




WATER QUALITY MANAGEMENT PLAN (WQMP) REVIEW CHECKLIST


Checklist to be utilized on WQMPs submitted during the 2020 calendar year

The purpose of this checklist is to allow project proponents an opportunity to review their WQMP prior to submittal to ensure all items in this checklist are addressed. Additionally, it provides a uniform format for comprehensive and complete reviews of WQMPs. The completed checklist will be transmitted to the project applicant with the project WQMP. A copy of the completed checklist will be retained with the project case file.

This checklist shall be utilized in conjunction with the [City of Anaheim WQMP Template](#) and the [City of Anaheim BMP Design Guidelines](#), both available at the City of Anaheim website. The requirements of these resources were developed by following the County of Orange Model WQMP Template and the 2013 Technical Guidance Document with additional guidance that pertain to City of Anaheim Priority Development Projects.

For any requirements not satisfied (eg. Marked "No"), additional explanations are provided where applicable (*comments provided in red italics*).

Line items with the  icon are only required for Final WQMPs, and to be provided if available for the Preliminary WQMP.

Line items with the  icon denotes additional guidance is available to the plan reviewer.

WQMP Project Check Project Information

WQMP: Preliminary Final

City Project Number _____

Project Name _____

Project Address _____

Name/Number of Plan Checker _____

Name/Number of Plan Check Supervisor _____

First Review WQMP Received On: _____



Review Completed On: _____

Second Review WQMP Received On: _____

Review Completed On: _____

Third Review WQMP Received On: _____

Review Completed On: _____

| WQMP REQUIREMENT | Requirement Satisfied? | | |
|--|------------------------|----|-----|
| | Yes | No | N/A |
| Has an electronic copy (i.e. PDF) of the WQMP been provided for review? A PDF scan of the hard copy WQMP is not acceptable. The PDF shall be created from the original electronic source files (.docx, .dwg, etc.) to minimize file size, preserve digital quality, and allow for keyword search. | | | |
| If applicable, has the Preliminary WQMP and any comments on the Preliminary WQMP deferred to the Final WQMP been reviewed to ensure consistency with Final WQMP? | | | |
| Are project Right-of-Way requirements followed? | | | |
| Is this WQMP affected by a Master WQMP or similar Document that would affect the design or implementation of the BMPs and, if so, has it been provided and reviewed for consistency? | | | |
| Is there an existing WQMP for the Property? | | | |
| Title Page | | | |
| Name of project | | | |
| Application (i.e. OTH number) and/or Tract Number | | | |
| Owner/Developer name, address, phone and email address | | | |
| Site address (or addresses) and planning area number | | | |
| Lot number(s) if site is a portion of a Tract | | | |
| Consulting/Engineering (WQMP preparer) firm name, address, phone and email address | | | |
| Date WQMP was prepared/revised | | | |
| Applicable Jurisdictional Information Shown  | | | |
| Owner's Certification | | | |
|  Is the Owner certification statement, in which the project owner acknowledges and accepts the provisions of the WQMP signed? | | | |
| Is the certification by the Engineer indicating their assurance that the WQMP complies with the permit requirements signed? | | | |
| Table of Contents | | | |
| Is a Table of Contents provided, including a list of all figures and attachments? | | | |

Title, Owner's Certification and Table of Contents

Comments – Title, Owner's Certification and Table of Contents

Section 1 – Discretionary Permits & Water Quality Conditions

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|------------------|---|------------------------|----|-----|
| | | Yes | No | N/A |
| 1.1 | <input checked="" type="checkbox"/> Are the Discretionary Permit(s) relevant to WQMP preparation listed, if any? | | | |
| 1.2 | Is the address and/or the lot & tract/parcel map number describing the subject property provided? | | | |
| 1.3 | Are applicable conditions from watershed-based plans, such as WIHMPs and TMDLs provided? (<i>Currently Not Applicable</i>) | | | |
| 1.4 | If applicable, has the prior approved Preliminary WQMP been reviewed to confirm consistency of the Final WQMP? If there are any substantive differences, are they adequately explained? | | | |

