

SECTION C-7

NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT

**PROGRAM EFFECTIVENESS ASSESSMENT
2013-14**





C-7.0 NEW DEVELOPMENT/SIGNIFICANT REDEVELOPMENT

C-7.1 Introduction (LIP Section A-7.1)

One of the most important responsibilities of the County is to provide a framework for decision making for the planning and permitting of new development and redevelopment within the County's jurisdiction. This framework ensures that both new development and redevelopment occur in an organized and orderly fashion that reflects the vision and needs of the community, assesses the environmental issues associated with the proposed changes and provides a regulatory framework to ensure that standards set by the County are implemented.

Following the adoption of the Fourth Term Permits, the County participated in an extensive stakeholder process to advance the land development program in Orange County. Section XII of Order R8-2009-0030 and Section F.1 of Order R9-2009-0002 aims to minimize the short and long-term impacts on receiving water quality from new developments and significant redevelopments by emphasizing the use of site design Best Management Practices (BMPs) and incorporating the concepts of Low Impact Development (LID) and hydromodification control early into the development planning process.

Several program documents were developed during this stakeholder process and include the following:

- **Model Water Quality Implementation Plan (Model WQMP)** - The purpose of the Model WQMP is to describe the process that Permittees will employ for developing a Project WQMP for individual new development and significant redevelopment projects (Project WQMP), which, when implemented will minimize the effects of urbanization on site hydrology, runoff flow rates or velocities and pollutant loads.
- **Project WQMP Template** - The Project WQMP Template provides the framework for developing a Conceptual/Preliminary or Project WQMP in compliance with the Fourth Term Permits within Orange County.
- **Technical Guidance Document (TGD)** - The TGD serves as a technical resource companion to the Model WQMP and the Project WQMP Template.
- **Model Watershed Infiltration and Hydromodification Master Plan (WIHMP)** [Santa Ana Region] - The WIHMP is intended to provide watershed-specific support for integrating water quality, hydromodification, water supply, and habitat protection issues as part of selecting and designing BMPs water quality control measures.
- **Hydromodification Master Plan (HMP)** [San Diego Region] - The HMP outlines hydrograph management approaches for Priority Development Projects that focus on managing runoff from a developed area in a manner that does not increase instability in a channel. The HMP is incorporated into each Permittee's local WQMP and implemented by each Permittee so that estimated post-project runoff discharge rates and durations shall not exceed pre-development discharge rates and durations.



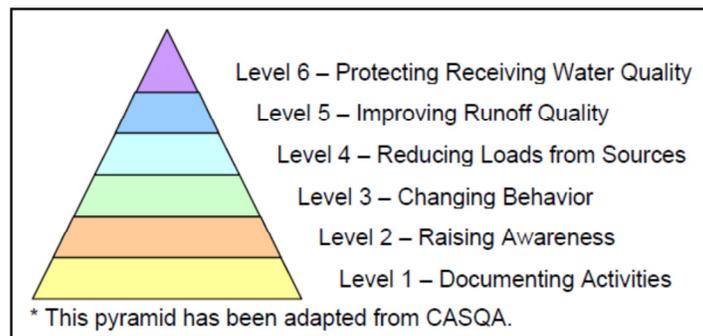
In the 2013-14 reporting period the following took place:

- The provisions of the Model WQMP for the San Diego Region went into effect on December 20, 2013;
- Technical errata to the Model WQMP and TGD were approved by the Santa Ana Regional Board on September 26, 2013 (note that the Model WQMP and TGD were previously approved by the Santa Ana Regional Board on May 19, 2011 and went into effect on August 17, 2011);
- Updated hydromodification susceptibility and infiltration feasibility mapping was conducted to further support the WIHMP and other watershed planning efforts.

Please see **Section C-3.2** of the 2013-14 Unified Report for a detailed update on the watershed mapping efforts.

Development and construction process guidance for public and private projects in the County's right-of-way or unincorporated communities can be found on the OC Planning - Community Development's website at <http://ocplanning.net/water>.

