CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD San Diego Region

Errata Sheet
(OPTION 2)
CORRECTED

Tentative Order No. R9-2013-0001 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 following changes to the revised version of Tentative Order No. R9-2013-0001, released March 27, 2013, are based on the California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) Public Hearing testimony presented during Agenda Item No. 8 at the April 10 and 11, 2013 San Diego Water Board Meeting. The changes to the Tentative Order listed below are shown in underline/strikeout format to indicate added and removed language, respectively.

GENERAL Errata

Correct typographical and grammatical errors.

FINDINGS Errata

1) Discharge Characteristics and Runoff Management Findings

Add the following finding after Finding 17, and renumber the subsequent findings appropriately:

Mater Quality Improvements. Since 1990, the Copermittees have been developing and implementing programs and BMPs intended to effectively prohibit non-storm water discharges to the MS4s and control pollutants in storm water discharges from the MS4s to receiving waters. As a result, several water body / pollutant combinations have been de-listed from the CWA Section 303(d) List, beach closures have been significantly reduced, and public awareness of water quality issues has increased. The Copermittees have been able to achieve improvements in water quality in some respects, but significant improvements to the quality of receiving waters and discharges from the MS4s are still necessary to meet the requirements and objectives of the Clean Water Act.

PROVISION A Errata

1) **Provision A.4.a.(4)**

(4) Within 90 days of the San Diego Water Board determination that the update
modifications to the Water Quality Improvement Plan required under Provision
A.4.a.(3) meets the requirements of this Order, the applicable Copermittees must revise the jurisdictional runoff management program documents to incorporate the updated modified water quality improvement strategies that have been and will be implemented, the implementation schedule, and any additional monitoring required; and

PROVISION B Errata

1) Provision B Introductory Paragraph

The purpose of this provision is to develop Water Quality Improvement Plans that guide the Copermittees' jurisdictional runoff management programs towards achieving the outcome of improved water quality in MS4 discharges and receiving waters. The goal of the Water Quality Improvement Plans is to <u>further the Clean Water Act's objective to</u> protect, preserve, <u>and</u> enhance, <u>and restore</u> the water quality and designated beneficial uses of waters of the state. This goal will be accomplished through an adaptive planning and management process that identifies the highest priority water quality conditions within a watershed and implements strategies through the jurisdictional runoff management programs to achieve improvements in the quality of discharges from the MS4s and receiving waters.

2) Provision B.3.b.(4)(b)

- (b) The Copermittees must use the results of the Watershed Management Area Analysis performed pursuant to Provision B.3.b.(4)(a) to identify and compile a list of candidate projects that could potentially be used as alternative compliance options for Priority Development Projects, to be implemented in lieu of onsite structural BMP performance requirements described in Provisions E.3.c.(1) and E.3.c.(2). Specifically, the Copermittees must identify opportunities to be included in the list for candidate projects in each Watershed Management Area, such as:
 - (i) Opportunities for sStream or riparian area rehabilitation;
 - (ii) Opportunities for rRetrofitting existing infrastructure to incorporate storm water retention or treatment;
 - (iii) Opportunities for rRegional BMPs;
 - (iv) Opportunities for gGroundwater recharge projects;
 - (v) Opportunities for wWater supply augmentation projects; and
 - (vi) Opportunities for Land purchases to preserve floodplain functions.

3) Provision B.3.c

Revise references to "Provisions A.1.a, A.1.c and A.2.a" to "Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba" throughout the requirements of the Provision B.3.c.

4) Provision B.3.c.(1)(d)

(d) The numeric goals proposed pursuant to Provision B.3.c.(1)(a), the analysis performed pursuant to Provision B.3.c.(1)(b) and the specific monitoring and assessments proposed pursuant to Provision B.3.c.(1)(c) have been reviewed and receive concurrence by a majority of the Water Quality Improvement Consultation Panel (see Provision F.1.a.(1)(b)) for any recommendations. Updates must also receive concurrence be reviewed by a majority of the Water Quality Improvement Consultation Panel for any recommendations.

