

SECTION A-7

NEW DEVELOPMENT/REDEVELOPMENT COMPONENT



FOR THE COUNTY OF ORANGE
AND
THE ORANGE COUNTY FLOOD CONTROL DISTRICT



A-7.0 NEW DEVELOPMENT/REDEVELOPMENT

A-7.1 Introduction

One of the most important responsibilities of the County is to provide a decision making and approval processing framework for new development and redevelopment that occurs within the County's boundaries. This framework ensures that both 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.

The Third Term MS4 Permits required the County and other Permittees to initiate a comprehensive assessment of their planning and development processes with the intent of providing a greater focus on the protection of water bodies and a more rigorous application of BMPs in development and significant redevelopment projects. The County, as the Principal Permittee, coordinated the development of a model program to guide compliance with these requirements (see **DAMP, Section 7**).

The model program links BMP design, construction and operation to the earlier phases of project planning encompassed by the County's General Plan, environmental review process and development permit approval processes. The General Plan specifies policies that guide new development. The environmental review process examines impacts from proposed new development /significant redevelopment with respect to the General Plan policies and many environmental issues, including water quality, and includes consideration of mitigation measures to reduce any identified significant impacts.

The development permit approval process carries forward mitigation requirements in the form of conditions of approval, design specifications, tracking, inspection and enforcement actions. These three "front-end" planning processes must be coordinated and linked to the later phases of BMP design, construction and operation for new development/significant redevelopment to help ensure water quality protection features are planned, designed and evaluated in accordance with goals for the protection of water quality and other environmental resources.

The County has used this model program in forming the new development/significant redevelopment plan contained within this section of the LIP. Subsequent sections describe:

- The organization structure for new development/redevelopment in the County;
- The assessment of the County's General Plan and the need for amendment;
- The assessment of the County's CEQA environmental review process;
- The assessment of the County's development project review, approval and permitting process;
- The County's requirement for Water Quality Management Plan (WQMP) preparation;
- The County's program for post construction BMP inspection and verification;



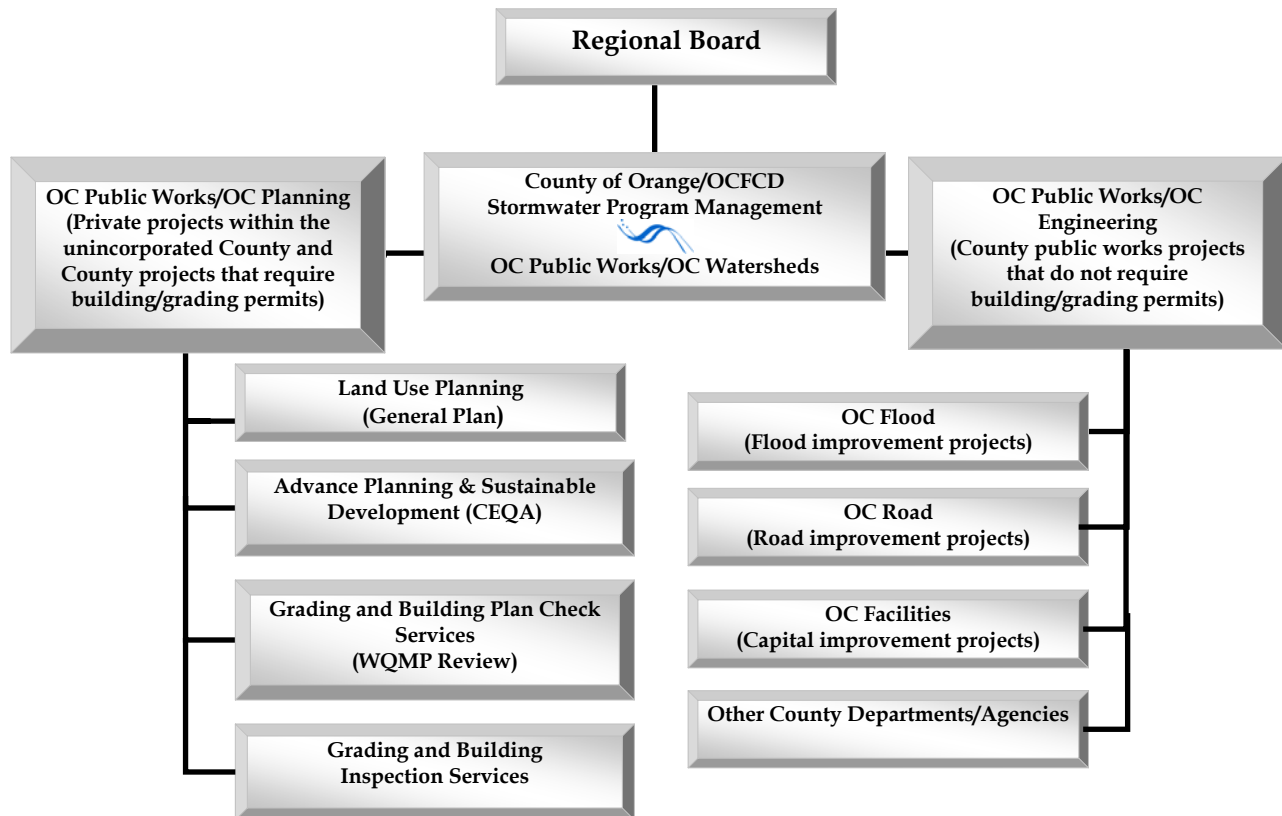
- Education and training programs; and,
- Program assessment.

It is important to note that this section of the County’s LIP will not be fully updated to meet the requirements of the Fourth Term MS4 Permits of Orange County until such time as the Model Water Quality Management Plan (Santa Ana Region) and Local Water Quality Management Plan (San Diego Region) are adopted for implementation. The Model WQMP is anticipated to be adopted in May of 2011 and the Local WQMP is anticipated to take effect some time in mid 2012.

A-7.2 Organization Structure

The key sections responsible for overseeing, implementing, and enforcing the new development/significant redevelopment program are identified in **Figure A-7.1**.

Figure A-7.1 New Development/Significant Redevelopment Program Management Organization Chart





The contact information below describes the County's key divisions in each of the various departments with responsibility for new development and redevelopment. The contact provided has the primary responsibility and oversight for ensuring that the program has been implemented. Additional information is provided under Program Management (**Section A-2**).

OC Planning

Address: 300 N. Flower Street, Santa Ana, CA 92703, Tel (714) 834-2300

General Plan Contact – Manager, Land Use Planning

CEQA Review Contact – Manager, Land Use Planning

Inspection Contact – Manager, OC Inspection

OC Planning is responsible for:

- Implementing the policies and objectives of the County set forth in the General Plan and Zoning Ordinance
- Reviewing proposed developments for consistency with the County's standards and policies relating to land use and preservation of the environment
- Overseeing that all building construction in unincorporated areas of the County for compliance with adopted codes, and that permitting systems are efficient and serve the needs of the public, as well as the County.

OC Public Works

Address: 300 N. Flower Street, Santa Ana, CA 92703, Tel (714) 834-2300

Public Works Projects Contact – Director, OC Public Works

OC Parks Projects Contact – Director, OC Parks

County Buildings Projects – Director, OC Facilities

OC Public Works is responsible for:

- Administration of County public improvement projects and ensuring construction in the public right-of-way complies with adopted codes and engineering standards.
- Administration of County building improvement projects and ensuring construction complies with adopted codes and engineering standards.



