objectives in water quality control or basin plans. Together with an anti-degradation policy, these beneficial uses and water quality objectives serve as water quality standards under the Clean Water Act. In Clean Water Act parlance, state beneficial uses are called “designated uses” and state water quality objectives are called “criteria.” Throughout this Order, the relevant term is used depending on the statutory scheme.

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State ~~regardless of circumstances or condition.~~ Under this definition, portions of a MS4 is always may be considered to be a Waters of the State. However, man-made portions of the MS4 constructed for the sole purpose of flow and/or pollutant reduction are not considered waters of the state.

Waters of the United States - As defined in the 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, sandflats, “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 United States 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 United States 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, the final authority regarding Clean Water Act jurisdiction remains with the EPA.”

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Season (aka Rainy Season) – The period of time from October 1 to April 30 when the San Diego Region experiences the most rainfall.

Wet Weather – Weather is considered wet if there is a storm event of 0.1 inches and greater and the following 72 hours, unless defined in another regulatory mechanism such as a TMDL.

ATTACHMENT D

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY _____**

I. COPERMITTEE INFORMATION	
Copermittee Name:	
Copermittee Primary Contact Name:	
Copermittee Primary Contact Information:	
Address:	
City:	County:
State:	Zip:
Telephone:	Fax:
Email:	
II. LEGAL AUTHORITY	
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES <input type="checkbox"/> NO <input type="checkbox"/>
III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE	
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of non-storm water discharges reported by the public	
Number of non-storm water discharges detected by Copermittee staff or contractors	
Number of non-storm water discharges investigated by the Copermittee	
Number of sources of non-storm water discharges identified	
Number of non-storm water discharges eliminated	
Number of sources of illicit discharges or connections identified	
Number of illicit discharges or connections eliminated	
Number of enforcement actions issued	
Number of high level enforcement actions issued	
V. DEVELOPMENT PLANNING PROGRAM	
Has the Copermittee implemented a development planning program that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Was an update to the Permanent-BMP Sizing Criteria -Design Manual required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its Permanent-BMP-Sizing Criteria -Design Manual and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of proposed development projects in review	
Number of Priority Development Projects in review	
Number of Priority Development Projects approved	
Number of approved Priority Development Projects exempt from any BMP requirements	
Number of approved Priority Development Projects requiring mitigation	
Number of Priority Development Projects granted occupancy	
Number of completed Priority Development Projects in inventory	
Number of high priority Priority Development Project permanent structural BMP inspections	
Number of Priority Development Project permanent structural BMP violations	
Number of enforcement actions issued	

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM**

Number of high level enforcement actions issued	
FY _____	

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2012-0011?	YES	<input type="checkbox"/>
	NO	<input type="checkbox"/>
Number of construction sites in inventory		
Number of active construction sites in inventory		
Number of inactive construction sites in inventory		
Number of construction sites closed/completed during reporting period		
Number of construction site inspections		
Number of construction site violations		
Number of enforcement actions issued		
Number of high level enforcement actions issued		

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2012-0011?	YES	<input type="checkbox"/>		
	NO	<input type="checkbox"/>		
	Municipal	Commercial	Industrial	Residential
Number of existing developments in inventory				
Number of existing development inspections				
Number of follow-up inspections				
Number of existing development violations				
Number of enforcement actions issued				
Number of high level enforcement actions issued				

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program that complies with Order No. R9-2012-0011?	YES	<input type="checkbox"/>
	NO	<input type="checkbox"/>
Has the Copermittee implemented a mechanism for public participation and where necessary intergovernmental coordination that complies with Order No. R9-2012-0011?	YES	<input type="checkbox"/>
	NO	<input type="checkbox"/>

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2012-0011?	YES	<input type="checkbox"/>
	NO	<input type="checkbox"/>

X. CERTIFICATION

I [Principal Executive Officer Ranking Elected Official Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature	Date
Print Name	Title
Telephone Number	Email

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM**

|

ADMINISTRATIVE DRAFT

ATTACHMENT E

SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS
APPLICABLE TO ORDER NO. R9-2012-0011

These provisions implement Total Maximum Daily Loads (TMDLs), adopted by the San Diego Water Board and approved by USEPA under Clean Water Act section 303(c), which are applicable to discharges regulated under this Order. The provisions and schedules for implementation of the TMDLs described below must be incorporated into the Water Quality Improvement Plans [and monitoring requirements](#), required pursuant to Provision [s B and D](#) of this Order, [respectively](#), for the specified Watershed Management Areas.

1. ~~Total Maximum Daily Load for Diazinon in Chollas Creek Watershed~~ [Total Maximum Daily Load for Diazinon in Chollas Creek Watershed Resolution No. R9-2002-0123](#)
2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin [Resolution No. R9-2005-0019](#)
3. ~~Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed~~
- 4.3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek [Resolution No. R9-2007-0043](#)
- 5.4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay [Resolution No. R9-2008-0027](#)
- 6.5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) [Resolution No. R9-2010-0001](#)

ADMINISTRATIVE DRAFT**1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2002-0123(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	August 14, 2002
State Water Board Approval Date:	July 16, 2003
Office of Administrative Law Approval Date:	September 11, 2003
US EPA Approval Date:	November 3, 2003

(3) TMDL Effective Date: September 11, 2003(4) Watershed Management Area: San Diego Bay(5) Water Body: Chollas Creek(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, Unified Port District of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 1.#c:

Table 1.1*Receiving Water Limitations as Concentrations in Chollas Creek*

Constituent	Exposure Duration	Receiving Water Limitation	Averaging Period
Diazinon	Acute	0.08 µg/L	1 hour
	Chronic	0.05 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 1.#c:

ADMINISTRATIVE DRAFT**Table 1.2***Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek*

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Diazinon	Acute	0.072 µg/L	1 hour
	Chronic	0.045 µg/L	4 days

(3) Best Management Practices

~~The following~~ BMPs for Chollas Creek ~~must~~may be incorporated into the Water Quality Improvement Plan for the San Diego Bay Watershed Management Area and implemented by the Responsible Copermittees:

- ~~(a) The Responsible Copermittees must implement BMPs capable of achieving the WQBELs under Specific Provision 1. for Chollas Creek.~~
~~(b) Responsible Copermittees must implement the Diazinon Toxicity Control Plan and Diazinon Public Outreach/Education Program as described in the report titled, *Technical Report for Total Maximum Daily Load for Diazinon in Chollas Creek Watershed, San Diego County*, dated August 14, 2002, including subsequent modifications, in order to achieve the WQBELs under Specific Provision 1..~~
- ~~(c)~~(a) The Responsible Copermittees should coordinate ~~the any~~ implemented BMPs to address this TMDL with Caltrans ~~wherever and whenever, as possible.~~

c. COMPLIANCE SCHEDULE

The Responsible Copermittees were required to achieve their WLA by December 31, 2010. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision ~~1.kkb~~.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
(2) Applicable effluent limitations are met, or
(3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
(4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
(5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

~~d~~.e. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (a) The Responsible Copermittees must implement the monitoring and

ADMINISTRATIVE DRAFT

assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

~~The Responsible Copermittees must monitor the effluent of the MS4 outfalls for diazinon within the Chollas Creek watershed, and calculate or estimate the monthly and annual diazinon loads, in accordance with the requirements of Provisions , , and of this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision of this Order.~~

ADMINISTRATIVE DRAFT**2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0019(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	September 22, 2005
Office of Administrative Law Approval Date:	December 2, 2005
US EPA Approval Date:	February 8, 2006

(3) TMDL Effective Date: December 2, 2005(4) Watershed Management Area: San Diego Bay(5) Water Body: Shelter Island Yacht Basin(6) Responsible Copermittees: City of San Diego, [San Diego Unified Port District](#)

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Shelter Island Shoreline Park consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision [2.444](#):

Table 2.1*Receiving Water Limitations as Concentrations in Shelter Island Yacht Basin*

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Dissolved Copper	Acute	4.8 µg/L	1 hour
	Chronic	3.1 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision [2.444](#):

Table 2.2*Effluent Limitations as Annual Loads in MS4 Discharges to Shelter Island Yacht Basin*

Constituent	Effluent Limitation
Dissolved Copper	30 kg/yr

ADMINISTRATIVE DRAFT(3) Best Management Practices

The Responsible Copermittees ~~must~~may implement BMPs ~~capable of achieving to support~~ the achievement of WQBELs under Specific Provision 2.p.p.b for Shelter Island Yacht Basin.

c. COMPLIANCE SCHEDULE

The Responsible Copermittees ~~was~~are required to achieve its-respective WLAs ~~upon the effective date of the TMDL, by~~ December 2, ~~2005~~2022. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision 2.p.p.b.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

d.e. _____ SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittees must ~~monitor~~implement the ~~effluent of its MS4 outfalls for dissolved copper, and calculate or estimate the monthly and annual dissolved copper loads, in accordance with the monitoring and assessment requirements of Provisions , , and of this issued under~~ Order No. R9-2005-0019. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

ADMINISTRATIVE DRAFT

~~3. Total Maximum Daily Loads for Total Nitrogen and Total Phosphorus in Rainbow Creek Watershed~~

~~4.~~

~~5. Applicability~~

~~6.~~

~~7. TMDL Basin Plan Amendment: Resolution No. R9-2005-0036~~

~~8.~~

~~9. TMDL Adoption and Approval Dates:~~

~~10.~~

~~11. San Diego Water Board Adoption Date: February 9, 2005~~

~~12. State Water Board Approval Date: November 16, 2005~~

~~13. Office of Administrative Law Approval Date: February 1, 2006~~

~~14. US EPA Approval Date: March 22, 2006~~

~~15.~~

~~16. TMDL Effective Date: February 1, 2006~~

~~17.~~

~~18. Watershed Management Area: Santa Margarita River~~

~~19.~~

~~20. Water Body: Rainbow Creek~~

~~21.~~

~~22. Responsible Copermittee: County of San Diego~~

~~23.~~

~~24. Water Quality Based Effluent Limitations~~

~~25.~~

~~26. The WQBELs for Rainbow Creek consist of the following~~

~~27.~~

~~28. Receiving Water Limitations~~

~~29.~~

~~30. Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 3.c.(1):~~

~~31.~~

~~32. Table 3.1~~

~~33. Receiving Water Limitations as~~

~~34. Concentrations in Rainbow Creek~~

35. Constituent	36. Receiving Water 37. Limitation
38. Nitrate (as N)	39. 10 mg/L
40. Total Nitrogen	41. 1 mg/L
42. Total Phosphorus	43. 0.1 mg/L

~~44.~~

ADMINISTRATIVE DRAFT

|

ADMINISTRATIVE DRAFT

46.

47. ~~Effluent Limitations~~

48.

49. ~~Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):~~

50.

51. ~~Table 3.2~~

52. ~~Effluent Limitations as Concentrations in~~

53. ~~MS4 Discharges to Rainbow Creek~~

54. Constituent	55. Effluent 56. Limitation
57. Nitrate (as N)	58. 10 mg/L
59. Total Nitrogen	60. 1 mg/L
61. Total Phosphorus	62. 0.1 mg/L

63.

64. ~~Pollutant loads from given land uses discharging to and from the MS4s must not exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 3.c.(1):~~

65.

66. ~~Table 3.3~~

67. ~~Effluent Limitations as Annual Loads in~~

68. ~~MS4 Discharges to Rainbow Creek~~

69. Land Use	70. Total N	71. Total P
72. Commercial nurseries	73. 116 kg/yr	74. 3 kg/yr
75. Park	76. 3 kg/yr	77. 0.1 kg/yr
78. Residential areas	79. 149 kg/yr	80. 12 kg/yr
81. Urban areas	82. 27 kg/yr	83. 6 kg/yr

84.

85. ~~Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision 3.0.~~

86.

87. ~~Best Management Practices~~

88.

89. ~~The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision 3.b for Rainbow Creek.~~

90.

ADMINISTRATIVE DRAFT

~~91. The Responsible Copermitttee should coordinate the BMPs to address this TMDL with Caltrans and other sources wherever and whenever possible.~~
~~92.~~

ADMINISTRATIVE DRAFT

~~94. Compliance Schedule~~

~~95.~~

~~96. WLA Compliance Date~~

~~97.~~

~~98. The Responsible Copermittee is required to achieve its WLAs, thus must be in compliance with the WQBELs under Specific Provision 3.b, by December 31, 2021.~~

~~99.~~

~~100. Interim Compliance Requirements~~

~~101.~~

~~102. Table 3.4~~

~~103. Interim Effluent Limitations as Annual Loads in~~

~~104. MS4 Discharges from Specific Land Uses to Rainbow Creek~~

105.	106. Total N 107. Interim Effluent Limitations 108. (kg/yr)			109. Total P 110. Interim Effluent Limitations 111. (kg/yr)		
	112. 113. Interim Compliance Date			114. Interim Compliance Date		
115. Land Use	116. 20	117. 20	118. 20	119. 20	120. 20	121. 20
122. Commercial nurseries	123. 39	124. 29	125. 19	126. 20	127. 16	128. 10
129. Park	130. 5	131. 3	132. 3	133. 0.1	134. 0.1	135. 0.1
136. Residential areas	137. 50	138. 39	139. 26	140. 99	141. 74	142. 47
143. Urban areas	144. 40	145. 27	146. 27	147. 9	148. 6	149. 6

~~150.~~

~~151. Specific Monitoring and Assessment Requirements~~

~~152.~~

~~153. The Responsible Copermittee must implement the Sampling and Analysis Plan for Rainbow Creek Nutrient Reduction TMDL Implementation Water Quality Monitoring, dated January 2010. The results of any monitoring conducted during the reporting period, and assessment of whether the interim and final WQBELs have been achieved must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.~~

~~154.~~

ADMINISTRATIVE DRAFT**155.3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2007-0043(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2007
State Water Board Approval Date:	July 15, 2008
Office of Administrative Law Approval Date:	October 22, 2008
US EPA Approval Date:	December 18, 2008

(3) TMDL Effective Date: October 22, 2008(4) Watershed Management Area: San Diego Bay(5) Water Body: Chollas Creek(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, [San Diego Unified Port District](#) [of San Diego](#)

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision [4.c.\(1\)](#):

Table 3.1*Receiving Water Limitations as Concentrations in Chollas Creek*

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$(0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$(0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$(0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$(0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

ADMINISTRATIVE DRAFT**(2) Effluent Limitations**

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision **4.c.(1)**:

Table 3.2

Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(3) Best Management Practices

- (a) The Responsible Copermittee **mustmay** implement BMPs **capable of achievingto support** the **achievement of** WQBELs under Specific Provision **4.cuu** for Chollas Creek.
- (b) The Responsible Copermittees should coordinate the BMPs to address this TMDL with Caltrans and the U.S. Navy **wherever and whenever, as possible**.

c. COMPLIANCE SCHEDULE**(1) WLA Compliance Date**

The Responsible Copermittee is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision **4.buu**, by October 22, 2028.

ADMINISTRATIVE DRAFT

(2) Interim Compliance Requirements

The Responsible Copermittee must comply with the following interim WQBELs by the interim compliance date:

|

ADMINISTRATIVE DRAFT**Table 3.3***Interim Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek*

Interim Compliance Date	Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
October 22, 2018	Dissolved Copper	Acute	$1.2 \times 90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
	Dissolved Lead	Acute	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
	Dissolved Zinc	Acute	$1.2 \times 90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

d.e. _____ SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (a) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*, when it is amended to include monitoring requirements for the Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision **F.3.b** of this Order.

ADMINISTRATIVE DRAFT

- (b) The Responsible Copermittees must ~~monitor~~implement the ~~effluent of the MS4 outfalls discharging to Chollas Creek for dissolved copper, lead, and zinc, and calculate or estimate the monthly and annual dissolved copper, lead, and zinc loads, in accordance with the monitoring and assessment requirements of Provisions , , and of issued under Order No. R9-2007-0043, as consistent with~~ this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

ADMINISTRATIVE DRAFT**156.4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2008-0027(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 11, 2008
State Water Board Approval Date:	June 16, 2009
Office of Administrative Law Approval Date:	September 15, 2009
US EPA Approval Date:	October 26, 2009

(3) TMDL Effective Date: September 15, 2009(4) Watershed Management Areas: See [Table 5.0](#)(5) Water Bodies: See [Table 5.0](#)(6) Responsible Copermittees: See [Table 5.0](#)**Table 4.0**

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Dana Point Harbor	Baby Beach	-City of Dana Point -County of Orange
San Diego Bay	San Diego Bay	Shelter Island Shoreline Park	-Unified Port of San Diego

ADMINISTRATIVE DRAFT

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in [Table 5.0](#) consist of the following:

(1) Receiving Water Limitations

- (a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#):

|

ADMINISTRATIVE DRAFT**Table 4.1***Receiving Water Limitations as Bacteria Densities in the Water Body*

Receiving Water Limitations		
Constituent	Single Sample Maximum^{1,2}	30-Day Geometric Mean²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision [5.b.\(2\)](#).

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 4.2*Effluent Limitations as Bacteria Densities in MS4 Discharges to the Water Body*

Effluent Limitations		
Constituent	Single Sample Maximum^{1,2}	30-Day Geometric Mean²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision [5.c.aaa](#).

(3) Best Management Practices

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in [Table 5.0](#) fulfill the Bacteria Load Reduction Plan (BLRP) requirements in Resolution No. R9-2008-0027.
- (b) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision [5.0](#) for the segments or areas of the water bodies listed in [Table 5.0](#)

ADMINISTRATIVE DRAFT

c. COMPLIANCE SCHEDULE

(1) Baby Beach in Dana Point Harbor

(a) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to Baby Beach are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, according to the following compliance schedule:

Table 4.3*Compliance Schedule Dates to Achieve Baby Beach WLAs*

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform	September 15, 2014	September 15, 2009
Fecal Coliform		September 15, 2009
<i>Enterococcus</i>		September 15, 2019

(b) Interim Compliance Requirements

The Responsible Copermittees for MS4 discharges to Baby Beach must comply with the following interim WQBELs by the interim compliance date:

Table 4.4*Interim Effluent Limitations as Loads in MS4 Discharges to Baby Beach*

Constituent	Interim Compliance Date	Dry Weather Interim Effluent Limitation	Wet Weather Interim Effluent Limitation
Total Coliform	September 15, 2012	5.32x10 ⁹ MPN/day	NA*
Fecal Coliform	September 15, 2012	0.59x10 ⁹ MPN/day	NA*
<i>Enterococcus</i>	September 15, 2012	0.42x10 ⁹ MPN/day	NA**
	September 15, 2016	NA*	207x10 ⁹ MPN/30days

Notes:

* The WQBELs under Specific Provision 5.b must already be achieved by the given interim compliance date.

** There is no corresponding interim WQBEL for the given interim compliance date.

(2) Shelter Island Shoreline Park in San Diego Bay

The Responsible Copermittee for MS4 discharges to Shelter Island Shoreline Park is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, by December 31, 2012.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water

ADMINISTRATIVE DRAFT

- quality objective, or
(4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
(5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

~~d.e.~~ SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS(1) Monitoring Stations and Procedures

- ~~(a) The Responsible Copermittees must implement the monitoring requirements issued under Order No. R9-2008-0027. designate the MS4 outfalls within their jurisdiction discharging to the segments or areas of the water bodies listed in Table 5.0 as high priority non-storm water MS4 monitoring stations, in accordance with the requirements of Provision D.1.~~
~~(b) —~~
~~(c) The Responsible Copermittees must establish at least one monitoring station within the receiving water body.~~

(2) Monitoring Procedures

- ~~(a) The Responsible Copermittees must monitor the effluent of the designated MS4 outfalls within their jurisdiction discharging during dry weather conditions to the segments or areas of the water bodies listed in Table 5.0 in accordance with the dry weather jurisdictional monitoring requirements of Provision D.1.a.(1)(b). Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.~~
- ~~(b) The Responsible Copermittees must monitor, within the first 24 hours of each storm event,²⁵ the effluent of the designated MS4 outfalls within their jurisdiction discharging to the segments or areas of the water bodies listed in Table 5.0 in accordance with the wet weather jurisdictional monitoring requirements of Provision D.1.b.(1)(b) of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.~~
- ~~(c) The Responsible Copermittees must collect samples from the monitoring stations within the receiving water body for each dry weather and wet weather MS4 outfall monitoring event. Samples must be analyzed for total~~

²⁵ ~~Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].~~

ADMINISTRATIVE DRAFT

| ~~coliform, fecal coliform, and *Enterococcus indicator* bacteria.~~

| ~~(3)~~(2) Assessment and Reporting Requirements

- (a) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs have been achieved.
- (b) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

ADMINISTRATIVE DRAFT

157.5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2010-0001

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date: February 10, 2010
 State Water Board Approval Date: December 14, 2010
 Office of Administrative Law Approval Date: April 4, 2011
 US EPA Approval Date: June 22, 2011

(3) TMDL Effective Date: April 4, 2011

(4) Watershed Management Areas: See [Table 6.0](#)

(5) Water Bodies: See [Table 6.0](#)

The water bodies identified in Table 6.0 are subject to the requirements of this Attachment E, except those water bodies listed in Table 6.0 that have been delisted from the 303(d) list for REC-1 bacteria impairments. These delisted water bodies are not subject to the requirements of this Attachment E so long as monitoring data continues to support compliance with water quality standards.

(6) Responsible Copermittees: See [Table 6.0](#)

Table 5.0

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
 Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	-City of Laguna Beach -County of Orange -Orange County Flood Control District
		at Heisler Park - North	
	Pacific Ocean Shoreline	at Main Laguna Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Woods -County of Orange -Orange County Flood Control District
		Laguna Beach at Ocean Avenue	
		Laguna Beach at Cleo Street	
	Arch Cove at Bluebird Canyon Road		
	Laguna Beach at Dumond Drive		

ADMINISTRATIVE DRAFT

Table 5.0 (Cont'd)

Applicability of Total Maximum Daily Loads for Indicator Bacteria

Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees	
South Orange County (cont'd)	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Hills	
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	-City of Laguna Niguel -City of Laguna Woods -City of Lake Forest -City of Mission Viejo -County of Orange -Orange County Flood Control District	
	Aliso Creek Mouth	at mouth		
	Pacific Ocean Shoreline	Aliso Beach at West Street		-City of Dana Point -City of Laguna Beach -City of Laguna Niguel -County of Orange -Orange County Flood Control District
		Aliso Beach at Table Rock Drive		
		100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)		
		at Salt Creek (large outlet)		
		Salt Creek Beach at Salt Creek service road		
		Salt Creek Beach at Strand Road		
	Pacific Ocean Shoreline	at San Juan Creek		-City of Dana Point -City of Laguna Hills -City of Laguna Niguel -City of Mission Viejo
	San Juan Creek	lower 1 mile		-City of Rancho Santa Margarita -City of San Juan Capistrano
	San Juan Creek Mouth	at mouth		-County of Orange -Orange County Flood Control District

ADMINISTRATIVE DRAFT**Table 5.0 (Cont'd)***Applicability of Total Maximum Daily Loads for Indicator Bacteria**Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County (cont'd)	Pacific Ocean Shoreline	at Poche Beach	- City of Dana Point -City of San Clemente -County of Orange -Orange County Flood Control District
		Ole Hanson Beach Club Beach at Pico Drain	
		San Clemente City Beach at El Portal Street Stairs	
		San Clemente City Beach at Mariposa Street	
		San Clemente City Beach at Linda Lane	
		San Clemente City Beach at South Linda Lane	
		San Clemente City Beach at Lifeguard Headquarters	
		under San Clemente Municipal Pier	
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	
		San Clemente State Beach at Riviera Beach	
Can Clemente State Beach at Cypress Shores			
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	-City of Oceanside -City of Vista -County of San Diego
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	-City of Carlsbad -City of Encinitas -City of Escondido -City of Oceanside -City of San Marcos -City of Solana Beach -City of Vista -County of San Diego
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	-City of Del Mar -City of Escondido -City of Poway -City of San Diego -City of Solana Beach -County of San Diego
Penasquitos (Miramar Reservoir HA)	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	-City of Del Mar -City of Poway -City of San Diego -County of San Diego
Mission Bay	Pacific Ocean Shoreline	La Jolla Shores Beach at El Paseo Grande	-City of San Diego
		La Jolla Shores Beach at Caminito del Oro	

ADMINISTRATIVE DRAFT

Table 5.0 (Cont'd)

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
		La Jolla Shores Beach at Vallecitos	
Mission Bay (cont'd)	Pacific Ocean Shoreline	La Jolla Shores Beach at Avenida de la Playa	-City of San Diego
		at Casa Beach, Children's Pool	
		South Casa Beach at Coast Boulevard	
		Whispering Sands Beach at Ravina Street	
		Windansea Beach at Vista de la Playa	
		Windansea Beach at Bonair Street	
		Windansea Beach at Playa del Norte	
		Windansea Beach at Palomar Avenue	
		at Tourmaline Surf Park	
		Pacific Beach at Grand Avenue	
	Tecolote Creek	Entire reach and tributaries	-City of San Diego
San Diego River	Forrester Creek	lower 1 mile	City of El Cajon City of La Mesa -City of Santee -County of San Diego
	San Diego River	lower 6 miles	-City of El Cajon -City of La Mesa
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	-City of San Diego -City of Santee -County of San Diego
San Diego Bay	Chollas Creek	lower 1.2 miles	-City of La Mesa -City of Lemon Grove -City of San Diego -County of San Diego San Diego Unified Port District

ADMINISTRATIVE DRAFT

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in [Table 6.0](#) consist of the following:

(1) Receiving Water Limitations

- (a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provision [6.c.\(1\)](#):

Table 5.1

Receiving Water Limitations as Bacteria Densities and Allowable Exceedance Frequencies in the Water Body

Receiving Water Limitations				
Constituent	Single Sample Maximum ^{1,2} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ³	30-Day Geometric Mean ² (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
<i>Enterococcus</i>	10 ⁴ / 61 ⁵	22% / 0%	35 ⁴ / 33 ⁵	0%

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* receiving water limitation applies to segments of areas of Pacific Ocean Shoreline listed in [Table 6.0](#).
5. This *Enterococcus* receiving water limitations applies to segments or areas of creeks or creek mouths listed in [Table 6.0](#).

Interim receiving water limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision [6.cfff](#).

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision [6.b.](#).

(2) Effluent Limitations

Discharges from the MS4s must not ~~contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provision 6.c. to demonstrate the discharge is not causing cause or contributing contribute~~ to a violation of receiving water ~~quality standardslimitations~~. The mass-based waste load allocations presented in Resolution No. R9-2010-0001 can be used to demonstrate that loading from the MS4 is such that it does not cause water quality objective exceedances.

ADMINISTRATIVE DRAFT

as described in bullet (4) under Specific Provision 6.d. :

Table 6.2

Effluent Limitations as Bacteria Densities and Allowable Exceedance Frequencies in MS4 Discharges to the Water Body

Constituent	Effluent Limitations			
	Single Sample Maximum ^{1,2} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ³	30-Day Geometric Mean ² (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22%/0%	1,000	0%
Fecal Coliform	400	22%/0%	200	0%
Enterococcus	104 ⁴ /61 ⁵	22%/0%	35 ⁴ /33 ⁵	0%

Notes:

1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* effluent limitation applies to MS4 discharges to segments of areas of Pacific Ocean Shoreline listed in Table 6.0.
5. This *Enterococcus* effluent limitation applies to MS4 discharges to segments or areas of creeks or creek mouths listed in Table 6.0.

~~Interim effluent limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision 6.c.~~

(3) Best Management Practices

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in Table 6.0 fulfill will incorporate the Comprehensive Load Reduction Plan Plans (CLRP) requirements indrafted pursuant to Resolution No. R9-2010-0001.
- (b) The Responsible Copermittee must may implement BMPs capable of achieving to support the achievement of WQBELs under Specific Provision 6. b e e e for the segments or areas of the water bodies listed in Table 6.0.
- (c) The Responsible Copermittees should coordinatemay implement BMPs to support the BMPsachievement of to address this TMDL with Caltrans and owners/operators of small MS4s wherever and whenever, as possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to a segment or area of the water bodies listed in Table 6.0 are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 6.b, according to the following compliance schedule:

ADMINISTRATIVE DRAFT**Table 5.2***Compliance Schedule Dates to Achieve Indicator Bacteria WLAs*

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform ¹	April 4, 2021	April 4, 2031
Fecal Coliform		
<i>Enterococcus</i>		

[1 - Total coliform receiving water limitations apply only to segments of areas of Pacific Ocean Shoreline listed in Table 6.0.](#)

(2) Interim Compliance Requirements

The Responsible Copermittees must comply with the [following](#) interim WQBELs by the interim compliance dates: [provided as part of the CLRP and supported by Order No. R9-2010-0001.](#)

(a) Interim Dry Weather WQBELs

[Interim dry weather WQBELs are expressed as receiving water limitations.](#) The Responsible Copermittee must calculate the “existing” exceedance frequencies of the 30-day geometric mean water quality objectives for each of the indicator bacteria by analyzing the monitoring data collected between January 1, 2002 and April 4, 2011. “Existing” exceedance frequencies may be calculated by segment or area of a water body, or by water body, and/or by Watershed Management Area listed in [Table 6.0](#). Separate “existing” exceedance frequencies must be calculated for beaches and creeks/creek mouths.

The Responsible Copermittees must achieve a 50 percent reduction in the “existing” exceedance frequency of the 30-day geometric mean WQBELs for the segments or areas of the water bodies listed in [Table 6.0](#) ~~by the interim compliance dates for achieving the interim dry weather WQBELs given in Table 6.5.~~ A 50 percent reduction in the “existing” exceedance frequency is equivalent to half of the “existing” exceedance frequency of the 30-day geometric mean WQBELs.

(3) Submittals to Support TMDL Basin Plan Amendment

[The Responsible Copermittees are encouraged to submit data to support the TMDL reopener scheduled for April 2016 including but not limited to data related to reference watershed monitoring and beneficial use usage frequency.](#)

~~d. The “existing” exceedance frequencies and the interim dry weather allowable exceedance frequencies (i.e. interim dry weather WQBELs) calculated by the Responsible Copermittees must be included in the Water Quality Improvement Plans for the applicable Watershed Management Areas.~~

~~e.~~

~~f. Interim Wet Weather WQBELs~~

~~g.~~

~~h. The Responsible Copermittees must achieve the interim wet weather WQBELs in~~

ADMINISTRATIVE DRAFT

Table 6.4, expressed as interim allowable exceedance frequencies, by the interim compliance dates for achieving the interim wet weather WQBELs given in Table 6.5.

i.—

j.— Table 6.4

k.— Interim Wet Weather WQBELs Expressed as

l.— Interim Wet Weather Allowable Exceedance Frequencies

m.—W at er sh ed	n.—	o.—	p.—Interim Wet Weather	q.—Allowable Exceedance Frequencies	r.—
			u.—	v.—	w.—
r.—M an ag e m en t Ar ea	s.—Wa ter Be dy	t.—Segment or Area			
x.—So ut h Or an ge Co un ty	y.—Pac ific Oc ean Sh orel ine	z.—Cameo Cove at Irvine Cove Drive— Riviera Way			
		dd.—at Heisler Park— North			
	ee.—Pac ific Oc ean Sh orel ine	ff.— at Main Laguna Beach	aa.—	bb.—	cc.—
		gg.—Laguna Beach at Ocean Avenue			
		hh.—Laguna Beach at Cleo Street			
		ii.— Arch Cove at Bluebird Canyon Road			
		jj.—Laguna Beach			

ADMINISTRATIVE DRAFT

		at Dumond Drive			
kk. Pacific Ocean Shoreline	ll.	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	mm.	nn.	oo. pp.
qq. Aliso Creek	rr.	Entire reach (7.2 miles) and associated tributaries: ss. Aliso Hills Channel tt. English Canyon Creek uu. Dairy Fork Creek vv. Sulfur Creek ww. Wood Canyon Creek	xx.	yy.	zz.
aaa. Aliso Creek Mouth	bbb.	at mouth	ccc.	ddd.	eee.
fff. Pacific Ocean Shoreline	ggg.	Aliso Beach at West Street	hhh.	iii.	jjj.
	kkk.	Aliso Beach at Table Rock Drive			
	lll.	100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)			
	mmm.	at Salt Creek (large outlet)			

ADMINISTRATIVE DRAFT

		nnn. Salt Creek Beach at Salt Creek service road			
		ooo. Salt Creek Beach at Strand Road			

ADMINISTRATIVE DRAFT

qqq. Table 6.4 (Cont'd)

rrr. Interim Wet Weather WQBELs Expressed as

sss. Interim Wet Weather Allowable Exceedance Frequencies

ttt. W at er sh ed	uuu.	vvv.	www. Interim Wet Weather xxx. Allowable Exceedance Frequencies	bbb	ccc	ddd
vvv. M an ag e m en t Ar ea	zzz. Wa ter Bo dy	aaaa. Segment or Area				
eeee. So ut h Or an ge Co un ty	gggg. Pac ific Oc ean Sh orel ine	hhhh. at San Juan Creek		iiii. 4 4 %	jjjj. 4 4 %	kkkk. 4 8 %
fff. (on t'd)	qqqq. Sa n Jua n Cre ek Mo uth	mmmm. lower 1 mile		nnnn. 4 4 %	oooo. 4 4 %	pppp. 4 7 %
		rrrr. at mouth		ssss. 4 4 %	tttt. 4 4 %	uuuu. 4 7 %

ADMINISTRATIVE DRAFT

		www. — at Poche Beach			
		aaaa. — Ole Hanson Beach Club Beach at Pico Drain			
		bbbb. — San Clemente City Beach at El Portal Street Stairs			
		cccc. — San Clemente City Beach at Mariposa Street			
		dddd. — San Clemente City Beach at Linda Lane			
	vvvv. — Pacific Ocean Shoreline	eeee. — San Clemente City Beach at South Linda Lane	xxxx	yyyy	zzzz
		ffff. — San Clemente City Beach at Lifeguard Headquarters			
		ggggg. — under San Clemente Municipal Pier			
		hhhhh. — San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)			
		iiii. — San Clemente State Beach at Riviera Beach			
		jjjj. — Can Clemente State Beach at Cypress Shores			

ADMINISTRATIVE DRAFT

<p>kkkkk. Sa n Lui s Re y Ri ve r</p>	<p>lllll. Pac ific Oce an Sh orel ine</p>	<p>mmmmm. at San Luis Rey River mouth</p>	<p>nnn 4 5 9</p>	<p>ooo 4 4 9</p>	<p>ppp 4 7 9</p>
<p>qqqqq. Ga rls ba d</p>	<p>rrrrr. Pac ific Oce an Sh orel ine</p>	<p>sssss. at Moonlight State Beach</p>	<p>ttttt. 4 0 9</p>	<p>uuu 4 0 9</p>	<p>vvvv 4 1 9</p>
<p>wwwww Sa n Di eg uit e Ri ve r</p>	<p>xxxxx. Pac ific Oce an Sh orel ine</p>	<p>yyyyy. at San Dieguito Lagoon mouth</p>	<p>zzzz 3 3 9</p>	<p>aaaa 3 3 9</p>	<p>bbb 3 6 9</p>

ADMINISTRATIVE DRAFT

~~dddddd.~~ Table 6.4 (Cont'd)

~~eeeeee.~~ Interim Wet Weather WQBELs Expressed as

~~ffffff.~~ Interim Wet Weather Allowable Exceedance Frequencies

ggggg. W at er sh ed	hhhhh.	iiii.	jjjj. Interim Wet Weather Allowable Exceedance Frequencies	kkkkk.	llll.	mmmm. M an ag e m en t Ar ea	nnnnn. Segment or Area	oooo.	pppp.	qqqq.
iiii.	sssss. Pac ific Oce an Sh orel ine	ttttt. Torrey Pines State Beach at Del Mar (Anderson Canyon)	uuu.	vvv.	www.	rrrrr. Pe na sq uit es	yyyyy. La Jolla Shores Beach at El Paseo Grande	zzzz.	aaaa.	bbb.
	xxxxx. Pac ific Oce an Sh orel ine	ccccc. La Jolla Shores Beach at Caminito del Oro					ddddd. La Jolla Shores Beach at Vallecitos			

ADMINISTRATIVE DRAFT

		<p>eeeeeee. La Jolla Shores Beach at Avenida de la Playa</p> <p>ffffff. at Casa Beach, Children's Pool</p> <p>ggggggg. South Casa Beach at Coast Boulevard</p> <p>hhhhhhh. Whispering Sands Beach at Ravina Street</p> <p>iiiiiii. Windans ea Beach at Vista de la Playa</p> <p>jjjjjjj. Windans ea Beach at Bonair Street</p> <p>kkkkkkk. Windans ea Beach at Playa del Norte</p> <p>lllllll. Windans ea Beach at Palomar Avenue</p> <p>mmmmmmm. at Tourmaline Surf Park</p> <p>nnnnnnn. Pacific Beach at Grand Avenue</p>			
	<p>ooooooo Tee olot e Creek</p>	<p>ppppppp. Entire reach and tributaries</p>	<p>qqqqq 4 9 %</p>	<p>rrrrr 4 9 %</p>	<p>sssss 5 4 %</p>

ADMINISTRATIVE DRAFT

	<p>uuuuuu For rest er Cre ek</p>	<p>vvvvvvv. lower 1 mile</p>	<p>www 4 6 %</p>	<p>xxx 4 3 %</p>	<p>yyy 4 3 %</p>
<p>tttttt Sa n Di eg e Ri ve r</p>	<p>zzzzzzz Sa n Die go Riv er</p>	<p>aaaaaaaa. lower 6 miles</p>	<p>bbb 4 6 %</p>	<p>ccc 4 3 %</p>	<p>ddd 4 3 %</p>
	<p>eeeeeee Pac ific Oc ean Sh orel ine</p>	<p>ffffff. at San Diego River mouth at Dog Beach</p>	<p>ggg 4 6 %</p>	<p>hhh 4 3 %</p>	<p>iiiiii 5 4 %</p>
<p>jjjjjjj Sa n Di eg e Ba y</p>	<p>kkkkkkk Ch olla s Cre ek</p>	<p>lllllll. lower 1.2 miles</p>	<p>mmm 4 4 %</p>	<p>nnn 4 4 %</p>	<p>ooo 4 3 %</p>

pppppppp.
qqqqqqqq.

ADMINISTRATIVE DRAFT

~~sssssss. Interim WQBEL Compliance Dates~~

~~ttttttt.~~

~~uuuuuuuu. The Responsible Copermittees must achieve the interim WQBELs under Specific Provisions 6.c.(2) and 6.c.(2) by the interim compliance dates given in Table 6.5.~~

~~vvvvvvvv.~~

~~wwwwwww. Table 6.5~~

~~xxxxxxx. Interim Compliance Dates to Achieve Interim WQBELs~~

yyyyyyy. Watershed Management Area	zzzzzzz. Water Body	aaaaaaaa. Segment or Area	bbbbbbb. Interim Dry Weather WQBELs
iiiiiii. South Orange County	mmmmmm. Pacific Ocean Shoreline	nnnnnnn. Cameo Cove at Irvine Cove Drive - Riviera Way	oooooooo. April 4, 2016
		qqqqqqq. at Heisler Park - North	
	rrrrrrr. Pacific Ocean Shoreline	sssssss. at Main Laguna Beach	ttttttt. April 4, 2016
		vvvvvvv. Laguna Beach at Ocean Avenue	
wwwwwww. Laguna Beach at Cleo Street			
xxxxxxx. Arch Cove at Bluebird Canyon Road	yyyyyyy. Laguna Beach at Dumond		

ADMINISTRATIVE DRAFT

		Drive		
	zzzzzzzzzz. Pacific Ocean Shoreline	aaaaaaaaaa. Laguna Beach at Lagunita Place/ bbbbbbbbbb. Blue Lagoon Place at Aliso Beach	cccccccccc. April 4, 2016	
	eeeeeeeeee. Aliso Creek	fffffff. Entire reach (7.2 miles) and associated tributaries: gggggggggg. -Aliso Hills Channel hhhhhhhhh. -English Canyon Creek iiiiiii. -Dairy Fork Creek jjjjjjjj. -Sulfur Creek kkkkkkkkk. -Wood Canyon Creek	iiiiiii. April 4, 2018	
	nnnnnnnnnn. Aliso Creek Mouth	oooooooooo. at mouth	pppppppppp. April 4, 2018	
	rrrrrrrrrr. Pacific Ocean Shoreline	sssssssss. Aliso Beach at West Street vvvvvvvvv. Aliso Beach at Table Rock Drive	ttttttttt. April 4, 2016	

ADMINISTRATIVE DRAFT

		<p>wwwwwwwwww 100 Steps Beach at Pacific Coast Hwy at hospital (9th Avenue)</p>		
		<p>xxxxxxxxxx. at Salt Creek (large outlet)</p>		
		<p>yyyyyyyyy. Salt Creek Beach at Salt Creek service road</p>	<p>zzzzzzzzzz. April 4, 2017</p>	
		<p>bbbbbbbbbb. Salt Creek Beach at Strand Road</p>	<p>cccccccccc. April 4, 2017</p>	

ADMINISTRATIVE DRAFT

~~Table 6.5 (Cont'd)~~

~~Interim Compliance Dates to Achieve Interim WQBELs~~

Watershed Management Area	Water Body	Segment or Area	Interim Dry Weather WQBELs
South Orange County (cont'd)	Pacific Ocean Shoreline	at San Juan Creek	April 4, 2016
	San Juan Creek	lower 1 mile	April 4, 2018
	San Juan Creek Mouth	at mouth	April 4, 2016
	Pa	at Poche Beach	April 4, 2016
		Ole Hanson Beach Club Beach at Pico Drain	April 4, 2016
		San Clemente City Beach at El Portal Street Stairs	April 4, 2017
	San Clemente City Beach at Mariposa Street		

ADMINISTRATIVE DRAFT

		ttttttttttt. San Clemente City Beach at Linda Lane	uuuuuuuuuuuuu. April 4, 2016	
		wwwwwwwwwww San Clemente City Beach at South Linda Lane	xxxxxxxxxxxxx. April 4, 2018	
		zzzzzzzzzzzz. San Clemente City Beach at Lifeguard Headquarte rs	aaaaaaaaaaaaa. April 4, 2017	
		cccccccccccccc. under San Clemente Municipal Pier		
		dddddddddddddd San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	eeeeeeeeeeeeeee. April 4, 2018	
		gggggggggggggg San Clemente State Beach at Riviera Beach	hhhhhhhhhhhhh. April 4, 2016	
		jjjjjjjjjjj. Can Clemente State Beach at Cypress Shores	kkkkkkkkkkkkk. April 4, 2017	

ADMINISTRATIVE DRAFT

mmmmmmmmmm San Luis Rey River	nnnnnnnnnn Pacific Ocean Shoreline	oooooooooooo at San Luis Rey River mouth	pppppppppppp April 4, 2017	
rrrrrrrrrrrr Carlsbad	ssssssssssss Pacific Ocean Shoreline	ttttttttttt at Moonlight State Beach	uuuuuuuuuuuu April 4, 2016	
wwwwwwwwww San Dieguito River	xxxxxxxxxxx Pacific Ocean Shoreline	yyyyyyyyyyyy at San Dieguito Lagoon mouth	zzzzzzzzzzzz April 4, 2016	

ADMINISTRATIVE DRAFT

~~Table 6.5 (Cont'd)~~

~~Interim Compliance Dates to Achieve Interim WQBELs~~

Watershed Management Area	Water Body	Segment or Area	Compliance Date
Penasquitos	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	April 4, 2016
		La Jolla Shores Beach at El Paseo Grande	
		La Jolla Shores Beach at Caminito del Oro	
	Pacific Ocean Shoreline	La Jolla Shores Beach at Vallecitos	
		La Jolla Shores Beach at Avenida de la Playa	
		at Casa Beach, Children's Pool	

ADMINISTRATIVE DRAFT

		<p>cccccccccccccccc South Casa Beach at Coast Boulevard</p> <p>ddddddddddddddd Whispering Sands Beach at Ravina Street</p> <p>eeeeeeeeeeeeeeee Windansea Beach at Vista de la Playa</p> <p>ffffffffffffff. — Windansea Beach at Bonair Street</p> <p>gggggggggggggggg Windansea Beach at Playa del Norte</p> <p>hhhhhhhhhhhhhhh Windansea Beach at Palomar Avenue</p> <p>iiiiiiiiiii. at Tourmaline Surf Park</p> <p>jjjjjjjjjjj. Pacific Beach at Grand Avenue</p>	
	<p>kkkkkkkkkkkkkkk Tecolote Creek</p>	<p>lllllllllll. Entire reach and tributaries</p>	
<p>mmmmmmmmmm San Diego River</p>	<p>nnnnnnnnnnnnnn Forrester Creek</p>	<p>oooooooooooooooo lower 1 mile</p>	<p>ppppppppppp April 4, 2018</p>
	<p>rrrrrrrrrrrrr. — San Diego River</p>	<p>sssssssssssssss lower 6 miles</p>	
	<p>ttttttttttt. — Pacific Ocean Shoreline</p>	<p>uuuuuuuuuuuuuuu at San Diego River mouth at Dog Beach</p>	

ADMINISTRATIVE DRAFT

vvvvvvvvvvvvvvv San Diego Bay	wwwwwwwwwwww Chellas Greek	xxxxxxxxxxxxxxxx lower 1.2 miles	yyyyyyyyyyyy April 4, 2018
--	---	---	---

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

Furthermore, as stated in the TMDL:

The Phase I MS4s may demonstrate that their discharges are not causing the exceedances in the receiving waters by providing data from their discharge points to the receiving waters, by providing data collected at jurisdictional boundaries, and/or using other methods accepted by the San Diego Water Board. Otherwise, at the end of the [wet or] dry weather TMDL compliance schedule, the municipal Phase I MS4s will be held responsible and considered out of compliance unless other information or evidence indicates another controllable or uncontrollable source is responsible for the exceedances in the receiving waters. If controllable sources other than discharges from the municipal Phase I MS4s are identified before or after the end of the [wet or] dry weather TMDL Compliance Schedule as causing the exceedances, those controllable sources will be responsible for reducing their bacteria loads and/or demonstrating that discharges from those sources are not causing the exceedances. The San Diego Water Board shall implement additional actions (e.g., issue enforcement actions, amend existing NPDES requirements or conditional waivers), as needed, to bring all controllable sources into compliance with the [wet or] dry weather TMDLs.

~~aaaaaaaaaaaaaaaa~~e. Specific Monitoring and Assessment Requirements

The Bacteria Load Reduction Plans (BLRPs) and CLRPs to be submitted by the Copermittees and approved by the Regional Board Executive Officer contain monitoring programs. Implementation of those Regional Board-approved monitoring programs constitutes compliance with the Monitoring Station and Monitoring Procedure requirements, described below.

- (1) Monitoring and Assessment Requirements for Beaches

ADMINISTRATIVE DRAFT

(a) Monitoring Stations

- ~~(i) The Responsible Copermitees must designate the MS4 outfalls within their jurisdiction discharging to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 as high priority non-storm water MS4 monitoring stations, in accordance with the requirements of Provision of this Order.~~

ADMINISTRATIVE DRAFT

- ~~(ii) For the Pacific Ocean Shoreline segments or areas listed in Table 6.0 with MS4 outfalls, the Responsible Copermittees must establish at least one monitoring station within the receiving water.~~

For beaches addressed by these TMDLs, monitoring locations should consist of, at a minimum, the same locations used to collect data required under MS4 NPDES monitoring requirements and beach monitoring for Health and Safety Code section 115880.⁷⁵ If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also

be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.

⁷⁵ Commonly referred to as AB 411 monitoring

ADMINISTRATIVE DRAFT

(b) Monitoring Procedures

(i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly.

~~(i)(ii) The Responsible Copermittees must monitor the effluent of the designated MS4 outfalls within their jurisdiction discharging during dry weather to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 in accordance with the dry weather jurisdictional monitoring requirements of Provision of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.~~

(iii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations at least once within the first 24 hours of the end of a storm event²⁶ that occurs during the rainy season (i.e., October 1 through April 30).

~~(ii) The Responsible Copermittees must monitor, within the first 24 hours of each storm event,²⁷ the effluent of the designated MS4 outfalls within their jurisdiction discharging to the Pacific Ocean Shoreline segments or areas listed in Table 6.0 in accordance with the wet weather jurisdictional monitoring requirements of Provision of this Order. Samples required to be submitted to a laboratory for analysis must include analysis for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.~~

~~(iii)(iv) The Responsible Copermittees must collect samples from the monitoring stations within the receiving water body for each dry weather and wet weather MS4 outfall monitoring event. Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.~~

(c) Assessment and Reporting Requirements

(i) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs for the Pacific Ocean Shoreline segments or areas listed in

²⁶ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

²⁷ ~~Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].~~

ADMINISTRATIVE DRAFT

| [Table 6.0](#) have been achieved.

| ~~(i)~~(ii) The monitoring and assessment results must be submitted as part of
| the Annual Reports required under Provision [F.3.b](#) of this Order.

ADMINISTRATIVE DRAFT**(2) Monitoring and Assessment Requirements for Creeks and Creek Mouths****(a) Monitoring Stations**

- ~~(i) The Responsible Copermittes must establish at least one receiving water monitoring station at or near the mouth of the creeks listed in Table 6.0.~~
- ~~(ii)~~
- ~~(iii) The Responsible Copermittes must establish at least one receiving water monitoring station upstream of the station established for Specific Provision 6.d.(2)(a). At least one monitoring station must be established for each Responsible Copermittes at the most downstream location within its jurisdiction, and one monitoring station at the most upstream location within its jurisdiction.~~
- ~~(iv) The Responsible Copermittes must identify the MS4 outfalls discharging to the segments or areas of the creeks and creek mouths listed in Table 6.0. The Responsible Copermittes must identify the MS4 outfalls that are monitored in accordance with the dry weather jurisdictional monitoring requirements of Provision of this Order and the wet weather jurisdictional monitoring requirements of Provision of this Order.~~

For creeks addressed by these TMDLs, monitoring locations should consist of, at a minimum, a location at or near the mouth of the creek (e.g., Mass Loading Station or Mass Emission Station) and one or more locations upstream of the mouth (e.g., Watershed Assessment Stations). If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.

ADMINISTRATIVE DRAFT

(b) Monitoring Procedures

- (i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations ~~at least monthly.~~ according to the WQIP.
- (ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations within the first 24 hours of
- (iii) the end of a storm event²⁸ that occurs during the rainy season (i.e., October 1 through April 30).
- (iv)
- (v) Samples collected from receiving water monitoring stations must be analyzed for ~~total coliform,~~ fecal coliform, and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

- (i) The Responsible Copermittees must analyze the receiving water monitoring data to assess whether the interim and final receiving water WQBELs for the creeks and creek mouths listed in Table 6.0 have been achieved.
- ~~(ii) If the receiving water WQBELs for the creeks and creek mouths listed in Table 6.0 have not been achieved, the Responsible Copermittees must review the MS4 outfall monitoring data to assess whether the interim and final effluent WQBELs have been achieved.~~
- ~~(iii) The Responsible Copermittee must identify and incorporate additional MS4 outfall and receiving water monitoring stations and/or adjust monitoring frequencies to identify sources causing exceedances of the receiving water WQBELs.~~
- ~~(iv)~~ (ii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

²⁸ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

ADMINISTRATIVE DRAFT

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION**

**TENTATIVE
ORDER NO. R9-2012-0011
NPDES NO. CAS0109266**

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT
AND WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM THE MUNICIPAL SEPARATE STORM SEWER SYSTEMS (MS4s)
DRAINING THE WATERSHEDS WITHIN THE SAN DIEGO REGION**

The San Diego County Copermittees in [Table 1a](#) are subject to waste discharge requirements within their respective jurisdictions set forth in this Order.

Table 1a. San Diego County Copermittees

City of Carlsbad	City of Oceanside
City of Chula Vista	City of Poway
City of Coronado	City of San Diego
City of Del Mar	City of San Marcos
City of El Cajon	City of Santee
City of Encinitas	City of Solana Beach
City of Escondido	City of Vista
City of Imperial Beach	County of San Diego
City of La Mesa	San Diego County Regional Airport Authority
City of Lemon Grove	Unified Port District of San Diego
City of National City	

The Orange County Copermittees in [Table 1b](#) are subject to waste discharge requirements within their respective jurisdictions set forth in this Order upon expiration of Order No. R9-2009-0002, NPDES No. CAS0108740 on December 16, 2014.

Table 1b. Orange County Copermittees

City of Aliso Viejo	City of Ranch Santa Margarita
City of Dana Point	City of San Clemente
City of Laguna Beach	City of San Juan Capistrano
City of Laguna Hills	City of Laguna Woods
City of Laguna Niguel	County of Orange
City of Lake Forest	Orange County Flood Control District
City of Mission Viejo	

ADMINISTRATIVE DRAFT

The Riverside County Copermittees in [Table 1c](#) are subject to waste discharge requirements within their respective jurisdictions set forth in this Order upon expiration of Order No. R9-2010-0016, NPDES No. CAS0108766 on November 10, 2015.

Table 1c. Riverside County Copermittees

City of Murrieta	County of Riverside
City of Temecula	Riverside County Flood Control and Water Conservation District
City of Wildomar	

The Orange County Copermittees and Riverside County Copermittees may enroll under this Order at a date earlier than the expiration date of their current Orders subject to the conditions described in Provision [F.6](#) of this Order and the Copermittees in the respective county receive a Notice of Enrollment (NOE) from the San Diego Water Board.

The term Copermittee in this Order refers to any San Diego County, Orange County, or Riverside County Copermittee enrolled under this Order, unless specified otherwise.

This Order provides permit coverage for the Copermittee discharges described in [Table 2](#). “Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.26(a)(3)(vi).

Table 2. Discharge Locations and Receiving Waters

Discharge Points	Locations throughout San Diego Region
Discharge Description	Municipal Separate Storm Sewer System (MS4) Discharges
Receiving Waters	Waters of the U.S.: Inland Surface Waters, Enclosed Bays and Estuaries, and Coastal Ocean Waters of the San Diego Region

Table 3. Administrative Information

This Order was adopted by the San Diego Water Board on:	Month Day, 2012
This Order will become effective on:	Month Day, 2012
This Order will expire on:	Month Day, 2017
The Copermittees must file a Report of Waste Discharge (ROWD) in accordance with Title 23, 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.	

I, David W. Gibson, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on Month Day, 2012.

TENTATIVE

David W. Gibson
Executive Officer

ADMINISTRATIVE DRAFT

TABLE OF CONTENTS

I. FINDINGS..... 1

 Jurisdiction..... 1

 Discharge Characteristics and Runoff Management..... 2

 Water Quality Standards..... 5

 Considerations Under Federal Law..... 6

 Considerations Under State Law 7

 State Water Board Decisions 7

 Administrative Findings..... 8

II. PROVISIONS..... 9

A. Prohibitions and Limitations 9

 1. Discharge Prohibitions..... 10

 2. Receiving Water Limitations 10

 3. Effluent Limitations 11

 4. Compliance with Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations 12

B. Water Quality Improvement Plans 14

 1. Watershed Management Areas 14

 2. Identification of Water Quality Priorities..... 16

 3. Water Quality Improvement Strategies and Schedules 20

 4. Water Quality Improvement Monitoring and Assessment..... 21

 5. Iterative and Adaptive Management Process 22

 6. Water Quality Improvement Plan Submittal, Implementation, and Modifications..... 23

C. Action Levels 24

 1. Non-Storm Water Action Levels 25

 2. Storm Water Action Levels 27

D. Monitoring and Assessment Requirements 29

 1. Receiving Waters Monitoring..... 31

 2. MS4 Outfall Discharge Monitoring..... 40

 3. Source/Stressor Identification..... 49

 4. Special Studies..... 50

 5. Assessment Requirements..... 52

E. Jurisdictional Runoff Management Programs 62

 1. Legal Authority Establishment and Enforcement..... 63

 2. Illicit Discharge Detection and Elimination..... 64

 3. Development Planning 71

 4. Construction Management 87

 5. Existing Development Management..... 92

 6. Enforcement Response Plans 101

 7. Public Education and Participation 103

 8. Fiscal Analysis..... 103

F. Reporting 105

 1. Water Quality Improvement Plans 105

 2. Updates 106

 3. Progress Reporting..... 107

ADMINISTRATIVE DRAFT

**TABLE OF CONTENTS
(Cont'd)**

4. Regional Clearinghouse 109

5. Report of Waste Discharge..... 109

6. Application for Early Enrollment..... 110

7. Reporting Provisions 111

G. Principal Watershed Copermittee Responsibilities..... 112

 1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision F.1 of this Order. 112

 2. The Principal Watershed Copermittee is responsible for, at a minimum, the following: 112

H. Modification of Programs 113

 1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the San Diego Water Board..... 113

 2. Minor modifications to the Order may be made by the San Diego Water Board where the proposed modification complies with all the prohibitions and limitations, and other requirements of this Order. 113

 3. Proposed modifications outside of the WQIP process that are not minor require amendment of this Order in accordance with this Order’s rules, policies, and procedures..... 113

I. Standard Permit Provisions and General Provisions 114

Attachment A Discharge Prohibitions 1

 1. Basin Plan Waste Discharge Prohibitions 1

 2. Attachment B to State Water Board Resolution 2012-0012..... 3

Attachment B Standard Permit Provisions and General Provisions 1

 1. Standard Permit Provisions 1

 2. General Provisions 10

Attachment C ACRONYMS AND ABBREVIATIONS 1

 1. Acronyms and Abbreviations 1

 2. Definitions..... 2

Attachment D Jurisdictional Runoff Management Program Annual Report Form..... 0

Attachment E SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS APPLICABLE TO ORDER NO. R9-2012-0011 1

 1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed..... 2

 2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin 4

 3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek 6

ADMINISTRATIVE DRAFT

**TABLE OF CONTENTS
(Cont'd)**

4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay..... 10

5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)..... 14

ADMINISTRATIVE DRAFT**I. FINDINGS**

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

JURISDICTION

- 1. MS4 Ownership or Operation.** Each of the Copermittees owns or operates an MS4, through which it discharges storm water and non-storm water into waters of the U.S. within the San Diego Region. These MS4s fall into one or more of the following categories: (1) a medium or large MS4 that services a population of greater than 100,000 or 250,000 respectively; or (2) a small MS4 that is "interrelated" to a medium or large MS4; or (3) an MS4 which contributes to a violation of a water quality standard; or (4) an MS4 which is a significant contributor of pollutants to waters of the U.S.
- 2. Legal and Regulatory Authority.** This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations (Code of Federal Regulations [CFR] Title 40, Part 122 [40 CFR 122]) adopted by the United States Environmental Protection Agency (USEPA), and chapter 5.5, division 7 of the California Water Code (CWC) (commencing with section 13370). This Order serves as an NPDES permit for discharges from MS4s to surface waters. This Order also serves as waste discharge requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the CWC (commencing with section 13260).
- 3. CWA Technology Based Standards and Prohibitions.** Pursuant to CWA section 402(p)(3)(B), NPDES permits for storm water discharges from MS4s must include requirements to effectively prohibit non-storm water discharges into MS4s, and require controls to reduce the discharge of pollutants in storm water to the maximum extent practicable (MEP).
- 4. CWA NPDES Permit Conditions.** Pursuant to CWA section 402(a)(2), NPDES permits must prescribe conditions to assure compliance with CWA section 402(p)(3)(B) and 40 CFR 122.26(d)(2)(iv)(B). This Order prescribes conditions to assure compliance with the CWA requirements for owners and operators of MS4s to effectively prohibit non-storm water discharges in to the MS4s, and require controls to reduce the discharge of pollutants in storm water from the MS4s to the MEP.
- 5. CWA and CWC Monitoring Requirements.** Pursuant to 40 CFR 122.48, NPDES permits must specify requirements for recording and reporting monitoring results. In addition, CWC sections 13267 and 13383 authorize the San Diego Water Board to require technical and monitoring reports. This Order establishes monitoring and reporting requirements to implement federal and State requirements.

ADMINISTRATIVE DRAFT

- 6. Total Maximum Daily Loads.** CWA section 303(d)(1)(A) requires that “[e]ach state shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard applicable to such waters.” The CWA also requires states to establish a priority ranking of impaired water bodies known as Water Quality Limited Segments and to establish Total Maximum Daily Loads (TMDLs) for such waters. This priority list of impaired water bodies is called the Clean Water Act Section 303(d) List of Water Quality Limited Segments, commonly referred to as the 303(d) List. The CWA requires the 303(d) List to be updated every two years. Requirements of this Order implement the TMDLs adopted by the San Diego Water Board and approved by USEPA.
- 7. Non-Storm Water Discharges.** Pursuant to CWA section 402(p)(3)(B)(ii), this Order requires each Copermittee to effectively prohibit discharges of non-storm water into its MS4. Nevertheless, non-storm water discharges into and from the MS4s continue to be reported to the San Diego Water Board by the Copermittees and other persons. Monitoring conducted by the Copermittees, as well as the 303(d) List, have identified dry weather, non-storm water discharges from the MS4s as a source of pollutants causing or contributing to receiving water quality impairments in the San Diego Region. The federal regulations [40 CFR 122.26(d)(2)(iv)(B)] require the Copermittees to have a program to prevent all types of non-storm water discharges, or illicit discharges, from entering the MS4. The federal regulations, however, allow for specific categories of non-storm water discharges or flows to be addressed as illicit discharges only where such discharges are identified as sources of pollutants to waters of the U.S.
- 8. In-Stream Treatment Systems.** Pursuant to federal regulations [40 CFR 131.10(a)], in no case shall a state adopt waste transport or waste assimilation as a designated use for any waters of the U.S. Authorizing the construction of a runoff treatment facility within a water of the U.S., or using the water body itself as a treatment system or for conveyance to a treatment system, would be tantamount to accepting waste assimilation as an appropriate use for that water body. Runoff treatment must occur prior to the discharge of runoff into receiving waters. Treatment control best management practices (BMPs) must not be constructed in waters of the U.S. Construction, operation, and maintenance of a pollution control facility in a water body can negatively impact the physical, chemical, and biological integrity, as well as the beneficial uses, of the water body.

DISCHARGE CHARACTERISTICS AND RUNOFF MANAGEMENT

- 9. Point Source Discharges of Pollutants.** Discharges from the MS4s may contain waste, as defined in the CWC, and pollutants that adversely affect the quality of the waters of the state. A discharge from an MS4 is a “discharge of pollutants from a point source” into waters of the U.S. as defined in the CWA. Storm water and non-storm water discharges from the MS4s may contain pollutants that cause or threaten to cause a violation of surface water quality standards, as outlined in the Basin Plan. Storm water and non-storm water discharges from the MS4s are subject to the

ADMINISTRATIVE DRAFT

conditions and requirements established in the Basin Plan for point source discharges.