5) Provision B.3.c.(3)(a)

(a) The results of the analysis performed pursuant to Provision B.3.c.(1)(bd) is accepted and continues to be accepted by the San Diego Water Board Executive Officer as part of the Water Quality Improvement Plan and as part of subsequent updates to the Water Quality Improvement Plan; AND

6) Provision B.3.c.(3)(d)

(d) The Copermittees in the Watershed Management Area continues to implement the requirements of Provision A.4.a.

PROVISION D Errata

1) Provision D.2.a.(3)(b)

(b) Transitional Wet Weather MS4 Outfall Discharge Monitoring Frequency

Each wet weather MS4 outfall discharge monitoring station selected pursuant to Provision D.2.a.(3)(a) must be monitored twice-once during the wet season (October 1 – April 30). The wet weather monitoring events must be selected to be representative of the range of hydrological conditions experienced in the region. At least 10 percent of samples must be conducted during the first wet weather event of the wet season, to include at least one such sample in each Watershed Management Area.

2) Provision D.3.d

(d) Special studies initiated prior to the effective date of this Order that meet the requirements of Provision D.3.b and are implemented during the term of this Order as part of the Water Quality Improvement Plan may be utilized to fulfill the special study requirements of Provision D.3.a. Special studies completed before the effective date of this Order Water Quality Improvement Plan is accepted by the San Diego Water Board cannot be utilized to fulfill the special study requirements of Provision D.3.a.

3) Provision D.4.b.(2)(b)(i)[d]

[d] The percent contribution of storm water volumes and pollutant loads discharged from each land use type within the each hydrologic subarea with a major MS4 outfall to receiving waters or within each major MS4 outfall to receiving waters drainage basin to each of in the Copermittee's major MS4 outfalls in its jurisdiction to receiving waters within the Watershed Management Area for each storm event with measurable rainfall greater than 0.1 inch.

PROVISION E Errata

1) **Provision E.3.b.(1)**

- (1) Definition of Priority Development Project
 - (a) New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site), or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.
 - (b) Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.

(b)

(c) New <u>or redevelopment</u> projects that create 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses:

2) Provision E.3.c.(3)(b) E.3.b.(3)(b)

(b) Retrofitting <u>or redevelopment</u> of existing paved alleys, streets or roads that are designed and constructed in accordance with the USEPA Green Streets quidance.

3) Provision E.3.c.(1)

- (a) Each Priority Development Project must be required to implement LID BMPs that are designed to retain (i.e. intercept, store, infiltrate, evaporate, and evapotranspire) onsite 100 percent of the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event (design capture volume);
- (b) (i) If a Copermittee determines that implementing BMPs to retain the full design capture volume onsite for a Priority Development Project is not technically feasible, then the Copermittee may allow the Priority Development Project to utilize flow thru treatment control biofiltration BMPs.

 Biofiltration BMPs must be sized and designed to: achieve the equivalent pollutant load removal described in Provision E.3.c.(1)(a). Biofiltration LID BMPs must be considered as a first option before other types of flow-thru treatment control BMPs may be considered.
 - [a] Treat 1.5 times the design capture volume not reliably retained onsite; OR
 - [b] Treat the design capture volume not reliably retained onsite with a flow-thru design that has a total volume, including pore spaces and pre-filter detention volume, sized to hold at least 0.75 times the portion of the design capture volume not reliably retained onsite.
 - [c] Have an appropriate loading rate to prevent erosion, scour, and channeling within the BMP.
 - (ii) If a Copermittee determines that biofiltration is not technically feasible, then the Copermittee may allow the Priority Development Project to utilize flow-thru treatment control BMPs to treat runoff leaving the site, AND mitigate for the design capture volume not reliably retained onsite pursuant to Provision E.3.(c)(1)(b). Flow thru treatment control BMPs must be sized and designed to:
 - [a] Remove pollutants from storm water to the MEP;
 - [b] 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;

