
San Diego Regional Water Quality Control Board

September 6, 2019

Via Email Only

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Subject: Annual Report Review for Year 2017-2018: South Orange County (San Juan) Watershed Management Area Water Quality Improvement Plan (WQIP)

The California Regional Water Quality Control Board, San Diego Region (San Diego Water Board) has completed its review of the 2017-2018 South Orange County (San Juan) WQIP Annual Report (WQIP Annual Report). Provision F.3.b(3) of Order R9 2013-0001, as amended (Order) requires the 2017-2018 Water Quality Improvement Plan Annual Report be submitted on or before January 31, 2019. The WQIP Annual Report was submitted by Orange County on behalf of the South Orange County (San Juan) WQIP Copermittees on January 31, 2019. The South Orange County (San Juan) WQIP Copermittees include County of Orange, Orange County Flood Control, and the Cities of Aliso Viejo, Dana Point, and Laguna Beach, Laguna Hills, Laguna Niguel, Laguna Woods, Lake Forest, Mission Viejo, Rancho Santa Margarita, San Clemente, and San Juan Capistrano (WQIP Copermittees). The WQIP Copermittees within South Orange County subject to Order R9 2009-0002 were enrolled under the Order on April 1, 2015.

The San Diego Water Boards' review of the 2017-2018 WQIP Annual Report did not include every aspect of the Report. The review focused primarily on eight elements:

1. Submittal of WQIP Acceptance Letter requirements;
2. Submittal of required monitoring data and reports;
3. Status of WQIP numeric goals and schedules;
4. Compliance with ASBS General Exceptions;
5. Compliance with Provision B.3.c requirements;
6. WQIP Reasonable Assurance Demonstration;
7. Adaptive Management General Topics to be addressed in all WMAs; and

8. Updates of the WQIP required pursuant to provision F.2.c of the Order based on either new information or updates required by the San Diego Water Board.

A summary of the San Diego Water Board's comments and findings on the WQIP Annual Report are below.

1. Acceptance Letter Submittal Requirements

The San Diego Water Board Executive Officer accepted the South Orange County (San Juan) WQIP on June 20, 2018. The Acceptance Letter included additional specific submittal requirements as described below.

- a. *Final Certified WQIP*: A Final Certified WQIP incorporating all proposed revisions and those required by the Acceptance Letter was received on July 13, 2018.
- b. *Revised Quality Assurance Project Plan for Hydromodification Management Plan Effectiveness Monitoring (Revised HMP QAPP)*: A Revised HMP QAPP was received by the San Diego Water Board on August 20, 2018 as required, and was finalized on October 30, 2018, based on San Diego Water Board comments.

The San Diego Water Board finds that the additional submittal requirements specified in the Acceptance Letter have been met by the WQIP Copermittees.

2. Monitoring Data Submittals

- a. Provision D.1.a of the Order required submittal of transitional monitoring annually. Transitional monitoring was to be conducted in accordance with the monitoring requirements of Order R9-2009-0002 (Orange County Municipal Storm Water Permit) until the WQIP was accepted. Transitional MS4 outfall monitoring was also required under provision D.2.a of the Order. Provisions D.2.b and D.2.c required dry weather and wet weather MS4 outfall monitoring beyond the transitional period. Under provision D.2.c, the Order also required monitoring for the *Total Maximum Daily Loads for Indicator Bacteria, Baby Beach in Dana Point Harbor and Shelter Island Shoreline Park in San Diego Bay* (Baby Beach Bacteria TMDL), *Revised Total Maximum Daily Loads for Indicator Bacteria, Project I – Twenty Beaches and Creeks in the San Diego Region (Including Tecolote Creek)* (Bacteria TMDL), and Heisler Park ASBS (ASBS) to be submitted in accordance Attachment E of the Order. The Baby Beach TMDL is only applicable to the City of Dana Point and the County of Orange. The ASBS is only applicable to the City of Laguna Beach as the applicant approved by the State Water Board for the General Exceptions. Provisions D.1.a (1), D.2.a, and D.2.c require Annual Transitional Monitoring Reports be submitted on or before January 31. The WQIP Copermittees were enrolled under the Order on April 1, 2015. The following transitional monitoring reporting years were received:

- 2016/2017 – Received December 27, 2017, as Appendix D of the Report of Waste Discharge;
- 2015/2016 – Received January 31, 2017; and
- 2014/2015 – Received January 31, 2016

- b. Provision D.1.a(2) of the Order requires the WQIP Copermittees to submit HMP monitoring and reports required under Order R9-2009-0002 (Orange County Municipal Storm Water Permit) according to the HMP monitoring plan approved by the San Diego Water Board. In order to fulfill the HMP monitoring plan requirements approved by the San Diego Water Board under Order R9-2009-0002, the WQIP Copermittees were required to submit a Revised HMP QAPP on August 20, 2018, and a revision of the 2017 HMP Integrated Effectiveness Assessment (HMP IEA). The revised HMP IEA was required to be submitted January 31, 2019.

An additional three years of HMP annual monitoring and HMP Data submittals are required to be submitted beginning January 31, 2019, in order to be in full compliance with provisions D.1.a(1), D.1.a (2), D.2.a, and D.2.c of the Order. The Final Report is due on or before January 31, 2022, to comply with provision D.1.a (2) of the Order.

The San Diego Water Board finds that the WQIP Copermittees have submitted HMP Data from the Rancho Mission Viejo development, a revised HMP QAPP and a revised HMP IEA identifying three additional years of HMP monitoring to be completed by January 31, 2022, in accordance with Order R9-2009-0002, the Accepted WQIP, and provisions D.1.a(1), D.1.a (2), D.2.a, and D.2.c of the Order.

- c. Provision D.1.b, D.1.c, D.1.d, D.1.e, D.2.b, and D.2.c required WQIP Annual Monitoring to be submitted annually.

The WQIP Copermittees submitted the first WQIP annual monitoring after the WQIP was accepted on January 31, 2019, for the 2017-2018 reporting period. The San Diego Water Board finds that the WQIP Copermittees have submitted required monitoring reports on January 31, 2019, as required by the Order.

The San Diego Water Board notes that the first full year of annual HMP monitoring will be conducted in 2019 in accordance with the HMP QAPP and HMP IEA. Therefore, the first year WQIP HMP data reporting will be submitted with the January 31, 2020, WQIP Annual Report. The 2017-2018 Rancho Mission Viejo development project monitoring data was submitted with the January 31, 2019, WQIP Annual Report as required by the San Diego Water Board to partially fulfill HMP monitoring plan requirements under Order R9-2009-0002 and provision B.3.c requirements of the Order (see Section 5 below).

3. Status of WQIP Numeric Goals and Schedules

A summary of the WQIP Copermittees reported interim compliance with TMDL numeric goals and non-TMDL numeric goals is provided in Attachment 2. Bolded text in Attachment 2 indicates the compliance pathways being pursued by the WQIP Copermittees. The WQIP Copermittees reported on the status of the WQIP numeric goals and schedules for the Baby Beach Bacteria TMDL, Bacteria TMDL, and the Heisler Park Area of Special Biological Significance (ASBS). A discussion of the ASBS requirements under the Order are discussed separately under Section 4.

The Accepted WQIP has identified dry and wet weather Highest Priority Water Quality Conditions (HPWQCs) and Priority Water Quality Conditions (PWQCs). Provision B.3.c of the Order requires numeric goals and schedules for both HPWQCs and PWQCs. Provision B.3.c compliance is discussed more specifically under Section 5.

The 2004 *Aliso Creek 13325 Directive, Revised Monitoring Program Design – Integration with NPDES Program* has been discontinued upon the acceptance of the WQIP and is now

included in the Accepted WQIP monitoring and reporting program required under provision D of the Order.

