

Post-Construction Storm Water Management in New and Redevelopment

BMP 5.1 Update Land Use Policies

Measurable Goal 5.1.1: *Update all policies, practices, and procedures applied to discretionary new and redevelopment projects to protect water quality consistent with the requirements of General Permit and Attachment 4(B) prior to SWMP implementation.*

Status: Complete and ongoing. See Annual Report Year 1 and SWMP for historical detail.

Comprehensive Planning. Updates of community plans provide opportunities to incorporate area-specific measures. During Yr2, several community plan updates were in progress or completed by the Planning & Development Department. These were the Santa Ynez Valley Community Plan, Mission Canyon Community Plan, Los Alamos Community Plan, and the Isla Vista Master Plan. Information on these plans can be found on the County's website for Long Range Planning <http://longrange.sbcountyplanning.org>, and for Isla Vista, the CEO's website <http://www.countyofsb.org/ceo/RDA/ivmasterPlan.asp>.

Update of Permit Tracking Procedures. During Year 2, Planning & Development continued update of intake and procedures primarily through the permit tracking software called Accela. This software update includes a new field requiring the planner to identify whether the project is a category from General Permit Attachment 4(B). This will enable tracking of all projects subject to the Attachment 4(B) design standards and greatly improve SWMP reporting for this measurable goal.

Flood Control District. During Year 2, revisions to the Flood Control Standard Conditions were made final. A summary of those revisions, the original conditions, and the revised conditions are shown in Appendix 5B.

Proposed Modifications: None.

Planned Year 3 Activities: Further revisions will be accomplished pursuant to BMP 5.3.

BMP 5.2 Implement Design Standards for Post-Construction BMPs Per NPDES General Permit Including Provisions of Attachment 4(B)

Measurable Goal 5.2.1: *Apply design standards to 100% of all applicable projects.*

Status: Complete and ongoing. In Year 2, 484 discretionary case applications were filed with P&D and include tract maps, lot line adjustments, tentative parcel maps, conditional use permits, development plans, specific plans, and coastal development permits in the appeals area. Upon application receipt, intake planners must determine if the application is an NPDES Attachment 4(B)2 category project in type or scale, or if the parcel is in a creek or flood area overlay. If so, these cases are distributed to Public Works, Water Resources Division for review. All discretionary projects are reviewed and analyzed by P&D

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development review staff based upon the comprehensive plan policies, CEQA thresholds of significance, and standard conditions of approval, described in the SWMP.

As described in the Storm Water Management Program, it is the practice of P&D to review all discretionary projects and condition as appropriate for water quality design standards consistent with Attachment 4(B), except for design standards described in Attachment 4(B)(2a) and 4(B)(2i) which are instead reviewed / approved by Public Works Department.

Table 5-1 Discretionary Cases Filed & Reviewed

No. Cases	Description
484	Total discretionary case applications filed with P&D
141	Discretionary cases reviewed by Public Works - Clean Water
16	Cases subject to standard conditions – Clean Water
7	Approved Projects undergoing Plan Check – Clean Water
196*	Discretionary cases reviewed by Public Works - Flood Control District
37*	Cases subject to standard conditions – Flood Control
57	Approved Projects undergoing Plan Check – Flood Control

* In addition to peak runoff, includes cases reviewed and conditioned for approval due to development within the floodplain or near water courses, per County Code Chapter 15A (Floodplain Management Ordinance) and Chapter 15B (Development Along Watercourses).

Public Works: Treatment Control (Attachment 4(B)(2i)). See Appendix 5A for a list of projects that were reviewed and those that were conditioned for treatment control BMPs during Year 2.

During Year 2, 7 projects were submitted to Water Resources, Project Clean Water staff for Plan Check review. (Note all of these projects submitted applications prior to Year 2.) During Plan Check review, the conditioned requirements are verified so that construction may begin and a maintenance agreement is recorded.

Public Works: Peak Storm Water Runoff Rates (Attachment 4(B)(2a)). In Year 2, 196 cases were received and reviewed by Flood Control District. Of these, 57 cases were approved through Plan Check.

During Year 2, the Flood Control District revised their standard conditions. A summary of those revisions, the original conditions, and the revised conditions are shown in Appendix 5B.

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Proposed Modifications: Ongoing requirements will continue to be implemented; no changes to this BMP are recommended.

Planned Year 3 Activities: Ongoing requirements will continue to be implemented.

BMP 5.3 Evaluate Program Efficacy

Measurable Goal 5.3.1: *Compare existing policies, procedures, and standard conditions to the General Permit Attachment (4) requirements (year 1)*

Status: Complete. This measurable goal was accomplished through a consultant evaluation of the County's approach. See discussion Year 1 Report.

Proposed Modifications: None.

Planned Year 3 Activities: Measurable Goal is completed; no further activities proposed except through ongoing evaluation of effectiveness as described below.

5.3.2 Measurable Goal: *If it is determined that changes need to be made to better comply with those requirements, then the relevant policy, procedures, or standard conditions will be developed or modified so that they meet or exceed all of the requirements in the General Permit including Attachment 4(B) (year 2).*

Status: Complete and ongoing. The evaluation report made a larger number of recommendations (See Appendix 5C). For a summary of Areas of Potential Conflict, and how these were addressed and in most cases resolved during Year 2, see Appendix 5H.