- 10. Potential Beneficial Use Impairment.** The discharge of pollutants and/or increased flows from MS4s may cause or threaten to cause the concentration of pollutants to exceed applicable receiving water quality objectives and impair or threaten to impair designated beneficial uses resulting in a condition of pollution, contamination, or nuisance.
- 11. Pollutants Generated by Land Development.** Land development has created and continues to create new sources of non-storm water discharges and pollutants in storm water discharges as human population density increases. This brings higher levels of car emissions, car maintenance wastes, municipal sewage, pesticides, household hazardous wastes, pet wastes, and trash. Pollutants from these sources are dumped or washed off the surface by non-storm water or storm water flows into and from the MS4s. When development converts natural vegetated pervious ground cover to impervious surfaces such as paved highways, streets, rooftops, and parking lots, the natural absorption and infiltration abilities of the land are lost. Therefore, runoff leaving a developed area not subject to SUSMP or HMP requirements contains greater pollutant loads and is significantly greater in runoff volume, velocity, and peak flow rate than pre-development runoff from the same area.
- 12. Runoff Discharges to Receiving Waters.** The MS4s discharge runoff into lakes, drinking water reservoirs, rivers, streams, creeks, bays, estuaries, coastal lagoons, the Pacific Ocean, and tributaries thereto within the eleven hydrologic units comprising the San Diego Region. Numerous receiving water bodies and water body segments have been designated as impaired by the San Diego Water Board pursuant to CWA section 303(d).
- 13. Pollutants in Runoff.** The most common pollutants in runoff discharged from the MS4s include total suspended solids, sediment, 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 (decaying vegetation, animal waste), detergents, and trash.
- 14. Human Health and Aquatic Life Impairment.** Pollutants in runoff discharges from the MS4s can threaten and adversely affect human health and aquatic organisms. Adverse responses of organisms to chemicals or physical agents in runoff range from physiological responses such as impaired reproduction or growth anomalies to mortality. Increased volume, velocity, rate, and duration of storm water runoff greatly accelerate the erosion of downstream natural channels. This alters stream channels and habitats and can adversely affect aquatic and terrestrial organisms.
- 15. Water Quality Effects.** The Copermittees' water quality monitoring data submitted to date documents persistent exceedances of Basin Plan water quality objectives for runoff-related pollutants at various watershed monitoring stations. Persistent toxicity

ADMINISTRATIVE DRAFT

has also been observed at several watershed monitoring stations. In addition, bioassessment data indicate that the majority of the monitored receiving waters have Poor to Very Poor Index of Biotic Integrity (IBI) ratings. These findings indicate that runoff discharges are causing or contributing to water quality impairments, and are a leading cause of such impairments in the San Diego Region. Non-storm water discharges from the MS4s have been shown to contribute significant levels of pollutants and flow in arid, developed Southern California watersheds, and contribute significantly to exceedances of applicable receiving water quality objectives.

16. Non-Storm Water Discharges. Pursuant to CWA 402(p)(3)(B)(ii), non-storm water discharges into the MS4s must be effectively prohibited.

17. Best Management Practices. Pollutants can be effectively reduced in runoff by the application of a combination of pollution prevention, source control, and treatment control BMPs. Pollution prevention is the reduction or elimination of pollutant generation at its source and is the best “first line of defense”. Source control BMPs (both structural and non-structural) minimize the contact between pollutants and runoff, therefore keeping pollutants onsite and out of receiving waters. Treatment control BMPs remove pollutants that have been mobilized by storm water or non-storm water flows.

18. BMP Implementation. Runoff needs to be addressed during the three major phases of development (planning, construction, and use) in order to reduce the discharge of storm water pollutants to the MEP, effectively prohibit non-storm water discharges, and protect receiving waters. Development which is not guided by water quality planning policies and principles can result in increased pollutant load discharges, flow rates, and flow durations which can negatively affect receiving water beneficial uses. Construction sites without adequate BMP implementation result in sediment runoff rates which greatly exceed natural erosion rates of undisturbed lands, causing siltation and impairment of receiving waters. Existing development can generate substantial pollutant loads which are discharged in runoff to receiving waters.

19. Long Term Planning and Implementation. Federal regulations require municipal storm water permits to expire 5 years from adoption, after which the permit must be renewed and reissued. The San Diego Water Board recognizes that the degradation of water quality and impacts to beneficial uses of the waters in the San Diego Region occurred over several decades. The San Diego Water Board further recognizes that a decade or more may be necessary to realize demonstrable improvement to the quality of waters in the Region. This Order includes a long term planning and implementation approach that will require more than a single permit term to complete.

ADMINISTRATIVE DRAFT**WATER QUALITY STANDARDS**

20. Basin Plan. The San Diego Water Board adopted a Water Quality Control Plan for the San Diego Basin (Basin Plan) on September 8, 1994 that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for receiving waters addressed through the plan. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the San Diego Water Board and approved by the State Water Board. Requirements of this Order implement the Basin Plan.

The Basin Plan identifies the following existing and potential beneficial uses for inland surface waters in the San Diego Region: Municipal and Domestic Supply (MUN), Agricultural Supply (AGR), Industrial Process Supply (PROC), Industrial Service Supply (IND), Ground Water Recharge (GWR), Contact Water Recreation (REC1), Non-contact Water Recreation (REC2), Warm Freshwater Habitat (WARM), Cold Freshwater Habitat (COLD), Wildlife Habitat (WILD), Rare, Threatened, or Endangered Species (RARE), Freshwater Replenishment (FRSH), Hydropower Generation (POW), and Preservation of Biological Habitats of Special Significance (BIOL). The following additional existing and potential beneficial uses are identified for coastal waters of the San Diego Region: Navigation (NAV), Commercial and Sport Fishing (COMM), Estuarine Habitat (EST), Marine Habitat (MAR), Aquaculture (AQUA), Migration of Aquatic Organisms (MIGR), Spawning, Reproduction, and/or Early Development (SPWN), and Shellfish Harvesting (SHELL).

21. Ocean Plan. The State Water Board adopted the Water Quality Control Plan for Ocean Waters of California, California Ocean Plan (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Requirements of this Order implement the Ocean Plan.

The Ocean Plan identifies the following beneficial uses of ocean waters of the state to be protected: Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance; rare and endangered species; marine habitat; fish spawning and shellfish harvesting

22. Sediment Quality Control Plan. On September 16, 2008, the State Water Board adopted the Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality (Sediment Quality Control Plan). The Sediment Quality Control Plan became effective on August 25, 2009. The Sediment Quality Control Plan establishes 1) narrative sediment quality objectives for benthic community protection from exposure to contaminants in sediment and to protect human health, and 2) a program of implementation using a multiple lines of evidence approach to interpret

ADMINISTRATIVE DRAFT

the narrative sediment quality objectives. Requirements of this Order implement the Sediment Quality Control Plan.

23. National Toxics Rule and California Toxics Rule. USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About forty criteria in the National toxics Rule (NTR) applied in California. On May 18, 2000, USEPA adopted the California Toxics Rule (CTR). The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants

24. Antidegradation Policy. This Order is in conformance with the federal Antidegradation Policy described in 40 CFR 131.12, and State Water Board Resolution No. 68-16, *Statement of Policy with Respect to Maintaining High Quality Waters in California*. Federal regulations at 40 CFR 131.12 require that the State water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The San Diego Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies.

CONSIDERATIONS UNDER FEDERAL LAW

25. Coastal Zone Act Reauthorization Amendments. Section 6217(g) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires coastal states with approved coastal zone management programs to address non-point pollution impacting or threatening coastal water quality. CZARA addresses five sources of non-point pollution: agriculture, silviculture, urban, marinas, and hydromodification. This Order addresses the management measures required for the urban category, with the exception of septic systems. The runoff management programs developed pursuant to this Order fulfill the need for coastal cities to develop a runoff non-point source plan identified in the Non-Point Source Program Strategy and Implementation Plan. The San Diego Water Board addresses septic systems through the administration of other programs.

26. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 USCA sections 1531 to 1544). This Order requires compliance with receiving water limits, and other requirements to protect the beneficial uses of waters of the State. The Copermitttees are responsible for meeting all requirements of the applicable Endangered Species Act.

ADMINISTRATIVE DRAFT*CONSIDERATIONS UNDER STATE LAW*

- 27. Unfunded Mandates.** This Order does not constitute an unfunded local government mandate subject to subvention under Article XIII B, Section (6) of the California Constitution for several reasons, including, but not limited to, the following:
- a. This Order implements federally mandated requirements under CWA section 402. (33 USC 1342(p)(3)(B).)
 - b. The local agency Copermittees' obligations under this Order are similar to, and in many respects less stringent than, the obligations of non-governmental and new dischargers who are issued NPDES permits for storm water and non-storm water discharges.
 - c. The local agency Copermittees have the authority to levy service charges, fees, or assessments sufficient to pay for compliance with this Order.
 - d. The Copermittees have requested permit coverage in lieu of compliance with the complete prohibition against the discharge of pollutants contained in CWA section 301(a) (33 USC 1311(a)) and in lieu of numeric restrictions on their MS4 discharges (i.e. effluent limitations).
 - e. The local agencies' responsibility for preventing discharges of waste that can create conditions of pollution or nuisance from conveyances that are within their ownership or control under State law predates the enactment of Article XIII B, Section (6) of the California Constitution.
 - f. The provisions of this Order to implement TMDLs are federal mandates. The CWA requires TMDLs to be developed for water bodies that do not meet federal water quality standards. (33 USC 1313(d).) Once the USEPA or a state develops a TMDL, federal law requires that permits must contain effluent limitations consistent with the assumptions and requirements of any applicable wasteload allocation. (40 CFR 122.44(d)(1)(vii)(B).)

- 28. California Environmental Quality Act.** The issuance of WDRs and an NPDES permit for the discharge of runoff from MS4s to waters of the U.S. is exempt from the requirement for preparation of environmental documents under the California Environmental Quality Act (CEQA) (Public Resources Code, Division 13, Chapter 3, section 21000 et seq.) in accordance with CWC section 13389.

STATE WATER BOARD DECISIONS

- 29. Compliance with Prohibitions and Limitations.** The receiving water limitation language specified in this Order is consistent with language recommended by the USEPA and established in State Water Board Order WQ-99-05, *Own Motion Review of the Petition of Environmental Health Coalition to Review Waste Discharge Requirements Order No. 96-03, NPDES Permit No. CAS0108740*, adopted by the State Water Board on June 17, 1999. The receiving water limitation language in this Order requires compliance with water quality standards, which for storm water discharges is to be achieved through an iterative approach requiring the

ADMINISTRATIVE DRAFT

implementation of improved and better-tailored BMPs over time. Implementation of the iterative approach to comply with receiving water limitations based on applicable water quality standards is necessary to ensure that storm water discharges from the MS4 ultimately will not cause or contribute to violations of water quality standards and the creation of conditions of pollution, contamination, or nuisance.

30. Special Conditions for Areas of Special Biological Significance. On March 20, 2012, the State Water Board approved Resolution No. 2012-0012 approving an exception to the Ocean Plan prohibition against discharges to Areas of Special Biological Significance (ASBS) for certain nonpoint source discharges and NPDES permitted municipal storm water discharges. The Resolution requires monitoring and testing of marine aquatic life and water quality in several ASBS to protect California's coastline during storms when rain water overflows into coastal waters. Specific terms, prohibitions, and special conditions were adopted to provide special protections for marine aquatic life and natural water quality in ASBSs. The City of San Diego's municipal storm water discharges to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's municipal storm water discharges to the Heisler Park ASBS are subject terms and conditions of the Resolution. The Special Protections contained in Attachment B to the Resolution applicable to these discharges are hereby incorporated in this Order as if fully set forth herein.

ADMINISTRATIVE FINDINGS

31. Executive Officer Delegation of Authority. The San Diego Water Board by prior resolution has delegated all matters that may legally be delegated to its Executive Officer to act on its behalf pursuant to CWC section 13223. Therefore, the Executive Officer is authorized to act on the San Diego Water Board's behalf on any matter within this Order unless such delegation is unlawful under CWC section 13223 or this Order explicitly states otherwise.

32. Standard Provisions. Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR 122.42, are provided in [Attachment B](#) to this Order.

33. Fact Sheet. The Fact Sheet 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 hereby incorporated into this Order and constitutes part of the Findings of this Order.

34. Public Notice. The San Diego Water Board notified the Copermitees, and interested agencies and persons of its intent to prescribe WDRs for MS4 discharges of pollutants 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.

35. Public Hearing. The San Diego Water Board held a public hearing on Month Day, 2012 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.

ADMINISTRATIVE DRAFT**II. PROVISIONS**

THEREFORE, IT IS HEREBY ORDERED that the Copermittees, in order to meet the provisions contained in division 7 of the CWC and regulations adopted thereunder, and the provisions of the CWA and regulations adopted thereunder, must each comply with the following:

A. PROHIBITIONS AND LIMITATIONS

[NOTE: The receiving water limitations language contained in provision A raises significant legal and policy issues that require further discussion and revision. The receiving water limitations language in Provision A generally follows the language required by the State Board's precedential Order WQ 99-05. In the State Board's precedential order WQ 2001-15, the State Board determined that the mandatory receiving water limitations language found in Order 99-05 "does not require strict compliance with water quality standards." Instead, the State Board concluded that compliance with water quality standards is "to be achieved over time, through an iterative approach requiring improved BMPs." Despite this policy statement from the State Board, in 2011, the 9th Circuit interpreted the State Board's mandatory language in a manner that requires strict and immediate compliance with water quality standards. The State Board has recently scheduled a workshop for November 20 to address the receiving water limitations language. The San Diego Copermittees support revisions to the receiving water limitations language that align the language with the State Board's policy that compliance with water quality standards is "to be achieved over time, through an iterative approach requiring improved BMPs." Storm water organizations such as CASQA have already submitted language to the State Board designed to address this conflict between the State Board's policy and the 9th Circuit decision. The redlines submitted below are not designed to address all the issues raised by this conflict. Instead, the redlines address, for this draft permit, how compliance with water quality standards will be achieved for water bodies covered by an adopted TMDL or covered in the WQIPs. The San Diego Copermittees will participate in the State Board process regarding the larger issues involving the receiving water limitations language, and encourage the Regional Board to do so as well. The San Diego Copermittees reserve the right to submit additional language intended to align all of the receiving water limitations language in this draft permit with State Board policy as the State Board workshop process evolves. At this time, however, the San Diego Copermittees believe it is premature to submit such language given the pending State Board process and the proposed CASQA language.]

The purpose of this provision is to describe the conditions under which storm water and non-storm water discharges into and from MS4s are prohibited or limited. The goal of this provision is to address the impacts of MS4 discharges so that such discharges do not impair water quality and designated beneficial uses of waters of the U.S. This goal will be accomplished through implementation of control measures that effectively prohibit non-storm water discharges into and from the Copermittees' MS4s, and reduce pollutants in storm water discharges from the Copermittees' MS4s to the MEP. The

ADMINISTRATIVE DRAFT

process for determination of compliance with the Discharge Prohibitions (A.1), Receiving Water Limitations (A.2), and Effluent Limitations (A.3) is defined in Provision A.4.

1. Discharge Prohibitions

- a. Discharges from MS4s owned and operated by a Copermittee in a manner causing, or threatening to cause, a condition of pollution, contamination, or nuisance in receiving waters of the U.S. are effectively prohibited, unless the Copermittee is addressing the discharges through Provision A.1.e or A.4 through the process set forth in Provision A.4.
- b. Non-storm water discharges into MS4s are effectively prohibited, unless such discharges are either authorized by a separate NPDES permit, or the discharge is a category of non-storm water discharges or flows that must be addressed pursuant to Provisions [E.2.a.\(1\)-\(5\)](#) of this Order.
- c. Discharges from MS4s are subject to all waste discharge prohibitions in the Basin Plan, included in [Attachment A](#) to this Order, unless the Copermittee is addressing the discharges through Provision A.1.e or A.4 through the process set forth in Provision A.4.
- d. Storm water discharges from the City of San Diego's MS4 to the San Diego Marine Life Refuge in La Jolla, and the City of Laguna Beach's MS4 to the Heisler Park ASBS are authorized under this Order subject to the Special Protections contained in Attachment B to State Water Board Resolution No. 2012-0012 applicable to these discharges, included in [Attachment A](#) to this Order. All other discharges from MS4s to ASBS are prohibited, unless authorized by a subsequent order.
- e. For discharges associated with water body pollutant combinations addressed in a TMDL in Attachment E of this Order, the affected Copermittees shall achieve compliance as outlined in Attachment E (Total Maximum Daily Load Provisions).

2. Receiving Water Limitations

- a. Discharges from MS4s owned and operated by a Copermittee must not cause or contribute to the violation of water quality standards in any receiving waters, including all applicable provisions contained in the list below including any modifications unless the Copermittee is addressing the discharges through Provision A.2.b or A.4 through the process set forth in Provision A.4:
 - (1) The San Diego Water Board's Basin Plan, including beneficial uses, water quality objectives, and implementation plans;
 - (2) State Water Board plans for water quality control including the following:

ADMINISTRATIVE DRAFT

- (a) Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries (Thermal Plan), and
 - (b) The Ocean Plan, including beneficial uses, water quality objectives, and implementation plans;
- (3) State Water Board policies for water and sediment quality control including the following:
- (a) Water Quality Control Policy for the Enclosed Bays and Estuaries of California,
 - (b) Sediment Quality Control Plan which includes the following narrative objectives for bays and estuaries:
 - (i) Pollutants in sediments shall not be present in quantities that, alone or in combination, are toxic to benthic communities, and
 - (ii) Pollutants shall not be present in sediments at levels that will bioaccumulate in aquatic life to levels that are harmful to human health,
 - (c) The Statement of Policy with Respect to Maintaining High Quality of Waters in California (State Water Board Resolution No. 68-16).
- (4) Priority pollutant criteria promulgated by the USEPA through the following:
- (a) National Toxics Rule (NTR)¹ (promulgated on December 22, 1992 and amended on May 4, 1995), and
 - (b) California Toxics Rule (CTR)^{2,3}
- b.** For receiving water limitations associated with a water body pollutant combination addressed in a TMDL in Attachment E of this Order, the Copermittees shall achieve compliance as outlined in Attachment E (Total Maximum Daily Load Provisions).

3. Effluent Limitations

- a.** Technology Based Effluent Limits
Pollutants in storm water discharges from MS4s must be reduced to the MEP⁴,

¹ 40 CFR 131.36

² 65 Federal Register 31682-31719 (May 18, 2000), adding Section 131.38 to 40 CFR

³ If a water quality objective and a CTR criterion are in effect for the same priority pollutant, the more stringent of the two applies, unless a previous regulatory action (i.e., TMDL) has specified otherwise.

⁴ This does not apply to MS4 discharges which receive subsequent treatment to reduce pollutants in storm water discharges to the MEP prior to entering receiving waters (e.g., low flow diversions to the

ADMINISTRATIVE DRAFT

through timely implementation of control measures and other actions as specified in Provisions **B** and **E** as described in Provision A.4.

b. Water Quality Based Effluent Limits

For a water body-pollutant combination addressed in a TMDL in Attachment E of this Order, pollutants in discharges from MS4s must be reduced to comply with effluent limitations expressed as WQBELs required to meet the WLAs established for those TMDLs as described in Provision A.4 and **Attachment E** to this Order, pursuant to the applicable TMDL compliance schedules.

4. Compliance with Discharge Prohibitions, Receiving Water Limitations, and Effluent Limitations

Each Copermittee must comply with the discharge prohibitions (A.1), receiving water limitations (A.2), and effluent limitations (A.3) of this Order through timely implementation of strategies, control measures, and other actions as specified in Provisions **B** and **E** of this Order, including any modifications. The Water Quality Improvement Plans described in Provision B shall be designed to achieve compliance with the discharge prohibitions, receiving water limitations, and effluent limitations. Copermittees shall be considered in compliance with A.1, A.2, and A.3 unless the Regional Board has denied approval of a Water Quality Improvement Plan or subsequent update as described in Provisions B and F.1.

a. If exceedance(s) of water quality standards persist in receiving waters notwithstanding implementation of this Order, the Copermittees must comply with the following procedures:

(1) For pollutants that are not in the process of being addressed via specific scheduled actions in a Water Quality Improvement Plan, upon a determination by either the Copermittees or the San Diego Water Board that discharges from the MS4 are causing or contributing to an exceedance of an applicable water quality standard, the Copermittees must submit the following updates to the Water Quality Improvement Plan required under Provision **B** as part of the Annual Report required under Provision **F.3.b** or Water Quality Improvement Plan update Provision B.5.a, unless the San Diego Water Board either: 1) directs an earlier submittal; or 2) allows for the adoption of a forthcoming TMDL to establish wasteload allocations that will form the basis of revisions to the Water Quality Improvement Plan:

(a) The water quality improvement strategies being implemented that are effective and will continue to be implemented;

sanitary sewer). Runoff treatment must occur prior to the discharge of runoff into receiving waters per Finding 8.

ADMINISTRATIVE DRAFT

- (b) Water quality improvement strategies (e.g. BMPs, retrofitting projects, stream and/or habitat rehabilitation, restoration projects, etc.) that will be implemented to reduce or eliminate any pollutants or conditions that are causing or contributing to the exceedance of water quality standards;
 - (c) Updates to the schedule for implementation of the existing and additional water quality improvement strategies; and
 - (d) Updates, when necessary, to the schedule for achieving compliance with the discharge prohibitions and receiving water limitations of this Order;
 - (e) As described in Provision B.6, Copermittees must submit requested modifications to the Water Quality Improvement Plan either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. ;;
 - (f) As described in Provision B.6, upon San Diego Water Board determination that the update to the Water Quality Improvement Plan meets the requirements of this Order, the Copermittees must submit requested modifications to the jurisdictional runoff management programs either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b.; and
 - (g) The Copermittees must implement the revised jurisdictional runoff management programs and updated jurisdictional monitoring and assessment component of the Water Quality Improvement Plan.
- (2) For pollutants in the process of being addressed via a specific, scheduled program in a Water Quality Improvement Plan, the Copermittee(s) shall continue to implement that program as described in the Water Quality Improvement Plan approved by the Regional Board;
- b.** So long as the Copermittees have complied with the procedures set forth above and are implementing the Water Quality Improvement Plan(s) approved by the Regional Board, the Copermittees do not have to repeat the same procedure for continuing or recurring exceedances of the same discharge prohibitions, effluent limitations, and receiving water limitations unless directed to by the San Diego Water Board.

ADMINISTRATIVE DRAFT**B. WATER QUALITY IMPROVEMENT PLANS**

The purpose of this provision is to develop Water Quality Improvement Plans that guide the Copermittees' jurisdictional runoff management program implementation efforts towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. The goal of the Water Quality Improvement Plan is to 1) effectively prohibit non-storm water discharges into the MS4s, 2) reduce pollutants in storm water discharges from the MS4s to the MEP, and 3) support attainment and reasonable protection, preservation and enhancement of water quality and designated beneficial uses of waters of the state. Therefore, implementation of the WQIPs also provides the basis for complying with Provisions A.1 and A.3, as described in Provision A.4. This goal will be accomplished through an adaptive planning and management process that identifies the highest water quality priorities within a watershed and implements strategies, control measures, and BMPs to achieve improvements in the quality of discharges from the MS4s and receiving waters.

The Copermittees must develop Water Quality Improvement Plans for each Watershed Management Area that 1) prioritize water quality conditions resulting from the Copermittee's MS4 discharges in each Watershed Management Area, 2) identify MS4 pollutant sources associated with the water quality priorities, 3) define numeric goals and schedules to address water quality priorities, 4) describe water quality improvement strategies to achieve numeric goals, and 5) develop and execute a coordinated monitoring and assessment program to facilitate adaptive management of the Water Quality Improvement Plans and determine progress towards achieving improved water quality in MS4 discharges and receiving waters

The Copermittees must submit Water Quality Improvement Plans for public review and Regional Board Executive Officer review and approval per the schedule outline in Provision B.

1. Watershed Management Areas

The Copermittees must develop Water Quality Improvement Plans for each of the Watershed Management Areas in [Table B-1](#). A total of ten Water Quality Improvement Plans must be developed for the San Diego Region.

ADMINISTRATIVE DRAFT**Table B-1. Watershed Management Areas**

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
South Orange County	San Juan (901.00)	Aliso Creek San Juan Creek San Mateo Creek Pacific Ocean	- City of Aliso Viejo ¹ - City of Dana Point ¹ - City of Laguna Beach ¹ - City of Laguna Hills ¹ - City of Laguna Niguel ¹ - City of Laguna Woods ¹ - City of Lake Forest ¹ - City of Mission Viejo ¹ - City of Rancho Santa Margarita ¹ - City of San Clemente ¹ - City of San Juan Capistrano ¹ - County of Orange ¹ - Orange County Flood Control District ¹
Santa Margarita River	Santa Margarita (902.00)	Murrieta Creek Temecula Creek Santa Margarita River Santa Margarita Lagoon Pacific Ocean	- City of Murrieta ² - City of Temecula ² - City of Wildomar ² - County of Riverside ² - County of San Diego ³ - Riverside County Flood Control and Water Conservation District ²
San Luis Rey River	San Luis Rey (903.00)	San Luis Rey River San Luis Rey Estuary Pacific Ocean	- City of Oceanside - City of Vista - County of San Diego
Carlsbad	Carlsbad (904.00)	Loma Alta Slough Buena Vista Lagoon Agua Hedionda Lagoon Batiquitos Lagoon San Elijo Lagoon Pacific Ocean	- City of Carlsbad - City of Encinitas - City of Escondido - City of Oceanside - City of San Marcos - City of Solana Beach - City of Vista - County of San Diego
San Dieguito River	San Dieguito (905.00)	San Dieguito River San Dieguito Lagoon Pacific Ocean	- City of Del Mar - City of Escondido - City of Poway - City of San Diego - City of Solana Beach - County of San Diego
Penasquitos	Reservoir HA (906.10) Poway HA (906.20) Miramar HA (906.40)	Los Penasquitos Lagoon Pacific Ocean	- City of Del Mar - City of Poway - City of San Diego - County of San Diego
Mission Bay	Scripps HA (906.30) Miramar HA (906.40) Tecolote HA (906.50)	Mission Bay Pacific Ocean	-City of San Diego
San Diego River	San Diego (907.00)	San Diego River Pacific Ocean	- City of El Cajon - City of La Mesa - City of San Diego - City of Santee - County of San Diego

ADMINISTRATIVE DRAFT**Table B-1. Watershed Management Areas**

Watershed Management Area	Hydrologic Unit(s)	Major Surface Water Bodies	Responsible Copermittees
San Diego Bay	Pueblo San Diego (908.00) Sweetwater (909.00) Otay (910.00)	Sweetwater River Otay River San Diego Bay Pacific Ocean	- City of Chula Vista - City of Coronado - City of Imperial Beach - City of La Mesa - City of Lemon Grove - City of National City - City of San Diego - County of San Diego - San Diego County - Regional Airport Authority - Unified Port of San Diego
Tijuana River	Tijuana (911.00)	Tijuana River Tijuana Estuary Pacific Ocean	- City of Imperial Beach - City of San Diego - County of San Diego

Notes:

1. The Orange County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2009-0002, or earlier if the Orange County Copermittees meet the conditions in Provision [F.6](#).
2. The Riverside County Copermittees will be enrolled under this Order upon expiration of Order No. R9-2010-0016, or earlier if the Riverside County Copermittees meet the conditions in Provision [F.6](#).
3. The County of San Diego will not be required to implement the requirements of Provision [B](#) for the Santa Margarita River Watershed Management Area until the Riverside County Copermittees are enrolled under this Order. Until then, the County of San Diego is responsible for implementing and complying with the requirements of Provisions [D.1](#), [D.4.a.\(1\)&\(3\)](#), [E](#), [F.2.a-b](#), [F.3.b](#), and [F.4](#) for the areas of the Santa Margarita River Watershed Management Area within its jurisdiction.

2. Identification of Water Quality Priorities

The Copermittees must identify the water quality priorities within each Watershed Management Area that will be addressed by the Water Quality Improvement Plan. Where appropriate, Watershed Management Areas may be separated into subwatersheds to focus water quality prioritization and jurisdictional implementation efforts by receiving water.

a. ASSESSMENT OF RECEIVING WATER CONDITIONS

The Copermittees must consider the following, at a minimum, to support the identification of water quality priorities based on the impacts of MS4 discharges on receiving water beneficial uses:

- (1) Receiving waters listed as impaired on the CWA Section 303(d) List of Water Quality Limited Segments (303(d) List);
- (2) TMDLs adopted and under development by the San Diego Water Board;
- (3) The requirements of Provision [A.2](#);
- (4) Receiving waters recognized as sensitive or highly valued by the Copermittees, including estuaries designated under the National Estuary Program under CWA section 320, wetlands defined by the State or U.S. Fish and Wildlife Service's National Wetlands Inventory as wetlands, and

ADMINISTRATIVE DRAFT

receiving waters identified as ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 ([Attachment A](#));

- (5) Water quality standards established in the Basin Plan;
- (6) Known historical versus current physical, chemical, and biological water quality conditions;
- (7) Available, relevant, and appropriately collected physical, chemical, and biological receiving water monitoring data meeting appropriate QA/QC standards, including data describing:
 - (a) Chemical constituents;
 - (b) Water quality parameters (i.e. pH, temperature, conductivity, etc.);
 - (c) Toxicity Identification Evaluations for both receiving water column and sediment;
 - (d) Trash impacts;
 - (e) Bioassessments; and
 - (f) Physical habitat.
- (8) Available evidence of erosional impacts in receiving waters due to accelerated flows (i.e. hydromodification);
- (9) Available evidence of adverse impacts to the chemical, physical, and biological integrity of receiving waters; and
- (10) The potential for long-term achievement and maintenance of beneficial use attainment in the Watershed Management Area.

b. ASSESSMENT OF MS4 DISCHARGE QUALITY AND IMPACTS

To support the identification of priorities based on the impacts of MS4 discharges on receiving water beneficial uses, the Copermitees must review appropriately collected MS4 discharge quality data and consider the extent to which MS4s cause or contribute to the adverse impacts to receiving water beneficial uses identified in B.2.a. Considerations include:

- (1) Locations of the Copermitees' MS4 discharges with respect to receiving waters;
- (2) MS4 discharge quality results relevant to impacts in receiving waters and action levels, including the temporal and geographic variation of the results:

ADMINISTRATIVE DRAFT

- (3) The requirements of Provisions A.1 and A.3.; and
- (4) Whether MS4 discharge quality is sufficiently well known or other information is available to assess whether MS4 discharges are causing or contributing to specific receiving water conditions, or whether additional data need to be collected through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan.

c. IDENTIFICATION OF PRIORITY RECEIVING WATER CONDITIONS

The Copermittees must use the information gathered in Provision [B.2.a](#) and [B.2.b](#). to develop a list of water quality priorities as pollutants and/or receiving water conditions that are the highest threat to receiving water quality or that most adversely affect the physical, chemical, and biological integrity of receiving waters. The Copermittees must identify the highest water quality priorities to be addressed by the Water Quality Improvement Plan, and describe the reasoning for selecting a subset of receiving water conditions as the highest priority(ies) The Water Quality Improvement Plans shall describe the following for the highest priority receiving water condition:

- (1) The beneficial use(s) and pollutant(s) associated with the priority receiving water condition(s);
- (2) The geographic extent of the priority receiving water condition(s) within the WMA, if known;
- (3) The Copermittees with MS4s that contribute discharges to the priority water receiving condition(s);
- (4) The temporal extent of the priority receiving condition(s) (i.e., dry weather and/or wet weather); and
- (5) Whether receiving waters have been monitored sufficiently to adequately characterize the priority receiving condition(s), including a consideration of spatial and temporal variation.

d. MS4 POLLUTANT SOURCE IDENTIFICATION

The Copermittees must identify and prioritize known and suspected storm water and non-storm water pollutant sources within the MS4 associated with the highest priority receiving water conditions identified under B.2.c. The identification of known and suspected sources of the highest water quality priorities as identified for Provision B.2.c shall consider the following :

- (1) Land uses and their potential contribution to the highest priority receiving water conditions;

ADMINISTRATIVE DRAFT

- (2) Pollutant generating facilities, areas, and/or activities within the Watershed Management Area;
- (3) Locations of the Copermittees' MS4s outfalls.
- (4) Review of available data, including:
 - (a) Findings from the Copermittees' illicit discharge detection and elimination programs,
 - (b) Findings from the Copermittees' MS4 outfall monitoring,
 - (c) Other available, relevant, and appropriately-collected data, information, or studies related to pollutant sources and pollutant-generating activities that contribute to the highest priority receiving water conditions identified in Provision [B.2.c](#).
- (5) Whether MS4 sources are sufficiently well known to design an effective, efficient⁵, directed control strategy, or whether additional source/stressor identification needs to be conducted through the Monitoring and Assessment Program developed as part of the Water Quality Improvement Plan to identify and prioritize sources/stressors within the watershed.

e. NUMERIC GOALS

The Copermittees must develop and incorporate interim and final numeric goals⁶ into the Water Quality Improvement Plans. Numeric goals and schedules are intended to support Water Quality Improvement Plan development and to measure progress towards addressing the highest priority receiving water conditions identified under B.2.c. Numeric goals are not enforceable compliance standards, effluent limitations, or receiving water limitations. When establishing numeric goals and corresponding schedules, the Copermittees must consider the following:

⁵ Copermittees are encouraged to use a sustainability analysis, or Triple Bottom Line analysis, that considers environmental, social and economic factors when estimating the potential efficiency of control strategies.

⁶ Interim and final numeric goals may take a variety of forms such as TMDL targets, TMDL wasteload allocations, TMDL based WQBELs incorporated in Attachment E of this Order, action levels, pollutant concentration, load reductions, number of impaired water bodies delisted from the List of Water Quality Impaired Segments, Index of Biotic Integrity (IBI) scores, or other appropriate metrics. Interim and final numeric goals are not necessarily limited to one criterion or indicator, but may include multiple criteria and/or indicators. To the extent that a goal is not based on an enforceable regulatory mechanism (i.e., TMDL, WLA), WQIP goals and schedules may be revised through the iterative process. Numeric goals are not subject to enforcement or non-compliance actions under this Order.

ADMINISTRATIVE DRAFT

- (1) Final numeric goals must be based on measureable criteria or indicators, to be achieved in the receiving waters and/or MS4 discharges for the highest priority receiving water conditions which will be capable of demonstrating progress toward the achievement of the restoration and/or protection of water quality standards in receiving waters; and
- (2) Interim numeric goals must be based on measureable criteria or indicators that can demonstrate incremental progress toward achieving the final numeric goals in the receiving waters and/or MS4 discharges.
- (3) Schedules must be adequate for measuring progress toward achieving the interim and final numeric goals required for Provisions [B.2.d](#). Schedules must incorporate the following:
 - (a) Interim dates for achieving the interim numeric goals,
 - (b) Compliance schedules for any applicable TMDLs in [Attachment E](#) to this Order,
 - (c) Compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 (see [Attachment A](#)),
 - (d) Achievement of the final numeric goals in the receiving waters and/or MS4 discharges for the highest water quality priorities must be as soon as possible, and
 - (e) Final dates for achieving the final numeric goals must not extend more than 10 years beyond the date this Order is adopted, unless the schedule includes an applicable TMDL in [Attachment E](#) to this Order⁷.

3. Water Quality Improvement Strategies and Schedules

The Copermittees must develop specific water quality improvement strategies to address the highest priority receiving water conditions identified within a Watershed Management Area. The water quality improvement strategies must address the highest water quality priorities by preventing or eliminating non-storm water discharges to and from the MS4, reducing pollutants in storm water discharges from the MS4 to the MEP, and restoring and/or protecting the water quality standards of receiving waters.

a. WATER QUALITY IMPROVEMENT STRATEGIES

⁷ Achievement of final numeric goals within 10 years represents progress towards attainment of water quality standards, but is not a requirement to fully attain all applicable water quality standards or all priority receiving water conditions within 10 years.

ADMINISTRATIVE DRAFT

The Copermittees must prioritize water quality improvement strategies, based on their likely effectiveness and efficiency, and implement measures, as appropriate, to effectively prohibit non-storm water discharges into its MS4, reduce pollutants in storm water discharges from its MS4 to the MEP, and achieve the interim and final numeric goals in accordance with the schedules in Provision [B.2.e](#).

Measures include:

- (1) Copermittee-selected activities identified in Provision E, either as described in the jurisdictional runoff management programs or as modified with justification, that will address priority receiving water conditions; and
- (2) Additional structural and/or non-structural BMPs (to include public outreach and participation programs), as selected by the Copermittee, that are designed to achieve the interim and final numeric goals identified in Provision [B.2.e](#).

b. IMPLEMENTATION SCHEDULES

- (1) The Copermittees must develop schedules for implementing the water quality improvement strategies identified under Provision [B.3.a](#) to achieve the interim and final numeric goals identified in [B.2.e](#) in the Watershed Management Area. Schedules must be developed for both the water quality improvement strategies implemented by each Copermittee within its jurisdiction and for strategies that Copermittees' choose to implement on a collaborative basis.
- (2) The Copermittees must incorporate the implementation compliance schedules for any ASBS subject to the provisions of Attachment B to State Water Board Resolution No. 2012-0012 (see [Attachment A](#)).

4. Water Quality Improvement Monitoring and Assessment

The Copermittees in each Watershed Management Area must develop an integrated Water Quality Improvement Plan Monitoring and Assessment Program that assesses: 1) progress toward achieving the numeric goals and schedules, 2) progress toward addressing the highest priority receiving water conditions for each Watershed Management Area, and 3) each Copermittee's overall efforts implementing the requirements of Provision B. The water quality improvement monitoring and assessment program must include the monitoring and assessment requirements of Provision [D](#), which may be modified for consistency with the priority receiving water conditions of each Watershed Management Area and associated Copermittees. For Watershed Management Areas with applicable TMDLs, the water quality monitoring and assessment program must incorporate the specific monitoring and assessment requirements of [Attachment E](#). For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012 (see [Attachment A](#)).

ADMINISTRATIVE DRAFT**5. Iterative and Adaptive Management Process**

The Copermittees in each Watershed Management Area must implement the iterative process, adapting the Water Quality Improvement Plan, jurisdictional runoff management programs and monitoring and assessment programs, as necessary, to become more effective and meet the requirements of Provisions A, and shall consider the following:

a. **PRIORITY RECEIVING WATER CONDITIONS AND NUMERIC GOALS**

The priority receiving water conditions and numeric goals, developed pursuant to B.2.c. and B.2.e respectively, shall guide jurisdictional implementation efforts for the duration of this Order. Recommendations for changes to priority receiving water conditions and numeric goals shall be provided in the Report of Waste Discharge and shall consider the following:

- (1) Achieving the outcome of improved water quality in MS4 discharges and receiving waters through implementation of the water quality improvement strategies identified in the Water Quality Improvement Plan;
- (2) Progress toward achieving interim and final numeric goals in receiving waters and/or MS4 discharges for the highest water quality priorities in the Watershed Management Area
- (3) New scientific information or new or updated policies or regulations that affect identified numeric goals including revised water quality objectives or TMDLs;
- (4) Spatial and temporal accuracy of monitoring data collected to inform prioritization of water quality problems and implementation measures to address the highest priority receiving water conditions;
- (5) Availability of new information and data from sources other than the jurisdictional runoff management programs within the Watershed Management Area that informs the effectiveness of the actions implemented by the Copermittees;
- (6) The factors listed in Provision B.2.a.(1)-(10);
- (7) San Diego Water Board recommendations; and
- (8) Recommendations for modifications solicited through a public participation process.

b. **WATER QUALITY IMPROVEMENT STRATEGIES AND SCHEDULES**

The water quality improvement strategies and schedules required pursuant to Provisions B.3 and B.4 shall be adapted as new information becomes available

ADMINISTRATIVE DRAFT

to inform more effective and efficient means of achieving the numeric goals established in Provision B.2.e. Copermittees shall consider adaptation to jurisdictional runoff management programs and monitoring and assessment strategies and schedules at least annually considering the following:

- (1) Changes to priority receiving water conditions and numeric goals based on recommendations from B.5.a.;
- (2) Measurable or demonstrable reductions of non-storm water discharges to each Copermittee's MS4;
- (3) Measurable or demonstrable reductions of pollutants in storm water discharges from each Copermittee's MS4 to the MEP;
- (4) Information on the MS4 sources and/or pollutant-generating activities determined to be most significantly contributing to priority receiving water conditions;
- (5) Efficiency in implementing the Water Quality Improvement Plan;
- (6) San Diego Water Board recommendations; and
- (7) Recommendations for modifications solicited through a public participation process.

6. Water Quality Improvement Plan Submittal, Implementation, and Modifications

Requirements for Water Quality Improvement Plan submittals and modifications are described in Provision F. Requirements for corresponding modifications to the jurisdictional runoff management programs and monitoring and assessment program are also described in Provision F.

Copermittees must commence with implementation of the Water Quality Improvement Plan no later than the fiscal year (July 1) following San Diego Water Board approval of the Water Quality Improvement Plan.

ADMINISTRATIVE DRAFT**C. ACTION LEVELS**

The purpose of this provision is for the Copermittees to incorporate numeric non-storm water and storm water action levels in the Water Quality Improvement Plans. The action levels shall be used to guide the following program planning efforts and measure progress towards attaining the reasonable protection, preservation, and enhancement of water quality and designated beneficial uses of waters of the state:

1. Support development and prioritization of water quality improvement strategies through the Water Quality Improvement Plans. Discharge data above action levels can be evaluated using a statistical approach considering the frequency, magnitude, and loading of discharges to the receiving waters to support development of actions and prioritization of their implementation.
2. Assist in the effective prohibition of non-stormwater discharges from the MS4 pursuant to Provision E.2.
3. Support the detection and elimination of illicit discharges to the MS4 pursuant to Provision E.2.

These goals will be accomplished through monitoring and assessing the quality of the MS4 discharges prior to and during the implementation of the Water Quality Improvement Plans. Exceedances of action levels are not subject to enforcement or non-compliance actions under this Order.

Action levels will be developed and incorporated into the Water Quality Improvement Plans (Provision B) including the Illicit Discharge Detection and Elimination (IDDE) Program (Provision E.2). Depending upon the goals/objectives for the use of the action levels and the priority receiving water conditions, the constituents and values at which they are set may differ between watersheds. Copermittees may develop Watershed Management Area specific numeric action levels for non-storm water and storm water MS4 discharges using an approach approved by the Regional Board or use the default non-stormwater and stormwater action levels prescribed within C.1 and C.2 below, respectively. The Copermittees will submit action levels as part of their Water Quality Improvement Plan(s). The action levels established as part of R9-2007-0001 will serve as the interim action levels until the Water Quality Improvement Plans are completed and approved.

ADMINISTRATIVE DRAFT**1. Non-Storm Water Action Levels**

a. The following non-storm water action levels (NALs) must be incorporated:

(1) Non-Storm Water Discharges from MS4s to Ocean Surf Zone

Table C-1. Non-Storm Water Action Levels for Discharges from MS4s to Ocean Surf Zone

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Total Coliform	MPN/100 ml	1,000	-	10,000/1,000 ¹	OP
Fecal Coliform	MPN/100 ml	200 ²	-	400	OP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	OP

Abbreviations/Acronyms

AMAL – average monthly action level
OP – Ocean Plan water quality objective

MDAL – maximum daily action level
MPN/100 ml – most probable number per 100 milliliters

Notes:

- Total coliform density NAL is 1,000 MPN/100 ml when the fecal/total coliform ratio exceeds 0.1
- Fecal coliform density NAL is 200 MPN per 100 ml during any 30 day period
- This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas”

(2) Non-Storm Water Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Table C-2. Non-Storm Water Action Levels for Discharges from MS4s to Bays, Harbors, and Lagoons/Estuaries

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Turbidity	NTU	75	-	225	OP
pH	Units	Within limit of 6.0 to 9.0 at all times			OP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	35	-	104 ³	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level
OP – Ocean Plan water quality objective
NTU – Nephelometric Turbidity Units
ug/L – micrograms per liter

MDAL – maximum daily action level
BP – Basin Plan water quality objective
MPN/100 ml – most probable number per 100 milliliters

Notes:

- Based on a minimum of not less than five samples for any 30-day period
- NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period
- This value has been set to the Basin Plan water quality objective for saltwater “designated beach areas” and is not applicable to waterbodies that are not designated REC-1.

ADMINISTRATIVE DRAFT**Table C-3. Non-Storm Water Action Levels for Priority Pollutants**

Parameter	Units	Freshwater (CTR)		Saltwater (CTR)	
		MDAL	AMAL	MDAL	AMAL
Cadmium	ug/L	**	**	16	8
Copper	ug/L	*	*	5.8	2.9
Chromium III	ug/L	**	**	-	-
Chromium VI	ug/L	16	8.1	83	41
Lead	ug/L	*	*	14	2.9
Nickel	ug/L	**	**	14	6.8
Silver	ug/L	*	*	2.2	1.1
Zinc	ug/L	*	*	95	47

Abbreviations/Acronyms:

CTR – California Toxic Rule

ug/L – micrograms per liter

AMAL – average monthly action level

MDAL – maximum daily action level

Notes:

* Action levels developed on a case-by-case basis (see below)

** Action levels developed on a case-by-case basis (see below), but calculated criteria are not to exceed Maximum Contaminant Levels (MCLs) under the California Code of Regulations, Title 22, Division 4, Chapter 15, Article 4, Section 64431

The Cadmium, Copper, Chromium (III), Lead, Nickel, Silver and Zinc NALs for MS4 discharges to freshwater receiving waters will be developed on a case-by-case basis because the freshwater criteria are based on site-specific water quality data (receiving water hardness). For these priority pollutants, the following equations (40 CFR 131.38.b.2) will be required:

Cadmium (Total Recoverable)	= exp(0.7852[ln(hardness)] - 2.715)
Chromium III (Total Recoverable)	= exp(0.8190[ln(hardness)] + .6848)
Copper (Total Recoverable)	= exp(0.8545[ln(hardness)] - 1.702)
Lead (Total Recoverable)	= exp(1.273[ln(hardness)] - 4.705)
Nickel (Total Recoverable)	= exp(.8460[ln(hardness)] + 0.0584)
Silver (Total Recoverable)	= exp(1.72[ln(hardness)] - 6.52)
Zinc (Total Recoverable)	= exp(0.8473[ln(hardness)] + 0.884)

(3) Non-Storm Water Discharges from MS4s to Inland Surface Waters

Table C-4. Non-Storm Water Action Levels for Discharges from MS4s to Inland Surface Waters

Parameter	Units	AMAL	MDAL	Instantaneous Maximum	Basis
Dissolved Oxygen	mg/L	Not less than 5.0 in WARM waters and not less than 6.0 in COLD waters			BP
Turbidity	NTU	-	20	See MDAL	BP
pH	Units	Within limit of 6.5 to 8.5 at all times			BP
Fecal Coliform	MPN/100 ml	200 ¹	-	400 ²	BP
<i>Enterococci</i>	MPN/100 ml	33	-	61 ³	BP
Total Nitrogen	mg/L	-	1.0	See MDAL	BP
Total Phosphorus	mg/L	-	0.1	See MDAL	BP
MBAS	mg/L	-	0.5	See MDAL	BP
Iron	mg/L	-	0.3	See MDAL	BP
Manganese	mg/L	-	0.05	See MDAL	BP
Priority Pollutants	ug/L	See Table C-3			

Abbreviations/Acronyms:

AMAL – average monthly action level

MDAL – maximum daily action level

BP – Basin Plan water quality objective

WARM – warm freshwater habitat beneficial use

COLD – cold freshwater habitat beneficial use

MBAS – Methylene Blue Active Substances

NTU – Nephelometric Turbidity Units

MPN/100 ml – most probable number per 100 milliliters

mg/L – milligrams per liter

ug/L – micrograms per liter

Notes:

1. Based on a minimum of not less than five samples for any 30-day period

ADMINISTRATIVE DRAFT

2. NAL is reached if more than 10 percent of total samples exceed 400 MPN per 100 ml during any 30 day period
3. This value has been set to the Basin Plan water quality objective for freshwater "designated beach areas" and is not applicable to waterbodies that are not designated REC-1.

- b.** If not identified in Provision [C.1.a](#), NALs must be identified and incorporated in the Water Quality Improvement Plan for any pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the U.S. associated with the highest water quality priorities related to non-storm water discharges from the MS4s. NALs must be based on:
- (1) Applicable water quality standards which may be dependent upon site-specific or receiving water-specific conditions or assumptions to be identified by the Copermittees; or
 - (2) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in [Attachment E](#) to this Order.
- c.** Dry weather monitoring and assessment data from MS4 outfalls collected in accordance with Provision [D.1](#) may be used to develop or revise NALs based upon watershed-specific data. Revision of NALs is subject to Regional Board EO approval.

2. Storm Water Action Levels

- a.** The following storm water action levels (SALs) for discharges of storm water from the MS4 must be incorporated:

Table C-5. Storm Water Action Levels for Discharges from MS4s to Receiving Waters

Parameter	Units	Action Level
Turbidity	NTU	126
Nitrate & Nitrite (Total)	mg/L	2.6
Phosphorus (Total P)	mg/L	1.46
Cadmium (Total Cd)*	µg/L	3.0
Copper (Total Cu)*	µg/L	127
Lead (Total Pb)*	µg/L	250
Zinc (Total Zn)*	µg/L	976

Abbreviations/Acronyms:

NTU – Nephelometric Turbidity Units
 mg/L – milligrams per liter
 ug/L – micrograms per liter

Notes:

* The sampling must include a measure of receiving water hardness at each MS4 outfall. If a total metal concentration exceeds the corresponding metals SAL in [Table C-5](#), that concentration must be compared to the California Toxics Rule criteria and the USEPA 1-hour maximum concentration for the detected level of receiving water hardness associated with that sample. If it is determined that the sample's total metal concentration for that specific metal exceeds that SAL, but does not exceed the applicable USEPA 1-hour maximum concentration criterion for the measured level of hardness, then the sample result will not be considered above the SAL for that measurement.

- b.** If not identified in Provision [C.2.a](#), SALs must be identified and incorporated in

ADMINISTRATIVE DRAFT

the Water Quality Improvement Plan for pollutants or waste constituents causing or contributing, or threatening to cause or contribute to a condition of pollution or nuisance in waters of the state associated with the highest water quality priorities related to storm water discharges from the MS4s. SALs must be based on:

- (1) Federal and State water quality guidance and/or water quality standards; or
 - (2) Site-specific or receiving water-specific conditions; or
 - (3) One of the approaches recommended by the California Water Board's Storm Water Panel in its report, "The Feasibility of Numerical Effluent Limits Applicable to Discharges of Storm Water Associated with Municipal, Industrial and Construction Activities" (June 2006).
 - (4) Applicable numeric WQBELs required to meet the WLAs established for the TMDLs in [Attachment E](#) to this Order.
- c.** Wet weather monitoring and assessment data from MS4 outfalls collected in accordance with Provision [D.1.b](#) may be used to develop or revise SALs based upon watershed-specific data. Revision of SALs is subject to San Diego Water Board approval.

ADMINISTRATIVE DRAFT**D. MONITORING AND ASSESSMENT REQUIREMENTS**

[NOTE: This section has been replaced with a proposed alternative version of provision D.]

Water quality monitoring and assessment shall be question-driven and designed to support adaptive storm water management and the iterative process outlined in Provision B. The monitoring and assessment activities shall be based on a logical hierarchy in which overall management goals help define clear management questions, which are addressed by specific monitoring activities designed to produce data targeted to defined assessment needs. The monitoring and assessment activities shall follow relevant and applicable guidance provided in the SWAMP Assessment Framework (Bernstein, 2010⁸), A Framework for Monitoring and Assessment in the San Diego Region (SDRWQCB, 2011⁹), and the Southern California Stormwater Monitoring Coalition's (SMC) Model Monitoring Program (SMC, 2004¹⁰).

The monitoring and assessment shall be designed in two phases. A transitional program shall be implemented beginning the first day of October in the year following permit adoption, and continue until the first day of October following commencement of Water Quality Improvement Plan implementation, pursuant to Provision B. The transitional ("pre-WQIP") program shall build on the experience gained implementing water quality monitoring programs under previous Orders and shall address the SMC questions as described below. The second ("post-WQIP") phase of the Monitoring and Assessment Program shall address the watershed priorities identified in the Water Quality Improvement Plans as developed for each watershed pursuant to Provision B. This phase of monitoring shall begin with implementation of the approved WQIPs. The transitional (pre-WQIP) phase of monitoring and assessment applies only to the San Diego County Copermittees; the Orange County and Riverside County permittees affected by this regional permit are expected to participate during the post-WQIP phase, after officially enrolling under the regional permit.

As a starting point, the Monitoring and Assessment Program shall be designed to address the overarching management questions developed by the SMC:

⁸ Bernstein, Brock, 2010. "SWAMP Assessment Framework." Prepared for the Surface Water Ambient Monitoring Program (SWAMP). December, 2010).

http://www.swrcb.ca.gov/water_issues/programs/swamp/docs/reports/app_c_assess_frmwrk.pdf.

⁹ SDRWQCB, 2011. "A Framework for Monitoring and Assessment in the San Diego Region." California Regional Water Quality Control Board, San Diego Region, Staff Report, Working Draft. May 2012. Prepared by Lilian Busse and Bruce Posthumus.

http://www.waterboards.ca.gov/sandiego/board_info/agendas/2012/Jun/item9/eosr0612MonitoringFramework.SD1.pdf

¹⁰ SMC, 2004. "Model Monitoring Program for Municipal Separate Storm Sewer Systems in Southern California." A report from the Stormwater Monitoring Coalition's Model Monitoring Technical Committee. August 2004. Technical Report #419.

http://www.lmtf.org/FoLM/Poliact/EColi/419_smc_mm.pdf

ADMINISTRATIVE DRAFT

1. Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? This question will be addressed by comparing indicator values to the relevant benchmarks or objectives and/or to background conditions.
2. What is the extent and magnitude of the current or potential receiving water problems? This question will be addressed by mapping the spatial extent and/or temporal persistence of problems, the severity of impacts, and/or the degree to which benchmarks are exceeded.
3. What is the relative urban runoff contribution to the receiving water problem(s)? This question will be addressed by comparing concentrations and loads of priority constituents to those from other sources, including background.
4. What are the sources of urban runoff that contribute to receiving water problem(s)? This question will be addressed by characterizing and prioritizing discharges and using targeted source identification protocols to track the origin of specific constituents.
5. Are conditions in receiving waters getting better or worse? This question will be addressed by time series analyses of individual indicators and/or of aggregate or cumulative indices of condition.

Given that substantial work has already been accomplished and other work is ongoing to address the questions related to receiving water condition assessment (questions 1, 2, 5), the Copermittees shall focus their efforts principally on questions 3 and 4. All five questions need not be addressed simultaneously to the same degree. As watershed problems are identified, effort should shift to diagnosis (questions 4 and 5) until the problems have been addressed, at which point effort may shift back to broader assessment (questions 1 and 2) in search of other problems to address.

During the transitional (pre-WQIP) period, where feasible the Copermittees shall develop more specific monitoring questions to guide the design of specific monitoring activities and address specific assessment needs. The information so generated will be used to guide management actions, based on the results of the monitoring data assessments.

As part of each WQIP, the Copermittees shall develop a water quality Monitoring and Assessment Program (Monitoring and Assessment Program) for each Watershed Management Area (WMA), as provided in Table B-1. Using the overarching SMC management questions as guidance, each Monitoring and Assessment Program shall include specific monitoring questions appropriate to address the assessment needs of each specific WMA. The monitoring activities shall be designed to generate data needed to address priority issues identified in the WQIPs, and the resulting monitoring data and assessments shall be supplied to program planners to help inform management actions. If a WMA has an approved Comprehensive Load Reduction Plan (CLRP), the CLRP shall be incorporated into the WQIP.

ADMINISTRATIVE DRAFT

Each Copermittee covered by this permit shall participate in development and implementation of the Monitoring and Assessment Program for each WMA in which they have jurisdiction. The Copermittees shall consider the needs of regional monitoring and assessment activities in the development of each Monitoring and Assessment Program and make allowances as needed for regional coordination.

1. Receiving Waters Monitoring

Until approval and implementation of the WQIPs, the Copermittees shall perform receiving water monitoring to address management questions and specific questions, as specified in Provisions D.1.a-D.1.g below:

a. SMC REGIONAL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall participate in the SMC Regional Monitoring Program through its planned completion. The SMC monitoring program seeks to coordinate and leverage existing monitoring efforts to produce regional estimates of condition, improve data comparability and quality assurance, and maximize data availability, while conserving monitoring expenditures. The primary goal of this program is to implement an ongoing, large scale regional monitoring program for southern California's coastal streams and rivers. A comprehensive program was designed by the SMC, in which each participating group assesses its local watersheds and then contributes their portion to the overall regional assessment. The SMC Regional Monitoring Program involves a probabilistic design for characterization of coastal watersheds using bioassessment metrics and related analyses, including, but may not be limited to: physical habitat characterization, Southern California Index of Biological Integrity scoring, macroinvertebrate and algal taxonomy, algal biomass, water chemistry, and toxicity. The study incorporates both reference and non-reference streams and may identify additional biological and/or chemical stressors affecting stream health, such as channel alteration and presence of invasive species.

b. SOUTHERN CALIFORNIA BIGHT REGIONAL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall participate in the Southern California Bight Regional Monitoring program as a trade-off with other routine monitoring requirements. The Bight program involves detailed characterization of coastal and offshore receiving waters, as well as targeted special studies. The Bight regional monitoring effort is designed to build upon the data collected during the previous Bight regional

ADMINISTRATIVE DRAFT

programs, to assess the extent of contamination in the Southern California Bight. Receiving water samples are collected in or near coastal areas, bays, estuaries, offshore islands, and open water/deep ocean within the Bight. Water quality and sediment samples may be collected to provide data for model input, to assess long-term trends, and to answer management questions developed by the diverse group of stakeholders in the Southern California Bight Region as part of the program. In addition, special studies such as potential new technology implementation (i.e. bioanalytical screening and/or genetic coding) may be conducted as part of the Bight Regional Monitoring.

c. SEDIMENT QUALITY MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What is the condition of sediments in enclosed bays and estuaries with respect to the statewide sediment quality objectives?

Copermittees shall perform monitoring of bay and lagoon sediments, as applicable, under the Copermittees' responsibility to conform to the requirements of the Statewide Sediment Quality Objectives regulatory program, per State Water Resources Control Board Resolution No. 2008-0070 – Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality.

d. HYDROMODIFICATION MANAGEMENT PLAN (HMP) MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall perform receiving water monitoring as required per their Hydromodification Management Plan Monitoring Plans, as approved by the California Regional Water Quality Control Board, San Diego Region.

e. TMDL MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

Specific question: What is the progress in achieving and complying with adopted TMDL targets?

The Copermittees shall conduct receiving water monitoring to address monitoring requirements associated with TMDLs as specified below.

ADMINISTRATIVE DRAFT

- (1) The Copermittees shall perform water quality monitoring as required per the Implementation Plans or approved CLRPs of effective TMDLs, including compliance monitoring for the following TMDLs:
 - (a) TMDL for Diazinon in Chollas Creek Watershed Resolution No. R9-2002-0123; Effective as of September 11, 2003.
 - (b) TMDLs for Dissolved Copper in Shelter Island Yacht Basin Resolution No. R9-2005-0019; Effective as of December 2, 2005.
 - (c) TMDLs for Dissolved Copper, Lead, and Zinc in Chollas Creek Resolution No. R9-2007-0043; Effective as of October 22, 2008.
 - (d) TMDLs for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay Resolution No. R9-2008-0027; Effective as of September 15, 2009.
 - (e) Revised TMDLs for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) Resolution No. R9-2010-0001; Effective as of April 4, 2011.
- (2) TMDL monitoring shall be coordinated and/or integrated with monitoring specified in an approved CLRP or equivalent implementation plan.

f. ASBS SPECIAL PROTECTIONS MONITORING

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

The Copermittees responsible for discharges to Areas of Special Biological Significance (ASBS) as regulated per the Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges, State Water Resources Control Board Resolution No. 2012-0012, shall perform receiving water monitoring as required, per the adopted ASBS Special Protections.

g. SAN DIEGO REGIONAL REFERENCE STREAM STUDY

Management Question: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What are the concentrations/loads of bacteria, nutrients, and metals in reference streams in Southern California?

ADMINISTRATIVE DRAFT

The Copermittees shall participate in reference stream receiving water monitoring and data analysis under the San Diego Regional Reference Stream Study as a Regional Study. The San Diego Regional Reference Stream Study is intended to characterize background concentrations of bacteria, nutrients, and metals in natural streams within the jurisdiction of the San Diego Water Board (Region 9). Samples shall be collected during wet and dry weather at sites considered representative of natural conditions (a contributing drainage area at least 95 percent undeveloped) and that vary in regards to hydrology, catchment size, and geology. The results of the study may be used to assist determination of scientifically-based reference stream numeric goals for indicator bacteria, nutrients, and metals.

h. LONG-TERM RECEIVING WATER MONITORING, POST-WQIP ADOPTION

Management Question: Are conditions in receiving waters getting better or worse?

Following adoption of the WQIPs, the Copermittees shall conduct long-term receiving water monitoring to be performed in each WMA during WQIP implementation, for assessment of long-term trends, as specified below:

- (1) The Copermittees in each Watershed Management Area shall select one long-term receiving water station from among the existing mass loading stations (MLS) and temporary watershed assessment stations (TWAS) to be representative of receiving water quality within the WMA.
- (2) During the permit term, the Copermittees shall perform monitoring during three wet weather events and three dry weather events at each of the long-term stations selected by the Copermittees and approved by the San Diego Water Board.
- (3) Dry Weather Receiving Water Monitoring

During the permit term, the Copermittees shall perform monitoring during three dry weather events, at minimum, at each of the long-term stations. One event must be conducted during the dry season (May 1-September 30) and one event must be conducted during a dry weather period during the wet season (October 1 –April 30), after the first wet weather event of the season, with an antecedent dry period of at least 72 hours following any storm event producing measurable rainfall of greater than 0.1 inch.

- (a) For each dry weather receiving water monitoring event, the Copermittees must record field observations consistent with Table D-1 at each monitoring station.

ADMINISTRATIVE DRAFT**Table D-1. Field Observations for Dry Weather Ambient Receiving Water Monitoring Stations**

Field Observations
<ul style="list-style-type: none"> • Station identification and location. • Presence of flow, or pooled or ponded water. • If flow is present: <ul style="list-style-type: none"> - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), • If pooled or ponded water is present: <ul style="list-style-type: none"> - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color). • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station.

- (b) If flow is present during the dry weather watershed monitoring event, and conditions allow the collection of the data, the Copermitttee must monitor and record the parameters in Table D-2.

Table D-2. Field Monitoring Parameters for Receiving Water and Persistent MS4 Monitoring Stations

Parameters
<ul style="list-style-type: none"> • pH • Temperature • Specific conductivity • Dissolved oxygen • Turbidity

- (c) Samples must be collected and analyzed as follows:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, indicator bacteria, and toxicity. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques: time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over a typical 24 hour period. Only one analysis of the composite of aliquots is required.

ADMINISTRATIVE DRAFT

(d) Samples shall be collected for analysis of the following parameters: TMDL or CLRP constituents in watersheds where the Copermittees are responsible parties in an adopted TMDL Implementation Plan, constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges, applicable NAL constituents, and constituents identified by the Copermittees as the watershed priorities in their respective WQIPs, as well as the constituents listed in Table D-3.