- [c] Be ranked with high or medium pollutant removal efficiency for the Priority Development Project's most significant pollutants of concern. Flow-thru 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 flow-thru treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.
- (c)
- (b) A Priority Development Project may be allowed to utilize alternative compliance under Provision E.3.c.(3) in lieu of complying with the storm water pollutant control BMP performance requirements of Provision E.3.c.(1)(a). The Priority Development Project must mitigate for the portion of the pollutant load in the design capture volume not retained onsite if Provision E.3.(c₂)(3) is utilized. If a Priority Development Project is allowed to utilize alternative compliance, flow-thru treatment control BMPs must be implemented to treat the portion of the design capture volume that is not reliably retained onsite. Flow-thru treatment control BMPs must be sized and designed in accordance with Provision E.3.c.(1)(a)(ii)[a]-[c].
- (d) If a Priority Development project is allowed to utilize alternative compliance, flow-thru treatment control BMPs must be implemented to treat the portion of the design capture volume that is not retained onsite. Flow-thru treatment control BMPs must be sized and designed to:
 - (i) Remove pollutants from storm water to the MEP:
 - (ii) 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 Priority Development Project's most significant pollutants of concern. Flow-thru 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 flow thru treatment control BMPs with high or medium removal efficiency rankings are infeasible for a Priority Development Project or portion of a Priority Development Project.

4) Provision E.3.c.(2)(b)

(b) Each Priority Development Project must avoid known critical sediment yield areas known to the Copermittee or identified by the Watershed Management Area Analysis pursuant to Provision B.3.b.(4), or implement measures that allow critical coarse sediment to be discharged to receiving waters, such that there is no net impact to the receiving water sediment supply is unaffected by the project.

5) Provision E.3.c.(3)(a)(ix)

(ix) Receiving waters must not be utilized to convey untreated storm water runoff from the Priority Development Project to the candidate project;

6) Provision E.3.e.(1)(a)

(a) Each Copermittee must require and confirm that for all Priority Development Project applications that have not received prior lawful approval by the Copermittee by the time the BMP Design Manual is updated pursuant to Provision E.3.d 18 months after the commencement of coverage under this Order, the requirements of Provision E.3 are implemented. For project applications that have received prior lawful approval by 18 months after before the BMP Design Manual is updated pursuant to Provision E.3.d commencement of coverage under this Order, the Copermittee may allow previous land development requirements to apply.

PROVISION F Errata

1) Provisions F.1 and F.2

Delete the terms "certification" and "notification of concurrence" and replace with "notification of acceptance" throughout Provisions F.1 and F.2.

2) Provision F.1.a.(1)(c)

(c) The Copermittees must coordinate the schedules for the public participation process among the Watershed Management Areas to provide the public as much time and opportunity as possible to participate during the development of the Water Quality Improvement Plans.

3) **Provision F.1.b.(7)**

(7) During implementation of the Water Quality Improvement Plan after implementation the Copermittees must correct any deficiencies in the Plan identified by the San Diego Water Board no later than 90 days in the updates submitted with the Water Quality Improvement Plan Annual Report following a request by the Board to do so.

4) **Provision F.2.a.(2)**

(2) Each Copermittee must update its jurisdictional runoff management program document to incorporate the requirements of Provision E no later than 3 months after San Diego Water Board notification of concurrence with concurrent with the submittal of the Water Quality Improvement Plan. Each Copermittee must correct any deficiencies in the jurisdictional runoff management program document based on comments received from the San Diego Water Board in the updates submitted with the Water Quality Improvement Plan Annual Report.

5) Provision F.2.b.(1)

(1) Each Copermittee must update its BMP Design Manual to incorporate the requirements of Provisions E.3.a-d no later than 3 months after San Diego Water Board notification of concurrence with concurrent with the submittal of the Water Quality Improvement Plan-by the San Diego Water Board Executive Officer.

Each Copermittee must correct any deficiencies in the BMP Design Manual based on comments received from the San Diego Water Board in the updates submitted with the Water Quality Improvement Plan Annual Report.

6) Provision F.3.b.(2)

(2) Transitional Monitoring and Assessment Program Annual Reports

The Copermittees for each Watershed Management Area must submit a Transitional Monitoring and Assessment Program Annual Report no later than January 31 for each complete transitional monitoring and assessment program reporting period (i.e. October 1 to September 30) during the transitional period, until the first Water Quality Improvement Plan Annual Reports are required to be submitted under this Order. The Transitional Monitoring and Assessment Program Annual Reports must include:

ATTACHMENT E Errata

1) Attachment E, Specific Provision 1.b.(3)(a)-(c)

Delete "Copermittees" and replace with "Copermittee's"

2) Attachment E, Specific Provision 1.d

Add the following after Specific Provision 1.d.(2):

(3) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 1.b.(2)(b), dry and wet weather discharge concentrations may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.