A-7.3 General Plan Assessment and Amendment

The County is required by the Santa Ana Region and San Diego Region Fourth Term MS4 Permits to minimize short and long-term impacts on receiving water quality from new development and significant redevelopment to the maximum extent practicable. The permits require at a minimum that the County's General Plan be reviewed and updated, as necessary, to ensure watershed and stormwater quality and quantity management are considered as specified in Section XII of the Santa Ana Region Fourth Term MS4 Permit and Section F.1 of the San Diego Region Fourth Term MS4 Permit.

To meet these Fourth Term MS4 Permit requirements, the County has undertaken the following actions:

1. Review of County's General Plan

The General Plan was reviewed during the reporting period to ensure that new requirements contained in the Fourth Term permits are adequately addressed. It was determined that a comprehensive update is needed and revisions should be made to several existing elements including Land Use, Resources and Transportation. A General Plan Amendment will be completed by December 2011 which will incorporate the principles of watershed protection and Low Impact Development into the County's General Plan.

A-7.4 CEQA Environmental Review Process

The County is required by the Santa Ana Region and San Diego Region Permits to minimize short and long-term impacts on receiving water quality from new development and redevelopment to the maximum extent practicable. The San Diego Region Fourth Term MS4 Permit (Section F.1.b) requires the County to "revise as needed its current environmental review processes to accurately evaluate water quality impacts and cumulative impacts and identify appropriate measures to avoid, minimize and mitigate those impacts for all development projects."

The results of this evaluation are presented in the sub-sections below.

A-7.4.1 Environmental Information Form

The current Environmental Information Form contained in Appendix H of the CEQA Guidelines (State of California Office of Planning and Research, March, 2010) contains questions about the potential environmental effects of the project and requires the submittal of specific information about the project design. The County has developed a discretionary approval application package to ensure submittal of all of this fundamental information. In addition, the County developed its own version of the Environmental Information Form, which is part of the application package and includes questions that request the following: 1) Expected percent change in pervious surface area of the site; and 2) Submittal of a preliminary Conceptual Water Quality Management Plan (Conceptual WQMP), if applicable, (along with



required submittal of other development plans). The Project Environmental Information Form is included as **Exhibit A-7.I**.

A-7.4.2. Initial Study Checklist

The current Initial Study Checklist contained in Appendix G of the CEQA Guidelines (State of California Office of Planning and Research, March 2010) has been updated and is used by the County in its environmental review process. This Checklist contains the following considerations under the environmental impact category "Hydrology and Water Quality" (State Section IX, County Section 9) with respect to whether the project would:

- a) Violate any water quality standards or waste discharge requirements?
- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted.
- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?
- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site
- e) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?
- f) Otherwise substantially degrade water quality?
- g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?
- h) Place within a 100-year flood hazard area structures that would impede or redirect flood flows?
- i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?
- j) Inundation by seiche, tsunami, or mudflow?

The County has also added the following question to the "Hazards and Hazardous Materials" (Section 8) checklist:

- Would the project include new or retrofitted stormwater treatment control Best Management Practice (BMP), (e.g. water quality treatment basin, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors and odors)?



To support awareness of the Fourth Term MS4 Permit considerations described earlier, the County will take the following additional actions:

- Provide the CEQA Initial Study Checklist and training to staff regarding its use in preparing and reviewing CEQA documents for internal County projects and when reviewing CEQA documents prepared by the private sector.
- Distribute the CEQA Initial Study Checklist to consultants and other members of the private sector for use in preparing CEQA documents for private and public sector projects.
- Provide the CEQA Initial Study Checklist to project applicants during the CEQA preliminary review process.

A-7.4.3 Guidance for Preparing and Reviewing CEQA Initial Studies and Environmental Impact Reports (EIRs)

The guidance provided in the **DAMP, Section 7, Exhibit 7.I** will be considered by the County in evaluating the CEQA Initial Study checklist questions in Section 8, Hydrology and Water Quality (Appendix G of the CEQA Guidelines, State of California Office of Planning and Research, March 2010). This guidance will also be considered during the review and preparation of CEQA documents including negative declarations, mitigated negative declarations and environmental impact reports.

The guidance will be reviewed annually in conjunction with the other Permittees, updated as needed, and its status/use will be discussed in the Annual Progress Report.



A-7.5 Development Project Review, Approval and Permitting

A-7.5.1 Project Review, Approval, and Permitting Process Overview

During project review, approval, and permitting, the County shall require new development and significant redevelopment projects to address the quality and quantity of stormwater runoff through the incorporation of permanent (post-construction) BMPs in project design. The County shall require project-specific Water Quality Management Plans (WQMPs) for all private and public projects that:

- Qualify as one of the Priority Project Categories listed in **Figure A-7.2**
- Do not qualify as one of the Priority Project Categories but meet one of the following criteria:
 - Require discretionary action that will include a precise plan of development, except for those projects specified by the County's Water Quality Ordinance
 - Require issuance of a non-residential plumbing permit, where a non residential plumbing permit is defined as a plumbing permit authorizing the construction and installation of facilities for the conveyance of liquids other than stormwater, potable water, reclaimed water or domestic sewage (see Water Quality Ordinance Section A-4).

The WQMP contains all the information specified for the Standard Urban Stormwater Mitigation Plan (SSMP) in the San Diego Region Fourth Term MS4 Permit and should for purposes of compliance with that permit be considered to be a SSMP.

New development and significant redevelopment projects requiring a WQMP will be categorized by the County as either a Priority Project or a Non-Priority Project. The primary difference between a Priority Project and a Non-Priority Project is that Priority Projects will be required to include Treatment Control BMPs in project design. The detailed requirements for preparation of a WQMP are included in **Section A-7.6** and a template for preparing a WQMP is provided as **Exhibit A.7.IV**.

"Significant Redevelopment" in the Santa Ana Regional Board area means:

Development that would create or add 5,000 square feet or more of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to:

- *Expansion of a building footprint*
- *Addition of a building and/or structure*
- *Addition of an impervious surface that is not part of a routine maintenance activity such as construction of a new parking lot*
- *Replacement of impervious surfaces, buildings and/or structures when 5000 or more square feet of soil is exposed during replacement construction. Replacement does not include routine maintenance activities, trenching and resurfacing associated with utility work, resurfacing and reconfiguring the surface of parking lots (unless 5000 or more square feet of impervious surface*



is added to the existing parking lot area) or reconfiguration of pedestrian ramps and replacement of damaged pavement.

Where the significant redevelopment results in an increase of less than fifty percent of the impervious surface of a previously existing development, the treatment requirements apply only to the addition, and not to the entire development. In this circumstance, the County will work with the project proponent ways by which Treatment Control BMPs can be provided for the entire site (or a greater percentage of the site), consistent with the overall pollution reduction goals of the Third Term Permits and DAMP, of which this LIP is a part.

Where the significant redevelopment results in an increase of fifty percent or more of the impervious surface of a previously existing development, the treatment requirements apply to the entire development.