Table D-3. Analytical Monitoring Constituents for Receiving Water Monitoring Stations

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Pesticides	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity¹ • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus¹ • Orthophosphate • Nitrite^{1,2} • Nitrate^{1,2} • Total Kjeldahl Nitrogen • Ammonia 	<ul style="list-style-type: none"> • Arsenic • Cadmium¹ • Chromium • Copper¹ • Iron • Lead¹ • Mercury • Nickel • Selenium • Thallium • Zinc¹ 	<ul style="list-style-type: none"> • Organo-phosphate pesticides • Pyrethroid pesticides 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform³ • <i>Enterococcus</i>

Notes:

1. Constituent with a storm water action level (SAL) specified under Provision [C.2](#).
2. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
3. *E. Coli* may be substituted for Fecal Coliform.

(e) Dry Weather Receiving Water Toxicity Monitoring:

For each dry weather monitoring event, grab or composite samples from each monitoring station must be collected and analyzed for toxicity in accordance with Table D-4.

ADMINISTRATIVE DRAFT**Table D-4. Toxicity Testing for Receiving Water Monitoring Stations**

Freshwater Organism	Test Approach per Event	EPA Protocol¹
<i>Pimephales promelas</i> (fathead minnow)	Wet: 1 acute Dry: 1 acute and chronic	<u>EPA-821-R-02-012</u>
<i>Hyalella azteca</i>	Wet: 1 acute Dry: 1 acute and chronic	EPA-821-R-02-012
<i>Psuedokirchneriella subcapitata</i> (formerly <i>Selenastrum capricornutum</i> , unicellular algae)	Wet: 1 acute Dry: 1 acute and chronic	EPA-821-R-02-013

Notes:

1. EPA protocols shall be utilized for toxicity testing unless alternate toxicity testing protocols have been approved by the San Diego Regional Water Quality Control Board. Chronic toxicity testing will also be conducted at dry weather mass loading stations unless the channel flows are diverted year-round during dry weather conditions to the sanitary sewer for treatment

(f) Receiving Water Bioassessment Monitoring:

Copermittees shall perform Bioassessment monitoring once during the permit term in accordance with the SMC Model Monitoring Program "Triad" assessment approach (SMC, 2004). Copermittees shall conduct sampling, analysis, and reporting of specified in-stream biological and habitat data according to the protocols specified in the SCCWRP Tech Report No. 539, or subsequent protocols, if developed, that have been widely-accepted as an appropriate alternative for Southern California receiving waters. Bioassessment monitoring may be conducted in conjunction with SMC Regional Monitoring and/or other dry weather receiving water monitoring. A physical assessment shall be conducted that will include details of the channel condition including channel dimensions, hydrologic and geomorphic conditions, and presence and condition of vegetation and habitat.

(4) Wet Weather Receiving Water Monitoring

During the permit term, Copermittees shall perform monitoring during three wet weather events at each of the long-term receiving water monitoring stations. Each monitoring station must be monitored during the wet season beginning October 1 and ending April 30.

- (a) For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each monitoring station:

ADMINISTRATIVE DRAFT

- (i) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;
 - (ii) The flow rates and volumes measured or estimated. Data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the USEPA Storm Water Sampling Guidance Document (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;
 - (iii) Station condition (i.e. deposits or stains, vegetation condition, structural condition, observable biology); and
 - (iv) Presence and assessment of trash in and around station.
- (b) For each wet weather receiving water monitoring event, the parameters in Table D-2 must be monitored and recorded in the field.
- (c) Samples must be collected and analyzed as follows:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, indicator bacteria, and toxicity. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques: time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter. Only one analysis of the composite of aliquots is required.
 - (iii) Copermittees should implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods.
- (d) Samples shall be collected for analysis of the following parameters: TMDL or CLRP constituents in watersheds where the Copermittees are responsible parties in an adopted TMDL Implementation Plan, constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges,

ADMINISTRATIVE DRAFT

applicable SAL constituents, and constituents identified by the Copermittees as the watershed priorities in their respective WQIPs, as well as the constituents listed in Table D-3.

(e) Wet Weather Receiving Water Toxicity Monitoring

Grab samples or composites from each monitoring station must be collected and analyzed for toxicity in accordance with Table D-4.

i. OTHER RECEIVING WATER MONITORING, POST-WQIP ADOPTION

After adoption of the WQIPs, the Copermittees shall conduct monitoring based on the approved WQIPs, in addition to long-term receiving water monitoring as described in Provision D.1.h, to include constituents identified by the Copermittees as the watershed priorities in their respective WQIPs. Nothing in this Provision is intended to prevent Copermittee collection of additional receiving water data, as necessary, to support and implement respective WQIPs. This monitoring shall include, at minimum, integration of the following receiving water requirements within the WQIPs, as appropriate for specific watersheds:

- (a) Participation in SMC Regional Monitoring Program, where applicable
- (b) Sediment Quality Monitoring in applicable estuaries
- (c) Hydromodification Management Plan (HMP) Monitoring as applicable
- (d) TMDL Monitoring where implementation plans have been approved and are under implementation, and
- (e) ASBS Special Protections Monitoring, where applicable.

j. RECEIVING WATER MONITORING REPORTING

The Copermittees shall report on the progress of the receiving water monitoring and the results or findings of such monitoring, when completed, in the Annual Report pursuant to Provision F.3.b.

ADMINISTRATIVE DRAFT**2. MS4 Outfall Discharge Monitoring**

Discharge monitoring shall involve both Non-Storm Water (Dry Weather) and Storm Water (Wet Weather) components. The Copermittees shall perform monitoring, as necessary, to identify non-storm water discharges and illegal connections/illicit discharges (IC/IDs) pursuant to Provision E.2 of this Order. To accomplish this, the monitoring may include a variety of water quality and other monitoring techniques, including visual and other observations. Copermittees shall investigate dry weather flows and prioritize outfalls with observed flows for follow-up action as detailed below.

a. STORM WATER OUTFALL INVENTORY

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

- Each Copermittee shall identify all major outfalls, as defined by 40 CFR §122.26(b)(5-6), that discharge directly to named receiving waters within its jurisdiction, and geo-locate those outfalls on a map of the MS4 pursuant to Provision E.2.b of this Order. This information shall be compiled in a storm water outfall inventory, which also shall include applicable information including HSA, jurisdiction, outlet size, and approximate drainage area. Only MS4 outfalls with safe access and for which access is gained without disturbing critical habitat will be considered in the number of eligible major MS4 outfalls.

b. NON-STORM WATER TRANSIENT FLOW (DRY WEATHER) MONITORING, IDDE INVESTIGATION

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which non-storm water discharges are transient and which are persistent? Which discharges should be investigated as potential IDDEs? Which outfalls exhibit persistent dry weather flows?

The Copermittees shall perform non-storm transient flow discharge monitoring to address the above management and specific questions as follows:

- (1) Each Copermittee shall prioritize the major MS4 outfalls within its jurisdiction from the list of major outfalls developed pursuant to Provision D.a., based on criteria and rationale that include potential threat to water quality.

ADMINISTRATIVE DRAFT

- (2) Copermitees with less than 125 major MS4 outfalls that discharge to a receiving water shall visually inspect 80% of the outfalls twice per year during dry weather.
- (3) Copermitees with 125 or more but less than 250 major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized list of major MS4 outfalls that discharge to a receiving water annually. The total number of inspections per Copermitees with 125 or more but less than 250 major MS4s will be a minimum of the total number of all major MS4 outfalls locations once with annual visual inspections. Major MS4 outfalls shall be prioritized based on threat to water quality and will consider factors such as:
- Assessment of connectivity of the discharge to a flowing receiving water
 - Reported exceedances in water quality data
 - Surrounding land use
 - Presence of watershed priority constituents, TMDLs & CWA 303(d) list of impaired water bodies
 - Flow rate
- (4) Copermitees with 250 or more major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized list of major MS4 outfalls that discharge to a receiving water annually. The total number of inspections per Copermitees with 250 or greater major MS4s will be a minimum of 250 to a maximum of 500 locations with annual visual inspections. Where possible, inspections will be conducted year round. Major MS4 outfalls shall be prioritized based on threat to water quality and will consider factors such as:
- Assessment of connectivity of the discharge to a flowing receiving water
 - Reported exceedances in water quality data
 - Surrounding land use
 - Presence of watershed priority constituents, TMDLs & CWA 303(d) list of impaired water bodies
 - Flow rate
- (5) Obvious illicit discharges (i.e., unusual color, unusual odor, or high flow) shall be investigated immediately pursuant to Provision E.2.
- (6) An antecedent dry period of at least 72 hours following any storm event producing measurable rainfall of greater than 0.1 inch is required prior to conducting dry weather visual inspections.
- (7) During a visual inspection, field personnel shall note visual and other

ADMINISTRATIVE DRAFT

observations, including those provided in Table D-5 of this Order.

- (a) During a visual inspection, an inspection form will be filled out documenting observations in conformance with table D-5.
- (b) Inspections of major outfalls conducted pursuant to Provision E of this order, including but not limited to complaint follow-ups, may be accounted for as the visual inspection for the major outfall under this Provision.

Table D-5. Field Observations for Non-Storm Water MS4 Monitoring Stations

Field Observations
<ul style="list-style-type: none"> • Station identification and location. • Presence of flow, or pooled or ponded water from the outfall. • If flow is present: <ul style="list-style-type: none"> - Flow estimation (i.e. width of water surface, approximate depth of water, approximate flow velocity, flow rate), - Flow characteristics (i.e. presence of floatables, surface scum, or sheens, odor, color), - Flow source(s) suspected or identified from non-storm water source investigation, and - Flow source(s) eliminated during non-storm water source identification. • If pooled or ponded water is present: <ul style="list-style-type: none"> - Characteristics of pooled or ponded water (i.e. presence of floatables, surface scum, or sheens, odor, color), and - Known or suspected source(s) of pooled or ponded water. • Station description (i.e. deposits or stains, vegetation condition, structural condition, observable biology). • Presence and assessment of trash in and around station. • Evidence or signs of illicit connections or illegal dumping.

- (8) Evidence of obvious illegal discharges, such as obvious odor, discoloration, or floating foam or scum, shall be followed up immediately.
- (9) The field observations shall be evaluated together with existing information available from prior inspections and prior monitoring results to determine whether the non-storm water (dry weather) discharge flow is likely to be transient or persistent¹¹.

¹¹ Persistent flow, as modified from the SMC Model Monitoring Program definition of persistent WQO exceedance, is defined as “the presence of flow, pooled, or ponded water more than 72 hours after a measureable rainfall event of 0.1 inch of precipitation during three consecutive monitoring and/or inspection events”. All other flow is considered transient.

ADMINISTRATIVE DRAFT

- (a) If the flow is deemed to be transient, observations shall be used to conduct IDD E investigations where warranted pursuant to Provision E.2.
 - (b) If the nature and source of the observed flow is already known, this shall be noted on the field log, including whether the observed flow results from a non-storm water discharge conditionally allowed per Provision E.2.a.
- (10) Where the non-storm water (dry weather) discharge flow is deemed to be persistent in Provision D.2.a.(8), the outfall shall be referred to the characterization and prioritization process described in Provision D.2.c. .
- (11) The framework developed in the transitional monitoring program shall be used as a basis to design a continuing IDDE monitoring program as part of the Monitoring and Assessment Program in each WQIP.

c. NON-STORM WATER PERSISTENT FLOW (DRY WEATHER) OUTFALL MONITORING

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which outfalls exhibit persistent dry weather flows? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during dry weather?

The Copermittees shall perform non-storm water persistent flow discharge monitoring to address the above-listed management and specific questions as follows:

- (1) Based upon the results of the investigation conducted pursuant to Provision D.2.b., each Copermittee shall add to the storm water outfall inventory compiled pursuant to Provision D.2.a., a classification of whether the outfall produces persistent discharge flow, transient flow, or no dry weather flow. The inventory shall provide notations on the basis for that classification; the classification may be based on historical data and/or contemporary observations, including information generated per Provision D.2.b..
- (2) The Copermittees shall prioritize the outfalls identified as having persistent dry weather in the stormwater outfall inventory, pursuant to Provision D.2.c.(1). Historical data may be used to assist prioritization, where available. The prioritization shall be prepared based on criteria to be developed by the Copermittees, and a brief rationale for the prioritization shall be provided to accompany the map.
- (3) Based on the prioritization of major outfalls developed under Provision

ADMINISTRATIVE DRAFT

- D.2.c.(2), the Copermittees shall identify, at minimum, a number of major outfalls to monitor within each watershed management area equivalent to the number of urbanized HSAs within the WMA.. The selected outfalls shall be listed by urbanized HSA and indicated on the map prepared pursuant to Provision D.2.a..
- (4) The Copermittees shall monitor each major outfall identified in Provision D.2.c.(3) two times annually under dry weather conditions until one of the following occurs, at which point the outfall may be removed from the list:
- (a) Flows are reduced to near-zero for three consecutive visits, or
 - (b) The source(s) of flows are determined to be derived from a non-storm water discharge source conditionally allowed per Provision E.2.a, or
 - (c) The source of the discharge is determined to be covered by a separate NPDES permit.
 - (d) The Copermittees shall document any such removal of sites from the outfall monitoring list in their annual report. Outfalls so removed must be replaced with then next highest prioritized MS4 outfall in the WMA per Provision D.2.c.(3), unless there are no remaining qualifying outfalls within the urbanized HSAs of the WMA.
 - (e) Where these criteria are not met but the threat to water quality is reduced, the outfall may be prioritized accordingly for continued follow up activity.
- (5) During each semi-annual visit, the Copermittee must record field observations consistent with Table D-5 at each non-storm water MS4 monitoring station within its jurisdiction.
- (6) Prior to WQIP approval, each semi-annual visit in which measurable flow is present from an outfall listed under Provision D.2.c.(3) must include the following:
- (a) Grab samples shall be collected for analysis for the constituents listed in Table D-6, unless the Copermittee has historical data that can demonstrate or provide justification that the analysis of the constituent is not necessary.

ADMINISTRATIVE DRAFT**Table D-6. Analytical Monitoring Constituents for Non-Storm Water MS4 Monitoring Stations**

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Total Phosphorus • Ortho-phosphate • Nitrite¹ • Nitrate¹ • Total Kjeldahl Nitrogen • Ammonia as N • Chlorine 	<ul style="list-style-type: none"> • Cadmium • Copper • Lead • Zinc 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform² • <i>Enterococcus</i>

Notes:

1. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
2. *E. Coli* may be substituted for Fecal Coliform.

- (b) Field measurements shall be collected for the parameters listed in Table D-2.
- (c) If the Copermittee identifies and eliminates the source of non-storm water discharge, analysis of the sample is not required.
- (7) As part of the WQIP, Copermittees must develop a program to characterize the persistent non-storm water discharges and pollutant loads from the Copermittee's major MS4 outfalls. As part of the development of the Monitoring and Assessment Program for each WMA, the number and selection of outfalls shall be re-evaluated and determined anew for each WMA, along with the appropriate monitoring frequency and methods.
- (8) After WQIP approval, each visit in which measurable flow is present from an outfall listed under Provision D.2.c.(3), as modified by approved changes pursuant to Provision D.2.c.(7) must include the following:
- (a) Samples shall be collected for analysis of the following parameters:
- (i) Constituents identified by the Copermittees as highest watershed priorities,
 - (ii) TMDL constituents in watersheds where the Copermittees are responsible parties in an effective TMDL Implementation Plan for the receiving water body reach to which the outfall discharges,
 - (iii) Constituents listed as a cause of impairment on a CWA Section

ADMINISTRATIVE DRAFT

303(d) listing for the receiving water body reach to which the outfall discharges, and

(iv) Applicable NAL constituents.

(b) Field measurements shall be collected for the parameters listed in Table D-2.

(9) Annually, the Copermittees shall evaluate the data produced by the persistent flow outfall monitoring and inspections, rank the outfalls according to potential threat to receiving water quality, and produce a prioritized list of major outfalls for follow-up action. The prioritized list shall be used to update the WQIP, with the goal of reducing flows and/or loads in order of the ranked priority list through targeted programmatic actions and source investigations.

d. STORM WATER (WET WEATHER) OUTFALL MONITORING

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which MS4 outfalls impact receiving water quality during wet weather? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? How do representative MS4 outlet discharge concentrations, loads, and flows change over time?

The Copermittees shall perform storm water discharge monitoring to address the above-listed management and specific questions as follows:

- (1) Prior to adoption of the WQIPs, the San Diego Copermittees shall continue the MS4 outfall monitoring program implemented under Order No. R9-2007-0001 per RWQCB approved plan through its planned completion to continue to obtain data from a representative cross-section of discharges.
- (2) Prior to adoption of the WQIPs, the San Diego Copermittees shall perform storm water discharge monitoring based on representative outfalls to address the above-listed management questions as follows:
 - (a) The Copermittees shall select, at minimum, three monitoring stations at representative major MS4 outfalls with homogenous land use types and/or typical mixed-use drainage areas per WMA from the map developed pursuant to Provision D.2.a. Historical data may be used to assist site selection, where available. These outfalls shall be geo-located on a map showing the urban hydrologic sub-areas (HSAs), land use drainage areas, and jurisdictional boundaries within the permitted area.
 - (b) Each selected monitoring station must be monitored twice during the wet season, beginning October 1 and ending April 30.

ADMINISTRATIVE DRAFT

- (c) For each wet weather monitoring event, the following narrative descriptions and observations must be recorded at each monitoring station:
- (i) A narrative description of the station that includes the location, date and duration of the storm event(s) sampled, rainfall estimates of the storm event, and the duration between the storm event sampled and the end of the previous measurable (greater than 0.1 inch rainfall) storm event;
 - (ii) The flow rates and volumes measured or estimated. Data from nearby USGS gauging stations may be utilized, or flow rates may be measured or estimated in accordance with the [USEPA Storm Water Sampling Guidance Document](#) (EPA-833-B-92-001), section 3.2.1, or other method proposed by the Copermittees that is acceptable to the San Diego Water Board;
- (d) For each wet weather monitoring event, the parameters in Table D-2 must be monitored and recorded in the field. Samples shall be collected for analysis of parameters listed in Table D-7, according to the following methods:
- (i) Grab samples may be collected for pH, temperature, specific conductivity, dissolved oxygen, turbidity, and indicator bacteria. Analytes that are field measured do not need to be analyzed by a laboratory.
 - (ii) For all other constituents, composite samples shall be collected for a duration adequate to be representative of changes in pollutant concentrations and runoff flows using one of the following techniques:
 - [a] Through use of automated equipment to collect time-weighted composites composed of 24 discrete hourly samples, or flow-weighted composites collected over the length of the storm event or a typical 24 hour period, whichever is shorter. Only one analysis of the composite of aliquots is required.
 - [b] If automated compositing is not feasible, a composite sample may be collected using a minimum of 4 grab samples, collected during the first 24 hours of the storm water discharge, or for the entire storm water discharge if the storm event is less than 24 hours. Only one analysis of the composite of aliquots is required.
 - (iii) Copermittees should implement consistent sample collection methods for regional comparability of data, unless site-specific conditions indicate the need for alternate methods.

ADMINISTRATIVE DRAFT**Table D-7. Analytical Monitoring Constituents for Wet Weather MS4 Outfall Monitoring Stations**

Conventionals, Nutrients, Hydrocarbons	Metals (Total and Dissolved)	Indicator Bacteria
<ul style="list-style-type: none"> • Total Dissolved Solids • Total Suspended Solids • Turbidity¹ • Total Organic Carbon • Dissolved Organic Carbon • Sulfate • Methylene Blue Active Substances (MBAS) • Total Phosphorus¹ • Orthophosphate • Nitrite^{1,2} • Nitrate^{1,2} • Total Kjeldahl Nitrogen • Ammonia 	<ul style="list-style-type: none"> • Arsenic • Cadmium¹ • Chromium • Copper¹ • Iron • Lead¹ • • Nickel • Selenium • Thallium • Zinc¹ 	<ul style="list-style-type: none"> • Total Coliform • Fecal Coliform³ • <i>Enterococcus</i>

Notes:

1. Constituent with a storm water action level (SAL) specified under Provision [C.2](#).
2. Nitrite and nitrate may be combined and reported as nitrite+nitrate.
3. *E. Coli* may be substituted for Fecal Coliform.

(3) After adoption of the WQIPs, the Copermittees shall perform storm water discharge monitoring based on representative major MS4 outfalls to address the above-listed management questions, and according to the needs for outfall monitoring as defined in the monitoring and assessment sections of the WQIPs. Samples shall be collected for analysis of parameters identified by the Copermittees as watershed priorities in the WQIP. Copermittees shall consider constituents based on factors including, but not limited to:

- (a) Constituents identified as the highest water quality priorities.
- (b) TMDL constituents in watersheds where the Copermittees are responsible parties in an effective TMDL Implementation Plan for the receiving water body reach to which the outfall discharges,
- (c) Constituents listed as a cause of impairment on a CWA Section 303(d) listing for the receiving water body reach to which the outfall discharges, and
- (d) Applicable SAL constituents.

ADMINISTRATIVE DRAFT

e. MS4 OUTFALL DISCHARGE MONITORING REPORTING

The Copermittees shall report on the progress of the MS4 outfall monitoring and the results or findings of such monitoring, when completed, in the Annual Report pursuant to Provision F.3.b.

3. Source/Stressor Identification

Management Question: What are the sources of urban runoff that contribute to receiving water problem(s)?

The Copermittees shall perform Source/Stressor Identification studies as needed to investigate sources of pollutants or stressors in cases where MS4 discharges are deemed to be causing or contributing to receiving water priorities, based on monitoring performed under Provisions D.1 and D.2. The results of the Stressor/Source Identification studies may be shared regionally among the Copermittees to provide information useful in improving adaptive management of urban runoff through implementation of the WQIPs.

The principal role of Source/Stressor Identification is to identify and prioritize pollutant generating activities and source categories. Identification of high-priority sources is an important step in support of the WQIP process, to help inform the development of effective pollutant reduction strategies for particular priority constituents on a watershed-specific basis.

Source identification shall be conducted on a constituent-specific basis. The source identification efforts shall focus on constituents identified as watershed priorities, and include prioritization of sources based on magnitude, controllability, and other factors. The constituent-specific source identification process shall include, at a minimum, the following steps:

- Step 1: Compile known information on the specific priority constituent. This information includes data on potential sources and movement of a particular constituent within the urban watershed. Data generated by the Copermittees and others, as well as information available from a literature research on the priority constituent shall be compiled and analyzed as appropriate.
- Step 2: Based on the compiled information generated on the priority constituent, identify data gaps, if any. Targeted studies may be planned where appropriate to fill identified data gaps; such studies would be performed as Special Studies per Provision D.4. For example, targeted studies may be performed to quantify the relative loading of a priority constituent from a particular pollutant generating activity, or to improve understanding of the fate of a constituent in the environment.

ADMINISTRATIVE DRAFT

- Step 3: Based on the information compiled, develop an inventory of sources and consider how to prioritize them within the watershed for potential follow-up action. Examples of prioritization criteria for sources include relative magnitude in discharges, geographical distribution (i.e., regional or localized), frequency of occurrence in discharges, human health risk, and controllability.
- Step 4: Develop a prioritized list of sources for the priority constituent and deliver to the Copermittee staff responsible for implementing WQIPs.

Prior to adoption of the WQIPs, the San Diego Copermittees shall continue source identification studies pertaining to compliance with TMDLs and the development of the CLRP implemented under Order No. R9-2007-0001.

Following adoption of the WQIPs, the Copermittees shall conduct source/stressor identification studies as necessary to support the WQIP watershed priorities and strategies. The plans for source/stressor ID studies must be submitted as part of the Monitoring and Assessment Programs included as part of the WQIPs required pursuant to Provision B of this Order.

The Copermittees shall report on the progress of the source/stressor ID studies and the results or findings of such studies, when completed, in the Annual Report pursuant to Provision F.3.b.

4. Special Studies

The Copermittees shall conduct Special Studies to address information needs as identified for receiving waters per monitoring performed pursuant to Provision D.1, for MS4 outfall discharges per monitoring performed pursuant to Provision D.2, and in Source/Stressor Identification studies per Provision D.3; to provide information on BMP effectiveness; and otherwise as needed to support implementation or evaluation of the WQIP strategies for the identified highest water quality priorities.

Within the permit term, two Special Studies shall be conducted within each Watershed Management Area, to address specific questions developed for each Watershed Management Area, and two regional special studies shall be conducted to answer regional questions.

- a. The monitoring plans for the special studies must be submitted as part of the Monitoring and Assessment Programs included as part of the Water Quality Improvement Plans required pursuant to Provision [B](#). The special studies must, at a minimum, be in conformance with the following criteria:
 - (1) The special studies must be related to water quality priorities identified by the Copermittees within the Watershed Management Area or San Diego Region, and the monitoring plans for the special studies must address specific watershed or regional questions;

ADMINISTRATIVE DRAFT

- (2) The special studies must be implemented within specific Watershed Management Areas or regionally within the San Diego Region;
 - (3) The special studies must include some form of participation by all Copermitees within the Watershed Management Area or San Diego Region, as applicable;
 - (4) One of the two required special studies within each Watershed Management Area may be replaced by a regional special study pursuant to D.4.a. (1) through D.4.a.(3); and
 - (5) A special study done pursuant to D.4.a. (1) through D.4.a.(4) that is started prior to the submittal of the WQIP, but is completed during the permit term, shall meet the requirements of a special study for a Watershed Management Area or San Diego Region, as applicable.
- b.** The Copermitees shall report on the progress of the special studies and the results or findings of such studies, when completed, in the Annual Report pursuant to Provision F.3.b.

Examples of special studies include:

- Enhance outreach & education by expanding residential BMP rebate programs (irrigation, rainwater harvesting and turf conversion) to multi-family housing
- Enhance outreach & education by increasing enforcement of over-irrigation regulation
- Conduct Catch Basin Inlet Cleaning Study assessment
- Implement Residential & Commercial Area Patrolling
- Implement Targeted Aggressive Street Sweeping Study
- Develop Watershed Urban Runoff Management Program Inspection Program (separate from commercial/industrial inspections, targets all businesses in specific areas)
- Conduct an investigation to improve the understanding of the linkage between groundwater and surface water hydrology and potential impacts to receiving water beneficial uses
- Conduct targeted field investigations to provide additional spatial or temporal information on the highest priority constituents or activities to inform or improve the efficiency of implementation efforts in the WMA.

The Regional Reference Stream Study is an example of a regional special study.

ADMINISTRATIVE DRAFT**5. Assessment Requirements**

The Copermittees must report the progress and findings of the following assessments, when available and as applicable to each WMA, as part of the Annual Report for each WMA, as required pursuant to Provision F. Assessments that occur only once per permit term, or are based on monitoring that occurs only once per permit term, shall be reported as part of the applicable Annual Report, or included within the Copermittees' Report of Waste Discharge, prior to commencement of the subsequent permit term.

a. RECEIVING WATER MONITORING

The Copermittees shall perform analysis and assessments of data and information produced per Provision D.1, addressing for each Receiving Water Monitoring element the management and specific questions as shown in Provision D.1 and below. The analysis and assessments shall relate the monitoring data compiled for each component to the conditions of affected receiving waters and status of relevant receiving water beneficial uses.

(1) SMC Regional Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the SMC Regional Monitoring Program, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The SMC Program is designed to provide a representative sampling of receiving water quality in coastal rivers and streams in the region's watersheds, based on a probabilistic design for characterization of coastal watersheds, using bioassessment metrics and related analyses. The analysis and assessments of the data shall relate the SMC monitoring data to the condition of receiving waters and status of receiving water beneficial uses.

(2) Bight Regional Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the Bight Regional Monitoring Program, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The Bight regional monitoring effort involves detailed characterization of coastal and offshore receiving waters, as well as targeted special studies. The analysis and assessments of the data shall relate the Bight monitoring data to the condition of receiving waters and status of receiving water beneficial uses.

ADMINISTRATIVE DRAFT**(3) Sediment Quality**

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

Specific Question: What is the condition of sediments in enclosed bays and estuaries with respect to the statewide sediment quality objectives?

The Copermittees shall incorporate results of the sediment quality monitoring of bay and estuarine sediments, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the data shall relate sediment quality data to the condition of receiving waters and status of receiving water beneficial uses.

The analysis of sediment quality data also shall conform to the requirements of the Statewide Sediment Quality Objectives regulatory program, per State Water Resources Control Board Resolution No. 2008-0070 – Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(4) Hydromodification Management Plan (HMP) Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?

The Copermittees shall incorporate results of the receiving water monitoring required per their Hydromodification Management Monitoring Plans, as approved by the California Regional Water Quality Control Board, San Diego Region, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the data shall relate HMP monitoring data to the condition of receiving waters and status of receiving water beneficial uses. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(5) TMDL Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

Specific question: What is the progress in achieving and complying with

ADMINISTRATIVE DRAFT

adopted TMDL targets?

The Copermittees shall incorporate results of TMDL monitoring, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the TMDL monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees shall annually evaluate receiving water data produced per Provision D.1.e. to determine whether TMDL targets are being met, for applicable receiving waters as specified in adopted TMDLs and include the results of this evaluation, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

The analysis of TMDL monitoring data also shall conform to the requirements of the adopted TMDLs and associated Implementation Plans, to demonstrate compliance with the applicable terms of adopted TMDLs and Implementation Plans.

(6) ASBS Special Protections Monitoring

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?

The Copermittees responsible for discharges to Areas of Special Biological Significance (ASBS) as regulated per the Special Protections for Areas of Special Biological Significance, Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges, State Water Resources Control Board Resolution No. 2012-0012, shall incorporate results of ASBS monitoring, when available, into the analysis and assessments conducted as part of WQIP planning and implementation. The analysis and assessments of the ASBS monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees for whom ASBS monitoring is required under the terms of the adopted ASBS Special Protections shall evaluate the data as required per State Water Resources Control Board Resolution No. 2012-0012, and include the results of this evaluation, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(7) Long-Term Receiving Water Monitoring

Management Question: Are conditions in receiving waters getting better or

ADMINISTRATIVE DRAFT

worse?

The Copermittees shall incorporate the results of the Long-Term Receiving Water Monitoring into the analysis and assessments conducted as part of the adaptive management process. The analysis and assessments of the Long-Term monitoring data shall be integrated with other receiving water data in assessments of the condition of receiving waters and status of receiving water beneficial uses.

The Copermittees shall evaluate the data produced by the receiving water monitoring pursuant to Provision D.1.g, and incorporate new receiving water data into time series plots for each long-term monitoring constituent, for each WMA. Once per permit term the Copermittee shall perform statistical trends analysis on the cumulative long-term receiving water data set.

(8) Integrated Receiving Water Assessment

Management Questions: Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems? Are conditions in receiving waters getting better or worse?

Once during the permit term, for each watershed management area, the Copermittees shall integrate the analyses and assessments of the results of the SMC Regional Monitoring Program, Bight Regional Monitoring Program, Sediment Quality monitoring, HMP Monitoring, TMDL monitoring, ASBS monitoring, and Long-term receiving water monitoring, as performed per Provisions D.5.a.(1)-D.5.a.(7), as well as other data as available and applicable, to assess the condition of receiving waters and status of receiving water beneficial uses, and identify data or information gaps. The integrated assessment shall include, as appropriate to address any identified data gaps, recommendations for additional monitoring as may be required to adequately characterize conditions in receiving waters, or where special studies may be needed to address specific information needs.

b. MS4 OUTFALL DISCHARGE MONITORING

The Copermittees shall perform analysis and assessments of data and information produced per Provision D.2, addressing the management and specific questions as shown in Provision D.2 and below. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

(1) Transient Non-Storm Water (Dry Weather) Monitoring, IC/ID Investigation

Management Questions: What is the relative urban runoff contribution to

ADMINISTRATIVE DRAFT

receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which non-storm water discharges are transient and which are persistent? Which discharges should be investigated as potential IC/IDs? Which outfalls exhibit persistent dry weather flows?

- (a) Where the presence of non-storm water (dry weather) flow is noted from an outfall during a visual inspection, field personnel shall note visual and other observations (including approximate/estimated flow rate, changes in flow rate during inspection, changes in flow rate over previous inspections, color, presence of foam or sheen, and odor) on a field log. Inspectors also shall note where there is evidence of past flow and record pertinent observations at all sites visited.
- (b) The field observations shall be evaluated together with existing information available from prior inspections and prior monitoring results to determine whether the non-storm water (dry weather) discharge flow is likely to be transient or persistent. If the flow is deemed to be transient as indicated by pooled or ponded water or other evidence of recent flow, and there is evidence of an illicit discharge such as obvious odor, discoloration, foam or scum, the observations shall be used to conduct IC/ID investigations pursuant to Provision E.2. If the nature and source of the observed flow is already known, this shall be noted on the field log, including whether the observed flow results from a non-storm water discharge conditionally allowed per Provision E.2.a.
- (c) Where the non-storm water (dry weather) discharge flow is deemed to be persistent in Provision D.2.b.(9), the outfall shall be referred to the characterization and prioritization process described in Provision D.2.c.

(2) Persistent Non-Storm Water (Dry Weather) Outfall Monitoring

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Which outfalls exhibit persistent dry weather flows? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during dry weather?

(a) Identification and Prioritization of Outfalls with Persistent Flow

Annually, the Copermittees shall evaluate the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., rank the outfalls according to potential threat to receiving water quality, and produce a

ADMINISTRATIVE DRAFT

prioritized list of outfalls for follow-up action. The Copermittees must analyze the non-storm water monitoring data collected pursuant to Provision D.2.c. and consider NAL exceedances in prioritizing outfalls. The prioritized list shall be provided in the Annual Report for each WMA pursuant to Provision F.3.b. The prioritized list shall be used to update the WQIPs with the goal of reducing flows/ loads in order of the ranked priority list, through targeted programmatic actions and source investigations.

(b) Evaluate Potential Impacts to Receiving Waters from Persistent Non-Storm Water Outfall Flows

Annually, the Copermittees shall evaluate the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., and compare the outfall monitoring data to relevant receiving water quality data, to identify outfalls that may cause or contribute to receiving water quality problems.

(c) Calculate Loadings to Receiving Waters from Persistent Non-Storm Water Outfall Flows

Annually, the Copermittees shall estimate discharge loadings from the data produced by the dry weather outfall monitoring pursuant to Provision D.2.c., and rank the monitored outfalls in order from highest to lowest loading, to identify outfalls that may cause or contribute to receiving water quality problems. As part of this annual estimation, the Copermittees shall identify areas where program implementation is thought to have resulted in reductions or elimination of loads from MS4 outfalls.

(d) The Copermittees in each Watershed Management Area must review the non-storm water flow and pollutant load analyses required pursuant to Provision [D.4.b.\(2\)\(d\)](#) on an annual basis to:

- (i) Identify the pollutant load reductions that are thought to be attributable to water quality management actions within the high priority outfall drainage areas
- (ii) Assess the effectiveness of the water quality improvement strategies being implemented within the Watershed Management Area toward reducing or eliminating non-storm water discharges and pollutant loads discharging from the MS4 to receiving waters; and
- (iii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing or eliminating non-storm water discharges and pollutant loads discharging from the MS4 to receiving waters.

ADMINISTRATIVE DRAFT**(3) Storm Water (Wet Weather) Outfall Monitoring**

Management Questions: What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?

Specific Questions: Do discharge concentrations at MS4 outfalls meet applicable permit action levels? Which MS4 outfalls impact receiving water quality during wet weather? How do representative MS4 outlet discharge concentrations, loads, and flows change over time?

(a) Comparisons of Wet Weather Outfall Quality to Storm Water Action Levels

The Copermittees shall analyze the storm water monitoring data collected pursuant to Provision D.2.c and consider SAL exceedances in prioritizing outfalls for further investigation, and assessing progress towards addressing WQIP priorities.

(b) Evaluate Potential Impacts to Receiving Waters

Annually, the Copermittees shall evaluate the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c, and compare the outfall monitoring data to relevant receiving water quality data, to identify outfalls that may cause or contribute to receiving water quality problems.

(c) Calculate Loadings to Receiving Waters from Storm Water Outfall Flows

Annually, the Copermittees shall estimate discharge loadings from the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c. As part of this annual estimation, the Copermittees shall identify areas where program implementation is thought to have resulted in reductions or elimination of loads from MS4 outfalls.

(d) The Copermittees in each Watershed Management Area must review the storm water flow and pollutant load analyses required pursuant to Provision [D.5.b.\(3\)\(c\)](#) on an annual basis to:

- (i) Identify the pollutant load reductions that are thought to be attributable to water quality management actions within the monitored outfall drainage areas
- (ii) Assess the effectiveness of the water quality improvement strategies being implemented within the Watershed Management Area toward reducing storm water pollutant loads discharging from the MS4 to receiving waters; and
- (iii) Identify modifications necessary to increase the effectiveness of the water quality improvement strategies toward reducing storm water

ADMINISTRATIVE DRAFT

pollutant loads discharging from the MS4 to receiving waters.

(e) Characterization of Trends Over Time

The Copermittees shall evaluate the data produced by the wet weather outfall monitoring pursuant to Provision D.2.c, and incorporate new outfall monitoring data into time series plots for each long-term monitoring constituent, for each WMA. Once per permit term the Copermittee shall perform statistical trends analysis on the cumulative long-term MS4 outfall water quality data set.

c. SOURCE IDENTIFICATION

Management Question: What are the sources of urban runoff that contribute to receiving water problem(s)?

The principal role of Source/Stressor Identification is to identify and prioritize pollutant generating activities and source categories. Identification of high-priority sources is an important step in support of the WQIP process, to help inform the development of effective pollutant reduction strategies for particular priority constituents on a watershed-specific basis.

Source identification shall be conducted on a constituent-specific basis. The source identification efforts shall focus on constituents identified as watershed priorities, and include prioritization of sources based on magnitude, controllability, and other factors.

Following WQIP approval and implementation, source identification studies shall be used to improve WQIP effectiveness. For each Watershed Management Area, the Copermittees shall perform the investigation pursuant to Provision D.3, as necessary to address identified watershed priorities, including production of a prioritized list of sources or potential sources that warrant additional investigation and/or development of control strategies through the WQIPs.

Annually, the Copermittees shall evaluate the results and findings produced by the source/stressor identification studies conducted pursuant to Provision D.3, and inform Copermittee staff responsible for WQIP implementation of the relative magnitudes and/or priority rankings of identified sources. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

ADMINISTRATIVE DRAFT

d. SPECIAL STUDIES

Following WQIP approval and implementation, special studies shall be identified to fill data gaps and provide targeted information to improve WQIP effectiveness. Upon completion of each Special Study conducted pursuant to Provision D.4, the Copermittees shall evaluate the study results and apply the results to the implementation of WQIPs within each Watershed Management Area as applicable.

Annually, the Copermittees shall evaluate the results and findings produced by the special studies conducted pursuant to Provision D.4, and assess their relevance to the Copermittees' efforts to better characterize WMAs and receiving water conditions, to understand urban runoff pollutant sources, and to control and limit the discharges of pollutants from MS4 outfalls to the maximum extent practicable. The Copermittees shall include the results of this analysis, when available and as applicable to each WMA, in the Annual Report pursuant to Provision F.3.b.

e. INTEGRATED EVALUATION OF WATER QUALITY IMPROVEMENT STRATEGIES

Once during the permit term, for each watershed management area, the Copermittees shall integrate the analyses and results of the monitoring performed pursuant to Provisions D.1-D.4, and the results of the assessments performed pursuant to Provision D.5.a.-D.5.d, as well as other data as available and applicable, to assess: 1) progress towards achieving the numeric goals and schedules established per the approved WQIPs, 2) progress toward addressing the highest priority receiving water conditions established for each Watershed Management Area, and 3) water quality improvements that are thought to be attributable to the Copermittees' implementation of the requirements of Provision B. For Watershed Management Areas with applicable TMDLs, the integrated evaluation must incorporate the specific monitoring and assessment requirements of [Attachment E](#). For Watershed Management Areas with any ASBS, the water quality monitoring and assessment program must also incorporate the monitoring requirements of Attachment B to State Water Board Resolution No. 2012-0012. The integrated evaluation shall include the following:

- (1) The conditions of receiving waters and status of receiving water beneficial uses,
- (2) The extent to which MS4 discharges cause or contribute to receiving water problems during both dry weather and wet weather,
- (3) The estimated reductions in loadings from MS4 discharges attributable to the Copermittees' stormwater management activities, for both dry and wet weather,
- (4) The principal identified sources of pollutants that are responsible for constituents in MS4 discharges that cause or contribute to receiving water

ADMINISTRATIVE DRAFT

problems,

- (5) The results of the cumulative special studies and their application to improvement of the WQIPs for the Watershed Management Areas,
- (6) Progress toward achieving the interim and final numeric targets for restoring impacted beneficial uses in receiving waters with adopted TMDL Implementation Plans;
- (7) Any identified data or information gaps, along with recommendations for additional monitoring, special studies, or other investigations to address the data and information needs.

ADMINISTRATIVE DRAFT**E. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS**

The purpose of this provision is for each Copermittee to implement a program to control the discharge of pollutants to and from its respective MS4 to receiving waters within its jurisdiction. The goals of this program are to: 1) effectively prohibit non-storm water discharges into the MS4s, 2) reduce pollutants in storm water discharges from the MS4s to the MEP, and 3) support the attainment and the reasonable protection, preservation, and enhancement water quality and designated beneficial uses of waters of the U.S. These goals will be accomplished through compliance with the jurisdictional runoff management program requirements of this Provision, and as modified or supplemented per Provision B (Water Quality Improvement Plans).

Each Copermittee must implement all the requirements of Provision E no later than 18 months after the adoption of this Order, or in accordance with Provision F.5.a. Each Copermittee must update its jurisdictional runoff management program document, in accordance with Provision F.2.a, to include all the requirements of Provision E. The jurisdictional runoff management programs implemented by each Copermittee must be consistent with the Water Quality Improvement Plan for the applicable Watershed Management Area required by Provision B. Until the Copermittee has updated its jurisdictional runoff management program document with the requirements of Provision E, the Copermittee must continue implementing its current jurisdictional runoff management program.

Modification of Jurisdictional Runoff Management Program Requirements

The requirements of this section apply to each Copermittee on a jurisdiction-wide basis. Copermittees that are in multiple WMAs may implement any activity or requirement at a level different than a specified minimum within any individual WMA so long as the requirement (as specified below) is met for the jurisdiction as a whole and compliance with all other applicable permit directives is maintained jurisdictionally and within each WMA.

Upon approval of the Executive Officer, specific requirements may be reduced or waived on a jurisdictional basis only where the following conditions have been met:

- The Copermittee's proposed JRMP modifications must be submitted to the San Diego Water Board for a 30 day public review and comment period. The San Diego Water Board will issue a public notice and solicit public comments on the JRMP modification for a minimum of 30 days. Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittee that the JRMP modification has been approved following its review and determination that it meets the requirements of this Order;

ADMINISTRATIVE DRAFT

- On RWQCB approval, the Copermittee's JRMP must be amended per Section II.F.2.a. to incorporate the modification(s);
- Applicable portions of any WQIP to which an approved modification applies must be modified to reference or incorporate it, and the updated WQIP made available on the Regional Clearinghouse pursuant to Provision F.4.

1. Legal Authority Establishment and Enforcement

- a. Each Copermittee must establish, maintain, and enforce adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 through statute, ordinance, permit, contract, order, or similar means to the extent allowable by law. This legal authority must authorize the Copermittee to:
 - (1) Effectively prohibit and eliminate all illicit discharges and illicit connections to its MS4;
 - (2) Control the contribution of pollutants in discharges of runoff associated with industrial and construction activity to its MS4 and control the quality of runoff from industrial and construction sites, including industrial and construction sites that do not have coverage under the statewide General Permit for Discharges of Storm Water Associated with Industrial Activities (Industrial General Permit) or General Permit for Discharges of Storm Water Associated with Construction Activities (Construction General Permit);
 - (3) Control the discharge of spills, dumping, or disposal of materials other than storm water into its MS4;
 - (4) Coordinate, as possible, with other agencies to minimize the contribution of pollutant discharges from the Copermittee's portion of the MS4 to portions of the MS4 under another agency's jurisdiction and from the other agency's portions of the MS4 to the portion of the MS4 under the Copermittee's jurisdiction;
 - (5) Require compliance with conditions in its statutes, ordinances, permits, contracts, orders, or similar means to hold dischargers to its MS4 accountable for their contributions of pollutants and flows;
 - (6) Require the use of BMPs to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;
 - (7) Require documentation on the effectiveness of BMPs implemented to prevent or reduce the discharge of pollutants in storm water from its MS4 to the MEP;

ADMINISTRATIVE DRAFT

- (8) Utilize enforcement mechanisms to require compliance with its statutes, ordinances, permits, contracts, orders, or similar means; and
 - (9) Carry out all inspections, surveillance, and monitoring procedures necessary to determine compliance and noncompliance with its statutes, ordinances, permits, contracts, orders, or similar means and with the requirements of this Order, including the prohibition of illicit discharges and connections to its MS4; the Copermittee must also have authority to enter, monitor, inspect, take measurements, review and copy records, and require regular reports from industrial facilities, including construction sites, discharging into its MS4.
- b. With the first Annual Report required by Provision [F.3.b](#), each Copermittee must submit a statement certified by its Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative that the Copermittee has taken the necessary steps to obtain and maintain full legal authority within its jurisdiction to implement and enforce each of the requirements contained in this Order.

2. Illicit Discharge Detection and Elimination

Each Copermittee must implement a program to actively detect and eliminate illicit discharges and improper disposal into the MS4, or otherwise require the discharger to apply for and obtain a separate NPDES permit. The illicit discharge detection and elimination program must include, at a minimum, the following requirements:

a. Non-Storm Water Discharges

To the extent allowable by law, each Copermittee must address all non-storm water discharges as illicit discharges where the likelihood exists that they are a source of pollutants to waters of the U.S., unless a non-storm water discharge is either identified as a discharge authorized by a separate NPDES permit, or identified as a category of non-storm water discharges or flows that must be addressed pursuant to the following requirements:

- (1) Discharges of non-storm water to the MS4 from uncontaminated pumped groundwater must be addressed as illicit discharges where there is evidence that suggests that they are the source of pollutants to waters of the U.S., unless the discharge has coverage under NPDES Permit No. CAG919001 (Order No. R9-2007-0034, or subsequent order) for discharges to San Diego Bay, or NPDES Permit No. CAG919002 (Order No. R9-2008-0002, or subsequent order) for discharges to surface waters other than San Diego Bay:
- (2) Discharges of non-storm water from water line flushing and water main breaks to the MS4 must be addressed as illicit discharges unless the discharge has coverage under a valid NPDES Permit, Order No. R9-2010-0003, or a subsequent order. This includes water line flushing and water

ADMINISTRATIVE DRAFT

- main break discharges from water purveyors under the Copermittee's jurisdiction that has been issued a water supply permit by the California Department of Public Health or federal military installations. Discharges from recycled or reclaimed water lines to the MS4 must be addressed as illicit discharges, unless the discharges have coverage under a separate NPDES permit.
- (3) Discharges of non-storm water to the MS4 from the following categories must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a anthropogenic source of pollutants to receiving waters within the Copermittee's jurisdiction:
- (a) Discharges from foundation drains;
 - (b) Water from crawl space pumps;
 - (c) Water from footing drains.
 - (d) Diverted stream flows;
 - (e) Rising ground waters;
 - (f) Uncontaminated ground water infiltration to MS4s;
 - (g) Springs;
 - (h) Flows from riparian habitats and wetlands; and
 - (i) Discharges from potable water sources.
- (4) Discharges of non-storm water to the MS4 from the following categories must be controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means where there is evidence that those discharges are a source of pollutants to waters of the U.S. Discharges of non-storm water to the MS4 from the following categories not controlled by the requirements given below through statute, ordinance, permit, contract, order, or similar means must be addressed by the Copermittee as illicit discharges.
- (a) Air conditioning condensation
- The discharge of air conditioning condensation should be directed to landscaped areas or other pervious surfaces where feasible;
- (b) Individual residential vehicle washing

ADMINISTRATIVE DRAFT

The discharge of wash water must be encouraged through public outreach and education:

- (i) To be directed to landscaped areas or other pervious surfaces where feasible, and
 - (ii) To minimize the use of water for vehicle washing, use as little washing detergent and other vehicle wash products as possible, wash vehicles at commercial wash facilities, and implement other practices or behaviors that will prevent the discharge of pollutants associated with individual residential vehicle washing from entering the MS4; and
- (c) Dechlorinated swimming pool discharges
- (i) Eliminate residual chlorine, algaecide, filter backwash, or other pollutants from swimming pools prior to discharging to the MS4, and
 - (ii) The discharge of saline swimming pool water must be directed to the sanitary sewer, landscaped areas, other pervious surfaces that can accommodate the volume of water, or to the MS4 if the MS4 discharges to a saltwater receiving water.
- (5) Firefighting discharges to the MS4 must be addressed by the Copermittee as illicit discharges only if the Copermittee or the San Diego Water Board identifies the discharge as a significant source of pollutants to receiving waters. Firefighting discharges to the MS4 not identified as a significant source of pollutants to receiving waters, must be addressed, at a minimum, as follows:
- (a) Non-emergency firefighting discharges
- (i) Building fire suppression system maintenance discharges (e.g. sprinkler line flushing) to the MS4 must be addressed as illicit discharges where BMPs are not implemented.
 - (ii) Non-emergency firefighting discharges (i.e., discharges from controlled or practice blazes, firefighting training, and maintenance activities not associated with building fire suppression systems) must be addressed by a program, to be developed and implemented by the Copermittee, to reduce or eliminate pollutants in such discharges from entering the MS4.
- (b) Emergency firefighting discharges
- Each Copermittee should develop and encourage implementation of BMPs to reduce or eliminate pollutants in emergency firefighting

ADMINISTRATIVE DRAFT

discharges to the MS4s and receiving waters within its jurisdiction. During emergency situations, priority of efforts should be directed toward life, property, and the environment (in descending order). BMPs shall not interfere with immediate emergency response operations or impact public health and safety.

- (6) If the Copermittee or San Diego Water Board identifies any category of non-storm water discharges listed under Provisions [E.2.a.\(1\)-\(4\)](#) as a source of pollutants to receiving waters, the category must be prohibited through ordinance, order, or similar means and addressed as an illicit discharge.

b. Prevent and Detect Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to prevent and detect illicit discharges to the MS4:

- (1) Each Copermittee must maintain an updated map of its entire MS4 and the corresponding drainage areas. The accuracy of the MS4 map must be confirmed during non-storm water MS4 monitoring events. The MS4 map must be included as part of the jurisdictional runoff management program document. Any geographic information system (GIS) layers or files used by the Copermittee to maintain the MS4 map must be made available to the San Diego Water Board upon request. The MS4 map must identify the following:
- (a) All segments of the MS4 owned, operated, and maintained by the Copermittee,
 - (b) All known locations of inlets that discharge and/or collect runoff into the Copermittee's MS4,
 - (c) All known locations of connections with other MS4s not owned or operated by the Copermittee (e.g. Caltrans MS4s),
 - (d) All known locations of MS4 outfalls as defined by 40 CFR §122.26(B)(5-6) and private outfalls as defined by 40 CFR §122.26(B)(9) that discharge runoff collected from areas within the Copermittee's jurisdiction,
 - (e) All segments of receiving waters within the Copermittee's jurisdiction that receive and convey runoff discharged from the Copermittee's MS4 outfalls, and
 - (f) Locations of the non-storm water MS4 monitoring stations, identified pursuant to Provision [D.2.b](#), within its jurisdiction;
- (2) Each Copermittee must use Copermittee personnel and contractors to assist in identifying and reporting illicit discharges and connections, if observed, during the course of their daily employment activities;

ADMINISTRATIVE DRAFT

- (3) Each Copermittee must promote, publicize, and facilitate public reporting of the presence of illicit discharges or water quality impacts associated with discharges to or from the MS4. Each Copermittee must facilitate public reporting through development and operation of a public hotline. Public hotlines can be Copermittee-specific or shared by the Copermittees. All public hotlines must be capable of receiving reports in both English and Spanish 24 hours per day and seven days per week;
- (4) Each Copermittee must implement practices and procedures (including a notification mechanism) to prevent, respond to, contain, and clean up any spills that may discharge into the MS4 within their jurisdiction from any source. The Copermittee must coordinate with spill response teams to prevent to the extent possible entry of spills into the MS4, and prevent contamination waters of the U.S. The Copermittee must coordinate spill prevention, containment, and response activities throughout all appropriate Copermittee departments, programs, and agencies;
- (5) Copermittees are responsible for control of discharges to their MS4. In the event that the source of an illicit discharge or connection is from another MS4, the Copermittee shall notify and, if necessary coordinate, with the upstream MS4 to implement and/or enforce corrective actions; and
- (6) Each Copermittee must implement practices and procedures to prevent and limit infiltration of seepage from sanitary sewers (including private laterals and failing septic systems) to the MS4.

c. Visual Observations, Field Screening, And/or Monitoring

Each Copermittee must conduct visual observations, field screening and/or monitoring of MS4 outfalls and other portions of its MS4 within its jurisdiction to detect non-storm water and illicit discharges and connections to the MS4 in accordance with the jurisdictional non-storm water MS4 monitoring program requirements in Provision [D.2.b](#).

d. Investigate and Eliminate Illicit Discharges And Connections

Each Copermittee must include the following measures within its program to investigate and eliminate illicit discharges to the MS4:

- (1) Each Copermittee must prioritize and determine when follow-up investigations will be performed in response to visual observations and/or water quality monitoring data collected during an investigation of a detected non-storm water or illicit discharge to or from the MS4. The criteria for follow-up investigations must include the following:

ADMINISTRATIVE DRAFT

- (a) Pollutants identified as causing or contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;
 - (b) Pollutants identified as causing or contributing, or threatening to cause or contribute to impairments in water bodies on the 303(d) List and/or in environmentally sensitive areas (ESAs), located within its jurisdiction;
 - (c) Pollutants identified from sources or land uses known to exist within the area, drainage basin, or watershed that discharges to the portion of the MS4 within its jurisdiction included in the investigation; and
 - (d) Pollutants identified as causing or contributing to and exceedance of an NAL¹² where the source has not been identified as natural described in Provision C.1; and
 - (e) Pollutants identified as a threat to human health or the environment.
- (2) Each Copermittee must implement procedures to investigate and inspect portions of its MS4 that based on reports or notifications, visual observations, field screening, monitoring, or other appropriate information, indicate a reasonable potential of discharging pollutants to receiving waters within the Copermittees jurisdiction due to illicit discharges, illicit connections, or other sources of non-storm water.
- (a) The Copermittee may develop criteria to assess the validity of, and prioritize the response to, each report or notification received. Each Copermittee must respond to each report or notification (e.g., public hotline reports, staff or contractor reports and notifications, etc.) of an incident in a timely manner.
 - (b) Procedures should address field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been identified during previous investigations. The criteria established in Provision E.d.(2)(a) shall be used to prioritize response based on highest watershed priorities as established for the iterative process and determined in the Water Quality Improvement Plan, including:
 - (i) Obvious illicit discharges must be immediately investigated to identify the source(s) of discharges of non-storm water where flows are observed in and from the MS4 during the field screening and monitoring required pursuant to Provision D.2.b;

¹² NAL exceedances discovered during the course of IDDE monitoring and/or investigations may trigger action levels, including but not limited to, follow-up investigations based on the highest watershed priorities set forth and the iterative process provided in the WQIP.

ADMINISTRATIVE DRAFT

- (ii) The investigation must include field investigations to identify sources or potential sources for the discharge, unless the source or potential source has already been identified during previous investigations;
 - (iii) The investigation may include field investigations, reviewing Copermittee inventories, and other land use data to identify potential sources of the discharge; and
 - (iv) Procedures should address tracking of illicit discharges and connections.
- (3) Each Copermittee must maintain records and a database of the investigations, including the following information:
- (a) Location of incident, including hydrologic subarea, portion of MS4 receiving the non-storm water or illicit discharge, and point of discharge or potential discharge from MS4 to receiving water,
 - (b) Source of information initiating the investigation (e.g., public hotline reports, staff or contractor reports and notifications, monitoring data, etc.),
 - (c) Date the information used to initiate the investigation was received,
 - (d) Date the investigation was initiated,
 - (e) Dates of follow-up investigations,
 - (i) Identified or suspected source of the illicit discharge or connection, if determined,
 - (f) Known or suspected related incidents, if any,
 - (g) Result of the investigation, and
 - (h) If a source cannot be identified and the investigation is not continued, a rationale for why a discharge does not pose a threat to water quality and/or does not require additional investigation.
- (4) Each Copermittee must initiate the implementation of procedures, in a timely manner, to eliminate all detected and identified illicit discharges and connections within its jurisdiction. The procedures must include the following:
- (a) Procedures outlined by the Copermittee should address legal authority, as required under Provision [E.1](#), to enforce the elimination of illicit discharges and connections to the MS4. If the Copermittee identifies the source as a controllable source of non-storm water or illicit discharge or connection, the Copermittee must implement its Enforcement Response Plan pursuant to Provision [E.6](#) and enforce its legal authority to effectively prohibit and

ADMINISTRATIVE DRAFT

eliminate illicit discharges and connections to its MS4. Responses to discharges may include:

- (i) If the Copermittee identifies the source of the discharge as a category of non-storm water discharges in Provision [E.2.a](#), and the discharge in exceedance of NALs developed in the Water Quality Implementation Plan, then the Copermittees must determine if this is an isolated incident or set of circumstances, or if the category of discharge must be addressed through the prohibition of that category of discharge as an illicit discharge pursuant to Provision [E.2.a.\(6\)](#);
 - (ii) If the Copermittee suspects the source of the non-storm water discharge as natural in origin (i.e. non-anthropogenically influenced) and in conveyance into the MS4, then the Copermittee must document the rationale for why the discharge does not need further investigation. This documentation shall be included in the Annual Report.
 - (iii) If the Copermittee is unable to identify and document the source of a recurring non-storm water discharge to or from the MS4, then the Copermittee must address the discharge as an illicit discharge and update its jurisdictional runoff management program to address the common and suspected sources of the non-storm water discharge within its jurisdiction in accordance with the Copermittee's priorities.
- (5) Each Copermittee must submit a summary of the non-storm water discharges and illicit discharges and connections investigated and eliminated within its jurisdiction with each Annual Report required under Provision [F.3.b](#) of this Order.

3. Development Planning

Each Copermittee, within its respective jurisdiction, must implement a development planning program that includes, at a minimum, the following requirements.

a. Permanent BMP Requirements for All Development Projects

Each Copermittee, as practical and feasible, must prescribe BMP requirements during the planning process (i.e. prior to project approval and issuance of grading or building permits) for all development projects where local permits are issued, including unpaved roads and flood management projects, except emergency projects implemented for the protection of persons and property:

(1) General Requirements

PROVISION E: JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS

E.2. Illicit Discharge Detection and Elimination

E.3. Development and Redevelopment Planning

ADMINISTRATIVE DRAFT

- (a) All BMPs must be located so as to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible;
- (b) Multiple development projects may use shared permanent BMPs as long as construction of any shared BMP is completed prior to the use or occupation of any development project from which the BMP will receive runoff; and
- (c) Permanent BMPs must not be constructed within waters of the U.S.

(2) Source Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement applicable source control BMPs. The following source control BMPs must be implemented at all development projects where applicable and feasible:

- (a) Prevention of illicit discharges into the MS4;
- (b) Storm drain system stenciling or signage;
- (c) Properly designed outdoor material storage areas;
- (d) Properly designed outdoor work areas;
- (e) Properly designed trash storage areas; and
- (f) Any additional BMPs necessary to minimize pollutant generation at each project.

(3) Low Impact Development (LID) BMP Requirements

The following LID BMPs must be implemented at all development projects where applicable and feasible:

- (a) Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams);¹³

¹³ Development projects proposing to dredge or fill materials in waters of the U.S. must obtain a CWA Section 401 Water Quality Certification. Projects proposing to dredge or fill waters of the State must obtain Waste Discharge Requirements.

ADMINISTRATIVE DRAFT

- (b) Buffer zones for natural water bodies (where buffer zones are technically infeasible, require project applicant to include other buffers such as trees, access restrictions, etc.);
- (c) Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils;
- (d) Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised;
- (e) Minimization of the impervious footprint of the project;
- (f) Minimization of soil compaction to landscaped areas;
- (g) Disconnection of impervious surfaces through distributed pervious areas;
- (h) Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharge to the MS4;
- (i) Small collection strategies located at, or as close as possible to, the source (i.e. the point where storm water initially meets the ground) to minimize the transport of runoff and pollutants to receiving waters;
- (j) Use of permeable materials for projects with low traffic areas and appropriate soil conditions;
- (k) Landscaping with native or drought tolerant species; and
- (l) Harvesting and using precipitation.

b. Priority Development Projects**(1) Definition of Priority Development Project**

Priority Development Projects include the following:

- (a) All new development projects that fall under the Priority Development Project categories listed under Provision [E.3.b.\(2\)](#). Where a new development project feature, such as a parking lot, falls into a Priority Development Project category, the entire project footprint is subject to Priority Development Project requirements; and
- (b) Those redevelopment projects that create, add, or replace at least 5,000 square feet of impervious surfaces on an already developed site, and the redevelopment project is a Priority Development Project category listed

ADMINISTRATIVE DRAFT

under Provision [E.3.b.\(2\)](#). Where redevelopment results in an increase of less than fifty percent of the impervious surfaces of a previously existing development, and the existing development was not subject to Priority Development Project requirements, the performance and sizing requirements discussed in Provisions [E.3.c.\(2\)](#) and [E.3.c.\(3\)](#) apply only to the addition or replacement, and not to the entire development. Where redevelopment results in an increase of more than fifty percent of the impervious surfaces of a previously existing development and was not subject to previous Priority Project Development requirements, the performance and sizing requirements apply to the entire development.

- (c) Projects where redevelopment results in an increase of more than fifty percent of impervious surfaces of a previously existing development, and the existing development was subject to previous Priority Project Development requirements, only the altered portion of development is subject to the Priority Development Project requirements in this Order.

(2) Priority Development Project Categories

- (a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public development projects on public or private land which fall under the planning and building authority of the Copermittee.
- (b) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.
- (c) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is 5,000 square feet or more of impervious surface.
- (d) Hillside development projects. This category includes any development which creates 5,000 square feet or more of impervious surface which is located in an area with known erosive soil conditions, where the development will grade on any natural slope that is twenty-five percent or greater.
- (e) Environmentally sensitive areas (ESAs). This category includes any development located within, directly adjacent to, or discharging directly to an ESA, which either creates 2,500 square feet of impervious surface on a proposed project site or increases the area of imperviousness of a proposed project site to 10 percent or more of its naturally occurring

ADMINISTRATIVE DRAFT

condition. "Directly adjacent to" means situated within 200 feet of the ESA. "Discharging directly to" means outflow from a drainage conveyance system that collects runoff from the subject development or redevelopment site which terminates at or in receiving waters within the ESA and is not comingled with flows from adjacent lands.

- (f) Parking lots. This category is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce that has 5,000 square feet or more of impervious surface.
- (g) Streets, roads, highways, and freeways. This category is defined as any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles.
- (h) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more of impervious surface or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day.
- (i) Large development projects. This category includes any post-construction pollutant-generating new development projects that result in the disturbance of one acre or more of land.