3) Attachment E, Specific Provision 2.b.(2)(b), Table 2.2

Table 2.2Final Effluent Limitations as Expressed as Annual Loads in MS4 Discharges to Shelter Island Yacht Basin

Constituent Limitation
Dissolved Copper 30 g/yr*

4) Attachment E, Specific Provision 3.d

Add the following after Specific Provision 3.d.(2):

- (3) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 3.b.(2)(b)(i), dry and wet weather discharge concentrations may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.
- 5) Attachment E, Specific Provision 4.b.(3)(a)-(c)

Delete "Copermittees" and replace with "Copermittee's"

6) Attachment E, Specific Provision 4.c.(2)(a)-(d)

Delete "Copermittees" and replace with "Copermittee's"

^{*} If the water quality objectives for dissolved copper in Shelter

Island Yacht Basin are changed in the future, then the margin of safety (MOS), TMDL and allocations will be recalculated using the Method for Recalculation of the Total Maximum Daily Load for Dissolved Copper in the Shelter Island Yacht Basin, San Diego Bay in the Basin Plan (pp. 7-14).

7) Attachment E, Specific Provision 4.d

Add the following after Specific Provision 4.d.(2):

(3) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 4.b.(2)(b) or 4.c.(1), dry and wet weather discharge concentrations may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.

8) Attachment E, Specific Provision 5.b.(3)(a)-(c)

Delete "Copermittees" and replace with "Copermittee's"

9) Attachment E, Specific Provision 5.c.(1)(b)(i)-(iii)

Delete "Copermittees" and replace with "Copermittee's"

10) Attachment E, Specific Provision 5.d.(3)

Add the following after Specific Provision 5.d.(3)(a) and renumber subsequent provisions appropriately:

(b) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 5.b.(2)(b)(i), dry and wet weather discharge bacteria densities may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.

11) Attachment E, Specific Provision 6.b.(2)(a), Table 6.2a

Table 6.2aFinal Receiving Water Limitations Expressed as Bacteria Densities and Allowable Exceedance Frequencies for Beaches

	Wet Weather Days		Dry Weather Days	
Constituent	Single Sample Maximum ^{a,b} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ^c	30-Day Geometric Mean ^b (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	22% / 0%	35	0%

Notes:

During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.

b. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

c. 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. For dry weather days, the dry weather bacteria densities must be consistent with the single sample maximum REC-1 water quality objectives in the Ocean Plan.

12) Attachment E, Specific Provision 6.b.(2)(a), Table 6.2b

Table 6.2b

Final Receiving Water Limitations Expressed as Bacteria Densities and Allowable Exceedance Frequencies for Creeks

	Wet Weather Days		Dry Weather Days	
0	Single Sample Maximum ^{a,b}	Single Sample Maximum Allowable Exceedance	30-Day Geometric Mean ^b	30-Day Geometric Mean Allowable Exceedance
Constituent Fecal Coliform	(MPN/100mL) 400	Frequency ^c 22% / 0%	(MPN/100mL) 200	Frequency 0%
Enterococcus	61 (104)	22% / 0%	33	0%

Notes:

- During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.
- b. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.
- c. 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. For dry weather days, the dry weather bacteria densities must be consistent with the single sample maximum REC-1 water quality objectives in the Basin Plan.
- d. A single sample maximum of 104 MPN/100ml for Enterococcus may be applied as a receiving water limitation for creeks, instead of 610 MPN/100mL, if one or more of the creeks addressed by these TMDLs (San Juan Creek, Aliso Creek, Tecolote Creek, Forrester Creek, San Diego River, and/or Chollas Creek) is designated with a "moderately to lightly used area" or less frequent usage frequency in the Basin Plan. Otherwise, the single sample maximimum of 61 MPN/100mL for Enterococcus must be used to assess compliance with the allowable exceedance frequency.

