

Memorandum

Date: 20 December 2013
To: Richard Boon, OC Watersheds
From: Aaron Poresky, Lisa Austin, and Raina Dwivedi, Geosyntec Consultants
Subject: Guidance for Using the Technical Guidance Document (TGD) in South Orange County

1. INTRODUCTION

As of December 20, 2013, the provisions of the Model Water Quality Management Plan (Model WQMP) for South Orange County are in effect for copermittees in South Orange County (under the jurisdiction of the San Diego Regional Water Quality Control Board). The Technical Guidance Document (TGD) for the Preparation of Conceptual/Preliminary and/or Project Water Quality Management Plans (Exhibit 7.III) accompanies the Model WQMP in both North Orange County (NOC) and South Orange County (SOC). While the SOC program is similar to the NOC program in many respects, specific permit provisions for the SOC area require that certain sections of the TGD be utilized differently in SOC than in NOC. This memorandum is intended to provide a brief summary of those differences and provide reference locations within the TGD to assist with preparation and review of WQMPs for Priority Development Projects in SOC.

This memorandum is intended to assist Permittees and WQMP preparers in interpretation and application of program documents. However, Permittees are responsible for compliance with the MS4 Permit and all responsibilities under their respective Local Implementation Plans (also referred to as Jurisdictional Runoff Management Programs). This memorandum is not intended to supersede any elements of the Model WQMP or TGD; if discrepancies exist, the Model WQMP and TGD are the governing documents.

2. GUIDANCE FOR USING THE TGD IN SOUTH ORANGE COUNTY

This section presents a brief summary of major differences between using the TGD in the San Diego Region (SOC Permit area) as compared to the Santa Ana Region (NOC Permit area).

- 1) There are no Watershed Infiltration and Hydromodification Management Plans (WIHMPs) for the San Diego Region; references to WIHMPs found in the TGD are not relevant in SOC.
- 2) Non-Priority Project Plans do not apply in SOC; references to Non-Priority Project Plans are not relevant in SOC.

- 3) There is a different 303d list and applicable TMDLs for the San Diego Region. This applies to *Section 2.3.3.1, specifically Table 2.3 and Table 2.4, in the TGD.*
- 4) The SOC Permit (Order No. R9-2009-0002) specifically requires the use of “biofiltration” rather than “biotreatment” to meet remaining low impact development (LID) requirements when a project proponent has demonstrated that the full design capture volume (DCV) cannot be retained. The TGD uses the more general term “biotreatment” to refer to a category of LID BMPs that treat and discharge stormwater, however this is not intended to be permissive of the use of biotreatment BMPs that are not biofiltration BMPs. Some biotreatment BMPs are also biofiltration BMPs, however some are not. For WQMP preparers and reviewers in SOC, the word “biotreatment” (as used in the TGD) must be defined to mean only “biofiltration”. Additionally, the inadvertent use of the term “biotreatment” in the Model WQMP, training materials, checklists, and/or templates is not intended to be permissive of the use of biotreatment BMPs that are not biofiltration BMPs. Biofiltration is defined to include LID BMPs that filter stormwater through amended soils that are biologically active and support vegetation. Biofiltration BMPs referenced in the TGD include INF-4 (Bioinfiltration), BIO-1 (Bioretention with Underdrains), potentially some forms of BIO-7 (Proprietary Biotreatment), or variations on these BMPs that provide the same treatment process and meet the additional criteria described in (5) below. This definition applies throughout the TGD and Model WQMP.
- 5) The SOC Permit and the Model WQMP defines biofiltration further, by stating that: *“Due to the flow through design of biofiltration BMPs, the total volume of the BMP, including pore spaces and pre-filter detention volume, must be sized to hold at least 0.75 times the design storm volume that is not retained onsite by LID retention BMPs.”* This provision sets an upper limit on the amount of water that may be considered to be biofiltered or “routed” during the storm event, and effectively sets a lower limit on the physical storage that must be provided in a biofiltration BMP. This effectively eliminates the use of biofiltration systems that have a very small footprint and behave similarly to flow-based BMPs (e.g., tree-box filters). A schematic of biofiltration storage compartments is shown in Figure 1. This applies to selection of BMPs in TGD *Section 2* as well as sizing methods described in *Appendix III*. Sizing approaches described in *Appendix III* must be applied in a manner that ensures that, in the design of biofiltration BMPs, the total volume of the BMP, including pore spaces and pre-filter detention volume, must be sized to hold at least 0.75 times the design storm volume that is not retained on-site in LID retention BMPs.