Comments – Section 1

Section 2 – Project Description

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|--|---|------------------------|----|-----|
| | | Yes | No | N/A |
| II.1: Project Description | | | | |
| 2.1 | Does the project accurately identify its priority project development category(s)? | | | |
| 2.2 | Is sufficient detail provided about the proposed development that is not, otherwise, available on the plans and exhibits in Section 6? | | | |
| 2.3 | Are pre- and post-project condition impervious percentages, drainage patterns, and storm drain connections provided to understand the project's drainage conditions and hydrology? | | | |
| For Commercial and Industrial Projects: | | | | |
| 2.4 | Is the Standard Industrial Classification (SIC) Code(s) which best describes the facilities operations provided? | | | |
| 2.5 | <input checked="" type="checkbox"/> Describes, if any, food preparation, cooking, and eating areas (specify location and type of area), delivery areas and loading docks, outdoor material storage areas, vehicle maintenance areas, and other activities that will be completed outdoors? | | | |
| For Residential Projects: | | | | |
| 2.6 | <input checked="" type="checkbox"/> Range of lot and home sizes provided, and all community facilities such as laundry, car wash, swimming pools, jacuzzi, parks, open spaces, tot lots, etc, if any? | | | |
| II.2: Potential Stormwater Pollutants | | | | |
| 2.7 | Does the project identify the potential stormwater or urban runoff pollutants reasonably expected to be associated with the project (see Table 2.1 of the TGD for reference)? | | | |
| II.3: Hydrologic Conditions of Concern | | | | |
| 2.8 | Are Hydrologic Conditions of Concern (HCOC) identified (see TGD Appendix XVI)? http://www.ocwatersheds.com/gov/pw/watersheds/documents/wqmp/technical_guidance_document_(tgd)/technical_guidance_document_watershed_exhibits.asp | | | |
| 2.9 | If the project is determined to be in an HCOC susceptible area, are supporting 2-year pre- and post-development runoff volume, Tc, and flow rate calculations provided? | | | |
| 2.10 | Does the project adequately demonstrate that it is exempt or requires hydromodification (post-development does or does not exceed 5% pre-development)? | | | |
| II.4: Post Development Drainage Characteristics | | | | |
| 2.11 | Is post-development drainage characteristics adequately described, including how runoff drains from the project site to downstream receiving waters? | | | |
| II.5: Property Ownership/Management | | | | |
| 2.12 | Describes ownership of all portions of project and site: <ul style="list-style-type: none">If applicable, is all infrastructure proposed to be transferred to public agencies (City, County, Caltrans, etc.) properly identified? | | | |

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|------------------|---|------------------------|----|-----|
| | | Yes | No | N/A |
| | • <input type="checkbox"/> If applicable, is a homeowners or property owners association to be formed properly identified? | | | |
| | • <input type="checkbox"/> If a homeowners or property owners association is being formed, will the association be involved in long term maintenance? | | | |





Comments – Section 2



Section 3 – Site Description

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|-------------------------------------|--|------------------------|----|-----|
| | | Yes | No | N/A |
| III.1: Physical Setting | | | | |
| 3.1 | Identifies planning area or community name, if applicable? | | | |
| 3.2 | Is the site address (or vicinity map or cross streets) and site size to nearest tenth acre (only include acreage within project limits) provided? | | | |
| 3.3 | Is the zoning and land use designation identified? | | | |
| 3.4 | Is Hydrologic Soil Group(s) A, B, C, or D for the site correctly identified? http://ocwatersheds.com/gov/pw/watersheds/documents/wqmp/technical_guidance_document_(tgd)/technical_guidance_document_watershed_exhibits.asp | | | |
| III.2: Site Characteristics | | | | |
| 3.5 | Is the Precipitation Zone (see TGD Appendix XVI or the website link above for reference) for the project site correctly identified? | | | |
| 3.6 | Does the project identify all details related to soil type/geologic conditions based on best available information? | | | |
| 3.7 | If present, is off-site run-on identified and does the project describe how it will be managed? If there are co-mingled flows, are they adequately treated by LID BMPs? | | | |
| 3.8 | Does the plan show existing underground utility, easements, and infrastructure information that may interfere with proposed storm drain systems or affect the feasibility of LID BMPs? | | | |
| III.3: Watershed Description | | | | |
| 3.9 | Is the watershed in which the project is located identified and the: <ul style="list-style-type: none"> Downstream receiving waters? 303(d) Listed Water Quality Impairments? (https://www.waterboards.ca.gov/water_issues/programs/tmdl/integrated2014_2016.shtml) Applicable Total Maximum Daily Loads (TMDLs)? Pollutants of Concern for the Project? Environmentally Sensitive Areas? (<i>N/A to Anaheim</i>) | | | |
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Comments – Section 3

