EXHIBIT 7.II

MODEL WATER QUALITY MANAGEMENT PLAN (MODEL WQMP)

FOR

SOUTH ORANGE COUNTY

September 28, 2017

TABLE OF CONTENTS

Note: For a List of Acronyms and a Glossary, please refer to the Technical Guidance Document (DAMP Exhibit 7.III)

SECTION 1. INTRODUCTION

1.1. Purpose

This Model Water Quality Management Plan (Model WQMP) has been developed to aid the County of Orange, the Orange County Flood Control District, the cities in South Orange County under the jurisdiction of the San Diego Regional Water Quality Control Board (Permittees) and project proponents with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that qualify as Priority Development Projects.

1.2. Regulatory Basis

The development of this Model WQMP and the accompanying Technical Guidance Document is required by the National Pollutant Discharge Elimination System (NPDES) Municipal Separate Storm Sewer System (MS4) permit held jointly by the Permittees in South Orange County (Order No. R9-2013-0001 as amended by Orders R9-2015-0001 and R9-2015-0100). As authorized by the Federal Clean Water Act (CWA), the NPDES permit program controls water pollution by regulating sources that discharge pollutants into waters of the United States.

South Orange County is defined as the area under the jurisdiction of the San Diego Regional Water Quality Control Board (SDRWQCB), including:

- County of Orange Unincorporated Area
- Orange County Flood Control District
- City of Aliso Viejo
- City of Dana Point
- City of Laguna Beach
- City of Laguna Hills
- City of Laguna Woods
- City of Laguna Niguel
- City of Mission Viejo
- City of Rancho Santa Margarita
- City of San Clemente
- City of San Juan Capistrano
- City of Lake Forest[1]

[1] At the time that 5th Term North Orange County MS4 Permit goes into effect, the City of Lake Forest will be covered solely within the North Orange County MS4 Permit with respect to land development planning requirements of Provision F.2.b. Until that time, the City of Lake Forest is within both Permit Regions depending on the location within the City.

Provision F.2.b requires the "BMP Design Manual" to be prepared to incorporate the requirements of Provision E.3a-d which describe requirements that apply to post-construction stormwater management for development projects. The Model WQMP and TGD collectively serve as the BMP Design Manual.

Per Provision E.3.e, each Copermittee must implement a program that requires and confirms structural BMPs on all Priority Development Projects are designed, constructed, and maintained to remove pollutants in storm water to the MEP.

1.3. Project Categorization

Each Copermittee must use their land use and planning authorities to implement a development planning program that applies to all development projects and Priority Development Projects. Development projects are defined by the MS4 Permit as "construction, rehabilitation, redevelopment, or reconstruction of any public or private projects". Priority Development Projects are a subset of development projects that exceed certain thresholds.

CEQA defines a project as: a discretionary action being undertaken by a public agency that would have a direct or reasonably foreseeable indirect impact on the physical environment. This includes actions by the agency, financing and grants, and permits, licenses, plans, regulations or other entitlements granted by the agency. CEQA requires that the project include "the whole of the action" before the agency. This requirement precludes "piecemealing," which is the improper (and often artificial) separation of a project into smaller parts to avoid preparing EIR-level documentation.

For the purpose of project categorization, the "project" is the "whole of the action" which has the potential for adding or replacing or resulting in the addition or replacement of, roofs, pavement, or other impervious surfaces and thereby resulting in increased flows and/or storm water pollutants. "Whole of the action" means the project may not be segmented or phased into small parts either onsite or offsite if the effect is to reduce the quantity of impervious area and fall below thresholds for applicability of storm water requirements.

1.3.1. Priority Development Project Categories

Projects that fall under the planning and building authority of the Copermittee and meet one or more of the categories defined in Permit Provision E.3.b must implement site design, source control, LID, and hydromodification BMPs. Additionally, clarifications for project categorization described in Section 1.2 of the TGD apply.

MS4 Permit Reference: Priority Development Project categories are described in Provision E.3.b of the MS4 Permit.

TGD Reference: Section 1.2 of the TGD describes these categories and provides additional guidance for project categorization. The balance of the TGD is intended to support Project WQMP development for Priority Development Projects.

1.3.2. Non-Priority Projects

Projects that (1) fall under the planning and building authority of the Copermittee, (2) do not meet any of the categories defined in Permit Provision E.3.b, and (3) have a significant nexus to stormwater quality are defined as Non-Priority Development Projects and must implement site design and source control BMPs.

MS4 Permit Reference: Requirements that apply to all development projects, including Non-Priority Development Projects are prescribed in Provision E.3.a. As part of the land use and development planning process, each Copermittee must prescribe that site design and source control BMPs (Provision E.3.a) be applied for all development projects where local permits are issue.

TGD Reference: The TGD provides guidance for incorporation of site design and source control BMPs. Specifically, Steps 1 through 4 of the TGD process (Sections 2.1 through 2.4), Sections 3 (Site Design) and Section 6 (Source Control) provide guidance that is applicable to Non-Priority Development Projects.

Other Supporting Documents: The Non-Priority Development Project Water Quality Checklist template can be used to evaluate project applications. Local jurisdictions may provide an alternative template or a checklist to fulfill requirements.

1.3.3. Exemptions from Stormwater Management Requirements

The Copermittees have the discretion to exempt site activities that are not development projects, do not have exposure to stormwater, or otherwise pose a de minimus risk to stormwater quality. The following types of site activities, or activities of an equivalent nature, may be exempted.