(3) Priority Development Project Exemptions

Each Copermittee has the discretion to exempt the following projects from being defined as Priority Development Projects:

- (a) Sidewalks constructed as part of new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;
- (b) Bicycle lanes that are constructed as part of new streets or roads but are not hydraulically connected to the new streets or roads and designed to direct storm water runoff to adjacent vegetated areas;
- (c) Impervious trails and driveways constructed and designed to direct storm water runoff to adjacent vegetated areas, or other non-erodible permeable areas;
- (d) Sidewalks, bicycle lanes, driveways, parking lots, or trails constructed with permeable surfaces.

ADMINISTRATIVE DRAFT

- (e) Single-family residential projects that are not part of a larger development or proposed subdivision and implement BMPs that meet minimum performance standards, as outlined in the BMP Design Manual.¹⁴
 - (f) Any paved impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles that follows the USEPA guidance regarding Management Wet Weather with Green Infrastructure: Green Streets¹⁵ to the MEP.
- c. Priority Development Project Structural BMP Performance and Sizing Requirements**

In addition to the BMP requirements listed for all development projects under Provision [E.3.a](#), Priority Development Projects must also implement structural BMPs that conform to performance and sizing requirements.

(1) Retention and Treatment Control BMP Requirements

Each Copermittee must require each Priority Development Project to implement BMPs to retain and treat pollutants onsite in the following order:

- (a) Each Priority Development Project must be required to implement LID BMPs as described in Provision [E.3.a.\(3\)](#); and
- (b) Each Priority Development Project must be required to implement LID BMPs that are sized and designed to retain the difference in volume between the runoff volume produced in the post-development condition as compared to the pre-development runoff condition resulting from a 24-hour 85th percentile storm event¹⁶ (“design capture volume¹⁷”); or
- (c) If onsite retention of the design capture volume using LID BMPs is technically infeasible per Provision [E.3.c.\(4\)](#), flow-thru LID and/or conventional treatment control BMPs must be implemented to provide equal pollutant removal for the portion of the design capture volume that is

¹⁴ The BMP Design Manual was formerly known as the Standard Urban Storm Water Mitigation Plan under Order Nos. R9-2007-0001, R9-2009-0002, and R9-2010-0016.

¹⁵ <http://water.epa.gov/infrastructure/greeninfrastructure/index.cfm>

¹⁶ This volume is not a single volume to be applied to all areas covered by this Order. The size of the 85th percentile storm event is different for various parts of the San Diego Region. The Copermittees are encouraged to calculate the 85th percentile storm event for each of its jurisdictions using local rain data pertinent to its particular jurisdiction. In addition, isopluvial maps may be used to extrapolate rainfall data to areas where insufficient data exists in order to determine the volume of the local 85th percentile storm event in such areas. Where the Copermittees will use isopluvial maps to determine the 85th percentile storm event in areas lacking rain data, the Copermittees must describe their method for using isopluvial maps in its BMP Design Manuals.

¹⁷ Design capture volume is a single event based volume occurring after an extended dry period.

ADMINISTRATIVE DRAFT

not retained onsite. Flow-thru LID treatment control BMPs must be designed for an appropriate surface loading rate to prevent erosion, scour and channeling within the BMP; or

(d) If retention and/or equivalent pollutant removal of the design capture volume to meet E.3.c.(2)(a) or E.3.c.(2)(b) are infeasible onsite, project applicants must perform mitigation for the portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, as described in Provision E.3.c.(5)(c).

(e) All onsite treatment control BMPs must:

- (i) Be correctly sized and designed so as to remove pollutants from storm water to the MEP;
- (ii) Be sized to comply with the following numeric sizing criteria:
 - [a] Volume-based treatment control BMPs must be designed to mitigate (infiltrate, filter, or treat) the remaining portion of the design capture volume that was not retained onsite; or
 - [b] Flow-based treatment control BMPs must be designed to mitigate (filter or treat) either: 1) the maximum flow rate of runoff produced from a rainfall intensity of 0.2 inch of rainfall per hour, for each hour of a storm event; or 2) the maximum flow rate of runoff produced by the 85th percentile hourly rainfall intensity (for each hour of a storm event), as determined from the local historical rainfall record, multiplied by a factor of two.
- (iii) Be ranked with high or medium pollutant removal efficiency for the project's most significant pollutants of concern. Treatment control BMPs with a low removal efficiency ranking must only be approved by a Copermittee when a feasibility analysis has been conducted which exhibits that implementation of treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.

(2) Hydromodification Management BMP Requirements

Each Copermittee must require each Priority Development Project disturbing greater than one acre to implement hydromodification management BMPs, as described in the Copermittees current HMP, as applicable.

(a) Post-project runoff flow rates and durations do not exceed pre-development runoff flow rates and durations by more than 10 percent (for the range of flows that result in increased potential for erosion or degraded channel conditions downstream of Priority Development Projects).

ADMINISTRATIVE DRAFT

- (i) In evaluating the range of flows that results in increased potential for erosion of natural (non-hardened) channels, the lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or that erodes the toe of channel banks.
 - (ii) For artificially hardened channels, analysis to identify the lower boundary must use characteristics of a natural stream segment similar to that found in the watershed. The lower boundary must correspond with the critical channel flow that produces the critical shear stress that initiates channel bed movement or erodes the toe of the channel banks.
 - (iii) The Copermittees may use monitoring results pursuant to Provision [D.5.a.\(4\)](#) to re-define the range of flows resulting in increased potential for erosion or degraded channel conditions, as warranted by the data.
- (b) Projects shall preserve (where feasible) or provide compensation for significant losses of sediment supply anticipated as a result of development.
- (c) If hydromodification management BMPs are technically infeasible per Provision [E.3.c.\(5\)](#), project applicants must perform mitigation for the portion of the runoff volume that is not controlled and will cause or contribute to increased potential for erosion of receiving waters downstream of the Priority Development Project, as described in Provision [E.3.c.\(5\)\(c\)](#).
- (d) Exemptions

Each Copermittee has the discretion to exempt a Priority Development Project from the hydromodification management BMP requirements where the project:

- (i) Discharges storm water runoff into underground storm drains discharging directly to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean;
- (ii) Discharges storm water runoff into conveyance channels whose bed and bank are stabilized (e.g. concrete lined, an engineered interlocking paver, gabion system etc...) all the way from the point of discharge to water storage reservoirs, lakes, enclosed embayments, or the Pacific Ocean; or

ADMINISTRATIVE DRAFT

- (iii) Discharges storm water runoff into other areas identified by the San Diego Water Board as exempt from the requirements of Provisions [E.3.c.\(3\)](#) .

(3) Long-Term Structural BMP Maintenance

Each Copermitee must require the project applicant to submit proof of the mechanism under which ongoing long-term maintenance of all structural BMPs will be conducted.

ADMINISTRATIVE DRAFT**(4) Infiltration and Groundwater Protection**

- (a) Infiltration and treatment control BMPs designed to primarily function as large, centralized infiltration devices (such as large infiltration trenches and infiltration basins) must not cause or contribute to an exceedance of an applicable groundwater quality objective. At a minimum, such infiltration and treatment control BMPs must be in conformance with the design criteria listed below, unless the development project applicant demonstrates to the Copermittee that one or more of the specific design criteria listed below are not necessary to protect groundwater quality. The design criteria listed below do not apply to small infiltration systems dispersed throughout a development project.
- (i) Runoff must undergo pretreatment such as sedimentation or filtration prior to infiltration;
 - (ii) Pollution prevention and source control BMPs must be implemented at a level appropriate to protect groundwater quality at sites where infiltration treatment control BMPs are to be used;
 - (iii) Infiltration treatment control BMPs must be adequately maintained to remove pollutants in storm water to the MEP;
 - (iv) The vertical distance from the base of any infiltration treatment control BMP to the seasonal high groundwater mark must be at least 10 feet. Where groundwater basins do not support beneficial uses, this vertical distance criteria may be reduced, provided groundwater quality is maintained;
 - (v) The soil through which infiltration is to occur must have physical and chemical characteristics (e.g., appropriate cation exchange capacity, organic content, clay content, and infiltration rate) which are adequate for proper infiltration durations and treatment of runoff for the protection of groundwater beneficial uses;
 - (vi) Infiltration treatment control BMPs must not be used for areas of industrial or light industrial activity, and other high threat to water quality land uses and activities as designated by each Copermittee, unless runoff does not exceed Basin Plan water quality standards or runoff is first treated or filtered to remove pollutants prior to infiltration; and
 - (vii) Infiltration treatment control BMPs must be located a minimum of 100 feet horizontally from any water supply wells.
- (b) The Copermittees may collectively or individually develop alternative mandatory design criteria to that listed above for infiltration and treatment control BMPs which are designed to primarily function as centralized

ADMINISTRATIVE DRAFT

infiltration devices. Before implementing the alternative design criteria in the development planning process the Copermittee(s) must:

- (i) Notify the San Diego Water Board of the intent to implement the alternative design criteria submitted; and
- (ii) Comply with any conditions set by the San Diego Water Board.

(5) Alternative Compliance for Technical Infeasibility

At the discretion of each Copermittee, alternative compliance may be allowed for certain Priority Development Projects to comply with Provisions [E.3.c.\(1\)](#) and [E.3.c.\(2\)](#). Alternative compliance is an optional program for the Copermittees to utilize if it is determined to provide an equal or greater benefit than onsite compliance. Where alternative compliance is allowed, it is the sole responsibility of the project applicant to execute the alternative compliance and comply with the following requirements:

ADMINISTRATIVE DRAFT

(a) Applicability

Priority Development Projects may be allowed alternative compliance if:

- (i) The Copermittee reviews and accepts site-specific hydrologic and/or design analysis performed by a registered professional engineer, geologist, architect, or landscape architect;
- (ii) The project applicant demonstrates, and the Copermittee determines and documents, that BMPs per Provisions [E.3.c.\(1\)](#) and [E.3.c.\(2\)](#) were incorporated into the project design to the maximum extent technically feasible given the project site conditions;
- (iii) The project applicant is required to perform mitigation described in Provision [E.3.c.\(5\)\(c\)](#) with a net result of at least the same level of water quality protection as would have been achieved if the Priority Development Project had fully implemented the BMP requirements under Provisions [E.3.c.\(1\)](#) and [E.3.c.\(2\)](#) onsite.

(b) Criteria For Technical Infeasibility

Each Copermittee must develop, or develop in collaboration with the other Copermittees, criteria to determine technical infeasibility for fully implementing the BMP requirements under Provisions [E.3.c.\(1\)](#) and [E.3.c.\(2\)](#) and include these requirements in the BMP Design Manual pursuant to Provision [E.3.d](#). Technical infeasibility may result from conditions including, but not limited to:

- (i) Locations that cannot meet the infiltration and groundwater protection requirements in Provision [E.3.c.\(4\)](#) due to the presence of shallow bedrock, contaminated soils, near surface groundwater, underground facilities, or utilities;
- (ii) Brownfield development sites or other locations where pollutant mobilization is a documented concern;
- (iii) The design of the site precludes the use of soil amendments, plantings of vegetation, or other designs that can be used to infiltrate and evapotranspire runoff;
- (iv) Soils cannot be sufficiently amended to provide for the requisite infiltration rates;
- (v) Locations with geotechnical hazards;
- (vi) Insufficient onsite and/or offsite demand for storm water use;
- (vii) Modifications to an existing building to manage storm water are not feasible due to structural or plumbing constraints;

ADMINISTRATIVE DRAFT

- (viii) HMP flow rate requirements that result in BMP orifice sizes too small for efficient maintenance; and
- (ix) Smart growth and infill or redevelopment locations where the density and/or nature of the project would create significant difficulty for compliance with Provisions [E.3.c.\(2\)](#) and [E.3.c.\(3\)](#) onsite.

(c) Mitigation

Priority Development Projects that meet the Copermittee's technical infeasibility criteria developed pursuant to Provision [E.3.c.\(5\)\(b\)](#) must be required to mitigate for the increased flow rates, increased flow durations, and/or water quality equivalence expected to be discharged from the site.

- (i) The Project applicant must perform offsite mitigation for:
 - [a] The portion of the pollutant load in the design capture volume that is not retained or equally treated onsite, and/or
 - [b] The portion of the increased potential erosion of downstream receiving waters not fully controlled with hydromodification management BMPs onsite.

(ii) Mitigation Project Locations

Offsite mitigation projects must be implemented within the same Watershed Management Area as the Priority Development Project, and preferably within the same hydrologic subarea. Mitigation projects outside of the hydrologic subarea but within the same Watershed Management Area may be approved provided that the project applicant demonstrates that mitigation projects within the same hydrologic subarea are infeasible and that the mitigation project will address similar potential impacts expected from the Priority Development Project.

(iii) Mitigation Project Types

Offsite mitigation projects may include, where applicable and feasible, retrofitting opportunities and stream and/or habitat rehabilitation or restoration opportunities identified in the Water Quality Improvement Plans, identified pursuant to Provision [B.3.](#) Other offsite mitigation projects may include green streets or infrastructure projects, groundwater recharge projects, or regional BMPs upstream of receiving waters. Mitigation credit will not be given to portions of in stream mitigation projects using impervious hardscape materials such as concrete. Project applicants seeking to utilize these alternative compliance provisions may propose other

ADMINISTRATIVE DRAFT

offsite mitigation projects, which the Copermittees may approve if they meet the requirements of Provision [E.3.c.\(4\)](#).

(iv) Mitigation Project Timing

The Copermittee and/or project applicant must develop a schedule for the completion of offsite mitigation projects, including milestone dates to identify, fund, design, and construct the projects. Offsite mitigation funding must be secured by the applicant and verified by the Copermittee prior to granting construction permits or recording of maps, whichever comes first. .

(v) Mitigation Fund

A Copermittee may choose to implement additional mitigation programs (e.g., pollutant credit system, mitigation fund) as a means for developing and implementing offsite mitigation projects, provided the projects conform to the requirements for project locations, types, and timing described above.

d. Update BMP Design Manual

Each Copermittee must update its BMP Design Manual pursuant to Provision [F.2.b](#) or Provision [F.5.a](#). Until the Copermittee has updated its BMP Design Manual with the requirements of Provision [E.3.c](#), the Copermittee must continue implementing its current BMP Design Manual. Unless directed otherwise by the San Diego Water Board, the Copermittee must implement the BMP Design Manual within 180 days of completing the update. The update of the BMP Design Manual must include the following:

- (1) Updated procedures to determine the nature and extent of storm water requirements applicable to a potential development or redevelopment project. These procedures must inform project applicants of the storm water management requirements applicable to their project including, but not limited to, general requirements for all development projects, LID and conventional BMP design procedures and requirements, hydromodification management requirements, requirements specific to phased projects, and procedures specific to private developments and public improvement projects;
- (2) Updated procedures to identify pollutants and conditions of concern for selecting the most appropriate structural BMPs that consider, at a minimum, the following:
 - (a) Receiving water quality (including pollutants for which receiving waters are listed as impaired under CWA section 303(d));
 - (b) Priority pollutants or receiving water conditions contributing to the highest water quality priorities identified in the Water Quality Improvement Plan;

ADMINISTRATIVE DRAFT

- (c) Land use type of the project and pollutants associated with that land use type; and
 - (d) Pollutants expected to be present onsite.
- (3) Updated procedures for designing structural BMPs, including any updated performance and sizing requirements to be consistent with the requirements of Provision [E.3.c](#) for all BMPs listed in the BMP Design Manual;
 - (4) Long-term maintenance criteria for each BMP listed in the BMP Design Manual; and
 - (5) Criteria and mitigation requirements, in accordance with the requirements under Provision [E.3.c.\(4\)](#), if the Copermittee elects to allow alternative compliance for technical infeasibility within its jurisdiction.
- e. Priority Development Project BMP Implementation and Oversight**

Each Copermittee must implement a program to ensure structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

(1) Structural BMP Approval and Verification Process

- (a) Each Copermittee must ensure that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by 18 months after the adoption of this Order, or pursuant to Provision [F.5.a](#), the requirements of Provision [E.3](#) are implemented. For project applications that have received prior lawful approval by 18 months after the adoption of this Order, or pursuant to Provision [F.5.a](#), the Copermittee may allow previous land development requirements to apply.
- (b) Each Copermittee must identify the roles and responsibilities of various municipal departments in implementing the structural BMP requirements, including each stage of a project from application review and approval through BMP maintenance and inspections.
- (c) Each Copermittee must ensure that appropriate easements and ownerships are properly recorded in public records and the information is conveyed to all appropriate parties when there is a change in project or site ownership.
- (d) Each Copermittee must ensure that prior to occupancy and/or intended use of any portion of the Priority Development Project, each structural BMP must be inspected to verify that they have been constructed and are

ADMINISTRATIVE DRAFT

operating in compliance with all of its specifications, plans, permits, ordinances, and the requirements of this Order.

(2) Priority Development Project Inventory and Prioritization

(a) Each Copermittee must develop and regularly maintain a watershed-based database to track and inventory all Priority Development Projects and associated structural BMPs within their jurisdiction. Inventories must be accurate and complete beginning from January 2002 for the San Diego County Copermittees, February 2003 for the Orange County Copermittees, and July 2005 for the Riverside County Copermittees, where data is available. The database must include, at a minimum, the following information:

- (i) Priority Development Project location (address and hydrologic subarea);
- (ii) Descriptions of structural BMP type(s);
- (iii) Date(s) of construction;
- (iv) Party responsible for structural BMP maintenance;
- (v) Dates and findings of structural BMP maintenance verifications; and
- (vi) Corrective actions and/or resolutions.

(b) Each Copermittee must prioritize the Priority Development Projects with structural BMPs within its jurisdiction. The designation of Priority Development Projects as high priority must consider the following:

- (i) The highest water quality priorities identified in the Water Quality Improvement Plan;
- (ii) Receiving water quality;
- (iii) Number and sizes of structural BMPs;
- (iv) Recommended maintenance frequency of structural BMPs;
- (v) Likelihood of operation and maintenance issues of structural BMPs;
- (vi) Land use and expected pollutants generated; and
- (vii) Compliance record.

(3) Structural BMP Maintenance Verifications and Inspections

Each Copermittee is required to verify that structural BMPs on each Priority Development Project are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP through

ADMINISTRATIVE DRAFT

inspections, self-certifications, surveys, or other equally effective approaches.

- (a) All (100 percent) of the structural BMPs at Priority Development Projects that are designated as high priority must be inspected directly by the Copermittee annually prior to each rainy season;
- (b) For verifications performed through a means other than direct Copermittee inspection, adequate documentation must be required by the Copermittee to provide assurance that the required maintenance of structural BMPs at each Priority Development Project has been completed; and
- (c) Appropriate follow-up measures (including re-inspections, enforcement, etc.) must be conducted to ensure that structural BMPs at each Priority Development Project continue to reduce pollutants in storm water to the MEP as originally designed.

f. Development Project Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision [E.1](#) for all development projects, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision [E.6](#).

4. Construction Management

Each Copermittee must implement a construction management program that includes the following requirements:

a. Construction Program Management

Each Copermittee must define in the Jurisdictional Runoff Management Plan the following:

- (1) Define construction sites to be inventoried, such as sites that involve ground disturbance or soil disturbing activities; and
- (2) Define a process for ensuring adequate construction BMP implementation for non-inventoried sites. Non-inventoried sites involve minor construction activities that are not anticipated to create storm water pollution such as interior improvements, small miscellaneous residential improvements such as patio covers, plumbing, electrical, and mechanical work.

b. Project Approval Process

Prior to issuance of any local permit that allows commencement of construction activities for any inventoried construction site, each Copermittee must:

ADMINISTRATIVE DRAFT

- (1) Require a site-specific Pollution Control Plan, or equivalent construction BMP or erosion control plan, to be submitted by the project applicant to the Copermittee;
- (2) Confirm the Pollution Control Plan, or equivalent construction BMP or erosion control plan, complies with the local grading ordinance, other applicable local ordinances, and the requirements of this Order; and
- (3) Confirm the Pollution Control Plan, or equivalent construction BMP or erosion control plan, includes seasonally appropriate and effective BMPs and management measures described in Provision [E.4.c](#), as applicable to the project.

c. Construction Site Inventory and Tracking

- (1) Each Copermittee must maintain, and update at least monthly, a watershed-based inventory of all applicable construction sites within its jurisdiction. The inventory must include:
 - (a) Relevant contact information for each site (e.g., name, address, phone, and email for the owner and contractor);
 - (b) The basic site information including location (address and hydrologic subarea), Waste Discharge Identification (WDID) number (if applicable), size of the site, and approximate area of disturbance;
 - (c) Whether or not the site is considered a high threat to water quality, as defined in Provision [E.4.b.\(2\)](#) below;
 - (d) Current construction phase;
 - (e) The required inspection frequency, as defined in the Copermittee's jurisdictional runoff management program document;
 - (f) The date the Copermittee accepted the project-specific Pollution Control Plan, or equivalent construction BMP or erosion control plan; and
 - (g) Whether or not there are ongoing enforcement actions administered to the site.
- (2) Each Copermittee must identify all construction sites within its jurisdiction that represent a high threat to downstream surface water quality. At a minimum, high threat to water quality sites must include:
 - (a) Sites located within a hydrologic subarea where sediment is known or suspected to contribute to the highest water quality priorities identified in the Water Quality Improvement Plan;

ADMINISTRATIVE DRAFT

- (b) Sites located within the same hydrologic subarea and tributary to a CWA section 303(d) water body segment impaired for sediment;
- (c) Sites located within, directly adjacent to, or discharging directly to a receiving water within an ESA; and
- (d) Other sites determined by the Copermitees or the San Diego Water Board as a high threat to water quality.

ADMINISTRATIVE DRAFT**d. Construction Site BMP and Management Measure Implementation**

Each Copermittee must implement, or require the implementation of effective BMPs to reduce discharges of pollutants in storm water from construction sites to the MEP, and prevent non-storm water discharges into the MS4. These BMPs must be site specific, seasonally appropriate, and construction phase appropriate. BMPs and management measures must be implemented at each construction site year round. Dry season BMP implementation must plan for and address unseasonal rain events that may occur during the dry season (May 1 through September 30). Copermittees must implement, or require the implementation of, BMPs and management measures in the following categories:

- (1) Project Planning;
- (2) Good Site Management "Housekeeping", including waste management;
- (3) Non-storm Water Management;
- (4) Erosion Control;
- (5) Sediment Control;
- (6) Run-on and Run-off Control; and
- (7) Active/Passive Sediment Treatment Systems, where applicable.

e. Construction Site Inspections

Each Copermittee must conduct construction site inspections to confirm compliance with its permits and applicable local ordinances, and the requirements of this Order. Priority for site inspections must consider threat to water quality pursuant to Provision E.4.b as well as the nature of the construction activity, topography, and the characteristics of soils and receiving water quality.

(1) Inspection Frequency

- (a) Each Copermittee must conduct inspections at all inventoried sites, including high threat to water quality sites, at an appropriate frequency for each phase of construction to confirm the site reduces the discharge of pollutants in storm water from construction sites to the MEP, and prevents non-storm water discharges from entering the MS4.
- (b) Each Copermittee must establish appropriate inspection frequencies for high threat to water quality sites, and all other sites, for each phase of construction. Inspection frequencies appropriate for addressing the highest water quality priorities identified in the Water Quality Improvement Plan, and for complying with the requirements of this Order must be

ADMINISTRATIVE DRAFT

identified in each Copermittee's jurisdictional runoff management program document.

- (c) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e., re-inspection, enforcement) necessary to confirm site compliance with its permits and applicable local ordinances, and the requirements of this Order.

(2) Inspection Content

Inspections of construction sites by the Copermittee must include, at a minimum:

- (a) Verification of coverage under the Construction General Permit (Notice of Intent (NOI) and/or WDID number) during initial inspections, when applicable;
- (b) Assessment of compliance with its permits and applicable local ordinances related to pollution prevention, including the implementation and maintenance of applicable BMPs;
- (c) Assessment of BMP adequacy and effectiveness;
- (d) Visual observations of actual non-storm water discharges;
- (e) Visual observations of actual or potential discharge of sediment and/or construction related materials from the site;
- (f) Visual observations of actual or potential illicit connections; and
- (g) If any violations are found and BMP enhancements are needed, inspectors must take and document appropriate actions in accordance with the Enforcement Response Plan pursuant to Provision [E.6](#).

(3) Inspection Tracking and Records

Each Copermittee must track all inspections and re-inspections at all inventoried construction sites. The Copermittee must retain all inspection records in an electronic database or tabular format, which must be made available to the San Diego Water Board upon request. Inspection records must include, at a minimum:

- (a) Site name, location (address and hydrologic subarea), and WDID number (if applicable);
- (b) Inspection date;
- (c) Weather conditions during inspection;

ADMINISTRATIVE DRAFT

- (d) Description of problems observed with BMPs and indication of need for BMP addition/repair/replacement and any scheduled re-inspection, and date of re-inspection;
- (e) Descriptions of any other specific inspection comments which must, at a minimum, include rationales for longer compliance time;
- (f) Description of enforcement actions issued in accordance with the Enforcement Response Plan pursuant to Provision [E.6](#); and
- (g) Resolution of problems noted and date problems fixed.

f. Construction Site Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision [E.1](#) for all its inventoried construction sites, as necessary, to achieve compliance with the requirements of this Order, in accordance with its Enforcement Response Plan pursuant to Provision [E.6](#).

5. Existing Development Management

[NOTE: This section is provided as an alternate to the original language.]

Each Copermittee must implement an existing development management program that includes the following requirements:

a. Industrial, Commercial, and Municipal Sources**(1) Source Identification and Prioritization**

Each Copermittee must identify sources and maintain an updated watershed-based inventory of its existing industrial, commercial, and municipal development that has the reasonable potential to discharge a pollutant load to and from the MS4. The use of an automated database system, such as GIS, is highly recommended. The inventory must, at a minimum, include:

- (a) Name, location (address and hydrological subarea) of each source;
- (b) A designation of the source as municipal, commercial, or industrial;
- (c) SIC Code or NAICS Code, if applicable;
- (d) Industrial General Permit NOI and/or WDID number, if applicable;
- (e) Identification of pollutants generated or potentially generated by the source;

ADMINISTRATIVE DRAFT

- (f) Whether the source is adjacent to an ESA;
- (g) Whether the source is tributary to and within the same hydrologic subarea as a CWA section 303(d) water body segment and generates or potentially generates pollutants for which the water body segment is impaired; and
- (h) Whether the source contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan;

(2) BMP Implementation and Maintenance

Each Copermittee must designate a minimum set of BMPs required for all inventoried existing development with the reasonable potential to discharge pollutant loads from their MS4, including special event venues. The designated minimum BMPs must be specific to facility types and pollutant-generating activities, as appropriate.

(a) Pollution Prevention

Each Copermittee must promote the use of pollution prevention methods, where appropriate.

(b) BMP Operation and Maintenance

- (i) Each Copermittee must properly operate and maintain, or require the proper operation and maintenance of designated BMPs at sources within its jurisdiction.
- (ii) Each Copermittee must implement a schedule of operation and maintenance activities for its MS4 and related structures (including but not limited to catch basins, storm drain inlets, detention basins, etc.), and verify proper operation of all its municipal structural treatment controls. Operations and maintenance activities may include:
 - [a] Inspections of MS4 and related structures;
 - [b] Cleaning of MS4 and related structures; and
 - [c] Proper disposal of materials removed from cleaning of MS4 and related structures.
- (iii) Each Copermittee must implement a schedule of operation and maintenance activities for public: streets, unpaved roads, paved

ADMINISTRATIVE DRAFT

roads, and paved highways and freeways within its jurisdiction.

- (iv) Each Copermittee must implement controls to prevent infiltration of sewage into the MS4 from leaking sanitary sewers. Copermittees that operate both a municipal sanitary sewer system and a MS4 must implement controls and measures to prevent and eliminate seeping sewage from infiltrating the MS4. Copermittees that do not operate both a municipal sanitary sewer system and a MS4 are encouraged to coordinate with sewerage agencies to keep themselves informed of relevant and appropriate maintenance activities and capital projects in their jurisdiction.

(c) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must implement procedures, or require the implementation of procedures, as appropriate, to reduce discharges of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers at sources within its jurisdiction.

(3) Measures to Address Highest Water Quality Priorities

Each Copermittee must conduct or require measures as necessary to address sources or areas that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. These measures must be identified as applicable in each WQIP strategy, and may include any of the following:

(a) Copermittee Program Activities

Each Copermittee may make modifications to its program activities (e.g. increased or focused education, inspections, etc.) to address sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

(b) Additional Control Measures

Each Copermittee may require additional pollution prevention measures and control measures at sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan, including consideration of retrofit and channel rehabilitation and improvement opportunities, as identified in Provision 5.a.2.(c)

(c) Retrofit

Each Copermittee must develop a strategy to facilitate the implementation of retrofit projects. Existing development in high priority areas should be assessed for inclusion in the retrofit plan. Retrofit plans should focus on

ADMINISTRATIVE DRAFT

pollutants and areas identified as high priority within the Water Quality Improvement Plans, with the highest priority projects included in the Water Quality Improvement Plans.

- (i) Retrofit projects may be prioritized based on their relative benefit to water quality, feasibility, cost effectiveness, and community acceptance.
- (ii) Retrofit projects in the highest priority areas should be included in the review for the Water Quality Improvement Plan to provide additional pollutant removal from storm water discharges.

(d) Channel Rehabilitation and Improvement

Each Copermittee must develop a strategy to facilitate the implementation of channel rehabilitation and improvement projects. Existing channels in high priority areas should be assessed for inclusion in the channel rehabilitation and improvement plan. Channel rehabilitation and improvement plans should focus on pollutants and areas identified as high priority within the Water Quality Improvement Plans.

- (i) Channel rehabilitation and improvement projects may be selected to address hydromodification, restore wetland and riparian habitat, or to address other water quality issues prioritized in the Water Quality Improvement Plan.
- (ii) Channel rehabilitation and improvement projects may be prioritized based on their relative benefit to water quality, feasibility, cost effectiveness, and community acceptance.
- (iii) Channel rehabilitation and improvement projects in the highest priority areas should be included in the review for the Water Quality Improvement Plan to provide additional pollutant removal from storm water discharges.

(4) Inspection Requirements:

(a) Inspection Frequency

- (i) Each Copermittee must establish appropriate inspection frequencies for inventoried industrial, commercial, and municipal sources based on the potential for discharging pollutants via storm water and non-storm water discharges, and should reflect the priorities set forth in the Water Quality Improvement Plan.
- (ii) Each Copermittee must conduct inspections annually with a level of effort equivalent to 20% of their industrial, commercial, and

ADMINISTRATIVE DRAFT

municipal inventory combined¹⁸¹⁹. If facilities require multiple inspections during any given year, those additional inspections may count towards this total.

- (iii) Inventoried existing development must be inspected, as needed, in response to valid public complaints and findings from the Copermittee's municipal and contract staff inspections.
- (iv) Based upon inspection findings, each Copermittee must implement all follow-up actions (i.e. education and outreach, re-inspection, enforcement) as necessary to confirm compliance in accordance with its enforcement response plan pursuant to Provision E.6.

(b) Inspection Content

Inspections of industrial, commercial, and municipal facilities by the Copermittee may include the following:

- (i) Industrial, commercial, and municipal facilities name and location (address and hydrologic subarea);
- (ii) Inspection and re-inspection date(s);
- (iii) Assessment of compliance with its applicable local ordinances and permits related to non-storm water and storm water discharges and runoff;
- (iv) Assessment of BMPs implementation;
- (v) Verification of coverage under the Industrial General Permit (NOI and/or WDID number), when applicable;
- (vi)
- (vii) Visual observations of actual non-storm water discharges, if present;
- (viii) Visual observations of actual or potential discharge of pollutants, if present; and
- (ix) Visual observations of actual or potential illicit connections, if present.

¹⁸ Excludes linear facilities (MS4 and roads).

ADMINISTRATIVE DRAFT**(c) Inspection Tracking and Records**

Each Copermittee must track all inspections and re-inspections at all inventoried industrial, commercial, and municipal facilities. The Copermittee must maintain all inspection records in an electronic database or tabular format, either in paper or electronic inspection records files, which must be made available to the San Diego Water Board upon request.

Inspection records must include the information necessary to effectively manage and implement the industrial, commercial, and municipal facilities inspection program, as described in each Copermittee's jurisdictional runoff management plan

b. Residential Sources**(1) Source Identification and Prioritization:**

An inventory of residential sources within each Copermittees jurisdiction must be developed as follows:

(a) Designation of Residential Management Areas

Each Copermittee must divide areas of residential development into Residential Management Areas. Residential Management Areas may be designated by one or more of the following: Hydrologic Sub Area, land use (e.g. single family, multi family, rural, Common Interest Areas, Home Owner Associations), and/or residential target audiences, and/or other accepted methods to be included in each Copermittee-approved jurisdictional runoff management plan.

(b) Prioritization of Residential Management Areas

Copermittees must prioritize Residential Management Areas for the purposes of directing their residential programs. Prioritization must consider whether the Residential Management Area contributes or potentially contributes to the highest water quality priorities identified in the Water Quality Improvement Plan, and consideration of other program information or information from other relevant programs:

(c) A regularly updated map must be developed showing the locations of the highest priority inventoried Residential Management Areas, watershed boundaries, and water bodies at or near them.

ADMINISTRATIVE DRAFT

(2) BMP Implementation and Maintenance

(a) Designate BMPs

Each Copermittee must designate and encourage the implementation of a minimum set of BMPs for all residential sources or residential target audiences with the reasonable potential to discharge significant pollutant loads from their MS4. The designated minimum BMPs must be source-specific, and must address each of the following as appropriate.

(i) Pollution Prevention

Each Copermittee must promote the use of pollution prevention methods, where appropriate.

(ii) BMP Operation and Maintenance

Each Copermittee must designate and require the operation and maintenance of designated BMPs for residential sources within its jurisdiction.

(iii) Pesticides, Herbicides, and Fertilizers BMPs

Each Copermittee must designate and encourage, as appropriate, the implementation of practices to reduce discharges of pollutants associated with the application, storage, and disposal of pesticides, herbicides and fertilizers at residential sources within its jurisdiction.

(3) Measures to Address Highest Water Quality Priorities

Each Copermittee must designate or require measures as necessary to address residential sources or residential target audiences that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan. These measures must be identified as applicable in each WQIP strategy, and may include any of the following:

(a) Copermittee Program Activities

Each Copermittee may make modifications to its program activities (e.g. increased or focused education, inspections, etc.) to address residential sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

ADMINISTRATIVE DRAFT**(b) Additional Control Measures**

Each Copermittee may require additional pollution prevention and control measures at sources that discharge pollutants identified as contributing to the highest water quality priorities in the Water Quality Improvement Plan.

(c) Retrofit

Each Copermittee must encourage through education or other means the implementation of retrofit projects at residential sources or areas.

(4) Residential Management Area Oversight:**(a) Residential Area Assessment**

Each Copermittee must conduct representative evaluations (e.g. visual observations, water use analysis, and other historical data) of its high priority Residential Management Areas as defined in the Water Quality Improvement Plan to update implementation strategies. Each Copermittee must develop a program to facilitate oversight and assessment in residential areas. Oversight may include complaint investigation, IDDE Activities, follow-up on monitoring observations, visual observations, outreach and education, water use analysis, or other methods deemed necessary to facilitate BMP implementation. Each Copermittee should conduct assessment of its oversight activities in prioritized residential areas to inform any updates to the WQIP.

(b) Follow up Actions

Each Copermittee must prioritize its follow up actions and enforcement (e.g. education and outreach, re-assessment) in accordance with its Enforcement Response Plan pursuant to Provision E.6.

(c) Record-keeping

Records must be sufficiently detailed in order to determine compliance with the requirements of this Order and any progress made toward the modification of residential management strategies, or addressing the highest water quality priorities identified in the Water Quality Improvement Plan.

c. Existing Development Enforcement

Each Copermittee must enforce its legal authority established pursuant to Provision E.1 for all its inventoried existing development identified by the

ADMINISTRATIVE DRAFT

Copermittee as having the reasonable potential to discharge pollutant loads from the MS4 within their jurisdiction, in accordance with its Enforcement Response Plan pursuant to Provision [E.6](#).

ADMINISTRATIVE DRAFT**6. Enforcement Response Plans**

Each Copermittee must develop and implement an Enforcement Response Plan as part of its jurisdictional runoff management program document. The Enforcement Response Plan must describe the applicable protocols and options for enforcing compliance with the provisions of this Order. The Enforcement Response Plan must include the following:

a. ENFORCEMENT RESPONSE PLAN COMPONENTS

The Enforcement Response Plans shall include the following individual components:

- (1) The Illicit Discharge Detection and Elimination Enforcement Components provided in Provision E.2;
- (2) The Development Planning Enforcement Component provided in Provision E.3;
- (3) The Construction Management Enforcement Component provided in Provision E.4; and
- (4) The Existing Development Management Enforcement Component provided in Provision E.5.

Existing enforcement plans or procedures may be used to partially or wholly satisfy the requirements of any Enforcement Response Plan component.

b. ENFORCEMENT APPROACHES AND OPTIONS

Each Enforcement Response Plan component must describe the Copermittee's approach to correcting noncompliance with its permits, applicable local ordinances, and this Order. It must describe protocols for progressively stricter responses, including, as applicable, timeframes allowed to bring areas or facilities into compliance. The enforcement process must include appropriate sanctions to compel compliance, such as:

- (1) Verbal and written notices of violation;
- (2) Cleanup requirements;
- (3) Fines
- (4) Bonding requirements;
- (5) Administrative and criminal (if intentional or criminally negligent) penalties;
- (6) Liens;
- (7) Stop work orders; and
- (8) Permit and occupancy denials.

ADMINISTRATIVE DRAFT

c. CORRECTION OF VIOLATIONS

- (1) Violations must be corrected in a timely manner with the goal of correcting them within 30 calendar days after the violations are discovered, and prior to the next predicted rain event, when possible.
- (2) If more than 30 calendar days are required for compliance, then a rationale must be recorded in the applicable electronic database or tabular system used to track compliance.

d. ESCALATED ENFORCEMENT PRIORITIES

- (1) Each Enforcement Response Plan must include a definition of “escalated enforcement priorities”. Escalated enforcement priorities shall be defined to include any enforcement scenario where a violation or other non-compliance is determined to constitute a significant contribution to any of the highest water quality priorities identified in the Water Quality Improvement Plan. Escalated enforcement priorities may be defined differently for development planning; construction sites; commercial, industrial, and municipal sources; and residential management areas.
- (2) Where a violation involving a pollutant or stressor that has been identified as a highest water quality priority is not determined to represent an escalated enforcement priority, a rationale must be recorded in the applicable electronic database or tabular system used to track compliance.
- (3) Escalated enforcement actions must continue to increase in severity, as necessary, to compel compliance as soon as possible.

e. REPORTING OF NON-COMPLIANT SITES

- (1) Each Copermittee must notify the San Diego Water Board verbally within 24 hours and in writing within 5 calendar days of issuing escalated enforcement (as defined in the Copermittee’s Enforcement Response Plan) to a construction site that poses a significant threat to water quality as a result of violations or other non-compliance with its permits and applicable local ordinances, and the requirements of this Order. Written notification may be provided electronically in email form.
- (2) Each Copermittee must notify the San Diego Water Board of non-filers under the Industrial General Permit and Construction General Permit by email to Nonfilers_R9@waterboards.ca.gov.

ADMINISTRATIVE DRAFT**7. Public Education and Participation**

- a. Each Copermittee must implement a public education and participation program, as appropriate, to promote and encourage the development of programs, management practices, control techniques and systems, design and engineering methods, and behaviors that reduce the discharge of pollutants in storm water to the MEP, prevent controllable non-storm water discharges from entering the MS4, and protect water quality standards in receiving waters. The public education program must include the following:
 - (1) Educational activities, public information activities, and other appropriate outreach activities intended to reduce pollutants of concern from its MS4 to the MEP. Activities shall be determined and prioritized by Copermittees by jurisdiction and/or watershed (Section 5.c.(5) to address the highest threats to water quality (e.g. pesticides, herbicides and fertilizers, used oil, toxic waste, etc.);
 - (2) Appropriate education and training measures for specific target audiences, as determined and prioritized by the Copermittee(s) by jurisdiction and watershed, based on high risk behaviors and pollutants of concern, such as construction site operators, residents, underserved target audiences and school-aged children.
- b. Each Copermittee shall incorporate a mechanism for evaluation and assessment of educational and other outreach activities, as needed, to identify progress and incorporate modifications necessary to increase the effectiveness of the public education program.
- c. Each Copermittee may determine, where appropriate and effective, mechanisms for intergovernmental coordination on education and outreach activities.

8. Fiscal Analysis

- a. Each Copermittee must secure the resources necessary to meet all the requirements of this Order.
- b. Each Copermittee must conduct an annual fiscal analysis of their jurisdictional runoff management programs in their entirety. The fiscal analysis must include the following:

Identification of the various categories of expenditures necessary to implement the requirements of this Order, including a description of the specific items to be accounted for in each category of expenditures;

- (1) The staff resources needed and allocated to meet the requirements of this Order, including any development, implementation, and enforcement activities required;

ADMINISTRATIVE DRAFT

- (2) The fiscal analysis must provide estimated expenditures for Provisions [E.8.b.0](#) and [E.8.b.\(1\)](#) for each Copermittee's jurisdictional runoff management program budget for the current reporting period.
 - (3) The source(s) of funds that are proposed to meet the necessary expenditures described in Provisions [E.8.b.0](#) and [E.8.b.\(1\)](#), including legal restrictions on the use of such funds.
- c.** Each Copermittee must submit a summary of the annual fiscal analysis with each Annual Report required pursuant to Provision [F.3.b](#).
 - d.** Each Copermittee must provide the documentation used to develop the summary of the annual fiscal analysis upon request by the San Diego Water Board.

ADMINISTRATIVE DRAFT**F. REPORTING**

The purpose of this provision is to determine and document compliance with the requirements set forth in this Order. The goal of this provision is to communicate to the San Diego Water Board and the people of the State of California the implementation status of each jurisdictional runoff management program and compliance with the requirements of this Order. This goal is to be accomplished through the submittal of specific deliverables to the San Diego Water Board by the Copermittees.

1. Water Quality Improvement Plans

The Copermittees for each Watershed Management Area must develop and submit a complete Water Quality Improvement Plan in accordance with the requirements of Provision B, no later than 18 months after the adoption of this Order for a 30 day public review and comment period. The San Diego Water Board will issue a public notice and solicit public comments on the Water Quality Improvement Plan for a minimum of 30 days. Based on the comments received, the San Diego Water Board will determine whether to hold a public hearing or to limit public input to submittal of written comments. If no hearing is held the San Diego Water Board will notify the Copermittees that the Water Quality Improvement Plan has been accepted as complete following its review and determination that the Water Quality Improvement Plan meets the requirements of this Order. Water Quality Improvement Plans are deemed approved if no response is provided to the Copermittees within 2 months of the submittal date. Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

a. WATER QUALITY IMPROVEMENT PLAN SUBMITTAL AND IMPLEMENTATION

Copermittees must submit requested modifications to the Water Quality Improvement Plan either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. Once approved by the San Diego Water Board Executive Officer, the Copermittees must implement any modifications to the Water Quality Improvement Plan in accordance with the schedules developed pursuant to Provisions B.2 and B.3.b. Requests for modification are deemed approved if no response is provided to the requesting Copermittee(s) within 2 months of the request date.

b. CORRESPONDING MODIFICATIONS TO JURISDICTIONAL RUNOFF MANAGEMENT PROGRAMS AND MONITORING AND ASSESSMENT PROGRAMS

Copermittees must submit requested modifications to the jurisdictional runoff management programs and monitoring and assessment programs either in the Annual Report required pursuant to Provision F.3.b, or as part of the Report of Waste Discharge (ROWD) required pursuant to Provision F.5.b. Once approved by the San Diego Water Board Executive Officer, the Copermittees must implement any modifications to the Water Quality Improvement Plan in

ADMINISTRATIVE DRAFT

accordance with the schedules developed pursuant to Provisions B.3.b. Requests for modification are deemed approved if no response is provided to the requesting Copermittee(s) within 2 months of the request date.

2. Updates**a. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATES**

Each Copermittee must update its jurisdictional runoff management program document to incorporate the requirements of Provision E. The update must be completed no later than 18 months after the adoption of this Order. Updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports, and updated jurisdictional runoff management program documents must be made available on the Regional Clearinghouse.

Jurisdictional Runoff Management Program document updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

b. BMP DESIGN MANUAL UPDATES

Each Copermittee must update its BMP Design Manual to incorporate the requirements of Provision E.3.d. The update must be completed no later than 18 months after the adoption of this Order. Updated BMP Design Manuals must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Subsequent updates may be submitted as part of the Annual Reports. Updated BMP Design Manuals must be made available on the Regional Clearinghouse.

BMP Design Manual updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

c. WATER QUALITY IMPROVEMENT PLAN UPDATES

The Copermittees for each Watershed Management Area must submit updates to the Water Quality Improvement Plan as part of the Annual Reports. Updated Water Quality Improvement Plans must be made available on the Regional Clearinghouse required pursuant to Provision F.4.

Water Quality Improvement Plan updates that modify program elements from the requirements of Provision E must provide rationale for the modifications within the update documents.

ADMINISTRATIVE DRAFT**3. Progress Reporting**

a. PROGRESS REPORT PRESENTATIONS

The Copermittees for each Watershed Management Area must appear before the San Diego Water Board, as requested by the San Diego Water Board, to provide progress reports on the implementation of the Water Quality Improvement Plan and jurisdictional runoff management programs.

b. ANNUAL REPORTS

(1) The Copermittees for each Watershed Management Area must submit an Annual Report for each reporting period, which begins July 1 and ends June 30 in the following year, no later than January 31 of the following year. This is to accommodate the monitoring year from October 1 to September 30 of the subsequent year. The first Annual Report must be prepared for the reporting period beginning July 1 after adoption of the permit, and upon San Diego Water Board determination that the Water Quality Improvement Plan meets the requirements of this Order to June 30 in the following year. Annual Reports must be made available on the Regional Clearinghouse required pursuant to Provision F.4. Each Annual Report must include the following:

(a) The progress of implementing the Water Quality Improvement Plan, including, but not limited to, the following:

- (i) The progress toward achieving the interim and final numeric goals for the highest water quality priorities for the Watershed Management Area,
- (ii) The water quality improvement strategies that were implemented and/or no longer implemented by each of the Copermittees during the reporting period and previous reporting periods, and are planned to be implemented during the next reporting period,
- (iii) Proposed modifications to water quality improvement or jurisdictional strategies with associated rationale for such modifications,
- (iv) Previously proposed modifications or updates incorporated into the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document and implemented by the Copermittees in the Watershed Management Area,

[a] The monitoring data collected pursuant to Provision D, summarized and presented in tabular and graphical form;

ADMINISTRATIVE DRAFT

- [b] Progress of the special studies required pursuant to Provision D, and the results or findings when a special study, or each phase of a special study, is completed;
 - [c] The findings from the assessments required pursuant to Provision D; and
 - (v) Proposed modifications or updates to the Water Quality Improvement Plan and/or each Copermittee's jurisdictional runoff management program document;
- (b) A completed Jurisdictional Runoff Management Program Annual Report Form ([Attachment D](#) or approved revision) for each Copermittee in the Watershed Management Area, certified by a Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative.
- (2) Each Copermittee must complete and submit a Jurisdictional Runoff Management Program Annual Report Form ([Attachment D](#) or approved revision) no later than October 31 of each year until the first Annual Report is required to be submitted. Each Copermittee's Annual Report form must summarize the jurisdictional activities in the WMAs in which the Copermittee has jurisdiction.
- (3) Each Copermittee must provide any data or documentation utilized in developing the Annual Report upon request by the San Diego Water Board. Any monitoring data utilized in developing the Annual Report must be uploaded to the California Environmental Data Exchange Network (CEDEN).²⁰ Any monitoring and assessment data utilized in developing the Annual Report must be provided on the Regional Clearinghouse required pursuant to Provision [F.4](#).

c. REGIONAL MONITORING AND ASSESSMENT REPORT

- (1) The Copermittees must submit a Regional Monitoring and Assessment Report no later than 180 days in advance of the expiration date of this Order. The Regional Monitoring and Assessment Report may be submitted as part of the ROWD required pursuant to Provision [F.5.b](#). The Copermittees must review the jurisdictional and watershed monitoring data, data analyses, and assessments required pursuant to Provision [D.4](#), to assess the following:

²⁰ Data must be uploaded to CEDEN Southern California Regional Data Center (<http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx>) using the templates provided on the CEDEN website.

ADMINISTRATIVE DRAFT

- (a) The beneficial uses of the receiving waters within the San Diego Region that are protected or must be restored;
 - (b) The progress toward restoring impacted beneficial uses in the receiving waters within the San Diego Region; and
 - (c) Pollutants or conditions of emerging concern that may impact beneficial uses in the receiving waters within the San Diego Region.
- (2) The Regional Monitoring and Assessment Report must include recommendations for improving the implementation and assessment of the Water Quality Improvement Plans and jurisdictional runoff management programs.
- (3) Each Copermittee must provide any data or documentation utilized in developing the Regional Monitoring and Assessment Report upon request by the San Diego Water Board. Any monitoring and assessment data utilized in developing the Regional Monitoring and Assessment Report must be provided on the Regional Clearinghouse required pursuant to Provision F.4.

4. Regional Clearinghouse

The Copermittees²¹ must develop, update, and maintain an internet-based Regional Clearinghouse that can be used to store, disseminate, and share the Copermittees' Water Quality Improvement Plans, Annual Reports, jurisdictional runoff management program documents, monitoring data, special studies, and any other data or information generated by the Copermittees during the implementation of this Order. Monitoring data collected pursuant to Provision D must be uploaded to CEDEN,²² with links to the uploaded data available on the Regional Clearinghouse. The Regional Clearinghouse may be linked to other internet-based data portals and databases where the original documents and data are stored. The Regional Clearinghouse must be available and accessible to members of the public. The Regional Clearinghouse must be developed and made available to the public no later than 18 months after the adoption of this Order.

5. Report of Waste Discharge

- a. The Orange County Copermittees and the Riverside County Copermittees, are required to submit a complete ROWD pursuant to the requirements of their current Orders and are enrolled under this Order upon expiration of their current

²¹ The Copermittee may elect to develop and maintain the clearinghouse(s) provided by other Copermittees or agencies.

²² Data must be uploaded to CEDEN Southern California Regional Data Center (<http://www.sccwrp.org/Data/DataSubmission/SouthernCaliforniaRegionalDataCenter.aspx>) using the templates provided on the CEDEN website.

ADMINISTRATIVE DRAFT

Orders. Upon expiration of their current Orders, the Copermittees in each county must comply with the requirements of this Order by July 1 after enrollment under this Order, unless early enrollment is granted pursuant to Provision [F.6](#) of this Order. The current Orders for the Orange County Copermittees and Riverside County Copermittees are rescinded upon their expiration date except for enforcement purposes.

- b. The Copermittees must submit to the San Diego Water Board a complete ROWD as an application for the re-issuance of this NPDES permit. The ROWD must be submitted no later than 180 days in advance of the expiration date of this Order. The Copermittee may elect to develop and submit the in conjunction with or provided by another Copermittee. The ROWD must contain the following minimum information:

- (1) Names and addresses of the Copermittees;
- (2) Names and titles of the primary contacts of the Copermittees;
- (1) Proposed changes to the Copermittees' Water Quality Improvement Plans and the supporting justification;
- (3) Proposed changes to the Copermittees' jurisdictional runoff management programs and the supporting justification;
- (4) Any other information necessary for the re-issuance of this Order; and
- (5) Any other information required by federal regulations for NPDES permit reissuance.

6. Application for Early Enrollment

- a. The Orange County Copermittees, collectively, or Riverside County Copermittees, collectively, may apply for early enrollment under this Order by submitting a [Report of Waste Discharge Form 200](#) for each individual Copermittee in the respective county, with a written request for early enrollment under this Order that certifies the following conditions have been met:
- (1) A Water Quality Improvement Plan has been developed in accordance with the requirements of Provision [B](#), which can and will be implemented immediately upon enrollment under this Order;
 - (2) Each Copermittee in the county has updated its jurisdictional runoff management program document to incorporate the requirements of Provision [E](#), which can and will be implemented immediately upon enrollment under this Order; and

ADMINISTRATIVE DRAFT

(3) Each Copermittee in the county has updated its BMP Design Manual to incorporate the requirements of Provision [E.3.d](#), which can and will be implemented immediately upon enrollment under this Order.

- b. The San Diego Water Board will review the application for early enrollment and associated documents for completeness. A Notice of Enrollment (NOE) under this Order will be issued to the Copermittees in the respective county by the San Diego Water Board upon completion of the early enrollment application requirements. The effective enrollment date will be specified in the NOE and the Copermittees in the respective county are authorized to have MS4 discharges pursuant to the requirements of this Order starting on the date specified in the NOE. The existing Order for that county is rescinded upon the effective enrollment date specified in the NOE except for enforcement purposes.

7. Reporting Provisions

Each Copermittee must comply with all the reporting and recordkeeping provisions of the Standard Permit Provisions and General Provisions contained in [Attachment B](#) to this Order.

ADMINISTRATIVE DRAFT**G. PRINCIPAL WATERSHED COPERMITTEE RESPONSIBILITIES**

1. The Copermittees within each Watershed Management Area must designate a Principal Watershed Copermittee and notify the San Diego Water Board of the name of the Principal Watershed Copermittee. The notification may be submitted with the Water Quality Improvement Plan required pursuant to Provision [F.1](#) of this Order.
2. The Principal Watershed Copermittee is responsible for, at a minimum, the following:
 - a. Serving as liaison between the Copermittees in the Watershed Management Area and the San Diego Water Board on general permit issues, and when necessary and appropriate, representing the Copermittees in the Watershed Management Area before the San Diego Water Board.
 - b. Facilitating the development of the Water Quality Improvement Plan in accordance with the requirements of Provision [B](#) of this Order
 - c. Coordinating the submittal of the deliverables required by Provisions [F.1](#), [F.2](#), [F.3.a](#), and [F.3.b](#) of this Order.
 - d. Coordinating and developing, with the other Copermittees, the requirements of Provisions [F.3.c](#), [F.4](#), and [F.5.b](#) of this Order.

ADMINISTRATIVE DRAFT**H. MODIFICATION OF PROGRAMS**

1. Modifications of the Order may be initiated by the San Diego Water Board or by the Copermittees. Requests by Copermittees must be made to the San Diego Water Board.
2. Minor modifications to the Order may be made by the San Diego Water Board where the proposed modification complies with all the prohibitions and limitations, and other requirements of this Order.
3. Proposed modifications outside of the WQIP process that are not minor require amendment of this Order in accordance with this Order's rules, policies, and procedures.

ADMINISTRATIVE DRAFT

I. STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

Each Copermittee must comply with all the Standard Permit Provisions and General Provisions contained in [Attachment B](#) to this Order.

ADMINISTRATIVE DRAFT

ATTACHMENT A

DISCHARGE PROHIBITIONS

1. Basin Plan Waste Discharge Prohibitions

California Water Code Section 13243 provides that a Regional Water Board, in a water quality control plan, may specify certain conditions or areas where the discharge of waste or certain types of waste is not permitted. The following waste discharge prohibitions in the Water Quality Control Plan for the San Diego Basin (Basin Plan) are applicable to any person, as defined by Section 13050(c) of the California Water Code, who is a citizen, domiciliary, or political agency or entity of California whose activities in California could affect the quality of waters of the state within the boundaries of the San Diego Region.

1. The discharge of waste to waters of the state in a manner causing, or threatening to cause a condition of pollution, contamination or nuisance as defined in California Water Code Section 13050, is prohibited.
2. The discharge of waste to land, except as authorized by waste discharge requirements or the terms described in California Water Code Section 13264 is prohibited.
3. The discharge of pollutants or dredged or fill material to waters of the United States except as authorized by a National Pollutant Discharge Elimination System (NPDES) permit or a dredged or fill material permit (subject to the exemption described in California Water Code Section 13376) is prohibited.
4. Discharges of recycled water to lakes or reservoirs used for municipal water supply or to inland surface water tributaries thereto are prohibited, unless this San Diego Water Board issues a NPDES permit authorizing such a discharge; the proposed discharge has been approved by the State Department of Health Services (DHS) and the operating agency of the impacted reservoir; and the discharger has an approved fail-safe long-term disposal alternative.
5. The discharge of waste to inland surface waters, except in cases where the quality of the discharge complies with applicable receiving water quality objectives, is prohibited. Allowances for dilution may be made at the discretion of the San Diego Water Board. Consideration would include streamflow data, the degree of treatment provided and safety measures to ensure reliability of facility performance. As an example, discharge of secondary effluent would probably be permitted if streamflow provided 100:1 dilution capability.
6. The discharge of waste in a manner causing flow, ponding, or surfacing on lands not owned or under the control of the discharger is prohibited, unless the discharge is authorized by the San Diego Water Board.

ADMINISTRATIVE DRAFT

7. The dumping, deposition, or discharge of waste directly into waters of the state, or adjacent to such waters in any manner which may permit its being transported into the waters, is prohibited unless authorized by the San Diego Water Board.
8. Any discharge to a storm water conveyance system that is not composed entirely of "*storm water*" is prohibited unless authorized by the San Diego Water Board. [The federal regulations, 40 CFR 122.26(b)(13), define storm water as storm water runoff, snow melt runoff, and surface runoff and drainage. 40 CFR 122.26(b)(2) defines an illicit discharge as any discharge to a storm water conveyance system that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities.] [§122.26 amended at 56 FR 56553, November 5, 1991; 57 FR 11412, April 2, 1992].
9. The unauthorized discharge of treated or untreated sewage to waters of the state or to a storm water conveyance system is prohibited.
10. The discharge of industrial wastes to conventional septic tank/subsurface disposal systems, except as authorized by the terms described in California Water Code Section 13264, is prohibited.
11. The discharge of radioactive wastes amenable to alternative methods of disposal into the waters of the state is prohibited.
12. The discharge of any radiological, chemical, or biological warfare agent into waters of the state is prohibited.
13. The discharge of waste into a natural or excavated site below historic water levels is prohibited unless the discharge is authorized by the San Diego Water Board.
14. The discharge of sand, silt, clay, or other earthen materials from any activity, including land grading and construction, in quantities which cause deleterious bottom deposits, turbidity or discoloration in waters of the state or which unreasonably affect, or threaten to affect, beneficial uses of such waters is prohibited.
15. The discharge of treated or untreated sewage from vessels to Mission Bay, Oceanside Harbor, Dana Point Harbor, or other small boat harbors is prohibited.
16. The discharge of untreated sewage from vessels to San Diego Bay is prohibited.
17. The discharge of treated sewage from vessels to portions of San Diego Bay that are less than 30 feet deep at mean lower low water (MLLW) is prohibited.
18. The discharge of treated sewage from vessels, which do not have a properly functioning U.S. Coast Guard certified Type I or Type II marine sanitation device, to portions of San Diego Bay that are greater than 30 feet deep at mean lower low water (MLLW) is prohibited.

ADMINISTRATIVE DRAFT

2. Attachment B to State Water Board Resolution 2012-0012

Copermittees that discharge into Areas of Special Biological Significance must comply with State Water Board Resolution No. 2012-0012.

