Ventura Countywide Stormwater Quality Management Program

Participating Agencies

Camarillo

County of Ventura

Fillmore

Moorpark

Ojai

Oxnard

Port Hueneme

San Buenaventura

Santa Paula

Simi Valley

Thousand Oaks

Ventura County Watershed Protection District

September 23, 2025 TGM Training Q & A

1. **Hearing the recommendation to get biofiltration approval during the entitlement phase, should consultants expect an increase in storm drain infrastructure design efforts in entitlement?**

   Response: During the entitlement phase, the storm drain infrastructure design review and approval process is the same as the previous MS4 Permit. Every project still needs to evaluate the technical feasibility for retention/infiltration as well as demonstrate conceptual stormwater mitigation design(s) using retention or alternative compliance to meet the requirements of the 2021 MS4 Permit. If a project is considering pursuing alternative compliance using onsite flow-based treatment BMPs, additional efforts may be warranted to navigate the Los Angeles Regional Water Quality Control Board approval process. For specific questions regarding entitlement submittals and approvals for stormwater compliance purposes, please reach out to the local land use authority.

2. **How long does the executive approval typically take?**

   Response: This additional approval step is a new process for Ventura County Permittees under the 2021 MS4 Permit. The Los Angeles Regional Water Quality Control Board has not provided a process schedule for their review and approval of onsite flow-based treatment BMPs. Ventura County Permittees anticipate the process to take a minimum of two (2) months in addition to the local land use authority review process.

3. **On the GIS Mapping Tool, are the NOAA Rainfall events listed 24-hour events?**

   Response: Yes, the various NOAA rainfall contours shown on the VC Public Works Agency GIS Viewer (https://maps.ventura.org/pwagisviewer/) are for 24-hour events.

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4. **Can bioretention systems have underdrains? If they do, what stops the runoff from leaving via the underdrain instead of being stored in the dp zone from slide 40?**

Response: The BMP illustrated on slide 40 is infiltration-based and the entire SQDV shall be infiltrated into the native soils below. Underdrains are not allowed for infiltration BMPs.

5. **When sizing underground infiltration chambers, do you use INF-2 with the rock section equation or INF-6?**

Response: When sizing underground infiltration chambers (INF-6), please use the INF-1/INF-2/INF-4 worksheet. The underground chamber is equivalent to the "drain-rock" section, but with a higher void ratio as specified by the manufacturer. To determine the filtration surface area, use Equation C-8 (At = SQDV/((T Pdesign /12)+ntdt+dp)) found on page C-12 of the 2025 TGM with **d**p (ponding depth) as zero. The 2025 TGM will be evaluated in the coming months to identify if minor clarity adjustments to the INF-6 BMP sizing worksheet is needed.

6. **Why is there a limit to the tributary area for the planter box option? Is that flexible depending on the size of the planter box and the way you distribute the roof drains?**

Response: The limitation was carried over from previous TGM versions. Planter boxes are usually proposed next to or in close proximity to building footprints and are usually narrow (4 - 6 ft). The 2025 TGM recommends designing planter boxes (BIO-2) for less than 15,000 square feet (1/3 of an acre) of tributary area to safeguard from the BMP becoming overwhelmed by numerous concentrated downspout flows. If planter boxes are sufficiently wide and receive inflows at multiple points and include an adequate overflow design, they can function similar to BIO-1 and the 15,000 square feet tributary area limitation may be unnecessary. In many cases, dividers can be designed in narrow planter boxes to ensure that each planter area receives no more than 15,000 square feet of tributary runoff. For project specific questions regarding acceptable BMP design and approvals, please reach out to the local land use authority.

7. **If I have a site where infiltration is infeasible, can I use a proprietary biofilter if it's sized to treat the biofilter design storm volume and I can show that it will provide better water quality than a planter box?**

Response: If it is determined that infiltration, onsite alternative compliance biofiltration using 2025 TGM design specification, and offsite alternative compliance measures are technically

infeasible, the project may request the Executive Officer allow the use of onsite flow-based BMPs. In the request, the project must outline why none of the other alternative compliance measures are feasible. Approval will only be granted to areas where other alternative compliance measures are not feasible due to significant technical issues. Please review the 2021 MS4 Permit and attachments for additional details about acceptable alternative compliance measures, definitions of BMPs and approval authority.