As described in detail in **Section C-2.5** of this PEA, the County utilizes the CASQA method of effectiveness assessment in order to demonstrate if program elements, activities, BMPs, etc., are resulting in desired outcomes. CASQA identifies six Outcome Levels (see pyramid below) and for each measure the County reports, the associated Outcome Level (more than one level may apply) is indicated by a colored triangle with a number:



C-7.2 Organization Structure (LIP Section A-7.2)

The key Service Areas and Divisions responsible for overseeing, implementing, and enforcing the new development/significant redevelopment program element have been identified in an organization chart in **Figure A-7.1** of the County's LIP.

C-7.3 General Plan Assessment and Amendment (LIP Section A-7.3)

In compliance with the Santa Ana and San Diego Region Fourth-Term MS4 permits and San Diego Regional MS4 Permit, the County has completed a review of its General Plan and related documents. In August 2013, the County of Orange General Plan and Zoning Code were



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updated to ensure that watershed protection principles and policies, including LID, are adequately included in the land use planning process. A summary of the updates can be found on the OC Watersheds website under "General Plan Updates" at the following link:

<http://prg.ocpublicworks.com/DocmgmtInternet/Download.aspx?id=1144>

C-7.4 Environmental Review Process (LIP Section A-7.4)

The environmental review processes, inclusive of planning procedures and CEQA document preparation, were examined during the 2009-10 reporting period to ensure that stormwater quality-related issues are properly considered and addressed. As detailed in **Section A-7.4.2** of its LIP, the County utilizes a customized CEQA Initial Study checklist to ensure that water quality and hydrologic impacts are addressed. The CEQA checklist is included as **Exhibit A-7.II** of the County's LIP.

C-7.5 Development Project Review, Approval and Permitting Process (LIP Section A-7.5)

C-7.5.1 Conditions of Approval

The following are the conditions of approval which apply to new development/significant redevelopment projects within the County's jurisdiction:

WQ01 Water Quality Management Plan

Prior to the issuance of any grading or building permits, the applicant shall submit for review and approval by the Manager, Permit Services, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. The applicant shall utilize the Orange County Drainage Area Management Plan (DAMP), Model WQMP, and Technical Guidance Manual for reference, and the County's WQMP template for submittal. This WQMP shall include the following:

- Detailed site and project description
- Potential stormwater pollutants
- Post-development drainage characteristics
- Low Impact Development (LID) BMP selection and analysis
- Structural and Non-Structural source control BMPs
- Site design and drainage plan (BMP Exhibit)
- GIS coordinates for all LID and Treatment Control BMPs
- Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for BMPs identified in the BMP Exhibit; (2) identifies the entity that will be responsible for long-term operation and maintenance of the referenced BMPs; and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced BMPs

The BMP Exhibit from the approved WQMP shall be included as a sheet in all plan sets submitted for plan check and all BMPs shall be depicted on these plans. Grading and building plans must be consistent with the approved BMP exhibit.



WQ02 Compliance with the NPDES Implementation Program

Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the County's NPDES Implementation Program in a manner meeting the satisfaction of the Manager, OC Inspection, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the BMP Exhibit from the project's approved WQMP have been implemented, constructed and installed in conformance with approved plans and specifications
- Demonstrate that the applicant has complied with all non-structural BMPs described in the project's WQMP
- Submit for review and approval an Operations and Maintenance (O&M) Plan for all structural BMPs (the O&M Plan shall become an attachment to the WQMP);
- Demonstrate that copies of the project's approved WQMP (with attached O&M Plan) are available for each of the initial occupants;
- Agree to pay for a Special Investigation from the County of Orange for a date twelve (12) months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan;
- Demonstrate that the applicant has recorded one of the following: 1) the CC&R's (that must include the approved WQMP and O&M Plan) for the project Home Owner's Association; 2) a water quality implementation agreement that has the approved WQMP and O&M Plan attached; or 3) the final approved Water Quality Management Plan (WQMP) and O&M Plan.

WQ04 Stormwater Pollution Prevention Plan

Prior to the issuance of any grading or building permits, the applicant shall demonstrate compliance with California's General Permit for Stormwater Discharges Associated with Construction Activity by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the subsequent notification of the issuance of a Waste Discharge Identification (WDID) Number; or other proof of filing in a manner meeting the satisfaction of the Manager, Permit Intake. Projects subject to this requirement shall prepare and implement a Stormwater Pollution Prevention Plan (SWPPP). A copy of the current SWPPP shall be kept at the project site and be available for County review on request.