- Replacement of impervious surfaces that are part of a routine maintenance activity, such as:
    - Replacing roof material on an existing building
    - Rebuilding a structure to original design after damage from earthquake, fire or similar disasters
    - Restoring pavement or other surface materials affected by trenches from utility work
    - Resurfacing existing roads and parking lots, including slurry, overlay and restriping
    - Routine replacement of damaged pavement, including full depth replacement, if the sole purpose is to repair the damage
    - Constructing new sidewalk, pedestrian ramps or bike lanes on existing roads

(within existing street right-of-way)
    - Restoring a historic building to its original historic design
- Repair or improvements to an existing building or structure that do not alter the size:
    - Plumbing, electrical and HVAC work
    - Interior alterations including major interior remodels and tenant build-out within an existing commercial building
- Exterior alterations that do not change the general dimensions and structural framing of the building (does not include building additions or projects where the existing building is demolished)
- A WQMP or Non-Priority Project checklist is not required for a project which, in its entirety, is necessary to mitigate an emergency.
- Other categories of site activities identified as exempt as part of the local water quality ordinance or identified as part of a standard project categorization process implemented by the local jurisdiction
- Activities identified on a case-by-case basis that have de minimus exposure to stormwater and/or de minimus potential to contribute stormwater pollutants.

1.4. Intended Use of the Model WQMP with Other Documents

There are five documents that describe requirements and/or provide guidance for developing Project WQMPs in South Orange County in substantial conformance with Provision E.3 of the MS4 Permit. These documents are listed in **Table 1-1**.

Table 1-1. Intended Purpose and Integration of Planning Documents

Document	Intended Purposes
South Orange County Model WQMP (DAMP Section 7.II)	Describes core performance criteria underlying the development of Project WQMPs Describes requirements that are specific to the South Orange County Permit Region Describes requirements and procedures for WQMP development, review, approval, verification, and ongoing implementation
Technical Guidance Document (DAMP Section 7.III) (serves North and South Orange County)	Provides technical guidance for: • Determining applicability of requirements • Developing Project WQMPs that incorporate applicable requirements • Conducting and documenting associated investigations and calculations • Designing BMPs that meet applicable requirements Provides examples and worksheets

Hydromodification Management Plan for South Orange County	Provide technical guidance for developing hydromodification management designs for projects in South Orange County
WQMP Template	Provides a standardized format, organizational structure, and embedded guidance for developing a project WQMP for a Priority Development Project.
Non-Priority Development Project Checklist	Local jurisdictions may provide a checklist or alternative method for determining applicable site design and source control BMPs for non-priority development projects.

As indicated in **Table 1-1**, the Model WQMP is intended to serve an important but limited role in guiding the implementation of BMPs to address urban runoff and stormwater pollution. For most projects, the TGD is intended to provide comprehensive guidance and a standard design procedure for using on-site BMPs, including a complete description of the requirements that apply. However, where it is necessary to deviate from standard approaches for on-site BMPs or a project needs to pursue off-site or alternative approaches (**Section 3**), the Model WQMP can be consulted for a description of the core requirements that apply.

1.5. Applicability of Previous MS4 Permit Requirements

Where a project was previously prepared to comply with a previous MS4 Permit, special conditions may apply. Permit Provisions E.3.e.(1)(a)(i)-(ii) provide criteria for determining whether BMP requirements of earlier MS4 Permits may apply to the project. See Permit Provisions E.3.e.(1)(a)(i)-(ii) for additional information.

1.6. Public Agency Projects

Public agency projects should be categorized according to the same definitions, limitations, and exemptions as apply to private projects. Clarifications about types of public agency projects that may be exempted from either WQMP or NPP WQP requirements are included in Section 1.2 of the TGD.

Public agency projects may have different permitting and project development requirements than private land development projects. The local implementation plans (LIPs) and Jurisdictional Runoff Management Plans (JRMPs) define how each jurisdiction will ensure that applicable post-construction BMPs are implemented and maintained for these projects.

Individual Permittees may elect to develop a separate "Master Project WQMP" for anticipated future projects with similar characteristics based upon the requirements outlined in this document. A Master Project WQMP document would need to list the public agency projects that are anticipated to occur within the Permittee's jurisdiction over a given time period and the proposed methods of compliance with the Model WQMP and TGD.

1.7. WQMP Development Process

Section 2 of the TGD describes a recommended WQMP development process for the most common case where project comply with applicable requirements via on-site LID and hydromodification BMPs (where applicable). The core requirements underlying this process are described in **Section 2** of this Model WQMP.

Section 3 of this Model WQMP describes specific options and associated criteria in the case that a regional/off-site compliance approach is selected as a preferred option or is determined to be necessary based on infeasibility of achieving full compliance with applicable criteria on site.

Section 4 of this Model WQMP describes the process for WQMP preparation, approval, implementation, inspection, closeout, and record keeping.

SECTION 2. PROJECT WQMP REQUIREMENTS

The purpose of a Project WQMP is to define project features and BMPs that will mitigate the project's impacts on receiving water quality and hydromodification in conformance with applicable standards.

Section 2 of the TGD describes an eight-step process for development of Project WQMPs utilizing on-site LID and hydromodification BMPs to meet applicable requirements. The TGD also identifies applicable standards, expected activities, and expected content associated with Project WQMP development. These expectations are intended as guidelines; alternative methods and approaches could be acceptable.

To complement the TGD, this section of the Model WQMP identifies the underlying MS4 Permit criteria and other core requirements associated with each step of WQMP development. This is intended to serve as a reference where a project proposes a project-specific deviation from the standard TGD processes or methods.

Sections 2.1 through 2.8 of the Model WQMP correspond to Sections 2.1 through 2.8 (Step 1 through 8) of the TGD.

Sections 2.1 through 2.6 of the Model WQMP and TGD correspond to Section 1 through 6 of the WQMP Template.

2.1. Discretionary Permits and Water Quality Conditions

Core Requirement(s): The Project WQMP shall identify and detail all project-specific requirements pertaining to water quality or hydromodification that have been applied to the project from prior approvals or other permitting processes. The intent of this section is of the Project WQMP is to full detail all requirements and commitments, beyond those described in the Model WQMP and TGD.

MS4 Permit Reference: The MS4 Permit does not specifically define how discretionary permits and water quality conditions must be documented.

TGD Reference: Section 2.1 provides guidance on expected Project WQMP content associated with this section.