8. Are the TGM GIS layers hosted on the Ventura County REST server?

Response: The TGM GIS layers are not currently hosted on the Ventura County REST server. They are only accessible for viewing at https://maps.ventura.org/pwagisviewer/. In the coming months, the Ventura Countywide Stormwater Quality Management Program will evaluate if it is feasible to make 2025 TGM layers accessible on the REST server for download.

9. Does the BMP on slide 41 require Board approval?

Response: No, the BMP shown on slide 41 is designed following BIO-1 and BIO-2 specification in the 2025 TGM and is sized to treat the Stormwater Quality Design Volume (SQDV), which is a volume capture measurement. BIO-1 and BIO-2 when designed per 2025 TGM specification do not require Los Angeles Regional Water Quality Control Board Executive Officer approval.

10. Why the 15k sf tributary area limitation for the planter box (Section 6.5.2.1)? Can't I just make it bigger for bigger drainage areas as long as I have adequate flow distribution?

Response: Please see detailed response under question no. 6.

11. Whose responsibility is it to make sure the bioretention or biofiltration media meets specifications? Can we get confirmation from the provider? How do you plan on enforcing media specifications?

Response: As with all improvement items, the project engineer shall ensure that all improvements are shown on approved plans, including biofiltration media, and they meet approved specifications. The project owner, project engineer, project architect, and general contractor are responsible for overseeing the construction according to approved plans. The

local land use authority reviews submittals for consistency with local and regional regulatory requirements during plan check and documents construction through field inspections.

12. Historically K-12 schools have been exempt from MS4 permit post construction storm water requirements. Is this still the case?

Response: The Planning and Land Development requirements within the 2021 MS4 Permit are associated with municipal approvals for discharges to municipal storm drain systems. If projects conducted by K-12 schools require municipal approvals and/or will discharge to municipal storm drain systems, they will be subject to compliance with the requirements of the 2021 MS4 Permit.

13. Has there been any thought by the committee and local agencies to identify sites that would perform better for groundwater recharge and implement development fees?

Response: The Ventura Countywide Stormwater Quality Management Program has discussed the concept and understands the steps required to create and execute regional stormwater capture in-lieu credit trading programs, however, the development of such programs within Ventura County has not been completed to date. These off-site mitigation programs that provide alternative compliance opportunities, if offered in the future, would likely be developed by individual agencies. Please reach out to the local land use authorities for additional information.

14. The TGM has a depth limit to the INF-2 of 8' in the table 6.2. That depth makes sense for a gravel trench section, but not really the underground pipes with the rock. Sometimes we use large chambers because we are also using them for detention in addition to infiltration. We also have the Dp value with the chambers because there is ponding, but it does go through the rock layer below the chamber. The photo on the INF-6 in the TGM is what kind of confused me as to which method the chambers would be considered.

Response: Please see detailed response under question no. 5. The depth limit of 8' applies to the system via surface flows with a gravel rock section (INF-2). While this depth limit exists, the depth of the system is governed by the design infiltration rate. In most cases, the **d**max is the limiting factor that will limit the effective depth. As for INF-6, proprietary system, there is no depth limit.

15. I didn't see that you had a map for the 85th percentile hourly rain, is that something the engineer has to develop if the flow-based design is approved?

Response: The 85th percentile hourly rainfall was not included or developed for the 2025 TGM. It is assumed that most projects would choose to use 0.2"/hr because as discussed on page C-5 of the 2025 TGM, the 85th percentile hourly rainfall method is expected to result in a higher design rainfall intensity and design flow rate compared to using 0.2"/hr. A project may develop the 85th percentile hourly rainfall or propose an alternative data source, if it proposed to use runoff produced by twice the 85th percentile rainfall intensity.