13) Attachment E, Specific Provision 6.b.(2)(b), Table 6.2

Table 6.2c

Final Effluent Limitations Expressed as Bacteria Densities and Allowable Exceedance Frequencies in MS4 Discharges to the Water Body

	Concentration-Based Effluent Limitations					
Constituent	Single Sample Maximum ^{a,b} (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency ^c	30-Day Geometric Mean ^b (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency		
Total Coliformd	10,000	22% / 0%	1,000	0%		
Fecal Coliform	400	22% / 0%	200	0%		
Enterococcus	104e / 61f	22% / 0%	35e / 33f	0%		

Notes:

- a. During wet weather days, only the single sample maximum effluent limitations are required to be achieved.
- b. During dry weather days, the single sample maximum and 30-day geometric mean effluent limitations are required to be achieved.
- c. 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. For dry weather days, the dry weather bacteria densities must be consistent with the single sample maximum REC-1 water quality objectives in the Ocean Plan for discharges to beaches, and the Basin Plan for discharges to creeks and creek mouths.
- d. Total coliform effluent limitations only apply to MS4 outfalls that discharge to the Pacific Ocean Shorelines and creek mouths listed in Table 6.0.
- e. This *Enterococcus* effluent limitation applies to MS4 discharges to segments of areas of Pacific Ocean Shoreline listed in Table 6.0.
- f. This Enterococcus effluent limitation applies to MS4 discharges to segments or areas of creeks or creek mouths listed in Table 6.0.

14) Attachment E, Specific Provision 6.b.(3)(a)-(c)

Delete "Copermittees" and replace with "Copermittee's"

15) Attachment E, Specific Provision 6.c.(3)(a)-(c)

Delete "Copermittees" and replace with "Copermittee's"

16) Attachment E, Specific Provision 6.d.(1)(b)

Add the following after Specific Provision 6.d.(1)(b)(iii):

(iv) For Pacific Ocean Shoreline segments or areas listed in Table 6.0 that have been de-listed from the Clean Water Act Section 303(d) List, the Responsible Copermittees may propose alternative monitoring procedures to demonstrate that the water bodies continue to remain in compliance with water quality standards under wet weather and dry weather conditions. The alternative monitoring procedures must be submitted as a part of the Water Quality Improvement Plans or any updates required under Provisions F.1 and F.2.c of the Order.

17) Attachment E, Specific Provision 6.d.(1)(c)

Add the following after Specific Provision 6.d.(1)(c)(iii) and renumber subsequent provisions appropriately:

(iv) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 6.b.(2)(b)(i), dry and wet weather discharge bacteria densities may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.

18) Attachment E, Specific Provision 6.d.(1)(c)(iii)[c]

[c] If there are any storm events not sampled, the bacteria density for every wet weather day of those storm events must be assumed to be equal to the <u>average</u> of the highest bacteria densityies result reported from wet weather samples collected each of the storm events sampled; and

19) Attachment E, Specific Provision 6.d.(2)(b)

Add the following after Specific Provision 6.d.(2)(b)(iii):

(iv) For creeks or creek mouths listed in Table 6.0 that have been de-listed from the Clean Water Act Section 303(d) List, the Responsible Copermittees may propose alternative monitoring procedures to demonstrate that the water bodies continue to remain in compliance with water quality standards under wet weather and dry weather conditions. The alternative monitoring procedures must be submitted as a part of the Water Quality Improvement Plans or any updates required under Provisions F.1 and F.2.c of the Order.

20) Attachment E, Specific Provision 6.d.(2)(c)

Add the following after Specific Provision 6.d.(2)(c)(iv) and renumber subsequent provisions appropriately:

(v) For assessing and determining compliance with the concentration-based effluent limitations under Specific Provision 6.b.(2)(b)(i), dry and wet weather discharge bacteria densities may be calculated based on a flow-weighted average across all major MS4 outfalls along a water body segment or within a jurisdiction if samples are collected within a similar time period.