Section 4 – Best Management Practices (BMPs)

|  WQMP REQUIREMENT | | Requirement Satisfied? | | |
|---|---|------------------------|----|-----|
| | | Yes | No | N/A |
| IV.1: Project Performance Criteria | | | | |
| 4.1 | If applicable Watershed Infiltration and Hydromodification Master Plan (WIHMP) is available, does the project incorporate watershed specific criteria? (<i>Currently Not Applicable</i>) | | | |
| 4.2 | If Project is susceptible to HCOCs, is Section 7.II-2.4.2.2 of the Model WQMP (<i>North County Requirements</i>) transcribed, verbatim? | | | |
| 4.3 | Are the applicable LID performance criteria transcribed, verbatim, from Section 7.II-2.4.3 of the Model WQMP, including specific BMP approaches identified for any specific project features (such as EPA Green Streets)? | | | |
| 4.4 | If it is not feasible to meet LID performance criteria, are applicable treatment control BMP performance criteria transcribed, verbatim, from Section 7.II-3.2.2 of the Model WQMP, including calculations based on accepted criteria? | | | |
| 4.5 | Is the calculated LID design storm capture volume (DCV) provided, based on Orange County specific criteria? | | | |
| IV.2: Site Design and Drainage Plan | | | | |
| 4.6 | Describes a site design and drainage plan that: <ul style="list-style-type: none"> • Provides a narrative of site design practices utilized (i.e. HSCs that are not designed to meet numeric performance criteria); • Provides a table of DMAs and shows LID BMP(s) proposed in each DMA; • Provides calculations of Design Capture Volume (DCV) for each DMA; | | | |
| | | | | |
| | | | | |
| | | | | |
| 4.7 | If the project includes improvements within the City's ROW, are these areas addressed adequately and appropriately by BMPs following Public Works design guidelines and Green Street Standards? (see item 5.5 to ensure O&M will be accepted if applicable).  | | | |
| 4.8 | Are LID BMPs designed as off-line systems, where feasible? Low flows are routed to the BMP, while high flows bypass the system.  | | | |
| 4.9 | If LID BMP system is in-line (high and low flows are routed through the system), is the bypass/overflow outlet structure properly designed to convey the high flow storm event associated with the project (i.e. 10-, 25-, 50- year) and not cause resuspension of pollutants?  | | | |


| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|---|---|------------------------|----|-----|
| | | Yes | No | N/A |
| IV.3: LID BMP Selection and Project Conformance Analysis | | | | |
| 4.10 | Hydrologic Source Controls (if HSCs are proposed to meet retention criteria): Does the narrative and calculations of proposed HSCs show how they meet retention requirements? Are the results supported with the completion of Worksheet A from the TGD? | | | |
| Infiltration BMPs | | | | |
| 4.11 | Has the Infiltration Feasibility Worksheet (Table 2.7 from TGD) been completed and included? | | | |
| 4.12 | Has the Summary of Groundwater-related Feasibility Criteria (Worksheet I from TGD) been completed and included? | | | |
| 4.13 | If Infiltration is feasible, is the selection of BMP type (INF) described, and do sizing calculations show adequate capacity and drawdown? | | | |
| 4.14 | Are volume storage components of the BMPs properly designed to retain the DCV (e.g. overflow drains are at correct heights, pervious pavement is not on a slope or is considered in volumetric calculation, planting soil is specified in detail if volume is claimed for engineered media)? | | | |
| 4.15 | Is adequate pretreatment provided relative to land use and anticipated pollutants, soil conditions and type of infiltration BMP? In all scenarios, PRE-2 (catch basin inserts) and pretreatment BMPs that feature standing water are <u>not allowed</u> for pretreatment of infiltration BMPs. | | | |
| 4.16 |  Class V Injection Well (i.e. drywells): If the infiltration facility qualifies as a Class V Injection Well (see link: http://water.epa.gov/type/groundwater/uic/class5/types_storm_water.cfm) has it been submitted to the EPA database for registration? (see link: https://www.epa.gov/uic/forms/underground-injection-wells-registration) | | | |
| 4.17 |  City Water Utility Well Permit: If a well (typically stormwater infiltration well) is proposed, has the requirement for a Well Permit (https://ca-anaheim.civicplus.com/DocumentCenter/View/4066) been conveyed to applicant? | | | |
| Evapotranspiration, Rainwater Harvesting BMPs (ONLY required if entire DCV not met through above BMPs) | | | | |
| 4.18 | Has TGD Feasibility Worksheet J and supporting calculations been completed? | | | |
| 4.19 | Has the selection, suitability and sizing information, with applicable calculations, of Harvest-and-Reuse (HU) BMPs been provided? | | | |
| 4.20 | If Evapotranspiration/Harvesting BMPs are infeasible to treat the LID DCV, has documentation been provided as to how much DCV can be met and why it is not feasible to meet the full volume with evapotranspiration/ harvest BMPs, infiltration BMPs, or a combination of them? | | | |