ADMINISTRATIVE DRAFT

ATTACHMENT B

STANDARD PERMIT PROVISIONS AND GENERAL PROVISIONS

1. Standard Permit Provisions

Code of Federal Regulations Title 40 Section 122.41 (40 CFR 122.41) includes conditions, or provisions, that apply to all National Pollutant Discharge Elimination System (NPDES) permits. Additional provisions applicable to NPDES permits are in 40 CFR 122.42. All applicable provisions in 40 CFR 122.41 and 40 CFR 122.42 must be incorporated into this Order and NPDES permit. The applicable 40 CFR 122.41 and 40 CFR 122.42 provisions are as follows:

a. DUTY TO COMPLY [40 CFR 122.41(a)]

The Copermittee must comply with all of the provisions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

- (1) The Copermittee must comply with effluent standards or prohibitions established under Section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement. [40 CFR 122.41(a)(1)]
- (2) The CWA provides that any person who violates Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any such sections in a permit issued under Section 402, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The CWA provides that any person who *negligently* violates Section 301, 302, 306, 307, 308, 318, or 405 of the CWA, or any condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, or any requirement imposed in a pretreatment program approved under Section 402(a)(3) or 402(b)(8) of the CWA, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who *knowingly* violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal

ADMINISTRATIVE DRAFT

penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates Section 301, 302, 303, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under Section 402 of the CWA, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in Section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

[40 CFR 122.41(a)(2)]

- (3) Any person may be assessed an administrative penalty by the San Diego Regional Water Quality Control Board (San Diego Water Board), State Water Resources Control Board (State Water Board), or United States Environmental Protection Agency (USEPA) for violating Section 301, 302, 306, 307, 308, 318 or 405 of the CWA, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

[40 CFR 122.41(a)(3)]

b. DUTY TO REAPPLY [40 CFR 122.41(B)]

If a Copermitttee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Copermitttee must apply for and obtain a new permit.

c. NEED TO HALT OR REDUCE ACTIVITY NOT A DEFENSE [40 CFR 122.41(C)]

It shall not be a defense for a Copermitttee 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.

d. DUTY TO MITIGATE [40 CFR 122.41(D)]

The Copermitttee must take all reasonable steps to minimize or prevent any discharge or prevent any discharge or sludge use or disposal in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

e. PROPER OPERATION AND MAINTENANCE [40 CFR 122.41(E)]

ADMINISTRATIVE DRAFT

The Copermittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Copermittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems that are installed by a Copermittee only when the operation is necessary to achieve compliance with the conditions of this permit.

f. PERMIT ACTIONS [40 CFR 122.41(F)]

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Copermittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

g. PROPERTY RIGHTS [40 CFR 122.41(G)]

This permit does not convey any property rights of any sort, or any exclusive privilege.

h. DUTY TO PROVIDE INFORMATION [40 CFR 122.41(H)]

The Copermittee must furnish to the San Diego Water Board, State Water Board, or USEPA within a reasonable time, any information which the San Diego Water Board, State Water Board, or USPEA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The Copermittee must also furnish to the San Diego Water Board, State Water Board, or USPEA upon request, copies of records required to be kept by this permit.

i. INSPECTION AND ENTRY [40 CFR 122.41(I)]

The Copermittee must allow the San Diego Water Board, State Water Board, USEPA, and/or their authorized representative (including an authorized contractor acting as their representative), upon presentation of credentials and other documents as may be required by law, to:

- (1) Enter upon the Copermittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit; [40 CFR 122.41(i)(1)]
- (2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit; [40 CFR 122.41(i)(2)]
- (3) Inspect and photograph at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; [40 CFR 122.41(i)(3)] and

ADMINISTRATIVE DRAFT

(4) Sample or monitor at reasonable times, for the purpose of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location. [40 CFR 122.41(i)(4)]

j. MONITORING AND RECORDS [40 CFR 122.41(j)]

(1) Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity. [40 CFR 122.41(j)(1)]

(2) Except for records of monitoring information required by this permit related to the Copermitttee's sewage sludge use and disposal activities, which shall be retained for a period of at least five (5) years (or longer as required by 40 CFR Part 503), the Copermitttee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time. [40 CFR 122.41(j)(2)]

(3) Records for monitoring information must include: [40 CFR 122.41(j)(3)]

(a) The date, exact place, and time of sampling or measurements; [40 CFR 122.41(j)(3)(i)]

(b) The individual(s) who performed the sampling or measurements; [40 CFR 122.41(j)(3)(ii)]

(c) The date(s) analyses were performed; [40 CFR 122.41(j)(3)(iii)]

(d) The individual(s) who performed the analyses; [40 CFR 122.41(j)(3)(iv)]

(e) The analytical techniques or methods used; [40 CFR 122.41(j)(3)(v)] and

(f) The results of such analyses. [40 CFR 122.41(j)(3)(vi)]

(4) Monitoring must be conducted according to test procedures under 40 CFR Part 136 unless another method is required under 40 CFR Subchapters N or O. [40 CFR 122.41(j)(4)]

In the case of pollutants for which there are no approved methods under 40 CFR Part 136 or otherwise required under 40 CFR Subchapters N and O, monitoring must be conducted according to a test procedure specified in the permit for such pollutants. [40 CFR 122.44(i)(1)(iv)]

(5) 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 permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 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

ADMINISTRATIVE DRAFT

more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both. [40 CFR 122.41(j)(5)]

k. SIGNATORY REQUIREMENT [40 CFR 122.41(k)]

(1) All applications, reports, or information submitted to the San Diego Water Board, State Water Board, or USEPA must be signed and certified. (See 40 CFR 122.22) [40 CFR 122.41(k)(1)]

(a) *For a municipality, State, Federal, or other public agency.* [All applications must be signed] [b]y either a principal executive officer or ranking elected official. [40 CFR 122.22(a)(3)]

(b) All reports required by permits, and other information requested by the San Diego Water Board, State Water Board, or USEPA must be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if: [40 CFR 122.22(b)]

(i) The authorization is made in writing by a person described in paragraph (a) of this section; [40 CFR 122.22(b)(1)]

(ii) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company, (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) [40 CFR 122.22(b)(2)] and,

(iii) The written authorization is submitted to the San Diego Water Board and State Water Board. [40 CFR 122.22(b)(3)]

(c) *Changes to authorization.* If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the San Diego Water Board prior to or together with any reports, information, or applications to be signed by an authorized representative. [40 CFR 122.22(c)]

(d) *Certification.* Any person signing a document under paragraph (a) or (b) of this section shall 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

ADMINISTRATIVE DRAFT

responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, 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." [40 CFR 122.22(d)]

- (2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both. [40 CFR 122.41(k)(2)]

I. REPORTING REQUIREMENTS [40 CFR 122.41(L)]

- (1) *Planned changes.* The Copermittee must give notice to the San Diego Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when: [40 CFR 122.41(l)(1)]
- (a) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
[40 CFR 122.41(l)(1)(i)] or
- (b) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1).
[40 CFR 122.41(l)(1)(ii)]
- (c) The alteration or addition results in a significant change in the Copermittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan. [40 CFR 122.41(l)(1)(iii)]
- (2) *Anticipated noncompliance.* The Copermittee must give advance notice to the San Diego Water Board or State Water Board of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
[40 CFR 122.41(l)(2)]
- (3) *Transfers.* This permit is not transferable to any person except after notice to the San Diego Water Board. The San Diego Water Board may require modification or revocation and reissuance of the permit to change the name of the Copermittee and incorporate such other requirements as may be necessary under the CWA.
[40 CFR 122.41(l)(3)]

ADMINISTRATIVE DRAFT

- (4) Monitoring reports. Monitoring results must be reported at the intervals specified elsewhere in this permit. [40 CFR 122.41(l)(4)]
- (a) Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the San Diego Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. [40 CFR 122.41(l)(4)(i)]
- (b) If the Copermittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or another method required for an industry-specific waste stream under 40 CFR Subchapters N or O, the results of this monitoring must be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the San Diego Water Board or State Water Board.
[40 CFR 122.41(l)(4)(ii)]
- (c) Calculations for all limitations which require averaging of measurements must utilize an arithmetic mean unless otherwise specified in the permit.
[40 CFR 122.41(l)(4)(iii)]
- (5) *Compliance schedules.* Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be submitted no later than 14 days following each schedule date. [40 CFR 122.41(l)(5)]
- (6) Twenty-four hour reporting.
- (a) The Copermittee must report any noncompliance that may endanger health or the environment. Any information must be provided orally within 24 hours from the time the Copermittee becomes aware of the circumstances. A written submission must also be provided within five (5) days of the time the Copermittee becomes aware of the circumstances. The written submission must contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6)(i)]
- (b) The following must be included as information which must be reported within 24 hours under this paragraph: [40 CFR 122.41(l)(6)(ii)]
- (i) Any unanticipated bypass that exceeds any effluent limitation in the permit (See 40 CFR 122.41(g)). [40 CFR 122.41(l)(6)(ii)(A)]

ADMINISTRATIVE DRAFT

- (ii) Any upset which exceeds any effluent limitation in the permit.
[40 CFR 122.41(l)(6)(ii)(B)] and,
 - (iii) Violation of a maximum daily discharge limitation for any of the pollutants listed by the San Diego Water Board in the permit to be reported within 24 hours. (See 40 CFR 122.44(g))
[40 CFR 122.41(l)(6)(ii)(C)]
- (c) The San Diego Water Board may waive the above-required written report on a case-by-case basis if the oral report has been received within 24 hours. [40 CFR 122.41(l)(6)(iii)]
- (7) *Other noncompliance.* The Copermittee must report all instances of noncompliance not reported in accordance with the standard provisions required under 40 CFR 122.41(l)(4), (5), and (6), at the time monitoring reports are submitted. The reports must contain the information listed in the standard provisions required under 40 CFR 122.41(l)(6). [40 CFR 122.41(l)(7)]
- (8) *Other information.* When the Copermittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the San Diego Water Board, State Water Board, or USEPA, the Copermittee must promptly submit such facts or information.
[40 CFR 122.41(l)(8)]
- m. UPSET [40 CFR 122.41(N)]
- (1) *Definition.* “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the Copermittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation. [40 CFR 122.41(n)(1)]
- (2) *Effect of an upset.* An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the standard provisions required under 40 CFR 122.41(n)(3) are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review. [40 CFR 122.41(n)(2)]
- (3) *Conditions necessary for a demonstration of upset.* A Copermittee who wishes to establish the affirmative defense of upset must demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
[40 CFR 122.41(n)(3)]

ADMINISTRATIVE DRAFT

- (a) An upset occurred and that the Copermitttee can identify the cause(s) of the upset; [40 CFR 122.41(n)(3)(i)]
- (b) The permitted facility was at the time being properly operated; [40 CFR 122.41(n)(3)(ii)] and
- (c) The Copermitttee submitted notice of the upset in accordance with the standard provisions required under 40 CFR 122.41(l)(6)(ii)(B) (24-hour notice). [40 CFR 122.41(n)(3)(iii)]
- (d) The Copermitttee complied with any remedial measures pursuant to the standard provisions required under 40 CFR 122.41(d). [40 CFR 122.41(n)(3)(iii)]

(4) *Burden of proof.* In any enforcement proceeding, the Copermitttee seeking to establish the occurrence of an upset has the burden of proof. [40 CFR 122.41(n)(4)]

n. **STANDARD PERMIT PROVISIONS FOR MUNICIPAL SEPARATE STORM SEWER SYSTEMS**
[40 CFR 122.42(c)]

The operator of a large or medium municipal separate storm sewer system or a municipal separate storm sewer that has been designated by the San Diego Water Board or State Water Board under 40 CFR 122.26(a)(1)(v) must submit an annual report by the anniversary of the date of the issuance of the permit for such system. The report must include:

- (1) The status of implementing the components of the storm water management program that are established as permit conditions; [40 CFR 122.42(c)(1)]
- (1) e
- (2) Revisions, if necessary, to the assessment of controls and the fiscal analysis reported in the permit application under 40 CFR 122.26(d)(2)(iv) and (v); [40 CFR 122.42(c)(3)]
- (3) A summary of data, including monitoring data, that is accumulated throughout the reporting year; [40 CFR 122.42(c)(4)]
- (4) Annual expenditures and budget for year following each annual report; [40 CFR 122.42(c)(5)]
- (5) A summary describing the number and nature of enforcement actions, inspections, and public education programs; [40 CFR 122.42(c)(6)]
- (6) Identification of water quality improvements or degradation. [40 CFR 122.42(c)(7)]

ADMINISTRATIVE DRAFT

o. STANDARD PERMIT PROVISIONS FOR STORM WATER DISCHARGES [40 CFR 122.42(D)]

The initial permits for discharges composed entirely of storm water issued pursuant to 40 CFR 122.26(e)(7) must require compliance with the conditions of the permit as expeditiously as practicable, but in no event later than three years after the date of issuance of the permit.

2. General Provisions

In addition to the standard provisions required to be incorporated into the Order and NPDES permit pursuant to 40 CFR 122.41 and 40 CFR 122.42, several other general provisions apply to this Order. The general provisions applicable to this Order and NPDES permit are as follows:

a. DISCHARGE OF WASTE IS A PRIVILEGE

No discharge of waste into the waters of the State, whether or not such discharge is made pursuant to waste discharge requirements, shall create a vested right to continue such discharge. All discharges of waste into waters of the State are privileges, not rights. [CWC Section 13263(g)]

b. DURATION OF ORDER AND NPDES PERMIT

(1) *Effective date.* This Order and NPDES permit becomes effective on the date of its adoption provided the USEPA has no objection. If the USEPA objects to its issuance, this Order shall not become effective until such objection is withdrawn. This Order supersedes Order No. R9-2007-0001 upon the effective date of this Order, and supercedes Order Nos. R9-2009-0002 and R9-2010-0016 upon their expiration.

(2) *Expiration.* This Order and NPDES permit expires five years after adoption. [40 CFR 122.46(a)]

(3) *Continuation of expired order.* After this Order and NPDES permit expires, the terms and conditions of this Order and NPDES permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits (40 CFR 122.6) are complied with.

c. AVAILABILITY

A copy of this Order must be kept at a readily accessible location and must be available to on-site personnel at all times.

ADMINISTRATIVE DRAFT

d. CONFIDENTIALITY OF INFORMATION

Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this Order will be considered confidential, and all such information and documents shall be available for review by the public at the San Diego Water Board office.

Claims of confidentiality for the following information will be denied:
[40 CFR 122.7(b)]

- (1) The name and address of any permit applicant or Copermittee;
[40 CFR 122.7(b)(1)] and
- (2) Permit applications and attachments, permits, and effluent data.
[40 CFR 122.7(b)(2)]

e. EFFLUENT LIMITATIONS

- (1) *Interim effluent limitations.* The Copermittee must comply with any interim effluent limitations as established by addendum, enforcement action, or revised waste discharge requirements which have been, or may be, adopted by the San Diego Water Board.
- (2) *Other effluent limitations and standards.* If any applicable 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 and that standard or prohibition is more stringent than any limitation on the pollutant in the permit, the San Diego Water Board shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition. [40 CFR 122.44(b)(1)]

f. DUTY TO MINIMIZE OR CORRECT ADVERSE IMPACTS

The Copermittee must take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

g. PERMIT ACTIONS

The filing of a request by the Copermittee for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order. (See 40 CFR 122.41(f)) In addition, the following provisions apply to this Order:

- (1) Upon application by any affected person, or on its own motion, the San Diego Water Board may review and revise the requirements in this Order. All requirements must be reviewed periodically. [CWC Section 13263(e)]

ADMINISTRATIVE DRAFT

- (2) This Order may be terminated or modified for cause, including, but not limited to, all of the following: [CWC Section 13381]
- (a) Violation of any condition contained in the requirements of this Order. [CWC Section 13381(a)]
 - (b) Obtaining the requirements in this Order by misrepresentation, or failure to disclose fully all relevant facts. [CWC Section 13381(b)]
 - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC Section 13381(c)]
- (3) When this Order is transferred to a new owner or operator, such requirements as may be necessary under the CWC may be incorporated into this Order.

h. NPDES PERMITTED NON-STORM WATER DISCHARGES

The San Diego Water Board has, in prior years, issued a limited number of individual NPDES permits for non-storm water discharges to MS4s. The San Diego Water Board or State Water Board may in the future, upon prior notice to the Copermittee(s), issue an NPDES permit for any non-storm water discharge (or class of non-storm water discharges) to an MS4.

i. MONITORING

In addition to the standard provisions required under 40 CFR 122.41(j) and (l)(4), the following general monitoring provisions apply to this Order:

- (1) Where procedures are not otherwise specified in Order, sampling, analysis and quality assurance/quality control must be conducted in accordance with the Quality Assurance Management Plan (QAMP) for the State of California's Surface Water Ambient Monitoring Program (SWAMP), adopted by the State Water Resources Control Board (State Water Board).
- (2) Pursuant to 40 CFR 122.41(j)(2) and CWC Section 13383(a), each Copermittee must retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least five (5) years from the date of the sample, measurement, report or application. This period may be extended by request of the San Diego Water Board at any time.
- (3) All chemical, bacteriological, and toxicity analyses must be conducted at a laboratory certified for such analyses by the California Department of Public Health or a laboratory approved by the San Diego Water Board.
- (4) For priority toxic pollutants that are identified in the California Toxics Rule (CTR) (65 Fed. Reg. 31682), the Copermittees must instruct their laboratories to establish

ADMINISTRATIVE DRAFT

calibration standards that are equivalent to or lower than 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 (SIP). If a Copermittee can demonstrate that a particular ML is not attainable, in accordance with procedures set forth in 40 CFR Part 136, the lowest quantifiable concentration of the lowest calibration standard analyzed by a specific analytical procedure (assuming that all the method specified sample weights, volumes, and processing steps have been followed) may be used instead of the ML listed in Appendix 4 of the SIP. The Copermittee must submit documentation from the laboratory to the San Diego Water Board for approval prior to raising the ML for any priority toxic pollutant.

j. ENFORCEMENT

- (1) The San Diego Water Board is authorized to enforce the terms of this Order under several provisions of the CWC, including, but not limited to, CWC Sections 13385, 13386, and 13387.
- (2) Nothing in this Order shall be construed to protect the Copermittee from its liabilities under federal, state, or local laws.
- (3) The CWC provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the CWA.
- (4) Except as provided in the standard conditions required under 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the Copermittee from civil or criminal penalties for noncompliance.
- (5) Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties to which the Copermittee is or may be subject to under Section 311 of the CWA.
- (6) Nothing in this Order shall be construed to preclude institution of any legal action or relieve the Copermittee from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authoring preserved by Section 510 of the CWA.

k. SEVERABILITY

The provisions of this Order are severable, and if any provision of this Order, or the application of any provisions of this Order to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this Order shall not be affected thereby.

l. APPLICATIONS

Any application submitted by a Copermittee for reissuance or modification of this Order must satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the CWC and the California Code of Regulations.

ADMINISTRATIVE DRAFT

m. IMPLEMENTATION

All plans, reports and subsequent amendments submitted in compliance with this Order must be implemented immediately (or as otherwise specified). All submittals by Copermittees must be adequate to implement the requirements of this Order.

n. REPORT SUBMITTALS

- (1) All report submittals must include an executive summary, introduction, conclusion, recommendations, and signed certified statement.
- (2) Each Copermittee must submit a signed certified statement covering its responsibilities for each applicable submittal.
- (3) The Principal Watershed Copermittee(s) must submit a signed certified statement covering its responsibilities for each applicable submittal and the sections of the submittals for which it is responsible.
- (4) Unless otherwise directed, the Copermittees must submit one hard copy and one electronic copy of each report required under this Order to the San Diego Water Board, and one electronic copy to the USEPA.
- (5) The Copermittees must submit reports and provide notifications as required by this Order to the following:

EXECUTIVE OFFICER
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION
9174 SKY PARK COURT, SUITE 100
SAN DIEGO CA 92123-4340
Telephone: (858) 467-2952 Fax: (858) 571-6972

EUGENE BROMLEY
US ENVIRONMENTAL PROTECTION AGENCY
REGION IX
PERMITS ISSUANCE SECTION (W-5-1)
75 HAWTHORNE STREET
SAN FRANCISCO CA 94105

ADMINISTRATIVE DRAFT

ATTACHMENT C

ACRONYMS AND ABBREVIATIONS

1. Acronyms and Abbreviations

AMAL	Average Monthly Action Level
ASBS	Area(s) of Special Biological Significance
BMP	Best Management Practice
Basin Plan	Water Quality Control Plan for the San Diego Basin
CEQA	California Environmental Quality Act
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CWA	Clean Water Act
CWC	California Water Code
CZARA	Coastal Zone Act Reauthorization Amendments of 1990
ERP	Enforcement Response Plan
ESAs	Environmentally Sensitive Areas
GIS	Geographic Information System
IBI	Index of Biotic Integrity
LID	Low Impact Development
MDAL	Maximum Daily Action Level
MEP	Maximum Extent Practicable
ML	Minimum Level
MS4	Municipal Separate Storm Sewer System
NAL	Non-Storm Water Action Level
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
ROWD	Report of Waste Discharge (application for NPDES reissuance)
SAL	Storm Water Action Level
San Diego Water Board	California Regional Water Quality Control Board, San Diego Region
SIC	Standard Industrial Classification Code
State Water Board	State Water Resources Control Board
TMDL	Total Maximum Daily Load
USEPA	United States Environmental Protection Agency
Waters of the U.S.	Waters of the United States
WDID	Waste Discharge Identification Number

ADMINISTRATIVE DRAFT

WLA
WQBEL

Waste Load Allocation
Water Quality Based Effluent Limitation

DEFINITIONS**2. Definitions**

Active/Passive Sediment Treatment - Using mechanical, electrical or chemical means to flocculate or coagulate suspended sediment for removal from runoff from construction sites prior to discharge.

Anthropogenic Litter – Trash generated from human activities, not including sediment.

Average Monthly Action Level – The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month or the geometric mean for bacteria, as applicable.

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 tangible and intangible economic, social, and environmental goals. “Beneficial Uses” of the waters of the State 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 uses 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)].

Best Management Practices (BMPs) - Defined in 40 CFR 122.2 as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices 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. In the case of municipal discharge permits, BMPs may be used in place of numeric effluent limits.

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. biotic integrity) of a water body.

Biocriteria - Under the CWA, numerical values or narrative expressions that define a desired biological condition for a water body that are legally enforceable. The USEPA defines biocriteria as: “numerical values or narrative expressions that describe the reference biological integrity of aquatic communities inhabiting waters of a given designated aquatic life use... (that)...describe the characteristics of water body segments least impaired by human activities.”

Biofiltration - Practices that use vegetation and amended soils to detain and treat runoff from impervious areas. Treatment is through filtration, infiltration, adsorption, ion exchange, and biological uptake of pollutants.

Biological Integrity - Defined in Karr J.R. and D.R. Dudley. 1981. Ecological perspective on

ADMINISTRATIVE DRAFT

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.

BMP Design Manual – A plan developed to eliminate, reduce, or mitigate the impacts of runoff from development projects, including Priority Development Projects.

Channel Rehabilitation and Improvement – Remedial measures or activities for the purpose of improving or restoring the environmental health of streams, channels or river systems. Techniques may vary from in-stream restoration techniques to off-line stormwater management practices installed in the system corridor or upland areas. Rehabilitation techniques may include, but are not limited to the following: riparian zone restoration, constructed wetlands, bank stabilization, channel modifications, and daylighting of drainage systems. Effectiveness may be measured in various manners, including: assessments of habitat, reduced streambank erosion, and restoration of water and sediment transport balance.

Clean Water Act Section 303(d) Water Body - An impaired 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. The discharge of runoff to these water bodies by the Copermittees is significant because these discharges can cause or contribute to violations of applicable water quality standards.

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. This does not include minor construction activities such as interior remodeling, plumbing, electrical, or mechanical work.

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 are affected.”

Copermittee – An incorporated city within the County of Orange, County of Riverside, or County of San Diego in the San Diego Region (Region 9), the County of Orange, the County of Riverside, the County of San Diego, the Orange County Flood Control District, the Riverside County Water Conservation and Flood Control District, the San Diego Regional Airport Authority, or the Unified Port District of San Diego.

Copermittees – All of the individual Copermittees, collectively.

Critical Channel Flow (Qc) – The channel flow that produces the critical shear stress that initiates bed movement or that erodes the toe of channel banks. When measuring Qc, it should be based on the weakest boundary material – either bed or bank.

Daily Discharge – Defined as either: (1) the total mass of the constituent discharged over the calendar day or any 24 hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g. concentration.)

ADMINISTRATIVE DRAFT

The Daily Discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day, or other 24 hour period other than a day), or by the arithmetic mean of analytical results from one or more grab samples taken over the course of a day.

Development Projects - Construction, rehabilitation, redevelopment, or reconstruction of any public or private projects involving land disturbance activities.

Dry Season –May 1 to September 30.

Dry Weather – Weather is considered dry if the preceding 72 hours has been without measurable precipitation (>0.1 inch).

Enclosed Bays – Enclosed bays are indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost bay works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays do not include inland surface waters or ocean waters.

Erosion – When land is diminished or worn away due to wind, water, or glacial ice. Often the eroded debris (silt or sediment) becomes a pollutant via storm water runoff. Erosion occurs naturally but can be intensified by land clearing activities such as farming, development, road building, and timber harvesting.

Environmentally Sensitive Areas (ESAs) - Areas that include but are not limited to all Clean Water Act Section 303(d) impaired water bodies; areas designated as Areas of Special Biological Significance by the State Water Board and San Diego Water Board; State Water Quality Protected Areas; water bodies designated with the RARE beneficial use by the State Water Board and San Diego Water Board; areas designated as preserves or their equivalent under the Natural Communities Conservation Program within the Cities and County of Orange; and any other equivalent environmentally sensitive areas which have been identified by the Copermitttees.

Estuaries – Waters, including coastal lagoons, located at the mouth of streams that serve as areas of mixing fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point upstream where there is no significant mixing of fresh water and ocean water. Estuaries do not include inland surface waters or ocean waters.

Existing Development – Any area that has been developed and exists for municipal, commercial, industrial, or residential purposes, uses, or activities. May include areas that are not actively used for its originally developed purpose, but may be re-purposed or redeveloped for another use or activity.

Flow Duration – The long-term period of time that flows occur above a threshold that causes significant sediment transport and may cause excessive erosion damage to creeks and streams (not a single storm event duration). The simplest way to visualize this is to consider a histogram of pre- and post-project flows using long-term records of hourly data. To maintain pre-development flow duration means that the total number of hours (counts) within each range of

ADMINISTRATIVE DRAFT

flows in a flow-duration histogram cannot increase between the pre- and post-development condition. Flow duration within the range of geomorphologically significant flows is important for managing erosion.

Grading - The cutting and/or filling of the land surface to a desired slope or elevation.

Hazardous Material – Any substance that poses a threat to human health or the environment due to its toxicity, corrosiveness, ignitability, explosive nature or chemical reactivity. These also include materials named by the USEPA in 40 CFR 116 to be reported if a designated quantity of the material is spilled into the waters of the U.S. or emitted into the environment.

Hazardous Waste - Hazardous waste is 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, Article 1].

Household Hazardous Waste – Paints, cleaning products, and other wastes generated during home improvement or maintenance activities.

Hydromodification – The change in the natural watershed hydrologic processes and runoff characteristics (i.e., interception, infiltration, overland flow, interflow and groundwater flow) caused by urbanization or other land use changes that result in increased stream flows and sediment transport. In addition, alteration of stream and river channels, such as stream channelization, concrete lining, installation of dams and water impoundments, and excessive streambank and shoreline erosion are also considered hydromodification, due to their disruption of natural watershed hydrologic processes.

Illicit Connection – Any connection to the MS4 that conveys an illicit discharge.

Illicit Discharge - Any discharge to the MS4 that is not composed entirely of storm water except discharges pursuant to a NPDES permit and discharges resulting from fire fighting activities [40 CFR 122.26(b)(2)].

Inactive Areas – Areas of construction activity that are not active and those that have been active and are not scheduled to be re-disturbed for at least 14 days.

Infiltration – Water other than wastewater that enters a sewer system (including sewer service connections and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow [40 CFR 35.2005(20)].

Inland Surface Waters – Includes all surface waters of the U.S. that do not include the ocean, enclosed bays, or estuaries.

Jurisdictional Runoff Management Program Document – A written description of the specific jurisdictional runoff management measures and programs that each Copermittee will implement to comply with this Order and ensure that storm water pollutant discharges in runoff are reduced to the MEP and do not cause or contribute to a violation of water quality standards.

Low Impact Development (LID) – A storm water management and land development strategy that emphasizes conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic

ADMINISTRATIVE DRAFT

functions.

Low Impact Development Best Management Practices (LID BMPs) – LID BMPs include schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States through storm water management and land development strategies that emphasize conservation and the use of on-site natural features integrated with engineered, small-scale hydrologic controls to more closely reflect pre-development hydrologic functions. LID BMPs include retention practices that do not allow runoff, such as infiltration, rain water harvesting and reuse, and evapotranspiration. LID BMPs also include flow-through practices such as biofiltration that may have some discharge of storm water following pollutant reduction.

Major Outfall – As defined in the Code of Federal Regulations, a major outfall is a MS4 outfall that discharges from a single pipe with an inside diameter of 36 inches or more or its equivalent (i.e. discharge from a single conveyance other than a circular pipe which is associated with a drainage area of more than 50 acres); or, for MS4s that receive storm water from lands zoned for industrial activity (based on comprehensive zoning plans or equivalent), a MS4 outfall that discharges from a single pipe with an inside diameter of 12 inches or more or from its equivalent (i.e. discharge from other than a circular pipe associated with a drainage area of 2 acres or more).

Maximum Daily Action Level (MDAL) –The highest allowable daily discharge of a pollutant, over a calendar day (or 24 hour period). For pollutants with action levels expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with action levels expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Maximum Extent Practicable (MEP) – The technology-based standard established by Congress in CWA section 402(p)(3)(B)(iii) for storm water that operators of MS4s must meet. Technology-based standards establish the level of pollutant reductions that dischargers must achieve, typically by treatment or by a combination of source control and treatment control BMPs. MEP generally emphasizes pollution prevention and source control BMPs primarily (as the first line of defense) in combination with treatment methods serving as a backup (additional line of defense). MEP considers economics and is generally, but not necessarily, less stringent than BAT. A definition for MEP is not provided either in the statute or in the regulations. Instead the definition of MEP is dynamic and will be defined by the following process over time: municipalities propose their definition of MEP by way of their runoff management programs. Their total collective and individual activities conducted pursuant to the runoff management programs becomes their proposal for MEP as it applies both to their overall effort, as well as to specific activities (e.g., MEP for street sweeping, or MEP for MS4 maintenance). In the absence of a proposal acceptable to the San Diego Water Board, the San Diego Water Board defines MEP.

In a memo dated February 11, 1993, entitled "Definition of Maximum Extent Practicable," Elizabeth Jennings, Senior Staff Counsel, SWRCB addressed the achievement of the MEP standard as follows:

"To achieve the MEP standard, municipalities must employ whatever Best Management Practices (BMPs) are technically feasible (i.e., are likely to be effective) and are not cost prohibitive. The major emphasis is on technical feasibility. Reducing pollutants to the MEP means choosing effective BMPs, and rejecting applicable BMPs only where other effective

ADMINISTRATIVE DRAFT

BMPs will serve the same purpose, or the BMPs would not be technically feasible, or the cost would be prohibitive. In selecting BMPs to achieve the MEP standard, the following factors may be useful to consider:

- a. Effectiveness: Will the BMPs address a pollutant (or pollutant source) of concern?*
- b. Regulatory Compliance: Is the BMP in compliance with storm water regulations as well as other environmental regulations?*
- c. Public Acceptance: Does the BMP have public support?*
- d. Cost: Will the cost of implementing the BMP have a reasonable relationship to the pollution control benefits to be achieved?*
- e. Technical Feasibility: Is the BMP technically feasible considering soils, geography, water resources, etc.?*

The final determination regarding whether a municipality has reduced pollutants to the maximum extent practicable can only be made by the Regional or State Water Boards, and not by the municipal discharger. If a municipality reviews a lengthy menu of BMPs and chooses to select only a few of the least expensive, it is likely that MEP has not been met. On the other hand, if a municipal discharger employs all applicable BMPs except those where it can show that they are not technically feasible in the locality, or whose cost would exceed any benefit derived, it would have met the standard. Where a choice may be made between two BMPs that should provide generally comparable effectiveness, the discharger may choose the least expensive alternative and exclude the more expensive BMP. However, it would not be acceptable either to reject all BMPs that would address a pollutant source, or to pick a BMP based solely on cost, which would be clearly less effective. In selecting BMPs the municipality must make a serious attempt to comply and practical solutions may not be lightly rejected. In any case, the burden would be on the municipal discharger to show compliance with its permit. After selecting a menu of BMPs, it is the responsibility of the discharger to ensure that all BMPs are implemented.”

Monitoring Year – The monitoring year begins annually on July 1st and ends on June 30th.

Municipal Separate Storm Sewer System (MS4) – A conveyance or system of conveyances (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, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to waters of the United States; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the Publicly Owned Treatment Works (POTW) as defined at 40 CFR 122.26. “Co-permittees need only comply with permit conditions relating to discharges from the municipal separate storm sewers for which they are operators.” 40 CFR §122.26(a)(3)(vi).

National Pollutant Discharge Elimination System (NPDES) - The national program for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits, and imposing and enforcing pretreatment requirements, under Sections 307, 318, 402, and 405 of the CWA.

Non-Storm Water - All discharges to and from a MS4 that do not originate from precipitation

ADMINISTRATIVE DRAFT

events (i.e., all discharges from a MS4 other than storm water). Non-storm water includes illicit discharges and NPDES permitted discharges.

Nuisance - As defined in the Porter-Cologne Water Quality Control Act, a nuisance is “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.”

Ocean Waters – the territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Board’s California Ocean Plan.

Order – Unless otherwise specified, refers to this Order, Order No. R9-2012-0011 (NPDES No. CAS0109266).

Person - A person is defined as an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof [40 CFR 122.2].

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, 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 storm water runoff.

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.

Pollution - As defined in the Porter-Cologne Water Quality Control Act, pollution is “the alteration of the quality of the waters of the State by waste, to a degree that unreasonably affects the either of the following: 1) The waters for beneficial uses; or 2) Facilities that serve these beneficial uses.” Pollution may include contamination.

Pollution Prevention - Pollution prevention is defined as practices and processes that reduce or eliminate the generation of pollutants, in contrast to source control BMPs, treatment control BMPs, or disposal.

Permanent BMPs - A subset of BMPs including structural and non-structural controls which detain, retain, filter, remove, or educate to prevent the release of pollutants to surface waters from development projects in perpetuity, after construction of a project is completed.

Pre-Development Runoff Conditions – “Runoff conditions that exist onsite immediately before the planned development activities occur. Pre-development is not intended to be interpreted as that period before any human-induced land disturbance activity has occurred.” 64 FR 68761.

Priority Development Projects - New development and redevelopment projects defined under Provision [E.3.b](#) of Order No. R9-2012-0011.

Properly Designed – Designed in accordance with the Copermitttee’s BMP Design Manual

ADMINISTRATIVE DRAFT

and/or any appropriate design requirements set forth by the Copermittee and based on widely accepted design criteria.

Public Education, Outreach and Participation – Programs to educate residents, businesses and visitors about the importance of water quality and water quality programs so that they will support local efforts and understand their role in protecting receiving waters. The Education and Outreach Program will increase knowledge and awareness, improve attitudes toward storm pollution prevention, and provide a foundation for changing behaviors that contribute to storm water pollution.

Rainy Season (aka Wet Season) –October 1 to April 30.

Receiving Waters – Waters of the U.S.

Receiving Water Limitations - Waste discharge requirements issued by the San Diego Water 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.

Redevelopment - The creation, addition, and or replacement of impervious surface on an already developed site. Examples include the expansion of a building footprint, road widening, the addition to or replacement of a structure, and creation or addition of impervious surfaces. Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Redevelopment does not include trenching and resurfacing associated with utility work; parking lots; resurfacing existing roadways; cutting and reconfiguring of surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on existing roads; and routine replacement of damaged pavement, such as pothole repair.

Retain –Keep or hold in a particular place, condition, or position without discharge to surface waters.

Retrofit – Retrofit is defined as a stormwater management practice (usually structural) put into place after development has occurred in watersheds where practices previously did not exist or are ineffective. The purpose of retrofits is to improve water quality, protect downstream channels, reduce flooding, or meet other specific objectives. Some examples of retrofits include, but are not limited to the following: green roofs, downspout and impervious cover disconnection, permeable pavement, bioretention, rain barrels, rain gardens, vacant lot stabilization, trash area enclosures, additional trash and waste disposal containers.

Runoff - All flows in a storm water conveyance system that consists of the following components: (1) storm water (wet weather flows) and (2) non-storm water including dry weather flows.

San Diego Water Board – As used in this document the term "San Diego Water Board" is synonymous with the term "Regional Board" as defined in Water Code section 13050(b) and is intended to refer to the California Regional Water Quality Control Board for the San Diego

ADMINISTRATIVE DRAFT

Region as specified in Water Code Section 13200.

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.

Shared Treatment Control BMP - BMPs used by multiple developments to infiltrate, filter, or treat the required volume or flow prior to discharge to a receiving water. This could include, for example, a treatment BMP at the end of an enclosed storm drain that collects runoff from several commercial developments.

Source Control BMP – Land use or site planning practices, or structural or nonstructural measures that aim to prevent runoff pollution by reducing the potential for contamination at the source of pollution. Source control BMPs minimize the contact between pollutants and runoff.

State Water Quality Protection Area – A nonterrestrial marine or estuarine area designated to protect marine species or biological communities from an undesirable alteration in natural water quality, including, but not limited to, areas of special biological significance that have been designated by the State Water Board through its water quality control planning process. Areas of special biological significance are a subset of State Water Quality Protection Areas, and require special protection as determined by the State Water Resources Control Board pursuant to the California Ocean Plan adopted and reviewed pursuant to Article 4 (commencing with Section 13160) of Chapter 3 of Division 7 of the California Water Code and pursuant to the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (California Thermal Plan) adopted by the State Water Board.

Storm Water – Per 40 CFR 122.26(b)(13), means storm water runoff, snowmelt runoff and surface runoff and drainage.

Structural BMP – Any structural control which detains, retains, or filters, to reduce the release of pollutants to surface waters from development projects (e.g. treatment control BMPs) which remains after construction.

Total Maximum Daily Load (TMDL) - The maximum amount of a pollutant that can be discharged into a water body from all sources (point and non-point) and still maintain water quality standards. Under CWA section 303(d), TMDLs must be developed for all water bodies that do not meet water quality standards after application of technology-based controls.

Toxicity - Adverse responses of organisms to chemicals or physical agents ranging from mortality to physiological responses such as impaired reproduction or growth anomalies). The water quality objectives for toxicity provided in the Basin Plan, state in part...“All waters shall be free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life....The survival of aquatic life in surface waters subjected to a waste discharge or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge”.

Treatment Control BMP – Any engineered system designed to remove pollutants by simple

ADMINISTRATIVE DRAFT

gravity settling of particulate pollutants, filtration, biological uptake, media absorption or any other physical, biological, or chemical process.

Unpaved Road – Any long, narrow stretch without pavement used for traveling by motor passenger vehicles between two or more points. Unpaved roads are generally constructed of dirt, gravel, aggregate or macadam and may be improved or unimproved.

Waste - As defined in CWC Section 13050(d), “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.”

Article 2 of CCR Title 23, Chapter 15 (Chapter 15) contains a waste classification system that applies to solid and semi-solid waste, which 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, non-hazardous solid waste, and inert waste.

Water Quality Objective - Numerical or narrative limits on constituents or characteristics of water designated to protect designated beneficial uses of the water. [California Water Code Section 13050 (h)]. California’s water quality objectives are established by the State and Regional Water Boards in the Water Quality Control Plans. Numeric or narrative limits for pollutants or characteristics of water designed to protect the beneficial uses of the water. In other words, a water quality objective is the maximum concentration of a pollutant that can exist in a receiving water and still generally ensure that the beneficial uses of the receiving water remain protected (i.e., not impaired). Since water quality objectives are designed specifically to protect the beneficial uses, when the objectives are violated the beneficial uses are, by definition, no longer protected and become impaired. This is a fundamental concept under the Porter Cologne Act. Equally fundamental is Porter Cologne’s definition of pollution. A condition of pollution exists when the water quality needed to support designated beneficial uses has become unreasonably affected or impaired; in other words, when the water quality objectives have been violated. These underlying definitions (regarding beneficial use protection) are the reason why all waste discharge requirements implementing the federal NPDES regulations require compliance with water quality objectives. (Water quality objectives are also called water quality criteria in the CWA.)

Water Quality Standards - Water quality standards, as defined in Clean Water Act section 303(c) consist of the beneficial uses (e.g., swimming, fishing, municipal drinking water supply, etc.,) of a water body and criteria (referred to as water quality objectives in the California Water Code) necessary to protect those uses. Under the Water Code, the water boards establish beneficial uses and water quality objectives in water quality control or basin plans. Together with an anti-degradation policy, these beneficial uses and water quality objectives serve as water quality standards under the Clean Water Act. In Clean Water Act parlance, state beneficial uses are called “designated uses” and state water quality objectives are called “criteria.” Throughout this Order, the relevant term is used depending on the statutory scheme.

ADMINISTRATIVE DRAFT

Waters of the State - Any water, surface or underground, including saline waters within the boundaries of the State [CWC section 13050 (e)]. The definition of the Waters of the State is broader than that for the Waters of the United States in that all water in the State is considered to be a Waters of the State. Under this definition, portions of a MS4 may be considered to be a Waters of the State. However, man-made portions of the MS4 constructed for the sole purpose of flow and/or pollutant reduction are not considered waters of the state.

Waters of the United States - As defined in the 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, sandflats, “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 United States 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 United States 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, the final authority regarding Clean Water Act jurisdiction remains with the EPA.”

Watershed - That geographical area which drains to a specified point on a water course, usually a confluence of streams or rivers (also known as drainage area, catchment, or river basin).

Wet Season (aka Rainy Season) – The period of time from October 1 to April 30 when the San Diego Region experiences the most rainfall.

Wet Weather – Weather is considered wet if there is a storm event of 0.1 inches and greater and the following 72 hours, unless defined in another regulatory mechanism such as a TMDL.

ATTACHMENT D

JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY _____**

I. COPERMITTEE INFORMATION	
Copermittee Name:	
Copermittee Primary Contact Name:	
Copermittee Primary Contact Information:	
Address:	
City:	County:
State:	Zip:
Telephone:	Fax:
Email:	
II. LEGAL AUTHORITY	
Has the Copermittee established adequate legal authority within its jurisdiction to control pollutant discharges into and from its MS4 that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
A Principal Executive Officer, Ranking Elected Official, or Duly Authorized Representative has certified that the Copermittee obtained and maintains adequate legal authority?	YES <input type="checkbox"/> NO <input type="checkbox"/>
III. JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM DOCUMENT UPDATE	
Was an update of the jurisdictional runoff management program document required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its jurisdictional runoff management program document and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
IV. ILLICIT DISCHARGE DETECTION AND ELIMINATION PROGRAM	
Has the Copermittee implemented a program to actively detect and eliminate illicit discharges and connections to its MS4 that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of non-storm water discharges reported by the public	
Number of non-storm water discharges detected by Copermittee staff or contractors	
Number of non-storm water discharges investigated by the Copermittee	
Number of sources of non-storm water discharges identified	
Number of non-storm water discharges eliminated	
Number of sources of illicit discharges or connections identified	
Number of illicit discharges or connections eliminated	
Number of enforcement actions issued	
Number of high level enforcement actions issued	
V. DEVELOPMENT PLANNING PROGRAM	
Has the Copermittee implemented a development planning program that complies with Order No. R9-2012-0011?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Was an update to the BMP Design Manual required or recommended by the San Diego Water Board?	YES <input type="checkbox"/> NO <input type="checkbox"/>
If YES to the question above, did the Copermittee update its BMP Design Manual and make it available on the Regional Clearinghouse?	YES <input type="checkbox"/> NO <input type="checkbox"/>
Number of proposed development projects in review	
Number of Priority Development Projects in review	
Number of Priority Development Projects approved	
Number of approved Priority Development Projects exempt from any BMP requirements	
Number of approved Priority Development Projects requiring mitigation	
Number of Priority Development Projects granted occupancy	
Number of completed Priority Development Projects in inventory	
Number of high priority Priority Development Project structural BMP inspections	
Number of Priority Development Project structural BMP violations	
Number of enforcement actions issued	
Number of high level enforcement actions issued	

**JURISDICTIONAL RUNOFF MANAGEMENT PROGRAM
ANNUAL REPORT FORM
FY _____**

VI. CONSTRUCTION MANAGEMENT PROGRAM

Has the Copermittee implemented a construction management program that complies with Order No. R9-2012-0011? YES
NO

Number of construction sites in inventory	
Number of active construction sites in inventory	
Number of inactive construction sites in inventory	
Number of construction sites closed/completed during reporting period	
Number of construction site inspections	
Number of construction site violations	
Number of enforcement actions issued	
Number of high level enforcement actions issued	

VII. EXISTING DEVELOPMENT MANAGEMENT PROGRAM

Has the Copermittee implemented an existing development management program that complies with Order No. R9-2012-0011? YES
NO

	Municipal	Commercial	Industrial	Residential
Number of existing developments in inventory				
Number of existing development inspections				
Number of follow-up inspections				
Number of existing development violations				
Number of enforcement actions issued				
Number of high level enforcement actions issued				

VIII. PUBLIC EDUCATION AND PARTICIPATION

Has the Copermittee implemented a public education program that complies with Order No. R9-2012-0011? YES
NO

Has the Copermittee implemented a mechanism for public participation and where necessary intergovernmental coordination that complies with Order No. R9-2012-0011? YES
NO

IX. FISCAL ANALYSIS

Has the Copermittee attached to this form a summary of its fiscal analysis that complies with Order No. R9-2012-0011? YES
NO

X. CERTIFICATION

I [Principal Executive Officer Ranking Elected Official Duly Authorized Representative] certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Signature

Date

Print Name

Title

Telephone Number

Email

ADMINISTRATIVE DRAFT

ATTACHMENT E

SPECIFIC PROVISIONS FOR TOTAL MAXIMUM DAILY LOADS
APPLICABLE TO ORDER NO. R9-2012-0011

These provisions implement Total Maximum Daily Loads (TMDLs), adopted by the San Diego Water Board and approved by USEPA under Clean Water Act section 303(c), which are applicable to discharges regulated under this Order. The provisions and schedules for implementation of the TMDLs described below must be incorporated into the Water Quality Improvement Plans and monitoring requirements, required pursuant to Provisions B and D of this Order, respectively, for the specified Watershed Management Areas.

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed Resolution No. R9-2002-0123
2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin Resolution No. R9-2005-0019
3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek Resolution No. R9-2007-0043
4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay Resolution No. R9-2008-0027
5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) Resolution No. R9-2010-0001

ADMINISTRATIVE DRAFT

1. Total Maximum Daily Load for Diazinon in Chollas Creek Watershed

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2002-0123

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	August 14, 2002
State Water Board Approval Date:	July 16, 2003
Office of Administrative Law Approval Date:	September 11, 2003
US EPA Approval Date:	November 3, 2003

(3) TMDL Effective Date: September 11, 2003

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Chollas Creek

(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, Unified Port District of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 1.c:

Table 1.1
Receiving Water Limitations as Concentrations in Chollas Creek

Constituent	Exposure Duration	Receiving Water Limitation	Averaging Period
Diazinon	Acute	0.08 µg/L	1 hour
	Chronic	0.05 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain concentrations that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 1.c:

ADMINISTRATIVE DRAFT**Table 1.2***Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek*

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Diazinon	Acute	0.072 µg/L	1 hour
	Chronic	0.045 µg/L	4 days

(3) Best Management Practices

BMPs for Chollas Creek may be incorporated into the Water Quality Improvement Plan for the San Diego Bay Watershed Management Area and implemented by the Responsible Copermittees:

- (a) The Responsible Copermittees should coordinate any implemented BMPs to address this TMDL with Caltrans, as possible.

c. COMPLIANCE SCHEDULE

The Responsible Copermittees were required to achieve their WLA by December 31, 2010. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision **1.b**.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

e. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (a) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision **F.3.b** of this Order.

ADMINISTRATIVE DRAFT

2. Total Maximum Daily Loads for Dissolved Copper in Shelter Island Yacht Basin

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2005-0019

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 9, 2005
State Water Board Approval Date:	September 22, 2005
Office of Administrative Law Approval Date:	December 2, 2005
US EPA Approval Date:	February 8, 2006

(3) TMDL Effective Date: December 2, 2005

(4) Watershed Management Area: San Diego Bay

(5) Water Body: Shelter Island Yacht Basin

(6) Responsible Copermittees: City of San Diego, San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Shelter Island Shoreline Park consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 2.c:

Table 2.1

Receiving Water Limitations as Concentrations in Shelter Island Yacht Basin

Constituent	Exposure Duration	Effluent Limitation	Averaging Period
Dissolved Copper	Acute	4.8 µg/L	1 hour
	Chronic	3.1 µg/L	4 days

(2) Effluent Limitations

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 2.c:

Table 2.2

Effluent Limitations as Annual Loads in MS4 Discharges to Shelter Island Yacht Basin

Constituent	Effluent Limitation
Dissolved Copper	30 kg/yr

ADMINISTRATIVE DRAFT**(3) Best Management Practices**

The Responsible Copermittees may implement BMPs to support the achievement of WQBELs under Specific Provision 2.b for Shelter Island Yacht Basin.

c. COMPLIANCE SCHEDULE

The Responsible Copermittees are required to achieve respective WLAs by December 2, 2022. The Responsible Copermittees must be in compliance with the WQBELs under Specific Provision 2.b.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

e. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

The Responsible Copermittees must implement the monitoring and assessment requirements issued under Order No. R9-2005-0019. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision F.3.b of this Order.

ADMINISTRATIVE DRAFT**3. Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2007-0043(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 13, 2007
State Water Board Approval Date:	July 15, 2008
Office of Administrative Law Approval Date:	October 22, 2008
US EPA Approval Date:	December 18, 2008

(3) TMDL Effective Date: October 22, 2008(4) Watershed Management Area: San Diego Bay(5) Water Body: Chollas Creek(6) Responsible Copermittees: City of La Mesa, City of Lemon Grove, City of San Diego, County of San Diego, San Diego Unified Port District

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for Chollas Creek consist of the following:

(1) Receiving Water Limitations

Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 3.1*Receiving Water Limitations as Concentrations in Chollas Creek*

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$(0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$(0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$[1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$(0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$(0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

ADMINISTRATIVE DRAFT**(2) Effluent Limitations**

Discharges from the MS4s must not contain pollutant loads that exceed the following effluent limitations by the end of the compliance schedule under Specific Provision 4.c.(1):

Table 3.2

Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek

Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
Dissolved Copper	Acute	$90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
Dissolved Lead	Acute	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
Dissolved Zinc	Acute	$90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
	Chronic	$90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

(3) Best Management Practices

- (a) The Responsible Copermittee may implement BMPs to support the achievement of WQBELs under Specific Provision 4.c for Chollas Creek.
- (b) The Responsible Copermittees should coordinate the BMPs to address this TMDL with Caltrans and the U.S. Navy, as possible.

c. COMPLIANCE SCHEDULE**(1) WLA Compliance Date**

The Responsible Copermittee is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 4.b, by October 22, 2028.

(2) Interim Compliance Requirements

The Responsible Copermittee must comply with the following interim WQBELs by the interim compliance date:

ADMINISTRATIVE DRAFT**Table 3.3***Interim Effluent Limitations as Concentrations in MS4 Discharges to Chollas Creek*

Interim Compliance Date	Constituent	Exposure Duration	Effluent Limitation (µg/L)	Averaging Period
October 22, 2018	Dissolved Copper	Acute	$1.2 \times 90\% \times (0.96) \times e^{[0.9422 \times \ln(\text{hardness}) - 1.700]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.96) \times e^{[0.8545 \times \ln(\text{hardness}) - 1.702]} \times \text{WER}^*$	4 days
	Dissolved Lead	Acute	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 1.460]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times [1.46203 - 0.145712 \times \ln(\text{hardness})] \times e^{[1.273 \times \ln(\text{hardness}) - 4.705]} \times \text{WER}^*$	4 days
	Dissolved Zinc	Acute	$1.2 \times 90\% \times (0.978) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	1 hour
		Chronic	$1.2 \times 90\% \times (0.986) \times e^{[0.8473 \times \ln(\text{hardness}) + 0.884]} \times \text{WER}^*$	4 days

Notes:

* The Water Effect Ratio (WER) is assumed to be 1.0 unless there is a site-specific and chemical-specific WER.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or
- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

e. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

- (a) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Investigation Order No. R9-2004-0277, *California Department of Transportation and San Diego Municipal Separate Storm Sewer System Copermittees Responsible for the Discharge of Diazinon into the Chollas Creek Watershed*, when it is amended to include monitoring requirements for the Total Maximum Daily Loads for Dissolved Copper, Lead, and Zinc in Chollas Creek. The monitoring reports required under Investigation Order No. R9-2004-0277 must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

ADMINISTRATIVE DRAFT

- (b) The Responsible Copermittees must implement the monitoring and assessment requirements issued under Order No. R9-2007-0043, as consistent with this Order. The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

ADMINISTRATIVE DRAFT

4. Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2008-0027

(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	June 11, 2008
State Water Board Approval Date:	June 16, 2009
Office of Administrative Law Approval Date:	September 15, 2009
US EPA Approval Date:	October 26, 2009

(3) TMDL Effective Date: September 15, 2009

(4) Watershed Management Areas: See [Table 5.0](#)

(5) Water Bodies: See [Table 5.0](#)

(6) Responsible Copermittees: See [Table 5.0](#)

Table 4.0

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Dana Point Harbor	Baby Beach	-City of Dana Point -County of Orange
San Diego Bay	San Diego Bay	Shelter Island Shoreline Park	-Unified Port of San Diego

b. WATER QUALITY BASED EFFLUENT LIMITATIONS

The WQBELs for segments or areas of the water bodies listed in [Table 5.0](#) consist of the following:

(1) Receiving Water Limitations

(a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#):

ADMINISTRATIVE DRAFT**Table 4.1***Receiving Water Limitations as Bacteria Densities in the Water Body*

Receiving Water Limitations		
Constituent	Single Sample Maximum^{1,2}	30-Day Geometric Mean²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittees must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittee must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision [5.b.\(2\)](#).

(2) Effluent Limitations

Discharges from the MS4s must not contain densities that exceed the following effluent limitations by the end of the compliance schedules under Specific Provisions [5.c.\(1\)\(a\)](#) and [5.c.\(2\)](#) to demonstrate the discharge is not causing or contributing to a violation of receiving water quality standards:

Table 4.2*Effluent Limitations as Bacteria Densities in MS4 Discharges to the Water Body*

Effluent Limitations		
Constituent	Single Sample Maximum^{1,2}	30-Day Geometric Mean²
Total Coliform	10,000 MPN/100mL	1,000 MPN/100mL
Fecal Coliform	400 MPN/100mL	200 MPN/100mL
<i>Enterococcus</i>	104 MPN/100mL	35 MPN/100mL

Notes:

1. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.

Interim effluent limitations expressed as pollutant loads are given in the compliance schedule under Specific Provision [5.c](#).

(3) Best Management Practices

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in [Table 5.0](#) fulfill the Bacteria Load Reduction Plan (BLRP) requirements in Resolution No. R9-2008-0027.
- (b) The Responsible Copermittee must implement BMPs capable of achieving the WQBELs under Specific Provision [5.0](#) for the segments or areas of the water bodies listed in [Table 5.0](#)

ADMINISTRATIVE DRAFT

c. COMPLIANCE SCHEDULE

(1) Baby Beach in Dana Point Harbor

(a) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to Baby Beach are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, according to the following compliance schedule:

Table 4.3*Compliance Schedule Dates to Achieve Baby Beach WLAs*

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform	September 15, 2014	September 15, 2009
Fecal Coliform		September 15, 2009
<i>Enterococcus</i>		September 15, 2019

(b) Interim Compliance Requirements

The Responsible Copermittees for MS4 discharges to Baby Beach must comply with the following interim WQBELs by the interim compliance date:

Table 4.4*Interim Effluent Limitations as Loads in MS4 Discharges to Baby Beach*

Constituent	Interim Compliance Date	Dry Weather Interim Effluent Limitation	Wet Weather Interim Effluent Limitation
Total Coliform	September 15, 2012	5.32x10 ⁹ MPN/day	NA*
Fecal Coliform	September 15, 2012	0.59x10 ⁹ MPN/day	NA*
<i>Enterococcus</i>	September 15, 2012	0.42x10 ⁹ MPN/day	NA**
	September 15, 2016	NA*	207x10 ⁹ MPN/30days

Notes:

* The WQBELs under Specific Provision 5.b must already be achieved by the given interim compliance date.

** There is no corresponding interim WQBEL for the given interim compliance date.

(2) Shelter Island Shoreline Park in San Diego Bay

The Responsible Copermittee for MS4 discharges to Shelter Island Shoreline Park is required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision 5.0, by December 31, 2012.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or

ADMINISTRATIVE DRAFT

- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

e. SPECIFIC MONITORING AND ASSESSMENT REQUIREMENTS

(1) Monitoring Stations and Procedures

The Responsible Copermittees must implement the monitoring requirements issued under Order No. R9-2008-0027.

(2) Assessment and Reporting Requirements

- (a) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs have been achieved.
- (b) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

ADMINISTRATIVE DRAFT**5. Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)**

a. APPLICABILITY

(1) TMDL Basin Plan Amendment: Resolution No. R9-2010-0001(2) TMDL Adoption and Approval Dates:

San Diego Water Board Adoption Date:	February 10, 2010
State Water Board Approval Date:	December 14, 2010
Office of Administrative Law Approval Date:	April 4, 2011
US EPA Approval Date:	June 22, 2011

(3) TMDL Effective Date: April 4, 2011(4) Watershed Management Areas: See [Table 6.0](#)(5) Water Bodies: See [Table 6.0](#)

The water bodies identified in Table 6.0 are subject to the requirements of this Attachment E, except those water bodies listed in Table 6.0 that have been delisted from the 303(d) list for REC-1 bacteria impairments. These delisted water bodies are not subject to the requirements of this Attachment E so long as monitoring data continues to support compliance with water quality standards.

(6) Responsible Copermittees: See [Table 6.0](#)**Table 5.0**

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County	Pacific Ocean Shoreline	Cameo Cove at Irvine Cove Drive – Riviera Way	-City of Laguna Beach -County of Orange -Orange County Flood Control District
		at Heisler Park - North	
	Pacific Ocean Shoreline	at Main Laguna Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Woods -County of Orange -Orange County Flood Control District
		Laguna Beach at Ocean Avenue	
		Laguna Beach at Cleo Street	
		Arch Cove at Bluebird Canyon Road	
Laguna Beach at Dumond Drive			

ADMINISTRATIVE DRAFT

Table 5.0 (Cont'd)

Applicability of Total Maximum Daily Loads for Indicator Bacteria

Project I - Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees	
South Orange County (cont'd)	Pacific Ocean Shoreline	Laguna Beach at Lagunita Place / Blue Lagoon Place at Aliso Beach	-City of Aliso Viejo -City of Laguna Beach -City of Laguna Hills	
	Aliso Creek	Entire reach (7.2 miles) and associated tributaries: - Aliso Hills Channel - English Canyon Creek - Dairy Fork Creek - Sulfur Creek - Wood Canyon Creek	-City of Laguna Niguel -City of Laguna Woods -City of Lake Forest -City of Mission Viejo -County of Orange -Orange County Flood Control District	
	Aliso Creek Mouth	at mouth		
	Pacific Ocean Shoreline	Aliso Beach at West Street		-City of Dana Point -City of Laguna Beach -City of Laguna Niguel -County of Orange -Orange County Flood Control District
		Aliso Beach at Table Rock Drive		
		100 Steps Beach at Pacific Coast Hwy at hospital (9 th Avenue)		
		at Salt Creek (large outlet)		
		Salt Creek Beach at Salt Creek service road		
	Pacific Ocean Shoreline	at San Juan Creek		-City of Dana Point -City of Laguna Hills -City of Laguna Niguel -City of Mission Viejo
	San Juan Creek	lower 1 mile		-City of Rancho Santa Margarita -City of San Juan Capistrano
	San Juan Creek Mouth	at mouth		-County of Orange -Orange County Flood Control District

ADMINISTRATIVE DRAFT

Table 5.0 (Cont'd)

*Applicability of Total Maximum Daily Loads for Indicator Bacteria
Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
South Orange County (cont'd)	Pacific Ocean Shoreline	at Poche Beach	- City of Dana Point - City of San Clemente - County of Orange - Orange County Flood Control District
		Ole Hanson Beach Club Beach at Pico Drain	
		San Clemente City Beach at El Portal Street Stairs	
		San Clemente City Beach at Mariposa Street	
		San Clemente City Beach at Linda Lane	
		San Clemente City Beach at South Linda Lane	
		San Clemente City Beach at Lifeguard Headquarters	
		under San Clemente Municipal Pier	
		San Clemente City Beach at Trafalgar Canyon (Trafalgar Lane)	
		San Clemente State Beach at Riviera Beach	
Can Clemente State Beach at Cypress Shores			
San Luis Rey River	Pacific Ocean Shoreline	at San Luis Rey River mouth	-City of Oceanside -City of Vista -County of San Diego
Carlsbad	Pacific Ocean Shoreline	at Moonlight State Beach	-City of Carlsbad -City of Encinitas -City of Escondido -City of Oceanside -City of San Marcos -City of Solana Beach -County of San Diego
San Dieguito River	Pacific Ocean Shoreline	at San Dieguito Lagoon mouth	-City of Del Mar -City of Escondido -City of Poway -City of San Diego -City of Solana Beach -County of San Diego
Penasquitos (Miramar Reservior HA)	Pacific Ocean Shoreline	Torrey Pines State Beach at Del Mar (Anderson Canyon)	-City of Del Mar -City of Poway -City of San Diego -County of San Diego
Mission Bay	Pacific Ocean Shoreline	La Jolla Shores Beach at El Paseo Grande	-City of San Diego
		La Jolla Shores Beach at Caminito del Oro	
		La Jolla Shores Beach at Vallecitos	

ADMINISTRATIVE DRAFT**Table 5.0 (Cont'd)***Applicability of Total Maximum Daily Loads for Indicator Bacteria**Project I- Twenty Beaches and Creeks in the San Diego Region (including Tecolote Creek)*

Watershed Management Area	Water Body	Segment or Area	Responsible Copermittees
Mission Bay (cont'd)	Pacific Ocean Shoreline	La Jolla Shores Beach at Avenida de la Playa	-City of San Diego
		at Casa Beach, Children's Pool	
		South Casa Beach at Coast Boulevard	
		Whispering Sands Beach at Ravina Street	
		Windansea Beach at Vista de la Playa	
		Windansea Beach at Bonair Street	
		Windansea Beach at Playa del Norte	
		Windansea Beach at Palomar Avenue	
		at Tourmaline Surf Park	
		Pacific Beach at Grand Avenue	
	Tecolote Creek	Entire reach and tributaries	-City of San Diego
San Diego River	Forrester Creek	lower 1 mile	City of El Cajon -City of Santee -County of San Diego
	San Diego River	lower 6 miles	-City of El Cajon -City of La Mesa
	Pacific Ocean Shoreline	at San Diego River mouth at Dog Beach	-City of San Diego -City of Santee -County of San Diego
San Diego Bay	Chollas Creek	lower 1.2 miles	-City of La Mesa -City of Lemon Grove -City of San Diego -County of San Diego -San Diego Unified Port District

ADMINISTRATIVE DRAFT**b. WATER QUALITY BASED EFFLUENT LIMITATIONS**

The WQBELs for segments or areas of the water bodies listed in [Table 6.0](#) consist of the following:

(1) Receiving Water Limitations

- (a) Discharges from the MS4s must not cause or contribute to the violation of the following receiving water limitations by the end of the compliance schedules under Specific Provision [6.c.\(1\)](#):

Table 5.1

Receiving Water Limitations as Bacteria Densities and Allowable Exceedance Frequencies in the Water Body

Receiving Water Limitations				
Constituent	Single Sample Maximum^{1,2} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency³	30-Day Geometric Mean² (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Total Coliform	10,000	22% / 0%	1,000	0%
Fecal Coliform	400	22% / 0%	200	0%
<i>Enterococcus</i>	10 ⁴ / 61 ⁵	22% / 0%	35 ⁴ / 33 ⁵	0%

Notes:

1. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
2. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.
3. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. The 0% single sample maximum allowable exceedance frequency applies to dry weather days.
4. This *Enterococcus* receiving water limitation applies to segments of areas of Pacific Ocean Shoreline listed in [Table 6.0](#).
5. This *Enterococcus* receiving water limitations applies to segments or areas of creeks or creek mouths listed in [Table 6.0](#).

Interim receiving water limitations expressed as allowable exceedance frequencies are given in the compliance schedule under Specific Provision [6.c](#).

- (b) If the above receiving water limitations are not met in the receiving water, the Responsible Copermittes must demonstrate that the discharges from the MS4s are not causing or contributing to the violation of receiving water limitations. The Copermittes must provide data that demonstrate the discharges from the MS4s are meeting the effluent limitations under Specific Provision [6.b](#).

(2) Effluent Limitations

Discharges from the MS4s must not cause or contribute to a violation of receiving water limitations. The mass-based waste load allocations presented in Resolution No. R9-2010-0001 can be used to demonstrate that loading from the MS4 is such that it does not cause water quality objective exceedances, as described in bullet (4) under Specific Provision [6.d](#).

(3) Best Management Practices

ADMINISTRATIVE DRAFT

- (a) The Water Quality Improvement Plans for the applicable Watershed Management Areas in [Table 6.0](#) will incorporate the Comprehensive Load Reduction Plans (CLRP) drafted pursuant to Resolution No. R9-2010-0001.
- (b) The Responsible Copermittee may implement BMPs to support the achievement of WQBELs under Specific Provision [6.b](#) for the segments or areas of the water bodies listed in [Table 6.0](#).
- (c) The Responsible Copermittees may implement BMPs to support the achievement of this TMDL with Caltrans and owners/operators of small MS4s, as possible.

c. COMPLIANCE SCHEDULE

(1) WLA Compliance Dates

The Responsible Copermittees for MS4 discharges to a segment or area of the water bodies listed in [Table 6.0](#) are required to achieve the WLA, thus must be in compliance with the WQBELs under Specific Provision [6.b](#), according to the following compliance schedule:

ADMINISTRATIVE DRAFT**Table 5.2***Compliance Schedule Dates to Achieve Indicator Bacteria WLAs*

Constituent	Dry Weather WLA Compliance Date	Wet Weather WLA Compliance Date
Total Coliform ¹	April 4, 2021	April 4, 2031
Fecal Coliform		
<i>Enterococcus</i>		

1 - Total coliform receiving water limitations apply only to segments of areas of Pacific Ocean Shoreline listed in [Table 6.0](#).

(2) Interim Compliance Requirements

The Responsible Copermittees must comply with the interim WQBELs by the interim compliance dates provided as part of the CLRP and supported by Order No. R9-2010-0001.