21) Attachment E, Specific Provision 6.d.(2)(c)(iii)[c]

[c] If there are any storm events not sampled, the bacteria density for every wet weather day of those storm events must be assumed to be equal to the average of the highest bacteria densityies result reported from wet weather samples collected each of the storm events sampled; and

ATTACHMENT F Errata

1) Attachment F, Under the Fact Sheet discussion of Provision A.4

The San Diego Water Board recognizes that there is an apparent disparity between the Copermittees being able to demonstrate and be in compliance with the TMDLs in Attachment E and the discharge prohibitions and receiving water limitations in Provisions A.1.a, A.1.c, and A.2.a. Thus, similar to the TMDL requirements in Attachment E, the Order establishes a process under Provision B.3.c that the Copermittees may choose to utilize to demonstrate and be in compliance with the discharge prohibitions and receiving water limitations in Provisions A.1.a, A.1.c, and A.2.a, as well as Provisions A.1.d and A.2.b. This process is described in more detail under the discussion for Provision B.3.

2) Attachment F, Under the Fact Sheet discussion of Provision B

Purpose: Since 1990, the Copermittees have been developing and implementing programs and BMPs intended to effectively prohibit non-storm water discharges to the MS4s and control pollutants in storm water discharges from the MS4s to receiving waters. As a result, several water body / pollutant combinations have been de-listed from the CWA Section 303(d) List, beach closures have been significantly reduced, and public awareness of water quality issues has increased. The Copermittees have been able to achieve improvements in water quality in some respects, but significant improvements to the quality of receiving waters and discharges from the MS4s are still necessary to meet the requirements and objectives of the Clean Water Act.

Provision B includes requirements for the Copermittees to develop and implement Water Quality Improvement Plans to ultimately comply with the prohibitions and limitations under Provision A. The Water Quality Improvement Plans will provide the Copermittees a comprehensive program that can achieve the requirements and further the objectives of the CWA. Implementation of the Water Quality Improvement Plans will also improve the quality of the receiving waters in the San Diego Region.

3) Attachment F, Under the Fact Sheet discussion of Provision B.3

Finally, Provision B.3.c has been included to provide the Copermittees an option to demonstrate and be in compliance with the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba. One or more Copermittees within a Watershed Management Area can choose to implement this option. This option is only expected to be utilized by the Copermittees that wish to clearly demonstrate and be in compliance with the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba.

In order for a Copermittee to utilize this option, the Copermittee is required to include three components in the Water Quality Improvement Plan. The first component is a comprehensive set of numeric goals that will demonstrate the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba will be achieved. The criteria provided in the Order will require the Copermittee to demonstrate that the discharges from its MS4s will not cause or contribute to exceedances of water quality objectives in the receiving waters, and the receiving waters will be protected from the Copermittee's MS4 discharges.

The second component is an analysis utilizing a watershed model or other watershed analytical tools. The analysis must demonstrate that the implementation of the water quality improvement strategies required under Provision B.3.b will achieve the numeric goals within the established schedules required under Provision B.3.a. Because the development of the analysis may require significant resources,

the Order allows the Copermittees in each Watershed Management Area that choose to implement this option to perform the analysis individually, or pool their resources for the analysis collectively.

The San Diego Water Board does not expect the analysis to be a "guarantee" that the water quality improvement strategies will achieve the numeric goals within the established schedules. The analysis, however, must "reasonably" and "quantitatively" demonstrate that the implementation of the water quality improvement strategies can achieve the numeric goals within the established schedules. However, as more data and information are collected to demonstrate progress toward achieving the numeric goals, the numeric goals, water quality improvement strategies and schedules may need to be updated. When these updates occur, the Copermittees that choose to utilize this option must also update the analysis.

Thus, the third component is the key component that will allow a Copermittee to demonstrate the implementation of the water quality improvement strategies within its jurisdiction is making progress toward achieving the numeric goals. Each Copermittee must specify the monitoring and assessments that will be performed to confirm the implementation of the water quality improvement strategies are making progress toward achieving the numeric goals within the established schedules.

These three components must then be reviewed by the Water Quality Improvement Consultation Panel. The Water Quality Improvement Consultation Panel is required to be formed as part of the public participation process for the development of the Water Quality Improvement Plans. The Water Quality Improvement Consultation Panel is described under Provision F.1.a.(1)(b). Review by the Water Quality Improvement Consultation Panel has been included to provide an additional layer of input, support, and accountability for the implementation of this option.