“Significant Redevelopment” in the San Diego Regional Board area means:

Development that would create or add at least 5,000 square feet of impervious surfaces on an already developed site. Significant redevelopment includes, but is not limited to:

- *Expansion of a building footprint*
- *Addition to or replacement of a structure*
- *Replacement of an impervious surface that is not part of a routine maintenance activity*
- *Land disturbing activities related with structural or impervious surfaces.*

Replacement of impervious surfaces includes any activity that is not part of a routine maintenance activity where impervious material(s) are removed, exposing underlying soil during construction. Significant redevelopment does not include trenching and resurfacing associated with utility work; resurfacing and reconfiguring surface parking lots; new sidewalk construction, pedestrian ramps, or bike lane on public and private existing roads; and replacement of damaged pavement.

Significant Redevelopment projects may fall into one of several categories:

- *Following redevelopment, the entire development (including the redeveloped area) would meet one of the Project Priority categories listed in **Figure A-7.2**. The project would be considered a Priority Project and require a WQMP including treatment controls. Where the significant redevelopment results in an increase of less than fifty percent of the impervious surface of a previously existing development, and the existing development was not subject to WQMP requirements, the treatment requirements apply only to the addition, and not to the entire development.*
- *Following redevelopment, the entire development (including the redeveloped area) would not meet one of the Project Priority categories listed in **Figure A-7.2**, but would require discretionary action that will include a precise plan of development, or require issuance of a non-residential plumbing permit. The project would be considered a Non-Priority Project and require a WQMP but would not require treatment controls.*
- *The redevelopment activity would not result in a Priority Project and would not require discretionary action that will include a precise plan of development or issuance of a non-residential plumbing permit. The project would not require a WQMP.*

The County shall require project applicants to submit a WQMP at one or both points in the project planning and permitting stage:



- During the discretionary approval process (land use permit) of a proposed project, when the County must exercise judgment or deliberation in order to approve or disapprove a new development or significant redevelopment project, or
- During the ministerial approval process of issuing a grading, building, demolition, or similar "construction" permits in which only fixed standards or objective measures are applied.

A-7.5.2 Public Agency Projects

The County intends to incorporate the requirement for a WQMP into the process of planning, design, approval, and construction oversight of its public agency projects. Depending upon the type of public agency project being planned or designed, the OC Public Works, OC Parks or OC Facilities project designer/engineer or their design architect/engineering contractors will prepare the WQMP for a public facility project.

The County will not require a WQMP for public agency projects consisting of routine maintenance or emergency construction activities required to protect public health and safety; interior remodeling with no outside exposure of construction materials or construction waste to stormwater; mechanical permit work; electrical permit work; and sign permit work.

The categories of Priority Projects are listed in **Figure A-7.2**. Although the County does not plan and design some of these categories of projects per se, some public agency projects may have similar functions or characteristics or may conduct similar activities after construction is completed. Therefore, some of the County's public agency projects will be considered Priority Projects requiring Treatment Control BMPs.

For example, a new corporation yard may include a vehicle and equipment maintenance facility, which is very similar to an automotive repair shop. A new civic center or library may be considered a Priority Project since it is very similar in its characteristics to a commercial office building. A new senior citizens center or a jail may have a cafeteria, which is very similar to a restaurant, and, therefore may be categorized as a Priority Project.

For other public agency projects that are not Priority Projects, the County may decide on a project specific basis not to require a WQMP, but may elect instead to require that all routine structural source control BMPs applicable to the project features be identified and included in the project, and Site Design BMPs be considered where applicable. Project types include, but are not limited to:

- Parks and recreation facilities
- Public buildings
- Streets and roadways
- Above ground drainage facilities (e.g. channels, basins)

A-7.5.3 Conditions of Approval



The County has reviewed its standard conditions of approval to ensure that the existing standard conditions are not in conflict with any provisions of the Santa Ana and San Diego Region Permits, the DAMP, California's General Permit for Stormwater Discharges Associated with Construction Activity, California's General Permit for Stormwater Discharges Associated with Industrial Activity and adopted Total Maximum Daily Load (TMDL) allocations that apply to the County.

The County shall utilize the following standard conditions of approval to protect receiving water quality from the short-term and long-term impacts of new development and redevelopment:

General Conditions

The following conditions will be applied by the County to the projects identified in A-7.5.1:

- **(WQ01) Project Water Quality Management Plan**

Prior to the issuance of any grading or building permit, the applicant shall submit for review and approval of the Manager, Inspection Services Division, a Water Quality Management Plan (WQMP) specifically identifying Best Management Practices (BMPs) that will be used onsite to control predictable pollutant runoff. This WQMP shall identify, at a minimum, the routine structural and non-structural measures specified in the current Drainage Area Management Plan (DAMP). The WQMP must also:

- Address Site Design BMPs (as applicable) such as minimizing impervious areas, maximizing permeability, minimizing directly connected impervious areas, creating reduced or "zero discharge" areas, and conserving natural areas.
- Incorporate the applicable Routine Source Control BMPs as defined in the DAMP.
- Include an Operation and Maintenance (O&M) Plan that identifies the mechanism(s) by which long-term O&M of all structural BMPs will be provided.
- Include GIS coordinates for all structural BMP(s); Be incorporated into all subsequent grading and building permits submitted for plan check. 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) WQMP for Priority Projects**

For those designated "Priority projects" as determined by the Manager, Inspection Services Division or designee.

Prior to the issuance of any grading or building permit, the applicant shall include in the WQMP the following additional Priority Project information in a manner meeting the approval of the Manager, Inspection Services Division:

- Include post-construction structural Treatment Control BMP(s) as defined in the DAMP;
- GPS coordinates for the location of all Treatment Control BMP(s);



- For applicants relying on Regional Treatment Controls, discuss applicable regional water quality and/or watershed program;
- Include an Operation and Maintenance (O&M) Plan that (1) describes the long-term operation and maintenance requirements for the post-construction Treatment Control BMP(s); (2) identifies the entity that will be responsible for the long-term operation and maintenance of the referenced Treatment Control BMP(s); and (3) describes the mechanism for funding the long-term operation and maintenance of the referenced Treatment Control BMP(s).

▪ **(WQ03) Compliance with the WQMP**

Prior to the issuance of a certificate of use and occupancy, the applicant shall demonstrate compliance with the WQMP in a manner meeting the satisfaction of the Manager, Inspection Services Division, including:

- Demonstrate that all structural Best Management Practices (BMPs) described in the WQMP have been implemented, constructed and installed in conformance with approved plans and specifications;
- Demonstrate that 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 incoming occupants;
- Agree to pay for a Special Investigation from the County or Orange for a date twelve (12) months after issuance of a Certificate of Use and Occupancy for the project to verify compliance with the approved WQMP and O&M Plan; and
- Demonstrate that the applicant has agreed to and 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 Operations and Maintenance (O&M) Plan.

▪ **(WQ04) Stormwater Pollution Prevention Plan**

For projects subject to California's General Permit for Stormwater Discharges Associated with Construction Activity.

Prior to the issuance of any grading or building permits, the applicant shall demonstrate compliance under California's Construction General Permit (CGP) for Stormwater Discharges Associated with Construction Activity by providing a printed copy of the Notice of Intent Certification from the State Water Resources Control Board (SWRCB) Stormwater Multi Application and Report Tracking System (SMARTS) database. Projects subject to this requirement shall comply with all provisions of Order No.2009-0009-DWQ (CGP).