Schedules

The WQIP Copermittees have established First Term Permit numeric goals for years 2015-2018 for the Baby Beach and Bacteria TMDLs and Second Term Permit numeric goals for the period 2018 through 2023 for the remaining HPWQCs and PWQCs. The following is a summary of the interim and final compliance schedules established for each of the HPWQCs and PWQCs in the Accepted WQIP.

a. Pathogen Health Risk

The Pathogen Health Risk includes compliance with the interim and final compliance deadlines to meet the WQBELs or WLAs of the Baby Beach and Bacteria TMDLs. Attachment E.5 and E.6 of the Order allows the WQIP Copermittees to demonstrate compliance with the interim and final compliance deadlines and WQBELs of the Baby Beach and Bacteria TMDLs by submitting and fully implementing the Accepted WQIP with a reasonable assurance demonstration that the interim and final TMDL compliance requirements will be achieved by the interim and final compliance dates in the Order. The Baby Beach TMDL requires incorporation of the Bacteria Load Reduction Plan (BLRP) developed under San Diego Water Board Resolution No. R9-2008-0027 into the WQIP and implementation of BMPs. The Baby Beach TMDL is only applicable to the City of Dana Point and the County of Orange.

The Bacteria TMDL identifies interim dry weather compliance dates of April 4, 2016, April 4, 2017, and April 4, 2018 for various compliance points at the Pacific Ocean shoreline in the watershed management area (WMA). The WQIP Copermittees requested and received an alternative compliance date of April 4, 2020¹, for all Pacific Ocean shoreline compliance points as part of the WQIP accepted by the San Diego Water Board. The interim and final compliance dates included in Attachment E of the Order for the Baby Beach and Bacteria TMDLs are summarized below:

1. Baby Beach TMDL Compliance Dates - City of Dana Point and County of Orange:

Dry Weather

- Interim WQBELs (Percent Load Reduction):
 - September 15, 2012 for Total Coliform (45.2%), Fecal Coliform (41.4%)
 - September 15, 2012 for Enterococcus (48.1%)
 - September 15, 2016 for Enterococcus (96.2%)
- Final WLA and Percent Load Reduction:
 - September 15, 2014 for Total Coliform (90.4%), Fecal Coliform (82.7%), and Enterococcus (96.2%)

Wet Weather

- Interim WQBELs (Percent Load Reduction):
 - September 15, 2012 for Total Coliform (0%), Fecal Coliform (0%), and Enterococcus (0%),
 - September 15, 2016 for Enterococcus (31.1 %)

¹ Appendices A, E, F, G, H, I, and J of the South Orange County (San Juan) WQIP

- Final WLAs and Percent Load Reduction:
 - September 15, 2009 for Total Coliform (0%), Fecal Coliform (0%)
 - September 15, 2019 for Enterococcus (62.2%)

2. Bacteria TMDL Compliance Dates (All WQIP Copermittees)

Dry Weather

- Interim: April 4, 2020, for Total Coliform, Fecal Coliform, and Enterococcus
- Final: April 4, 2021, for Total Coliform, Fecal Coliform, and Enterococcus

Wet Weather

- Interim: April 4, 2028, for Total Coliform, Fecal Coliform, and Enterococcus
- Final: April 4, 2031, for Total Coliform, Fecal Coliform, and Enterococcus

b. Channel Erosion and Associated Geomorphic Impacts (All WQIP Copermittees)

The following are the interim and final compliance numeric goals and schedules for the Channel Erosion and Associated Geomorphic Impacts HPWQC:

- Interim Compliance Year: 2023
 - The WQIP Copermittees will rehabilitate 2,000 linear feet of a stream reach to abate excess erosion using a geomorphically-referenced approach.
- Final Compliance Year 2042:
 - The WQIP Copermittees will rehabilitate 23,000 lineal feet of unstable stream channels;
 - No net change of existing stream channels; and
 - Addition of unstable stream channels to WQIP Numeric Goal as identified by WQIP Copermittees.

c. Unnatural Water Balance and Flow Regime - Inland Receiving Waters (All WQIP Copermittees)

The following are the interim and final compliance numeric goals and schedules for the Unnatural Water Balance and Flow Regime (Inland Receiving Waters) HPWQC:

- Interim Compliance Years: 2021 and 2023
 - 2021: The WQIP Copermittees will install two structural outfall controls and reduce dry weather flow by 5 percent.
 - 2023: The WQIP Copermittees will reduce all unnatural dry weather flow from MS4 to Inland receiving waters by 10% of the 2015 baseline discharge.
- Final Compliance Year: 2047
 - The WQIP Copermittees will eliminate all unnatural dry weather flows from all MS4 outfalls.

Copermittee Reported Compliance with Numeric Goals

The WQIP Copermittees reported on the First Permit Term (2015 -2018) Numeric Goals for the Baby Beach and Bacteria TMDLs.

Baby Beach TMDL

The WQIP Copermittees reported compliance with final dry weather TMDL percent exceedance rates for Total Coliform, Fecal Coliform and Enterococcus. In addition, the WQIP Copermittees reported no dry weather discharges occurred from the MS4 to the beach monitoring locations due

to implementation of dry weather diversions. For wet weather, the WQIP Copermittees reported that interim wet weather receiving water limitations expressed as interim wet weather allowable exceedance frequencies were achieved for Total Coliform, Fecal Coliform and Enterococcus.

Bacteria TMDL

The WQIP Copermittees sampled at beach segments, Aliso Creek, the Aliso Creek Mouth, San Juan Creek, and the San Juan Creek Mouth. For the beach segments during dry weather, the WQIP Copermittees reported meeting interim and final percent exceedances for all bacteria indicators in the Laguna Hills sub-watershed, Aliso Beach, 9th Avenue, Salt Creek, San Clemente City, State Beaches, and San Juan Creek at the Pacific Ocean Shoreline. Dry weather interim and final percent exceedances were not met for Aliso Creek, the Aliso Creek Mouth, Ole Hanson Beach Club, Poche Beach, and the San Clemente Pier. San Juan Creek, the mouth of the San Juan Creek, El Portal, and South Linda Lane locations were not sampled.

For the beach segments during wet weather, the WQIP Copermittees reported meeting interim and final percent exceedances for all bacteria indicators in the Laguna Hills sub-watershed, Aliso Beach, 9th Avenue, Salt Creek, Ole Hanson Beach Club, San Clemente City Beach, and State Beaches. Wet weather interim and final percent exceedances were not met for Aliso Creek, Aliso Creek Mouth, San Juan Creek at the Pacific Ocean Shoreline, San Juan Creek, and the mouth of the San Juan Creek. Interim percent exceedances were met at Mariposa Street, Poche Beach, and the San Clemente Pier. El Portal and South Linda Lane locations were not sampled.

A summary of the WQIP Copermittees' reported interim compliance with the Baby Beach TMDL and Bacteria TMDL numeric goals are provided in Attachment 2. Attachment 2 also identifies the reported compliance with the ASBS by the City of Laguna Beach. Bolded text in Attachment 2 indicates the compliance pathway being pursued by the WQIP Copermittees.

San Diego Water Board Comments on Reported Compliance

The San Diego Water Board reviewed the WQIP Annual Report to identify the basis of compliance with the First Permit Term (2013 -2018) Numeric Goals for the Baby Beach TMDL, Bacteria TMDL and compliance with the General Exceptions for the ASBS. The San Diego Water Board has noted that deliverables and efforts identified by the WQIP Copermittees for compliance with provision B.3.c of the Order have been assessed separately in section 5 below. A full assessment with B.3.c compliance will be conducted by the San Diego Water Board with the WQIP Copermittees' submittal of the January 31, 2020, Annual WQIP Report for the 2018-2019 reporting period. This is to allow a full year of monitoring by the WQIP Copermittees following the acceptance of the WQIP.

Baby Beach and Bacteria TMDLs

The WQIP Copermittees rely on the reasonable assurance demonstration load reductions in the Accepted WQIP for the Pathogen Health Risk HPWQC. The reasonable assurance demonstration is based on similar or identical modelling of assumptions for strategies to reduce bacteria loads in wet and dry weather as the San Diego Copermittees. This includes the approach to rely primarily on non-structural strategies, existing structural BMPs, an average of Priority Development Project acreage treated across each sub-watershed and proposed structural BMPs to obtain credit for bacteria load reductions to achieve compliance with the TMDLs, ASBS, and provision B.3.c. The proposed structural BMPs are based on the balance of the bacteria load reduction after credit for the load reductions from non-structural and existing structural strategies have been applied. These same strategies are also used as the basis for the request by the WQIP Copermittees to demonstrate that the interim dry weather bacteria load can be reached for the Bacteria TMDL by April 4, 2020. The San Diego Water Board's specific comments on the reasonable assurance demonstration submitted by the WQIP Copermittees is in section 6 below. The San Diego Water

Board cannot determine if the numeric goals for the percent bacteria load reduction for each TMDL in the WQIP Annual Report agree with the accepted reasonable assurance demonstrations for strategies identified for wet weather and dry weather bacteria load reductions.

