

7 DEVELOPMENT

7.1 INTRODUCTION

Watershed urbanization can adversely impact waterways and coastal waters and give rise to urban runoff pollution. To reduce these impacts, the City has established design standards for new development and significant redevelopment projects that require implementation of BMPs including Low Impact Development (LID) techniques, hydromodification controls, source controls, and treatment controls. Implementation of these design standards ensures that the hydrologic impacts that can arise from watershed imperviousness are mitigated and consequently, this key element of the Program addresses all of the High Priority Water Quality Conditions (HPWQCs) identified in the WQIP.

The Permittees recognize 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 their understanding of receiving waters on a watershed scale through implementation of the WQIP. This information will assist in providing a strong linkage between the planning process and the development review and permitting process as required by the Permits.

7.2 PROGRAM OVERVIEW

The New Development and Significant Redevelopment Program links new development BMP design, construction, and operation to the earlier phases of new development project planning encompassed by the General Plan, environmental review process and discretionary development planning, review, and approval processes. The General Plan specifies policies that guide new development. The environmental review process examines impacts from proposed new development 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 planning and permit approval processes carry forward requirements in the form of the California Environmental Quality Act (CEQA) commitments and mitigation measures, conditions of approval, design specifications, tracking, inspections, 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 and significant redevelopment to help ensure storm water quality protection features are planned, evaluated, selected, and designed in accordance with goals for the protection of water quality and other environmental resources.

The key staff that is responsible for overseeing, implementing, and enforcing the new development program are shown in the Organization Chart provided as **Exhibit 2.3**.

In general, the Planning and Building Departments are responsible for:

- Implementing the policies and objectives of the City set forth in the General Plan and Zoning Ordinance;
- Reviewing proposed developments for consistency with standards and policies relating to land use and preservation of the environment;
- Preparing for and supporting discretionary review and approval actions taken by the Planning Commission and City Council related to new development and significant redevelopment projects;
- Overseeing that all building construction complies with adopted codes and that permitting and licensing systems are efficient and serve the needs of the public, as well as the City.

The Public Works and Engineering Departments are responsible for:

- Administration of public improvement projects and ensuring construction in the public right-of-way complies with adopted codes and engineering standards;
- Administration of building improvement projects requiring grading and ensuring construction complies with adopted codes and engineering standards.
- Administration of other engineering related permit activities such as encroachment permits, improvement permits, utility improvement permits, etc. to ensure construction activities in the City's rights-of-ways comply with adopted codes, regulations, and engineering standards.

All the materials and tools for applicants related to development and water quality are provided on the City's website here: www.danapoint.org/wqrequirements.

7.3 GENERAL PLAN ASSESSMENT

The City has reviewed and revised, as necessary, its General Plan for the purpose of providing effective water quality and watershed protection principles and policies that direct land-use decisions and require implementation of consistent water quality protection measures for all development and redevelopment projects. Any future updates of the General Plan will also consider water quality and watershed protection.

7.4 ENVIRONMENTAL REVIEW PROCESS

During the period of the Fourth Term Permit Term, the City reviewed and revised, as necessary, its environmental review process to include requirements for evaluation of water quality effects and identification of appropriate mitigation measures, in accordance with the California Environmental Quality Act (CEQA).

7.5 PRIORITY PROJECT CRITERIA

During project review, approval, and permitting, the City requires new development and significant redevelopment projects that meet the criteria of a Priority Project (see below) to address the quality and quantity of stormwater runoff through the incorporation of permanent (post-construction) Best Management Practices (BMPs) in project design. The City requires project-specific Water Quality Management Plans (Project WQMPs) for all private and public projects that qualify as one of the Priority Project Categories listed in **Table 7.1**.

Table 7.1: Priority Project Categories

Priority Project Categories
<p>New development projects that create 10,000 square feet or more of impervious surfaces (collectively over the entire project site). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.</p>
<p>Redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site on an existing site of 10,000 square feet or more of impervious surfaces). This includes commercial, industrial, residential, mixed-use, and public development projects on public or private land.</p>
<p>New and redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface (collectively over the entire project site), and support one or more of the following uses:</p> <p>(i) Restaurants. This category is defined as a facility that sells prepared foods and drinks for consumption, including stationary lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption (SIC code 5812).</p> <p>(ii) Hillside development projects. This category includes development on any natural slope that is twenty-five percent or greater.</p> <p>(iii) Parking lots. This category 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>(iv) Streets, roads, highways, freeways, and driveways. This category is defined as any paved impervious surface used for the transportation of automobiles, trucks, motorcycles, and other vehicles.</p>

Priority Project Categories
<p>New or redevelopment projects that create and/or replace 2,500 square feet or more of impervious surface (collectively over the entire project site), and discharging directly to an Environmentally Sensitive Area (ESA). “Discharging directly to” includes flow that is conveyed overland a distance of 200 feet or less from the project to the ESA, or conveyed in a pipe or open channel any distance as an isolated flow from the project to the ESA (i.e. not commingled with flows from adjacent lands).</p>
<p>New development projects, or redevelopment projects that create and/or replace 5,000 square feet or more of impervious surface, that support one or more of the following uses:</p> <p>(i) Automotive repair shops. This category is defined as a facility that is categorized in any one of the following Standard Industrial Classification (SIC) codes: 5013, 5014, 5541, 7532-7534, or 7536-7539.</p> <p>(ii) Retail gasoline outlets (RGOs). This category includes RGOs that meet the following criteria: (a) 5,000 square feet or more or (b) a projected Average Daily Traffic (ADT) of 100 or more vehicles per day..</p>
<p>New or redevelopment projects that result in the disturbance of one or more acres of land and are expected to generate pollutants post Construction</p>

7.6 NON-PRIORITY PROJECT REQUIREMENTS

Regardless if a project is determined to be a Priority Project or not, all development projects must incorporate the following Source Control Low Impact Development Best Management Practices (BMPs), where applicable and feasible.

Source Control BMP Requirements

- Prevention of illicit discharges into the MS4;
- Storm drain system stenciling or signage;
- Protect outdoor material storage areas from rainfall, run-on, runoff, and wind dispersal;
- Protect materials stored in outdoor work areas from rainfall, run-on, runoff, and wind dispersal;
- Protect trash storage areas from rainfall, run-on, runoff, and wind dispersal; and
- Any additional BMPs determined to be necessary by the Copermittee to minimize pollutant generation at each project

Low Impact Development (LID) BMP Requirements

- Maintenance or restoration of natural storage reservoirs and drainage corridors (including topographic depressions, areas of permeable soils, natural swales, and ephemeral and intermittent streams);
- Buffer zones for natural water bodies (where buffer zones are technically infeasible, project applicant are required to include other buffers such as trees, access restrictions, etc.);
- Conservation of natural areas within the project footprint including existing trees, other vegetation, and soils;
- Construction of streets, sidewalks, or parking lot aisles to the minimum widths necessary, provided public safety is not compromised;
- Minimization of the impervious footprint of the project;
- Minimization of soil compaction to landscaped areas;
- Disconnection of impervious surfaces through distributed pervious areas;
- Landscaped or other pervious areas designed and constructed to effectively receive and infiltrate, retain and/or treat runoff from impervious areas, prior to discharging to the MS4;
- Small collection strategies located at, or as close as possible to, the source (i.e. the point where storm water initially meets the ground) to minimize the transport of runoff and pollutants to the MS4 and receiving waters;
- Use of permeable materials for projects with low traffic areas and appropriate soil conditions;
- Landscaping with native or drought tolerant species; and
- Harvesting and using precipitation

The City uses the “Low Impact Development & Source Control BMPs for all redevelopment and development projects” fact sheet provided as **Exhibit 7.1** to guide project applicants.

Food Facilities that may not meet the criteria of a Priority Project must complete and submit the “City of Dana Point Water Quality Grease Management BMP Certification Form” to confirm compliance for source control BMPs at restaurants (**Exhibit 7.2**) to address the pathogen health risk HPWQC.

7.7 PRIORITY PROJECT REQUIREMENTS

The "BMP Design Manual" consists of the following three documents: South Orange County Model Water Quality Management Plan (WQMP), Hydromodification Management Plan (HMP), and the Technical Guidance Document (TGD). These documents together describe the structural BMP performance criteria, provide guidance to applicants as to how to achieve the performance criteria for the project, and also provide engineering details, standards, etc.

Exhibit 7.3, the BMP Design Manual, contains links for the following documents:

- South Orange County Model WQMP

- South Orange County Technical Guidance Document (TGD)
- Hydromodification Management Plan (HMP)

The South Orange County Model WQMP, Technical Guidance Document (TGD) and Hydromodification Management Plan (HMP) contain all the information specified for the BMP Design Manual, as referenced in the Permit, and should for purposes of compliance be considered to be a BMP Design Manual¹.

7.8 PUBLIC AGENCY PROJECTS

Public Works projects, generally known as Capital Improvement Projects (CIPs), that meet the criteria of Priority Projects are also required to implement the LID, source control, hydromodification, and treatment control BMPs. In general, the same WQMP overall requirements described herein apply to public agency projects as well as private development projects. However, certain types of public projects that occur in Dana Point have unique characteristics that may be allowed certain exemptions, as specified in the Permit, such as:

- New or retrofit paved sidewalks, bicycle lanes, or trails that meet the following criteria:
 - Designed and constructed to direct storm water runoff to adjacent vegetated areas or other non-erodible permeable areas; or
 - Designed and constructed to be hydraulically disconnected from paved streets or roads; or
 - Designed and constructed with permeable pavements or surfaces in accordance with USEPA Green Streets guidance.²⁶
- Retrofitting or redevelopment of existing paved alleys, streets, or roads that are designed and constructed in accordance with the USEPA Green Streets guidance.²⁷

Please refer to the Model WQMP and TGD (**Exhibit 7.3**) for more information.

A WQMP is also not required for public agency projects consisting of routine maintenance activities, such as trenching and resurfacing associated with utility work, pavement grinding, resurfacing existing roadways, sidewalks, pedestrian ramps, or bike lanes on existing roads, and routine replacement of damaged pavement, such as pothole repair.

7.9 PROJECT WATER QUALITY MANAGEMENT PLANS (WQMPS)

The Model Water Quality Management Plan (WQMP) has been developed to aid the Cities and the County of Orange under the jurisdiction of the San Diego Regional Water Quality Control Board and project proponents therein with addressing post-construction urban runoff and stormwater pollution from new development and significant redevelopment projects that meet the criteria of a Priority Project. The

¹ The BMP Design Manual was previously referred to as the Standard Storm Water Mitigation Plan under Order No. R8-2009-0002.

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

7.9.1 Preliminary WQMPs

For all projects requiring discretionary or land use entitlement actions, a Preliminary WQMP (pWQMP) should be submitted as part of the application for project approval during the environmental review phase (CEQA) and must be submitted prior to approval of entitlements and Planning Commission approval of a project or other public hearing. Applications without a pWQMP will be deemed incomplete. Although termed "preliminary," it should be understood that the pWQMP requires relatively robust engineered design of LID retention and hydromodification management BMPs, as they may be significant elements of the site design. LID and hydromodification control BMPs should be considered and incorporated at the earliest conceptual planning stages of a project for early review, to potentially avoid necessary project changes and delays during the review and approval process. The pWQMP must identify and locate selected BMPs, provide design parameters including hydraulic sizing of treatment BMPs, and contain sufficient BMP detail to ensure the BMPs are adequately sized.