- **(WQ05) Erosion and Sediment Control Plan**

Prior to the issuance of any grading or building permit, the applicant shall submit a 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 BMP's will be 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) Drainage Facilities**

Prior to issuance of grading or building permits, drainage studies that demonstrate the following shall be submitted to and approved by Manager, Subdivision & Grading:

1. All surface runoff and subsurface drainage directed to the nearest acceptable drainage facility, via sump pumps if necessary, as determined by the Manager, Subdivision & Grading.
2. Drainage facilities discharging onto adjacent property shall be designed to imitate the manner in which runoff is currently produced from the site and in a manner meeting the satisfaction of the Manager, Building Permit Services. Alternatively, the project applicant may obtain a drainage acceptance and maintenance agreement, suitable for recordation, from the owner of said adjacent property. All drainage facilities must be consistent with the County of Orange Grading Ordinance and Drainage Manual.

- **(WQ08) 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 coverage under 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, Inspection Services.

▪ **(WQ09) Interim Hydromodification Criteria for Priority Projects in San Diego Region**

Effective December 16, 2010, all priority projects located in the San Diego Region of the California Water Quality Control Board shall be subject to the "Interim Hydromodification Criteria" set forth in Order No. R9-2009-0002.

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:

1. The project is exempt from the Criteria; or
2. Compliance with the "Interim Hydromodification Criteria" contained in this Order and requirements of the "Interim Hydromodification" program adopted by the County of Orange.

A-7.5.4 Review and Approval of WQMPs

The requirements for preparation of a WQMP are described in **Section A-7.6**. The County shall require all new development and significant redevelopment private projects that meet the minimum requirements described in **Sections A-7.5.1 and A-7.5.2** to select appropriate permanent (post-construction) non-structural and structural BMPs, prepare a project-specific WQMP, and submit the WQMP for review and approval. Prior to issuance of grading or building permits, the County shall require the project applicant to have an approved final WQMP. The County will require public projects that are considered Priority Projects to complete a WQMP as part of the design review, and Non-Priority Projects to identify and include all applicable routine structural and non-structural source control BMPs and consider site design BMPs in the project.

The County shall utilize a checklist to document the identification of a project as a Priority Project or as a Non-Priority Project. A checklist to be used by the County for categorizing new development and significant redevelopment projects as Priority or Non-Priority is shown in **Figure A-7.2**.



Figure A-7.2. Checklist for Categorizing Development and Significant Redevelopment¹ Projects as Priority or Non-Priority

| Priority Projects Categories (Unless otherwise indicated, listed requirements apply equally to both the Santa Ana and San Diego Regions.) | Yes | No |
|--|------------|-----------|
| <p>1. <i>Both Permit Areas</i> –New development projects that create 10,000 square feet or more of impervious surface (collectively over the entire project site). This category includes commercial, industrial, residential, mixed-use, and public projects on private, or public, property that falls under the planning and building authority of the Permittees.</p> <p><i>San Diego Region only</i> – All pollutant generating development or redevelopment projects that result in the disturbance of one acre or more of land will be considered Priority Projects starting December 16, 2012.</p> | | |
| <p>2. Automotive repair shops. This applies to facilities that are categorized in any one of the following Standard Industrial Classification (SIC) codes 5013, 5014, 5541, 7532-7534, and 7536-7539.</p> | | |
| <p>3. <i>Both Permit Areas</i> – Restaurants where the land area of development is 5,000 square feet or more including parking area. This category is defined as facilities that sell prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812), where the land area for development is greater than 5,000 square feet.</p> <p><i>San Diego Region only</i> – Restaurants where land development is less than 5,000 square feet shall meet all WQMP requirements except for structural treatment control BMP/LID, and hydromodification.</p> | | |
| <p>4. Hillside development that creates greater than 5,000 square feet of impervious surface. Hillside development is defined as any development which is located in an area with known erosive soil conditions or where the development will grade on any natural slope that is twenty-five (25) percent or greater.</p> | | |
| <p>5. <i>Both Permit Areas</i> – Impervious surface of 2,500 square feet or more located within, directly adjacent to (within 200 feet), or discharging directly into receiving waters within Environmentally Sensitive Areas.</p> <p><i>San Diego Region only</i> – or a project with an increase in impervious area by 10% or more of its naturally occurring condition located within, directly adjacent to (within 200 feet), or discharging directly to receiving waters within Environmentally Sensitive Areas.</p> | | |
| <p>6. <i>Both Permit Areas</i> – Parking lots 5,000 square feet or more including associated drive aisle, and potentially exposed to urban stormwater runoff. A parking lot is defined as a land area or facility for the temporary parking or storage of motor vehicles used personally, for business, or for commerce.</p> <p><i>San Diego Region only</i> – or parking lots with 15 parking spaces or more and potentially exposed to runoff.</p> | | |
| <p>7. <i>Streets, roads, highways, and freeways</i> - This category includes any paved surface that is 5,000 square feet or greater used for the transportation of automobiles, trucks, motorcycles, and other vehicles. (see discussion under Section 7.II –1.6).</p> | | |

Priority Project: Any question answered “YES.”

Non-Priority Project: All questions are answered “NO.”



Although both Priority and Non-Priority projects require the preparation of a WQMP, the scope of the WQMP differs. The WQMP for a Priority Project must address:

- Regional or watershed programs (if applicable) – Santa Ana Regional Board area only
- Site design BMPs (as appropriate)
- Routine structural and non-structural BMPs,
- Treatment Control BMPs
- Interim Hydromodification Controls – San Diego Regional Board area only
- The mechanism(s) by which long-term operation and maintenance of all structural BMPs will be provided.

The WQMP for a Non-Priority Project must address:

- Routine structural and non-structural BMPs,
- Site design BMPs (as appropriate), and
- The mechanism(s) by which long-term operation and maintenance of all structural BMPs will be provided.

To assure thorough and consistent reviews of WQMPs, the County will utilize the checklist provided in **Exhibit A-7.III** as its initial tool in reviewing WQMPs and approve in writing appropriately completed WQMPs.

When reviewing WQMPs submitted for approval, the County will assess the potential project impacts on receiving waters and ensure that the WQMP adequately identifies such impacts. The County will examine all identified BMPs, as a whole, to ensure that they address the pollutants and conditions of concern identified in the WQMP.

The County recognizes the importance of understanding the physical, chemical and biological conditions of the receiving waters at a watershed scale and the impact of incremental projects on these conditions and will continue to enlarge its understanding of receiving waters on a watershed scale through implementation of the watershed chapters of the DAMP. This information will assist in providing a strong linkage between the planning process (**DAMP Sections 7.4 and 7.5 and Exhibit 7.I**) and the development review and permitting process (**DAMP Section 7.6**) as required by the Fourth Term MS4 Permits

The Permittees have initiated watershed-scale assessments in some watersheds for watershed restoration and TMDL purposes, including modeling and other types of evaluations, and will continue efforts to provide forecasting tools that protect water resources from the impacts of new development and significant redevelopment.

A-7.5.5 Plan Check: Issuance of Grading or Building Permits

The construction plans submitted by the applicant for plan check must incorporate all of the structural BMPs identified in a project's WQMP.