(a) Interim Dry Weather WQBELs

Interim dry weather WQBELs are expressed as receiving water limitations. The Responsible Copermittee must calculate the “existing” exceedance frequencies of the 30-day geometric mean water quality objectives for each of the indicator bacteria by analyzing the monitoring data collected between January 1, 2002 and April 4, 2011. “Existing” exceedance frequencies may be calculated by segment or area of a water body, or by water body, and/or by Watershed Management Area listed in [Table 6.0](#). Separate “existing” exceedance frequencies must be calculated for beaches and creeks/creek mouths.

The Responsible Copermittees must achieve a 50 percent reduction in the “existing” exceedance frequency of the 30-day geometric mean WQBELs for the segments or areas of the water bodies listed in [Table 6.0](#). A 50 percent reduction in the “existing” exceedance frequency is equivalent to half of the “existing” exceedance frequency of the 30-day geometric mean WQBELs.

(3) Submittals to Support TMDL Basin Plan Amendment

The Responsible Copermittees are encouraged to submit data to support the TMDL reopener scheduled for April 2016 including but not limited to data related to reference watershed monitoring and beneficial use usage frequency.

d. COMPLIANCE DETERMINATION

Compliance with WQBELs or WLAs may be demonstrated via any one of the following methods:

- (1) There is no discharge from the MS4, or
- (2) Applicable effluent limitations are met, or
- (3) Receiving waters meet the applicable receiving water limitations or water quality objective, or

ADMINISTRATIVE DRAFT

- (4) Loading from the MS4 is such that it does not cause water quality objective exceedances, or
- (5) Implementation of a Water Quality Improvement Plan determined by the Regional Board Executive Officer to comply with Provision A as described in Provision A.4.

Furthermore, as stated in the TMDL:

The Phase I MS4s may demonstrate that their discharges are not causing the exceedances in the receiving waters by providing data from their discharge points to the receiving waters, by providing data collected at jurisdictional boundaries, and/or using other methods accepted by the San Diego Water Board. Otherwise, at the end of the [wet or] dry weather TMDL compliance schedule, the municipal Phase I MS4s will be held responsible and considered out of compliance unless other information or evidence indicates another controllable or uncontrollable source is responsible for the exceedances in the receiving waters. If controllable sources other than discharges from the municipal Phase I MS4s are identified before or after the end of the [wet or] dry weather TMDL Compliance Schedule as causing the exceedances, those controllable sources will be responsible for reducing their bacteria loads and/or demonstrating that discharges from those sources are not causing the exceedances. The San Diego Water Board shall implement additional actions (e.g., issue enforcement actions, amend existing NPDES requirements or conditional waivers), as needed, to bring all controllable sources into compliance with the [wet or] dry weather TMDLs.

e. Specific Monitoring and Assessment Requirements

The Bacteria Load Reduction Plans (BLRPs) and CLRPs to be submitted by the Copermittees and approved by the Regional Board Executive Officer contain monitoring programs. Implementation of those Regional Board-approved monitoring programs constitutes compliance with the Monitoring Station and Monitoring Procedure requirements, described below.

(1) Monitoring and Assessment Requirements for Beaches**(a) Monitoring Stations**

For beaches addressed by these TMDLs, monitoring locations should consist of, at a minimum, the same locations used to collect data required under MS4 NPDES monitoring requirements and beach monitoring for Health and Safety Code section 115880.⁷⁵ If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.

ADMINISTRATIVE DRAFT

(b) Monitoring Procedures

- (i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations at least monthly.
- (ii)
- (iii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations at least once within the first 24 hours of the end of a storm event²³ that occurs during the rainy season (i.e., October 1 through April 30).
- (iv) Samples must be analyzed for total coliform, fecal coliform, and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

- (i) The Responsible Copermittees must analyze the dry weather and wet weather monitoring data to assess whether the interim and final WQBELs for the Pacific Ocean Shoreline segments or areas listed in [Table 6.0](#) have been achieved.
- (ii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

(2) Monitoring and Assessment Requirements for Creeks and Creek Mouths

(a) Monitoring Stations

For creeks addressed by these TMDLs, monitoring locations should consist of, at a minimum, a location at or near the mouth of the creek (e.g., Mass Loading Station or Mass Emission Station) and one or more locations upstream of the mouth (e.g., Watershed Assessment Stations). If exceedances of the receiving water limitations are observed in the monitoring data, additional monitoring locations and/or other source identification methods must be implemented to identify the sources causing the exceedances. The additional monitoring locations and/or other source identification methods must also be used to demonstrate that the bacteria loads from the identified sources have been addressed and are no longer causing exceedances in the receiving waters.

²³ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

ADMINISTRATIVE DRAFT

(b) Monitoring Procedures

- (i) The Responsible Copermittees must collect dry weather monitoring samples from the receiving water monitoring stations according to the WQIP.
- (ii) The Responsible Copermittees must collect wet weather monitoring samples from the receiving water monitoring stations within the first 24 hours of
- (iii) the end of a storm event²⁴ that occurs during the rainy season (i.e., October 1 through April 30).
- (iv)
- (v) Samples collected from receiving water monitoring stations must be analyzed for fecal coliform and *Enterococcus* indicator bacteria.

(c) Assessment and Reporting Requirements

- (i) The Responsible Copermittees must analyze the receiving water monitoring data to assess whether the interim and final receiving water WQBELs for the creeks and creek mouths listed in [Table 6.0](#) have been achieved.
- (ii) The monitoring and assessment results must be submitted as part of the Annual Reports required under Provision [F.3.b](#) of this Order.

²⁴ Wet weather days are defined by the TMDL as storm events of 0.2 inches or greater and the following 72 hours. The Responsible Copermittees may choose to limit their wet weather sampling requirements to storm events of 0.2 inches or greater, or also include storm events of 0.1 inches or greater as defined by the federal regulations [40CFR122.26(d)(2)(iii)(A)(2)].

SEPTEMBER 14, 2012

COUNTY OF SAN DIEGO COPERMITTEES

**Supporting Documentation and Rationale for
Alternative Provision II.D
Monitoring and Assessment Requirements**

Table of Contents

Introduction.....	1
Approach to Monitoring and assessment	3
Question-Driven Monitoring Design.....	3
Monitoring Designed to Support Adaptive Management	5
The Monitoring and Assessment Framework.....	5
Prioritization of Water Quality Issues to Foster Efficiency	8
Adaptive Management, Jurisdictional Accountability, and Compliance	8
Alternative provision II.D - Elements and Rationale.....	10
Receiving Water Monitoring.....	10
Pre-WQIP Monitoring	11
WQIP Monitoring.....	14
Discussion of Long-Term Monitoring	14
Discussion of Jurisdictional Boundary Monitoring.....	16
Benefits of Proposed Receiving Water Monitoring Approach.....	19
Dry Weather Outfall Monitoring	21
Pre-WQIP Monitoring	22
Discussion of IDDE Program Efficiency and Effectiveness (Transient Flow)	25
WQIP Monitoring.....	28
Benefits of Proposed Dry Weather Outfall Monitoring Approach	28
Wet Weather Outfall Monitoring.....	29
Pre-WQIP Monitoring	29
WQIP Monitoring.....	30
Benefits of Proposed Wet Weather Outfall Monitoring Approach.....	31
Source/Stressor ID and Special Studies.....	33
Pre-WQIP Monitoring	35
WQIP Monitoring.....	35
Benefits of Proposed Source ID and Special Studies Monitoring Approach.....	36
Additional Monitoring Design References.....	37

Tables

Table 1. Analysis Of Variance Results For Ballona Creek Copper Data 18
Table 2. Minimum Detectable Differences Between Sites..... 19
Table 3. Illicit Discharge Detection and Elimination Programs, FY 2009-201127

Figures

Figure 1. Monitoring and Assessment Design Structure 7
Figure 2. Receiving Water Monitoring and Assessment Planning Process, Showing
Example Specific Questions 11
Figure 3. Ballona Creek Dry Weather Copper Data 18
Figure 4. Dry Weather Outfall Monitoring and Assessment Planning Process22
Figure 5. San Diego County MS4 System in Urban Areas25
Figure 6. Wet Weather Outfall Monitoring and Assessment Planning Process30
Figure 7. Power Curve For Difference Of Single Sample Mean, 95% Confidence Level
And 90% Statistical Power 31
Figure 8. Source and Stressor Identification Monitoring and Assessment Planning
Process..... 34
Figure 9. Special Studies Monitoring and Assessment Planning Process35

Attachment

Attachment 2-1: Receiving Water Monitoring Program Review (taken from the *San Diego County Copermittees Report of Waste Discharge*)

INTRODUCTION

The purpose of this document is to provide rationale to support the monitoring alternative developed by the San Diego County Copermittees in collaboration with the County of Orange and the County of Riverside for the San Diego Region Municipal Separate Storm Sewer Systems (MS4) NPDES Permit. The permit was released as an administrative draft by the San Diego Regional Water Quality Control Board (Regional Water Board) as Tentative Order No. R9-2012-0011. The Tentative Order contains a Monitoring and Assessment component (Provision II.D) that describes the elements of a monitoring program intended to generate data to assess the following three fundamental programmatic management questions/objectives from the agenda for the July 25, 2012 Monitoring and Assessment Focus Meeting on the Tentative Order:

1. *Are the Copermittees' Jurisdictional runoff management programs effectively prohibiting non-storm water discharges to their MS4s?*
2. *Are the Copermittees' Jurisdictional runoff management programs reducing pollutants in storm water to the Maximum Extent Practicable (MEP)?*
3. *Are the physical, chemical, and biological conditions of receiving waters being improved by the Copermittees' Water Quality Improvement Plans (WQIPs) for receiving waters that don't adequately support designated beneficial uses?*

It is also the goal of the Copermittees to answer these programmatic questions and achieve the management goals as efficiently as possible.

To accommodate the adaptive management approach supported by the Water Board, Copermittees propose to coordinate Provision II.D requirements with Section II.B language to require a strategic Monitoring and Assessment Program to be tailored to the needs of each Watershed Management Area (WMA) to be prepared as part of the Water Quality Improvement Plans (WQIPs). To provide useful feedback to the overall program, the Monitoring and Assessment Program is proposed to be developed during the long range planning process of the WQIP during the first 12 months after Permit adoption. The monitoring program is one piece of the overall implementation and needs to be coordinated with the other programmatic elements of implementation to provide the most useful information.

Based on 15 to 20 years of monitoring experience, the Copermittees have an understanding of receiving water quality issues, and now want more of a focus on a) identifying and prioritizing sources, and b) designing special studies to determine how to best implement solutions to address water quality problems. The Copermittees believe that this is the nexus to effective implementation, because it supports adaptive management and can both guide and utilize other programmatic implementation efforts to improve water quality.

To accomplish this, a phased approach is included in Alternative Provision II.D, with a Pre-WQIP or transitional period and a Post-WQIP phase after the Monitoring and Assessment Programs are developed as part of the WQIPs. Depending upon the adoption date of the final Order, the transitional phasing of monitoring would be

approximately two to three years to accommodate the public review, Water Board review and the lead time necessary for Copermittees' to plan and commit resources in the budgeting process. Transitional monitoring will build on the foundation of over 15 years of monitoring experience and the recommendations in the San Diego County Copermittees Report of Waste Discharge (ROWD) (San Diego County Copermittees, 2011). Additionally, the Copermittees have tailored the transitional monitoring to be responsive to the Water Board's three key questions. Transitional monitoring would only apply to the San Diego County Copermittees as Orange County and Riverside County Copermittees are scheduled to enroll at a later date. The transitional monitoring requirements will be reassessed as part of the development of the WQIP's Monitoring and Assessment Program and adjusted as necessary to support the highest priorities in each WMA.

The key changes proposed in Alternative Provision II.D are as follows:

1. **Question-Driven Approach:** The Copermittees support a Question-Driven Approach to design strategic and efficient monitoring plans that are responsive to Program Managers' needs to improve the implementation of effective stormwater programs. See the Question-Driven Monitoring Design section for further details.
2. **Adaptive Management:** Provide program managers with needed information to support changes to program priorities, monitoring locations, special studies, and BMPs. See the "Monitoring Designed to Support Adaptive Management" section of this document for additional details.
3. **Receiving Water and Watershed Monitoring (T.O. Provisions II.D.1.a(2), II.D.1.b, II.D.2.b, and II.D.2.c):** Copermittees propose to integrate the numerous receiving waters programs at the WMA level. See the "Receiving Water Monitoring" section of this document for additional details.
4. **Jurisdictional Non-Stormwater monitoring (T.O. Provision II.D.1.a):** Instead of extensive MS4 outfall chemical field screening and analysis, Copermittees propose to conduct a targeted program to reduce persistent flows that impact receiving water quality. This will allow resources to prioritize persistent non-stormwater discharges and focus actions to improve water quality. Copermittees are also proposing a broad program to eliminate transient illicit connections /illegal discharges (IC/ID) through visual surveys to be conducted over a large spatial area with appropriate follow-up criteria. See the "Dry Weather Outfall Monitoring" and "Discussion of IDDE Program Efficiency and Effectiveness" sections of this document for additional details.
5. **Jurisdictional Stormwater monitoring (T.O. Provision II.D.1.b):** Instead of extensive MS4 outfall chemical monitoring, monitor homogeneous land uses or representative mixed-use land uses and extrapolate the results to other drainages. This wet weather runoff data will provide a local understanding of wet weather discharges for San Diego County, and will better inform the planning process by prioritizing drainages and land uses for implementation efforts. Selection of these representative outfalls can be coordinated and shared among Copermittees to provide the most efficient representation and characterization. Modeling currently being done for some watersheds as part of the bacteria TMDL implementation plan effort may also be built upon.

- See the “Wet Weather Outfall Monitoring” section of this document for additional details.
6. **Jurisdictional Receiving Water Boundary Monitoring (T.O. Provision II.D.1.a(2)):** Jurisdictional receiving water boundary monitoring proposed in the Tentative Order does not support the three key goals. Monitoring conducted by the Copermittees’ and others have shown jurisdictional boundary monitoring of the type proposed in the Tentative Order not to be effective in estimating water quality impacts and loading from MS4 discharges. This is due to a combination of factors, including typically high variability of the constituent concentrations in receiving waters and discharges, and typically small percentages of MS4 discharge flows and pollutant loads in the receiving waters. This combination of high variability and relatively small impacts or differences requires high numbers of samples to detect significant and programmatically relevant differences and would be unlikely to support any programmatic changes or guide improvements to water quality. See the “Discussion of Jurisdictional Boundary Monitoring” section of this document for additional details and rationale for an alternative approach.
 7. **Source Identification Studies:** Prior to adoption of the WQIPs, the Copermittees will continue source identification studies pertaining to compliance with TMDLs and the development of the CLRP implemented under Order No. R9-2007-0001. Following adoption of the WQIPs, the Copermittees will conduct source and stressor identification studies based on Monitoring and Assessment Plans developed for the WQIPs. The plans for the studies will be submitted with the WQIP for approval by the Water Board. See the “Source/Stressor ID and Special Studies” section of this document for additional details.
 8. **Special Studies and Pilot BMPs:** The Copermittees will conduct Special Studies to address information needs as identified by Source/Stressor Identification studies above, and otherwise as needed to support implementation of the WQIPs. Within the permit term, two Special Studies will be conducted within each WMA: one to address specific questions developed for each WMA, and two Regional special studies will be conducted to answer broader regional questions. See the “Source/Stressor ID and Special Studies” section of this document for additional details.

The Copermittees also recognize that the Water Board wants to see jurisdictional accountability. Jurisdictional accountability should focus on continuing implementation of the iterative stormwater management process, and will be supported by data collected at prioritized targeted MS4 outfalls and programmatic implementation activities to be included in the WQIPs.

APPROACH TO MONITORING AND ASSESSMENT

Question-Driven Monitoring Design

Consistent with the Copermittees’ ROWD (San Diego County Copermittees, 2011), the transitional (Pre-WQIP) monitoring program proposed by the Copermittees was

developed using a question-driven approach that is widely supported by local, state and federal regulatory agencies. This same question-driven approach will be used to develop the strategic Monitoring and Assessment Programs of the WQIPs that will be tailored to the needs of each WMA. As described in the Copermittees' Alternative Provision II.D, the Monitoring and Assessment Program is based on a logical hierarchy in which 1) overall management objectives help define 2) clear management questions which can be addressed by 3) specific question and assessment frameworks that are then implemented with 4) data produced by monitoring designs. Wide acceptance of this approach to monitoring design is illustrated by its recommended use in several recent statewide policy documents related to monitoring and assessment. A December 2008 report¹ of the California Water Quality Monitoring Council to the Secretaries of CalEPA and the Resources Agency lays out a basic approach to correcting widespread problems in water quality monitoring and assessment, and the Comprehensive Strategy of December 2010² provides additional detail on the Council's approach. The SWAMP Assessment Framework³ is a companion document that provides more specific guidance to Regional Water boards on question-driven monitoring design as outlined in U.S. EPA's *Elements of a State Water Monitoring and Assessment Program*⁴. Relevant regional examples and implementations of this approach also include the Southern California Stormwater Monitoring Coalition's *Model Monitoring Program* (SMC, 2004), and The San Diego Regional Water Board's own *A Framework for Monitoring & Assessment in the San Diego Region* (SDRWQCB, 2012). At the June 2012 San Diego Regional Water Board meeting, Water Board staff presented this approach and it was well received by the Board. The Copermittees' process for developing the monitoring program aligns well with the condition assessment process proposed by Water Board staff at the June 2012 meeting, with an additional emphasis on setting priorities.

These referenced guidance documents stress the importance of basing monitoring on clear questions that support explicit decisions ensuring that data are gathered only when there is a validated assessment framework in place (i.e., data are collected only after it has been determined how they are going to be analyzed and evaluated). Clear motivating questions provide "*the functional link between broader concerns about beneficial uses and the technical specifications of monitoring designs*" (SWAMP, 2010). These technical monitoring specifications are designed to meet the data analysis and interpretation requirements of the assessment methods most appropriate to addressing the questions, including trend analysis and comparison to benchmarks. Additionally, all four of these documents follow in the footsteps of an earlier National

¹ *Maximizing the Efficiency and Effectiveness of Water Quality Data Collection and Dissemination and Ensuring that Collected Data are Maintained and Available for Use by Decision-makers and the Public.* Recommendations of the California Water Quality Monitoring Council, State of California, December 2008.

² *A Comprehensive Monitoring Program Strategy for California.* Recommendations of the California Water Quality Monitoring Council, State of California, December 2010.

³ *SWAMP Assessment Framework.* Prepared by Brock Bernstein for the Surface Water Ambient Monitoring Program, California Water Boards. December 2010.

⁴ *Elements of a State Water Monitoring and Assessment Program.* EPA 841-B-03-003. Assessment and Watershed Protection Division, Office of Wetlands, Oceans and Watershed. U.S. Environmental Protection Agency. March 2003.

Research Council report on monitoring⁵, which emphasized the importance of building on clear conceptual models and questions that are linked to management needs.

The use of conceptual models, questions, links to management decisions, and the need for defining analysis and assessment methods prior to developing a monitoring program are all key aspects of monitoring design that are now widely acknowledged. In addition, monitoring design and assessment are now commonly discussed in the context of the need to adapt monitoring targets, questions, and assessment methods as knowledge improves and more fundamental questions are answered. A short list of additional representative papers, books, and reports on this topic is provided with the references for this document.

Monitoring Designed to Support Adaptive Management

The purpose of monitoring is to provide the Copermittees' program managers with information needed to make management decisions to improve stormwater management programs and water quality. Although the monitoring proposed in Tentative Order Provision II.D is comprehensive in its scope, the extensive chemical analysis-based monitoring does not support an adaptive management approach and was not specifically designed to answer questions that support and guide effective management. Consequently, the Copermittees are proposing to replace Tentative Order Provision II.D with this Alternative Provision II.D, in order to better provide program managers with information needed to support effective adaptive management of water quality programs, and better support the development of tangible water quality solutions.

The Monitoring and Assessment Framework

The Copermittees' are proposing to implement a monitoring and assessment framework that provides the necessary feedback to Program Managers to improve implementation strategies. To facilitate this, a question-driven approach will be used, as illustrated in Figure 1. Broad management questions based on the SMC Model MS4 Stormwater Guidance are on the left side of Figure 1. The assessment questions listed on the right side of Figure 1 have been derived from the Tentative Order, with the addition of two additional questions related to source/stressor and BMP/special studies. The monitoring elements identified in the center column of **Figure 1** each are driven by a list of specific questions (not shown in this Figure) to aid in planning and design. For monitoring program design, the process starts at the top of the diagram, at the watershed scale, and proceeds down the diagram to the specific drainage scale. For assessment, data from the specific drainage scale is fed step-wise into the upper levels of the diagram. This assessment process is designed to provide feedback at the different levels so that ultimately Copermittees are addressing real problems in an efficient and effective manner using the adaptive management paradigm.

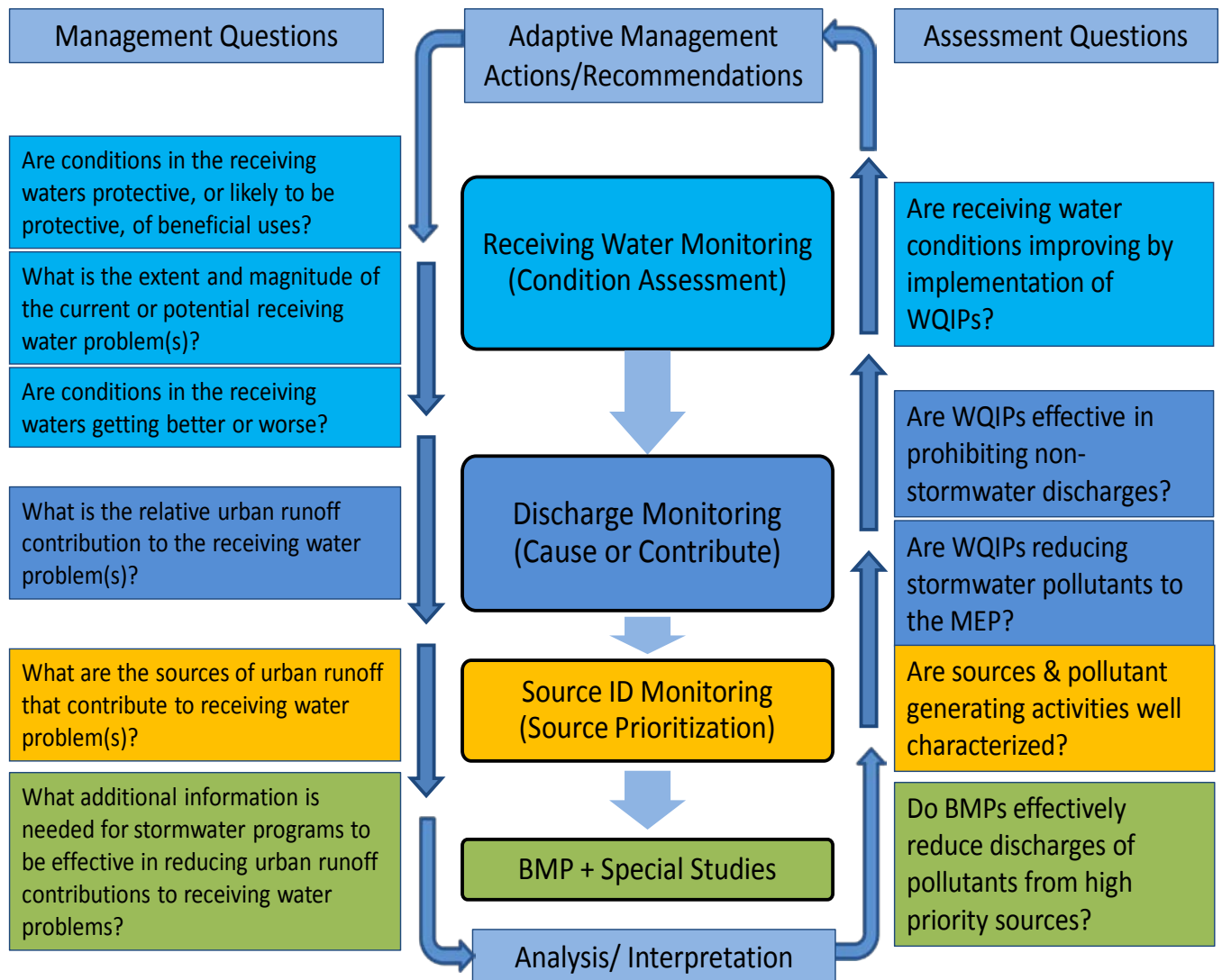
During the transitional, pre-WQIP phase, monitoring and assessment activities will be based on previously-identified information needs and management questions, as well as on ongoing monitoring and assessment activities. During the process of developing

⁵ *Managing Troubled Waters: The Role of Marine Environmental Monitoring*. National Research Council. National Academies Press, Washington, DC. 1990.

the WQIP for each WMA, the monitoring and assessment activities will then be tailored to the needs of each WMA. Using the framework shown in Figure 1, the information generated by the monitoring and assessment activities will help inform stormwater program management and implementation, and contribute to development of solutions for the identified water quality issues.

The Copermittees recognize that the watersheds are at different stages of understanding with respect to each of the four monitoring activity components shown in Figure 1. Those with active TMDLs, such as Chollas Creek, have a more mature program and may be farther along in understanding where their programs should focus. The Chollas Creek program will emphasize source identification and follow up with special studies to develop effective implementation strategies. Other watersheds may be still be developing the linkage between identified receiving waters problems and the contributions from the Copermittees' MS4s. The goal of the Monitoring and Assessment Programs will be to strategically tailor the balance of monitoring for each of the four components to the prioritized needs of the specific WMA. The result will be efficient, coordinated monitoring with an enhanced watershed and TMDL focus.

Figure 1. Monitoring and Assessment Design Structure



The main purpose of receiving water monitoring is to assess attainment of designated beneficial uses. Watershed receiving water priorities (Watershed priorities) are well established through prior monitoring of receiving waters in San Diego County (see Attachment 2-1 of ROWD (San Diego County Copermittees, 2011), as well as the LTEA report (San Diego County Copermittees, 2011)). With watershed priorities well established for the next permit cycle, monitoring should be reduced in receiving waters and those efforts and resources can be refocused to determine to what degree discharges from the MS4s contribute to the identified watershed priorities. Receiving water monitoring will still be necessary to help assess stormwater program effectiveness, as shown in the feedback loop on the Conceptual Framework diagram (Figure 1). In this same context, receiving water priorities also may be revised over time as water quality management efforts are successful, or understanding of water

quality issues evolves. The Copermittees' participation in TMDLs also may involve receiving water monitoring to determine the effectiveness of TMDL implementation.

For constituents for which MS4 discharges are determined to contribute significantly to receiving water problems, source identification and prioritization studies may be performed on a constituent-specific basis. Such follow-up investigations may involve monitoring in the form of watershed-driven targeted studies. The results of the watershed-driven source investigations can then be used in the watershed planning process to develop strategies for reduction of the high priority sources of discharges of the subject constituent.

The Monitoring and Assessment Design framework includes the analysis of appropriate data to evaluate program effectiveness and identify data gaps, if any. This completes the monitoring information cycle to guide the alternate adaptive management approach.

Prioritization of Water Quality Issues to Foster Efficiency

There is a general consensus at focus meetings that identifying and focusing on water quality priorities (whether in constituents, sources, or effective outreach management practices) is the most efficient and effective way to manage the Copermittees' programs and resources for protecting and improving water quality. Prioritization developed within the WQIP and adaptive management of the programs over time are the primary strategies for achieving this while maintaining effective long-term monitoring efforts in all four monitoring categories (receiving water, MS4 discharges, source identification, and special studies). The Copermittees are committed to retaining monitoring that will continue to characterize and assess receiving water and outfall conditions, while placing increased focus on source identification and source control. This increased focus on information that supports decision about management of water quality will more effectively advance the Copermittees and the Water Board's common objective of improving receiving water and outfall water quality.

Adaptive Management, Jurisdictional Accountability, and Compliance

There has been general agreement at focus meetings with the Water Board staff and stakeholders that compliance with the WQIPs and the Jurisdictional Runoff Management Programs (JRMPs) is based on an adaptive management process, and that monitoring should be included within that context in the permit. The accountability provided by the JRMPs is based on actions implemented by the Copermittees and programmatic results, and may not depend on receiving water or outfall water quality. As an example, if a concentrated outreach effort has been implemented in a priority residential drainage area because of the frequency of broken or mismanaged sprinklers, and after a year there are fewer homes with irrigation issues, then that demonstrates jurisdictional accountability and effectiveness by reducing discharges to the MS4 and the receiving waters, even when changes in receiving water quality can't be immediately or easily demonstrated. Similarly, jurisdictional accountability and compliance with the monitoring requirements should be assessed based on the effectiveness of completed monitoring in answering the questions driving the need for monitoring.

Strategic Monitoring Approach

The Copermittees propose to include the following steps in developing the Monitoring and Assessment Programs for each WMA, as part of the development of the WQIPs:

1. Establish stormwater management priorities specific for each WMA (“Watershed Priorities”) as part of WQIP development.
2. Compile existing monitoring data & assess available information for receiving waters, MS4 discharges, & sources or stressors within the watershed.
3. Identify regulatory & non-regulatory drivers that apply to water quality monitoring within the watershed, & list all associated monitoring responsibilities assigned to the Copermittees.
4. Evaluate the watershed priorities in context of available monitoring data & existing monitoring responsibilities, & develop specific management questions for each priority issue.
5. Establish metrics & identify assessments that should be performed to supply information needed to address the management questions.
6. Identify elements of a watershed-based monitoring program needed to address the watershed management questions & perform the necessary assessments.
7. Develop detailed monitoring plan to address the identified monitoring needs, coordinated with other ongoing monitoring in the watershed.

ALTERNATIVE PROVISION II.D - ELEMENTS AND RATIONALE

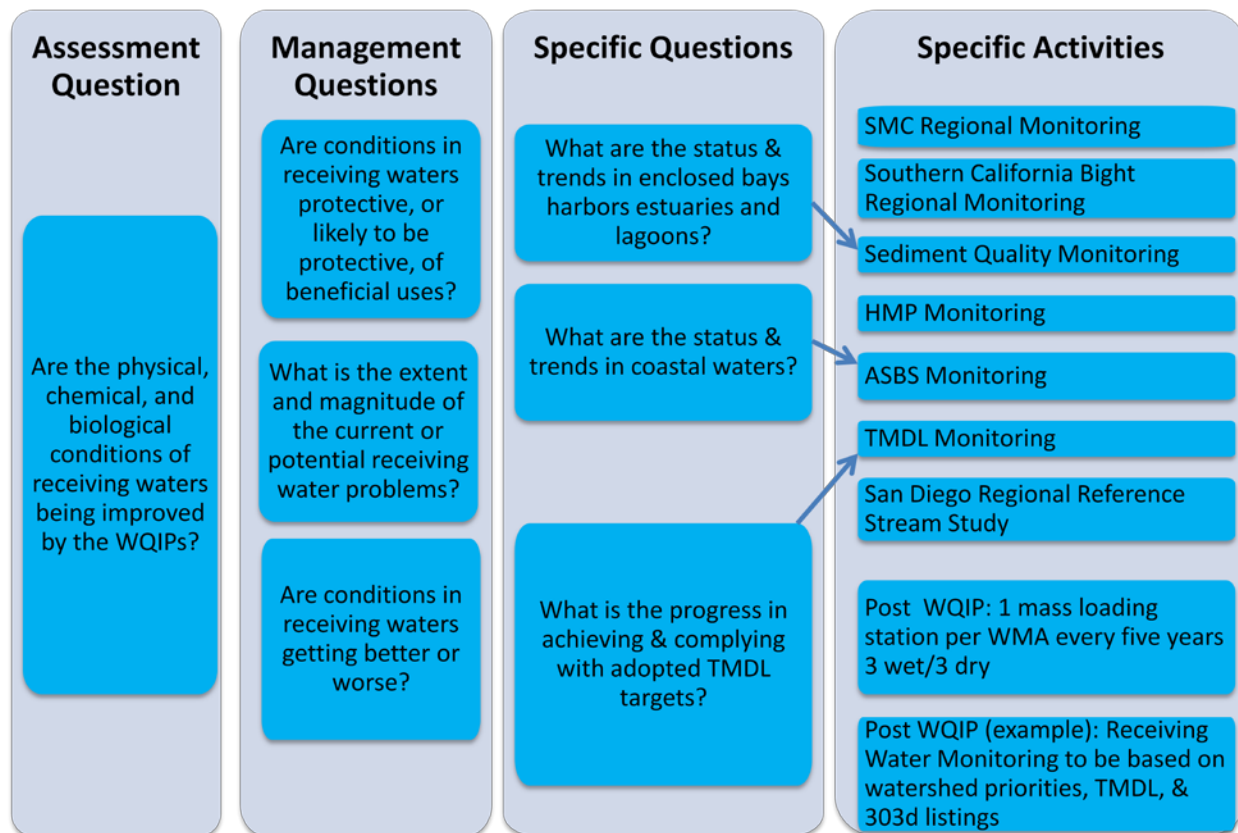
Receiving Water Monitoring

To address the need to assess receiving water conditions, the Copermittees propose to use a triad approach involving chemical, toxicity, and biological monitoring to evaluate the overall physical, chemical and biological conditions of receiving waters prior to the adoption of the WQIPs' Monitoring and Assessment Programs. This regionally coordinated and integrated approach will be implemented instead of the extensive chemical monitoring of receiving waters proposed in Sections II.D.1.a(2), II.D.1.b, II.D.2.b, and II.D.2.c, of the Tentative Order.

Figure 2 illustrates use of the question-driven approach in designing specific activities for receiving water monitoring and assessment. The process moves from left to right. Starting from the left hand side of the diagram, the assessment question derives from the current Provision II.D: Are there improvements in the conditions of receiving waters? The second column lists the relevant Stormwater Monitoring Coalition (SMC) management questions. These three SMC questions can be summarized as a status question, an extent and magnitude question, and a long-term trend question. The management questions are meant to provide context for the more specific, technical monitoring sub-questions and associated monitoring activities. Monitoring results from any given activity may only partially contribute to answers for the overarching "big picture" management questions. The Specific questions in the next column are the detailed study questions used to design the monitoring program. Several example study question are presented here and linked to the specific activity in the last column. Each activity responds to one or more study questions. When study questions are answered, then the specific activity is completed. The next prioritized study question can then begin as part of the adaptive process.

The Copermittees' proposed Regional monitoring and integrated assessments represent a cost-effective approach that avoids duplication of monitoring efforts, and provides a comprehensive evaluation of receiving waters conditions.

Figure 2. Receiving Water Monitoring and Assessment Planning Process, Showing Example Specific Questions



Pre-WQIP Monitoring

In the Alternative Provision II.D, the assessment of receiving water conditions and improvements in receiving water conditions is addressed by an approach that integrates and coordinates seven existing regional receiving water programs rather than focusing on watershed specific sites. The Copermittees also plan to leverage additional opportunities for regional coordination through the Southern California Bight 2013 Regional Monitoring Program, as well as make use of third party data where feasible. Specific elements of the Copermittees’ receiving water approach are discussed in the following paragraphs.

a. SMC Regional Monitoring

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?*

The Copermittees are committed to participate in the SMC Regional Monitoring Program through its planned completion, and to provide a statistically sound representative sampling of receiving water quality in the region’s watersheds.

Copermittees currently sample 16 sites annually across the urbanized region of San Diego County. The SMC Regional Monitoring Program uses a probabilistic design to characterize coastal watersheds using bioassessment metrics and related analyses, including but not limited to: physical habitat characterization, Southern California Index of Biological Integrity scoring, macroinvertebrate and algal taxonomy, algal biomass, water chemistry, and toxicity. The study incorporates both reference and non-reference streams and is designed to identify potential additional biological and/or chemical stressors affecting stream health, such as channel alteration and presence of invasive species.

b. Southern California Bight Regional Monitoring

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?*

The Copermittees will participate in the Southern California Bight Regional Monitoring program as a trade-off with other routine monitoring requirements to the extent allowable under the 2007 Permit. Planning begins in September 2012 and Copermittees plan to divert funds from the 2012-2013 Ambient Bay and Lagoon Program to the Summer 2013 Bight 13 Program. Additionally, Copermittees are willing to use these funds allocated for 2013-2014 to conduct additional Ambient Bay and Lagoon Monitoring in Summer of 2013, pending Water Board approval. Although the Bight Study design is not finalized, Copermittees anticipate focusing on addressing the Sediment Quality Objectives per State Water Resources Control Board Resolution No. 2008-0070, *Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality*.

The Bight program involves detailed characterization of coastal and offshore receiving waters, as well as targeted special studies. The Bight regional monitoring effort is designed to build upon the data collected during the Bight 08 regional program, to assess the extent of contamination in the Southern California Bight. Receiving water samples are collected in or near coastal areas, bays, estuaries, offshore islands, and open water/deep ocean within the Bight. Water quality and sediment samples may be collected to provide data for model input, to answer management questions developed by the stakeholders as part of the program. In addition, special studies such as influence of emerging contaminants and potential new technology implementation (i.e. bioanalytical screening and/or genetic coding) may be conducted as part of the Bight 13 Regional Monitoring. Copermittees will leverage as appropriate with these other programs to further scientific understanding of the potential affects of discharges from MS4s to the overall health of the receiving waters.

c. Sediment Quality Monitoring

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?*

Specific Question: *What is the condition of sediments in enclosed bays and estuaries with respect to the statewide sediment quality objectives?*

The Copermitees anticipate performing monitoring of bay and lagoon sediments, as needed, as part of Bight 13 monitoring under the Copermitees' responsibility to conform to the requirements of the Statewide Sediment Quality Objectives regulatory program, per State Water Resources Control Board Resolution No. 2008-0070 – Adoption of a Water Quality Control Plan for Enclosed Bays and Estuaries – Part 1 Sediment Quality.

d. Hydromodification Management Plan (HMP) Monitoring

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?*

The Copermitees will perform receiving water monitoring as required per Section 8 of the approved 2010 Hydromodification Management Plan (HMP) Monitoring Plan, as Revised July 14, 2010, and California Regional Water Quality Control Board, San Diego Region, Resolution No. R9-2010-0066. Additionally, geomorphic assessments will be included in the long-term monitoring receiving water program to address long-term trends to evaluate the effects of hydromodification.

e. TMDL Monitoring

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses? Are conditions in receiving waters getting better or worse?*

Specific question: *What is the progress in achieving and complying with adopted TMDL targets?*

The Copermitees shall perform water quality monitoring as required per the Implementation Plans or approved CLRPs of effective TMDLs, including compliance monitoring for the following TMDLs:

- TMDL for Diazinon in Chollas Creek Watershed Resolution No. R9-2002-0123; Effective as of September 11, 2003.
- TMDLs for Dissolved Copper in Shelter Island Yacht Basin Resolution No. R9-2005-0019; Effective as of December 2, 2005.
- TMDLs for Dissolved Copper, Lead, and Zinc in Chollas Creek Resolution No. R9-2007-0043; Effective as of October 22, 2008.
- TMDLs for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay Resolution No. R9-2008-0027; Effective as of September 15, 2009.
- Revised TMDLs for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek) Resolution No. R9-2010-0001; Effective as of April 4, 2011.

f. San Diego Regional Reference Stream Study

Management Questions addressed: *Are conditions in receiving waters protective, or likely to be protective, of beneficial uses?*

The San Diego Regional Reference Stream Study is designed to characterize background concentrations of bacteria, nutrients, and trace metals in natural streams within the jurisdiction of the San Diego Water Board. The study includes sampling during wet and dry weather at up to 12 sites considered representative of natural conditions (a contributing drainage area at least 95 percent undeveloped) and that vary in regards to hydrology, catchment size, and geology. This Study started began in 2012 and is anticipated to be completed over the next three years.

WQIP Monitoring

The WQIP monitoring will build on the above benefits and support an assessment-driven, adaptive management approach in the WQIP Management and Assessment Plan to focus monitoring on the needs of the Program Managers to address focused receiving waters monitoring where needed.

As previously indicated, ongoing monitoring programs will be reassessed for the WQIP, and modified as necessary (with Water Board Executive Officer's approval) to support the highest priorities in each WMA. The Monitoring and Assessment Programs developed as part of the WQIPs will promote efficient use of resources and produce data meaningful for the management and improvement of receiving water quality. In the proposed Alternative Provision II.D, assessment of receiving water conditions and improvements in receiving water conditions is addressed by an approach that integrates seven existing regional receiving water programs rather than focusing on watershed specific sites. Following the question-driven approach of Figure 1, the minimum requirements to be addressed in the WQIP will include the seven specific monitoring elements summarized under the pre-WQIP monitoring as applicable to the WMA and the long-term receiving water monitoring element as described below and in Figure 2.

Long-Term Receiving Water Monitoring

Management Question addressed: Are conditions in receiving waters getting better or worse?

The Copermittees will conduct receiving water monitoring for assessment of long-term trends using receiving water stations selected from among the existing mass loading stations (MLS) and temporary watershed assessment stations (TWAS). These long-term receiving water stations will be selected to be representative of regional receiving water quality and must be approved by the Executive Officer prior to monitoring. The frequency of monitoring will be three wet weather events and three dry weather events every five years.

Discussion of Long-Term Monitoring

The rationale for changes to the Receiving Water and Watershed Monitoring as proposed in T.O. Provisions II.D.1.a (2), II.D.1.b, ii.D.2.b, and II.D.2.c is provided below.

Mass Loading Station Monitoring can be reduced to once every five years, based on the statistical simulations conducted for in the ROWD (2011 and included in Attachment 2-1). The analyses conducted for the ROWD shows that decreasing the

sampling frequency to every five years will not affect the ability to detect long-term trends. This conclusion is further supported by the finding that priority constituents have not changed substantially for individual MLS receiving water sites in the past five years. The 5-year frequency for receiving water monitoring will continue to allow adequate detection of trends in the long-term, as needed to answer SMC management question 5. Consequently, because all mass loading stations have already been sampled in the 2011-2012 or 2012-2013 monitoring seasons, ongoing long-term monitoring will be addressed in the WQIP Monitoring and Assessment Programs, instead of implementing additional long-term trend monitoring during the Pre-WQIP period. This allows resources to be redirected from these receiving water monitoring efforts to monitoring efforts that better support solutions with increasing emphasis on MS4 outfall monitoring, source identification and source abatement activities. The Copermittees are committed to evaluating wet weather receiving water conditions at one MLS station per WMA to preserve long-term trends, assess receiving water quality and programmatic effectiveness, and evaluate WMAs comparatively.

Constituent priorities in receiving waters for 2010 are similar to those of the previous assessment in 2005. Additionally, the upstream TWAS and downstream MLS have similar constituent priorities. Based on this knowledge, the core SMC receiving water monitoring questions 1 and 2 (i.e., the questions addressing impacts to beneficial uses and the magnitude and extent of problems) have already been successfully addressed by the monitoring for the 2007 Permit. Because the constituent concentrations and patterns are generally similar at the TWAS and MLS (and especially within a watershed), there is no additional value to continuing the TWAS monitoring in its current form (*See Attachment 2-1 from the ROWD (San Diego County Copermittees, 2011)*). Additional focused receiving water monitoring to address key needs will be evaluated and addressed by Program Managers in the WQIP Monitoring and Assessment Programs.

Reference Site Monitoring: In Section II.D.2.a of the Tentative Order, the Regional Water Board included a requirement to monitor at least one reference watershed monitoring station for each WMA. The Copermittees propose to use the results of the San Diego Region Stream Reference Study in lieu of this requirement. Regional reference sites that are based on similar geology and watershed size will provide an appropriate measure of the expected receiving water conditions achievable in Copermittees' jurisdictions as a result of the future implementation of their WQIPs. Within the framework of the three compliance assessment areas, the intended purpose of monitoring reference sites for each WMA is to support assessments of whether *the physical, chemical, and biological conditions of receiving waters are being improved by the WQIPs*.

The specific assessments that receiving water monitoring programs are generally designed to support also include: *Are conditions in receiving waters protective or likely to be protective of beneficial uses? What is the extent and magnitude of the current or potential receiving water problems?* The proposed regional and reference condition monitoring will provide the needed information about the range of physical, chemical, and biological conditions that are natural in receiving waters of the San Diego region under both wet and dry conditions. This information will be incorporated into the Copermittees' Integrated Evaluation of Water Quality Improvement Strategies to support several related assessments:

- The conditions of receiving waters and status of receiving water beneficial uses,
- The extent to which MS4 discharges cause or contribute to receiving water problems during both dry weather and wet weather,
- Appropriateness of final dry weather and wet weather numeric goals that will restore the inadequately supported beneficial uses in the receiving waters;
- Characterizing non-storm water and storm water pollutant loads from receiving water flows within the authority of the Copermittee to control and from other non-anthropogenic sources;
- Progress of the water quality improvement strategies toward attaining non-storm water and storm water pollutant load reductions or improvements to water quality conditions;

Bacteria Compliance Monitoring: Copermittees propose to address the need for Bacteria Compliance Monitoring with the recently developed monitoring programs prepared to comply with bacteria TMDL implementation requirements (due to be submitted to the Water Board in October 2012). This monitoring will be conducted in place of the extensive bacteria compliance monitoring proposed in Attachment E of the Tentative Order to comply with the Bacteria TMDL that applies to 20 waterbodies. The current language proposed in Attachment E would replace the results of the recent stakeholder planning effort that has just been completed, and the monitoring proposed in the Tentative Order is so extensive that Copermittee resources for implementation would be redirected to monitoring that would not improve water quality.

Discussion of Jurisdictional Boundary Monitoring

In Section II.D.1.a(2)(a) of the Tentative Order, the Regional Water Board included a requirement to monitor at hydrologically connected receiving water monitoring stations in the lowest and upper most parts of the WMA near the boundary of its jurisdiction during dry weather. The monitoring described in the Tentative Order will not effectively address the three main programmatic objectives, and it will also not provide an effective means to assess jurisdictional accountability if that is the goal of the monitoring. An upstream-downstream monitoring approach in receiving waters has been shown to be a relatively ineffective method of detecting statistically and programmatically significant changes in the receiving waters from one location to the next or for the assessment of impacts of discharges on receiving waters.

There are a number of related reasons why receiving water monitoring is not an effective means of evaluating jurisdictional accountability or characterizing jurisdictional pollutant loads from dry weather MS4 discharges. The first reason is that receiving water monitoring is simply a less direct measure of jurisdictional performance and loads than the discharge monitoring that is already included in the program. A second related reason is that MS4 discharges typically comprise only a fraction of the receiving water flows and loads. A third factor is the typically high variability of the concentrations of analytes in receiving waters and discharges. This high variability in combination with the first two factors results in a low “signal to noise ratio” when the signal of interest is effects of discharges on receiving water concentrations.

The practical consequence of this combination of high variability and relatively small differences is that it requires high numbers of samples to detect statistically and programmatically significant differences expected between receiving water locations. Real differences expected between typical upstream/downstream receiving water sites are commonly less than 10%. Differences in concentrations that would be considered relevant to assessing jurisdictional accountability and impacts would be established by the Water Board and Copermittees, but are probably also in the range of 10% or less of average concentrations for any specific parameter.

Several of these challenges in using receiving water quality monitoring to distinguish differences of this magnitude are illustrated with a regionally relevant example of trace metals TMDL monitoring data for Ballona Creek (Los Angeles County). The Ballona Creek example is an appropriate comparison for the Copermittees' region based on similar geography, climate, hydrology, and a similarly high degree of urbanization in the watershed. The receiving water monitoring data for this program were collected over more than a 10-year period from 2001 to 2011 and include wet and dry season monitoring events. For this example, dry weather results ($n > 50$ samples per site) are presented for copper for the four Ballona Creek locations (Figure 3). The variability of the data is illustrated by the range (between 1 and 2 orders of magnitude for dissolved copper and total copper) and coefficients of variance for untransformed data of 0.5 - 0.75 for most sites. Although there is an increasing percentage of urban influence from upstream to downstream for these sites (from left to right in Figure 3), there is no discernable trend in the receiving water quality. Using more rigorous analysis of variance methods (ANOVA) to evaluate the Ballona data, the differences in mean concentrations of total copper were not statistically significant from site to site, although the largest difference between site means was greater than 22%. Differences in mean concentrations of dissolved copper were statistically significant among sites, but the smallest significant difference detected was 36%, and the next smallest *non*-significant difference was 30%. Applying statistical power analysis to further evaluate the ability to distinguish "signal" from "noise" in the Ballona Creek dissolved copper data, it can be seen that reliably detecting differences as small as 20% between sites would require more than 100 sample events, and differences as small as 10% would require more than 700 events even at a lower statistical power of 80% (Table 2).

The analysis of the Ballona Creek TMDL data illustrate why jurisdictional boundary monitoring in receiving waters would be an inefficient and impractical means of assessing impacts from the Copermittees' discharges. The Ballona Creek system is reasonably representative of conditions expected in the Copermittees' receiving waters, and is based on a robust data set. The variability of the Ballona copper data is also typical or slightly lower than is common for relatively small urban receiving waters and is therefore a reasonable conservative surrogate for other systems and parameters. Some parameters would be expected to be slightly less variable (e.g., conductivity, hardness) and might require somewhat fewer samples to detect programmatically relevant differences. However, the majority of priority constituents are likely to be equally or more variable than total or dissolved copper (e.g., bacteria, strongly particulate associated pollutants such as legacy organochlorine pesticides and many other trace metals), and would require similar or more samples to detect meaningful differences between sites.

A similar analysis was performed on data from Chollas Creek in San Diego County, involving 60 or more samples for each site from the period 1994-2010, with very similar results.

Figure 3. Ballona Creek Dry Weather Copper Data

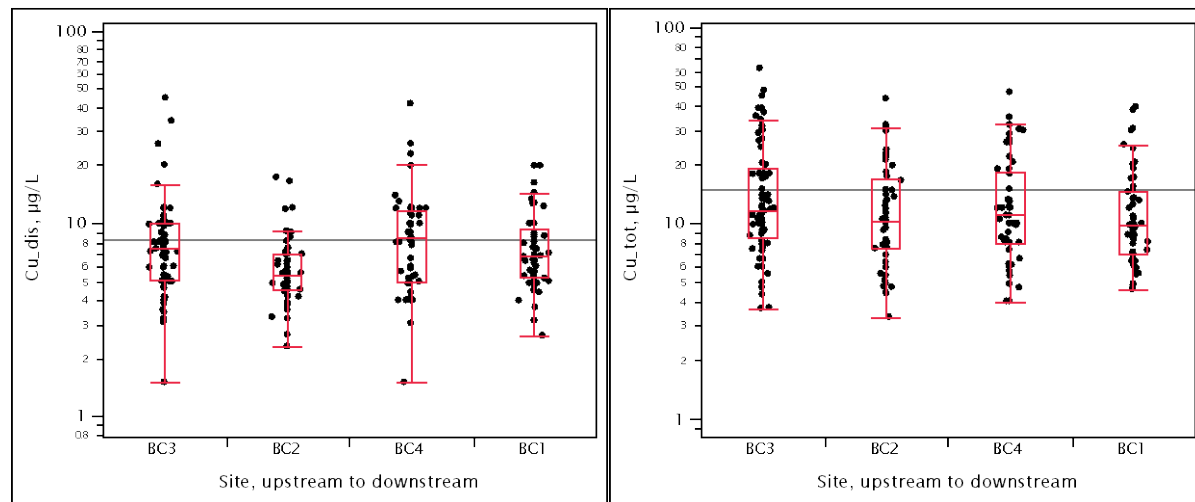


Table 1. Analysis Of Variance Results For Ballona Creek Copper Data

Dissolved copper					Total copper						
Source	DF	Sum of Squares	Mean Square	F Ratio	p-value	Source	DF	Sum of Squares	Mean Square	F Ratio	p-value
Model	3	331.6	110.52	3.65	0.0133*	Model	3	1.84	0.614	1.5574	0.2005
Error	228	6901.1	30.27			Error	228	89.91	0.394		
C. Total	231	7232.6				C. Total	231	91.75			

LSMeans Ordered Differences, Tukey HSD

Site		Least Sq Mean	Median	Site	Least Sq Mean	Median
BC4	A	9.4	8.5	BC3	A	11.6
BC3	A	8.8	7.5	BC4	A	11.0
BC1	A	8.3	6.8	BC2	A	10.3
BC2	B	6.1	5.4	BC1	A	9.7

Levels connected by same letter are *not* significantly different.

Table 2. Minimum Detectable Differences Between Sites

Power analysis results based on Ballona dissolved copper data, with a typical COV in log-scale of 0.2. Analysis is based on detection of differences between two sites, at a 95% confidence level, and a statistical power of 80% or 90% probability of detecting the difference.

Sample size	Minimum Detectible Significant Difference for stated sample size	
	Power=0.8	Power = 0.9
20	45%	53%
40	32%	37%
60	26%	30%
80	22%	26%
100	20%	23%
787	10%	12%

The jurisdictional boundary monitoring approach would also be ineffective at detecting differences in jurisdictional receiving water quality or impacts, since the relative differences in similar adjoining jurisdictions would be expected to be small (e.g., often less than a 10% difference in average pollutant concentrations). In each case, an upstream-downstream monitoring approach will be an ineffective method of assessing the impacts of dry weather discharges on the receiving water or differences between jurisdictional program effectiveness, as well as programmatic compliance with the management objective of eliminating dry weather MS4 discharges.

An additional unrelated challenge is that in many cases, the differences in flows and loads between upstream and downstream receiving water locations are not an adequately reliable measure of jurisdictional flow (and therefore loads and impacts). This is because of unmeasured losses or gains in flow due to the equilibrium between the surface water and groundwater. Interaction with groundwater is normal for most surface water streams, but is typically seasonally variable and difficult to accurately measure and characterize. The uncertainty due to the uncharacterized effect of these fluxes with groundwater is magnified in smaller and often ephemeral receiving water streams in the Copermittees' jurisdictions.

If the dry weather jurisdictional receiving water monitoring described in the Tentative Order is intended to support assessments of whether *the physical, chemical, and biological conditions of receiving waters are being improved by the WQIPs*, the Copermittees' proposed coordinated regional approach to receiving water monitoring provides a more effective means to accomplish this objective (as described in the following section).

Benefits of Proposed Receiving Water Monitoring Approach

The principal benefits of the Copermittees' Alternative Provision II.D approach to receiving water monitoring and assessment, as described above, can be summarized as follows:

- Supports broad spatial and temporal representation
- Integrates existing receiving water monitoring programs
- Builds on the existing receiving water data collected by Copermittees and others

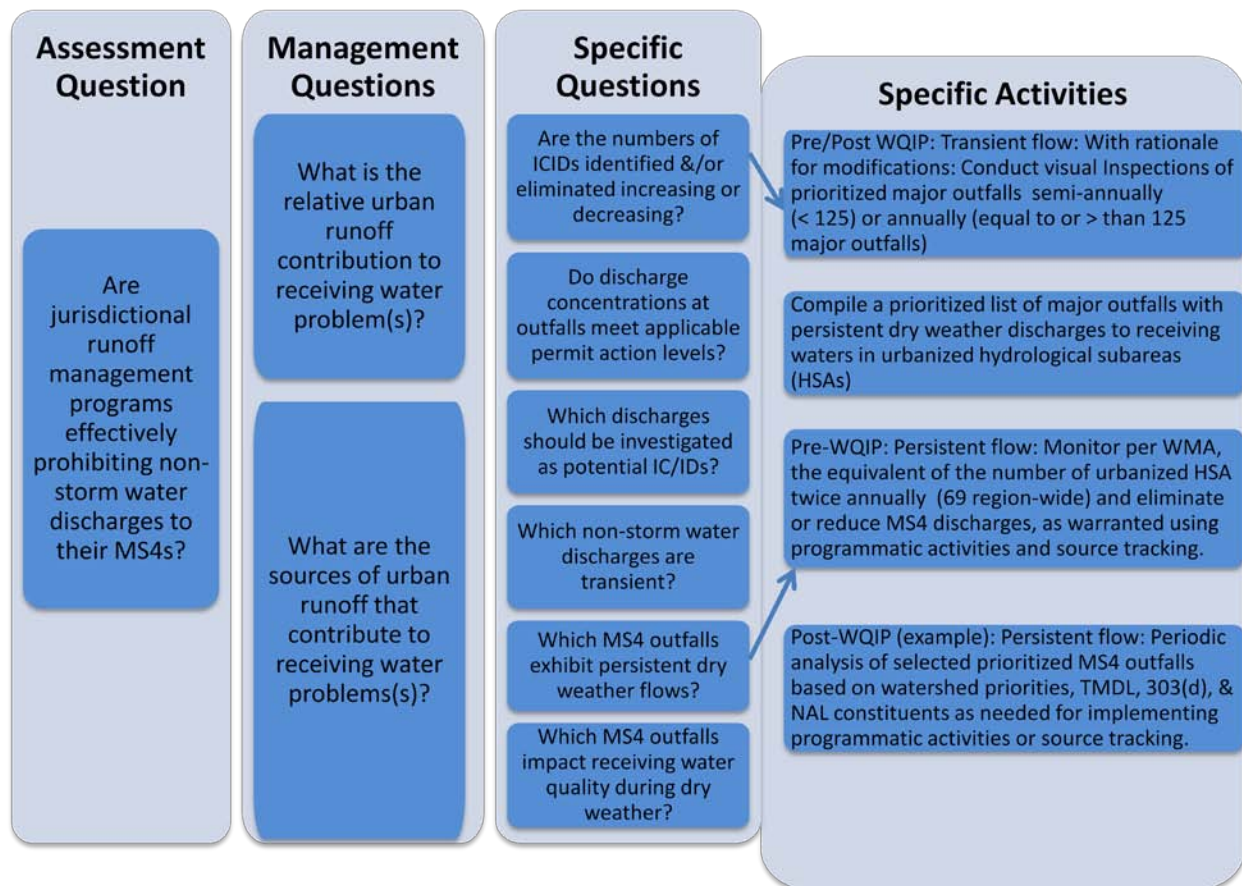
- Preserves long-term trend assessments based on scientifically sound, detailed statistical analyses of data collected over the last 10 to 15 years, and allows continued comparisons of WMAs
- Supports question/assessment-driven, adaptive management approach

Dry Weather Outfall Monitoring

Instead of the extensive chemical testing of MS4 outfalls proposed in the Tentative Order, Copermittees propose a more strategic approach based on knowledge from 15 to 20 years of dry weather monitoring. Follow up actions based on chemical action levels have not proven to be an efficient use of resources. As reported in the Copermittees' recent ROWD ((San Diego County Copermittees, 2011) See Attachment 1-1), follow-up investigations are rarely effective even when required within two business days after discovery. This is due largely to the intervening time between sampling the discharge and reporting the laboratory analytical results (typically more than a week). The resulting upstream investigations conducted over a week after the IC/ID was observed were rarely able to detect the source of the IC/ID and the two-day response requirement caused significant disruption of other higher priority efforts. The Copermittees found that the disruption to conduct the investigation was not an effective use of resources and rarely resulted in the elimination of more IC/IDs. The Copermittees will evaluate the alternative approach described in the Copermittees' proposed alternative Provision II.D during the Pre-WQIP monitoring phase. Based on its merits, the approach may be further refined in the Monitoring and Assessment Program developed as part of the WQIP with justifications.

Figure 4 illustrates use of the question-driven approach in designing specific activities for dry weather outfall monitoring and assessment.

Figure 4. Dry Weather Outfall Monitoring and Assessment Planning Process



Pre-WQIP Monitoring

In Section II.D.1.a of the Tentative Order, the Regional Water Board includes a requirement to monitor outfalls and inter-MS4 sites as part of each Copermittees' Dry Weather Jurisdictional Monitoring. Within the framework of the three compliance assessment areas, the intended purpose of monitoring dry weather MS4 outfalls is to support assessments of whether *jurisdictional runoff management programs effectively prohibit non-storm water discharges into their MS4s*.

As with the other proposed monitoring elements, the non-stormwater discharge monitoring in Alternative Provision II.D follows a question/assessment-driven approach. The primary assessment question driving this monitoring element is "Are *jurisdictional runoff management programs effectively prohibiting non-storm water discharges to their MS4s*?" To answer this overarching question, monitoring is focused on the following SMC management questions:

What is the relative urban runoff contribution to receiving water problem(s)?

What are the sources of urban runoff that contribute to receiving water problems(s)?

From these two management questions, specific monitoring questions have been developed to drive the design of an efficient and effective MS4 outfall monitoring program. Where possible, these questions are aligned directly with assessment questions in the draft Tentative Order. The specific monitoring questions developed to drive the initial monitoring design are:

Are the numbers of IC/IDs identified or eliminated increasing or decreasing?

Do pollutant concentrations at outfalls meet applicable permit action levels?

Which non-storm water discharges are transient?

Which MS4 outfalls exhibit persistent dry weather flows?

These questions have led the Copermittees to develop a two-pronged approach to effectively prohibit non-stormwater MS4 discharges. The first element targets transient discharges and is focused on IDDE, The second element is strategically designed to prioritize and address outfalls with persistent non-stormwater flows. These approaches are outlined below.

Transient flows: Prior to the completing the WQIP, transient flows will be addressed through visual inspection of major MS4 outfalls that discharge to a receiving water (in addition to other programmatic components such as construction, industrial/commercial, and municipal inspection programs, and responses to hot line complaints). All of the major MS4 outfall inspections will be conducted in dry weather as defined by the permit and will be conducted year round where possible. Obvious illicit discharges (e.g., those with unusual color, unusual odor, or high flows) shall be investigated immediately. The scope of the dry weather outfall inspection program will be adjusted based on the number of major MS4 outfalls that discharge to receiving waters:

- Copermittees with fewer than 125 major MS4 outfalls that discharge to a receiving water shall visually inspect 80% of these outfalls twice annually.
- Copermittees with 125-249 major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized list of these outfalls annually. .
- Copermittees with 250 or more major MS4 outfalls that discharge to a receiving water shall visually inspect a prioritized subset of these outfalls annually. The total number of annual inspections per Copermittee with 250 or more major MS4s will be a minimum of 250 and up to a maximum of 500 locations.

The major MS4 outfalls that are safe to access and avoid disturbances of critical habitat shall be prioritized based on threat to water quality and will consider factors including but not limited to:

- Proximity to a flowing receiving water
- Reported exceedances in water quality data
- Surrounding land use
- Presence of watershed priority constituents, TMDLs & CWA 303(d) list of impaired water bodies
- Flow rate

Persistent Flows: Prior to the completing the WQIP, the Copermittees' approach to effectively prohibit persistent non-stormwater discharges will focus on Major MS4 outfalls in the Urbanized Area (see Figure 5). Under this approach, Copermittees will:

- Identify persistent flows and develop a prioritized list of outfalls based on their threat to water quality. Prioritization will be based on visual surveys and historical knowledge. As in the SMC Model Monitoring Program, "persistent" is defined as observable flows in 3 consecutive site visits.
- Reduce dry weather flows through programmatic actions and source investigations
- Twice annually, Copermittees will monitor an average of one prioritized outfall in each urbanized hydrological subarea (there are 69 urbanized HSAs in San Diego County); However, WMAs will have the discretion to monitor the equivalent number of the highest priority outfalls and not necessarily in each of the HSAs. Samples will initially be analyzed for a broad list of constituents, and subsequent monitoring will focus on constituents of concern as needed to guide effective reduction & elimination.
- If persistent dry weather flows in a priority outfall are determined to be (a) conditionally allowed per Provision II.E.2.a, (b) anthropogenic and effectively eliminated, or (c) covered by another NPDES permit; then the outfall will be replaced in the monitoring program with the next highest priority outfall.
- Allow flexibility in location of persistent flows (guided by the prioritizations) for each WMA to maximize effectiveness of program. Specifically, within the constraints of the minimum required number of monitored outfalls, Copermittees may choose to monitor more than one high priority flow in some HSAs, and none in other HSAs with only low-priority persistent flows.