The Model WQMP and TGD **Exhibit 7.3** should be used as a guide for preparation of a Preliminary WQMP and the Final Project WQMP. The City of Dana Point/South Orange County WQMP Template (**Exhibit 7.4**) should be used by a project proponent to complete the Preliminary and Final WQMP for a specific project. The BMP fact sheets can be used in conjunction with project-specific design parameters and sizing to convey design intent. The TGD contains a number of BMP fact sheets that can be used for most LID BMPs. There are a number of resources listed in the Model WQMP for Site Design, Source Control, and Treatment Control BMPs that should be considered to guide the design and implementation of the BMPs.

Final details of non-structural source control BMPs and operation and maintenance details are not required to be included with the pWQMP, but will be required as part of the Final Project WQMP (See Section 7.9.2 below) that is required prior to the issuance of grading or building permits. Owner certification is required for both the Preliminary and Final WQMP submittals. All final plans must show all the structural and any applicable non-structural source control BMPs per the approved Final WQMP.

7.9.2 Final WQMPs

Prior to issuance of grading or building permits, the project applicant must update the pWQMP and submit the completed Final WQMP for review and approval. The Final WQMP shall include all final BMP design drawings and details on the construction plans.

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

quality impacts, or result in previously undisclosed environmental impacts, the City should require that the project be subject to further environmental review.

The Final Project WQMP must include calculations to support the structural integrity of the selected LID or treatment control BMP as appropriate and be prepared by or under the direction of a California Registered Civil Engineer and affixed with their stamp and signature. The City shall review a project's construction plans to assure that the plans are consistent with the BMP design criteria and guidance.

The Final WQMP must also include a stand-alone, user friendly Operation and Maintenance Plan. Please see Section 7.10 for the specific requirements.

7.10 OPERATION AND MAINTENANCE PLAN

The City of Dana Point requires that a separate, stand-alone, and user-friendly document is prepared for the party that will ultimately be responsible for operation and maintenance of all the BMPs in the Final WQMP. The Operation and Maintenance Plan (O&M) Plan that is prepared by the applicant for private sector projects shall describe and/or include:

- Site Plan
- Non-structural and Structural BMPs
- Employee responsibilities and training for BMP operation and maintenance with 24-hour contact information
- Operating schedule
- Maintenance frequency and schedule
- Specific maintenance activities
- Required permits from resource agencies, if any
- Forms to be used in documenting maintenance activities
- Recordkeeping requirements (at least 5 years)

The City has developed an Operations and Maintenance (O&M) Plan template to assist the applicant in preparing an acceptable O&M Plan. The City of Dana Point O&M Plan Template is provided as **Exhibit 7.5**.

7.11 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 the approved Final WQMP. Therefore, the City requires that the final Project WQMP is approved prior to being issued a building or grading permit.

7.12 PERMIT CLOSEOUT, CERTIFICATES OF USE, AND CERTIFICATES OF OCCUPANCY

Prior to certificate of occupancy, the City construction and building inspectors inspect the project, including any BMPs, to verify that they have been constructed and are operating in compliance with all specifications, plans, permits, ordinances, the WQMP, and TGD. The City also requires a separately-bound and stand-alone WQMP Operation and Maintenance Plan (O&MP) that will remain on site so that the parties responsible for maintenance of all the BMPs has an accessible and user friendly maintenance guide. See Section 7.10 for more information.

The City has developed a BMP Construction Certification Form, **Exhibit 7.6**, which is required to be signed and sealed by the Engineer of Record indicating that the project site has been field inspected and that the structural BMPs have been installed per approved plans and are operational and functioning properly for the intended use and the any debris that may have accumulate during construction has been removed.

The Project WQMP continues with the property after the completion of the construction phase and the City may require that the terms, conditions, and requirements be recorded with the County Recorder's office by the property owner or any successive owner as authorized by the Water Quality Ordinance. In lieu of recordation the Permittee may require the Project WQMP to include a Notice of Transfer Responsibility Form, which serves to notify the Permittee that a change in ownership has occurred and notify the new owner of its responsibility to continue implementing the Project WQMP.

Accompanying this is a close out of permits and issuance of certificates of use and occupancy. The City will use this juncture to assure satisfactory completion of all requirements in the Project WQMP by requiring the applicant to:

- Demonstrate that all structural BMPs described in the Project WQMP have been constructed and installed in conformance with approved plans and specifications,
- Demonstrate that an O&M Plan has been approved for all structural BMPs within the Project WQMP,
- Demonstrate that a mechanism or agreement acceptable to the City has been executed for the long-term funding and performance of BMP operation, maintenance, repair, and/or replacement.
- Demonstrate that the applicant is prepared to implement all non-structural BMPs described in the Project WQMP,
- Demonstrate that an adequate number of copies of the Project 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

Public Agency Projects

For 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 Public Works Department and become part of the Municipal Activities Program (Section 5), unless transfer of responsibility of the BMP has occurred through contracts, lease agreements, or maintenance agreements. Should responsibility be transferred, the City will negotiate satisfactory operation and maintenance standards with the entity accepting the operation and maintenance responsibilities.

7.13 BMP MAINTENANCE TRACKING

Each Project WQMP will be stored within the City's files and will continue with the property after the completion of the construction phase. The City may require that the terms, conditions, and requirements be recorded with the County Recorder's office by the property owner or any successive owner as authorized by the Water Quality Ordinance. In lieu of recordation, the City may require the Project WQMP to include a Notice of Transfer Responsibility Form, which serves to notify the City that a change in ownership has occurred and notify the new owner of its responsibility to continue implementing the Project WQMP.

The City maintains a watershed-based database to track and inventory all approved post-construction BMPs and BMP maintenance within its jurisdiction, since February 2003. LID BMPs implemented on a lot by lot basis at a single family residential home, such as rain barrels, are not tracked or inventoried. The database includes information on BMP type, location, watershed, date of construction, party responsible for maintenance, maintenance certifications or verifications, inspections, inspection findings, and corrective actions. A map of the private WQMP Sites (**Exhibit 7.7**) has also been prepared and will be updated periodically, as resources allow.

The City verifies that approved post-construction BMPs are operating effectively and have been adequately maintained by implementing the following measures:

- By considering BMP size, recommended maintenance frequency, likelihood of operational and maintenance issues, location, receiving water quality, and other pertinent factors, the City will designate High Priority BMPs in the inventory
- Inspection of all High Priority BMPs annually
- Verification of adequate maintenance at other WQMP sites through inspections, self-certifications, surveys, or other equally effective approaches
- Appropriate enforcement and follow-up measures will be implemented to ensure the treatment BMPs continue to function as originally designed

Exhibit 7.1



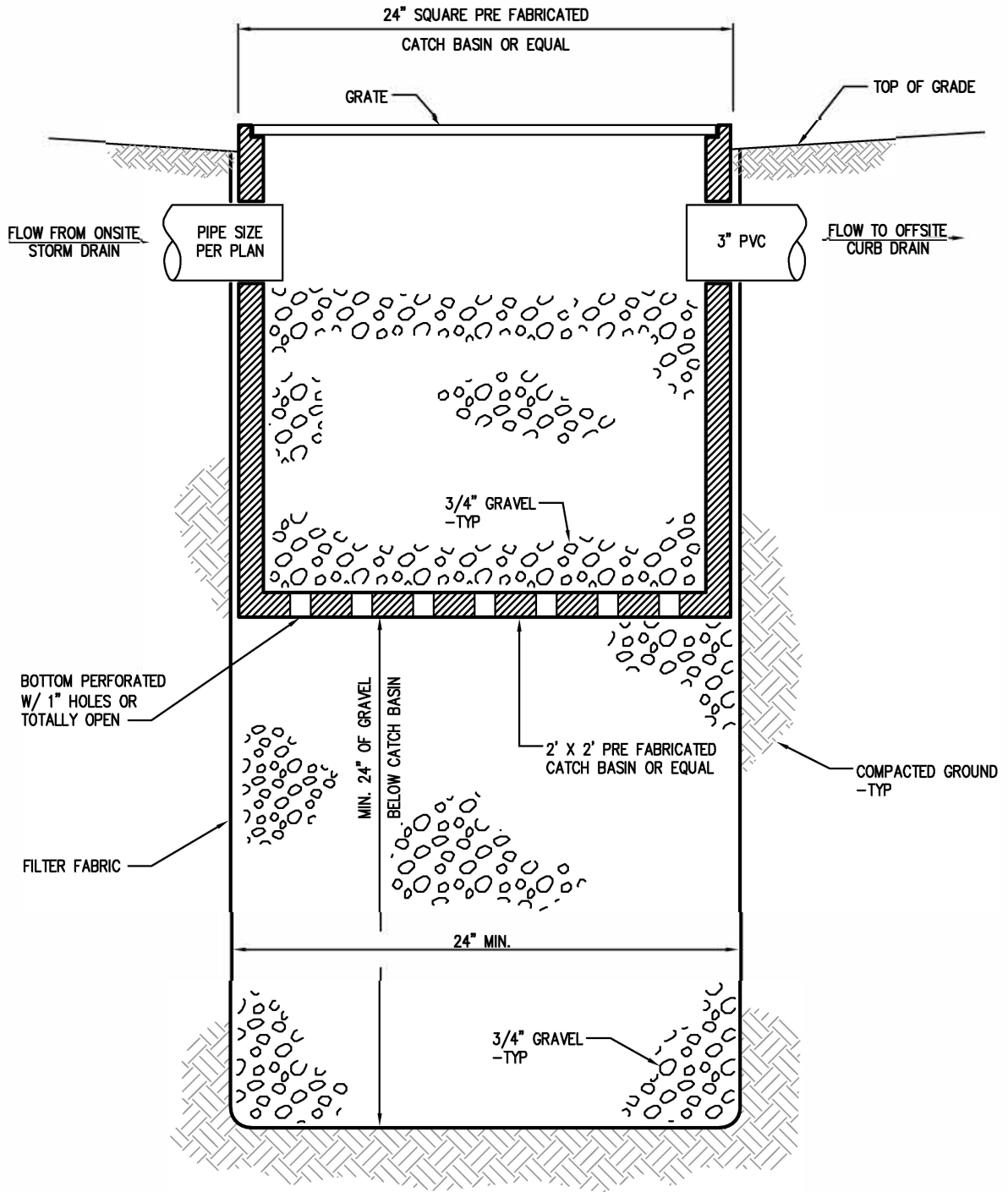
CITY OF DANA POINT

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LOW IMPACT DEVELOPMENT & SOURCE CONTROL BMP FOR ALL REDEVELOPMENT/DEVELOPMENT PROJECTS

where applicable and feasible

- Conserve natural areas, including existing trees, other vegetation and soils.
- Construct streets, sidewalks and parking lot aisles to the minimum widths necessary, provided that public safety is not compromised.
- Minimize the impervious footprint of the project.
- Minimize soil compaction in landscaped areas.
- Minimize disturbances in natural drainages, for example, natural swales, topographic depressions, etc.
- Disconnect impervious surfaces through distributed pervious areas by draining rooftops into adjacent landscaping, using vegetated swales in lieu of underground piping, incorporating sheet flow over vegetated areas, incorporating low flow infiltration, etc.;
- Create buffer zones for natural water bodies, where feasible and if buffer zones are not feasible, implement other buffer, such as trees, access restrictions, etc.;
- Install the Dry Weather Flow Diversion Basin, S-14. Refer to attached standard detail.
- Prevent illicit discharges into the MS4, including sprinkler/irrigation runoff.
- Stencil, sign or otherwise mark, with approval from City, the storm drain system with no dumping messages.
- Properly design outdoor material storage areas, outdoor work areas, and trash storage areas.
- Sweep street and parking lots monthly, at a minimum.
- Landscape with native, non-invasive and/or low water species, where feasible.
- Any other BMPs deemed necessary to address any specific issues or concerns, as directed by the Public Works Director.