The WQIP Copermittees have also identified a substitution of fecal coliform for all bacteria indicators in the Accepted WQIP for interim and final compliance with both TMDLs through implementation of the identified strategies as part of the reasonable assurance demonstration. The WQIP Annual Report has no supporting documentation regarding how the fecal coliform substitution is used or calculated to demonstrate compliance for both TMDLs. In addition, it is unclear in the WQIP Annual Report which compliance pathway is being identified for each TMDL.

The WQIP Copermittees report they have met the final dry weather and interim wet weather WQBELs for the Baby Beach TMDL at the point of compliance. The WQIP Copermittees report that 20 of the 29 water segments met the interim receiving water limits for dry weather and 22 of the 29 water segments met the final receiving water limits for dry weather. For wet weather, the WQIP Copermittees report that 20 of the 27 water segments met the interim receiving water limits and 19 of the 27 water segments met the final receiving water limits.

Both the lower San Juan Creek and Aliso Creek are experiencing 100% exceedances of Enterococcus during wet weather. During dry weather Aliso Creek at the mouth is also experiencing 94% exceedances for Enterococcus. These monitoring results appear to be contrary to the referenced bacteria load reduction strategies from the 2015 San Juan Creek CLRP and 2012 Aliso Creek CLRP strategies identified in the Accepted WQIP as part of the reasonable assurance demonstration. The Accepted WQIP identified a 90% and 100% load reduction for BMPs between 2003 and 2016 for these sub watersheds.

The WQIP Copermittees propose to meet the interim dry weather Bacteria TMDL compliance date through a suite of non-structural strategies, existing structural BMPs constructed prior to the acceptance of the WQIP (between the years 2003 and 2016), structural BMPs constructed as development occurs in the WMA, and future proposed Structural BMPs to achieve the balance of the bacteria load reduction.

The San Diego Water Board has the following comments:

- 1) There is no supporting documentation in the WQIP Annual Report to demonstrate how the WQIP Copermittees determined or calculated its compliance with the Baby Beach TMDL and Bacteria TMDL interim goals identified in the Accepted WQIP.
- 2) There is no supporting documentation in the WQIP Annual Report to demonstrate how the WQIP Copermittees determined or calculated its compliance with the assumed percent reductions in bacteria loads for dry weather for various strategies for the Bacteria TMDL. The reasonable assurance demonstration identified a significant focus on prioritizing non-structural strategies.

In the next WQIP Annual Report due January 31, 2020, the WQIP Copermittees must:

- 1) Identify the compliance pathways in the WQIP Annual Report that correspond to Attachment E of the Order. The WQIP Annual Report summary format is extremely difficult for the San Diego Water Board to assess compliance with various regulatory requirements. There are no references in the summary of the WQIP Annual Report or the Appendices as to which specific regulatory compliance point or pathway of compliance is being demonstrated with the information provided. The WQIP Copermittees identify the HPWQCs as "Tracks." The Order has specific regulatory requirements for compliance with numeric goals and schedules for HPWQCs and the pollutants identified under provision B.3.c. The Order has no references to "Tracks." For transparency, we request that the WQIP Copermittees clearly identify the "Tracks" as HPWQCs.
- 2) Provide separate wet and dry weather numeric goal summaries for each TMDL. The summaries are to be discussed in terms of TMDL or non-TMDL compliance pathways;
- 3) Report the percent load reductions for the entire WMA;
- 4) Include all baseline calculations and baseline pollutant load reduction calculations for all compliance pathways for the Bacteria TMDL and Baby Beach TMDL numeric goals. These calculations should be in one summary location. Supporting documentation regarding the accuracy of the assumed bacteria load reductions for each strategy was not included in the WQIP Annual Report for each TMDL. Therefore, the San Diego Water Board cannot assess the WQIP Copermittees' compliance with the First Permit Term goals, the ASBS Compliance Plan, the Baby Beach TMDL, or the Bacteria TMDL compliance pathways.;
- 5) Provide a summary of actions taken to address the disinfection system for Poche Beach and a schedule for completion of the actions. The WQIP Copermittees report that the disinfection system at Poche Beach is experiencing reduced performance resulting in more frequent exceedances at this location. However, there is no supporting documentation in the WQIP Annual Report regarding when this issue was known to the WQIP Copermittees and what specific actions have been taken to resolve the disinfection system, if any
- 6) Provide supporting documentation regarding how the fecal coliform substitution is used or calculated for both TMDLs to demonstrate compliance with Attachment E of the Order;
- 7) For the San Juan Creek and Aliso Creek sub-watersheds provide copies of the CLRPS relied on for the reasonable assurance demonstration;
- 8) Provide supporting documentation that demonstrates that the WQIP Copermittees are actually implementing the suite of strategies identified in the reasonable assurance demonstration to determine compliance with provisions 6.c(3)(h) and provision 6.b(3)(f) of Attachment E to the Order (Bacteria TMDL) and provisions 5.b(3)(g) and provision 5.c(b)(viii) of Attachment E to the Order (Baby Beach TMDL); and

- 9) Consider using a traditional technical report format style for the WQIP Annual Report. The San Diego Water Board finds the two-column format style very difficult to review for regulatory compliance assessment.

4. **ASBS General Exceptions Compliance**

Provision 2 of Attachment A of the Order incorporates the General Exception requirements of the Ocean Plan² (General Exceptions). The General Exceptions are only applicable to the City of Laguna Beach (City) as the City was the sole applicant to the State Water Board for inclusion under the General Exceptions. Compliance with the General Exceptions at the ASBS requires the City to include a Compliance Plan in the accepted WQIP to monitor, reduce pollutants in storm water with BMPs in accordance with the Compliance Plan, and eliminate non-authorized dry weather flow as of March 20, 2012. The City completed a Compliance Plan in September 2013 which was received by the San Diego Water Board December 2014. A Final Report prepared by SCCWRP in 2014³ concluded that the ASBS was least impacted by storm water plumes. However, the impacts from Laguna Canyon Creek were not determined. The City has included required monitoring for the ASBS in the WQIP.

The City's approach to meeting the conditions for the General Exceptions at the ASBS in the Laguna Beach sub-watershed is to implement the same WQIP non-structural strategies, numeric goals, and schedules identified for the Baby Beach and Bacteria TMDLs in the WQIP. The City is also relying on existing structural BMPs that have already been implemented consisting of diversion facilities and additional future BMPs to address 85% of the developed area in the Laguna Beach sub-watershed. A summary of the City's reported compliance with the ASBS non-TMDL numeric goals are provided in Attachment 2. Bolded text in Attachment 2 indicates the compliance pathway being pursued by the City.

ASBS Compliance Plan Strategies: The City reports that it has met the General Exception requirements by implementing the non-structural and structural strategies in its Compliance Plan. The City also reports that the Natural Water Guidelines were met based on monitoring conducted in 2013. However, the WQIP states that the City is relying on implementation of the WQIP strategies for compliance with the General Exception requirements. To meet the ASBS requirements, the reasonable assurance demonstration uses the same non-structural and structural BMPs as those used for the Baby Beach and Bacteria TMDLs to achieve wet and dry weather sediment load reductions. The WQIP Annual Report does not contain any supporting documentation to demonstrate compliance with each element of provision 2.I.A in Attachment A of the Order. The 2013 ASBS Compliance Plan submitted to the San Diego Water Board in 2014 contains different types of strategies, assumptions and monitoring which are not included in the reasonable assurance demonstration in the WQIP. The 2013 Compliance Plan is also inconsistent with the Accepted WQIP numeric goals, strategies, schedules, and monitoring for compliance with provision B.3.c of the Order in the Laguna Beach sub-watershed.