The Copermittees will evaluate the data produced by the dry weather outfall monitoring and inspections annually, rank outfalls according to potential threats to receiving water quality, exceedance of numeric action levels, and prioritize the outfalls. The prioritized list shall be submitted in the Annual Report to the Regional Board and used to update the WQIP, with the goal of eliminating or reducing flows and/or loads in order of the ranked priority list through targeted programmatic actions and source investigations. As part of the Annual Report, Copermittees shall also report the non-storm water discharges and pollutant loads from the Copermittee's MS4based on these data. Targeting the high priority outfalls allows elimination or reduction of the routine monitoring of inter-MS4 and non-major outfalls included in the TO Dry Weather Jurisdictional Monitoring without adversely affecting the ability of the Copermittees to make programmatic assessments about the effectiveness of their jurisdictional runoff management programs to prohibit non-storm water discharges to their MS4s. By targeting high priority outfalls, it also provides support for conservative assessment of whether dry weather discharges have the potential to impact receiving waters.

Figure 5. San Diego County MS4 System in Urban Areas

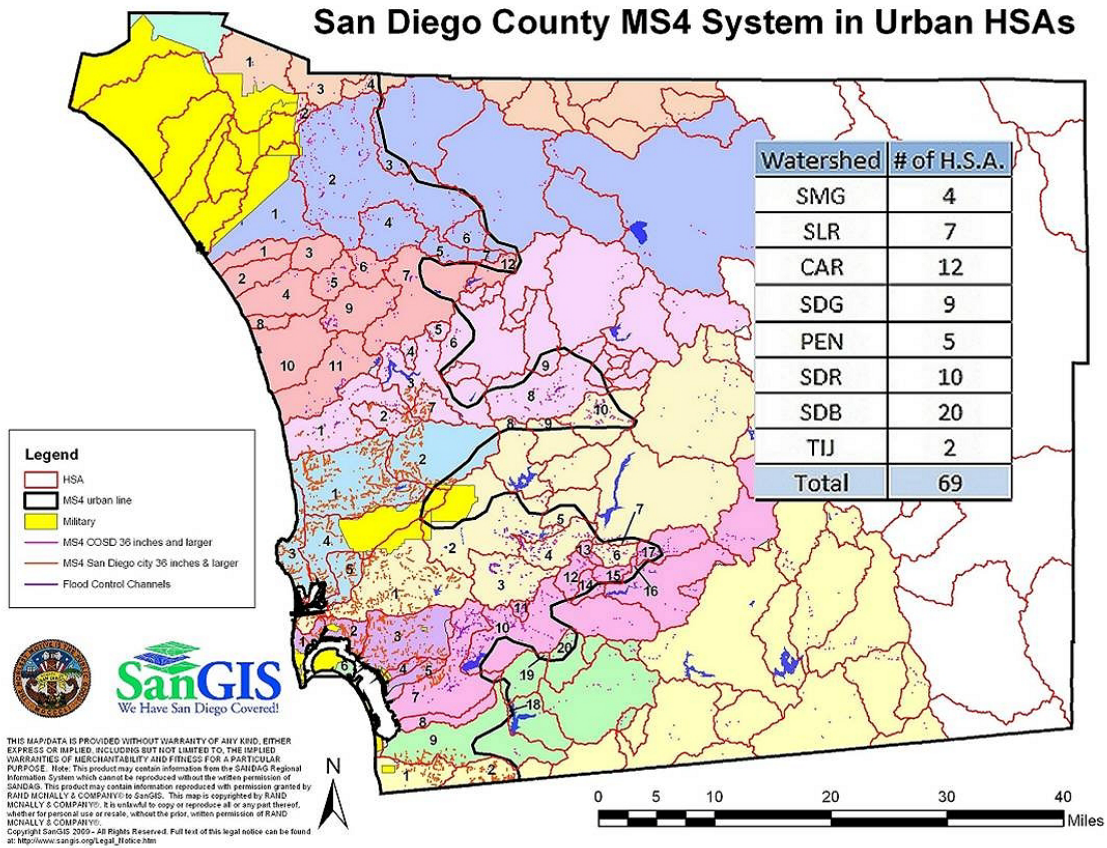


Table Notes: HSAs are numbered and outlined in red for each watershed. The inland extent of the approximate urban area is indicated by a solid black line.

Discussion of IDDE Program Efficiency and Effectiveness (Transient Flow)

The Copermittees’ proposed approach to detect and eliminate non-storm water discharges and illicit connections/illegal discharges (IC/IDs) is directly focused on potential impacts to receiving waters. The proposed dry weather transient outfall monitoring targets all major outfalls that discharge directly to receiving waters within each jurisdiction. Each of these major outfalls will be visually inspected once or twice annually (up to 500 per jurisdiction) during dry weather conditions – once in dry season and once during wet season. Outfalls with persistent⁶ dry weather flows will be addressed by the characterization and prioritization process described in the

⁶ Persistent flow, as modified from the SMC Model Monitoring Program definition of persistent WQO exceedance, is defined as “the presence of flow, pooled, or ponded water more than 72 hours after a measurable rainfall event of 0.1 inch of precipitation during three consecutive monitoring and/or inspection events”. All other flow is considered transient.

Copermittees' Alternative Provision II.D.2.b., as described above, and as applicable in the approved WQIP. Outfalls with transient dry weather flows will follow the procedures to be developed under Provision II.E.2.d. Where inspections indicate evidence of transient discharges through color, odor, unusual flow, etc - investigations will follow immediately. In cases where field test kits are deemed to be helpful, they will be used. Where inspections indicate persistent flow, outfalls will be included in the NSW discharge program to address persistent flows.

One aspect of the Tentative Order's Dry Weather Jurisdictional Monitoring is intended specifically to detect and eliminate non-storm water discharges and illicit discharges and connections (IC/IDs) to the Copermittees' MS4. As described in Section II.D.1.a of the TO, this would consist of monthly monitoring of all outfalls or MS4 segments in each quarter-mile section within the Copermittees' jurisdictions. This strategy would require sampling and field measurements at hundreds of sites in many of the jurisdictions, and analysis of thousands of samples per year for a variety of laboratory analytical parameters. Although the approach outlined in the Tentative Order would generate a great deal of water quality data for dry weather flows and IC/IDs, experience indicates that most of the flows sampled would be unlikely to have any impacts on receiving water. Additionally, since the purpose of the program is to eliminate dry weather flows and IC/IDs entirely, there is little value to collecting the dry weather water quality data for MS4 sites other than for outfalls. Most of the water quality data collected would not support assessment of the stated program management objective, which is to effectively prohibit non-storm water discharges to their MS4s. Consequently, this approach will be extremely resource intensive while also being relatively inefficient in eliminating the MS4 flows and IC/IDs with potential to adversely impact receiving waters.

As has been discussed and generally agreed to by the SDRWQCB and other TO stakeholders in focus meetings, the goal of the program is to eliminate dry weather flows entirely. If flows can be eliminated based on visual observations and IC/ID investigations, then there is little value to collecting water quality data and, according to the strategic monitoring frameworks available, this monitoring would not be necessary as it is not required to answer the management and assessment questions. Not only is water quality information not needed to get the desired results (i.e., eliminating dry weather discharges), but the Copermittees' past monitoring results illustrate that this type of monitoring is relatively ineffective for this purpose. As an example, based on the number of samples collected between 2007 and 2009 through the current permit's monitoring program, only 3.7% of the samples collected resulted in a successful detection and elimination of an illicit discharge (County of San Diego Copermittees' 2011 ROWD Attachment 1-1).

In contrast, IDDE programs based on responding to complaints about dry weather flows have been demonstrated to have a much higher rate of detecting and eliminating dry weather flows (~41% of inspections by the County of San Diego, and an average of 58% of inspections by seven other Copermittees using this approach). Another approach used by the County of San Diego Copermittees, the Industrial/Commercial Inspection Program, demonstrated that these industrial and commercial facilities had a very high level of compliance, with no illicit discharges or connections detected in a total of 1351 inspections conducted in 2009-2011 (Table 3). The industrial/commercial, municipal, and construction inspections have a large spatial coverage. The Copermittees attribute the success and effectiveness of this program in

preventing IC/IDs to their process of proactively engaging facility owners and operators through outreach and routine inspections.

Table 3. Illicit Discharge Detection and Elimination Programs, FY 2009-2011

Program	Total Site Visits	Total ICIDs Detected	Total ICIDs Eliminated	ICIDs eliminated per inspection
Total Industrial/Commercial Inspections Results	1351	0	0	0.0%
Total Complaint Responses	939	382	382	40.7%
Total Dry Weather Monitoring	174	0	0	0.0%

The proposed transient flow program is rooted in a three-pronged approach designed to provide broad spatial and increased temporal coverage. The focus is on three main areas: sources, the MS4, and outfalls discharging to receiving waters.

Experience shows that the main sources of NSW discharges are addressed via programs such as ICM inspections. Based on an analysis of recent data, this program appears effective in preventing illicit discharges through routine contact, OAE, and facility inspections. This program is broad in spatial coverage and occurs throughout the year.

The MS4 is continually monitored via jurisdictional programs such as complaint response, MS4 cleaning, and staff/citizen patrolling and reporting of illicit discharges. These programs have been shown to be effective in responding to and eliminating transient discharges. They also have a broad spatial element and are ongoing throughout the year.

One aspect of the Tentative Order's Dry Weather Jurisdictional Monitoring is intended specifically to detect and eliminate non-storm water discharges and illicit discharges and connections (IC/IDs) to the Copermitees' MS4. As described in Section II.D.1.a of the TO, this would consist of monthly monitoring of all outfalls or MS4 segments in each quarter-mile section within the Copermitees' jurisdictions. This strategy would require sampling and field measurements at hundreds of sites in many of the jurisdictions, and analysis of thousands of samples per year for a variety of laboratory analytical parameters. Although the approach outlined in the Tentative Order would generate a great deal of water quality data for dry weather flows and IC/IDs, experience indicates that most of the flows sampled would be unlikely to have any impacts on receiving water. Additionally, since the purpose of the program is to eliminate dry weather flows and IC/IDs entirely, there is little value to collecting the dry weather water quality data for MS4 sites other than for outfalls. Most of the water quality data collected would not support assessment of the stated program management objective, which is to effectively prohibit non-storm water discharges to their MS4s. Consequently, this approach will be extremely resource intensive while also being relatively inefficient in eliminating the MS4 flows and IC/IDs with potential to adversely impact receiving waters.

The third element of the proposed transient approach consists of visual monitoring at major MS4 outfalls. This requires the updating of inventories and periodic surveys of major outfalls, looking for flow indicative of illicit discharges. Where surveys indicate evidence of transient discharges through color, odor, unusual flow, etc - investigations

will follow. In cases where test kits are deemed to be helpful, they will be used. Where inspections indicate persistent flow, outfalls will be included in the non-storm water discharge program to address persistent flows.

WQIP Monitoring

The pre-WQIP program to control transient and persistent dry weather discharges will continue after completion of the WQIP, with any Water Board approved modifications needed to be responsive to Program Managers and to focus on watershed priorities, TMDLs & 303d-listed water bodies.

Benefits of Proposed Dry Weather Outfall Monitoring Approach

The principal benefits of the Copermittees' Alternative Provision II.D dry weather outfall monitoring approach, as described above, can be summarized as follows:

- Broad spatial and temporal coverage
- Supports assessment-driven, adaptive management approach
- Distinction between persistent and transient flows focuses resources on eliminating and/or controlling high priority threats to receiving waters quality
- Utilizing other elements of the stormwater programs (inspections, complaint calls) and third party information will efficiently and effectively assist jurisdictions in eliminating non-storm water discharges

Wet Weather Outfall Monitoring

Within the framework of the three compliance assessment areas, the intended purpose of monitoring wet weather MS4 outfalls is to support assessments of whether *jurisdictional runoff management programs are reducing pollutants in storm water to the MEP*. The management questions related to this objective include: *What is the relative urban runoff contribution to receiving water problem(s)? What are the sources of urban runoff that contribute to receiving water problem(s)?* Additional related specific questions include: *Which MS4 outfalls impact receiving water quality during wet weather? Do discharge concentrations at MS4 outfalls meet applicable permit action levels? How do representative MS4 outlet discharge concentrations, loads, and flows change over time?* The Copermittees' approach to wet weather outfall monitoring is illustrated in Figure 6.

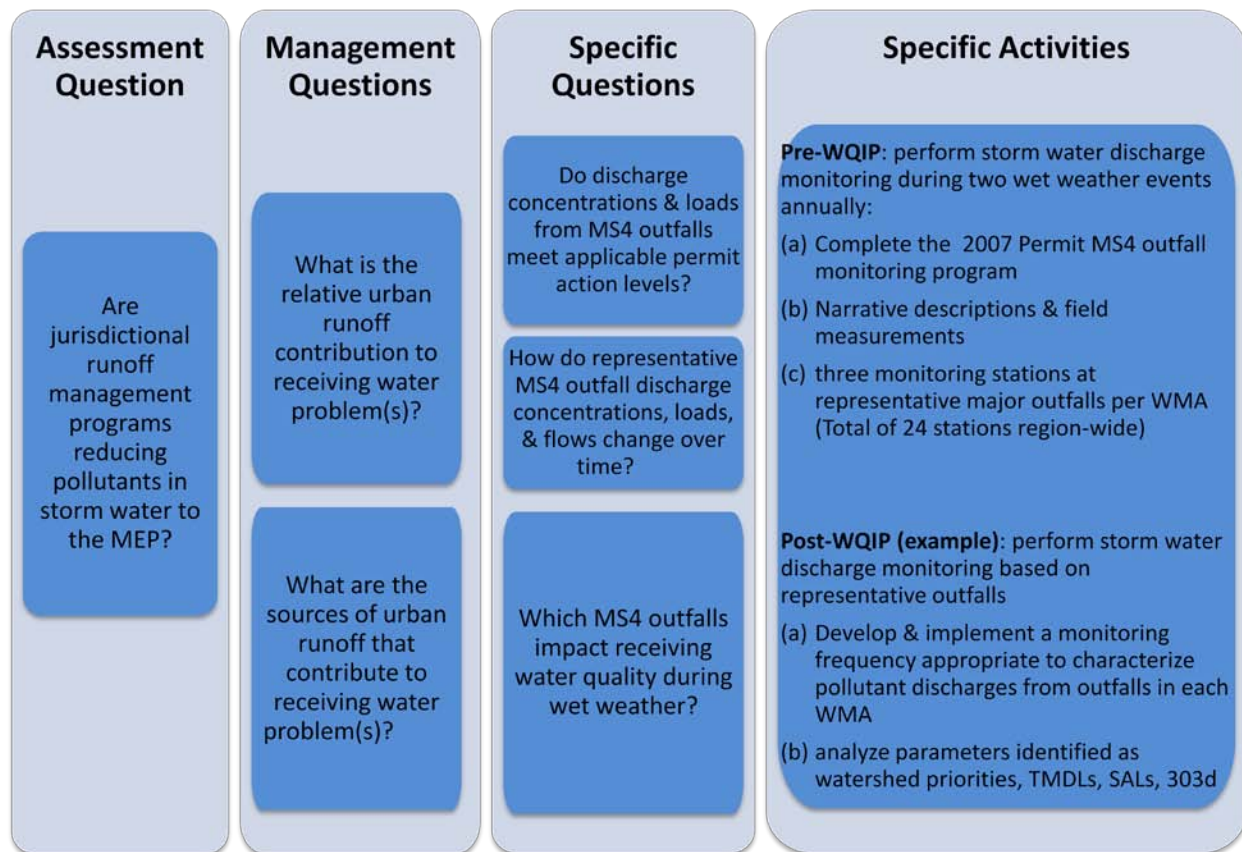
Pre-WQIP Monitoring

For the Jurisdictional Stormwater monitoring in Section II.D.1.b, instead of extensive MS4 outfall chemical monitoring, the Copermittees propose to monitor representative homogeneous land uses or mixed land uses.. These representative data will be extrapolated to better inform the planning process by prioritizing drainages for implementation efforts. Using the specific questions to guide design, the Copermittees commit to completing the current MS4 outfall program as part of the Pre-WQIP monitoring. Additionally, the Pre-WQIP outfall monitoring will consist of at least 3 monitoring stations per watershed management area. Selection of the representative outfalls with homogeneous land use types may be coordinated and shared among Copermittees to provide the most efficient representation and characterization of major land use categories. Representative typical mixed use sites also may be used as a cross check of the land-use-specific modeling results. Modeling currently being done for some watersheds as part of the bacteria implementation plan effort also may be built upon.

This proposed MS4 program will be more resource-intensive than the Copermittees' current MS4 program, and demonstrates the Copermittees' commitment to gathering useful data to target implementation activities. The post-WQIP program will continue a commitment to perform monitoring of outfalls to characterize pollutants from the MS4s. The design of the program will evolve depending on the specific questions and needs of the WMA. For example, if the question of trends is most important to demonstrate progress, then sampling representative MS4 outfalls with typical mixed use drainage areas may be preferred.

Figure 6 illustrates use of the question-driven approach in designing specific activities for wet weather outfall monitoring and assessment.

Figure 6. Wet Weather Outfall Monitoring and Assessment Planning Process



WQIP Monitoring

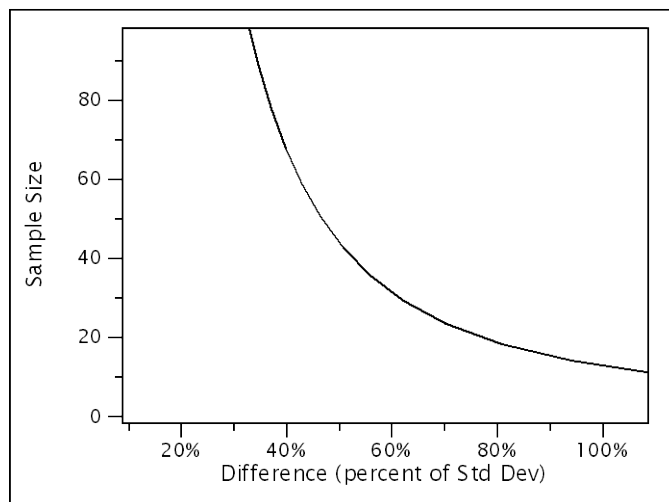
The outfall monitoring in the WQIPs will continue monitoring at representative major MS4 outfalls with homogenous land uses and/or typical mixed-use drainage areas. Selection of these representative outfall locations may be coordinated and shared among the Copermitttees to provide the most efficient representation and characterization of major land use categories (residential, commercial, industrial). The number of sites, the frequency of sampling, and the analyte list may be modified in the WQIPs with Regional Board approval. An adaptive strategy, based on analysis of data collected is proposed and is further discussed in the following paragraphs. The data analysis is anticipated to occur once during the permit cycle.

This adaptive strategy for wet weather outfall monitoring provides a number of significant benefits relevant to program flexibility and effectiveness, and storm water runoff quality management.

An assessment of the wet weather outfall monitoring program allows identification of data gaps and priorities that can be addressed with the ongoing representative wet weather outfall monitoring. By employing statistical power analysis based on available runoff quality data to support the development of the wet weather monitoring, the Copermitttees can gain an understanding of how many sites and events are needed to

adequately address the management questions about potential impacts and trends for each land use and pollutant of interest. This becomes especially valuable in making informed decisions about allocating resources to continue or modify existing monitoring. For example, continued monitoring of an already well-characterized site or category will provide little additional useful information about differences from other categories or impacts on receiving water. This is illustrated in Figure 7 with a generic power curve showing that for sample sizes greater than 40, the ability to identify differences does not increase substantially, and the proportional value of additional data therefore decreases. In the context of making storm water runoff management decisions, this means that continuing to collect data to answer the same question will not provide a substantially better or more accurate answer after a certain number of samples. In the context of adaptive management, when that point is reached, resources should be shifted to answer different or new questions.

Figure 7. Power Curve For Difference Of Single Sample Mean, 95% Confidence Level And 90% Statistical Power



The monitoring design for wet weather monitoring also should consider available comparable runoff quality data from other programs in the region and statewide (e.g., Ventura County, Sacramento County, SCCWRP Urban Runoff Study, etc.). If the data from these programs indicate that runoff quality for specific land uses does not differ significantly between or within land uses, the monitoring design and level of monitoring effort can be adjusted accordingly. This evaluation will be performed later in the Permit Term.

Benefits of Proposed Wet Weather Outfall Monitoring Approach

The principal benefits of the Copermitttees' Alternative Provision II.D wet weather outfall monitoring approach, as described above, can be summarized as follows:

- Broad spatial & temporal coverage
- Ability to extrapolate results across each WMA
- Supports assessment-driven, adaptive management approach

- Flexibility in site selection will focus resources on the highest watershed priorities, whether it be for representative drainage area data or homogeneous land-use based data.

Source/Stressor ID and Special Studies

The Copermittees recognize that the watersheds are at different stages of understanding with respect to each of the four monitoring components identified in Figure 1. The Copermittees anticipate an increased focus on Source/Stressor Identification and Special Studies (See Figure 8 and Figure 9) in the next permit cycle for watersheds with well-defined priorities such as adopted TMDLs. The Copermittees' approach to these elements is to continue implementation of already planned efforts, and to develop additional efforts with the long-term planning process for Monitoring and Assessment as part of the WQIP. The results of the watershed-driven source investigations can then be used in the watershed planning process to develop strategies for reduction of the high priority sources of discharges of the subject constituent.

Management Question: *What are the sources of urban runoff that contribute to receiving water problem(s)?*

The Copermittees will perform Source/Stressor Identification studies as needed to investigate sources of pollutants or stressors in cases where MS4 discharges are deemed to be causing or contributing to receiving water priorities, based on monitoring performed. Stressor/Source Identification studies will make use of relevant available water quality data and related information. The results of the Stressor/Source Identification studies will be shared regionally among the Copermittees to provide information useful for improving adaptive management of urban runoff through implementation of the WQIPs.

The principal role of Source/Stressor Identification is to identify and prioritize pollutant generating activities and source categories. Identification of high-priority sources is an important step in support of the WQIP process, primarily to inform the development of effective watershed-specific pollutant reduction strategies for particular priority constituents. Source identification will be conducted on a constituent-specific basis. The source identification efforts will focus on constituents identified as watershed priorities, and include a prioritization of sources based on magnitude, controllability, and other factors. For example, in the case that indicator bacteria was determined to be the highest priority constituent. If an analysis of potential sources of bacteria also indicated that human sources of bacteria have a higher risk of containing illness causing pathogens than non-human sources, the initial source ID efforts would emphasize using surveys and microbial source tracking or other methods to identify human sources of bacteria, so that these human sources can be prioritized and implementation of appropriate strategies developed.

Another role of Source/stressor identification is to identify and prioritize pollutant generating activities and source categories. Polluting generating activities (PGAs) are activities that can result in the release of pollutants. For example, restaurants are identified as a potential source of bacteria. Restaurant PGAs that could release bacteria include hosing out dumpsters and washing off floor mats in the parking lot. Once the PGAs are identified and prioritized, then behavioral changes can be targeted. Identification of high priority sources is an important step in support of the WQIP process, to help inform the development of effective pollutant control strategies for particular priority constituents on a watershed-specific basis.

Figure 8 illustrates use of the question-driven approach in designing specific activities for source identification monitoring and assessment.

Figure 9 illustrates use of the question-driven approach in designing specific activities for special studies monitoring and assessment.

Figure 8. Source and Stressor Identification Monitoring and Assessment Planning Process

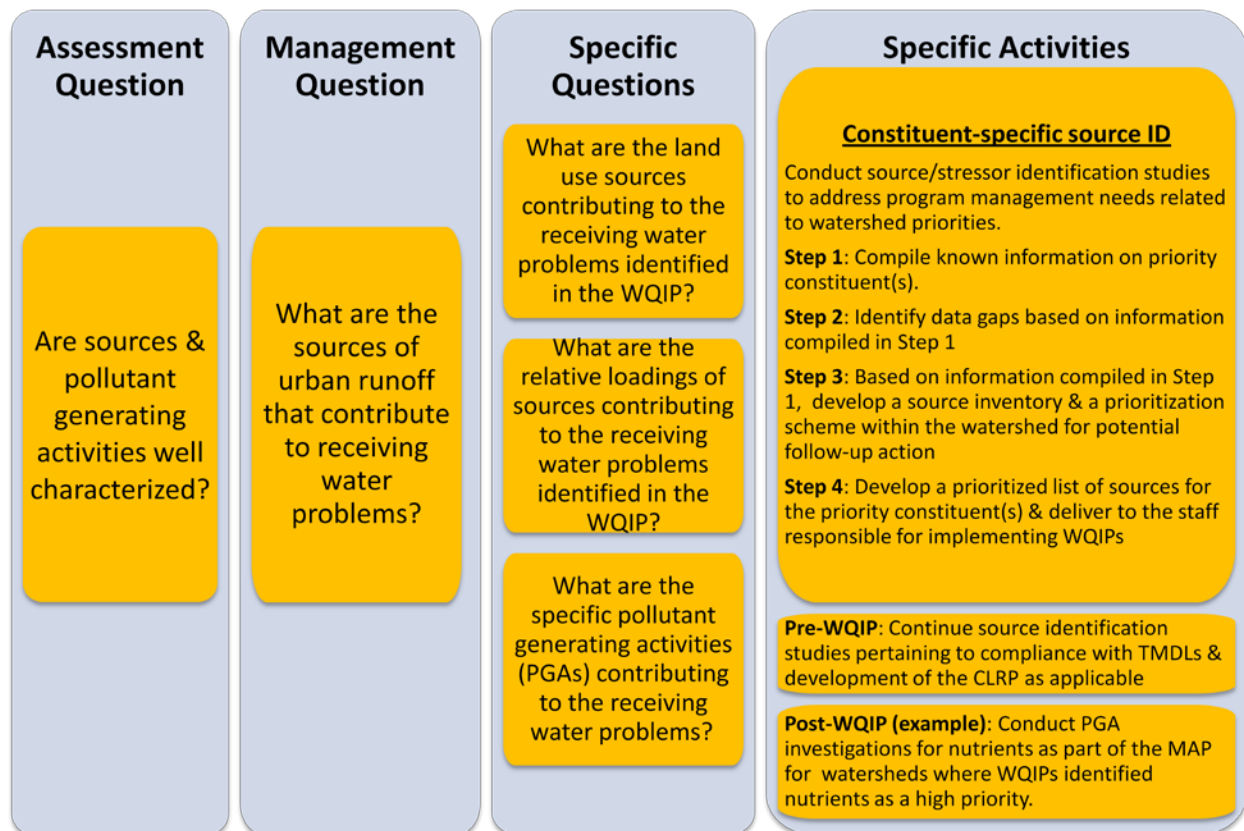
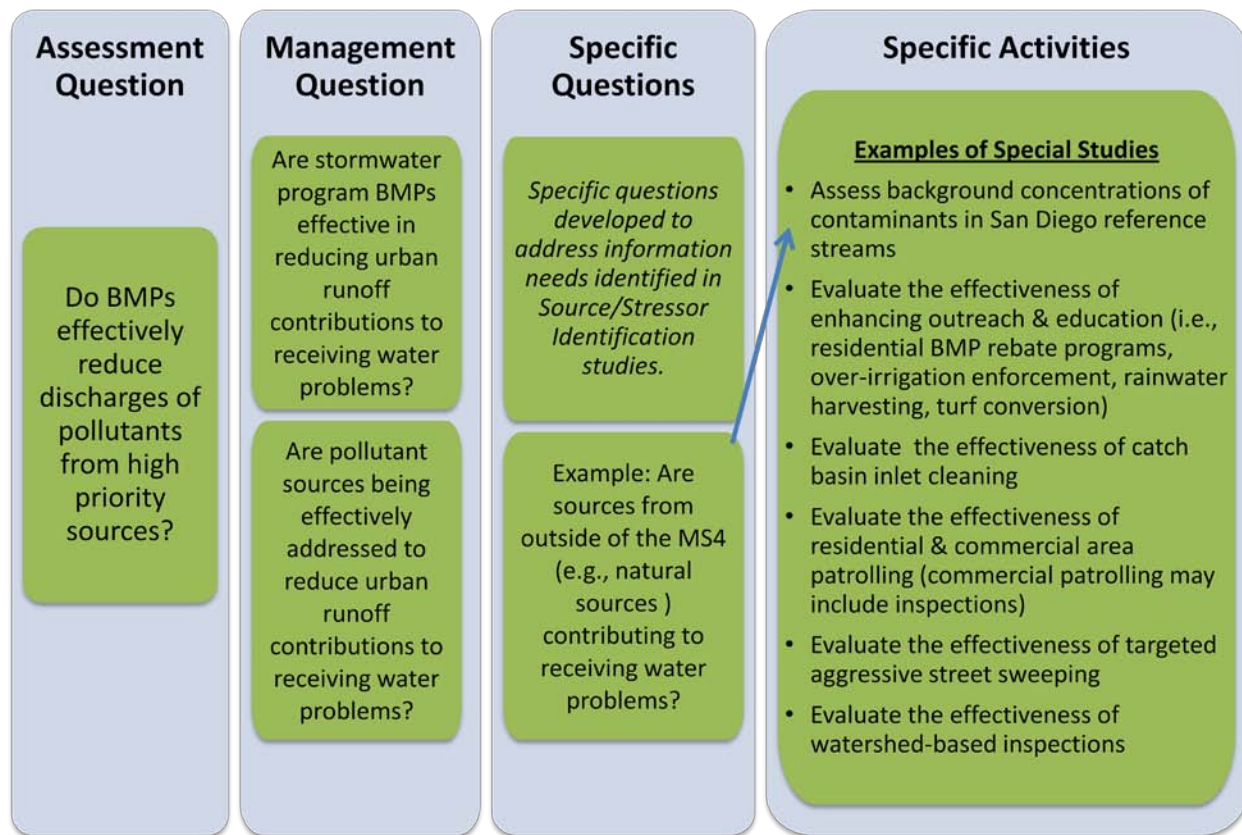


Figure 9. Special Studies Monitoring and Assessment Planning Process



Pre-WQIP Monitoring

Prior to adoption of the WQIP, the Copermittees will continue source identification and special studies pertaining to compliance with TMDLs and the development of the CLRP implemented under Order No. R9-2007-0001. As indicated previously in this report, the San Diego Region Stream Reference Study is a Regional Study to be implemented during the Pre-WQIP period. Additional Special Studies, such as BMP pilot studies or focused source identification studies will be implemented in some watersheds. Details of these studies will be included in the WQIP or Copermittees will provide criteria to guide when a special study is required as part of the WQIP planning process. This focus of the Copermittees' resources on the appropriate sources/activities will result in effective implementation strategies for water quality management.

WQIP Monitoring

Following adoption of the WQIPs, the Copermittees shall conduct source/stressor identification and special studies based on Monitoring and Assessment Plans developed for the WQIPs. The plans or the conditions for when special studies are appropriate will be submitted with the WQIPs.

Benefits of Proposed Source ID and Special Studies Monitoring Approach

The principal benefits of the Copermittees' Alternative Provision II.D Source Identification and Special Studies monitoring approach, as described above, can be summarized as follows:

- Responsive to Program Management needs
- Provides programs with information to verify, quantify, and prioritize sources
- Provides links between sources, activities & effects on runoff quantity & quality
- Answers questions related to program & BMP effectiveness
- Addresses data gaps to allow more effective program implementation
- Provides scientifically valid information related to regulatory principles

ADDITIONAL MONITORING DESIGN REFERENCES

Bernstein, B.B., Thompson, B.E., and Smith, R.W. 1993. A combined science and management framework for developing regional monitoring objectives. *Coastal Management* 27: 185-195.

Canadian Environmental Assessment Program (CEAP). 2004. Cumulative environmental effects assessment.

http://www.ec.gc.ca/ea-ee/eaprocesses/cumulative_effects_e.asp

Council on Environmental Quality (CEQ). 2010. Considering Cumulative Effects Under the National Environmental Policy Act.

<http://ceq.hss.doe.gov/nepa/ccenepa/ccenepa.htm>

European Commission (EC). 2001b. Guidelines for the assessment of indirect and cumulative impacts as well as impact interactions. ISBN 92-894-1337-9.

Report Of Waste Discharge (ROWD): Application for Renewal of NPDES Municipal Stormwater Permit for San Diego County. Submitted to the San Diego Regional Water Quality Control Board on behalf of the Copermittees to Order No. R9-2007-0001 (San Diego County Copermittees), June 27, 2011.

Suter, G.W., II. 1996. Guide for developing conceptual models for ecological risk assessments. U.S. Department of Energy, Oak Ridge National Laboratory.

ES/ER/TM-186. Accessed June 22, 2010 at

<http://www.esd.ornl.gov/programs/ecorisk/documents/tm186.pdf>.

U.S. Environmental Protection Agency (USEPA). 1998. Guidelines for ecological risk assessment. EPA/630/R-95/002F, Washington, DC.

U.S. Forest Service (USFS). 2005. Comparative risk assessment framework and tools.

http://www.fs.fed.us/psw/topics/fire_science/craft/craft/index.htm

Wood, C. 2002. Environmental Impact Assessment: A Comparative Review. Longman Group United Kingdom.

RECEIVING WATER ASSESSMENT OF MASS LOADING STATIONS/ TEMPORARY WATERSHED ASSESSMENT STATIONS

Wet and dry weather samples are collected at mass loading stations (MLS) and temporary watershed assessment stations (TWAS) within nine watershed management areas. Samples are collected per the requirements of Table 1 of the San Diego Regional Water Quality Control Board Order No. R9-2007-001 (Permit). The MLS stations have been consistently sampled for the last 10 to 15 years whereas the TWAS address specific questions beginning with the 2007 Permit and were not designed to be long term monitoring stations.

This monitoring is designed to answer core management questions 1, 2, and 5. The core monitoring management questions per the Permit are as follows:

- 1. Are conditions in receiving waters protective, or likely to be protective, of beneficial uses?*
- 2. What is the extent and magnitude of the current or potential receiving water problems?*
- 3. What is the relative urban runoff contribution to the receiving water problem(s)?*
- 4. What are the sources of urban runoff that contribute to receiving water problem(s)?*
- 5. Are conditions in receiving waters getting better or worse?*

Analysis of receiving water data was conducted to evaluate progress so far on questions 1, 2 and 5. Additionally, the following sub-questions were analyzed to guide the Copermittees' monitoring recommendations for the next permit:

- 1. Have priority constituents changed over this current Permit cycle compared to the previous?*
 - 2a. How have the TWAS contributed to the understanding of the spatial extent and magnitude of receiving water problems?*
 - 2b. How do the monitoring results of the upstream TWAS compare to the downstream MLS?*
 - 2c. Can wet weather priority constituents be linked to land uses in the watersheds?*
- 3. What frequency of sampling at the MLS is necessary to maintain the detection of long-term trends of receiving water quality?*

Statistical analysis of the water quality data from the MLs and TWAS concluded that:

- Receiving water constituent priorities in 2010 are similar to the previous assessment conducted in 2005 for wet weather. Dry weather ambient monitoring was added in the 2007 Permit to address seasonal variability. With few exceptions, priority constituents are the same in all watersheds. Wet weather priorities, in general, are bacteria and sediment. Dry weather priorities, in general, are bacteria, nutrients and total dissolved solids (TDS). Synthetic pyrethroids, not analyzed under the previous Permit, are an emerging regional issue beginning to be addressed at the state and national levels.
- With few exceptions, the constituent priorities at TWAS and MLS across the region are similar. Constituent concentrations and patterns of occurrence are similar at TWAS and MLS in the same watershed.

Attachment 2-1: Receiving Water Monitoring Program Review

- Additional constituent priorities were identified in Chollas Creek Watershed (copper and zinc) and Tijuana River Watershed (e.g., ammonia, surfactants (MBAS), and biological chemical oxygen demand). Both of these watersheds have unique characteristics compared to the rest of the region. Tijuana River is subject to periodic sewage discharges from across the international border and Chollas Creek has a high density of industrial facilities and transportation corridors.
- Statistical analysis of 8 to 18 years of wet weather receiving water data indicate that sampling frequency may be reduced from alternate years to once every five years without increasing the amount of time necessary to detect long term trends. Because wet weather data has a higher variability than dry weather data, it is assumed that a reduced frequency for ambient dry monitoring will also be appropriate.
- Statistical analysis of the wet weather receiving water data also showed that if a significant increasing or decreasing trend is observed, a reduction of sampling frequency from alternate years to every five years will not increase the time necessary to detect a significant trend.

Conclusions

Constituent priorities in receiving water are similar in 2010 to the previous 2005 assessment. Additionally, the upstream TWAS and downstream MLS have similar constituent priorities. Therefore, core monitoring questions 1 and 2 (i.e., impact to beneficial uses and the magnitude and lateral extent of problem) have been successfully addressed by the monitoring of the 2007 Permit. Because the constituent concentrations and patterns are generally similar at the TWAS and MLS, especially within a watershed, there is no added value to continuing TWAS monitoring in its current form. The similarity of priority constituents across the region support reducing the number of receiving water stations from the 2007 Permit. Several stations (3 to 5 across the region) close to the mouth of the watershed will be adequate to monitor receiving water conditions in the region. The region has the wet weather constituent priorities of bacteria and sediment and the dry weather constituent priorities of bacteria, nutrients and TDS. Resources can be reduced from receiving water monitoring and redirected to working on how to fix the problems by increasing emphasis on MS4 outfall monitoring, source identification and source abatement activities.

Wet weather sampling at the MLS may be reduced to once every five years. The statistical simulation results show that decreasing the sampling frequency to every five years will not affect the ability to detect long-term trends. This finding is further supported by the finding that receiving water priority constituents have not changed substantially at individual MLS during the past five years. Therefore, reduced receiving water monitoring will still allow for detection of trends in the long-term, answering management question 5.

Supporting Documentation

A list of watershed management area and mass loading station (MLS) acronyms is presented in Table 1.

Table 1. Watershed Management Area and Watershed Acronym List

Watershed Management Area	Watershed Name	Mass Loading Station
---------------------------	----------------	----------------------

Attachment 2-1: Receiving Water Monitoring Program Review

Watershed Management Area	Watershed Name	Mass Loading Station
Santa Margarita	Santa Margarita River	SMR-MLS; SMR-MLS2
San Luis Rey River	San Luis Rey River	SLR-MLS
Carlsbad Watershed	Loma Alta Creek	LAC-TWAS-1
	Buena Vista Creek	BVC-TWAS-1
	Agua Hedionda Creek	AHC-MLS; AHC-TWAS-1
	Escondido Creek	ESC-MLS; ESC-TWAS-1
San Dieguito River	San Dieguito Creek	SDC-MLS; SDC-TWAS-1; SDC-TWAS-2
Los Peñasquitos River	Los Peñasquitos	LPC-MLS; LPC-TWAS-1; LPC-TWAS-2
Mission Bay and La Jolla	Tecolote Creek	TC-MLS
	Mission Bay	MB-TWAS-1; MB-TWAS-2
San Diego River	San Diego River	SDR-MLS; SDR-TWAS-1; SDR-TWAS-2; SDR-TWAS-3
San Diego Bay	Chollas Creek	CC-SD8(1)-MLS; CC-NF54
	Sweetwater River	SR-MLS; SR-TWAS-1
	Otay River	OR-TWAS-1
Tijuana River	Tijuana River	TJR-MLS; TJR-TWAS-1; TJR-TWAS-2

Sub-Question #1: Have priority constituents changed over this current Permit cycle compared to the previous?

Determination of whether or not receiving water priorities remained similar between the Baseline Long Term Effectiveness Assessment (BLTEA) and the current long term effectiveness assessment (LTEA) was made by comparing the two sets of results at the watershed level. The BLTEA analysis was conducted in 2005 and grouped wet and ambient data from the municipal separate storm sewer system (MS4) and the receiving waters, along with whether or not an constituent was included on the Section (§) 303(d) list. The LTEA analysis was conducted in 2010 and evaluated data from the MS4, receiving water (RW), wet, and ambient separately. In addition, inclusion of a constituent on the §303(d) list did not result in that constituent categorized as high priority. Constituent groups are used for the comparison of the BLTEA and the receiving waters LTEA. Priorities within watersheds were also evaluated. The purpose of this evaluation was to determine if the answer to management question #1 (conditions in receiving waters protective of beneficial uses) is the same in 2010 (LTEA) as the 2005 (BLTEA).

As shown in Table 2, wet weather priorities are similar between the BLTEA and the LTEA, as well as across the region. Cells highlighted orange are high priorities (greater than 50-percent exceedance of water quality benchmark (WQB)) and yellow cells are medium priorities (greater than 25-percent exceedance of WQBs, up to and including 50-percent exceedance of WQBs). A comparison of BLTEA and LTEA priority results at each MLS indicates that priorities remain similar between the two evaluations. Due to the dry weather ambient monitoring element initiated in the 2007 Permit, seasonal differences in priority constituents were identified in receiving water. Nutrients were not found to be a priority constituent during wet weather monitoring, but were a high priority constituent across many watersheds during dry weather conditions. These seasonal variations may in part be attributed to the differences in WQBs between seasons.

Since 2005, Copermittees participation in the Stormwater Monitoring Coalition (SMC) Regional Monitoring Program has provided additional ambient dry weather nutrient data. In general, during dry weather bacteria, nutrients, and TDS are constituent priorities found in watershed

Attachment 2-1: Receiving Water Monitoring Program Review

management areas across the region. In general, during wet weather, bacteria and sediments (total suspended sediments) are region-wide constituent priorities.

Table 2. Comparison of 2005 Baseline Long Term Effectiveness Assessment and 2010 Long Term Effectiveness Assessment Priority Results

Priority Group	BLTEA or LTEA	SMR-MLS	SLR-MLS	AHC-MLS	ESC-MLS	SDC-MLS	LPC-MLS	TC-MLS	SDR-MLS	CC-SD8(1)	SR-MLS	TJR-MLS
Baseline Long Term Effectiveness Assessment Priorities												
Bacteria	BLTEA											
Gross Pollutants	BLTEA											
Heavy Metals	BLTEA											
Nutrients	BLTEA											
Pesticides	BLTEA											
Sediment	BLTEA											
Total Dissolved Solids	BLTEA											
Toxicity	BLTEA											
Turbidity	BLTEA											
2010 Long Term Effectiveness Assessment Wet Weather Priorities												
Bacteria	LTEA-WET											
Gross Pollutants	LTEA-WET											
Heavy Metals	LTEA-WET											
Nutrients	LTEA-WET											
Pesticides	LTEA-WET											
Sediment	LTEA-WET											
Total Dissolved Solids	LTEA-WET											
Toxicity	LTEA-WET											
Turbidity	LTEA-WET											
2010 Long Term Effectiveness Assessment Dry Weather Priorities												
Bacteria	LTEA-DRY											
Gross Pollutants	LTEA-DRY											
Heavy Metals	LTEA-DRY											
Nutrients	LTEA-DRY											
Pesticides	LTEA-DRY											
Sediment	LTEA-DRY											
Total Dissolved Solids	LTEA-DRY											
Toxicity	LTEA-DRY											
Turbidity	LTEA-DRY											

BLTEA Priorities were based on Section 303(d) listing and combined wet and dry weather data
 Orange highlights indicate high priorities (>50% exceedance of WQOs/WQBs), and yellow highlights indicate medium priorities (>25-50% exceedance of WQOs/WQBs)

Sub-Question #2a. How have the TWAS contributed to the understanding of the spatial extent and magnitude of receiving water problems?

and

Sub-Question #2b. How do the monitoring results of the upstream TWAS compare to the downstream MLS?

Priority constituents were also examined within watersheds to determine whether or not Priorities remained consistent throughout a watershed, and to help determine whether or not the TWAS have contributed to the understanding of the spatial extent and magnitude of receiving water quality problems. Three watersheds were examined in detail, and are presented in Table 3. The results demonstrate that Priorities remained consistent within the same watershed. Some differences in upstream and downstream relationships may be due to differences in the Basin Plan objectives in a specific hydrologic subarea (e.g. the TDS results for San Diego River stations).

Table 3. Agua Hedionda Creek, Escondido Creek, and San Diego River Mass Loading Station and Temporary Watershed Assessment Station Wet Weather Priority Constituent Comparison

Station	HSA	No. Samples	Assessment Scores - NPDES Monitoring - Wet Weather					
			Chemistry	Toxicity	IBI	Bacteriological	Nutrients	TDS
Agua Hedionda Hydrologic Area								
AHC-MLS	Los Monos (904.31)	9	TSS, Turbidity, Bifenthrin	<i>Hyalella azteca</i> acute	Very Poor	Fecal Coliforms		TDS
AHC-TWAS-1	Los Monos (904.31)	2	TSS, Turbidity, Chlorpyrifos, Bifenthrin	<i>Hyalella azteca</i> acute	Very Poor	Fecal Coliforms		TDS
Escondido Creek Hydrologic Area								
ESC-MLS	San Elijo (904.61)	9	Turbidity, Bifenthrin, TSS		NA	Fecal Coliforms		TDS
ESC-TWAS-1	Escondido (904.62)	2	Turbidity, Bifenthrin, TSS, Diazinon		Very Poor	Fecal Coliforms		TDS
San Diego River Hydrologic Area								
SDR-MLS	Mission San Diego (907.11)	9	Turbidity Bifenthrin		Very Poor	Fecal Coliforms		
SDR-TWAS-1	Mission San Diego (907.11)	2	Turbidity/Bifenthrin Surfactants (MBAS)	<i>Ceriodaphnia dubia</i> reproduction	Very Poor	Fecal Coliforms		TDS
SDR-TWAS-2	Santee (907.12)	2	TSS/Turbidity Bifenthrin/Permethrin pH/BOD	<i>Hyalella azteca</i> acute survival	Very Poor	Fecal Coliforms		

Attachment 2-1: Receiving Water Monitoring Program Review

Station	HSA	No. Samples	Assessment Scores - NPDES Monitoring - Wet Weather					
			Chemistry	Toxicity	IBI	Bacteriological	Nutrients	TDS
SDR-TWAS-3	Santee (907.12)	2	Turbidity Bifenthrin		Very Poor	Fecal Coliforms		

-Orange highlights indicate high priorities (>50% exceedance of WQOs/WQBs), yellow highlights indicate medium priorities (>25-50% exceedance of WQOs/WQBs), blue indicates low priorities (≤25% exceedance of WQOs/WQBs). Only group scores of blue (low priority) are presented in the table.

-NA, not applicable no data collected

Sub-Question #2c. Can wet weather priority constituents be correlated to land uses in the watersheds?

A cluster evaluation was conducted to evaluate whether or not watersheds with similar land use also exhibited similar Priority constituent concentrations during wet conditions. The TWAS data were included to evaluate whether or not Priority constituent similarities between MLS and TWAS were found within watersheds.

Land use proportions upstream of each receiving water catchment (MLS or TWAS) were calculated using Geographic Information System (GIS), and compared using cluster analysis. The results of the analysis are presented in Figure 1. A map of the cluster results is presented in Figure 2. Several distinct land use group patterns were found, three of which are discussed here. Cluster “A” is defined by watersheds that contain relatively large proportions of industrial and agricultural land uses, and includes Agua Hedionda Creek (AHC-MLS and AHC-TWAS-1), San Dieguito Creek (SDC-MLS), Loma Alta Creek (LAC-TWAS-1), and Otay River (OR-TWAS-1). Cluster “C1” is defined by the highly urbanized watersheds, and includes relatively high proportions of public facilities, residential, transportation, and commercial land uses. This group includes Buena Vista Creek (BVC-TWAS-1), Sweetwater River (SR-MLS), Chollas Creek (CC-SD8(1)-MLS and CC-NF54-MLS), and portions of San Dieguito (SDC-TWAS-1). Finally, the most rural watersheds are characterized by Clusters “D1, D2, and E”, which include relatively large proportions of vacant and undeveloped land, agriculture, and spaced rural residential land uses. Watersheds included in the cluster are portions of San Dieguito (SDC-TWAS-2), San Luis Rey (SLR-MLS and SLR-TWAS-1), Sweetwater River (SR-TWAS-1), Tijuana River (TJR-MLS, TJR-TWAS-1, TJR-TWAS-2), and Santa Margarita River (SMR-MLS and SMR-MLS2).

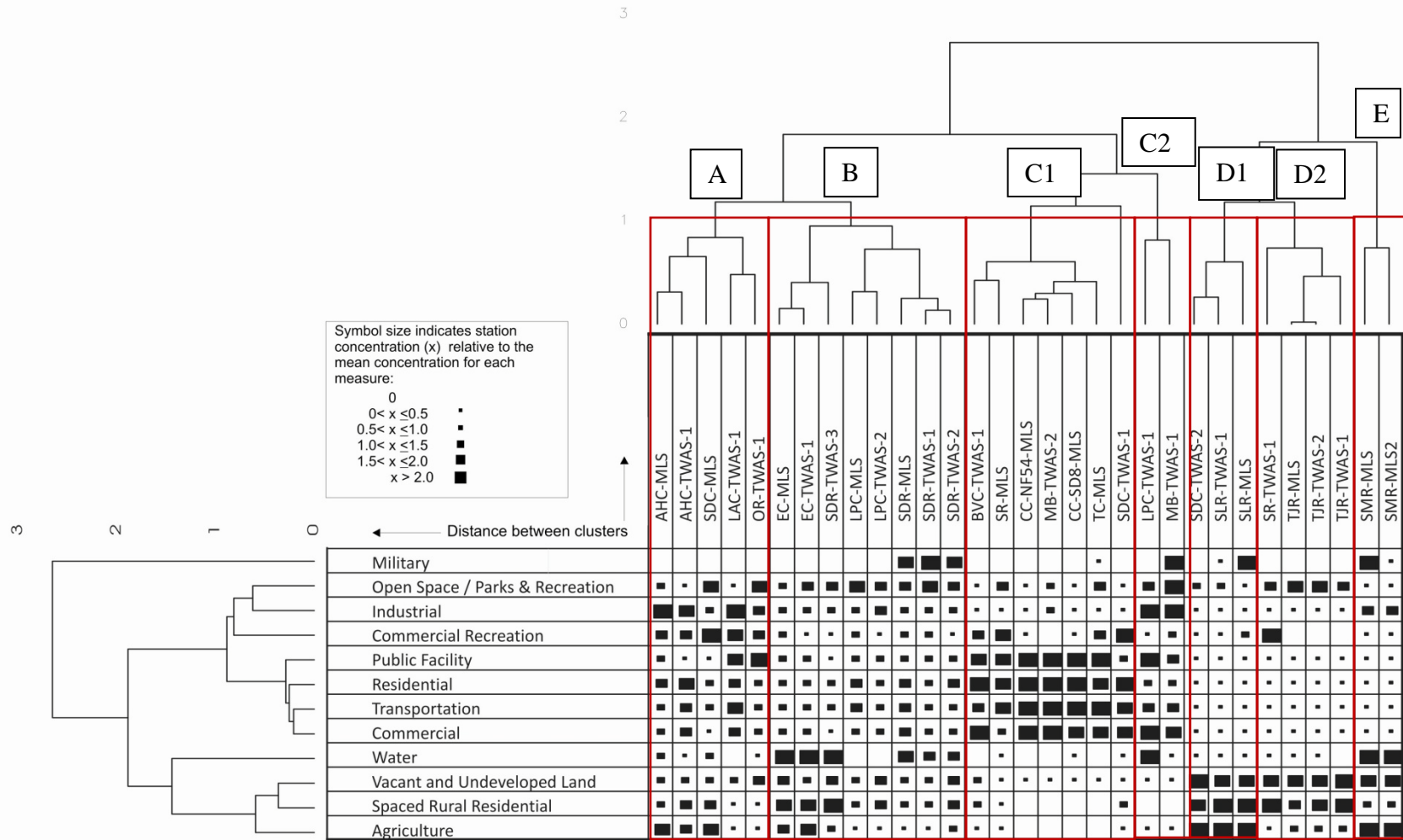


Figure 1. Land Use Cluster Analysis of the Mass Loading Station and Temporary Watershed Assessment Stations

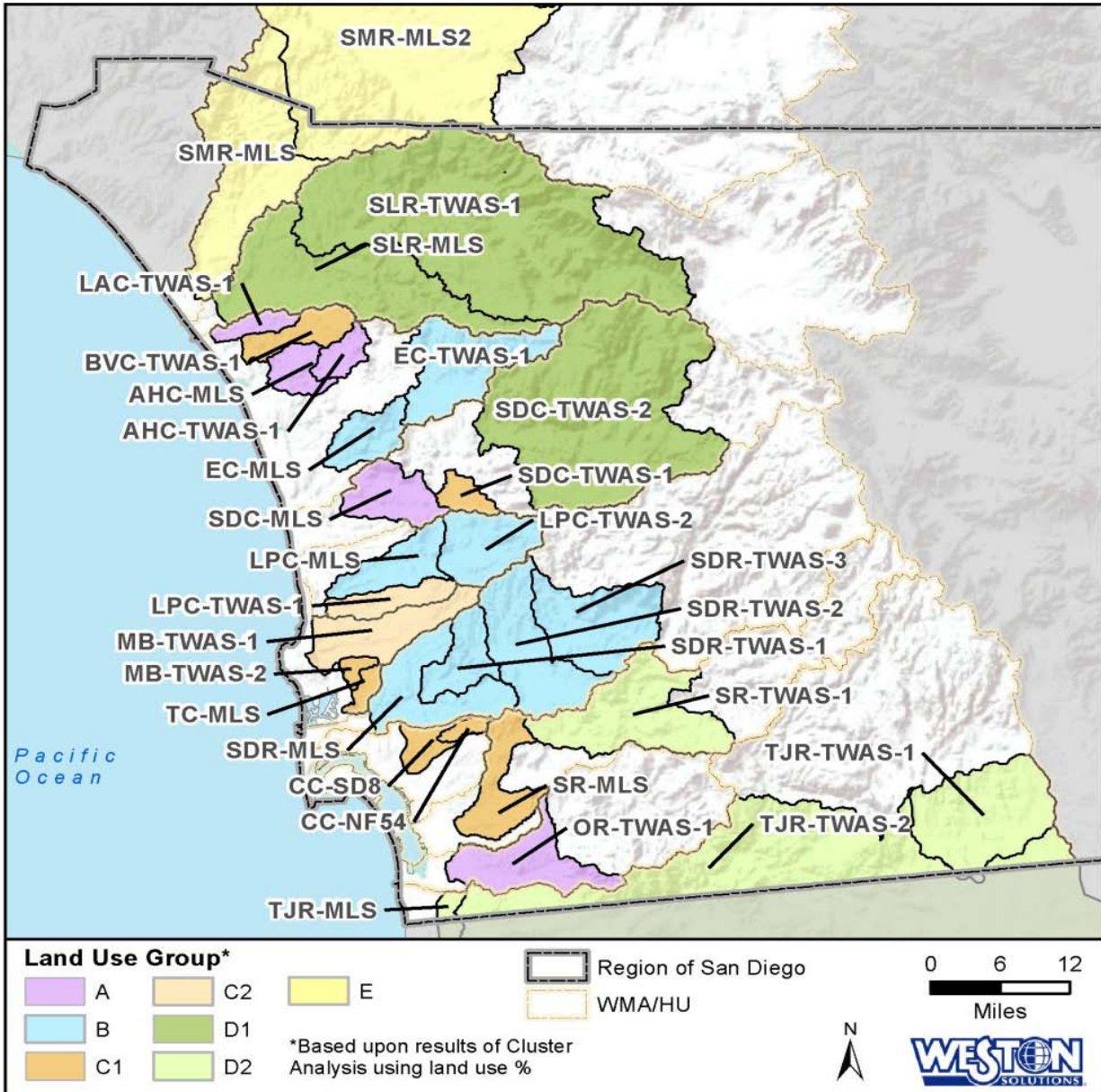


Figure 2. Land Use Cluster Analysis Results

The patterns of constituent concentrations at each MLS and TWAS were also evaluated using cluster analysis. The five-year LTEA dataset was used, and included wet weather data only, as receiving water constituent concentrations are expected to be more related to wash-off during wet events than during ambient conditions.

Results of the analysis are presented in Figure 3. In general, MLS and TWAS samples clustered together over time and a distinct sewage pattern was observed for Tijuana River (TJR-MLS and TJR-TWAS-2, highlighted blue) along with higher toxicity (highlighted orange). Chollas Creek (CC-SD8(1)-MLS) samples exhibited relatively higher concentrations of metals than other MLS and TWAS stations (highlighted purple). However, the groupings based on the water quality data do not directly correspond to the land use cluster analysis results. Therefore, based on constituent

Attachment 2-1: Receiving Water Monitoring Program Review

concentrations, there does not appear to be a strong correlation between land use and constituent concentrations (i.e., individual land uses do not relate directly to stormwater concentrations). The exceptions are Tijuana River and Chollas Creek, which have unique activities. Tijuana River is subject to sewage discharge and Chollas Creek has a high density of industrial facilities and transportation corridors. The SDC-TWAS-2 grouping with the Tijuana River (TJR-MLS) sites was due to the post-fire stormwater monitoring results which were highly impacted by the 2007 San Diego Wildfires.

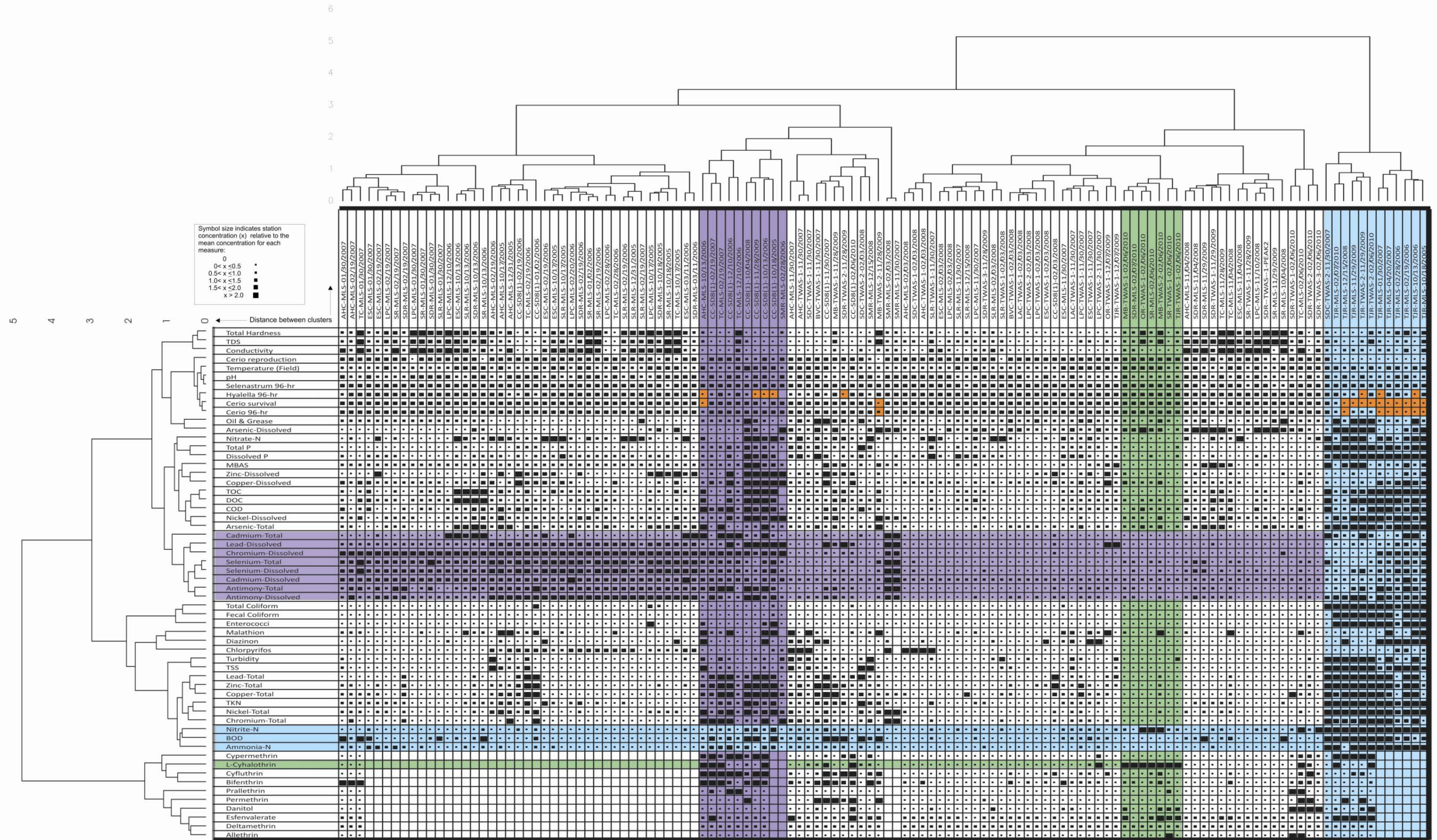


Figure 3. Cluster Analysis Results for Wet Weather Concentrations at Mass Loading Station and Temporary Watershed Assessment Stations during 2005-2010

Sub-Question #3: What frequency of sampling at the MLS is necessary to maintain the detection of long-term trends of receiving water quality?

A statistical analysis was conducted to determine whether or not a reduction in sample frequency from two wet weather events every other year to three wet weather events every five years at the MLS would decrease the Copermittees' ability to detect long-term receiving water trends. In particular, the question of whether a change in sampling frequency would affect Copermittees' ability to detect when the constituent concentrations fall below the WQB (or, for increasing trends, above the WQB) was evaluated.

The statistical analysis utilized the data from the existing program, between 8 and 18 years of data and 113 constituents at 10 MLS. The MLS and constituent combinations included all high priority constituents at each MLS, as well as constituents with greater than 50-percent detection frequency (more than half of the results were greater than the reporting limit). In addition, each MLS and constituent combination was tested for normality and log-normality (results in Attachment 1a). Only constituents that were found to be normal or log-normally distributed were included in the final statistical analysis dataset, because of the statistical method requirements. The final statistical analysis dataset included 66 analytes at 10 MLS. A full explanation of statistical tools utilized to assess the recommended monitoring program compared with the existing program is presented in Attachment 1a.

The existing data were used to evaluate trends (increasing, decreasing, or no trend), and the slope of the line was utilized to project future sampling results. Of the constituents included in the analysis, 2 were found to be significantly decreasing, 11 were found to be significantly increasing, and 53 did not exhibit a significant trend.

The statistical analysis included two scenarios, 1) the current program of two samples every other year and, 2) three samples every five years. The scenarios were compared to determine whether or not a reduction in monitoring frequency will increase the number of years it will take before the measured constituent of concern is observed below the WQO or WQB. Constituents that exhibited significant or non-significant decreasing or increasing trends were included in the analysis.