WQ05 Erosion and Sediment Control Plan

Prior to the issuance of any grading or building permit, the applicant shall submit an Erosion and Sediment Control Plan (ESCP) in a manner meeting approval of the Manager, Permit Intake, to demonstrate compliance with the County's NPDES Implementation Program and state water quality regulations for grading and construction activities. The ESCP shall identify how all construction materials, wastes, grading or demolition debris, and stockpiles of soil, aggregates, soil amendments, etc. shall be properly covered, stored, and secured to prevent transport into local drainages or coastal waters by wind, rain, tracking, tidal erosion or dispersion. The ESCP shall also describe how the applicant will ensure that all BMPs will be



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maintained during construction of any future public right-of-ways. The ESCP shall be updated as needed to address the changing circumstances of the project site. A copy of the current ESCP shall be kept at the project site and be available for County review on request.

WQ06 Chemical Management

Prior to the issuance of building permits for any tank or pipeline, the uses of said tank or pipeline shall be identified and the applicant shall submit a Chemical Management Plan in addition to a WQMP with all appropriate measures for chemical management (including, but not limited to, storage, emergency response, employee training, spill contingencies and disposal) in a manner meeting the satisfaction of the Manager, Permit Intake, in consultation with the Orange County Fire Authority, the Orange County Health Care Agency and wastewater agencies, as appropriate, to ensure implementation of each agency's respective requirements. A copy of the approved "Chemical Management Plans" shall be furnished to the Manager, OC Inspection, prior to the issuance of any Certificates of Use and Occupancy.

WQ07 Industrial Facilities

For industrial facilities subject to California's General Permit for Stormwater Discharges Associated with Industrial Activity as defined by Standard Industrial Classification (SIC) Code.

Prior to grading or building permit close-out and/or the issuance of a certificate of use and occupancy, the applicant shall demonstrate that compliance with the permit has been obtained by providing a copy of the Notice of Intent (NOI) submitted to the State Water Resources Control Board and a copy of the notification of the issuance of a Waste Discharge Identification (WDID) Number or other proof of filing to the satisfaction of the Manager, OC Inspection.

WQ08 Hydromodification Criteria for Priority Projects in San Diego Region

Effective April 16, 2012, all priority projects located in the San Diego Region of the California Water Quality Control Board shall be subject to the "Hydromodification Control Requirements" set forth in South Orange County Hydromodification Plan (HMP).

Prior to issuance of grading or building permits, studies or reports that demonstrate one of the following shall be submitted to and approved by the Manager, Permit Intake:

- The project is exempt from the Criteria; or
- Compliance with HMP Criteria and Performance Standard (Section 4.1 of the HMP dated 10-25-12) adopted by the County of Orange.

C-7.5.2 Water Quality Management Plans (WQMPs)

Project WQMPs identify the water quality BMPs applicable to the project to address pollutants or conditions of concern. To assist project applicants with preparing project WQMPs and determining whether project is priority project or non-priority project, the County has made informational materials available at its Development Processing Center (DPC) and via its website (<http://ocplanning.net/water>). During this reporting period the County approved the following WQMPs:



WQMP Summary

4

| WQMP Summary | | Approved | Acres Covered |
|-----------------------|---------------------------------------|----------|---------------|
| Priority Projects | Final Project WQMP – Public Projects | 2 | 2.4 |
| | Final Project WQMP – Private Projects | 10 | 31.8 |
| Non-Priority Projects | Final Project WQP – Public Projects | 0 | 0 |
| | Final Project WQP – Private Projects | 17 | 15.2 |

C-7.5.3 Runoff Management Plans

In April 2014 the County approved a Community-wide ROMP for the Rancho Mission Viejo (RMV) Ranch Plan Planned Community located in an unincorporated area of South Orange County. The ROMP was developed by Rancho Mission Viejo to support the planning and design efforts for future development within the San Juan Creek Watershed. The primary focus of the RMV ROMP is to provide planning guidance for the appropriate stormwater mitigation measures that address flood protection, surface hydrology, water quality and stream stability within the project area.