The WQIP Annual Report also references a September 18, 2015, Final Compliance Plan. However, neither the 2013 nor the 2015 Compliance Plan are included in the Accepted WQIP. We also cannot determine whether the appropriate agency designated in the General Exceptions approved the Compliance Plan. The WQIP has identified that the numeric goals, schedules and strategies identified for compliance with the provision B.3.c HPWQC for the Pathogen Health Risk

² Attachment B to State Water Board Resolution 2012-0012, as amended by State Water Board Resolution No. 2012-0031, Special Protections for Areas of Special Biological Significance (ASBS), Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges (General Exception to the Ocean Plan)

³ Final Report - Assessing Areas of Special Biological Significance Exposure to Stormwater Plumes Using a Surface Transport Model Assessing Areas of Special Biological Significance (SCCWRP, 2014)

in the Laguna Beach sub-watershed will be implemented for compliance with the General Exceptions.

The WQIP Annual Report does not provide any supporting documentation that all requirements of Attachment A of the Order have been met or that the WQIP strategies identified for the Laguna Beach sub-watershed are being implemented for the ASBS by the City. Therefore, the San Diego Water cannot determine compliance with the ASBS General Exception requirements in the Order. In addition, it is unclear how the WQIP Copermittees are coordinating the ASBS General Exception requirements with compliance with provision B.3.c in this sub watershed. No monitoring data was included with the WQIP Annual Report to support the 2013 conclusions or the conclusions in the WQIP that no further efforts were required to be implemented by the City or if the diversion units have effectively reduced the high bacteria loads from storm water. Last, there is no supporting documentation in the WQIP Annual Report regarding the impact of Laguna Canyon Creek to the ASBS.

In the next WQIP Annual Report due January 31, 2020, the City must include a separate assessment and supporting documentation to demonstrate that all the requirements in provision 2 of Attachment A of the Order have been met. The assessment must include a status on the strategies committed to by the City in the Compliance Plan and the WQIP. The City must clearly demonstrate how the WQIP strategies meet, or are equivalent to, the Compliance Plan assumptions and requirements in Attachment A of the Order. Monitoring data for the diversions and any collected by SCCWRP must be reported to support the conclusions for BMP implementation identified in the WQIP and the Compliance Plan. The City must also include the Final 2015 Compliance Plan in the WQIP and the referenced 2014 SCCWRP report. Last, the City must also provide supporting documentation that either the Executive Officer of the San Diego Water Board or the State Water Board approved the 2015 Compliance Plan.

5. Provision B.3.c Compliance

The WQIP Copermittees have implemented provision B.3.c of the Order (Prohibitions and Limitations Compliance Option) in the Accepted WQIP. By implementing provision B.3.c of the Order, the WQIP Copermittees may be deemed in compliance with provisions A.1.a, A.1.c, A.1.d, A.2, and A.3.b of the Order if the established numeric goals, strategies and annual milestones in the Accepted WQIP are met. Because the acceptance of the WQIP did not occur until June 20, 2018, the WQIP Copermittees were not able to complete a full year of monitoring for the 2017-2018 WQIP reporting period. The WQIP Annual Report has adjusted applicable B.3.c deliverables and monitoring schedules in Appendix J of the Accepted WQIP to accommodate the June 20, 2018, acceptance of the WQIP.

The WQIP Copermittees implemented the following High Priority Water Quality Conditions (HPWQCs), Priority Water Quality Conditions (PWQCs), and associated water quality objectives (WQOs) referenced in the Basin Plan and Ocean Plan under provision B.3.c of the Order:

a. HPWQCs Addressed by Provision B.3.c

Dry Weather

- Pathogens
- Unnatural Water Balance/Flow Regime

Wet Weather

- Pathogens
- Channel Erosion and Associated Geomorphic Impacts

b. PWQCs Addressed by Provision B.3.c

Dry Weather

- Nutrients and Eutrophication
- Bioassessment Scores

Wet Weather

- Turbidity
- Bioassessment Scores

c. Applicable Water Quality Objectives that the WQIP Copermittees are Deemed to be in Compliance with Pursuant to Provision B.3.c. of the Order⁴

- Bacterial indicators (Total Coliform, Enterococcus, E. coli, and Fecal Coliform) - Wet and Dry Weather
- Total Phosphorous - Dry Weather
- Total Nitrogen - Dry Weather
- Dissolved Oxygen - Dry Weather
- Turbidity - Dry and Wet Weather
- IBI; CSCI or Equivalent - Dry and Wet Weather
- Total Suspended Solids - Wet Weather

The WQIP Copermittees report progress towards the provision B.3.c annual milestones in the 2017-2018 WQIP Annual Report:

Human Pathogen Risk

- Submittal of the Comprehensive Human Waste Source Reduction Program (CHWSRP) Work Plan on June 20, 2019

Unnatural Water Balance/Flow Regime

- High Resolution Imagery Analyses Completed 2016; and
- Outfall Monitoring and Prioritization Completed 2018

Channel Erosion and Associated Geomorphic Impacts

- Completion of Wagon Wheel Restoration Project/OCTA Oso Creek Stabilization 10,000 lineal feet;
- LiDar Data Acquisition and Analyses;
- Submittal of HMP Effectiveness Monitoring QAPP;
- Submittal of Annual Rancho Mission Viejo HMP Effectiveness Assessment; and
- Completion of Geomorphically-Referenced Basis of Design Projects

The January 31, 2020, WQIP Annual Report will report on the first full year of implementation of commitments made by the WQIP Copermittees under provision B.3.c. Therefore, the San Diego Water Board will assess the annual compliance with the requirements of provision B.3.c in the January 31, 2020, WQIP Annual Report in accordance with provisions B.3.c (2), and F.3.b (3) of the Order.

⁴ The Accepted WQIP establishes the provision B.3.c Prohibitions and Limitations Compliance Option for the inland surface waters, coastal estuaries and lagoons, and ocean waters identified in Figure A-1 and Table 3-22 of the June 20, 2018, Accepted WQIP.

6. WQIP Reasonable Assurance Demonstration

The San Diego Water Board reviewed the reasonable assurance demonstration relied upon by the WQIP Copermittees to demonstrate compliance with the dry weather and wet weather Baby Beach and Bacteria TMDL WQBELs by the interim and final compliance dates. We have identified the following deficiencies with the assumptions used in the reasonable assurance demonstration to reach the Baby Beach TMDL and Bacteria TMDL interim and final WQBELs for dry and wet weather.

a. Pollutant Load Reduction Assumptions: The San Diego Water Board reviewed the pollutant load reduction assumptions the WQIP Copermittees used for the reasonable assurance demonstration. The following are our concerns with the assumed pollutant load reductions for non-structural and structural BMPs to meet the Baby Beach TMDL and Bacteria TMDL interim and final compliance dates and B.3.c compliance.

1) Non-Structural/Non-Modeled BMPs: The wet weather and dry weather non-modeled/non-structural strategies were based on the 2014 HDR study list of 35 strategies assumed to achieve an average 10 percent pollutant load reduction for indicator bacteria in the WMA. The WQIP Copermittees rely on these non-modeled/non-structural strategies to meet a substantive portion of its interim and final Bacteria TMDL load reductions. The WQIP Annual Report does not provide any supporting documentation that any of these strategies are actually being implemented by the WQIP Copermittees in the WMA. The San Diego Water Board is not in agreement with the use of unsupported load reductions for these 35 strategies to meet the interim and final Bacteria load reduction requirements in Attachment E.5, E.6, and provision B.3.C of the Order.

2) Non-Structural/Modeled BMPs:

The WQIP Copermittees rely on the following non-structural BMPs for wet and dry bacteria load reductions in the WMA:

- Future development implementing an average of 6% aggregate area of LID;
- Turf Conversion;
- Downspout Disconnection;
- Dispersion; and
- Elimination of Over-irrigation.