2.2. Project Description

Core Requirement(s): The Project WQMP shall describe the project in a manner that matches the legal description of the project used as part of project approval. It shall also identify project features and attributes relevant for water quality and hydromodification management planning.

MS4 Permit Reference: The MS4 Permit does not specifically define how the project must be described.

TGD Reference: Section 2.2 provides guidance on expected Project WQMP content related to this section.

2.3. Site and Watershed Assessment

Core Requirement(s): The project proponent shall conduct appropriate investigations to characterize the site and watershed in a manner that supports informed and appropriate decisions about site design, source control, LID, and hydromodification BMPs as part of subsequent steps. The Project WQMP shall clearly and comprehensively document the investigations completed and describe the site and watershed conditions in a manner that provides appropriate support for subsequent selection of site design, source control, LID and hydromodification BMPs.

MS4 Permit Reference: The MS4 Permit does not prescribe specific methods or approaches for site and watershed investigation. However, MS4 Permit requirements pertaining to site design, source control, LID, and hydromodification control each require appropriate and accurate information about the site in order to identify applicable requirements and support compliance with the requirements.

TGD Reference: Section 2.3 identifies expected activities and Project WQMP content associated with this section.

2.4. Site Design, Source Control, and Drainage Plan

Core Requirement(s): The project shall conduct and document a site design and drainage planning effort related specifically to stormwater quality management and hydromodification management (if applicable). The documentation of the site design and drainage planning provided in the Model WQMP must demonstrate that the following underlying criteria are met:

- BMPs are provided to remove pollutants from runoff prior to its discharge to any receiving waters, and as close to the source as possible.
- Structural BMPs must not be constructed within any Water of the United States.
- This effort must build clearly upon the relevant findings of the site and watershed investigation and must be conducted at the earliest practical phase of project development, such that stormwater management priorities can be considered in to the overall layout and planning of the site.
- All site design BMPs and source control BMPs that are applicable and feasible for the project must be identified and implemented. Where site design and source control BMPs are determined to be not applicable or not feasible, appropriate technical documentation must be provided to justify this finding.
- Water quality and hydromodification management BMPs (if applicable) must be considered at the earliest practical phase of project development. As part of this requirement, the plan must explain how the locations determined for LID BMPs were

identified to support the use of higher priority BMP types that maximize retention of stormwater. The Project WQMP must also identify critical coarse sediment areas.

- Space constraints and overriding considerations in site layout, BMP locations, and allocated area for BMPs must be presented based on technical justifications. This is mandatory for projects seeking modification of the LID BMP selection hierarchy on the basis of space constraints.

MS4 Permit References: The MS4 Permit does not prescribe a specific approach that must be used for overall project layout and drainage planning. However, several provisions directly or indirectly relate to site design, source control, and drainage planning:

Provision E.3.a of the MS4 Permit prescribes the use of all applicable and feasible site design and source control practices and identifies general requirements for all development projects.

Provision E.3.c(1) prescribes structural LID BMP selection and sizing requirements and directs the Model WQMP and TGD (collectively the "BMP Design Manual") to provide guidance and criteria for determining feasibility of retention BMPs and design of biofiltration BMPs to maximize stormwater retention and pollutant removal. This Model WQMP and TGD identify the role of site design and drainage planning efforts, including decisions about BMP siting and space availability, as integral elements of determining feasibility of retention BMPs and design of biofiltration BMPs to maximize stormwater retention and pollutant removal. In other words, it is not possible for a project applicant to justify decisions about LID BMP selection without also documenting the site design and BMP siting process that is integral to these decisions.

Provision E.3.c(2) requires the identification and avoidance or mitigation of critical coarse sediment areas. Identification of these areas and efforts to avoid impacts to sediment from these areas must be conducted as part of site design and drainage planning.

TGD Reference: Section 2.4 identifies expected activities and Project WQMP content.

2.5. Low Impact Development BMPs

Core Requirements: The Project WQMP shall document that the following narrative and numeric requirements for LID BMPs are satisfied. These core requirements include additional criteria beyond what is defined in the corresponding MS4 Permit provisions which are expected to result in equal or better performance than BMPs designed per the minimum MS4 Permit requirements. *Note: These requirements are referred to as "Storm Water Pollutant Control BMP Requirements" in the MS4 Permit but are referred to as "LID BMP Requirements" in this Model WQMP and TGD.*

LID BMP Selection and Sizing

LID BMPs must be selected and sized to maximize volume retention and pollutant retention according to the specific hierarchy described below.

LID BMPs must be implemented that are designed to retain stormwater onsite (i.e. intercept, store, infiltrate, evaporate, and/or evapotranspire) and meet one of the following equivalent criteria:

> Capture and retain the volume of stormwater runoff produced from a 24-hour 85th percentile storm event (design capture volume) **and** demonstrate that this DCV is drawn down within 48 hours or less following the end of precipitation.
>
> **OR**
>
> Capture and retain 80 percent of average annual runoff volume via either volume-based, flow-based, or combined approaches.

Where it is demonstrated based on substantial evidence that it is not feasible to fully comply with one of the sizing options above, LID BMPs must be implemented that are designed to meet the following criteria:

> 1) Maximize volume and pollutant retention through the incorporation of all the following design elements that apply:
>
> a) Use all applicable HSCs, **and**
> b) Design biofiltration BMPs with retention compartments, including gravel storage below the lowest point of treated discharge, amended soils and other features designed to achieve similar processes, where incidental infiltration is feasible. [Guidance: Where incidental infiltration is not feasible, this provision is not applicable.]
>
> **AND**
>
> 2) Size biofiltration BMPs to meet one of the following criteria:
>
> a) Biofilter 1.5 times the portion of the DCV that is not reliably retained.
> **OR**
> b) Determine the size required to capture and retain or biofilter 80 percent of average annual runoff volume, and apply a multiplier of 1.5 to the resultant required volume and footprint.
> **OR**
> c) Design a biofiltration BMP that has a static biofiltration volume (ponded water volume plus media pore spaces) of at least 0.75 times the portion of the DCV not reliably retained.