C-7.5.4 Issuance of Building or Grading Permits

To ensure that all applicants for building or grading permits understand that there are minimum requirements for all construction sites, the County has compiled a NPDES informational packet that includes the following: Construction Runoff Guidance Manual, Instruction Manual for Erosion and Sediment Control Plans (ESCPs), sample BMPs and NPDES Inspection Requirements. During the planning application review process, the County applies conditions of approval that delineate the minimum BMPs that must be in place throughout the construction phase. Additionally, plans are required to include standard NPDES construction notes, BMPs from a final approved project WQMP and an Erosion and Sediment Control Plan (ESCP).

To ensure that all applicants for building or grading permits for sites of one acre or more (1) have submitted a Notice of Intent (NOI) to the State Water Resources Control Board, and (2) understand that a Stormwater Pollution Prevention Plan (SWPPP) must be completed and on-site before commencement of any construction activities, the County requires the submittal of a copy of a NOI application and WDID Number prior to permit issuance. Notification of this requirement is provided to applicants either during the planning application review process or during plan check. Conditions of approval regarding the SWPPP are applied to planning applications and delineate the requirements that must be met prior to permit issuance (**see Section C-7.5.1**). If no previous condition has been applied to the project, the applicants may be notified during plan check.



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C-7.5.5 Issuance of Encroachment Permits

An encroachment permit is required for all projects encroaching on or discharging to County right of way. These are typically projects that have been issued building/grading permits by another jurisdiction. To protect its storm- drain system and ensure that all DAMP/NPDES requirements are being followed during construction and after, the project applicant is required to provide, prior to permit issuance, evidence of compliance with the State General Construction NPDES Permit and the Fourth Term Permits (WQMP, TGD, and hydromodification requirements).

C-7.6 Water Quality Management Plan (WQMP) Preparation (LIP Section A-7.6)

The County has formulated the WQMP template to reflect the requirements specified in **Section A-7.6** of the LIP. The document is accessible via the County's OC Planning website. Along with the template, the County has provided additional guidance information described in **Section C-7.5.2** to make the WQMP process as clear as possible for applicants. The County's WQMP Template is customized to outline County requirements. Specifics such as the submittal process, the need to record a project WQMP and O&M Plan, and what should be shown on a Site Plan are all included in the template.

C-7.7 Post Construction BMP Inspection and Verification (LIP Section A-7.7)

The County requires condition of approval *WQ03, Compliance with the WQMP*, on all priority development/redevelopment projects (see **Section C-7.5.1**) which specifies recording and verification requirements for an approved project WQMP.

The County's post-construction BMP inventory is maintained through a web-based GIS integrated database system (CBI MS4 Web). The post construction inventory can be accessed at the following link and login information:

<http://www.ms4web.com/base/wbin/Structures.aspx?ns=36>

User Name: PEA
Password: ocMS4!

Structural BMP inspection and verification beyond the initial period of one year after completion of construction is addressed in **Section C-9.7**.

C-7.8 Training and Outreach (LIP Section A-7.8)

The County conducted the following training to assist responsible municipal staff in understanding the New Development/Redevelopment Program during the 2013-14 reporting period:

2013-14 Summary of Training



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| Subject of Training | Date | Departments | Attendees | Location |
|--|------------------------|---|-----------|--|
| WQMP Training for Program Managers (SDR) | October 2, 2013 | Various City Staff and OC Public Works (Presented by Geosyntec) | 33 | City of Laguna Niguel – Community Center |
| WQMP Training for Implementation Staff (SDR) | October 7 and 16, 2013 | Various City Staff and OC Public Works (Presented by Geosyntec) | 21 | City of Laguna Niguel – Community Center |
| WQMP Training for Implementation Staff (SDR) | October 8 and 15, 2013 | Various City Staff and OC Public Works (Presented by Geosyntec) | 26 | City of Laguna Niguel – Community Center |

C-7.9 New Development/Significant Redevelopment Program Modifications

On October 3, 2013, the County of Orange, Orange County Flood Control District and Santa Ana Region Permittees submitted the Report of Waste Discharge (ROWD) to both the US EPA and Santa Ana Regional Water Quality Control Board pursuant to the requirements of Section XXIII of Order No. R8-2009-0030 NPDES No. CAS618030. On May 20, 2014, the County of Orange, Orange County Flood Control District and San Diego Region Permittees submitted the Report of Waste Discharge (ROWD) to both the US EPA and San Diego Regional Water Quality Control Board pursuant to the requirements of Section K.2.b of Order No. R9-2009-0002 NPDES No. CAS0108740. Both the Santa Ana Region and San Diego Region ROWDs presented specific recommendations for the continuation and future development of the Orange County Stormwater Program based upon a consideration of the effectiveness of the Program and need for additional pollutant control initiatives.