SECTION
NTS

REVISIONS

06/18/12

01

7/12/17

CITY OF DANA POINT EXHIBIT

DRY WEATHER FLOW
DIVERSION BASIN

S-14

SHEET 1 OF 1



CITY OF DANA POINT PUBLIC WORKS

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WATER QUALITY GREASE MANAGEMENT, EXPANDED POLYSTYRENE (EPS) BAN & ORGANICS RECYCLING CERTIFICATION FORM **INSTRUCTIONS**

****Required for Food Service Facilities Prior to Issuance of Certificate of Occupancy****

Specific requirements to address water quality and waste management are required for all food related businesses. Please review the following requirements as you plan your project to ensure that your new business will be in compliance. Annual inspections are conducted by the City to ensure ongoing compliance.

In addition to the City Building Department, all plans for food related facilities shall be submitted to the appropriate sewer district for review and approval. Call the appropriate sewer district for specific requirements:

- South Coast Water District: 949-499-4555
- Moulton Niguel Water District: 949-831-2500
- San Juan Capistrano Water: 949-443-6363

The form must be accurately completed during the permitting process and submitted for approval **prior to issuance of Certificate of Occupancy.**

Please note that you must read and understand the requirements prior to construction as **some requirements require building modifications and will need to be reflected on building plans so you must plan for them early in your project.**

1. **Waste Cooking Oil/Yellow Grease/Tallow Management:**

No outdoor storage of waste cooking oil is allowed. Clean, efficient, and safe systems, such as Darling DarPro Solutions Cleanstar Oil Management System, B.O.S.S. Space saver system or similar RTI, Inc. Oil Management Systems are encouraged. If those systems are not feasible, a clean, wheeled container that can be stored indoors in a dedicated space (approved by the Orange County Health Care Agency) may be acceptable. Note that you need to plan your method of used kitchen grease management prior to submittal of Building Permits.

2. **Equipment/Mat Washing Areas:**

No outdoor washing of kitchen mats or any equipment is allowed outdoors, unless a contained area is designed and constructed, approved and permitted to drain to the grease interceptor. For indoor washing, an area must be designated for employees for washing mats/equipment. If an outside vendor is used to wash mats, the vendor contact and contract or service agreement must be provided. The designated wash area must be noted on plans.

3. **Designated Wash Area Signage:**

A permanent, durable sign must be clearly posted to designate the area for mat/equipment washing. A photo of the sign, once installed, is required to complete this form. The sign must be shown on plans.

4. **Employee Training:**

All new employees must be trained on proper grease handling, cleaning methods and spill prevention and response to prevent stormwater pollution. All employees shall be re-trained on a regular basis. Prohibited outdoor washing and improper storage of used grease will result in violation(s) and will be subject to enforcement action.

5. **Roof Top Grease Control:**

A grease diaper (hydrophobic absorbent pad) must be installed on the rooftop grease exhaust fan(s). The grease diaper must be shown on plans.

6. **Expanded Polystyrene (EPS) also known as Styrofoam™ Food Service Ware Ban:**

The City has implemented a “Styrofoam” ban. Please review the attached fact sheet to understand the requirements so that any carry-out containers that you order and use are in compliance with said ordinance.

7. **AB1826 and SB1383: Mandatory Commercial Organics Recycling and Recordkeeping:**

Assembly Bill 1826 (AB1826) requires businesses that generate a specified amount of solid waste per week to arrange for organics recycling services. This law uses a tiered implementation schedule, which phases in requirements on businesses over time based on the amount and type of organics or waste the business produces on a weekly basis. In September 2020, the most comprehensive tier commenced which includes businesses and multifamily dwellings with 5+ units that generate two or more cubic yards per week of solid waste, recyclables, and organics must arrange for organic recycling services.

CR&R, Inc. is currently working with businesses and multi-family residences affected by AB1826 to ensure compliance with the State law.

You must contact Diana Leyva, Sustainability Specialist at CR&R, Inc. at 714-899-2493 or at dianal@crrmail.com to arrange organics recycling for your business and/or to ask any other questions you may have related to compliance with AB1826 and SB1383 specific to your business.

Please contact Lisa Zawaski with any questions regarding grease control at lzawaski@danapoint.org, 949-248-3584 and Jennifer Anderson regarding the EPS and organics recycling programs at janderson@danapoint.org, 949-248-3571.



CITY OF DANA POINT PUBLIC WORKS

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WATER QUALITY GREASE MANAGEMENT, EXPANDED POLYSTYRENE (EPS) BAN & ORGANICS RECYCLING CERTIFICATION FORM

Required for Food Service Facilities Prior to Issuance of Certificate of Occupancy

Name of Food Facility: _____ Address: _____

Owner of Food Facility: _____

Phone: _____ Email: _____

Please check appropriate box addressing the following items and submit the signed form to City:

Waste Cooking Oil /Yellow Grease/Tallow Management:

The following method will be used to manage used kitchen grease/oil. **No storage of grease barrels/containers shall be allowed outdoors.**

- Cleanstar Oil Management System. Indoor / Outdoor
- RTI, Inc. Oil Management System. Indoor / Outdoor
- Griffin B.O.S.S. Space Saver System.
- Clean, wheeled container stored indoors (must comply w/ Orange County Health Care Agency)
- Other: _____

Equipment/Mat Washing Areas:

The following area will be used to clean kitchen mats & equipment. **No washwater shall drain to storm drains or street.**

- An indoor mop/utility has been designated for cleaning and is connected to the grease interceptor.
- An outdoor wash-down area, which is connected to the grease interceptor and sanitary sewer.
- No kitchen mats are used and no other washing or hosing will be conducted outdoors.
- Kitchen mats are sent off-site for cleaning and no other washing or hosing will be conducted outdoors.

Note vendor: _____

Other: _____

Please check each box certifying the following required items and attach documents as requested.

Designated Wash Area Signage:

A sign has been posted to designate the designated wash area for mats or other equipment. **A photo of sign in place must be attached to this form.**

Employee Training:

All new employees will be trained to learn and implement the proper grease handling & cleaning methods to prevent stormwater pollution. All employees will be re-trained on a regular basis.

Roof Top Grease Control:

A grease diaper (hydrophobic absorbent pad) is installed on the rooftop grease exhaust fan(s). The grease diaper will be regularly inspected and maintained/replaced as necessary to effectively perform design function.

Expanded Polystyrene (EPS) also known as Styrofoam™ Food Service Ware Ban:

I have read and understand the City's regulations on the EPS (Styrofoam™) Food Service Ware Ban (see attached Fact Sheet and/or DPMC 6.46 at www.danapoint.org/municipalcode).

AB1826 and SB1383: Mandatory Commercial Organics Recycling and Recordkeeping:

Assembly Bill 1826 (AB1826) requires businesses that generate a specified amount of solid waste per week to arrange for organics recycling services. This law uses a tiered implementation schedule, which phases in requirements on businesses over time based on the amount and type of organics or waste the business produces on a weekly basis. In September 2020, the most comprehensive tier commenced which includes businesses and multifamily dwellings with 5+ units that generate two or more cubic yards per week of solid waste, recyclables, and organics must arrange for organic recycling services. CR&R, Inc. is currently working with businesses and multi-family residences affected by AB1826 to ensure compliance with the State law.

You must contact Diana Leyva, Sustainability Specialist at CR&R, Inc. at 714-899-2493 or at dianal@crrmail.com to arrange organics recycling for your business and/or to ask any other questions you may have related to compliance with AB1826 and SB1383 specific to your business.

I hereby certify that the above items regarding grease management & cleaning controls, as checked and noted above, have been installed or implemented, and will be utilized and maintained in accordance with design and manufacturer's recommendations. I also certify that I have read and understand the City's regulations on EPS Food Service Ware and have arranged for organic recycling services with CR&R to comply with the State's organics recycling requirements.

Signature

Date

What You Need to Know About the Dana Point Expanded Polystyrene (EPS) Food Service Ware Ban

As a coastal city, Dana Point has a strong interest in protecting the ocean, local beaches, and marine environment, which contribute to the unique quality of life enjoyed by the community. On February 21, 2012, the City Council voted to ban the use of Expanded Polystyrene (EPS) disposable food service ware within Dana Point (DPMC 6.46). The ban on EPS, also known as Styrofoam™, food service ware



The ban on EPS will help preserve our pristine coastline.

will help decrease the amount of litter found along our streets, beaches, and ocean waters and will reduce the adverse health impacts to birds and sea life, while improving water quality.

The City of Dana Point has joined nearly 50 other California cities in banning the use of expanded polystyrene single-use food service ware at

food businesses within the City. The EPS Ordinance reflects Dana Point's proactive approach to coastal stewardship by implementing policies that maintain our legacy as the most beautiful, desirable, and safest coastal community in which to live, work, visit, play or conduct business.

Frequently Asked Questions

When does the ordinance take effect and who must comply?

The ordinance took effect October 1, 2012 for all food vendors and food service providers as well as all City facilities and operations, City-managed concessions, City-sponsored events, City permitted events and all franchisees, contractors and vendors within the City of Dana Point.

The EPS ban began on **October 1, 2012.**
The ban applies to all food vendors and food service providers in Dana Point.

Why did the City ban non-recyclable plastic & polystyrene?

EPS is not biodegradable, and remains in the environment indefinitely. EPS is often ingested by wildlife that mistake it for food and perish.

Expanded polystyrene is a non-biodegradable material that tends to break up into very small pieces and disperse widely when littered due to its lightweight nature. This plastic waste causes significant damage to the beach and marine environment. EPS is not biodegradable thus EPS litter remains indefinitely in the environment and can be ingested by marine animals and birds that mistake EPS for pieces of food. While EPS is technically "recyclable" there is, to date, no meaningful recycling of EPS due to high food contamination rates and a very weak market to clean, handle and process the material.



City of Dana Point Public Works & Engineering Services
33282 Golden Lantern, Dana Point CA 92629
(949) 248-3554

What types of containers are banned?