A process for determining feasibility, selecting, and design BMPs is provided in the TGD.

Section 3 of this Model WQMP describes compliance options should it be determined that it is not feasible to satisfy these criteria within the project site.

LID BMP Design

LID BMPs must be designed per accepted engineering standards and methods to:

- Provide safe and reliable operation based on actual conditions at the location of the BMP
- Avoid premature failure or nuisance conditions resulting from clogging, scour, extended standing water, or other factors, and
- Allow for inspection and maintenance activities.

As part of documenting conformance with these requirements, the Project WQMP shall provide clear and technically-based documentation of:

- Determinations of infiltration and harvesting feasibility that influence BMP selection including the relevant findings related to site investigation that support the determinations
- Sizing calculations
- Conformance with accepted design criteria or support for adaptations to achieve equivalent or better performance.
- Design checks related to clogging, scour, maintainability, and other relevant factors.

MS4 Permit Reference: Provision E.3.c(1) prescribes structural LID BMP selection and sizing requirements and directs the Model WQMP and TGD (collectively the "BMP Design Manual") to provide guidance and criteria for determining feasibility of retention BMPs and design of biofiltration BMPs to maximize stormwater retention and pollutant removal.

TGD Reference: Section 2.5 identifies expected activities and Project WQMP content associated with LID BMP selection, sizing and design. This section also provides a process for meeting these requirement and references to the specific technical criteria and methods that are expected to be used to support evaluation and documentation of compliance with these criteria.

2.6. Hydromodification BMPs

Core Requirements: The Project WQMP shall clearly identify whether hydromodification management requirements apply and provide supporting documentation of this determination including a comprehensive description of the flow path that water follows between each project discharge and the Pacific Ocean. Each reach along this flow path shall be identified as being susceptible or not susceptible to hydromodification. If hydromodification requirements apply, the Project WQMP shall document and provide supporting calculations to demonstrate that hydromodification management requirements are met. The core requirements for hydromodification management are stated below.

Hydrologic Control Requirement

All Priority Development Projects must ensure, at each point of compliance, that the post-project runoff flow rates and durations do not exceed pre-development, naturally occurring, runoff flow rates and durations by more than 10% of the time, for flow rates from 10% of the 2-year flowrate up to the 10-year flowrate. (See HMP Section 3). This must be evaluated using the South Orange County Hydrology Model which is a continuous simulation model or approved equivalent.

Coarse Sediment Management Requirement

Priority Development Projects must avoid critical sediment yield areas known by the Copermittee or identified in the Watershed Management Area Analysis, or implement measures that allow critical coarse sediment to be discharged to receiving waters, such that there is no impact to the receiving water.

MS4 Permit Reference: Provision E.3.c(2) prescribes hydromodification control performance criteria and requires the development of the HMP. It also identifies the Watershed Management Area Analysis conducted as part of the Water Quality Improvement plan as the basis for identifying exempted reaches.

Other Document References:

- The South Orange County HMP identifies performance criteria and methods associated with hydromodification management consistent with MS4 Permit requirements.
- The Watershed Management Area Analysis included as part of the Water Quality Improvement Plan identifies the current list of receiving waters that are exempt from hydromodification management requirements.
- Section 2.6 of the TGD identifies expected activities and Project WQMP content associated with hydromodification management and provides guidance for incorporating hydromodification management into BMP plans. Other sections are referenced from Section 2.6.

2.7. WQMP Preparation and Associated Exhibits

Core Requirements: The Project WQMP shall meet the following criteria:

- The Project WQMP shall adhere to a standard template or alternate organization acceptable to the reviewing jurisdiction.
- The WQMP shall document the complete BMP plan at a level of detail commensurate to the overall project design at each phase of approval, including locations and extents of source control and site design BMPs, and the location, type(s), and sizes of structural LID and hydromodification control BMPs, as applicable. Accompanying exhibits are expected to be necessary to provide this information.

- The WQMP shall clearly document conformance to each of the core requirements described in Section 2.1 through 2.6.

The following content are required for Final Project WQMPs and may also be required at with the Conceptual/Preliminary WQMP subject to the discretion of the reviewing agency:

- The Final Project WQMP shall be based on the results of design level investigations and final design parameters (if applicable)
- The Final Project WQMP shall be accompanies by design sheets and specifications that identify the precise design and details of all proposed BMPs.
- The Final Project WQMP shall be accompanied by an O&M Manual meeting the criteria identified in Section 2.8.

MS4 Permit Reference: There are not specific MS4 Permit requirements that directly prescribe Project WQMP content and review procedures. However, Provision E.3.e requires each Copermittee to implement a program that ensures that structural BMPs have implemented for Priority Development Projects consistent with MS4 Permit standards. The Project WQMP process and core requirements defined in this Model WQMP and TGD have been developed in conformance with this requirement and will be implemented by each jurisdiction as part of its development planning process.

TGD Reference: Section 2.7 identifies expected content of the Project WQMP and accompanying exhibits for Preliminary/Conceptual and Final Project WQMP submittals. Section 2.1 through 2.6 also identify expected Project WQMP content associated with each section of the Project WQMP.

2.8. Operations and Maintenance Manual and Requirements

Core Requirements: An O&M Manual must accompany the Final Project WQMP. A draft or preliminary version of the O&M Manual may be requested by the reviewing jurisdiction as part of the Conceptual/Preliminary WQMP.

The Final O&M Manual shall include:

- Identification of responsible parties
- Identification of specific and legally-binding funding mechanisms and demonstration of their adequacy
- Routine inspection and O&M activities including description of the activity, responsibilities, frequencies, and documentation requirements.
- Estimated lifespan of systems and triggers for rehabilitation or corrective maintenance activities
- Process and expected outcome of rehabilitation or corrective maintenance activities
- Emergency response activities

- Required qualifications and training requirements
- Applicable resource agency permits
- Required documentation and reporting

The reviewing jurisdiction may require other content necessary to ensure structural BMPs are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP. Parties responsible for the O&M plan shall retain records for at least 5 years. These documents shall be made available to the local jurisdiction for inspection upon request at any time.