*General or Special Notes for Plan Sheets*

Prior to the issuance of a grading or building permit, the County shall require the permit applicant to include the following as general or special notes on the plan sheets for new development or significant redevelopment projects:

1. In the case of emergency, call _____
at Work Phone # _____
or Home Phone # _____.
2. Sediment from areas disturbed by construction shall be retained on site using structural controls to the maximum extent practicable.
3. Stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
4. Appropriate BMP's for construction-related materials, wastes, spills shall be implemented to minimize transport from the site to streets, drainage facilities, or adjoining properties by wind or runoff.
5. Runoff from equipment and vehicle washing shall be contained at construction sites unless treated to reduce or remove sediment and other pollutants.
6. All construction contractor and subcontractor personnel are to be made aware of the required best management practices and good housekeeping measures for the project site and any associated construction staging areas.
7. At the end of each day of construction activity all construction debris and waste materials shall be collected and properly disposed in trash or recycle bins.
8. Construction sites shall be maintained in such a condition that an anticipated storm does not carry wastes or pollutants off the site. Discharges of material other than stormwater only when necessary for performance and completion of construction practices and where they do not: cause or contribute to a violation of any water quality standard; cause or threaten to cause pollution, contamination, or nuisance; or contain a hazardous substance in a quantity reportable under Federal Regulations 40 CFR Parts 117 and 302.
9. Potential pollutants include but are not limited to: solid or liquid chemical spills; wastes from paints, stains, sealants, glues, limes, pesticides, herbicides, wood preservatives and solvents; asbestos fibers, paint flakes or stucco fragments; fuels, oils, lubricants, and hydraulic, radiator or battery fluids; fertilizers, vehicle/equipment wash water and concrete wash water; concrete, detergent or floatable wastes; wastes from any engine/equipment steam cleaning or chemical degreasing and super chlorinated potable water line flushing.

During construction, permittee shall dispose of such materials in a specified and controlled temporary area on-site, physically separated from potential stormwater runoff, with ultimate disposal in accordance with local, state and federal requirements.



10. Dewatering of contaminated groundwater, or discharging contaminated soils via surface erosion is prohibited. Dewatering of non-contaminated groundwater requires a National Pollutant Discharge Elimination System Permit from the respective State Regional Water Quality Control Board.
11. Graded areas on the permitted area perimeter must drain away from the face of slopes at the conclusion of each working day. Drainage is to be directed toward desilting facilities.
12. The permittee and contractor shall be responsible and shall take necessary precautions to prevent public trespass onto areas where impounded water creates a hazardous condition.
13. The permittee and contractor shall inspect the erosion control work and insure that the work is in accordance with the approved plans.
14. The permittee shall notify all general contractors, subcontractors, material suppliers, lessees, and property owners: that dumping of chemicals into the storm drain system or the watershed is prohibited.
15. Equipment and workers for emergency work shall be made available at all times during the rainy season. Necessary materials shall be available on site and stockpiled at convenient locations to facilitate rapid construction of temporary devices when rain is imminent.
16. All removable erosion protective devices shall be in place at the end of each working day when the 5-Day Rain Probability Forecast exceeds 40%.
17. Sediments from areas disturbed by construction shall be retained on site using an effective combination of erosion and sediment controls to the maximum extent practicable, and stockpiles of soil shall be properly contained to minimize sediment transport from the site to streets, drainage facilities or adjacent properties via runoff, vehicle tracking, or wind.
18. Appropriate BMPs for construction-related materials, wastes, spills or residues shall be implemented and retained on site to minimize transport from the site to streets, drainage facilities, or adjoining property by wind or runoff.

Plan Check for Private Projects

For projects with entitlements, the County shall review the conditions of approval and the submitted WQMP for an understanding of the water quality issues and structural BMPs required. The County shall review construction plans for conformity with the project's WQMP. No grading or building permits are issued prior to approval of the WQMP. If the selected BMPs were approved in concept during the land use entitlement process, the County shall require the applicant to submit detailed construction plans showing locations and design details of all BMPs that are in substantial conformance with the preliminary approvals. The County shall review a project's construction plans to assure that the plans are consistent with the BMP design criteria and guidance provided in **DAMP Section 7, Exhibit 7.II**.



Plan Check for Projects with By-Right Zoning (Ministerial Projects)

For projects with by-right zoning or projects that do not need discretionary review but are required to prepare a WQMP, the County shall first review the project's proposed WQMP for conformity with the requirements described in **DAMP Section 7.7** and **DAMP Section 7, Exhibit 7.II**. The WQMP shall then be used in reviewing the construction plans for consistency with the BMP design criteria and guidance provided in **DAMP Section 7, Exhibit 7.II**.

Design Review for Public Agency Projects

Prior to initiating grading or construction activities, the County shall ensure that the construction plans for its public works projects reflect the structural BMPs described in the project's approved final WQMP. In conducting the design review process for its public agency projects, the County shall review the construction plans and specifications for conformity with the approved final WQMP and for consistency with the BMP design criteria and guidance provided in **DAMP Section 7, Exhibit 7.II**.

*Plan Check for Projects with Alternative Treatment Control BMPs (i.e., BMPs not found in **DAMP Section 7, Table 7-11-6, See DAMP Section 7, Exhibit 7.II Section 3.3.3.**)*

If an applicant elected to utilize Alternative Treatment Control BMPs in a project's construction plans, the County shall require the project's engineer of record to certify that the Alternative Treatment Control BMPs are equally or more effective in pollutant reduction than comparable BMPs found in the Model WQMP.

A-7.5.6 Permit Closeout, Certificates of Use and Certificates of Occupancy

Private Sector Projects

The WQMP continues with the property (it "runs with the land") after the completion of the construction phase and the County requires 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. The end of the construction phase therefore represents a transition from the New Development/Redevelopment Program to the Existing Development Program (**Section A-9**). Accompanying this is a close out of permits and issuance of certificates of use and occupancy. The County will use this juncture to assure satisfactory completion of all conditions applied to the projects and all requirements in the WQMP by requiring the applicant to:

- Demonstrate that all structural BMPs described in the project's WQMP have been constructed and installed in conformance with approved plans and specifications;
- Prepare and submit for review and approval an O&M Plan for all structural BMPs;
- Demonstrate that the WQMP and the Operations and Maintenance (O&M) Plan have been recorded with the Orange County Clerk-Recorder;



- Agree to pay for an inspection twelve (12) months after the issuance of a Certificate of Use and Occupancy for the project to verify compliance with the WQMP and O&M Plan;
- Demonstrate that an adequate number of copies of the WQMP are available onsite; and,
- For industrial facilities subject to California's General Permit for Stormwater Discharges Associated with Industrial Activity as defined by Standard Industrial Classification (SIC) code, demonstrate that coverage 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.

The O&M Plan for structural BMPs that is prepared by the applicant for private sector projects shall include:

- Description of structural BMPs;
- Description of employee responsibilities and training for BMP operation and maintenance;
- Operating schedule;
- Inspection/maintenance frequency and schedule;
- Specific maintenance activities;
- Required permits from resource agencies, if any;
- Forms to be used in documenting maintenance activities; and,
- Recordkeeping requirements (at least 5 years).