The ordinance refers to expanded polystyrene (EPS or Styrofoam™) and clear and rigid polystyrene, both of which are marked with the symbol #6 on the bottom, that are intended for serving or transporting prepared, ready-to-eat food or beverages. Examples include cups, plates, trays, bowls, and hinged or lidded containers. This ordinance does not include single-use disposable straws and utensils.

What types of containers are acceptable to use?

- Aluminum
- Coated or uncoated paper, ideally made with post-consumer recycled content
- Any other plastic besides expanded polystyrene
- Compostable products



Are there exemptions?

Food prepared or packaged outside of the city such as uncooked meat, fish, poultry, or eggs are exempt from the ban. Reusable EPS coolers and ice chests are also exempt.

What are the penalties for non-compliance?

The first violation will result in a written warning that could be followed by fines ranging from \$100 to \$250 for additional violations.

Where can I find the City's Ordinance and the staff report related to the EPS ban?

Please visit www.danapoint.org/recycle to view both of these documents.

Where do I find acceptable service containers?

Contact or visit your sales representative to inquire about non-EPS serve ware. If they do not carry them, request that they begin to do so. As a service to the community, the City has compiled a list of suppliers of acceptable food service containers. The list can be found online at www.danapoint.org/recycle or provided to you via email or phone request through the contact information noted below.

Please note that the vendor list is provided is for informational purposes only. It does not include all vendors and the City of Dana Point does not make any specific recommendation or warranty about the quality of any vendor's products or services. Please contact the City of Dana Point (information noted below) for any additions or corrections.

Who can I contact for more information?

For more information, please contact Jennifer Anderson in Public Works & Engineering Services at (949) 248-3571 or janderson@danapoint.org.



City of Dana Point Public Works & Engineering Services
33282 Golden Lantern, Dana Point CA 92629
(949) 248-3554

Exhibit 7.3

South Orange County / Dana Point BMP Design Manual

September 28, 2017

The "BMP Design Manual" consists of the following three documents: Model Water Quality Management Plan (WQMP), Technical Guidance Document (TGD) and Hydromodification Management Plan (HMP)

The South Orange County/Dana Point Model Water Quality Management Plan (WQMP) and companion Technical Guidance Document (TGD) and Hydromodification Management Plan (HMP) are large documents and are included herein via reference.

The document can be found at any of the links below:

- www.danapoint.org/wqrequirements, scroll down to "Documents and Tools for WQMP/HMP Preparation:"
- www.ocwatersheds.com/documents/wqmp, scroll down to "San Diego Regional Water Quality Control Board (SDRWQCB) – South of El Toro Road"
- <https://ocgov.app.box.com/v/SDR-WQIP-Clearinghouse/folder/11337820145>, Click on the "BMP Design Manual Folder" to access each of the three documents:
 - SOC HMP 9-28-2017: South Orange County Hydromodification Management Plan
 - SOC Model WQMP_9-28-2017: South Orange County Model Water Quality Management Plan
 - SOC TGD 9-28-2017_v1.1(12-21-2018): South Orange County Technical Guidance Document

Please refer to Section 7 of the City of Dana Point's Local Implementation Plan (LIP) for Dana Point's planning, permitting and submittal requirements

Dana Point Water Quality LIP Section 7: www.danapoint.org/wqrequirements.

Dana Point Water Quality LIP in its entirety:

<https://www.danapoint.org/home/showpublisheddocument/31254/637315416724070000>.

If you have any question or would like to request an electronic version, please contact Dana Point Public Works Department at 949-248-3554.

Exhibit 7.5

South Orange County Water Quality Management Plan (WQMP) Template

September 28, 2017

The South Orange County Model Water Quality Management Plan (WQMP) and companion Technical Guidance Document (TGD) are large documents and are included herein via reference.

The document can be found at any of the working links below:

- www.danapoint.org/wqrequirements
- <http://www.ocwatersheds.com/documents/wqmp>
- <https://ocgov.app.box.com/v/SDR-WQIP-Clearinghouse/folder/11337820145>

If you have any question or would like to request an electronic, editable version, please contact Dana Point Public Works Department at 949-248-3554.

<City of Dana Point WQMP O&M Template>

September 28, 2017 Version

A separate detailed, stand-alone, user-friendly Operation & Maintenance (O&M) Plan must be part of the Final WQMP submittal and approved prior to Grading Permit issuance or Certificate of Occupancy in certain circumstances. The O&M Plan must include detailed operations and maintenance instructions for all applicable BMPs and the as-built BMP site plan. Disregard previous versions of this template.

The red text and *highlighted yellow* is intended to be instructional and should be deleted before submittal of the document for review.

For questions, please contact the City Water Quality Engineer at 949-248-3584, lzawaski@danapoint.org.

Operation & Maintenance (O&M) Plan for WQMP

Project Name:

Prepared for:

Insert Owner/Developer Name-then TAB.

Insert Address 1 then press ENTER to insert Address 2 or TAB to next field.

Insert City, State, ZIP-then TAB.

Insert Telephone-then TAB.

Insert email-then TAB.

Prepared by:

Insert Consulting/Engineering Firm Name-then TAB.

Water Quality Management Plan (WQMP)
INSERT Project Name

Engineer: Insert Name-then TAB.

**Registration No. Insert Number-then
TAB.**

Insert Address-then TAB.

Insert City, State, ZIP-then TAB.

Insert Telephone-then TAB

Insert email-then TAB.

Engineer's Seal



Prepared on:

Insert Date-then TAB.

Insert Revision Date(s) as appropriate-then TAB.

Responsible Party Acknowledgement

This Water Quality Management Plan (WQMP) & Operation & Maintenance Plan (O&MP) has been prepared for **Project Owner/Name by XXXX Engineering, Inc.** The WQMP/O&MP is intended to comply with the requirements of the local NPDES Stormwater Program requiring the preparation of the plan.

The undersigned acknowledges the Best Management Practices (BMPs) that have been incorporated into the project, along with maintenance requirements, and is responsible for ongoing maintenance and implementation of the BMPs

Owner/Responsible Party:		
Title		
Company		
Address		
Email		
Telephone #		
Signature		Date

INSERT OWNER/DEVELOPER NAME-THEN TAB.

Owner's Certification

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Guidance: Incorporate additional exhibits, reports, worksheets, and calculations, as needed.

Guidance: Highlighted text throughout the template provides guidance for use during WQMP preparation. Delete this guidance prior to submission of WQMP.

Guidance: Prior to submittal, review Table of Contents, pages numbers, Attachment references, etc. to ensure that they are correct. Submittals may be returned as incomplete

Section 1 Project Description and BMP Overview

This O&M Plan describes the designated responsible party for implementation of this WQMP, including: operation and maintenance of all the structural BMP(s), conducting the training/educational program and duties, and any other necessary activities. The O&M Plan includes detailed inspection and maintenance requirements for all structural BMPs, including copies of any maintenance contract agreements, manufacturer’s maintenance requirements, permits, etc. *Guidance: This section is intended to introduce the user of the O&M plan to the project and the BMPs that are present. It should contain sufficient detail for the user to be familiar with the project without consulting the WQMP. It does not need to contain the same level of detail as the WQMP.*

General Project Attributes and Stormwater Control Measures		
Site Location	<i>Guidance: Project location, address, boundaries.</i>	
APN		
Project Area (ft ²): _____	Number of Dwelling Units: _____	SIC Code: _____
Narrative Project Description:	<i>Guidance: Briefly describe the development type, land uses, site activities,</i>	
Project-specific Source Control BMPs	<i>Guidance: Briefly list the source control BMPs specific to the project, including structural source control features and housekeeping activities.</i>	

General Project Attributes and Stormwater Control Measures

Summary of Drainage
Patterns

Guidance: Briefly summarize how the site drains and where it discharges to.

Summary of Hydrologic
Source Controls

Guidance: Summarize any HSCs that are part of the overall stormwater control approach.

Structural Treatment and
Hydromodification BMPs

Guidance: Summarize the structural treatment and hydromodification BMPs (if applicable) found on the project site. This is intended to orient O&M personnel to the system of controls for the site.

The following table is intended to provide a BMP-specific introduction

WQMP Operations and Maintenance Plan
INSERT Project Name

Guidance: Briefly describe all of the structural LID and/or hydromodification BMPs incorporated into the project. Suggest including a table similar to the one below to the BMP type, include a narrative description of the BMP including pretreatment, if applicable, location on the site, and any specific design considerations that maintenance personnel should be aware of. Example text shown in table. Include photos/maps/exhibits showing locations, designs, and details of each BMP in Attachment 1 to supplement this table. This table should help maintenance personnel identify the BMPs on the drainage map to ensure they understand what each is and have not missed any. See TGD Section 4 and 5 and the BMP fact sheets in TGD Appendix G for additional guidance.

BMP ID	BMP Type	Narrative Description	Location Description	GIS Coordinates	Other Considerations
BMP 1	CDS Unit	Proprietary pre-treatment device located upstream of infiltration basin. Receives Flow from DMA 1.	Manhole 6W on west Carpenter St. near intersection with Via Andorra.		
BMP 2	Infiltration Basin (INF-1)	Above-ground 3-ft deep vegetated basin infiltrating flow into soil. Receives Flow from DMA 1 (after CDS treatment).	Just west of Carpenter St near western border of project.		Flow is pretreated by CDS unit prior to infiltration
BMP 3	Bioinfiltration Basin (BIO-1)	Above-ground 1-ft deep bioretention basin with sedimentation forebay. Receives flow from DMA 2.	North of Via Andorra near northeastern border of project		Underdrain outlet is above gravel layer to provide retention/nutrient treatment.

Section 2 Personnel, Documentation, and Reporting

2.1 Maintenance Roles and Responsibilities

The roles related to O&M of the BMPs are defined as follows:

- **Facility Owner** – *The Facility Owner is the party who is ultimately responsible for the functionality of all BMPs. The maintenance agreement (Attachment 2) identifies the facility owner for each BMP, including the timing of any ownership transitions.*
- **Responsible Party** – *The Responsible Party is the party that shall have direct responsibility for the O&M of the BMPs. This party shall be the designated contact with inspectors and lead maintenance personnel. The Responsible Party shall sign self-inspection reports and any correspondence regarding the verification of inspections and required maintenance. The Responsible Party will establish a system to delegate general inquiries to the appropriate maintenance personnel concerning the operation and maintenance of the BMPs. The Responsible Party reports directly to the Facility Owner and operates and manages the BMPs on the Facility Owner’s behalf.*
- **Designated Emergency Respondent** – *The Designated Emergency Respondent is the party responsible for directing activities and communications during emergencies such as broken irrigation pipes, landslides, hazardous spill responses etc., that would require immediate response should they occur during off-hours. It is the responsibility of the Designated Emergency Respondent to communicate the emergent situation with the Responsible Party as soon as possible.*
- **Key Maintenance Personnel** – *Key Maintenance Personnel are the designated lead field manager(s) or supervisor(s) who directly oversee and delegate the maintenance activities, maintain the scheduling, and coordinate activities between all personnel. These tend to change more often than other personnel over time, so their names do not necessarily need to be included in the O&M Plan. However, they must be properly trained as recorded in the training logs (Section 2.2).*

The table below lists the roles for this project. This table must be updated whenever changes occur.