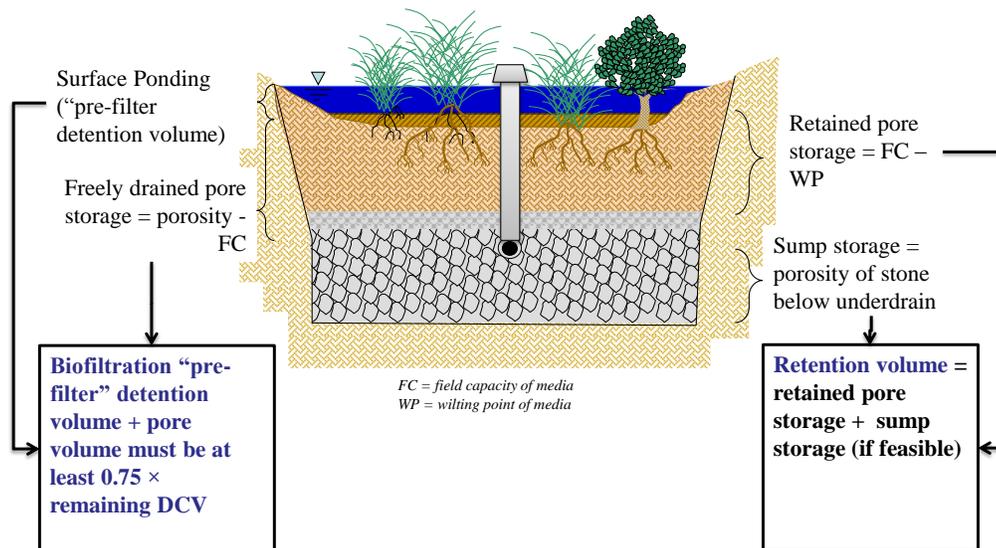


Figure 1. Schematic of Biofiltration Storage Compartments

- 6) The SOC Permit (*Section F.3.d.(6)(d)*) contemplates that infiltration and harvest and use of water from stormwater management activities may violate water rights. Water rights considerations are expected to be site-specific, therefore guidance is not provided in the TGD. Where water rights may be an issue, this should be considered when determining feasibility for infiltration and/or harvest and use for projects in SOC. This applies to *TGD Section 2.4.2.4*.
- 7) Hydrologic Conditions of Concern (HCOCs) for SOC are considered to exist for all projects, regardless of the existing condition of the project site, except where the receiving water is exempted from hydromodification criteria under regulations in place at the time of project approval (see item 8).
- 8) Hydromodification requirements were in flux at the time of publication of the Model WQMP, TGD, and other program documents. Appendix C to the Model WQMP includes a summary of current requirements at the time of publication and references to the associated technical resource(s) for implementing these requirements. The hydromodification-related guidance in the TGD should only be consulted as referenced from Appendix C of the Model WQMP, which is subject to change as the applicability of requirements changes. Elements of the TGD may be superseded by guidance contained in the SOC Hydromodification Management Plan (HMP) when it is approved. Please refer to <http://ocwatersheds.com/documents/wqmp/> to determine whether a newer version of the Model WQMP Appendix C is in effect. This applies to *TGD Section 2.2.3.2., TGD Section 2.3.3.3, TGD Section 5.4, and TGD Appendix V*.
- 9) Green Streets guidance provided in *Section 2.7* of the TGD may be used as a reference; however, street, highway, and roadway projects that qualify as Priority Development Projects in

SOC must meet the same LID and hydromodification performance criteria as other Priority Development Projects.

- 10) *Appendix I and IV* relate only to NOC and are not relevant to SOC users.
- 11) Priority Development Projects in the SOC Permit area do not have the option to satisfy LID BMP sizing criteria solely through participation in a regional/sub-regional LID BMP (which is an option for NOC). Regional/sub-regional LID BMPs may be used to satisfy alternative compliance requirements as part of the LID Waiver/Alternative Compliance Program. This applies to *Appendix II.2 and Appendix VI*.
- 12) The LID alternative compliance volume for SOC is the volume remaining after on-site LID BMPs are used to the MEP, not after also considering regional and/or sub-regional LID BMPs, as is the case in North Orange County. Sub-regional/regional LID BMPs are only an option as part of a waiver request/alternative compliance program in SOC. This applies to *Appendix VI.1*.
- 13) Consultation with Orange County Water District is not applicable for projects in SOC. However, groundwater protection criteria in *Appendix VIII* remain in effect, as required by the SOC MS4 permit. Where infiltration is proposed in the vicinity of a managed aquifer, consultation with the applicable groundwater management agency may be prudent as part of considering potential infiltration impacts on groundwater quality.
- 14) Certain guidance provided in *Appendix XI and Appendix XII* applies to biofiltration BMPs, however other elements of these appendices apply to biotreatment BMPs (such as ponds, swales, etc.) that are not considered to be biofiltration BMPs. The latter guidance is not relevant for biofiltration design, but may be used if these BMPs (i.e., ponds, swales, etc.) are applied as pre-treatment or treatment control BMPs in South Orange County.
- 15) Biotreatment BMP fact sheets found in *Appendix XIV* that do not meet the SOC Permit definition of biofiltration are considered to be either pre-treatment BMPs or treatment control BMPs in SOC.
- 16) Certain exhibits provided in *Appendix XVI* do not provide coverage for due to limitations on available data. The lack of data in these areas should not be interpreted to mean that the respective conditions do not exist. Professional judgment and discretion should be used in applying these exhibits to SOC.