MS4 Permit References: Provision E.3.c. requires that the project applicant submit proof of the mechanism under which ongoing long-term maintenance of all structural BMPs will be conducted. Provision E.3.d(4) identifies the requirement to provide Long-term maintenance criteria for each structural BMP listed in the BMP Design Manual. Provision E.3.e(3) requires each Copermittee to verify that structural BMPs on each Priority Development Project are adequately maintained, and continue to operate effectively to remove pollutants in storm water to the MEP. The requirement for an O&M Plan as part of the WQMP process is one mechanism by which this is achieved.

TGD Reference: Section 2.8 provides more detail about expected content of the O&M Manual and provides supporting guidance.

SECTION 3. ALTERNATIVE COMPLIANCE APPROACHES

3.1. Introduction

Alternative compliance refers to compliance activities conducted by choice or by necessity when the full LID and hydromodification performance criteria are not met through BMPs implemented within the Priority Development Project site. Alternative compliance generally consists of the implementing off-site projects in lieu of some or all on-site BMPs such that there is equal or greater benefit to water quality.

MS4 Permit Reference: Criteria and pathways for alternative compliance are defined in Provision E.3.c.(3) of the MS4 Permit.

3.2. Prerequisite Elements for Alternative Compliance

The MS4 Permit establishes several prerequisite efforts that must be completed prior to allowing Priority Development Projects to participate in certain alternative compliance pathways. The following sections identify these prerequisite efforts and describe the current status. This section of the Model WQMP may be updated from time to time.

3.2.1. Water Quality Equivalency Guidance

All potential alternative compliance pathways require the use of standardized water quality equivalency calculations.

On December 17, 2015, the San Diego Regional Water Quality Control Board accepted the Water Quality Equivalency Guidance Document for Region 9, including the portions of San Diego, Orange, and Riverside Counties within this region. This guidance document establishes a mechanism to correlate quantifiable Alternative Compliance Project water quality benefits with Priority Development Project water quality impacts and ultimately demonstrate that the ACP benefits outweigh the PDP impacts. Pursuant to the requirements set forth in Provision E.3.c.(3)(a) of the Permit, the methods presented within this guidance must be incorporated as part of any optional Offsite Alternative Compliance Program developed by a Copermittee or Project Applicant Proposed Alternative Compliance Projects allowed by the Copermittee.

The Water Quality Equivalency Guidance Document is available at this link: **http://www.projectcleanwater.org/index.php?option=com_content&view=article&id=252&Itemid=210**

3.2.2. Watershed Management Area Analysis

The Watershed Management Area Analysis conducted as part of the Water Quality Improvement Plan can identify candidate projects to which a project applicant could agree to fund, contribute funds to, or implement.

3.2.3. In Lieu Fee Structure

If a Copermittee chooses to allow a Priority Development Project applicant to fund or partially fund a candidate project or an alternative compliance project, then the Copermittee must develop and implement an in-lieu fee structure. This may be developed individually or with other Copermittees and/or entities.

At this time, an in-lieu fee structure has not been developed. Project applicants are therefore not allowed to fund or partially fund an alternative compliance project. An in-lieu fee structure is not required for all ACP pathways.

3.2.4. Alternative Compliance Water Quality Credit System Option

The Copermittee may develop and implement an alternative compliance water quality credit system option, individually or with other Copermittees and/or entities, subject to review and acceptance by the Executive Officer as part of the Water Quality Improvement Plan or updates to this Plan. At this time, a water quality credit system option has not been developed and project are therefore not allowed to comply via the use of water quality credits.

3.3. Alternative Compliance Pathways Currently Available

At the discretion of each Copermittee, Priority Development Projects may be allowed to participate in an alternative compliance program as a means of reducing the required implementation of on-site structural BMPs. Based on the current status of prerequisite elements described in Section 3.2, the following subsection describes the alternative compliance pathway that may currently be acceptable, at the discretion of each Copermittee.

3.3.1. Project Applicant Proposed Alternative Compliance Projects

The Copermittee may allow a Priority Development Project applicant to propose and implement an alternative compliance project. This option is allowed provided the Copermittee determines that implementation of the alternative compliance project will have a greater overall water quality benefit for the Watershed Management Area than fully complying with the LID and hydromodification requirements on-site. Additionally, this pathway is subject to all of the following criteria:

- If the Priority Development Project applicant chooses to implement an applicant-proposed alternative compliance project, the project applicant must enter into a voluntary agreement with the Copermittee agreeing to this arrangement.
- The voluntary agreement to implement the alternative compliance project must include reliable sources of funding for operation and maintenance of the applicant-proposed project.
- The project applicant must provide adequate documentation, consistent with the Water Quality Equivalency Guidance Document and acceptable to the reviewing jurisdiction,

demonstrating that that pollutant control and/or hydromodification management within the proposed alternative compliance project are sufficient to mitigate for impacts caused by not implementing structural BMPs fully on-site.

- Design of the applicant-proposed alternative compliance project must be conducted under an appropriately qualified engineer, geologist, architect, landscape architect, or other professional, licenses where applicable, and competent and proficient in the fields pertinent to the candidate project design.
- The applicant-proposed alternative compliance project must be completed prior to or concurrent with the first proposed Priority Development Project that will rely on it such that the alternative compliance project is operational prior to the certificate of occupancy of the Priority Development Project.

Note that these criteria are someone more stringent than the MS4 Permit in that they require the alternative compliance project to be completed at the same time or in advance of Priority Development Project relying on this project.