Role	Name (Title and Affiliation)	Phone Number	Address	Email Address
Facility Owner				
Responsible Party				
Designated Emergency Respondent				

2.2 Qualification and Training Requirements for Personnel

Guidance: Template language is included. Update this section, as needed, based on the maintenance activities specific to the BMPs included in the project.

Many of the activities presented in this O&M plan can be completed by personnel with basic landscaping and yard maintenance skills and project-specific orientation. However, there are activities that require a more experienced skillset to identify and remediate potential issues that could compromise the functionality of each BMP. The Responsible Party shall exercise discretion in determining the skillset required to complete each task.

Activities that can typically be completed by maintenance personnel with basic training and/or qualifications include:

- General landscaping activities (pruning, weeding, and raking)
- Routine sediment, trash and debris removal;
- Filling in minor scour or erosion areas, or replacing rip rap that has become displaced; and
- Watering or irrigation, as necessary.

Activities that typically require maintenance personnel with specialized qualifications, training, and/or engineering oversight include:

- Inspection and/or repair of inflow and outflow structures;
- Inspection and/or repair of underground elements;
- Large-volume sediment or media removal requiring specialized equipment;
- Inspection, diagnosis, and remediation of significant erosion issues potentially compromising function and/or structural stability; and
- Spill response and remediation.

Maintenance personnel who have identified a potential major issue with any facility should contact the designated key maintenance personnel for the facility immediately.

Training must be provided for all personnel performing maintenance tasks on or providing maintenance oversight of structural BMPs. The table below provides the personnel and relevant training topics.

Training Logs contained in Attachment 3 should be used to document training of maintenance personnel.

Training Topic	Responsible Party	Designated Emergency Respondent	Key Maintenance Personnel
Proper Maintenance of all BMP components	X		X
Identification and clean-up procedures for spills and overflows	X	X	X
Safety concerns when maintaining devices and responding to emergency situations	X	X	X

2.3 Maintenance Agreements and Funding Mechanisms

Guidance: Briefly describe the maintenance agreement and/or funding mechanism. Describe what agency, department, organization, or private company will operate the BMPs, and how the funding will be provided. Include the maintenance agreement as Attachment 2, as needed.

2.4 Record Keeping Requirements

Guidance: Update this section, as necessary.

Documentation of site conditions, maintenance activities performed, and any other remaining maintenance required is necessary during each inspection/maintenance visit. Inspection and maintenance records shall be retained in an accessible, secure location for the life of the facility, and not less than 10 years.

The following documentation mechanisms and procedures have been established for this O&M Plan:

- **Training Logs:** Personnel must document training activities as part of implementing this O&M Plan. Attachment 3 contains a sample training log.
- **Inspection and Routine Maintenance Logs:** Maintenance personnel are required to maintain logs of inspection and maintenance activities. Attachment 4 contain inspection and maintenance logs.
- **Rehabilitative and Corrective Maintenance Log and Reporting:** Rehabilitation and corrective maintenance activities should be documented at a degree of detail that is commensurate to the complexity/significance of the activity. Any significant changes to the BMP designs that arise from rehabilitation/corrective maintenance will be documented via an update to the Project WQMP and as-built drawings. Corrective maintenance that does

not result in design changes will be documented as a special entry in the maintenance logs to provide pertinent details of that rehabilitative or corrective maintenance activity.

The City or other agencies may also require a monitoring plan which has additional requirements for documentation. Details regarding the monitoring plan, such as parameters to be tested, frequency, testing locations, laboratory, etc. shall be included as appropriate, with the plan for meeting documentation requirements. This could include an attachment with a template form for sample collection, for example.

If no monitoring is required, a statement to that effect should be made.

2.5 Required Permits Associated with Maintenance Activities

Guidance: List any permits required for implementation, operation, and maintenance of the BMPs. Possible examples are: permits for maintenance-related discharges to sanitary sewer, permits from California Fish and Game for access or maintenance that pertains to habitat, and Encroachment Permits. If no permits are required, state this in this section.

2.6 Self-Reporting Requirements/WQMP Verification Form

Guidance: State any regular self-reporting requirements required by the local jurisdiction. Example from is below. Update, as needed. Include templates for any jurisdiction-specific forms in the attachment of this O&M Plan.

The WQMP Verification Form (**Attachment 4**) shall be completed accurately and submitted, with associated documentation, to the City of Dana Point via email to lzawaski@danapoint.org by September 30 of each year, or as requested by the City. Failure to complete and submit the verification form will result in a noncompliance and enforcement actions may be taken.

2.7 City Inspections

The City of Dana Point may conduct a site inspection to evaluate compliance with the Project WQMP, at any time, in accordance with Dana Point Municipal Code Chapter 15.10 Storm Water / Surface Runoff Water Quality ([Chapter 15.10 STORM WATER/SURFACE RUNOFF WATER QUALITY](#)).

2.8 Electronic Data Submittal

This document, along with the attachments, shall be provided to the City or County in PDF format. Autocad files and/or GIS coordinates of BMPs shall also be submitted to the City/County.

Section 3 Inspection and Maintenance Activities

This section identifies the inspection and O&M activities for each BMP incorporated into the project. Section 3.1 and 3.2 contain common maintenance activities and frequencies associated with Source Control BMPs and HSCs, respectively. Section 3.3 contains individual tables for each structural LID or hydromodification BMP with an explanation of the various types of maintenance activities associated with these BMPs.

3.1 Inspection and Maintenance of Source Control BMPs

Guidance: The tables below includes the recommended activities and frequencies for each source control BMP that has potential O&M requirements from the TGD. Delete rows for any unused BMPs, and add others, as needed. May tailor the table for site-specific considerations, as needed.

Source Control BMP	Activity	Frequency
Dry Weather Flow Source Control Note: this is a South Orange County High Priority Water Quality Condition for All Projects	Check for dry weather flows such as street washing, irrigation overspray, air conditioner condensate in areas of the project that do not drain to LID BMPs, the sanitary sewer, or landscaped pervious areas. Notify residents of any dry weather flows and follow up to correct.	Twice per year during dry season
	Inspect project outfall or most-downstream project manhole for presence of dry weather flow. If present, conduct reconnaissance to determine source and implement actions to eliminate source.	Twice per year during dry season
N1. Education for Property Owner's Tenants and Occupants	Distribute appropriate materials to owners, tenants, and/or occupants via contract language, mailings, website, or meetings.	Information provided to owners and tenants upon sale or lease. Reminders sent or posted as needed.
	Check www.ocwatersheds.com and/or City website for updated educational materials.	Annually

Source Control BMP	Activity	Frequency
N2. Activity Restrictions	Within the CC&R's or lease agreement, restrict the following activities: <i>List the activities to be restricted for water quality source control, e.g. car washing outside of car wash areas, etc.</i>	Information provided to owners and tenants upon sale or lease. Reminders sent or posted as needed.
N3/S4. Common Area Landscape Management, Efficient Landscape Design, and Efficient Irrigation	Check that fertilizer and pesticide usage is in accordance with the Integrated Pest Management Program. Adjust, if needed.	Annually
	Check the irrigation system water budget to ensure efficiency targets are being met and the system is in good condition. Adjust/repair irrigation system and controllers, if needed.	Annually prior to irrigation system activation
	Check landscaping for presence of invasive species and remove, if needed.	Annually
N11. Common Area Litter Control	Remove trash from around trash enclosure, inspect to ensure lids closed, structurally sound, and not overflowing. Repair or replace, as needed.	Monthly
	Inspect common area for litter and trash disposal violations by homeowners and reporting to the HOA or responsible party for investigation. Remove litter, as needed.	Weekly
N13/S6. Housekeeping of Loading Docks	Inspect loading dock for litter, spills, broken containers, and broken containers. Remove litter and debris and sweep docking area.	Monthly
	Check that loading dock is covered and isolated with no run-on or run-off to other areas or the storm drain system. Repair, redesign, regrade, etc. to correct deficiencies.	Annually
	If spills of hazardous materials occur, clean up spill, but prevent wash water from entering storm drain system.	As needed

Source Control BMP	Activity	Frequency
N14. Common Area Catch Basin Inspection	Remove trash and debris from catch basins and grates. Check for damage, clogging, and standing water. Repair or mitigate clogging/standing water, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
N15. Street Sweeping Private Streets and Parking Lots	Sweep curb and gutter areas using a vacuum street sweeper. Report any significant or illicit debris in curb/gutter to HOA or responsible party, as needed.	Monthly
S1. Provide Storm Drain System Stenciling and Signage	Check that all catch basins in paved areas marked or stenciled with “No dumping-Drains to Ocean; No Descargue Basura” language. Replace/repaint markings if faded, damaged, removed, or otherwise illegible.	Annually
S2. Design and Construct Outdoor Material Storage Areas	Check outdoor material storage structure to ensure structural stability is sound and that no contact of the stored materials with rainfall or runoff is occurring. Check secondary containment for leaks. Repair leaks or damage, as needed and mitigate, if coming into contact with stormwater.	Twice per year
S3. Design and Construct Trash and Waste Storage Areas	Check that outdoor waste storage structure is consistently covered, that structural stability is sound, and that no run-on or contact of the trash with runoff is occurring. Repair leaks or damage and mitigate if trash coming into contact with stormwater, as needed.	Twice per year
	Check that trash is removed by local waste management contractor on at least a weekly basis for proper disposal.	Weekly

Source Control BMP	Activity	Frequency
S5. Protect Slopes and Channels and Provide Energy Dissipation	Check slopes, channels, riprap and other conveyance or energy dissipation areas for signs of erosion or scour. Replace material, repair channels, replant vegetation, and/or redesign, as needed for signs of erosion/scour.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
S7. Maintenance Bays	Check that no run-on or runoff is occurring to or from maintenance bays	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check berms, drop inlets, and other control devices for structural soundness and effectiveness. Repair or mitigate, as needed, if runoff occurring from maintenance bays.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris and sweep maintenance areas	Monthly
S8. Vehicle Wash Areas	Check that no run-on or runoff is occurring to or from vehicle wash areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check berms, drop inlets, and other control devices for structural soundness and effectiveness. Maintain or replace any failed structural measures, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris from vehicle wash areas	Monthly

Source Control BMP	Activity	Frequency
S9. Outdoor Processing Areas	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check berms, drop inlets, and other control devices for structural soundness and effectiveness. Maintain or replace any failed structural measures, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris and sweep outdoor processing areas	Monthly
S10. Equipment Wash Areas	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check berms, drop inlets, and other control devices for structural soundness and effectiveness. Maintain or replace any failed structural measures, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris and sweep equipment wash areas	Monthly
S11. Fueling Areas	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check berms, drop inlets, and other control devices for structural soundness and effectiveness. Maintain or replace any failed structural measures, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris and sweep fueling areas	Monthly
S12. Hillside Landscaping	Check the vegetation on steep hillsides to ensure healthy, and check for signs of erosion. Replace eroded areas with deep-rooted, drought tolerant vegetation and remove invasives, as needed.	Twice per year

Source Control BMP	Activity	Frequency
S13. Wash Water for Food Preparation Areas	Check that signs are present prohibiting the discharge of wash water from food preparation areas (including outdoor) to areas draining to a storm drain, is prohibited.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Check that all wash water, leaks, and spills are prevented from possible contact with rainwater. Check sinks, berms, and other structures for structural soundness and effectiveness. Maintain or replace any failed structural measures, as needed.	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events >0.5 inches
	Remove trash and debris and sweep outdoor food preparation areas	Weekly

3.2 Inspection and Maintenance of Hydrologic Source Controls

Guidance: Where HSCs are considered as part of BMP sizing, then HSCs must be maintained in order to maintain intended functionality. The table below includes the recommended activities and frequencies for each HSC from the TGD. Delete rows for any unused HSCs, and add others, as needed. May tailor the table for site-specific considerations, as needed.