Compliance with the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba begins when the Water Quality Improvement Plan, incorporating the requirements of Provision B.3.c.(1), is accepted by the San Diego Water Board. Each Copermittee that chooses to implement and continues to implement this option will be in compliance with the requirements of Provisions A.1.a, A.1.c, A.1.d, A.2.a and A.2.ba as long as the San Diego Water Board continues to accepts the analysis as part of the Water Quality Improvement Plan, and subsequent updates, and the Copermittee continues to implement the strategies, monitoring and assessments as incorporated in the Water Quality Improvement Plan in accordance with Provision B.3.c.(1).

4) Attachment F, Under the Fact Sheet discussion of Provision D.2

Until the wet weather MS4 outfall discharge monitoring requirements of Provision D.2.c are incorporated into a Water Quality Improvement Plan that is accepted by the San Diego Water Board, the Copermittees must comply with the requirements of transitional wet weather MS4 outfall monitoring requirements pursuant to Provision D.2.a.(3). Provision D.2.a.(3) requires the Copermittees in each Copermittee Watershed Management Area to sample, at least five of the major MS4 outfalls inventoried pursuant to Provision D.2.a.(1) twice once per wet season for the monitoring data required to be collected pursuant to Provision D.2.a.(3)(c)-(e). Provision D.2.a.(3) further requires at least one major MS4 outfall monitoring station be located in each Copermittee's jurisdiction within the Watershed Management Area.

5) Attachment F, Under the Fact Sheet discussion of Provision E.3

The 85th percentile storm event is the event that has a precipitation total greater than or equal to 85 percent of all storm events over a given period of record in a specific area or location. For example, to determine what the 85th percentile storm event is in a specific location, all 24 hour storms that have recorded values over a 30 year period would be tabulated and a 85th percentile storm would be determined from this record (i.e., 15 percent of the storms would be greater than the number determined to be the 85th percentile storm). Most jurisdictions in the San Diego Region have already developed isopluvial maps that can provide this type of information. The 85th percentile storm might be determined to be a number such as 1.0 inch, and this would be multiplied by the total area of the project footprint producing runoff to calculate the design capture volume. The Priority Development Project designer would then select a system of BMPs that would retain (i.e. intercept, store, infiltrate, evaporate, or evapotranspire) 100 percent of the pollutants contained in the design capture volume onsite.

Retention BMPs are necessary to capture and retain pollutants generated from a Priority Development Project. In a recent study performed by SCCWRP in the Los Angeles Region, they found "that the magnitude of constituent load associated with storm water runoff depends, at least in part, on the amount of time available for pollutant build-up on land surfaces. The extended dry period that typically occurs in arid climates such as southern California maximizes the time for constituents to build-up on land surfaces, resulting in proportionally higher concentrations and loads during initial storms of the season." This implies that the "first flush" of a rainy season and the first storm events after long antecedent dry periods tend to have the highest pollutant loads. Capturing and retaining the pollutant loads of the "first flush" of a rainy season and the first storm events after long antecedent dry periods will

¹ Stein, E.D., Tiefenthaler, L.L., and Schiff, K.C., 2007. Technical Report 510, Sources, Patterns and Mechanisms of Storm Water Pollutant Loading from Watershed and Land Uses of the Greater Los Angeles Area, California, USA. March 20, 2007.

reduce a significant portion of the pollutants in storm water discharged to and from the MS4.

The San Diego Water Board, however, acknowledges that in some situations retention of the full design capture volume onsite may not be technically feasible. In this event, the Copermittee may allow the Priority Development Project to utilize biofiltration BMPs to treat 1.5 times the design capture volume not reliably retained onsite, or biofiltration BMPs with a flow-thru design that has a total volume, including pore spaces and pre-filter detention volume, sized to hold at least 0.75 times the portion of the design capture volume not reliably retained onsite. flow thru treatment control BMPs to achieve the equivalent pollutant load removal that would have been achieved if the design capture volume were fully retained onsite, pursuant to Provision E.3.c.(1)(b). Biofiltration LID BMPs must be considered as a first option before other types of flow-thru treatment control BMPs may be considered because of the ancillary benefits they provide, such as reduction in flow rates and creation of habitat. In any event, no matter what types of BMPs (or combination of BMPs) are chosen, 100 percent of the pollutants contained in the design capture volume must not be allowed to be discharged from the Priority Development Project.