Additional Requirement to Provide Treatment Prior to Discharge to Waters of the US

If a Priority Development Project is allowed to utilize alternative compliance, treatment control BMPs must be implemented to treat the portion of the design capture volume that is not reliably retained onsite prior to discharge to Waters of the US.

Where the proposed alternative compliance project is located such that stormwater runoff from the Priority Development Project will be treated by the alternative compliance project prior to discharge to Waters of the US, separate requirements for treatment control BMPs do not apply. The requirement to treat stormwater is satisfied through treatment provided within the alternative compliance project. At the discretion of the Copermittee the project applicant may still be required to provide pre-treatment prior to discharge of water from the Priority Development Project site.

Where the proposed alternative compliance project is located such that the alternative compliance project treats a different drainage area than where the Priority Development Project is located, then separate treatment control BMPs are required for the Priority Development Project prior to discharge to Waters of the US. The amount of pollutants retained onsite via treatment control BMPs can be credited to reduce the amount of pollutant load reduction required to be achieved through the alternative compliance project.

Where flow thru treatment control BMPs are required to be used, they must be sized and designed to:

- Remove pollutants from storm water to the MEP;
- Filter or treat either:
    - 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

  - 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;
  - the required flowrate to result in capture of 80 percent of average annual runoff volume after accounting for the portion of the DCV retained on site.
- Be ranked with high or medium pollutant removal efficiency for the Priority Development Project's most significant pollutants of concern.

Guidance for sizing and design of treatment control BMPs is provided in Section 4.3.7 of the TGD.

3.4. Potential Future Alternative Compliance Pathways

In the future, subject to optional completion of the prerequisite activities defined in Section 3.2, additional options may become available for alternative compliance, including:

- Implementing candidate projects that were identified as part of a Watershed Management Area Analysis
- Funding or partially funding candidate projects from a Watershed Management Area Analysis via an in-lieu fee structure
- Funding or partially funding project applicant-proposed alternative compliance projects
- Participating in a water quality credit system option

SECTION 4. WQMP REVIEW AND VERIFICATION PROCESS

4.1. Overview

This section describes the process for local jurisdiction review, approval, and verification of the Project WQMP at each stage of project approval.

Project proponents are strongly encouraged to incorporate site design, source control, LID and hydromodification control BMPs, as applicable, at the earliest conceptual planning stages of a project for early review, to potentially avoid necessary project changes and delays during the subsequent review and approval process.

For all projects requiring discretionary or land use entitlement actions, a Conceptual or Preliminary WQMP should be submitted as part of the application for project approval during the environmental review phase (CEQA) and must be submitted prior to relevant project-level approval of entitlements and Planning Commission approval of a project or other public hearing.

The local jurisdiction will require that a final Project WQMP is submitted for review and approval prior to issuance of grading or building permits. The final Project WQMP must be prepared by or under the direction of a California Registered Civil Engineer and affixed with their stamp unless specifically exempted from this requirement by the local jurisdiction.

Prior to closeout of permits and issuance of certificates of use and occupancy, the local jurisdiction will require verification that BMPs have been implemented consistent with the Final Project WQMP and maintenance agreements associated with implementation of the O&M Plan have been executed.

4.2. Required Certifications for Preparation and Review of Project WQMPs

The following bullets identify required certifications associated with preparation, review, and verification of Project WQMPs:

- Project WQMPs must be prepared by or under the supervision of a California Registered Civil Engineer or licensed landscape architect.
- The Final Project WQMP must be prepared by or under the direction of a California Registered Civil Engineer and affixed with their stamp unless specifically exempted from this requirement by the local jurisdiction
- Supporting disciplines for WQMP preparation (e.g., geotechnical engineers, geologies, hydrogeologist) are required to have appropriate qualifications and registrations based on the nature of the support that is provided.

- Final project WQMPs must be approved by or under the supervision of a California Registered Civil Engineer acting on behalf, and with the expressed permission, of the Copermittee.
- As part of final approval and project closeout, BMP must be certified as constructed, serviceable, and satisfactory to the Copermittee or otherwise certified as such by a licensed professional engineer and by the project applicant.

4.3. Conceptual or Preliminary WQMP Stage

To facilitate early water quality planning and ensure that water quality protection and LID principles are considered in the earliest phases of a project, the local jurisdiction will recommend or require that the project proponent prepare a Conceptual or Preliminary WQMP prior to a complete or final Project WQMP for full review and approval. A Conceptual or Preliminary WQMP may be used by the local jurisdiction during the land use entitlement process or as part of a project application for discretionary project approval.

A Conceptual or Preliminary WQMP supports the CEQA process and provides documentation to support a checklist for an Initial Study and Negative Declaration or Mitigated Negative Declaration, or serves as the basis for the water quality section of an EIR. It should also serve as the basis for the Lead Agency and Responsible Agency to conclude that the MEP standard is being met, by serving as the basis that selected BMPs will not have the potential to cause significant effects and/or that the effects have been mitigated, and "are not significant with mitigation". The Conceptual or Preliminary WQMP should to be circulated with the CEQA document or summarized within the circulated CEQA document.

The level of detail in a Conceptual or Preliminary WQMP can vary somewhat upon the level of detail known at the time discretionary project approval is sought. Expected content is identified in Section 2.7 of the TGD.

Local jurisdiction staff will review and evaluate the Conceptual / Preliminary Project WQMP for general acceptance and conceptual or preliminary approval, and will offer guidance toward plan elements necessary for approval of the full Project WQMP. Additional information and submittals may be necessary for conceptual or preliminary approval. It is the responsibility of the project proponent to provide the additional information for consideration by the local jurisdiction.

If additional site investigation will be conducted following discretionary approval, the Conceptual/Preliminary Project WQMP should identify contingency elements that could be activated based on this information. Consideration of both the primary plan as well as contingency plans as part of the CEQA process can provide the flexibility to adapt the BMP plan based on additional information following discretionary approval.