HSCs	Activity	Frequency
Localized On-Lot Infiltration (E.g. Rain Gardens, French Drains)	Confirm presence of HSC. Remove trash. Check facility for excessive sediment accumulation (>~ 1 inch), major erosion, damage, channelization, loss of vegetation, and standing water. Check downspout and flow spreader for damage or clogging. Remove sediment, restore vegetation, scarify soil, and/or otherwise mitigate, as needed, to restore functionality.	Annually
Impervious Area Dispersion (E.g. Downspout Disconnect, Sheet Flow Dispersion)	Confirm presence of HSC. Remove trash from pervious area. Check pervious area erosion, channelization, loss of vegetation. Check downspout and flow spreader for damage or clogging. Decompact, level, reseed, or other activities, as needed, to restore functionality.	Annually
Street Trees	Confirm presence of HSC. Check trees for damage, impaired health, insects, and growth. Prune and maintain trees to avoid impairment of traffic and replace/treat dead or damaged trees.	Annually
Green Roof/Brown Roof	Confirm presence of HSC. Check roof storage for excessive standing water. Check vegetation (if present) for health and coverage. Mitigate any detected issues to restore function, as needed.	Annually
Self-Retaining Areas	Confirm presence of HSC. Any self-retaining areas must be examined for excessive standing water and clogging (meaning they are no longer self-retaining). Mitigate, as needed, to provide full retention of the DCV.	Annually

3.3 Inspection and Maintenance of Structural LID and Hydromodification BMPs

The section is organized by type of structural LID or hydromodification BMP with separate tables for each BMP type included in the project. The section identifies four categories of activities related to O&M of the BMPs:

General Inspections - Evaluations conducted at regularly scheduled intervals to indicate the need for maintenance of structural BMPs.

Routine Maintenance Activities - Activities conducted at regularly scheduled intervals to sustain long-term performance of each BMP, including inspections and normal upkeep.

Corrective (Major) Maintenance Activities - Includes activities conducted to replace or rehabilitate system components at the end of their usable life as well as activities conducted to resolve major issues that are not anticipated.

Emergency Response Activities - Activities related to emergencies, primarily concerning spills, which may require immediate action and notifications (Section 3.4).

BMP ID	BMP Type	Reference Maintenance Table
BMP 1	CDS Unit	Manufacturer O&M Manual (Attachment XX)
BMP 2	Infiltration Basin	INF-1 (Page XX)
BMP 3	Bioinfiltration Basin	BIO-1 (Page XX)

Guidance: This section is pre-populated with tables for each LID and HM BMP. These tables contain the recommended activities and frequencies based on the BMP Fact Sheets in Appendix G of the TGD.

Delete tables for any unused BMPs, and add others, as needed.

Add tables for any proprietary BMPs that do not fit into any of the categories below, such as proprietary BMPs used for pretreatment or trash control based on manufacturers recommendations.

May tailor the tables for site-specific considerations, as needed.

Section 1.4 should already list the BMPs associated with the project, but this section should assign each of these BMPs to a category with a table below.

INF-1 Infiltration Basins		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Identify eroded facility areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches	
Observe and record drawdown rate		
Estimate degree of sediment accumulation in pretreatment system and infiltration basin		
Identify areas of compromised plant health or density		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Sediment, Trash, and Debris		
Remove trash from facility	Each visit; as needed	
Remove sediment from forebay when estimated sediment accumulation exceeds 25% of the forebay volume	As needed	
Remove sediment from pretreatment system per manufacturer's recommendations or when sediment storage volume is more than 50% full	Per manufacturer recommendation, or as needed	
Vegetation and Infiltration Bed		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season	
Replant or reseed areas of thin or missing vegetation	Annually	

INF-1 Infiltration Basins		Inspection Notes
Activity	Frequency	
Scrape soil from top 3 to 6 inches of infiltration bed and reestablished vegetation; augment soil amendment if needed	When infiltration rate drops below design infiltration rate	
Inflow and Outflow Structures		
Check energy dissipation function and add riprap	Four times per year during wet season, including inspection just before the wet season	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season	
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

INF-2 Infiltration Trench		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Identify eroded facility areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches	
Observe and record drawdown rate via the observation port		
Estimate degree of sediment accumulation in the pea gravel, thickness of surface layer or depth of penetration		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Pea Gravel Filter Layer		
Remove sediment via scraping of the top layers of this layer and replacement with clean washed pea gravel	Annually or when sediment has accumulated within more than 2 inches of the pea gravel layer	
Replace full depth of pea gravel	When comingled with sediment and appears to be restricting inflow to system	
Gravel Bed		
Excavate the entire facility, rehabilitate bottom and sides via over-excavation, and replace aggregate layers. Aggregate layers can be reused if they are washed before replacement.	When infiltration rate drops below design infiltration rate	
Inflow and Outflow Structures		
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate	Before major maintenance	

INF-2 Infiltration Trench		Inspection Notes
Activity	Frequency	
parties; modify WQMP if needed.		
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

INF-3 Bioretention Without Underdrain		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Repair eroded facility areas		
Inspect and maintain access roads		
Inspect and resolve areas of standing water		
Remove minor sediment in facility bottom		
Provide vector control if needed		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Reseed or replant areas of thin or missing vegetation	Annually	
Mulch		
Remove and replace mulch in areas where significant sediment (>1 inch) has accumulated	Annually	
Add an additional 1-2 inches of mulch; replace any mulch that is removed	Annually	
Media Layer		
Scarify media to promote infiltration while removing mulch	Annually	

INF-3 Bioretention Without Underdrain		Inspection Notes
Activity	Frequency	
Replace top 3-6 inches of media layer and replace vegetation	Estimated every 10 years (highly site specific)	
Replace full depth of media and replace vegetation	Estimated every 30 years (highly site specific)	
Inflow, Underdrain and Outflow Structures		
Check energy dissipation function and add riprap	Four times per year during wet season, including inspection just before the wet season.	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Flush underdrain	As needed	
Repair structural damage to inlets, outlets, and underdrain	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
For the adaptable configuration, utilize results of downtown observations to determine the need for adjustment of the outlet structure (i.e., uncapping closed underdrain)	Based on twice-yearly drawdown observations following events 0.5 inch or larger	
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

INF-4 Dry Well		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Identify and control sources of sediment in tributary areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches	
Observe and record drawdown rate via the observation port		
Estimate degree of sediment and/or trash and debris accumulation in the pre-treatment system		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Pre-treatment system		
Remove accumulated material from pre-treatment system	Annually or when material has accumulated to more than 50 percent of capacity of the pre-treatment system. If proprietary pre-treatment is used, then maintain per manufacturer guidance.	
Dry Well		
Excavate the entire facility, rehabilitate bottom and sides via over-excavation, and replace system components.	When infiltration rate drops below design infiltration rate	
Inflow and Outflow Structures		
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	

INF-5 Permeable Pavement		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Inspect for areas of sediment accumulation in the pavement surface	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
If sediment accumulation is elevated, inspect for potential sources of sediment in the tributary area and recommend control approaches		
Observe and record drawdown rate via observation port following storm event		
Periodically (every 2 to 5 years) measure the permeability of the surface of the permeable pavement		
Identify any damage to pavement		
Inspect overflow structures		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Permeable Surface Layer		
Remove sediment and leaf litter using a mechanical sweeper (i.e., regenerative air or vacuum-assisted sweeper)	Two to four times per year during wet season including just before the wet season, depending on sediment and debris load	
Manually remove weeds	Annually	
Power wash surface layer (without using surfactants)	Annually	
Patch pavement surface where needed	As needed	
Other activities specific to pavement surface type	As needed	
Coordinate with maintenance of adjacent pavement to ensure permeable pavement is protected	As needed	

INF-5 Permeable Pavement		Inspection Notes
Activity	Frequency	
Underdrain and Outflow Structures		
Inspect outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Repair structural damage to outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

INF-6 Underground Infiltration		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Inspect condition of pretreatment BMP to determine need for maintenance	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Inspect degree of sediment accumulation in storage reservoir, if possible		
Observe and record drawdown rate		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Pretreatment System		
Remove accumulated trash and debris	Each visit; as needed	
Remove sediment from pretreatment system per manufacturer's recommendations or when sediment storage volume is more than 50% full	Per manufacturer recommendation, or as needed	
Storage Reservoir		
It is not typically practical to maintain the storage reservoir or infiltrating surface; plan for overall reconstruction when infiltration falls below the design infiltration rate	Estimate frequency of clogging maintenance using guidance in Appendix E.4 of the TGD.	
If infiltration has declined and the system has the flexibility to be adapted to serve as a biotreatment BMP with partial infiltration (i.e., through use of a proprietary BMP as a pretreatment system), then adjust outlet to infiltrate a shallower depth of water and operate as biotreatment with partial infiltration system while infiltration rates allow. This can extend the period before rehabilitation is needed.	As needed and acceptable.	