At a minimum, the County shall require the annual inspection and maintenance of all structural BMPs including inspection and performance of any required maintenance in the late summer/early fall, prior to the start of the rainy season.

Following satisfactory inspection, those structural BMPs proposed during the planning process to be within County right-of-ways, or on land to be dedicated to County ownership will be offered for acceptance. Upon acceptance, responsibility for operation and maintenance will transfer from the developer or contractor to the appropriate County department, including the funding mechanism identified in the project's approved WQMP.

If a property owner or a private entity, such as a homeowners association (HOA), retains or assumes responsibility for operation and maintenance of structural BMPs, the County shall require access for inspection through an agreement. If the County will be responsible for operating and maintaining structural BMPs on private property, an easement will be established to allow for entry and proper management of the BMPs. Such access easements shall be binding throughout the life of the project, or until the BMPs requiring access are acceptably replaced with a BMP not requiring access. Funding for the long-term operation and maintenance of structural BMPs transferred to the County will be front-funded or



otherwise guaranteed via mechanisms such as approved assessment districts, or other funding mechanisms.

Public Agency Projects

For the County's public agency projects, upon completion of construction when contract close-out occurs the responsibility for operation and maintenance of the structural BMPs will transfer from the contractor to the appropriate County department and become part of the Municipal Activities Program (**Section A-5**). The County has the authority to approve the transfer of structural BMPs to any other public entity within its jurisdiction and shall negotiate satisfactory operation and maintenance standards with the public agencies accepting the operation and maintenance responsibilities. Alternatively, the responsibility for the operation and maintenance of structural BMPs may be transferred to a private entity through contracts or lease agreements. In any such transfer agreement, the County shall be identified as a third-party beneficiary empowered to enforce maintenance agreements.



A-7.6 Water Quality Management Plan (WQMP) Preparation

In accordance with the requirements in the Development Project Review, Approval and Permitting process described previously, the County will require WQMPs to be prepared using the guidelines set forth in **DAMP Section 7** and the model WQMP **DAMP Section 7, Exhibit 7.II**, and the submittal template provided as **Exhibit A-7.IV** of this LIP. Elements of WQMP development are illustrated in the following figures:

Figure A-7.3
Development Planning and WQMP Preparation Steps for the Santa Ana Regional Board Area

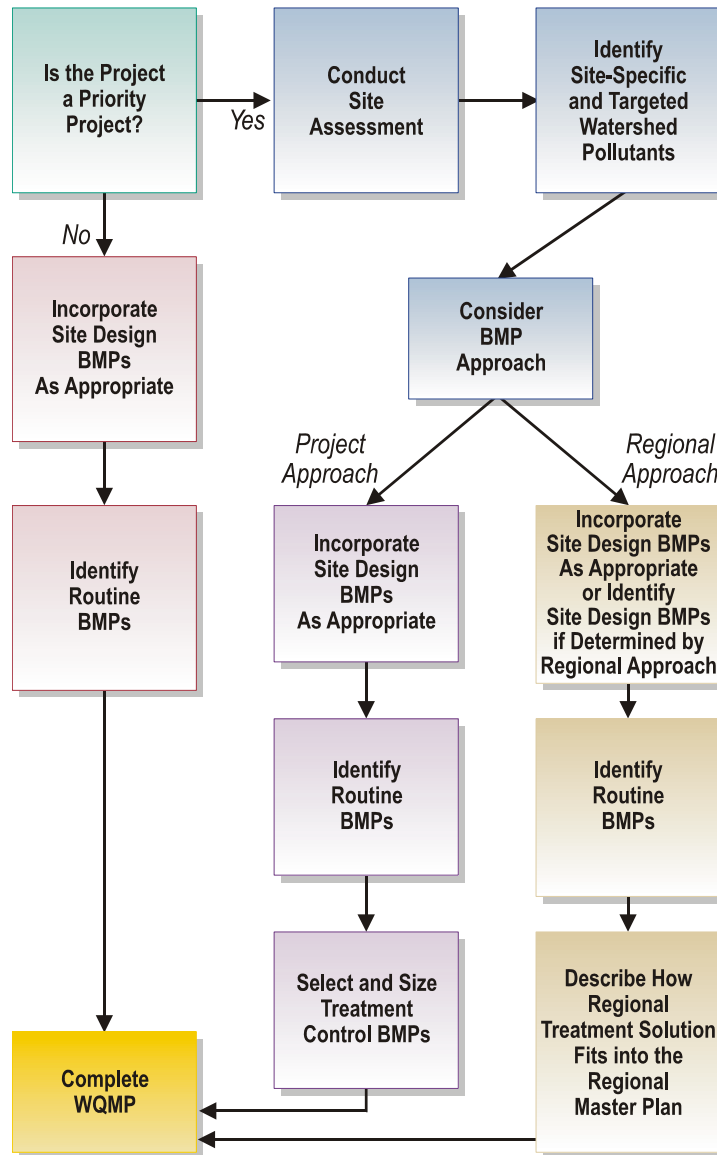
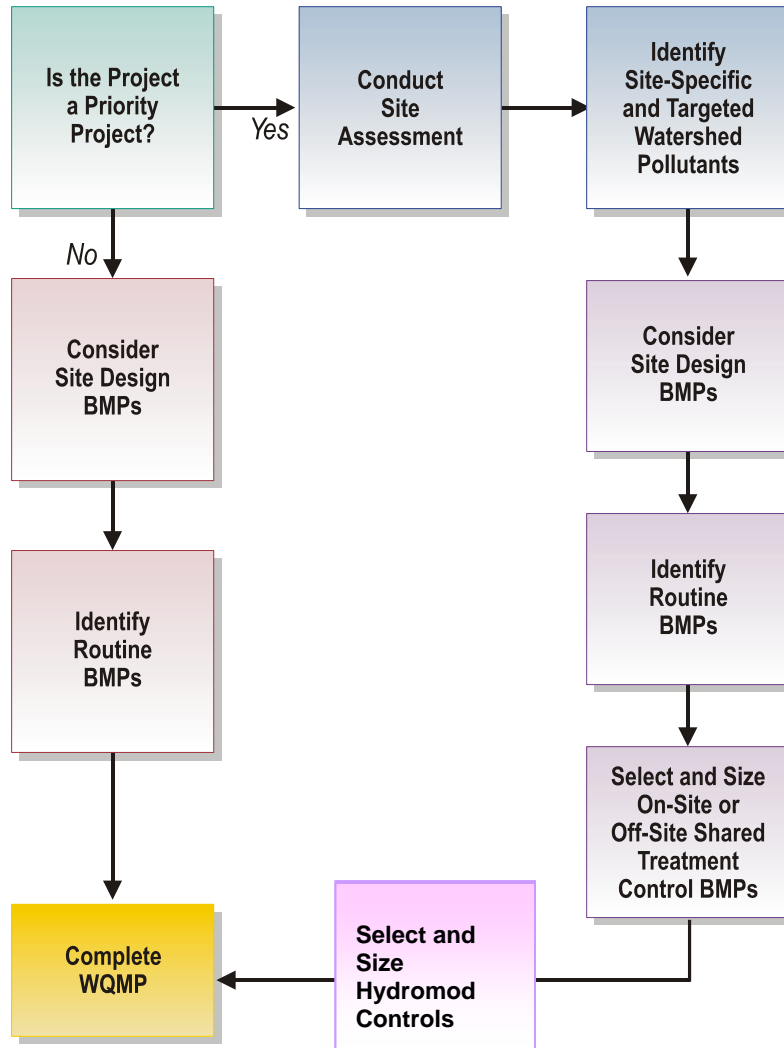