The WQIP Copermittees do not provide a baseline in the WQIP Annual Report for non-structural BMPs that are actually being implemented. The San Diego Water Board conducted an audit of the over-irrigation prohibition in 2018. All of the WQIP Copermittees in the WMA had significant deficiencies with the implementation of this non-structural BMP. Compliance with the TMDLs and provision B.3.c on an annual basis requires that all WQIP Copermittees implement these non-structural strategies and clearly document that they are being implemented to support the assumptions in the reasonable assurance demonstration.

3) Structural BMPs:

The modeled structural strategies in the reasonable assurance demonstration rely on existing structural BMPs from 2001 through 2016 for dry and wet weather load reductions in the WMA. The WQIP Copermittees rely on the same existing structural BMPs for pollutant load reductions in both dry weather and wet weather. Structural BMPs are intended for the treatment of pollutants in storm water. Under the Order, dry

weather flow is required to be effectively prohibited. The San Diego Water Board is not in agreement with the use of storm water structural BMPs designed to remove pollutants from storm water flow to also be used for dry weather pollutant load reduction. During the 2016 US EPA audit conducted in Orange County, the US EPA found that the existing structural treatment controls did not appear to be adequately inventoried, maintained, or inspected. Further, structural BMPs implemented under the design requirements of prior Orange County Municipal Storm Water Permits generally are ineffective to remove bacteria or were not designed to remove bacteria effectively. Compliance with the TMDLs and provision B.3.c on an annual basis requires that all WQIP Copermittees clearly document the types of existing structural BMPs that actually address bacteria are being operated and maintained effectively.

In summary, the interim and final compliance determination for the TMDLs under provisions 5.b(3)(g), 5.c(b)(viii), 6.c(3)(h) and 6.b(3)(f) of Attachment E to the Order requires that the WQIP Copermittees fully implement the WQIP and BMPs. The demonstration of WQBEL compliance by the pathway under Attachment E.6.b.(2)(c), E.6.c.(3)(h), E.5.b(3)(g) and E.5.c(b)(viii) is applicable to the WQIP Copermittees in the WMA.

Pursuant to provision F.1.b(6) of the Order, the San Diego Water Board is identifying deficiencies in the WQIP reasonable assurance demonstration that must be corrected.

The San Diego Water Board is requiring a revision to the assumed pollutant load reductions in the reasonable assurance demonstration for dry and wet weather in the WQIP Annual Report due January 31, 2021. The revision must include:

1. The achievable percent load reduction for dry and wet weather strategies based on the actual decrease in over-irrigation reported by the WQIP Copermittees in the WMA;
2. The achievable dry weather load reductions based on actual implementation of the non-structural and structural strategies in the WMA; and
3. The achievable percent reduction for structural BMPs based on the actual pollutant removal efficiency, and BMP design, operation and maintenance conducted by the WQIP Copermittees or private parties.

7. WQIP Adaptive Management General Topics

The San Diego Water Board is requiring all WQIP Copermittees to address the Adaptive Management General Topics included in Attachment 1 to this letter. The Adaptive Management General Topics are to be incorporated into the WQIP and submitted by the WQIP Copermittees on or before January 31, 2020. These Adaptive Management General Topics are being required pursuant to provisions B.5.a (4), B.5.a (5), B.5.b (8), and B.5.b (9) of the Order.

8. WQIP Update Requirements

No WQIP update is required for the South Orange County (San Juan) WMA WQIP.

9. Additional Comments on WQIP Annual Report

- a. Comprehensive Human Waste Source Reduction Strategy Work Plan (CHWSRSWP, the Work Plan): In general, the San Diego Water Board agrees with the strategies and approaches to identify and abate human sources of FIB/pathogens as summarized in the Work Plan. However, the San Diego Water Board has the following concerns and comments, which should be addressed prior to the onset of the investigations proposed in

the Work Plan:

- 1) The Action Levels proposed in the Work Plan are premature. Action Levels, including a value of 1,000 copies/100ml to trigger outfall sampling, especially the value of 4,100 copies/100 ml to trigger catchment source tracking, are likely too high to effectively identify possible human sources. These threshold values are developed based on the assumption that the primary sources of human waste are sewage and do not consider the effects of other identified human sources. Other identified human sources include human waste from homeless encampments and septic discharges. These sources include different compositions of pathogens and human markers (e.g., HF183) than for sewage. The effects of wildlife sources on the appropriate threshold values should also be considered.

It is also recognized that the extent and magnitude of recycled water use is significant in the South OC WMA and may contribute to background signals of human makers (e.g., HF183) in receiving waters and outfall flows. At this time, it is not clear if, and how likely, interference of HF183 signals from the recycled water is factored into the selection of the Action Levels.

It is the San Diego Water Board's understanding that the appropriate threshold values of HF183, that comprehensively consider the potential effects of different human waste sources, are still under development. Therefore, the San Diego Water Board does not agree with the Action Levels proposed in the Work Plan. While some levels of HF183, e.g., 500 to 900 copies/100 ml, may be used for prioritization purposes to identify potential hot spots of human waste sources at this time, the values should not be considered as thresholds below which additional investigation activities will not be pursued. The San Diego Water Board requires the re-evaluation of appropriate threshold values of HF183 for prioritizing the investigation activities. Additionally, it should be clarified in the CHWSRSWP that the selected HF183 values are only for such prioritization purposes.

- 2) An establishment of Conceptual Site Model for each potential human waste source is needed in the Work Plan.
 - i. The Work Plan lacks discussion regarding the potential pathways that human waste sources may take to impact receiving waters. The establishment of a conceptual site model with respect to the fate and transport of human fecal sources to receiving waters is lacking for both dry and wet weather. The Work Plan should provide a clear discussion regarding the conceptual site model for each potential source in each weather condition and clearly state whether such potential source is considered as primary source in the respective weather condition.
 - ii. The San Diego Water Board strongly recommends that the Copermittees thoroughly investigate and understand the nexus between inland water flows and discharges to the ocean to assist appropriate catchment prioritization and effective human source identification efforts. The San Diego Water Board agrees that especially in dry weather, the correct understanding of the hydraulic connections between the catchments and creeks, as well as between the lagoons/estuaries and the ocean, is critical for the success of the source identification and abatement strategies as proposed in the Work Plan. Such understanding should also include the effects and extent of groundwater flow and

tidal influences in dry weather, with the consideration of the effects of groundwater flow and tidal influence.

3) The catchment prioritization strategy needs to be clarified in the Work Plan.

- i. Figure 2-21 shows that multiple beach stations along the coastline between Segunda Deshecha Creek and San Mateo Creek showed elevated FIB exceedance rates in both dry and wet weather (Figures 2-4 and 2-5). However, operation conditions of the low-flow diversions are not known (Figure 2-18) at each beach station. Further, nearby catchments have been deprioritized as shown in Figure 2-21. An explanation is needed as to why these beach stations and nearby catchments were deprioritized in spite of the elevated FIB concentrations and uncertainties about low-flow diversion operations at the beaches.
- ii. A threshold value of 1,000 copies/100 ml of HF183 in dry weather has been used to deprioritize catchments draining to the mouth of Aliso creek. As detailed in 9.a.1) above, the threshold value of 1,000 copies/100 ml, and 4,000 copies/100 ml as well, is premature, and any de-prioritization results associated with these values should be re-evaluated.
- iii. Based on the discussion in Section 2.1.3 and the information in Table 2-6, it seems the minimum Source Criteria Composite Score would be four for each catchment, whereas many catchments in the WMA have the minimum score of one (Figure 2-13 and 2-14). Please describe narratively and with equations, how these scores (i.e., the X-axis in Figure 2-13 and 2-14) were calculated.

4) Clarify the implementation schedule of the proposed investigations. As an example, multiple high priority catchments or Area of Investigations (AOI) have been identified as high priority catchments in the WMA (Figure 2-21). Clarify if the WQIP Copermittees will carry out investigations simultaneously in all high priority catchments or if the WQIP Copermittees will use additional methods to further prioritize investigations in these high priority catchments.

b. Outfalls with Noted Exceedances in Dry Weather in the WMA

The San Diego Water Board reviewed dry weather data submitted by the Copermittees. The Cota de Caza MS4 outfall is noted as significantly exceeding WQO objectives for nutrients for several years. The San Diego Water Board is currently considering requiring SOCWA to monitor for nitrates due to reclaimed water being distributed in the WMA from Coto de Caza as reclaimed water without treatment. The WQIP Copermittees must include a discussion of this issue in the WQIP Annual Report.