INF-6 Underground Infiltration		Inspection Notes
Activity	Frequency	
Inflow and Outflow Structures		
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

HU-1 Rainwater Harvesting Cisterns and Tanks		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Check for leaks	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Inspect for minor sediment in cistern bottom		
Inspect for vector control issues		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Clean out gutters, screening, and/or first-flush diverter	As-needed	
Remove sediment, trash, debris, and oil accumulation from cistern	Semi-annually or as needed	
Clean inside surfaces of cistern and disinfect	Annually	
Maintain treatment systems per manufacturer or designer recommendations	As specified	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	

BIO-1/BIO-6 Bioinfiltration/Bioretenion With Underdrain		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Repair eroded facility areas		
Inspect and maintain access roads		
Inspect and resolve areas of standing water		
Remove minor sediment in facility bottom		
Provide vector control if needed		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Reseed or replant areas of thin or missing vegetation	Annually	
Mulch		
Remove and replace mulch in areas where significant sediment (>1 inch) has accumulated	Annually	
Add an additional 1-2 inches of mulch; replace any mulch that is removed	Annually	
Media Layer		

BIO-1/BIO-6 Bioinfiltration/Bioretenion With Underdrain		Inspection Notes
Activity	Frequency	
Scarify media to promote infiltration while removing mulch	Annually	
Replace top 3-6 inches of media layer and replace vegetation	Estimated every 10 years (highly site specific)	
Replace full depth of media and replace vegetation	Estimated every 30 years (highly site specific)	
Inflow, Underdrain and Outflow Structures		
Check energy dissipation function and add riprap	Four times per year during wet season, including inspection just before the wet season.	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Flush underdrain	As needed	
Repair structural damage to inlets, outlets, and underdrain	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

BIO-2 Vegetated Swale		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Repair eroded facility areas		
Inspect and maintain access roads		
Inspect and resolve areas of standing water		
Remove minor sediment in facility bottom		
Provide vector control if needed		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Repair areas of thin or missing vegetation	Annually	
Topsoil/Amended Soils/Media Layer		
Replace top 3-6 inches of top soil or media layer and replace vegetation	Estimated every 10 years (highly site specific)	
Replace full depth of top soil, media, aggregate storage (if provided) and replace vegetation	Estimated every 30 years (highly site specific)	
Inflow, Underdrain and Outflow Structures		
Check energy dissipation function	Four times per year during	

BIO-2 Vegetated Swale		Inspection Notes
Activity	Frequency	
and add riprap	wet season, including inspection just before the wet season.	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Flush underdrain, if included in design	As needed	
Repair structural damage to inlets, outlets, and underdrain	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

BIO-3 Vegetated Filter Strip		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Check for eroded facility areas or areas with sparse or dead vegetation		
Inspect for signs of concentrated flow into level spreader or into filter strip		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Repair eroded areas	Four times per year during wet season, including inspection just before the wet season.	
Maintain level spreader by making local adjustments to elevations to improve flow distribution over filter strip	Annually	
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation (i.e., weeds)	Four times per year during wet season, including inspection just before the wet season.	
Reseed areas of thin or missing vegetation	Annually	
Topsoil/Amended Soils		
Decompact/aerate to at least a 6-inch depth and reseed to maintain porosity and robust vegetation replace vegetation	Estimated every 10 to 15 years (highly site specific)	

BIO-3 Vegetated Filter Strip		Inspection Notes
Activity	Frequency	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

BIO-4 Dry Extended Detention Basin		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Areas of erosion or scour facility areas		
Areas of standing water		
Need for vegetation management		
Need for vector control efforts		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Repair areas of erosion, scour, or standing water	As needed	
Sediment		
Remove sediment from forebay when sediment volume exceeds 25% of the sediment storage volume	As needed	
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Reseed or replant areas of thin or missing vegetation	Annually	
Inflow and Outflow Structures		
Check energy dissipation function and add riprap as needed	Four times per year during wet season, including inspection just before the wet season.	

BIO-4 Dry Extended Detention Basin		Inspection Notes
Activity	Frequency	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

BIO-5/7 Proprietary Biotreatment		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Identify excess erosion or scour		
Identify sediment accumulation that requires maintenance		
Inspect during storm event, when possible, to estimate treatment capacity and determine if premature bypass is occurring		
Evaluate plant health and need for corrective action		
Identify any needed corrective maintenance that will require site-specific planning or design		
OPERATION AND MAINTENANCE		
<ul style="list-style-type: none"> • O&M of proprietary BMPs must follow established manufacturer guidelines • O&M of accompanying retention BMPs should follow the guidelines established in the associated fact sheet for that BMP. 		•

BIO-8 Wet Detention Basin		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Identify eroded facility areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Identify needs to improve vector control if needed		
Estimate degree of sediment accumulation		
Identify areas of compromised plant health or density		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Sediment, Trash, and Debris		
Remove trash from facility	Each visit; as needed	
Remove sediment from forebay when estimated sediment accumulation exceeds 25% of the forebay volume	As needed	
Remove sediment from basin bottom when estimated sediment accumulation exceeds 10% of total volume.	As needed	
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Reseed or replant areas of thin or missing vegetation	Annually	
Remove algae mats when algae coverage is more than 20% of the	As needed	

BIO-8 Wet Detention Basin		Inspection Notes
Activity	Frequency	
water surface		
Inflow and Outflow Structures		
Check energy dissipation function and add riprap, as needed	Four times per year during wet season, including inspection just before the wet season.	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

BIO-9 Constructed Wetland		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Identify eroded facility areas	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches.	
Identify needs to improve vector control if needed		
Estimate degree of sediment accumulation		
Identify areas of compromised plant health or density		
Identify any needed corrective maintenance that will require site-specific planning or design		
ROUTINE MAINTENANCE		
Sediment, Trash, and Debris		
Remove trash from facility	Each visit; as needed	
Remove sediment from forebay when estimated sediment accumulation exceeds 25% of the forebay volume	As needed	
Remove sediment from basin bottom when estimated sediment accumulation exceeds 10% of total volume.	As needed	
Vegetation		
Irrigate as recommended by a landscape professional, typically for the first 3 years to establish vegetation	As needed	
Remove undesirable vegetation	Four times per year during wet season, including inspection just before the wet season.	
Replant or reseed areas of thin or missing vegetation	Annually	
Remove algae mats when algae coverage is more than 20% of the water surface	As needed	

BIO-9 Constructed Wetland		Inspection Notes
Activity	Frequency	
Inflow and Outflow Structures		
Check energy dissipation function and add riprap	Four times per year during wet season, including inspection just before the wet season.	
Inspect inlets and outlets and remove accumulated sediment	Four times per year during wet season, including inspection just before the wet season.	
Repair structural damage to inlets and outlets	As needed	
CORRECTIVE (MAJOR) MAINTENANCE		
Prepare documentation of issues and resolutions for review by appropriate parties; modify WQMP if needed.	Before major maintenance	
Document major maintenance activities; record modified WQMP and as-built plan set if needed	After major maintenance	
Take photographs before and after from the same vantage point	Before and after	

TRT-2 Proprietary Treatment Control BMPs		Inspection Notes
Activity	Frequency	
GENERAL INSPECTIONS		
Remove trash and debris	Four times per year during wet season, including inspection just before the wet season and within 24 hours after at least two storm events ≥ 0.5 inches	
Identify excess erosion or scour		
Identify sediment accumulation that requires maintenance		
Inspect during storm event, when possible, to estimate treatment capacity and determine if premature bypass is occurring		
Identify any needed corrective maintenance that will require site-specific planning or design		
OPERATION AND MAINTENANCE		
O&M of proprietary treatment control BMPs must follow established manufacturer guidelines		

3.4 Emergency Response Plan

Guidance: Update this section as needed for the development

In some cases, adverse conditions may occur which could be an imminent threat to human or environmental health or severe damage to infrastructure or property. For example, a spill of hazardous substances in the contributing area to a BMP could cause harmful substances to enter the BMP and be released downstream, affecting environmental and public health. Other emergencies could arise related to the stormwater features or water quality protection, such as landsliding, major erosion, or burst pipes in the tributary area.

In the event of an actual or suspected hazardous material release, the following plan shall take effect.

The primary importance of initial response to an actual or suspected spill will be public safety, control of the source of pollution, and containment of spills that have occurred, as applicable. The table below provides the emergency contact information for hazardous materials spills affecting BMPs.

Name	Phone	When to Report
Local Emergency Response (Fire Department)	911	Immediately
Orange County 24-Hour Water Pollution Problem Reporting Hotline	1-877-897-7455	Immediately
CalOES State Warning Center	1-800-852-7550	Immediately

The first number to call is emergency response (9-1-1), followed by the California Governor's Office of Emergency Services (CalOES), formerly the California Emergency Management Agency (CalEMA). (CalOES) maintains guidance and instructions of what to do in the event of a spill of hazardous substances (<http://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/spill-release-reporting>). This plan is based on the guidance provided by CalOES (CalOES, 2014).

1. If an actual or suspected hazardous material incident exists, maintenance personnel will immediately call 911 and the CalOES State Warning Center (**Error! Reference source not found.**).
2. The Designated Emergency Respondent and Responsible Party assigned to the facility (from Section 2.1) must also be notified of any actual or potential spill.
3. Remediation of contamination in the water quality facility should be handled as a corrective maintenance issue per Section 3.2 of this O&M plan.

In the event that a potential spill is identified prior to it reaching the BMPs, the Designated Emergency Respondent will implement an isolation protocol to prevent the spill from entering the BMP. An inflatable plug, Hazmat Plug, or equivalent device as approved by the Designated Emergency Respondent will be installed within the storm drains or catch basins to block upstream flow from reaching and contaminating the BMP. The temporary plug will be an interim measure until the spill is properly maintained and remediated and the Designated Emergency Respondent has determined the risk to the BMP of contamination no longer exists.

Similar measures should be taken in the event of a landslide, mudslide, or major erosion within the tributary area of the BMP to prevent sediment from damaging the BMP to the extent possible.

3.5 Sewer Spill Response

In the event that a sewer spill is observed is observed, a call should be made immediately to a plumbing professional and to the appropriate sewer agency.

Plumbing Contractor: _____

Sewer Agency: *Guidance: select appropriate agency that serves this project area.*

South Coast Water District: 949-499-4555

Moulton Niguel Water District: 949-831-2500

San Juan Capistrano Utilities: 949-443-6363, after hours: 949-234-4575

3.5 Vector Control

Guidance: Update, as needed.

In addition to the inspection and maintenance activities listed in Section 3, all BMPs shall be inspected for standing water on a regular basis. Standing water which exists for longer than 72 hours may contribute to mosquito breeding areas. Standing water may indicate that the BMP is not functioning properly and proper action to remedy the situation shall be taken in a timely manner.

Elimination of standing water and managing garbage, lawn clippings, and pet droppings can help decrease the present of mosquitoes and flies in the area.

The Orange County Vector Control District may be contacted for more information and support at 714-971-2421 or 949-654-2421 or www.ocvcd.org.

Attachment 1: BMP Site Plan, Details, Schematics, Photos and Other Exhibits

Guidance: This attachment is referenced throughout the O&M Plan for visual information about the BMPs.

This attachment should include a copy of the BMP Site Plan from the WQMP (as-built) and relevant water quality details from the as-built construction drawings/grading plans.

Other exhibits should be included, as necessary, such as landscape, grading and/or architectural plans, to help maintenance staff locate and identify all BMPs associated with the project and identify the areas draining to them.

Schematics and cross sections should be included for each BMP to help maintenance staff identify the important features of each BMP to aid in inspection/maintenance.

Photos of each BMP in its constructed condition can provide useful reference for comparison with existing conditions at inspections and can help maintenance staff identify the BMPs.

Site plan is preferred on minimum 11” by 17” colored sheets, as long as legible.

Attachment 2: Training Log Form

Guidance: An example template for a training/educational log is included, here. Individual adaptation is allowed, and some jurisdictions may have separate templates they require to be used.

TRAINING / EDUCATIONAL LOG

Date of Training/Educational Activity: _____

**Name of Person Performing Activity
(Printed):** _____

Signature: _____

Topic of Training/Educational Activity:

Name of Participant	Signature of Participant

For newsletter or mailer educational activities, please include the following information:

- Date of mailing:
- Number distributed:
- Method of distribution:
- Topics addressed:

If a newsletter article was distributed, please include a copy of it.

Attachment 3: Inspection and Maintenance Log Forms

Guidance: Unless a different form is preferred, suggest to reference the appropriate BMP Maintenance Tables from Section 3.3.