Figure A-7.4
Development Planning and WQMP Preparation Steps for the San Diego Regional Board Area



BMP Implementation

Consistent with the Model WQMP, the County will require Priority Projects to:

- Incorporate and implement Source Control BMPs (routine non-structural and routine structural) unless not applicable to the project due to project characteristics, and document why any applicable Source Control BMP was not included;
- Incorporate and implement Site Design BMPs as appropriate; and
- Either:
 - Implement treatment control BMPs including a selection of such BMPs into the project design, (unless a waiver is granted for infeasibility of all treatment control BMPs, see Model WQMP, **DAMP Section 7, Exhibit 7.II, Section 6.0** for details);



Or:

- o Participate in or contribute to an acceptable regional or watershed management program – Santa Ana Regional Board area only.
- Implement Hydromodification Controls – San Diego Regional Board Rea only.
- The combination of Source Control, Site Design and Treatment Control BMPs, Hydromodification Controls or regional or watershed based-programs must adequately address all identified pollutants and hydrologic conditions of concern.

The County will require all Non-Priority projects to incorporate and implement Source Control BMPs as above and incorporate, implement and document Site Design BMPs as appropriate. Once a project reaches the plan check phase, the applicant will be required to submit the approved WQMP together with construction plans that incorporate the selected BMPs.

A combination of Source Control BMPs (routine non-structural and routine structural BMPs) and Site Design BMPs is generally the most effective means of pollution prevention because they minimize the need for treatment. The County will require Treatment Control BMPs to be considered for all Priority Projects in addition to Source Controls to meet the requirements of the Third Term Permits to minimize, to the maximum extent practicable, the discharge of pollutants to the storm drain system or receiving waters.

The categories of stormwater pollution control BMPs are summarized in **Table A-7.1**, together with the applicable projects and primary pollution prevention objectives of the BMPs.

Routine Source Control BMPs

Routine structural Source Control BMPs are low-technology practices designed to prevent pollutants from contacting stormwater runoff or to prevent discharge of contaminated runoff to the storm drainage system. Routine non-structural Source Control BMPs are listed in **Table A-7.2**. Routine structural Source Control BMPs are listed in **Table A-7.3**. WQMPs for Public Agency projects are not required to include routine non-structural BMPs if they are already included as part of the Municipal Activities Program (see **Section A-5**).



Table A-7.1
Summary of BMPs for Development/Significant Redevelopment Projects

| BMP Category | | Applicable Projects | Pollution Prevention Objective |
|---|------------------------------------|---|--|
| Source Control BMPs | Routine Non-Structural BMPs | Required for all projects – as applicable | Prevent pollution by educating the public on proper disposal of hazardous or toxic wastes, regulatory approaches, street sweeping and facility maintenance, and detection and elimination of illicit connections and illegal dumping. |
| | Routine Structural BMPs | Required for project features (see Table A-7.3) | Prevent potential pollutants from contacting rainwater or stormwater runoff or to prevent discharge of contaminated runoff to the storm drain system or receiving waters. Reduce the creation or severity of potential pollutant sources or to reduce the alteration of the project site's natural flow regime. |
| Site Design BMPs | | All projects shall incorporate as appropriate | Minimize or prevent potential pollutants from contacting rainwater or stormwater runoff or to prevent discharge of contaminated runoff to the storm drain system or receiving waters. |
| Treatment Control BMPs or Regional Program | | All priority projects – at least one treatment control BMP required | Remove pollutants from stormwater runoff prior to discharge to the storm drain system or receiving waters |
| Interim Hydromodification Controls | | All priority projects in San Diego Region not draining directly or via a concrete conveyance system all the way to a harbor, lake, pond, lagoon, basin, or the ocean) – until adoption of Model WQMP/ Hydromodification Management Plan | Match post-development hydrologic regime with pre-development for all flows between 10% of the 2 year event, up to the 10 year storm even. |



Table A-7.2
Routine Non-Structural Source Control BMPs

| Identifier | Name |
|-------------------|---|
| N1 | Education for Property Owners, Tenants and Occupants |
| N2 | Activity Restrictions |
| N3 | Common Area Landscape Management |
| N4 | BMP Maintenance |
| N5 | Title 22 CCR Compliance (How the development will comply) |
| N6 | Local Water Quality Permit Compliance |
| N7 | Spill Contingency Plan |
| N8 | Underground Storage Tank Compliance |
| N9 | Hazardous Materials Disclosure Compliance |
| N10 | Uniform Fire Code Implementation |
| N11 | Common Area Litter Control |
| N12 | Employee Training |
| N13 | Housekeeping of Loading Docks |
| N14 | Common Area Catch Basin Inspection |
| N15 | Street Sweeping Private Streets and Parking Lots |
| N16 | <i>BMP has been removed</i> |
| N17 | Retail Gasoline Outlets |

Table A-7.3
Routine Structural Source Control BMPs

| |
|--|
| Provide storm drain system stenciling and signage |
| Design and construct outdoor material storage areas to reduce pollution introduction |
| Design and construct trash and waste storage areas to reduce pollution introduction |
| Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control |
| Protect slopes and channels and provide energy dissipation |
| Required for the following project features: <ul style="list-style-type: none"> • Private roads • Residential driveways and guest parking • Loading dock areas • Maintenance bays • Vehicle wash areas • Outdoor processing areas • Equipment wash areas • Parking areas • Roadways • Fueling areas • Hillside landscaping • Wash water control for food preparation areas • Community car wash racks |



Site Design BMPs

The principal objective of Site Design BMPs is to prevent pollution of stormwater by minimizing the introduction of pollutants and conditions of concern that may result in significant impacts generated from site runoff to the stormwater conveyance system. One approach to achieve this objective is to reduce stormwater runoff flows and volumes and reduce pollutants through appropriate Site Design BMPs.

Start at the Source (Bay Area Stormwater Management Association 1999) provides design guidance and techniques for implementing site design BMPs. Benefits derived from this approach include:

- Reduced size of downstream treatment controls and conveyance systems;
- Reduced pollutant loading to treatment controls; and,
- Reduced hydraulic impact on receiving streams.

Site Design BMPs should be incorporated and implemented as appropriate. Site Design BMPs include the design techniques listed in **Table A-7.4**.

Table A-7.4
Site Design BMP Techniques

| |
|---|
| Minimize Impervious Area/Maximize Permeability (C-Factor Reduction) |
| Minimize Directly Connected Impervious Areas (DCIAs) (C-Factor Reduction) |
| Create Reduced or "Zero Discharge" Areas (Runoff Volume Reduction) |
| Conserve Natural Areas (C-Factor Reduction) |

Fact sheets for routine structural Source Control BMPs and Site Design BMPs are presented in **Exhibit A-7.V**. The fact sheets include design criteria established to ensure effective implementation of the required Site Design BMPs and will be made available by the County.