In addition, the San Diego Water Board is requiring the WQIP Copermittees to adaptively manage their programs based on these outfall exceedances in accordance with 11.b of Attachment 1.

Please submit written correspondence in response to this letter to SanDiego@waterboards.ca.gov. Documents over 50 megabytes will not be accepted via e-mail and must be placed on a disc and delivered to the San Diego Water Board, 2375 Northside Drive, Suite 100, San Diego, CA 92108. Each electronic document must be submitted as a single file, in Portable Document Format (PDF) format, and converted to text searchable format using Optical Character Recognition (OCR). All electronic documents must include scanned copies of all signature pages; electronic signatures will not be accepted. Electronic documents submitted to the San Diego Water Board must include the following identification numbers in the header or subject line: **PIN:794813:HYu**. For questions pertaining to the subject matter, please contact Helen Yu at (619) 521-5893 or Helen.Yu@waterboards.ca.gov.

Summary

Due Date	
January 31, 2020	Answers to numerous technical questions on specific aspects of the WQIP Annual Report
	Documentation to demonstrate compliance with Ocean Plan Exception conditions for ASBS pursuant to provision 2 of Attachment A to the Order
	Update 303d List summaries using the most current OAL approved list Include responses to adaptive management topics provided in Attachment 1 in WQIP Annual Report
January 31, 2021	Revise Reasonable Assurance Demonstration

Sincerely,



Laurie Walsh, PE
Senior Water Resource Control Engineer
Storm Water Management Unit

LAW:emr

cc: South Orange County (San Juan) WMA WQIP Copermittees

Tech Staff Info & Use
Place ID: 794813

ATTACHMENT 1

Adaptive Management General Topics

The San Diego Water Board is requiring that Copermittees address the following Adaptive Management General Topics more fully in the WQIP. The San Diego Water Board finds that these topics are either inconsistently addressed region-wide in the WQIPs, or that the topics have become a highlighted issue region-wide, or new information or completion of special studies have become available that may affect strategies proposed to address the High Priority Water Quality Conditions (HPWQCs) and Priority Water Quality Conditions (PWQCs) for each Watershed Management Area (WMA). Pursuant to provisions B.5.a (4), B.5.a (5), B.5.b (8), and B.5.b (9) of the Order the San Diego Water Board is requiring these Adaptive Management General Topics to be assessed in the WQIPs in all WMAs.

The San Diego Water Board expects that these Adaptive Management General Topics be included in the Annual WQIP Report **on or before January 31, 2020**. Where an Adaptive Management General Topic is determined not applicable to the WMA, the Copermittees shall describe the technical rationale as to why the topic is not applicable. Each Adaptive Management General Topic shall be assessed separately in the WQIP.

The Copermittees' JRMP strategies for each WMA are required to be modified to address the Adaptive Management General Topics, as applicable. The updated JRMP strategies are required to be included in the JRMP Annual Report submitted concurrently with each applicable WQIP Annual Report **on or before January 31, 2020**.

1. Homeless Encampments

The San Diego Water Board has identified discharges of pollutants from homeless encampments as a controllable source under the land use authority of the Copermittees. The WQIPs shall identify potential geographical areas of focus where Copermittees have implemented or coordinated with local and regional programs or strategies to address discharges from encampments. The Copermittees shall include summaries of efforts conducted since the Regional MS4 Permit went into effect June 2013. The WQIP shall include a map of geographical areas that have been prioritized as pollutant sources by the Copermittees in the WMA. The Copermittees shall include in the WQIPs a description of coordination with other agencies and programs.

2. Identification of Controllable and Uncontrollable Sources

Region-wide, WQIPs often make general statements that various sources are "...*uncontrollable and ... not the responsibility of the Copermittees.*" Most often these uncontrollable sources are identified as either agricultural lands or homeless encampments. In addition, the treatment of these sources as controllable or uncontrollable varies from WMA to WMA.

The San Diego Water Board finds that agricultural lands and homeless encampments are controllable sources under the land use authority of the Copermittees. With regards to agricultural land uses, WQIPs with nutrient PWQCs or HPWQCs shall make clear substantiation in the WQIPs how the Copermittees will implement their land use authority to address the PWQCs and HPWQCs for controllable sources through minimum BMPs, enhanced constructed BMPs, commercial industrial inspection programs, or coordination with the adopted Agricultural Orders (Orders R9-2016-0004 and R9-2016-0005).

For any other source(s) identified as “uncontrollable,” the Copermittee shall include the basis and detailed technical rationale in the WQIP that explains how the source(s) is not able to be controlled by the Copermittee with its ordinances, polices, or programs.

3. Agricultural Orders Update and Assessment

In 2016, the San Diego Water Board adopted Order No. R9-2016-0004, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers that are Members of a Third-Party Group in the San Diego Region* and Order No. R9-2016-0005, *General Waste Discharge Requirements for Discharges from Commercial Agricultural Operations for Dischargers Not Participating in a Third-Party Group in the San Diego Region* (Agricultural Orders). The San Diego Water Board has been enrolling facilities, implementing and enforcing the requirements of the Agricultural Orders for three years. Enrolled facilities are now identified on Geotracker. The Copermittees shall include the Geotracker information of the enrolled facilities and provide an assessment on the scale, type and location of agricultural facilities required to enroll in the Agricultural Orders. Copermittees shall include a discussion in the WQIP regarding how inspections have been, or plan to be implemented for agricultural facilities in the WMA required to enroll in the Agricultural Orders.

4. Coordination of WQIP HPWQCs, PWQCs, and Strategies with WMA Ecological Reserve Goals and Projects

The San Diego Water Board finds that there are many State funded restoration projects throughout the region. The projects include, but are not limited to local, regional, and other agency projects within marine protected areas, lagoons, estuaries, ASBS reserve areas, mitigation banks, river parks, and drinking water reservoir watersheds (collectively identified as Ecological Reserves). Most of these Ecological Reserves have either environmental or planning documents that identify existing environmental goals or planned restoration projects. The San Diego Water Board finds that many of the WQIPs do not identify these projects or the long-term goals of the Ecological Reserves within the WMA. Further very little assessment in the WQIPs has been completed to ensure that strategies identified in the WMA are supportive of the Ecological Reserves' existing goals or planned projects. The Copermittees are required to identify Ecological Reserves in the WMA, a summary of environmental goals or restoration project technical goals (if available) and provide an assessment that the jurisdictional and WMA strategies in the WQIP are compatible and supportive with the Ecological Reserve projects and goals.

5. Storm Drain Biofilms Source of Bacteria

The San Diego Water Board finds that biofilm regrowth in storm drain facilities is treated inconsistently region-wide from WMA to WMA. Biofilm regrowth in storm drain facilities is considered an anthropogenic source of bacteria. Several bacteria-specific special studies have been completed along with the triennial review since the adoption of the Order. The San Diego Water Board is requiring that the results of these studies regarding biofilm regrowth in storm drain facilities be included in the WQIP and whether the bacteria source has been identified as human.

6. Update of 303(d) Listings

Since the acceptance of WQIPs, the 303(d) listings have been updated. The San Diego Water Board is requiring that Copermittees' update the 303(d) summaries to the most current OAL approved 303(d) list as of **January 31, 2020**. An assessment of any

potential changes to the selected PWQCs or HPWQCs based on the revised list are required to be included in the WQIP.

7. Over-Irrigation Audit Findings

The San Diego Water Board conducted an audit in 2018 of all Copermittees' pollutant control programs to evaluate the effective prohibition of overirrigation discharges. The San Diego Water Board found substantive deficiencies in Copermittee JRMP programs, WQIP strategies, and Copermittee Legal Authority. The majority of WQIPs rely on an assumed or modeled percent reduction of pollutant loading based on implementation of non-structural BMPs within a jurisdiction or within the watershed. The deficiencies brought forth in the audits must be addressed by the WQIP Copermittees in the WQIP for the WMA. The assessment must evaluate any assumed pollutant load reduction for non-structural BMPs used to meet TMDLs or numeric goals and schedules. The assessment may require an update of model-based load reductions or a reduction in percentages of pollutant loads attributed to non-structural BMPs.