The following recommendations from the Santa Ana Region ROWD relate to new development/ signification redevelopment:

- **Develop an integrated water resources approach element into the land planning/land development process.** The Permittees understand that an integrated water resources approach is needed to achieve the goals of water quality protection, water conservation, flood control, and stream protection. In order to achieve an integrated water resources approach the Permittees propose to integrate a water resources approach element into the land planning and land development processes so that as development projects begin entitlement this approach and opportunities to achieve this approach are evaluated.
- **Develop an internet based regional geodatabase.** To achieve an integrated water resources and watershed management approach access to information will be critical. The Permittees are developing an internet- based regional geodatabase to manage this information and provide access to developers, municipal staff, and regulatory staff to evaluate integrated water resource options and assist with WQMP development.



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- **Develop an internet based WQMP Submittal Tool and Database potentially in collaboration with Riverside and San Bernardino.** The Permittees spend a significant amount of time plan checking and tracking Project WQMPs and so the permittees propose development of an internet based Project WQMP review tool to streamline the submittal and review of WQMPs, allow for enhanced tracking of WQMPs and WQMP inspections, and help with effectiveness assessments and annual reporting.

The following recommendations from the San Diego Region ROWD relate to new development/ signification redevelopment:

- **Implement an approach to hydromodification management that is informed by a watershed analysis and channel-specific protection and restoration goals.** The Permittees understand that, consistent with current published research, a “one-size-fits- all” approach for hydromodification management is not appropriate for highly modified urban stream systems. Pending a comprehensive watershed analysis, land development projects discharging runoff to engineered channels, should not be required to implement hydromodification management controls.
- **Incorporate an IRWM element into the land planning/land development process.** The Permittees understand that an IRWM approach is needed to optimize attainment of water quality protection, water conservation, flood control, and stream protection goals. The Permittees therefore intend to incorporate an IRWM element into their land planning and land development processes so that as development projects begin entitlement this approach and opportunities to achieve this approach are evaluated. This recommendation will require a modified LID Hierarchy that establishes the equivalency of “On-site BMP” and “Off-Site /Regional BMP” solutions.
- **Create an exemption from Project WQMP requirements for steam and watershed restoration projects.**
- **Create an exemption for emergency public safety projects where delay would compromise public safety, public health and/or the environment.**
- **Develop an internet based regional geodatabase.** To effectively implement an IRWM and watershed management approach, access to information that describes all of the key hydrologic process and landscape characteristics will be critical. The Permittees are developing and starting to use an internet-based regional geodatabase to give developers and municipal staff access to the geotechnical and hydrologic information necessary for evaluating the application of the LID hierarchy to sites.

New development/signification redevelopment program recommendations included in both the Santa Ana Region and San Diego Region ROWDs include:

- **Pilot the use of technology to better track Project WQMP inspections and follow up actions needed.** To fully utilize the WQMP Submittal Tool and Database WQMP inspections could be performed with tablets or other devices where GIS information and other information can immediately be uploaded to the database. The Permittees propose piloting the use of tablets or other devices linked to the Database for Project WQMP inspections by a select number of cities.



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- **Enhance the data collected for WQMPs to have a better understanding of water quality benefits on an annual basis.** The Permittees desire to perform a better assessment of the New Development/Significant Redevelopment Program. In order to better understand the effectiveness of the program, the Permittees propose to collect new critical data elements, and enhance data quality by integrating information into the WQMP Submittal Tool and Database. New data would include volumes of water treated, land area treated, and other relevant information needed to evaluate TMDL compliance, to identify developed/redeveloped areas that meet LID and/or hydromodification requirements, and to track BMP maintenance as a measure of effectiveness.