4.4. Final Project WQMP Stage

A completed Final Project WQMP must fully detail site design, source control, LID, hydromodification BMPs (where applicable to the project) and be accompanied by a BMP plan and BMP details that define specifically how the required BMPs are incorporated into the project precise grading plans.

The Final Project WQMP, when prepared for submittal for approval, must be certified by the owner, and must include elements agreed upon at Conceptual or Preliminary WQMP acceptance and any revisions proposed.

The Final Project WQMP must be consistent with the Conceptual or Preliminary WQMP. If there are any substantial differences, the local jurisdiction must make a determination that the differences do not diminish the effectiveness of the BMPs to mitigate or address the project's potential impacts to water quality. Furthermore, any changes must not result in any new environmental impacts not previously disclosed in the local jurisdiction's circulated environmental document(s). If the changes diminish the project's ability to mitigate or address its water quality impacts, or result in previously undisclosed environmental impacts, the local jurisdiction should require that the project be subject to further environmental review.

Section 2.7 of the TGD identifies expected content for Final Project WQMPs.

The completed Project WQMP is to be submitted to the local jurisdiction for review and approval. Any changes to WQMP elements agreed upon at the Conceptual or Preliminary WQMP phase should be noted within the Project WQMP submitted for final approval.

Local jurisdiction staff will review the submittal for acceptance and approval. Reviews will be documented by the local jurisdiction. Additional information and submittals may be necessary for final approval. It is the responsibility of the project proponent to provide the additional information for consideration by the local jurisdiction.

Once a project reaches the plan check phase for construction plans, the project proponent must submit a completed Project WQMP. The plan checker must be able to verify that the construction plans submitted by the project proponent for plan check incorporate all of the structural BMPs identified in the Project WQMP. Local jurisdictions may encourage (but not necessarily require) project proponents to obtain approval of the Final Project WQMP prior to submitting construction plans for plan check. Building or grading permits will not be issued until the Project WQMP has been submitted and approved.

The Final Project WQMP may require certain construction-phase testing, such as infiltration testing in the as-graded condition. Any contingencies associated with construction phase testing must be detailed in the Final Project WQMP and reflected in construction plans and specifications. This is particularly relevant for BMPs that rely solely on infiltration. Proof of operation should be provided as part of project verification, which may including measurement

of actual infiltration rates depending on conditions of approval deemed appropriate by the reviewing agency. Therefore, project construction plans may require the ability to adapt to lower infiltration rates, such as by providing a greater footprint or converting to biofiltration with partial infiltration, should infiltration rates be less than used in design calculations.

4.5. Permit Closeout Requirements

The local jurisdiction will be responsible for determining that all requirements of the Project WQMP have been satisfactorily completed prior to close-out of permits and issuance of certificates of use and occupancy.

For discretionary projects, the method approved by local jurisdiction for stormwater BMP maintenance shall be incorporated into the project's permit, and shall be consistent with permits issued by resource agencies, if any.

For projects requiring only ministerial permits, the method approved by local jurisdiction for stormwater BMP maintenance shall be shown on the project plans before the issuance of any ministerial permits. Verification will occur similar to discretionary projects.

In all instances, the project proponent shall provide proof of execution of a method approved by local jurisdiction for maintenance, repair, and replacement before the issuance of construction approvals, permit closeout and issuance of certificates of use and occupancy.

For all projects, the verification mechanism includes the project proponent's signed statement, as part of the Project WQMP, accepting responsibility for all structural BMP maintenance, repair and replacement or agreeing to an alternative mechanism that is approved by the local authority regarding maintenance, repair and replacement of the structural BMP. Local authorities implementing public projects that are not required to obtain permits shall be responsible for ensuring that stormwater BMP maintenance, repair and replacement requirements are identified prior to the completion of construction and incorporated into the agency’s Municipal Activities Program under the DAMP

As a condition of permit closeout, project proponent shall create an as-built version of the BMP plans and details to include with the Final Project WQMP and O&M Plan.

4.6. WQMP Recordation and Transfer

The Project WQMP, O&M Plan, BMP plan, and relevant as-built sheets will be stored within local jurisdiction files, and will continue with the property after the completion of the construction phase, and a local jurisdiction may require that the terms, conditions and requirements be recorded with the County Recorder’s office by the property owner or any successive owner as authorized by the Water Quality Ordinance. In lieu of recordation, a local jurisdiction may require the Project WQMP to include a Notice of Transfer Responsibility Form,

which serves to notify the local jurisdiction that a change in ownership has occurred and notify the new owner of its responsibility to continue implementing the Project WQMP.

4.7. Updates to Project WQMPs and O&M Plans

Over the course of ongoing implementation of a Project WQMP, changes may occur that materially affect the content of the WQMP and associated O&M Plan.

The Project WQMP or associated conditions of approval should describe the requirement for the owner to seek approval from the reviewing jurisdiction for any substantive changes to BMPs or site uses that affect BMPs.

4.7.1. Changes in Ownership or Maintenance Responsibility

Changes in ownership or maintenance responsibility should be recorded using processes deemed appropriate by each jurisdiction with responsibility for the Project WQMP.

4.7.2. Changes in Site Uses

Changes in site uses do not typically trigger a process for requiring the use of different structural BMPs. However, where the change in use results in a change in classification as part of the commercial or industrial inspection program, additional or revised BMPs may be required through those programs.

4.7.3. Minor Changes in BMPs

Minor changes to the BMPs do not typically trigger a full revision and review of the Project WQMP. Minor changes could include activities such as:

- Minor revisions to BMP design details implemented as part of maintenance or rehabilitation efforts that are intended to improve operations or provide equivalent performance.
- Replacement of a proprietary BMP model with an equivalent proprietary BMP model that has the same level of third party certifications, consistent with Appendix J of the TGD.
- Minor changes in land cover tributary to a BMP, such that the total percent imperviousness does not change by an appreciable amount and does not otherwise trigger a WQMP or NPP WQP.