Refer to the maintenance tables in Section 3.3 for maintenance checklists that can be used for the required inspections. Note that the date, inspection name and signature is required to be included on the forms.

The completed inspection forms shall be submitted to the City each year along with the WQMP Verification Form in Attachment 4.

Attachment 4: WQMP VERIFICATION FORM

**CITY OF DANA POINT
WATER QUALITY MANAGEMENT PLAN (WQMP) VERIFICATION SURVEY**

This form must be modified to reflect the all the BMPs in this Project WQMP

Project Name/Site Address: _____

Responsible Party : _____

Contact Phone: _____ Contact Email: _____

1. **Have your contractors (landscape, maintenance, etc.) been educated regarding the applicable requirements to prevent pollution as outlined in the WQMP?**

Yes **No** Name of Landscape/Maintenance Contractor:

Method of education (contract language, Copy of O&M, educational brochures, etc.):

2. **Have the storm drains and inlets been inspected and maintained, at a minimum, annually prior to Oct 1?**

Yes **No** Date of Last Inspection/Maintenance:

Maintenance conducted by:

3. **Have you observed any runoff from the irrigation system?**

Yes **No** If yes, how was the problem resolved?:

4. **What type of Integrated Pest Management (IPM) practices are used on site?**

5. **Are native and/or drought tolerant plants established and considered for any new landscaping?**

Yes **No**

6. **Have the storm drain stencils been inspected annually for legibility prior to Oct. 1?**

WQMP Operations and Maintenance Plan
INSERT Project Name

Yes **No** Total number of stencils on site: _____

How many inlets required restenciling / date of restenciling? _____ / _____

7. **Have education materials been distributed to the residents/tenants/contractors within the past year?**

Yes **No** Topic / Date of Distribution: _____ / _____

Method of Distribution: newsletter, billing insert, etc.: _____

8. **Is street sweeping conducted weekly?**

Yes **No** Contractor:

9. **Are trash areas in common area inspected daily?**

Yes **No**

10. **Have any vector concerns been observed (standing water, mosquito larvae, etc.). if yes, please contact Orange County Vector Control District at www.ocvcd.org.**

Yes **No**

11. **Have the **treatment BMPs** been inspected and maintained per Manufacturer instructions? (attach invoices and inspection/maintenance forms).**

Yes **No**

12. **Have there been any issues with operation and maintenance of the **treatment BMPs** units?**

I certify that the above information is correct and that the BMPs for this project have been implemented and operated and maintained in accordance with the Operation and Maintenance (O&M) Plan on site and on file at the City.

Print Name of Responsible Party

WQMP Operations and Maintenance Plan
INSERT Project Name

Signature (required)

Date

This form must be completed and submitted to the City by September 30 each year.

City of Dana Point • 33282 Golden Lantern • Dana Point • 92629
Attn: Water Quality Engineer

Email: ljawaski@danapoint.org

Attachment 5: Vendor O&M Information

Guidance: Include vendor O&M information for vendor-supplied proprietary BMPs.

Attach O&M criteria derived from Washington State TAPE approval of BMP technology.

<http://www.ecy.wa.gov/programs/wq/stormwater/newtech/technologies.html>

Attachment 6: Maintenance Agreement and Funding Mechanism Documentation

Guidance: Guidance about the maintenance agreement and funding mechanism is provided in TGD Section 2.8. The maintenance mechanism must assign responsibility for maintenance of the BMPs and describe the funding mechanism. This attachment should document any formal agreements between different owners, agencies, HOAs, etc. for providing the maintenance activities for the BMPs and funding for O&M (including eventual rehabilitation).

Delete if not used.

WQMP BMP CONSTRUCTION CERTIFICATION FORM

CIVIL ENGINEER'S LETTERHEAD

City of Dana Point
Department of Public Works/Engineering
33282 Golden Lantern
Dana Point, CA 92629

Attention: Lisa Zawaski, Senior Water Quality Engineer

Subject: **WQMP Construction Certification**

Reference Project: Grading Permit No. _____

Address: _____

Project Name: _____

I hereby certify that the above referenced project has been field inspected to confirm that the structural best management practices (BMPs) have been installed per the project's approved Water Quality Management Plan (WQMP) and associated grading plans and in accordance with my responsibilities as a Civil Engineer in the State of California.

By way of this certification, I hereby declare that the BMPs are operational and functioning properly for intended use and that any debris that may have been accumulated during construction has been removed.

Photographs of the installed structural BMPs, described and referenced per the Operation and Maintenance (O&M) Plan is attached.

Signature

(R.C.E. # _____)

*Engineer's Wet
Stamp Here*

Note: Photographs, with name/brief description/reference shall be taken of the installed structural BMPs and provided as an attachment to this certification. For source BMPs with multiple locations, such as storm drain "no dumping" messages, a photo of one location may be provided, with the number of locations provided in the description, when appropriate.

Submit by Email

WQMP Construction Certification Photo Log

DATE: _____

PROJECT: _____

ADDRESS / LOCATION: _____



X

add caption multiple lines ok



X

add caption multiple lines ok



X

add caption multiple lines ok



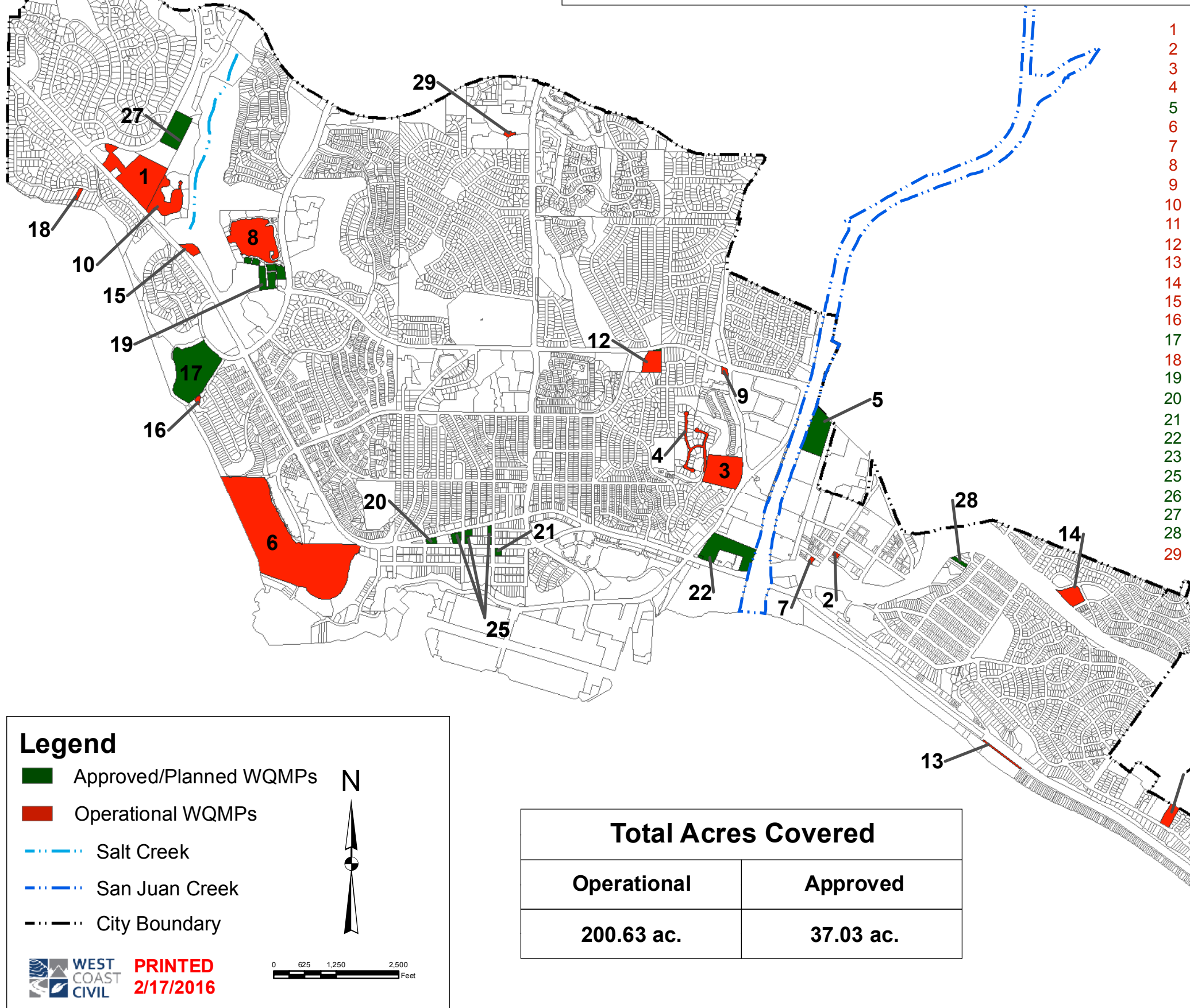
X

add caption multiple lines ok

Exhibit 7.8



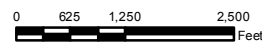
City of Dana Point Storm Drain System GIS - Private WQMPs



- | | | |
|----|--|----------------|
| 1 | Monarch Bay Plaza | Treatment |
| 2 | Valvoline | Treatment |
| 3 | Fountains at Sea Bluffs Drive | Source |
| 4 | Bal Harbour (Capo by the Sea) | Treatment |
| 5 | SCWD Boat Storage Lot | Full Retention |
| 6 | Headlands | Treatment |
| 7 | Penna Development | Treatment |
| 8 | St. Regis Resort | Treatment |
| 9 | Mobil Station | Treatment |
| 10 | Point Monarch | Treatment |
| 11 | Castillo del Mar (Pioneer Builders, Capo 8) | Treatment |
| 12 | Gloria Dei Lutheran Church | Biofiltration |
| 13 | Capistrano Bay District Access Road/Parking Improvements | Full Retention |
| 14 | Faith Lutheran Church | Treatment |
| 15 | Monarch Links Golf Course Maintenance | Treatment |
| 16 | 23482 Seaward Isle (Bergman Residence) | Treatment |
| 17 | Ritz Carlton Expansion | Biofiltration |
| 18 | 41 Monarch Bay Dr. (Stoddard Residence) | Treatment |
| 19 | Hotel Village South | Treatment |
| 20 | Mixed Use, CETT Investments | Full Retention |
| 21 | Advent Group, "The Pointe" | Treatment |
| 22 | 34202 Del Obispo Doheny Village (old mobile site) | Biofiltration |
| 23 | Ocean Del Rey | Treatment |
| 25 | Majestic: 24471 Del Prado | Full Retention |
| 26 | Gloria Dei Sanctuary | Biofiltration |
| 27 | South Shores Church Master Plan Conceptual WQMP | Biofiltration |
| 28 | 26371 Via Cannon | Biofiltration |
| 29 | Seabrook Apartments Clubhouse & Lounge | Biofiltration |

Legend

- Approved/Planned WQMPs
- Operational WQMPs
- Salt Creek
- San Juan Creek
- City Boundary



Total Acres Covered

Operational	Approved
200.63 ac.	37.03 ac.