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|---|--|------------------------|----|-----|
| | | Yes | No | N/A |
| Biotreatment BMPs (ONLY required if entire DCV not met through above BMPs) | | | | |
| 4.21 | Has the selection, suitability and sizing information, with applicable calculations, of Biotreatment (BIO) BMPs been provided? | | | |
| 4.22 | If Biotreatment BMPs are infeasible to treat LID DCV, has documentation been provided as to how much DCV can be met and why it is not feasible to meet the full volume with biotreatment BMPs, evapotranspiration/ harvest BMPs, infiltration BMPs, or a combination of them? | | | |
| Hydromodification Control BMPs (if required) | | | | |
| 4.23 | Has the selection, suitability and sizing information, with applicable calculations, of Hydromodification Control BMPs been provided? | | | |
| 4.24 | If infeasible, is narrative and supporting documentation and calculations provided? | | | |
| Source Control, Treatment Control, and Other BMP Details | | | | |
| 4.25 | Regional/Sub-Regional LID BMPs (if available and DCV not met through above BMPs): Are regional/sub-regional LID BMPs in which the project will participate in adequately described? | | | |
| 4.26 | Treatment Control BMPs Has the selection, suitability and sizing information, with applicable calculations, of Treatment (TRT) BMPs been provided? • | | | |
| 4.27 | If the project impacts an off-site catch basin within the City's Right of Way, does design include the implementation of "full capture systems" within the catch basin(s) that are designed to treat the 1-year, 1-hour storm event for the entire tributary area of the catch basin? https://www.waterboards.ca.gov/water_issues/programs/storm_water/docs/trash_implementation/a1_certified_fcd.pdf | | | |
| 4.28 | Do on-site BMPs include full capture certification or does a separate BMP address the full capture of trash? Full-capture systems must be sized for the 1-year, 1-hour storm event for the on-site drainage area. • | | | |
| 4.29 | Non-Structural Source Control BMPs: Does the project properly prescribe non-structural source control BMPs and include valid explanations for those that are not used? Are implementation responsibilities identified and description of each prescribed BMP provided as well? | | | |
| 4.30 | Structural Source Control BMPs: Does the project properly prescribe structural source control BMPs include valid explanations for those that are not used? Are implementation responsibilities identified and description of each prescribed BMP provided as well? | | | |

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|-------------------------|---|-------------------------------|-----------|------------|
| | | Yes | No | N/A |
| 4.31 | Are proper and accepted terminology, consistent with CASQA or other industry standards, used to describe all structural BMPs? | | | |
| 4.32 | If applicable, does the project lists and appropriately calculates any applicable Water Quality Credits? | | | |
| 4.33 | If applicable, does the project describe an alternative compliance plan including obligations and proposed alternative compliance measures? | | | |