Prior to being implemented, any substantive change to the stormwater treatment approach change must be determined to have de minimus impact on stormwater quality and BMP operational requirements and documentation of this change must be recorded with the Project WQMP. The process of approving and memorializing these changes is as follows:

- The project owner should provide a letter transmittal and supporting information to describe the change and why it is not significant.

- This letter transmittal should be subject to review and approval by the Copermittee and should be filed with the Project WQMP and O&M Plan.
- If approval is granted, then the change may be implemented. The documentation of this change and the review of this change should be recorded with the Project WQMP

Each Copermittee has discretion to develop a process for reviewing and documenting minor changes to WQMPs.

4.7.4. Significant Changes in BMPs

Changes to the site or BMPs that have significant potential to change site runoff water quality and/or BMP design and operations include, but are not limited to:

- Changes in BMP locations, tributary areas, or sizes
- Significant changes in site land cover
- Changes in BMP types or major redesign of BMPs

These types of changes will typically require an update to the Project WQMP at the discretion of the Copermittee. If there are new potential impacts that qualify as a significant project under CEQA, then a discretionary approval process may be required.

4.8. Guidance Specific to Phased Projects

This section provides guidance for projects that are implemented in a phased approach.

4.8.1. Tiered Approvals at Multiple Scales

This section covers the scenario in which the Conceptual/Preliminary WQMP may be processed at a larger scale (e.g., a tract map) as part of discretionary approval. Subsequently, Final Project WQMPs may be processed for smaller planning areas or parcels within this overall project that was considered for discretionary approval. I this scenario, there would be multiple Final Project WQMPs within the project that was initial considered in the Conceptual Preliminary WQMP.

In any instance, each Final Project WQMP needs to stand alone and satisfy the respective portions of the overall project commitments that were considered as part of discretionary approval. Additionally, phased completion must always result that the overall project is in compliance with applicable criteria such that if a phased project was only partially completed, the completed portions would be in full compliance. The reviewing jurisdiction may impose additional requirements on phased projects to account for phasing issues.

The following guidelines apply to this case:

- Proposed LID and hydromodification BMPs must be demonstrated to comply with applicable criteria for the overall project at ultimate completion as well as at the time of

completion of each phase (i.e., the current phase plus previously completed phases). A tract-scale BMP planning approach could be used such that centralized LID and hydromodification BMP(s) serve multiple planning areas or parcels that are covered by individual Final Project WQMPs. If this approach is used, any centralized BMP needs to be constructed and verified operational with an executed maintenance agreement prior to occupancy and permit closeout of the first Final Project WQMP that relies on this system.

- The risk of sediment generation from the remaining tributary areas undergoing construction must be carefully considered; disturbed areas must be managed with applicable construction phase controls and routed separately during the construction phase such that no construction-phase stormwater enters the post-construction BMP.
- Where Final Project WQMP approval will occur at a finer scale than Conceptual/Preliminary WQMP approval, the quantity of BMPs attributable to each planning area or parcel must be defined in the Conceptual/Preliminary WQMP at the discretionary planning stage; this quantity of BMPs must be demonstrated to be provided in each Final Project WQMP for the respective planning area(s) or parcel(s) it covers.
- Where multiple phases will rely on a centralized facility, the maintenance funding mechanism must be adequate to provide O&M of the centralized facility even if all phases are not completed as planned.

4.8.2. Phased Completion of a Single Project

This section covers the scenario in which the Conceptual/Preliminary and Final Project WQMPs are prepared at the same scale, but portions of the project are proposed to be completed and placed into use prior to completion of the full project.

In any instance, the project needs to meet LID and hydromodification BMP requirements on a standalone basis at the time each portion of the project is placed into use such that if a phased project was only partially completed, the completed portions would be in full compliance. The reviewing jurisdiction may impose additional requirements on phased projects to account for phasing issues.

The following guidelines apply to this case:

- The proposed phase completion needs to be clearly defined in the Project WQMP.
- Proposed LID and hydromodification BMPs must be demonstrated to comply with applicable criteria for the overall project at ultimate completion as well as at the time of completion of each phase (i.e., the current phase plus previously completed phases).
- At the time of completion of each phase, the full suite of BMPs serving that phase must be completed and verified. The Final Project WQMP must identify the responsible parties for inspection and maintenance of BMPs during this interim condition. O&M activities must commence at the time post-construction BMPs are placed into service to serve the completed phase.

- Construction phase erosion and sediment must be managed with appropriate construction phase BMPs and must never be allowed to drain to completed post-construction BMPs that are serving completed phases.
- Where multiple phases will rely on a centralized facility, the maintenance funding mechanism must be adequate to provide O&M of the centralized facility even if all phases are not completed as planned.

4.8.3. Interim Uses During Construction Phase

This section covers the scenario in which planned interim uses of portions of the project have characteristics similar to final uses but that occur on a temporary basis as part of the construction phase of the overall project. For example, completion and showing of model homes on a portion of a site or completion of portions of the road network may have resemblance to final uses but occur on a temporary basis during the overall construction phase of the site.

Where a local jurisdiction requires that a certificate of use or occupancy is required to allow for the interim use to occur, then all post-construction BMPs serving the portion of the project must be placed into service and verified before this certificate of occupancy or use can be issued.

If a certificate of occupancy or use is not required for the interim uses to occur, the following guidelines apply to this case:

- Any proposed interim uses and time limits on these uses should be described in the planning and design documents considered as part of discretionary approval. An interim use should not be allowed on a perpetual basis.
- The construction phase stormwater pollution prevention plans should identify these interim uses and determine if specific construction phase BMPs are necessary to address potential water quality impacts associated with these uses. This should be verified by the permittee through a separate review process.
- Post-construction site design and source control BMPs should be put into service as part of the interim use, as applicable. In cases where LID or hydromodification BMPs serve the portion of the project proposed for the interim use (but not other areas undergoing construction), these BMPs should be put into service as part of the interim use.
- In no instance shall post-construction BMPs be placed into service that receive runoff from areas of the site undergoing construction.