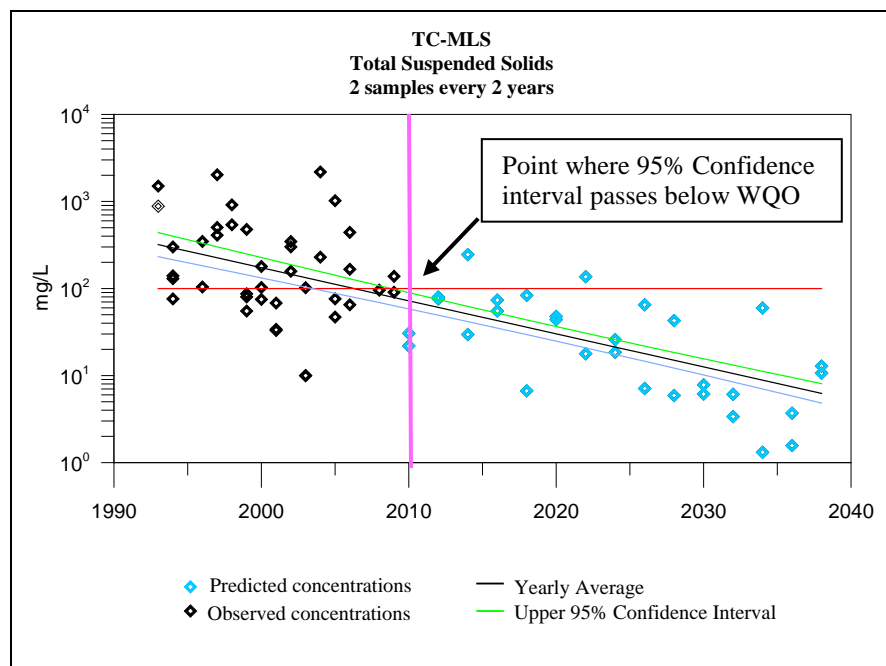
Comparison of the two scenarios found that, given the continuation of the existing trend line, decreasing the sampling frequency from two storm events every two years (n=5 per permit cycle) to three storm events every five years will not increase the amount of time necessary to detect when a decreasing or increasing trend crosses the WQO with 95-percent confidence. For MLS and constituent combinations that currently exhibit a significant increasing or decreasing trend, decreasing the sampling frequency will not decrease the ability to detect trends. For constituent and MLS combinations that do not exhibit significant trends, there is no difference between the two scenarios to detect when annual average concentrations first fall below or above the WQB or WQO with 95-percent confidence.

TSS was selected to illustrate the simulation results because it is often correlated to other constituents during storm events, including total phosphorus, bacteria, and total metals. Regionally, bacteria and TSS are Priority constituents during wet weather events. Therefore, evaluation to detect when these Priorities fall below WQOs is highlighted in the analysis. Results of the correlation analysis used to justify examination of TSS as a surrogate for other

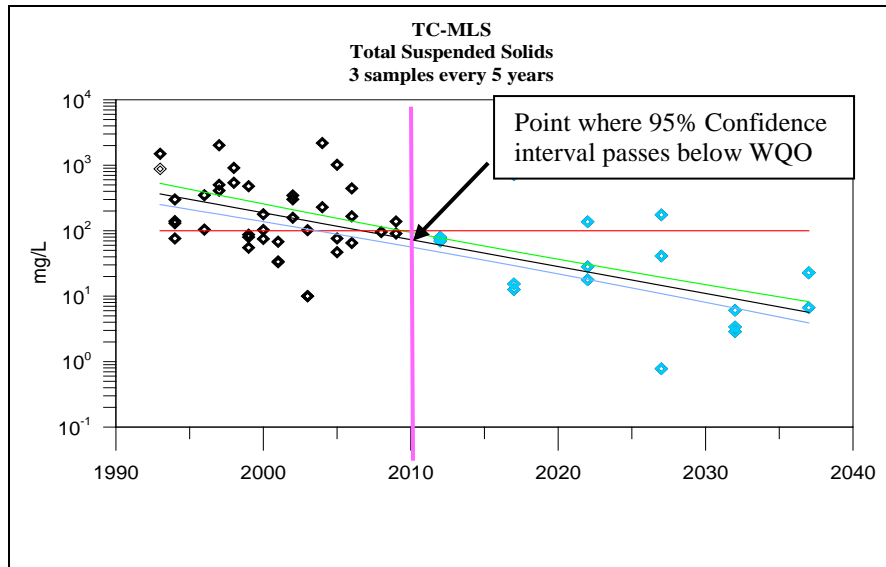
constituents is included in Attachment 1b. Statistically significant correlations are highlighted yellow in the table (alpha=0.10).

Significantly Decreasing Trends

Only two of the 66 constituent and MLS combinations included in the statistical analysis exhibited statistical decreasing trends. These included total suspended solids (TSS) at Tecolote Creek Mass Loading Station (TC-MLS) and TDS at SLR-MLS. Figure 4 below illustrates the statistical assessment results for TC-MLS. The upper and lower 95-percent confidence interval is shown as a green and light blue line, respectively. Currently, there is a significantly decreasing trend for TSS at this MLS. Observed data are shown as black diamonds, and simulated data are shown as light blue diamonds. The existing program of two wet weather events every other year is compared to three events every five years at TC-MLS. Given the steep decreasing trend at TC-MLS (Figure 4), changes to the frequency of monitoring will not increase the amount of time required to detect when the 95-percent confidence interval falls below the wet weather water quality benchmark of 100 mg/L for TSS (shown in red on the graphs). As shown in Figure 4, the anticipated date to detect TSS concentrations below the WQO is during 2010 for both scenarios (shown as a vertical fuchsia line).



**Figure 4.
Analysis**



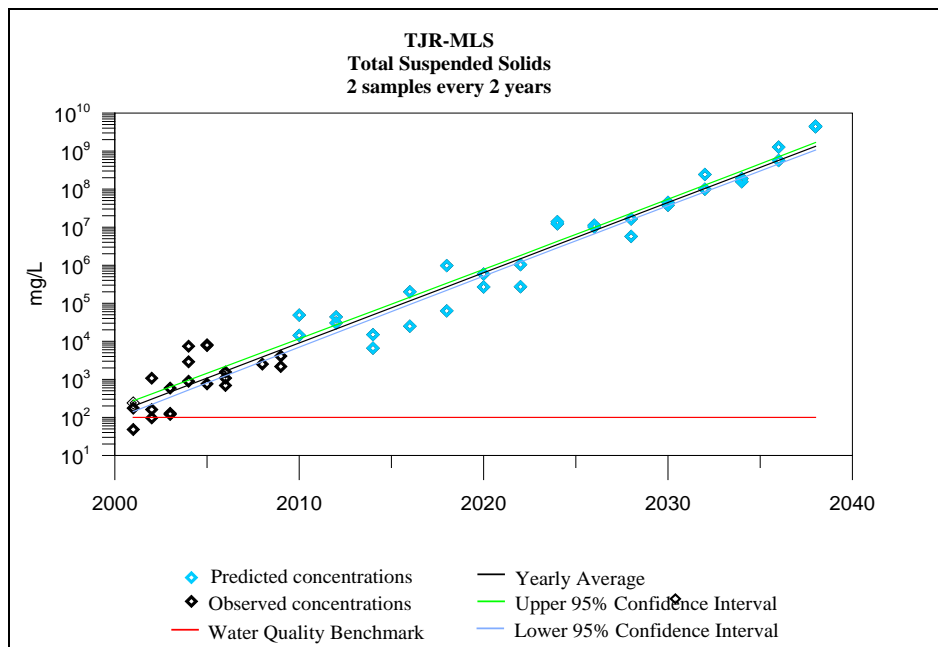
**Statistical
Results**

Comparison for Mass Loading Station with Significantly Decreasing Trend, Tecolote Creek Simulated Total Suspended Solids concentrations with Trend Line and 95-percent confidence interval bound

Significantly Increasing Trends

Eleven of the 66 constituent and MLS combinations included in the statistical analysis were found to be statistically increasing over time. Of these 11, four were turbidity, three were Total coliform, two were Fecal coliform, one was for TSS, and one was for total phosphorus.

The increasing trend shown in Figure 5 of TSS at Tijuana River MLS (TJR-MLS) (shown as the black line) illustrates the finding that if a significant increasing trend is observed, a reduction in sampling frequency will not affect the Copermitttees’ ability to detect it. Additional examples are provided in Attachment 1c that supports this conclusion.



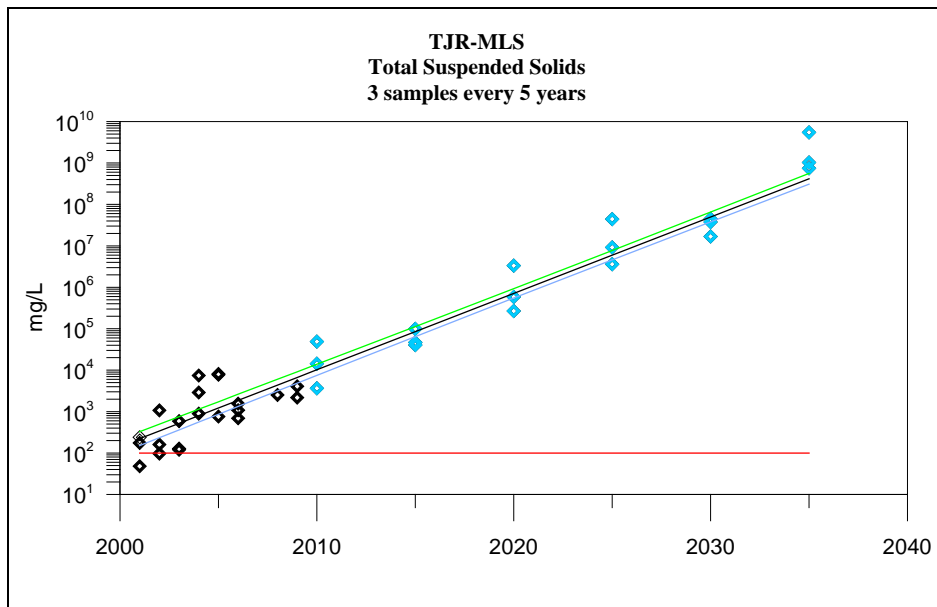


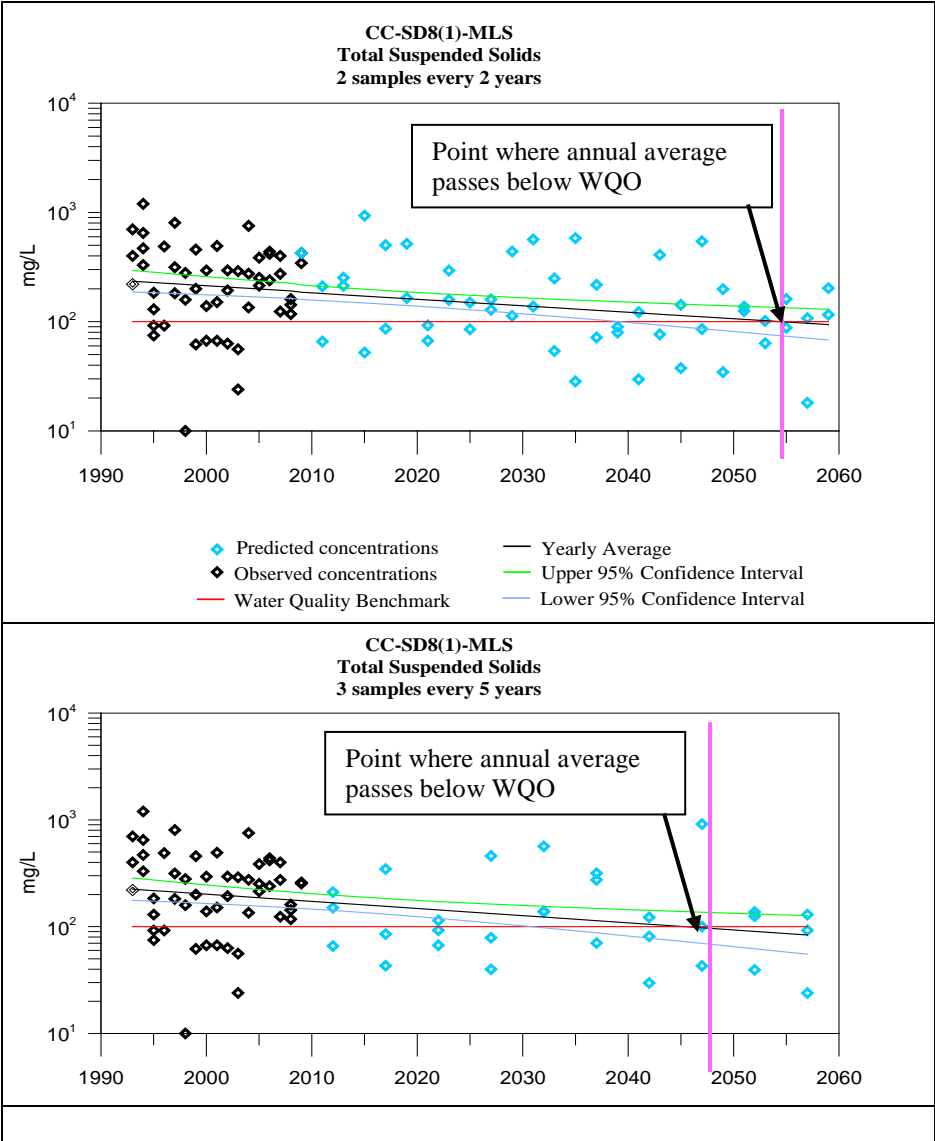
Figure 5. Statistical Analysis Results Comparison for Mass Loading Station with Significantly Increasing Trend, Tijuana River Simulated Total Suspended Solids concentrations with Trend Line and 95-percent confidence interval bound

No Significant Trends

Constituent and MLS combinations for which no significant increasing or decreasing trend has been observed present the worst case scenario for sample frequency reduction (53 of the 66 constituent and MLS pairs analyzed). The two scenarios are compared for TSS at Chollas Creek Mass Loading Station (CC-SD8(1)-MLS) and TSS at San Dieguito River (SDC-MLS) in Figure 6. The trend is generally decreasing at CC-SD8(1) and generally increasing at SDC-MLS.

In the CC-SD8(1) example, because a significant trend is not currently observed, the existing trend line will take a considerable amount of time before the upper 95-percent confident interval passes the WQB. As noted in Figure 6, although the average result is expected to cross the WQB in 2054 at the two year sampling frequency, and 2047 for the five year frequency, the 95-percent confidence interval is not predicted to fall below the WQB before the next 50 years. This finding is based on the variability of the data. Because the data are highly variable, sampling every two years actually makes it more difficult to predict when the average annual TSS concentrations will fall below the WQB. Therefore, decreasing the sample frequency from every other year to every five years will not decrease the Copermittees’ ability to detect a decreasing trend. If the existing slope of the line changes to decrease faster, this scenario would result in less time to detect a trend in either instance.

At SDC-MLS a generally increasing TSS trend is observed. This example is included here to illustrate that although the current TSS levels are below the WQB, it is possible to predict when TSS concentrations will meet or exceed the WQB using either the current monitoring program or the reduced sampling frequency to every five years. In this instance, the average annual TSS concentrations are not expected to exceed the WQB within the next 50 years. The lower 95-percent confidence interval does not pass the WQB in this example.



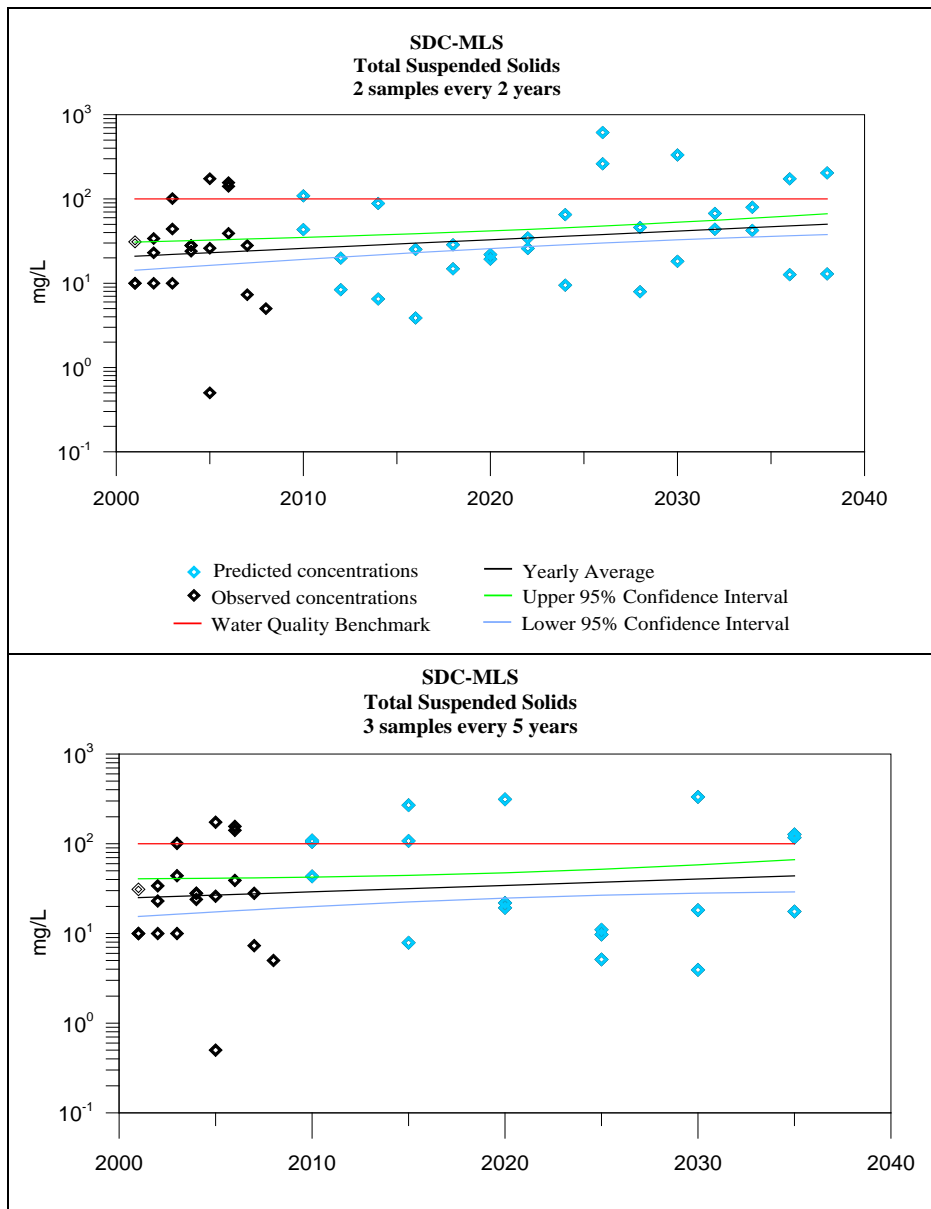


Figure 6. Tecolote Creek and Chollas Creek Simulated Total Suspended Solids concentrations with Trend Line and 95-percent confidence interval bound

MLS	Contituent	n	Normality Result	2009 and 2010 Trend Results
AHC-MLS	Bifenthrin by NCI	6	Normal	No Significant Trend
AHC-MLS	Dissolved Organic Carbon	9	Normal	No Significant Trend
AHC-MLS	Fecal Coliforms	31	Unknown	Significant Increasing Trend
AHC-MLS	Malathion	9	Log-Normal	No Significant Trend
AHC-MLS	MBAS	9	Unknown	No Significant Trend
AHC-MLS	Selenium,Total	9	Unknown	No Significant Trend
AHC-MLS	Total Coliforms	9	Normal	Significant Increasing Trend
AHC-MLS	Total Dissolved Solids	29	Unknown	No Significant Trend
AHC-MLS	Total Phosphorus-Low Range	9	Log-Normal	No Significant Trend
AHC-MLS	Total Suspended Solids	29	Unknown	Significant Increasing Trend
AHC-MLS	Turbidity	29	Log-Normal	Significant Increasing Trend
CC-SD8(1)	Bifenthrin by NCI	12	Log-Normal	No Significant Trend
CC-SD8(1)	Biochemical Oxygen Demand	48	Unknown	No Significant Trend
CC-SD8(1)	COD	47	Unknown	No Significant Trend
CC-SD8(1)	Copper,Dissolved	42	Log-Normal	No Significant Trend
CC-SD8(1)	Dissolved Organic Carbon	14	Log-Normal	No Significant Trend
CC-SD8(1)	Fecal Coliforms	50	Unknown	No Significant Trend
CC-SD8(1)	Lead,Dissolved	42	Unknown	No Significant Trend
CC-SD8(1)	Malathion	15	Unknown	No Significant Trend
CC-SD8(1)	MBAS	47	Unknown	Significant Decreasing Trend
CC-SD8(1)	Permethrin by NCI	12	Unknown	No Significant Trend
CC-SD8(1)	Selenium,Total	11	Unknown	No Significant Trend
CC-SD8(1)	Total Coliforms	15	Log-Normal	Significant Increasing Trend
CC-SD8(1)	Total Phosphorus-Low Range	11	Normal	No Significant Trend
CC-SD8(1)	Total Suspended Solids	51	Log-Normal	No Significant Trend
CC-SD8(1)	Turbidity	48	Log-Normal	Significant Increasing Trend
CC-SD8(1)	Zinc,Dissolved	42	Unknown	No Significant Trend
ESC-MLS	Bifenthrin by NCI	3	Normal	No Significant Trend
ESC-MLS	Dissolved Organic Carbon	9	Log-Normal	No Significant Trend
ESC-MLS	Fecal Coliforms	21	Log-Normal	No Significant Trend
ESC-MLS	Malathion	9	Unknown	No Significant Trend
ESC-MLS	MBAS	9	Unknown	No Significant Trend
ESC-MLS	Selenium,Total	9	Unknown	No Significant Trend
ESC-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
ESC-MLS	Total Dissolved Solids	21	Normal	No Significant Trend
ESC-MLS	Total Phosphorus-Low Range	9	Normal	No Significant Trend
ESC-MLS	Total Suspended Solids	21	Log-Normal	No Significant Trend
ESC-MLS	Turbidity	21	Log-Normal	No Significant Trend
LPC-MLS	Bifenthrin by NCI	3	Normal	No Significant Trend
LPC-MLS	Dissolved Organic Carbon	9	Normal	No Significant Trend
LPC-MLS	Fecal Coliforms	21	Unknown	Significant Increasing Trend
LPC-MLS	Malathion	9	Unknown	No Significant Trend
LPC-MLS	MBAS	9	Unknown	No Significant Trend
LPC-MLS	Selenium,Total	9	Unknown	No Significant Trend
LPC-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
LPC-MLS	Total Dissolved Solids	21	Unknown	No Significant Trend
LPC-MLS	Total Phosphorus-Low Range	9	Log-Normal	No Significant Trend
LPC-MLS	Turbidity	21	Log-Normal	No Significant Trend
SDC-MLS	Bifenthrin by NCI	3	Unknown	No Significant Trend
SDC-MLS	Dissolved Organic Carbon	9	Normal	No Significant Trend
SDC-MLS	Fecal Coliforms	21	Log-Normal	No Significant Trend
SDC-MLS	Malathion	9	Unknown	No Significant Trend
SDC-MLS	MBAS	9	Unknown	No Significant Trend

SDC-MLS	Selenium,Total	9	Log-Normal	No Significant Trend
SDC-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
SDC-MLS	Total Dissolved Solids	21	Normal	No Significant Trend
SDC-MLS	Total Phosphorus-Low Range	9	Normal	Significant Increasing Trend
SDC-MLS	Total Suspended Solids	21	Log-Normal	No Significant Trend
SDC-MLS	Turbidity	21	Log-Normal	No Significant Trend
SDR-MLS	Bifenthrin by NCI	3	Unknown	No Significant Trend
SDR-MLS	Dissolved Organic Carbon	9	Unknown	Significant Increasing Trend
SDR-MLS	Fecal Coliforms	21	Log-Normal	No Significant Trend
SDR-MLS	Malathion	9	Unknown	No Significant Trend
SDR-MLS	MBAS	9	Unknown	No Significant Trend
SDR-MLS	Selenium,Total	9	Unknown	No Significant Trend
SDR-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
SDR-MLS	Total Phosphorus-Low Range	9	Normal	No Significant Trend
SDR-MLS	Turbidity	21	Log-Normal	No Significant Trend
SLR-MLS	Bifenthrin by NCI	3	Normal	No Significant Trend
SLR-MLS	Dissolved Organic Carbon	9	Log-Normal	No Significant Trend
SLR-MLS	Fecal Coliforms	21	Log-Normal	Significant Increasing Trend
SLR-MLS	Malathion	9	Log-Normal	No Significant Trend
SLR-MLS	MBAS	9	Unknown	No Significant Trend
SLR-MLS	Selenium,Total	9	Unknown	No Significant Trend
SLR-MLS	Total Coliforms	9	Log-Normal	Significant Increasing Trend
SLR-MLS	Total Dissolved Solids	21	Normal	Significant Decreasing Trend
SLR-MLS	Total Phosphorus-Low Range	9	Normal	No Significant Trend
SLR-MLS	Turbidity	21	Log-Normal	Significant Increasing Trend
SR-MLS	Bifenthrin by NCI	3	Unknown	No Significant Trend
SR-MLS	Dissolved Organic Carbon	9	Unknown	No Significant Trend
SR-MLS	Fecal Coliforms	21	Log-Normal	No Significant Trend
SR-MLS	Malathion	9	Unknown	No Significant Trend
SR-MLS	MBAS	9	Unknown	No Significant Trend
SR-MLS	Selenium,Total	9	Unknown	No Significant Trend
SR-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
SR-MLS	Total Dissolved Solids	21	Normal	No Significant Trend
SR-MLS	Total Phosphorus-Low Range	9	Normal	No Significant Trend
SR-MLS	Turbidity	21	Log-Normal	No Significant Trend
TC-MLS	Bifenthrin by NCI	6	Normal	No Significant Trend
TC-MLS	Dissolved Organic Carbon	9	Normal	No Significant Trend
TC-MLS	Fecal Coliforms	41	Unknown	No Significant Trend
TC-MLS	Malathion	9	Unknown	No Significant Trend
TC-MLS	MBAS	9	Unknown	No Significant Trend
TC-MLS	Selenium,Total	9	Normal	No Significant Trend
TC-MLS	Total Coliforms	9	Log-Normal	No Significant Trend
TC-MLS	Total Dissolved Solids	41	Unknown	No Significant Trend
TC-MLS	Total Phosphorus-Low Range	9	Normal	No Significant Trend
TC-MLS	Total Suspended Solids	40	Log-Normal	Significant Decreasing Trend
TC-MLS	Turbidity	40	Log-Normal	No Significant Trend
TJR-MLS	Bifenthrin by NCI	3	Normal	No Significant Trend
TJR-MLS	Biochemical Oxygen Demand	21	Unknown	No Significant Trend
TJR-MLS	COD	21	Log-Normal	No Significant Trend
TJR-MLS	Diazinon	21	Unknown	Significant Decreasing Trend
TJR-MLS	Dissolved Organic Carbon	9	Normal	No Significant Trend
TJR-MLS	Fecal Coliforms	21	Log-Normal	Significant Increasing Trend
TJR-MLS	Malathion	15	Unknown	No Significant Trend
TJR-MLS	MBAS	21	Log-Normal	No Significant Trend
TJR-MLS	Selenium,Total	9	Unknown	No Significant Trend

TJR-MLS	Total Coliforms	9	Unknown	Significant Increasing Trend
TJR-MLS	Total Phosphorus-Low Range	21	Log-Normal	No Significant Trend
TJR-MLS	Total Suspended Solids	21	Log-Normal	Significant Increasing Trend
TJR-MLS	Turbidity	21	Log-Normal	Significant Increasing Trend

Client Sample ID	AHC-MLS		CC-SD8(1)		ESC-MLS		LPC-MLS		SDC-MLS		SDR-MLS		SLR-MLS		SR-MLS		TC-MLS		TJR-MLS	
N=number of samples	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS	N	TSS
Critical Value	31	0.236	50	0.184	21	0.292	21	0.292	21	0.292	21	0.292	21	0.292	21	0.292	41	0.309	21	0.292
	9	0.483	15	0.354	9	0.483	9	0.483	9	0.483	9	0.483	9	0.483	9	0.483	9	0.483	9	0.483
Fecal Coliforms	31	0.578	50	0.191	21	0.357	21	0.259	21	0.045	21	-0.667	21	0.468	21	0.606	41	-0.150	21	0.549
Enterococcus	9	0.469	15	-0.173	9	0.571	9	0.433	9	-0.402	9	-0.286	9	-0.009	9	0.000	9	0.477	9	-0.405
Total Coliforms	9	0.405	15	-0.008	9	0.261	9	0.102	9	-0.504	9	-0.595	9	0.525	9	0.300	9	0.185	9	0.137
Total Dissolved Phosphorus	9	0.803	11	0.191	9	0.418	9	0.567	9	-0.402	9	0.117	9	0.220	9	0.183	9	-0.126	9	-0.267
Total Phosphorus Low Range	9	0.778	11	0.145	9	0.879	9	0.433	9	0.226	9	0.450	9	0.407	9	-0.374	9	0.900	21	-0.227
Nitrate as N	9	0.567	14	-0.266	9	-0.150	9	0.460	9	-0.209	9	-0.300	9	0.220	9	-0.076	9	-0.025	9	-0.071
Nitrite as N	9	-0.277	14	-0.304	9	0.678	9	0.059	9	-0.406	9	-0.753	9	0.334	9	0.571	9	0.237	9	-0.323
Total Kjeldahl Nitrogen	9	0.254	14	-0.134	9	0.109	9	0.567	9	0.519	9	0.192	8	0.037	9	-0.070	9	0.650	9	-0.400
Antimony, Total	9	-0.274	11	0.110	9	0.420	9	0.726	9	-0.069	9	0.582	9	-0.053	9	0.609	9	-0.085	9	-0.109
Arsenic, Total	9	0.412	11	-0.055	9	0.252	9	0.429	9	-0.387	9	-0.267	9	0.838	9	-0.079	9	0.067	9	0.285
Cadmium, Total	9	0.366	11	0.258	9	0.034	9	0.257	9	0.707	9	0.502	9	0.279	9	0.286	9	0.722	9	0.752
Chromium, Total	9	-0.136	11	0.402	9	0.256	9	0.548	9	-0.183	9	-0.089	9	0.373	9	0.486	9	0.165	9	-0.393
Copper, Total	9	0.567	11	0.282	9	0.633	9	0.502	9	0.373	9	0.353	9	0.436	9	0.603	9	0.837	9	-0.100
Lead, Total	9	0.672	11	0.564	9	0.848	9	0.749	9	0.414	9	0.954	9	0.372	9	0.982	9	0.833	9	0.050
Nickel, Total	9	0.695	11	-0.036	9	0.470	9	-0.085	9	0.547	9	0.218	9	0.701	9	-0.288	9	0.603	9	0.133
Selenium, Total	9	0.279	11	0.019	9	0.139	9	0.000	9	0.341	9	0.366	9	-0.171	9	-0.383	9	-0.200	9	-0.248
Zinc, Total	9	0.883	15	0.178	9	0.617	9	-0.017	9	0.109	9	0.728	9	-0.019	9	0.579	9	0.817	9	0.183
Diazinon	9	0.638	15	0.422	9	0.096	9	0.112	9	-0.091	9	0.091	9	0.532	9	-0.715	9	-0.279	21	-0.720
Malathion	9	0.200	15	0.236	9	0.409	9	0.493	9	-0.075	9	0.018	9	0.231	9	-0.063	9	-0.042	15	-0.587

A longer record for fecal coliforms was included here, but in general five years of data were assessed (n=9) for all stations and analytes

Results highlighted yellow are statistically significant, alpha =0.1

Attachment 2-1c: Statistical Analysis Methods

Statistical Analysis Methods

The focus of the statistical analysis was to determine whether or not proposed changes to the receiving water monitoring frequency will impact the Copermittees' ability to answer management question #5:

Are conditions in receiving waters getting better or worse?

In particular, the frequency of monitoring to determine whether or not constituent concentrations are improving or worsening over time must be assessed before changes to the monitoring program can occur. This question was addressed by evaluating how changes to monitoring frequency will affect how many more years will be necessary to detect when constituent concentrations are improving (i.e., falling below the water quality objective (WQO) with 95-percent confidence) or worsening (i.e., rising above the WQO with 95-percent confidence).

The approach employed to evaluate the effects of reducing the receiving water monitoring frequency from two wet events every two years to three wet events every five years was based on a Monte Carlo simulation approach. This approach is often used to predict or simulate future outcomes based on existing knowledge.

The Monte Carlo simulations, referred to as statistical analysis in the text, utilized empirical data from the existing program to predict or model the future data sets and estimate when water quality objectives (WQOs) will be reached assuming the current trends continue. The same methodology was followed as that used during the 2005 ROWD report development, summarized below, whereby an exponential decay model was used to estimate the future average yearly concentrations (based on the current rate of change). Simulated samples were randomly drawn from a log-normal distribution centered on each future average annual concentration. The intra-year variability of the existing dataset was used when defining log-normal distributions from which to make the random draws. Three criteria were necessary to include constituents within the analysis, 1) constituent results must have been detected (above the reporting limit) in at least half of the samples at an individual mass loading station (MLS), and 2) constituents must exhibit normal or log-normal distributions at individual MLS, 3) constituents must be high priority constituents. The Shapiro-Wilk test for normality and visual inspection of the data were used to identify constituents that met the normality requirements of this analysis (Technical Memo, Attachment 1a).

A major consideration for redesigning a monitoring program is an evaluation of the impacts the changes may have on the analysis and interpretation of the results. The recommendation to change the frequency of monitoring from two wet events every other year to three events every five years necessitated a thorough examination of the potential impacts on how the sampling frequency will affect the ability to detect trends in the data. Both the effect on existing trends and non-significant trends were evaluated.

The statistical analysis utilized the data from the existing program, between 8 and 18 years of data and 113 constituents at 10 MLS. The MLS and constituent combinations included all high priority constituents at each MLS, as well as constituents with greater than 50-percent detection frequency (more than half of the results were greater than the reporting limit). In addition, each MLS and constituent combination was tested for normality and log-normality (results in Technical Memo, Attachment 1a). Only constituents that were found to be normal or log-normally distributed were included in the final statistical analysis dataset, because of the statistical method requirements. The final statistical analysis dataset included 66 analytes at 10 MLS (58-percent of the original constituents included in the evaluation).

The existing data were used to evaluate trends (increasing, decreasing, or no trend), and the slope of the line was utilized to project future sampling results. Of the constituents included in the analysis, 2 (3-percent) were found to be significantly decreasing, 11 (17-percent) were found to be significantly increasing, and 53 (80-percent) did not exhibit a significant trend.

The analysis uses either the \log_{10} transformed data or original results (based on the distribution of the data) regressed with year to determine the equation of the regression line drawn through the data. The regression equation was used to compute the predicted mean value in future years based on the standard deviation from the regression analysis. Data were generated for each future year that have a mean equal to the predicted mean and were randomly distributed within the bounds of the standard deviation. Using these simulated data with the existing data, the regression was rerun and the point in time when the upper 95% confidence bound crossed below the WQO was determined. Because this was just one random simulation that may have been anomalous, the process was repeated with 100 sets of randomly simulated data based on the original equation. The entire set of 100 regressions was then evaluated to determine when the upper confidence bound would be below the WQO 95 out of 100 times. This is the number of years of sampling that must occur to be extremely confident that the concentration meets the objective; whereas in determining compliance the actual results are compared to the relevant WQO. The process started with the addition of one more year of sampling and evaluated whether the confidence bound met the criteria, if not, sequential years were added until the upper bound was below the WQO for 95 of the 100 datasets.

This whole process was performed for sampling a) two wet events every year into the future, b) three wet events every five years. Examples of this analysis for constituents with significant and non-significant decreasing and increasing trends are discussed in this document.

Decreasing Trends

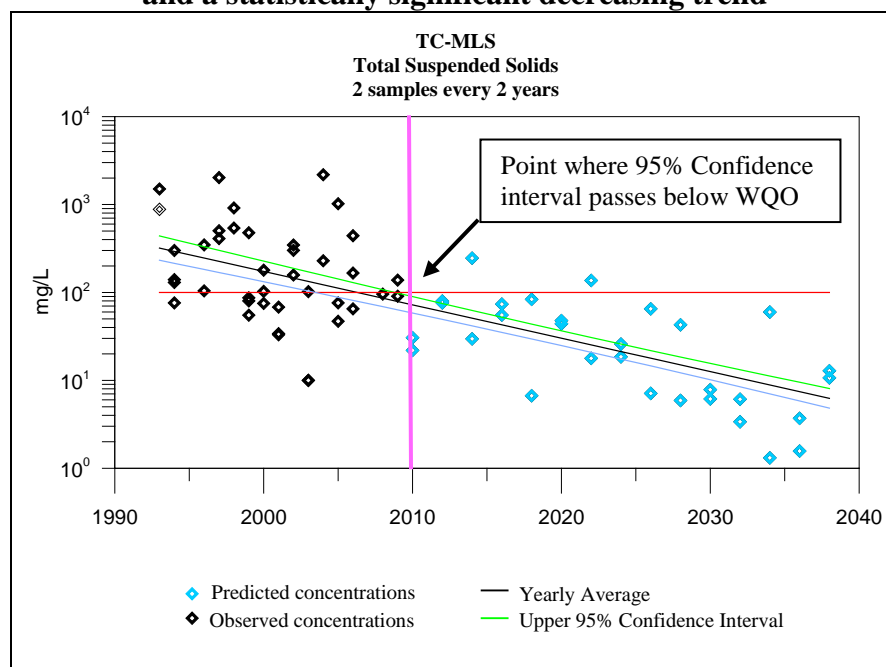
Two constituents with significant decreasing trends (TSS at TC-MLS and TDS at SLR-TDS), along with TSS at CC-SD8(1)-MLS were selected as examples because they have established WQOs that are below the current concentrations and provide cases with differing numbers of existing data points as well as a variety of slopes with decreasing concentrations through time.

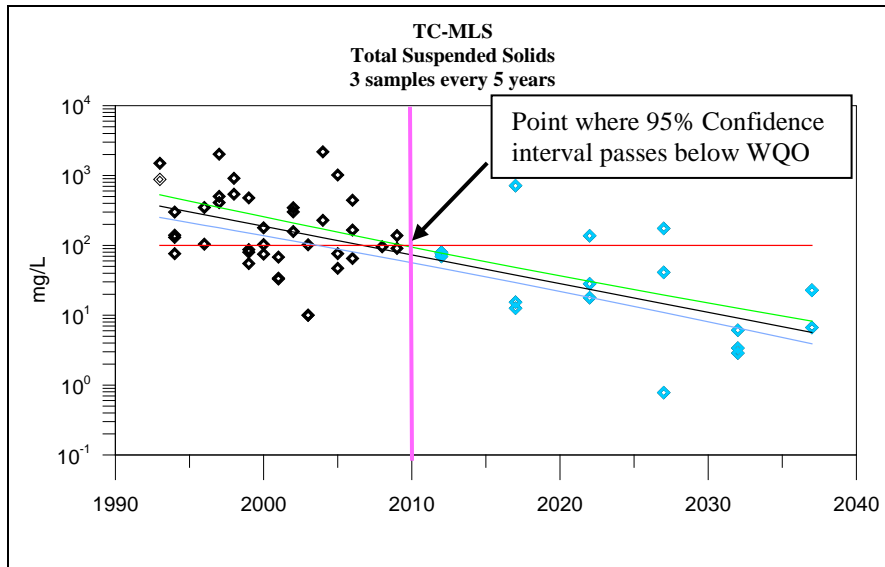
Example constituents include:

1. TSS data from TC-MLS with eight years of existing data and a statistically significant decreasing trend;
2. TDS data from SLR-MLS, with eight years of data and a statistically significant decreasing trend;
3. TSS data from CC-SD8(1)-MLS, with 18 years of existing data and a non-significant decreasing trend.

The plots shown below for each example constituent and frequency of sampling represent one of the randomly generated datasets for which the upper confidence bound crosses the WQO at the point where 95 of the 100 regression lines would be below this line. Vertical lines on the plots indicate the years in which the mean and upper bound cross below the WQO (horizontal line).

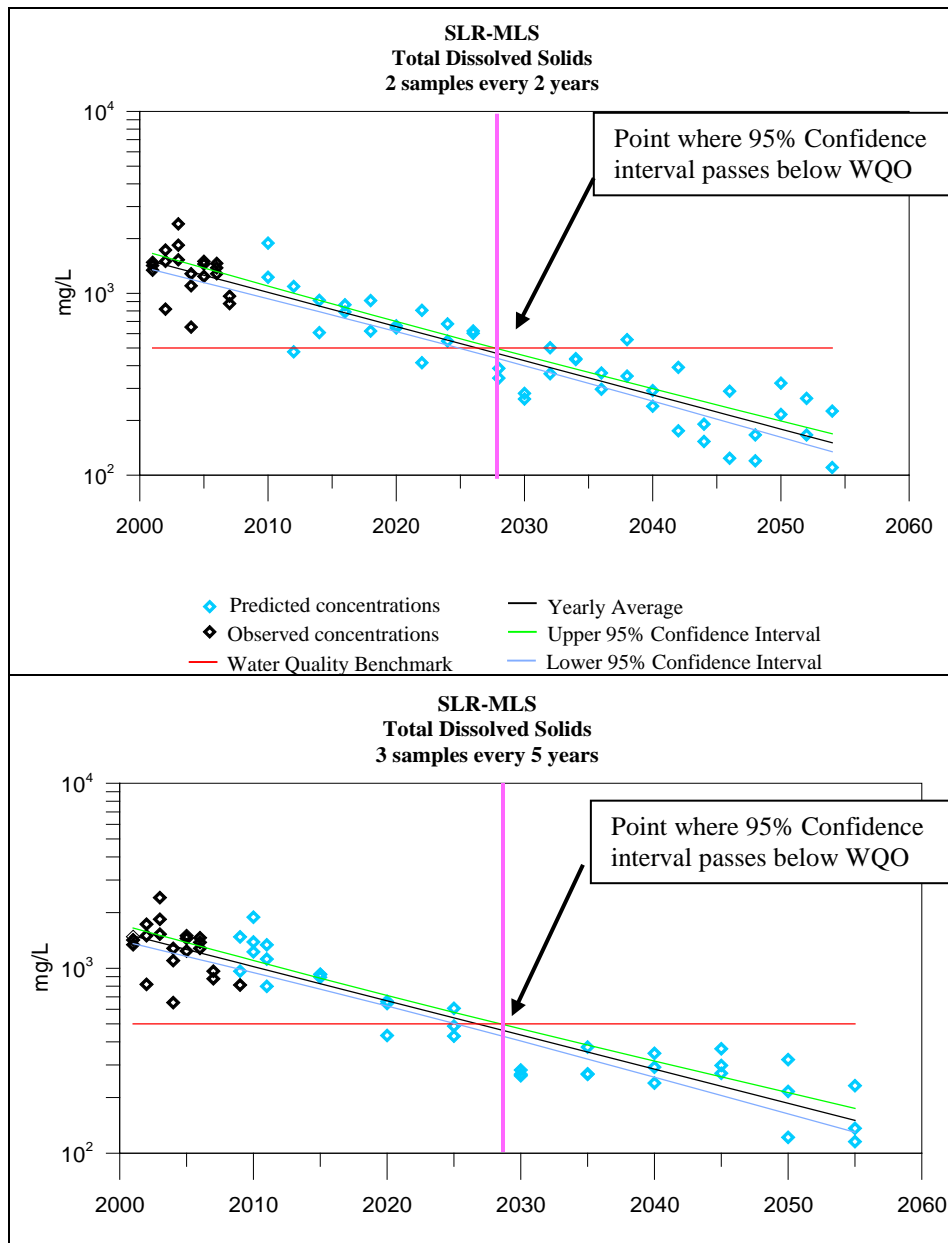
Example 1. Total Suspended Solids data from TC-MLS with eight years of existing data and a statistically significant decreasing trend





The WQO for TSS is 100 mg/L (shown by horizontal red line). As shown above in Example 1, if sampling during wet weather were to continue at two events every other year, the mean value for TSS would be below the WQO in 2007 and the upper confidence bound would drop below in 2010. The second plot in Example 1 shows the change if sampling was to occur every five years: the mean would also go below the WQO in 2007 and the upper confidence bound would still cross in 2010. In this example, reduction of sampling frequency results in no increase in the number of years necessary to observe when the TSS concentrations will fall below the WQB.

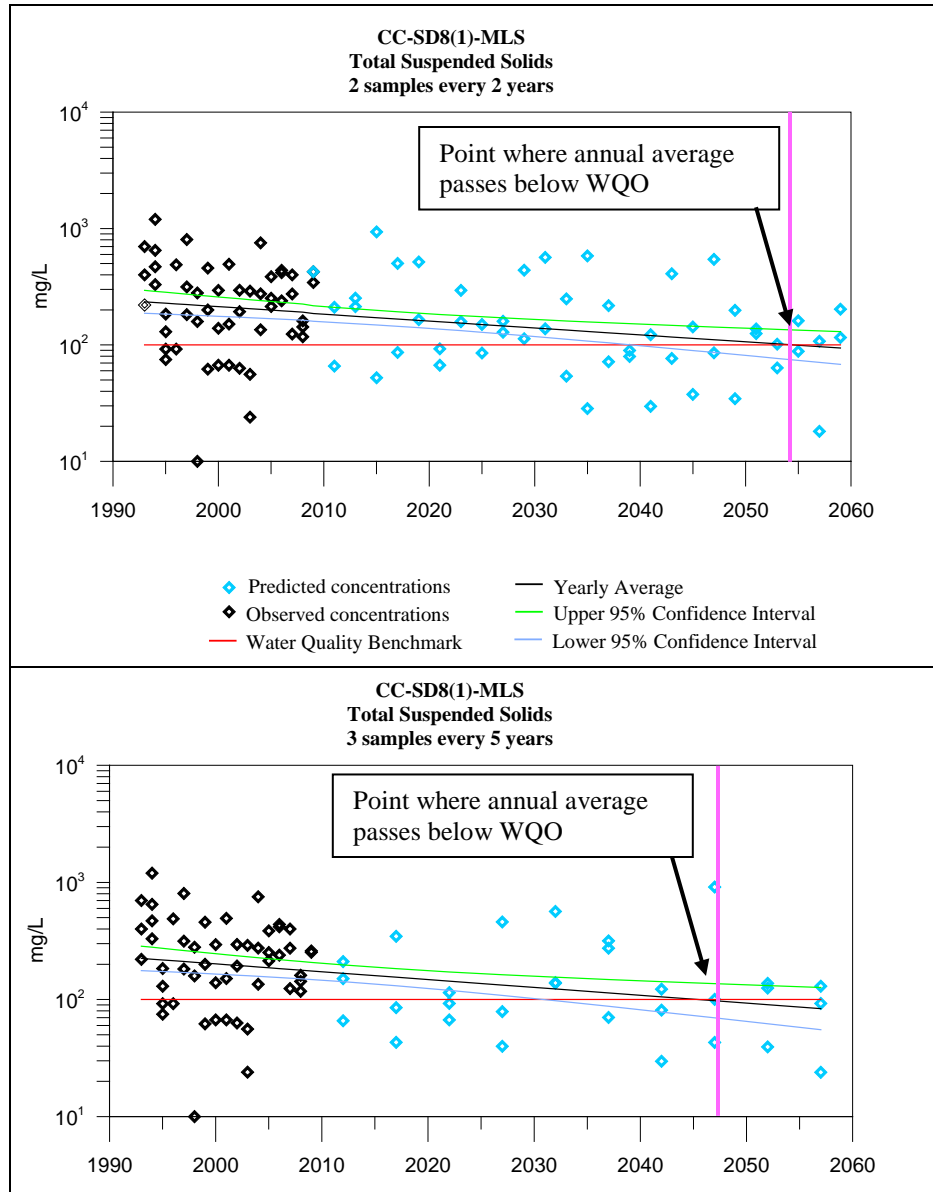
Example 2. Total Dissolved Solids data from SLR-MLS with eight years of existing data and a significant decreasing trend



The WQO for TDS varies dependent on the hydrologic unit, as stated in the San Diego Basin Plan. In San Luis Rey the WQO is 500 mg/L. The trend at SLR-MLS is significantly decreasing, but at a slower rate than TC-MLS. As shown above in Example 2, if sampling during wet weather were to continue at two events every other year, the mean value for TDS would be below the WQO in 2025 and the upper confidence bound would drop below in 2028. The second plot in Example 2 shows the change if sampling was to occur every five years: the mean would go below the WQO in 2026 and the upper confidence bound would cross in 2029. In this

example, reduction of sampling frequency results in an approximate one year increase in the number of years necessary to observe when the TDS concentrations will fall below the WQB.

Example 3. Total Suspended Solids data from CC-SD8(1)-MLS with 18 years of existing data and a non-significant decreasing trend



In the CC-SD8(1) example the WQB is 100 mg/L, and because a significant trend is not currently observed, the existing trend line will take a considerable amount of time before the upper 95-percent confident interval passes the WQB. As shown in Example 3, above, although the average result is expected to cross the WQB in 2054 at the two year sampling frequency, and 2047 for the five year frequency, the 95-percent confidence interval is not predicted to fall below the WQB before the next 50 years. This finding is based on the variability of the data. Because

the data are highly variable, sampling every two years actually makes it more difficult to predict when the average annual TSS concentrations will fall below the WQO. Therefore, decreasing the sample frequency from every other year to every five years will not decrease the Copermittes' ability to detect a decreasing trend. If the existing slope of the line changes to decrease faster, this scenario would result in less time to detect a trend in either instance.

Increasing Trends

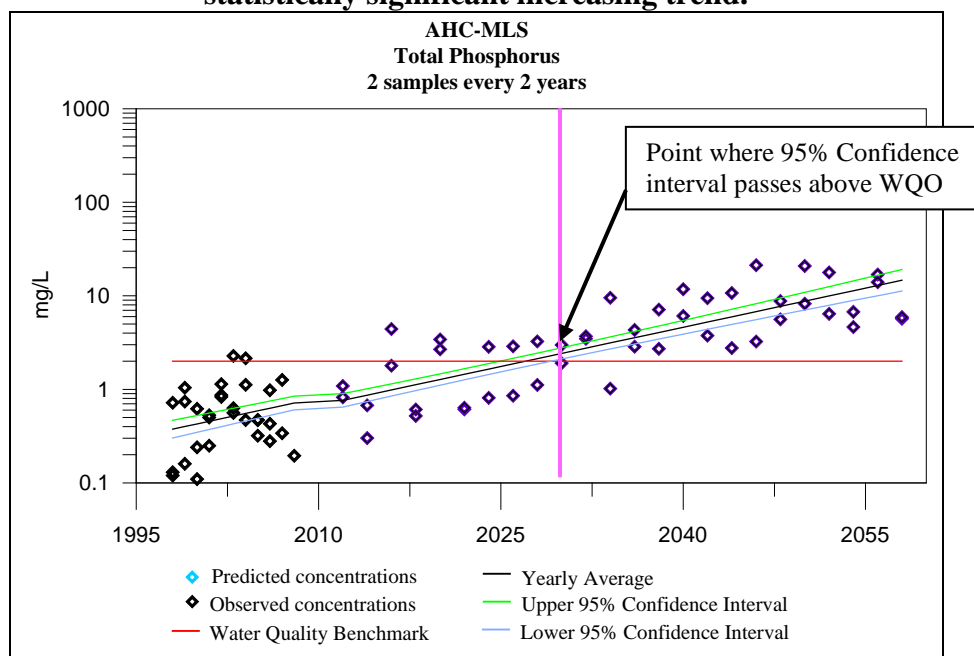
Two constituents with significant increasing trends and one constituent with a non-significant increasing trend were evaluated to determine whether or not a reduction in sampling frequency from two wet events every other year to three wet events every five years would increase the number of years necessary to determine when constituent concentrations will exceed WQOs. As above, both significant and non-significant trends were considered.

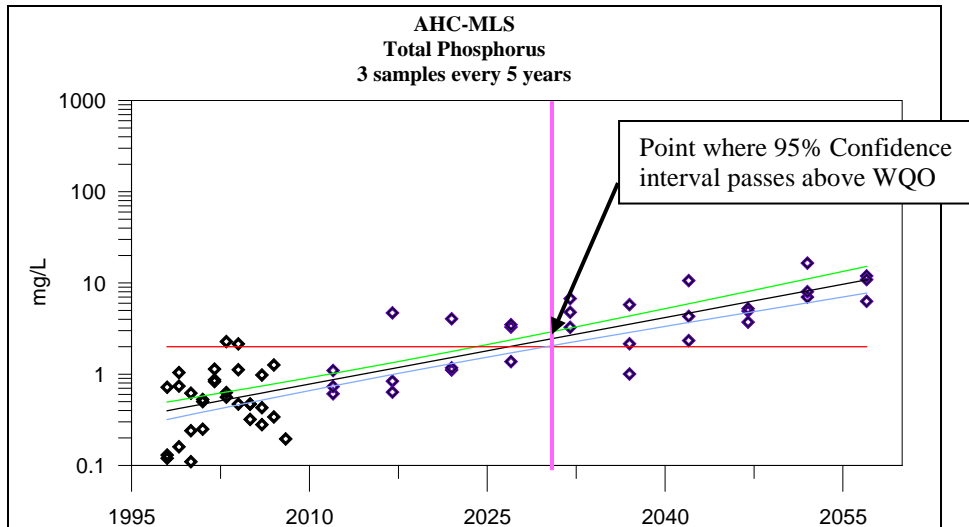
Example constituents include:

4. Total phosphorus data from AHC-MLS with 13 years of existing data and a statistically significant increasing trend;
5. TSS data from TJR-MLS, with eight years of data and a statistically significant increasing trend;
6. TSS data from SDC-MLS, with 8 years of existing data and a non-significant increasing trend.

The plots shown below for each example constituent and frequency of sampling represent one of the randomly generated datasets for which the lower confidence bound crosses the WQO at the point where 95 of the 100 regression lines would be above this line. Vertical lines on the plots indicate the years in which the mean and upper bound cross above the WQO (horizontal line).

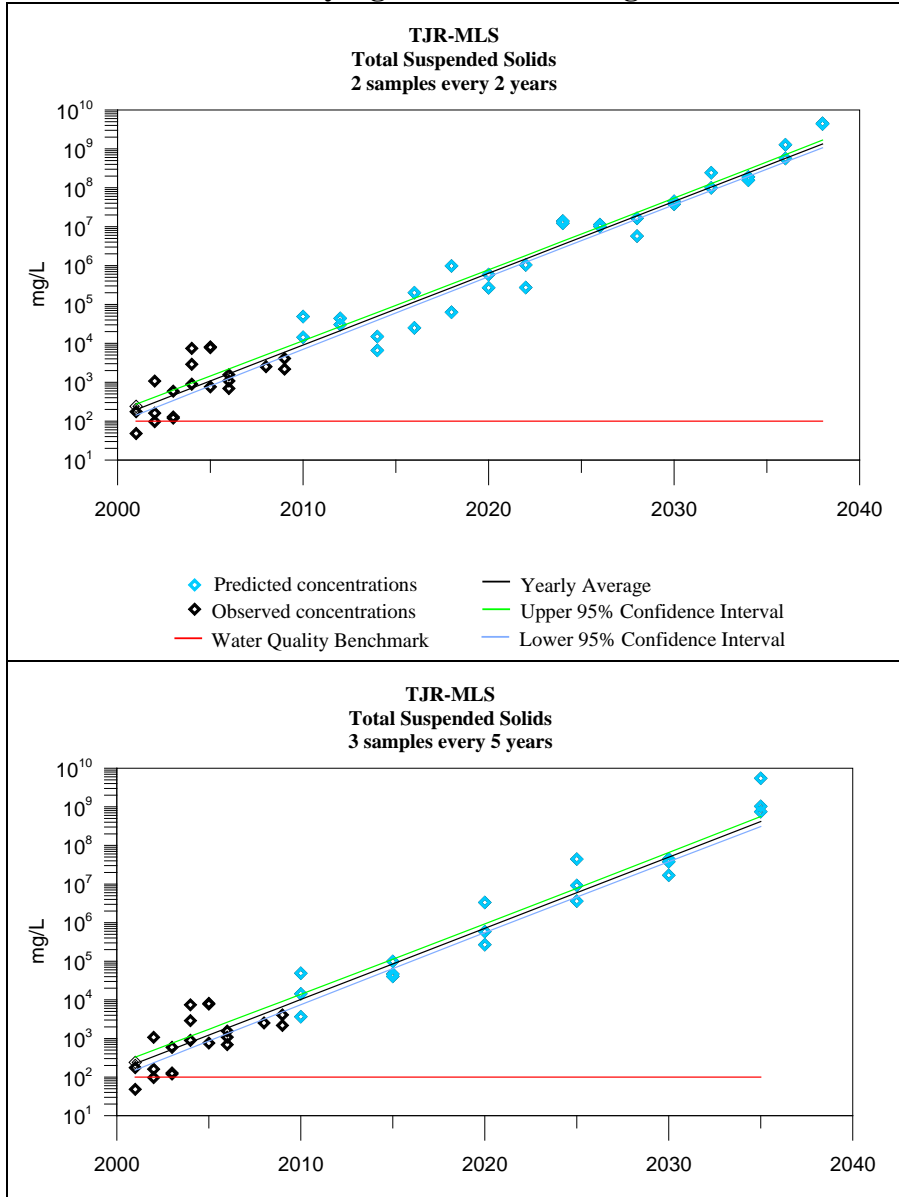
Example 4. Total phosphorus data from AHC-MLS with 13 years of existing data and a statistically significant increasing trend.





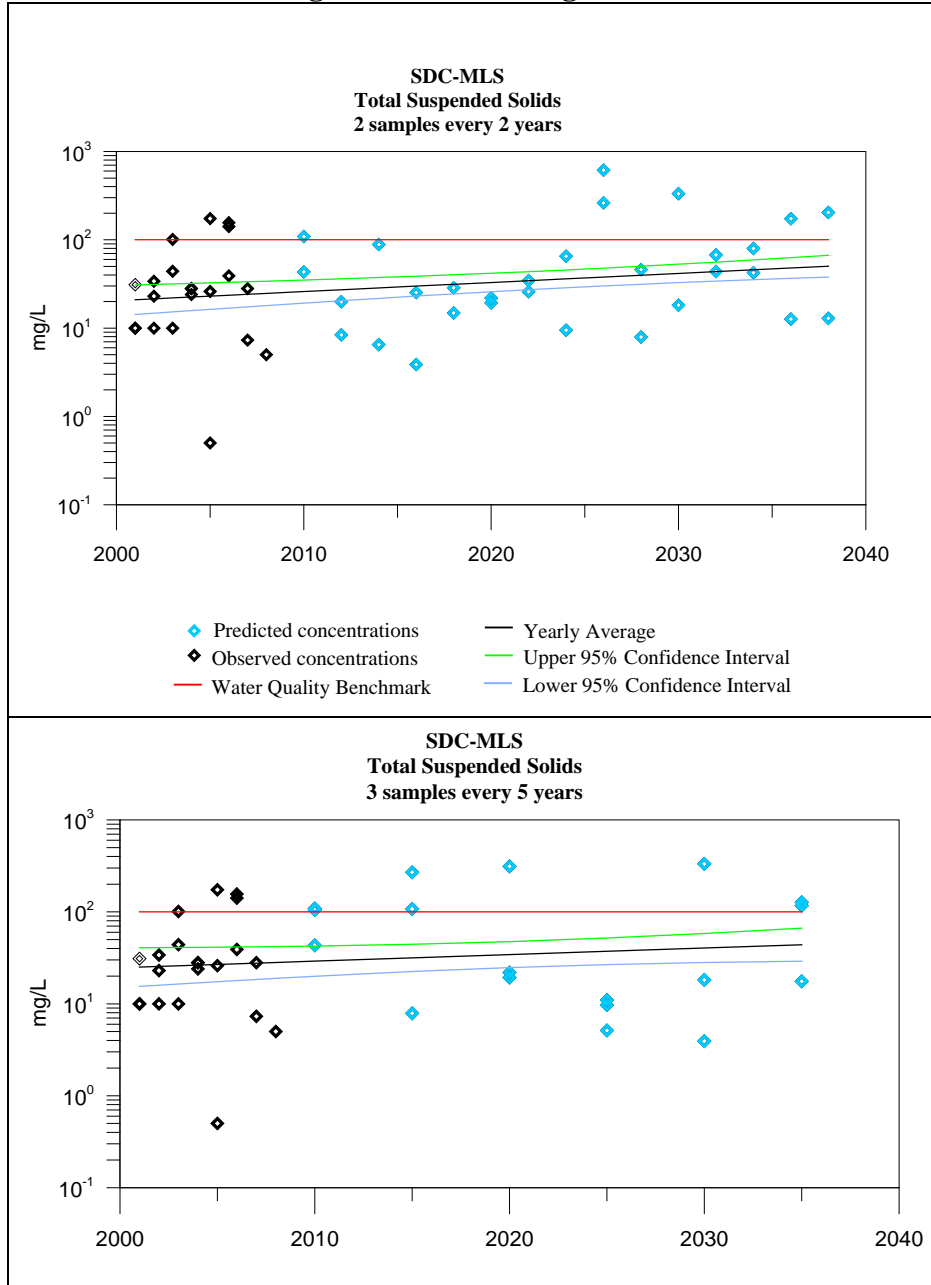
Total phosphorus concentrations at AHC-MLS are currently below WQOs, but are increasing at a slow rate. In Example 4, the simulation results show that a reduction in sample frequency from two wet events every two years to three wet events every five years will not decrease the ability to detect when the total phosphorus concentrations will exceed the WQO. The first plot in Example 4 shows that the year the 95-percent confidence limit will pass the WQO is approximately 2028. In the second plot in Example 4 (3 samples every 5 years) the year that the 95-percent confidence limit for total phosphorus exceeds the WQO is also approximately 2028. Therefore, a reduction in sample frequency from two wet events every two years to three wet events every five years will not decrease the chance of detecting when the total phosphorus concentrations will exceed the WQO.

Example 5. Total suspended solids data from TJR-MLS with 8 years of data and a statistically significant increasing trend.



The steep increasing trend for TSS at TJR-MLS illustrates the finding that if a significant increasing trend is observed, a reduction in sampling frequency will not decrease the ability to detect it. In Example 5, the constituent concentrations are above the WQO and increasing at a rapid pace. Therefore, the reduction in sampling frequency from two wet events every two years to three wet events every five years will not decrease the statistical ability to detect significant trends.

Example 6. Total suspended solids data from SDC-MLS with 8 years of data and a non-significant increasing trend



At SDC-MLS a generally increasing TSS trend is observed (Example 6). This example is included here to illustrate how a reduction in sample frequency will affect the Copermittees' ability to detect significant trends and to determine when TSS concentrations meet or exceed the WQO. Although the current TSS levels are below the WQB, it is possible to predict when TSS concentrations will meet or exceed the WQO using either the current monitoring program (two wet events every two years) or the reduced sampling frequency to three wet events every five years. In this instance, the average annual TSS concentrations are not expected to exceed the WQO within the next 30 years. The lower 95-percent confidence interval does not pass the WQO in this example.