Treatment Control BMPs

Treatment Control BMPs are engineered technologies designed to remove pollutants from stormwater runoff and are required to augment Source Control and Site Design BMPs to reduce pollution from stormwater discharges as required by the Third Term Permits. The type of Treatment Control BMP(s) to be implemented at a site depends on a number of factors including: type of pollutants in the stormwater runoff, volume or flow of stormwater runoff to be treated, project site conditions, receiving water conditions, and General Industrial Permit requirements, when applicable. Land requirements, and costs to design, construct and maintain Treatment Control BMPs vary by Treatment Control BMP.

Unlike flood control measures that are designed to handle peak flows, stormwater Treatment Control BMPs are designed to treat the more frequent, lower-flow storm events, or the first



flush portions of runoff from larger storm events (typically referred to as the first-flush events). Small, frequent storm events represent most of the total average annual rainfall for the area. The flow and volume from such small events is targeted for treatment.

The primary control strategy for designing BMPs is to treat the Stormwater Quality Design Flow (SQDF) or the Stormwater Quality Design Volume (SQDV) of the stormwater runoff. **Table A-7.5** lists BMPs along with the basis of design, SQDF or SQDV, to be used for designing the BMP. The Model WQMP (**DAMP Section 7, Exhibit 7.II**) shows the approach that should be used to calculate the SQDF and/or SQDV.

Table A-7-5
Basis of Design for Treatment Control BMPs

| Treatment Control BMP | Design Basis |
|------------------------------|--------------|
| Vegetated (Grass) Strips | SQDF |
| Vegetated (Grass) Swales | |
| Proprietary Control Measures | |
| Dry Detention Basin | SQDV |
| Wet Detention Basin | |
| Constructed Wetland | |
| Detention Basin/Sand Filter | |
| Porous Pavement Detention | |
| Porous Landscape Detention | |
| Infiltration Basin | |
| Infiltration Trench | |
| Media Filter | |
| Proprietary Control Measures | |

BMP fact sheets from the CASQA New Development Handbook are presented for guidance in **Exhibit A-7.V**. These fact sheets include specific design criteria established to ensure effective implementation of the required Treatment Control BMPs.

Regional or Watershed Programs

For the Santa Ana Regional Board area, if a regional or watershed-based program is selected, the regional or watershed BMPs selected must be designed to have the capacity to treat more than the cumulative volume (or flow rate) of runoff from all new development or significant



redevelopment projects included in the regional or watershed plan. More detailed analysis (such as detailed planning and modeling) should be employed and cross-jurisdictional issues must be clearly defined and coordinated (see **DAMP Section 7 and Section 7.II. 3.3.3** for a more detailed discussion of the applicability of regional or watershed programs).

Regional and/or watershed management programs, as described in this Local WQMP, are not allowed within the San Diego Regional Board permit area. However, under certain conditions within the San Diego Regional Board permit area, offsite shared controls can be considered (see Locate Treatment Control BMPs Near Pollutant Sources, **Section A-7.VI - 3.3.4**, the County Local WQMP).

Interim Hydromodification Controls (Applicable in the San Diego Region beginning on 12/16/2010 until the Model WQMP and Hydromodification Plan for Orange County are adopted)

On December 16th, 2010, Interim Hydromodification Control Requirements as required in Section F.1.h.(5) of the San Diego Region Fourth Term MS4 Permit became effective. The County will apply these interim hydromod requirements to all priority projects in the San Diego Region until such time as the final Hydromodification Management Plan (HMP) for the San Diego Region of Orange County is approved and adopted for implementation (Anticipated mid 2012).

Within the Santa Ana Region of Orange County, hydromodification control will be a function of the Model WQMP which is anticipated to be approved and adopted for implementation in May of 2011.

A Technical guidance manual and a BMP sizing tool have been developed to assist projects with meeting the interim hydromod requirements and are included in **Exhibit A-7.VII** of this LIP.

A-7.7 Post Construction BMP Inspection and Verification

The County will conduct verifications to assure that implementation and appropriate maintenance described in the WQMP is taking place at structural and non-structural BMPs during the post construction phase. Assessment of BMP effectiveness will take place during verification. The goal is to perform verifications at 90% of developments with approved WQMPs during the Third Term Permit period. The number of verifications necessary to achieve the above goal will be based on either the total area of approved WQMP projects, or the total number of WQMPs approved.

Verification of BMP implementation and ongoing maintenance will be conducted by inspection, self-certifications, surveys, or other equally effective approaches, in compliance with the Fourth Term MS4 requirements. A summary of the inspections conducted and any assessments of effectiveness will be provided in the annual Program Effectiveness Assessment, within Section C-9, Existing Development.



An inventory of post-construction BMPs is being developed and will be included as part of Section A-9, Existing Development, of this LIP.

A-7.8 Education and Training

To assist responsible County and contract staff in understanding the New Development/Significant Redevelopment Program, annual training sessions will be conducted. In addition to Permittee sponsored training, staff may also attend training seminars or workshops related to general water quality and stormwater management during construction, conducted by other organizations.

A-7.8.1 Training Modules

Two training modules have been prepared that cover different aspects of the New Development/Significant Redevelopment Program. These modules are provided in **DAMP Appendix B-7**.

New Development/Significant Redevelopment Program Management (**DAMP Appendix B, Exhibit B-7.I**)

This training module is for Permittee Stormwater Program managers and the managers of a Permittee's planning and building departments. It provides an overview of the Stormwater Program as it pertains to a Permittee's General Plan, the preparation and review of environmental documents (Initial Studies, Environmental Impact Reports, Environmental Impact Statements, Negative Declarations, Mitigated Negative Declarations, etc.), conditions of approval for projects, the review of WQMPs, plan check, and permit closeout. The training module also briefly describes a Permittee's responsibility for verifying and inspecting permanent BMPs and for assessing the effectiveness of the New Development/Significant Redevelopment program element.

Project Planning and Design: Environmental Review, Planning and Permitting, and WQMP Development (**DAMP Appendix B, Exhibit B.7.II**)

This training module is targeted to planners, plan checkers, developers and engineers, and will address: the laws and regulations applicable to new development/significant redevelopment; the connection between new development/significant redevelopment and water quality; how to review and prepare California Environmental Quality (CEQA) compliance documents with regard to stormwater/urban runoff effects, how to develop and review a WQMP; and how to design and incorporate into a project Source Control, Site Design and Treatment Control BMPs to minimize impact to receiving waters.

A-7.8.2 Record Keeping

Records of training provided to County staff will be maintained to allow a determination of:

- Which staff require which training;



- When training sessions were conducted;
- Compliance with the permit requirements.

In addition to the Permittee-sponsored training, County staff may also attend various other workshop or training events as they take place throughout the year. These types of events may include local or national organization sponsored training.

A-7.9 Program Effectiveness Assessment

The County will prepare an annual Program Effectiveness Assessment (see **DAMP Appendix C-7**). This report will provide the basis for evaluating the County's efforts towards the reduction of pollutants from new development and significant redevelopment. The PEA will demonstrate a commitment to pollution prevention and source reduction processes in new development/redevelopment projects in the County. The annual PEA will include:

- Changes made to the County's General Plan, CEQA and development review processes;
- Information on WQMPs approved and verified by the County;
- Documentation of training received by the County staff.