The 1.5 multiplier is based on the finding in the Ventura County Technical Guidance Manual that biofiltration of 1.5 times the design capture volume not retained onsite will provide approximately the same pollutant removal as retention of the design capture volume on an annual basis. This standard is consistent with the Los Angeles Water Board's Los Angeles and Ventura County municipal storm water permits (Order Nos. R4-2012-0175 and R4-2010-0108, respectively). The flow-thru design of 0.75 times the portion of the design capture volume not reliably retained onsite is consistent with the San Diego Water Board's Orange County and Riverside County municipal storm water permits (Order Nos. R9-2009-0002 and R9-2010-0016, respectively).

The San Diego Water Board further recognizes that, in addition to not being technically feasible, retention of the full design capture storm onsite may be cost prohibitive, or may not provide as much water quality benefit to the Watershed Management Area as would implementing BMPs elsewhere in the watershed. Thus, Provision E.3.c.(1)(c) E.3.c.(1)(b) allows for the use of a combination of onsite retention BMPs, and the implementation of an Alternative Compliance Program described in Provision E.3.c.(3). Provision E.3.c.(3) is discussed in more detail below.

If the full design capture volume is not retained onsite either because biodiltration is not technically feasible, or a Copermittee grants a Priority Development Project permission to utilize the Alternative Compliance Program, then the pollutants in the portion of the design capture volume that are not reliably retained onsite must still be reduced to the MEP. Thus, flow-thru treatment control BMPs are required to be implemented on Priority Development Projects in addition to the retention BMPs.

² Ventura Countywide Stormwater Management Program. 2011. Ventura Technical Guidance Manual, Manual Update, 2011.

The requirements of Provisions <u>E.3.c.(1)(d)</u> <u>E.3.c.(1)(a)(ii)[a]-[c]</u> include the performance standards for flow-thru treatment control BMPs, consistent with the Fourth Term Permits in the San Diego Region.

6) Attachment F, Under the Fact Sheet discussion of Provision F.1

The San Diego Water Board recognizes that the development of multiple Water Quality Improvement Plans concurrently may limit the ability of the public to review and provide comments to the Copermittees. Thus, Provision F.1.a.(1)(c) requires the Copermittees to coordinate the schedules for the public participation process among the Watershed Management Areas to provide the public as much time and opportunity as possible to participate during the development of the Water Quality Improvement Plans.

7) Attachment F, Under the Fact Sheet discussion of Provision F.2

Each Copermittee is required to continue implementing a jurisdictional runoff management program, as required under Provision E. Implementation of each Copermittee's jurisdictional runoff management program is directed by its jurisdictional runoff management program document. Provision F.2.a requires each Copermittee to update its jurisdictional runoff management program document to be consistent with the requirements of Provision E within 3 months after the acceptance concurrent with the submittal of the Water Quality Improvement Plan.

Likewise, each Copermittee must continue to require new development and redevelopment projects to implement BMPs to control pollutants in storm water runoff. The control of pollutants in storm water runoff from development and redevelopment projects within each Copermittee's jurisdiction is guided and directed by its BMP Design Manual, formerly known as a Standard Storm Water Mitigation Plan (SSMP). Provision F.2.b requires each Copermittee to update its BMP Design Manual to be consistent with the requirements of Provision E.3 within 3 months after the acceptance concurrent with the submittal of the Water Quality Improvement Plan.

8) Attachment F, Under the Fact Sheet discussion of Provision F.3

Provision F.3.b.(2) includes the transitional annual reporting requirements for the transitional monitoring and assessment program for each Watershed Management Area. The Copermittees in the Watershed Management Area are required to submit a Transitional Monitoring and Assessment Program Annual Report no later than January 31 for each complete transitional monitoring and assessment program reporting period (i.e. October 1 to September 30) during the transitional period, until the first Water Quality Improvement Plan Annual Reports are required to be submitted. The Transitional Monitoring and Assessment Program Annual Report is required to include the transitional period monitoring data collected pursuant to Provisions D.1.a and D.2.a, and the findings from the transitional period findings from the assessments required pursuant to Provisions D.4.a.(1)(a), D.4.b.(1)(a)(i), D.4.b.(2)(a)(i).