Comments – Section 4

Section 5 - Inspection/Maintenance Responsibility for BMPs

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|------------------|---|------------------------|----|-----|
| | | Yes | No | N/A |
| 5.1 | Is the Operation and Maintenance Matrix completed with all source control BMPs, LID, Treatment, and Pre-treatment BMPs selected for the project? Is the O&M Plan and specific O&M Fact Sheets/Guides for LID or Proprietary BMPs included as an attachment? | | | |
| 5.2 | Does the O&M Plan identify an appropriate mechanism for the long-term operation and maintenance, including funding? | | | |
| 5.3 | Does the O&M Section identify the entity (or entities) responsible for the long-term inspection and maintenance of all Source Control BMPs and any Treatment Control BMPs, including name, title, company, address, and phone number. | | | |
| 5.4 | Does the O&M Plan prescribe appropriate minimum frequencies for inspection and maintenance of BMPs to ensure their continued effectiveness? | | | |
| 5.5 | In order to ensure that the current owner recognizes that upon sale or transfer of property, the Notice of Transfer of Responsibility must be completed, is this form included in the Attachments (see Exhibit D in link below)? https://www.anaheim.net/DocumentCenter/View/222/NPDES-Water-Quality-Control-PDF | | | |
| 5.6 |  Is the Project subject to cross-lot drainage? | | | |

Comments – Section 5

Section 6 – WQMP BMP Plan

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|------------------|--|------------------------|----|-----|
| | | Yes | No | N/A |
| 6.1 | Has an 11" by 17" plot plan been included? (see prior comments in Section 4 regarding deficiencies) | | | |
| 6.2 | Do all figures, maps, plot plans, etc. have a legend, including a North arrow and scale? | | | |
| 6.3 | Are BMPs labeled and is enough detail provided to allow a Site Manager the ability to understand what is in place and how it operates and is maintained? | | | |
| 6.4 | <input checked="" type="checkbox"/> Are locations of roof downspouts identified to ensure runoff from buildings are appropriately routed as depicted by the DMAs? | | | |
| 6.5 | Does the plot plan provide the following minimum information? <ul style="list-style-type: none"> • Project location; • Site boundary and easements, if any; • Drainage delineations (DMAs) and flow information, including storm drain facilities; • Drainage connections, <input checked="" type="checkbox"/> including roof drain locations; • Paved (i.e. parking) versus landscaped surfaces; • BMP cross section details; • Structural Source Control BMP locations; and • GIS Coordinates of LID/Treatment/Hydromodification BMPs; | | | |
| 6.6 | <input checked="" type="checkbox"/> Is the project grading plan consistent with WQMP plot plan? | | | |

Comments – Section 6

Section 7 – Educational Materials

| WQMP REQUIREMENT | | Requirement Satisfied? | | |
|------------------|--|------------------------|----|-----|
| | | Yes | No | N/A |
| 7.1 | Are all applicable educational materials that will be used by the project identified, including reference to Orange County Watershed websites where the brochures or BMP fact sheets can be found (do not include brochures as an Attachment in the WQMP)? | | | |

Comments – Section 7



WQMP Completion and Approval Process

The Plan Checker will review the WQMP as many times as necessary to ensure that the WQMP meets the minimum City and County requirements. Once the WQMP plan check is complete, the Plan Checker will ensure the following items have been executed (if applicable).

WQMP Completion and Approval Checklist (Internal Use Only)

| WQMP REQUIREMENT | Requirement Satisfied? | |
|--|------------------------|-----|
| | Yes | N/A |
| Plan Checker has contacted NPDES Coordinator via phone to discuss WQMP approval and has obtained a stamped cover page to return to project applicant. Voicemail is not an acceptable form of contact. | | |
| Projects with focused Infiltration BMPs: OCWD Coordination has been completed and infiltration BMPs have been accepted by the agency. Focused Infiltration BMPs are defined as all infiltration BMPs with the exception of permeable pavement, bioretention without underdrains and self-treating areas. | | |
| Projects with BMPs in Public Right-of-Way: WQMP includes an Attachment indicating the public agency's intent to accept the Treatment Control BMPs as designed. Public Works Operations Department has been contacted and Operations ROW BMP Acceptance Memo has been signed and approved. | | |
| Projects with Cross-Lot Drainage from multiple parcels to sub regional treatment control BMP(s): WQMP includes an Attachment of the executed and approved rights and responsibilities documentation (i.e. Cross Lot Drainage Agreements) and agreement demonstrating shared responsibility to maintain treatment control BMP(s). | | |
| Completed By: | | |
| Signature: | | |
| Date: | | |