8. Persistent Flow in MS4 Outfalls - Groundwater or Water Agency Maintenance Source Identification

Since the acceptance of the WQIPs in the region, Copermittees are identifying patterns of persistent dry weather flow in MS4 outfalls which may be associated with ground water or water district maintenance and operation of facilities authorized under the State Water Board WQO 2014-0194 SWQ.² The WQIP Copermittees are required to include an assessment for the WMA on the scope and nature of groundwater and State Water Board WQO 2014-0194 SWQ authorized discharges' contribution to MS4 persistent flowing outfalls based on studies, inspections or observations. The Copermittees are also required to identify where in the WMA this issue is likely to be occurring.

9. Monitoring Inconsistencies

a. Use of C Value

Based on spot checks on various monitoring data submitted with the WQIP Annual Reports, the San Diego Water Board finds that there may be inconsistencies with the usage of the Land Use Factor (C) in the calculation of pollutant loadings. The methodology using event mean concentration is not appropriate since land uses are co-mingled and not a single land use. The San Diego Water Board is requiring that WQIP Copermittees review the calculation methodology and land use values used and either provide a corrected pollutant load calculation or propose a method or process to correct the calculations. Based on the revised calculations, the WQIP Copermittees are required to revise the WMA or JRMP strategies as applicable to address the WQIP numeric goals and schedules. If applicable, the WQIP Copermittees are required to provide an assessment based on the revised results whether proposed projects or actions are reprioritized.

b. Monitoring Completeness

Based on spot checks of monitoring data submitted with the WQIP Annual Reports, the San Diego Water Board has found inconsistencies. For example, collected monitoring data is not always identified and data was not recorded in accordance

²

https://www.waterboards.ca.gov/water_issues/programs/npdes/docs/drinkingwater/final_statewide_wqo2014_0194_dwq.pdf

with the frequency required in the Order, Board adopted Resolutions, or TMDL's applicable to the WQIP. The San Diego Water Board is requiring that the WQIP Copermittees conduct a completeness check of the required monitoring **on or before January 31, 2020 WQIP Annual Report.**

c. Fecal Indicator Bacteria (FIB)

According to the new Bacteria Provisions for Inland Surface Waters, Enclosed Bays and Estuaries, and for Ocean Waters adopted by the State Water Board in August 2018, E. coli is the new standard of FIB for REC-1 in freshwaters and brackish waters of frequent low salinity, enterococci is the FIB standard for brackish waters of frequent high salinity; and both enterococci and fecal coliform are the new standards for ocean waters. Although the Order does not currently include these revised standards, the Order will be updated to incorporate the newly adopted bacteria standards and therefore adaptation of monitoring in preparation for inclusion of the revised standards is strongly encouraged. The San Diego Water Board is requiring a discussion of these new standards in the monitoring programs in the WMA. The discussion shall identify whether or not the Copermittees will add the new FIB standard and to which monitoring stations.

d. Appropriate Use of Surfer Health Study (SHS) Results

The SHS results should not be directly compared with the illness-rate thresholds recommended in the USEPA 2012 Criteria for REC-1. The San Diego Water Board Investigative Order No. R9-2019-0014 findings state how the intrinsic differences in study design between the SHS and epidemiology studies conducted by USEPA should be considered when evaluating the SHS results. The direct comparison of SHS results with USEPA 2012 Criteria have been frequently cited in WQIP annual reports of multiple WMAs to downplay the importance of bacteria monitoring in storm drains and receiving water, which is not correct. The San Diego Water Board is requiring the Copermittees to update the evaluations that cite the SHS results to assure the differences in study design is accurately accounted for in the WQIP Annual Reports.

10. Coordination with Water and Sewer Agency Planning and Projects

The San Diego Water Board finds that water and sewer agencies in the region are identifying projects that may alter natural water balance in stream systems, capture and reuse storm water, or dry weather flows. The San Diego Water Board finds that many of the WQIPs either do not identify these projects or the long-term effects of these project in the WMA. The Copermittees are required to identify water and sewer projects in the WMA which affect receiving waters or propose capture and reuse of storm water or dry weather flows. The Copermittees are also required to include a summary of water or sewer agency project technical goals (if available) and provide an assessment that the jurisdictional and WMA strategies in the WQIP are compatible and supportive with the planned projects.

11. Annual Report Data

a. Structural BMP Data

Pursuant to provision F.3.b.(3)f the San Diego Water Board is requiring Copermittees to tabulate and report structural BMP information **in the following manner in each WMA on or before January 31, 2020.** Tabulate and report the information in a shape file format showing all structural BMPs, including wetland restoration projects

and dry-weather diversions. The information for each structural BMP should include, at least:

- GPS location;
- Size of BMP (i.e. volume or flow);
- Drainage Area to BMP;
- Type of BMP;
- Installation year; and
- Target pollutant(s) to be treated.

b. High Priority Outfall Criteria

Pursuant to D.2.b.2(a) of the Order, the Copermittees are required to provide the criteria for determining high-priority outfalls for monitoring in dry and wet weather **on or before January 31, 2020**. Include clarification as to whether, and how, the results summarized in the Five-year Assessment of Random and Targeted MS4 Outfall Discharge Data Collected under NPDES Permit Order No. R9-2007-0001 in San Diego County Watersheds (Weston Solution, 2015) were used to prioritize outfall monitoring in each WMA. The San Diego Water Board found that multiple outfalls in various WMAs had elevated pollutant concentrations in dry weather according to the Weston Solution 2015 report but were not included in the monitoring of high-priority outfalls according to the WQIP Annual Reports.

c. Monitoring Data

In all future annual report submittals beginning with January 31, 2020, the San Diego Water Board is requiring Copermittees to provide electronic copies of all monitoring results as a separate submittal turned in concurrently with the WQIP Annual Report. For each WMA, provide a copy of the analytical results for all outfalls and receiving waters in the same Excel format as submitted to CEDEN.

ATTACHMENT 2

**Summary of WQIP Copermittee Reported Status
of
First Permit Term Numeric Goals for 2015-2018**

TMDL Compliance Pathway	Baseline	Permit Term Numeric Goal (2015-2018)	Numeric Goal Met (Yes/No)
<p>Numeric Dry Weather Goals for Baby Beach and Bacteria TMDLs Sub-watersheds: SJH/LH = San Joaquin Hills/Laguna Hills; A = Aliso; DP= Dana Point; LSJ= Lower San Juan; SC = San Clemente Indicator Bacteria: Fecal Coliform (FC) Enterococcus (E) Total Coliform (TC)</p>			
<p>1) No Discharge from MS4</p>	<p>a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established</p>	<p>a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established</p>	<p>a. Baby Beach TMDL – Dry Weather flow diverted during reporting period b. Bacteria TMDL - Not Used by WQIP Copermittees as a TMDL Compliance Pathway</p>
<p>2) Meet TMDL Limits in Receiving Water</p>	<p>a. Baby Beach TMDL – Percent Exceedance Rate (1996-2002) Total Coliform 1% Fecal Coliform 22%, 26% Enterococcus 26% ,50% b. Bacteria TMDL - No Baseline Established</p>	<p>a. Baby Beach TMDL Percent Exceedance rate Total Coliform 1% Fecal Coliform 5%, 2% Enterococcus 12%, 20% b. Bacteria TMDL - No First Term Goal Established</p>	<p>a. Baby Beach TMDL – Yes Total Coliform 1%,0% Fecal Coliform 2%, 0% Enterococcus 3%, 5% b. Bacteria TMDL – No Yes for 20 segments. No for Aliso Creek, Ole Hanson Beach Club, and San Clemente Pier at the Pacific Shoreline</p>
<p>3) MS4 Discharge Meets TMDL Limits</p>	<p>a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established</p>	<p>a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established</p>	<p>a. Baby Beach TMDL – Not Used by WQIP Copermittees as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by WQIP Copermittees as a TMDL Compliance Pathway</p>
<p>4) MS4 Discharge Load Reduction</p>	<p>1) MS4 Percent Discharge Load Reduction a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established OR 2) Number of Direct/Indirect MS4 discharges a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established</p>	<p>1) MS4 Percent Discharge Load Reduction a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established 2) Number of Direct/Indirect MS4 discharges a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established</p>	<p>1) MS4 Percent Discharge Load Reduction a. Baby Beach TMDL – Not Used by WQIP Copermittees as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by WQIP Copermittees as a TMDL Compliance Pathway 2) Number of Direct/Indirect MS4 discharges a. Baby Beach TMDL – Not Used by WQIP Copermittees as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by WQIP Copermittees as a TMDL</p>

<p>5) Exceedance due to Natural Sources</p>	<p>a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established</p>	<p>a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established</p>	<p>a. Baby Beach TMDL – Not Used by WQIP Copermittees as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by WQIP Copermittees as a TMDL Compliance Pathway</p>
<p>TMDL Compliance Pathway</p>	<p>Baseline</p>	<p>Permit Term Numeric Goal (2015-2018)</p>	<p>Numeric Goal Met (Yes/No)</p>
<p>6) Implement WQIP based on analysis results from 6/20/18 reasonable assurance demonstration in Accepted WQIP 6/20/2018 Appendices A, F, D, E, H, I 2015 CLRP San Juan Creek, 2014 Aliso Creek CLRP</p> <p>a. Baby Beach TMDL</p> <p>MS4 discharge % load reduction</p> <p>b. Bacteria TMDL MS4 discharge % load reduction for Fecal Coliform Tables 3-1 and 3-2)</p>	<p>a. Baby Beach TMDL No Baseline Established</p> <p>b. Bacteria TMDL Annual baseline Load by Sub-watershed:</p> <ol style="list-style-type: none"> 1. SJH/LH: 32.4 x10¹² MPN 2. A: 65.6 x10¹² MPN 3. DP: 22.2 x10¹² MPN 4. LSJ: 77.4 x10¹² MPN 5. SC: 39.8 x10¹² MPN 	<p>a. Baby Beach TMDL No First Term Goal Established</p> <p>b. Bacteria TMDL Permit Term % Load Reduction of Fecal Coliform - Values calculated as half of the Interim Compliance Goals</p> <ol style="list-style-type: none"> 1. SJH/LH: 22.9% Total Coliform 22.9% Fecal Coliform 24.6% Enterococcus 2. A: 23.9% Total Coliform 23.9% Fecal Coliform 24.8% Enterococcus 3. DP: 23.8% Total Coliform 23.8% Fecal Coliform 24.7% Enterococcus 4. LSJ: 18.2% Total Coliform 18.6% Fecal Coliform 23.7% Enterococcus 5. SC: 23.57% Total Coliform 23.6% Fecal Coliform 24.7% Enterococcus 	<p>a. Baby Beach TMDL Not Used by WQIP Copermittees as a TMDL Compliance Pathway</p> <p>b. Bacteria TMDL Not Used by WQIP Copermittees as a TMDL Compliance Pathway</p>

Numeric Wet Weather Goals for Baby Beach and Bacteria TMDLs Sub-watersheds: SJH/LH = San Joaquin Hills/Laguna Hills; A = Aliso; DP= Dana Point; LSJ= Lower San Juan; SC = San Clemente Indicator Bacteria: Fecal Coliform (FC) Enterococcus (E) Total Coliform (TC)			
TMDL Compliance Pathway	Baseline	Permit Term Numeric Goal (2015-2018)	Numeric Goal Met (Yes/No)
1) No Discharge from MS4	a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established	a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established	a. Baby Beach TMDL Not Used by City as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by City as a TMDL Compliance Pathway
2) Meet TMDL Limits in Receiving Water	a. Baby Beach TMDL - % Exceedance Rate (1996-2002) Total Coliform 4% Fecal Coliform 32% Enterococcus 55% b. Bacteria TMDL - No Baseline Established	a. Baby Beach TMDL - % Exceedance Rate Total Coliform 1% Fecal Coliform 10% Enterococcus 29% b. Bacteria TMDL - No First Term Goal Established	a. Baby Beach TMDL % Exceedance Rate- Yes Interim Only Total Coliform 0% Fecal Coliform 8% Enterococcus 8% b. Bacteria TMDL – No Yes for 19 segments. No for Aliso Creek San Juan Creek, Poche Beach, Ole Hanson Beach Club, Mariposa Street, and San Clemente Pier
3) MS4 Discharge Meets TMDL Limits	a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established	a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established	a. Baby Beach TMDL Not Used by City as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by City as a TMDL Compliance Pathway
4) MS4 Discharge Load Reduction	a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established	a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established	a. Baby Beach TMDL Not Used by City as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by City as a TMDL Compliance Pathway
5) Exceedance due to Natural Sources	a. Baby Beach TMDL -No Baseline Established b. Bacteria TMDL - No Baseline Established	a. Baby Beach TMDL - No First Term Goal Established b. Bacteria TMDL - No First Term Goal Established	a. Baby Beach TMDL Not Used by City as a TMDL Compliance Pathway b. Bacteria TMDL - Not Used by City as a TMDL Compliance Pathway

TMDL Compliance Pathway	Baseline	Permit Term Numeric Goal (2013-2018)	Numeric Goal Met (Yes/No)
<p>6) Fully Implement WQIP supported by a reasonable assurance demonstration accepted by the San Diego Water Board</p> <p>Reasonable assurance demonstration included in 6/20/18 Accepted WQIP for Bacteria TMDL</p>	<p>a. Baby Beach TMDL -No Baseline Established</p> <p>b. Bacteria TMDL - No Baseline Established</p>	<p>a. Baby Beach TMDL - No First Term Goal Established</p> <p>b. Bacteria TMDL - No First Term Goal Established</p>	<p>a. Baby Beach TMDL - Not Used by City as a TMDL Compliance Pathway</p> <p>b. Bacteria TMDL - Not Used by City as a TMDL Compliance Pathway</p>
<p align="center">ASBS Ocean Plan General Exceptions – Heisler Park (City of Dana Point, County of Orange only)</p> <p align="center"><i>Attachment A, Provision A.2 of the Order, Attachment B to State Water Board Resolution 2012-0012, as amended by State Water Board Resolution No. 2012-0031 Special Protections for Areas of Special Biological Significance (ASBS), Governing Point Source Discharges of Storm Water and Nonpoint Source Waste Discharges</i></p>			
<p>Accepted Compliance Plan in WQIP</p>	<p>Not Applicable</p>	<p>Not Applicable</p>	<p>Not Provided</p>
<p align="center">Wet Weather</p>			
<p>1.Meet Natural Water Quality Guidelines</p> <p>2. Meet All Attachment B, Provision I.A Requirements of General Exceptions for ASBS for Storm Water</p>	<p>1.Receiving Water Bight '13 Monitoring Results</p> <p>2. Attachment B: No Baseline Established</p>	<p>1. Meet Natural Water Quality Guidelines</p> <p>2. Attachment B -No First Term Goal Established</p>	<p>1. Yes - met Natural Water Quality Guidelines. Note Did not meet Bacteria WQOs</p> <p>2.Attachment B-No</p> <p>Attachment B, Provision I.A Requirements Not identified in Annual Report for Storm Water</p>
<p align="center">Dry Weather</p>			
<p>Compliance Plan</p> <p>1. NSWDs Prohibited to ASBS</p> <p>2.Meet Attachment B I.A Requirements of General Exceptions for ASBS for NSWDs</p>	<p>1. Discharges NSWDs prohibited 3/20/12</p> <p>2. Attachment B: No Baseline Established</p>	<p>1. Zero NSWDs from MS4</p> <p>2. Attachment B: No First Term Goal Established</p>	<p>1. Yes – Zero NSWDs discharges – existing NSWD diversions maintained</p> <p>2.Attachment B – No. Not identified in Annual Report for NSWD</p>