To update the program for full compliance with the NPDES General Permit requirements, all but two recommendations were completed in Year 1 (see Year 1 Annual Report, page 10, Chapter 5.0). The two remaining recommendations to bring the County into full compliance were: 1) document a process by which an applicant can obtain a waiver, and 2) implement an alternative certification process. These are discussed below.

Waiver. Attachment 4(B)4 of the General Permit states, "A Permittee may, through adoption of an ordinance, code, or other regulatory mechanism incorporating the treatment requirements of the Design Standards, provide for a waiver from the requirement if impracticability for a specific property can be established..."

Furthermore, such a waiver must "becomes recognized and effective only after approval by the RWQCB or the RWQCB Executive Officer"

The county has determined that there would be limited cases wherein a permittee could not provide some measure of treatment for a developed site. If there were extreme site constraints such as unfavorable soil conditions or sensitive groundwater that would preclude infiltration, then at a minimum the applicant could install filters within the storm drain

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system. The County's standard conditions state, "The County reserves the right to modify these conditions as site conditions warrant." Therefore the County has not implemented a waiver for the treatment control requirements.

Alternative Certification. Attachment 4(B)6 states, "in lieu of conducting a detailed BMP review to verify structural or treatment control BMP adequacy, a Permittee may elect to accept a signed certification from a Civil Engineer or Licensed Architect registered in the State of California, that the plan meets the criteria established herein" At this time, the County does not wish to limit County review role in any way. Therefore at this time there is no alternative certification for approving BMP adequacy.

Remaining recommendations and status are shown in Appendix 5C.

One of the evaluation recommendations was to develop a county-wide technical guidance manual. During Year 2, a number of developments occurred that would affect the future of the local and statewide post-construction MCM. These include 1) the reissuance of the SWRCB General Permit, 2) the February 15, 2008 letter from the Central Coast Regional Water Quality Control Board to permittees not yet enrolled, 3) recent Water Board Strategic Plan (May 2008) to adopt LID incentives through NPDES permits, 4) recent OPC resolution and strategic plan to provide technical guidance on LID and to incorporate or reference applicable NPDES permit criteria for LID in Green Building Standards, (http://www.resources.ca.gov/copc/05-15-08_meeting/05_LID/0805COPC05_MEMO.pdf) and locally, 5) development of a Technical Guidance Manual on the south coast (City of Santa Barbara).

Because of ongoing developments in Year 2, County staff delayed preparation of such a manual in order to assess the relationship of these developments to the County's program. For example, the revised General Permit was initially expected to be released by July 2008. (The current, more realistic expectation will be during the next reporting year.)

Meanwhile, the County greatly improved guidance for implementing the post-construction requirements by providing clearer direction to developers on the website including examples of post-construction BMPs for two typical types of development (residential and commercial), as well as examples of maintenance agreements and maintenance resource guides, etc. Ongoing P&D training to development review staff also provides planners with permit requirements, which encourages early communication with applicants concerning water quality.

Although some type of stand-alone guidance document is likely, this will be considered closely in Year 3 or will be developed thereafter.

Engineering Design Standards. The Public Works Engineering Design Standards underwent significant rewrite during Year 2. Several elements of this document were highlighted in the evaluation as "Conflicting Local Practices / Opportunities to Improve". As of the end of Yr2, the Engineering Design Standards were still in draft form. However, most areas of conflict were eliminated from the text, as shown in Appendix 5H.

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In general, revisions to the Design Standards were focused on making public road standards consistent with roadway design criteria such as: Caltrans Standard Plans & Specifications, Caltrans Design Manual and Local Agency Guidelines, AASHTO Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT less than or equal to 400), AASHTO Roadside Design Guide, etc.

Although private road standards are flexible, public roads standards are not. This is due to the County's ownership and need to provide long-term maintenance. It is currently not within the capacity of the County to maintain non-traditional material (e.g., porous asphalt), treatment measures (e.g. bioretention) or non-traditional storm conduits (e.g. grassy swales). Private roads, sidewalks, driveways, etc. are an entirely different matter. As long as long-term maintenance can be assured, through a contractual arrangement such as a homeowners association or property owner, alternative designs can be, and are, approved.

Flood Control Standard Conditions. During Year 2, revisions to the Flood Control Standard Conditions were made final. A summary of those revisions, the original conditions, and the revised conditions are shown in Appendix 5B. Also, see summary of potential conflicts in Appendix 5H.

Proposed Modifications: No modifications to this measurable goal are proposed.

Planned Year 3 Activities: Review project approval process to assure that it meets or exceeds all of the requirements in the General Permit including Attachment 4(B). It is possible that the revised General Permit will be issued during Year 3. If so, CEQA thresholds of significance may be revised to reflect the new terms of the General Permit, with accompanying revisions to Guidelines for Surface and Storm Water Quality.

BMP 5.4 Discretionary Permit Review Process: Project Evaluations

Measurable Goal 5.4.1: *Annually evaluate 100% of all discretionary projects for compliance with water quality measures*

Status: Complete. All projects issued a discretionary permit (CUPs, DVPs, etc.) undergo regular inspection during construction to ensure compliance with permit conditions and mitigation measures. Construction practices must comply with all conditions of approval, the design must be consistent with final approved plans, construction must meet all codes and standards, and the final project must comply with any conditions of use or final design conditions such as landscaping. Site inspections for permit compliance are performed by the Development Review Division of Planning & Development Department.

All discretionary projects with post-construction mitigation measures to protect water quality were inspected during construction by Planning & Development staff and by Public Works staff.

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During Year 2, all projects that were conditioned by Public Works and either installed or under construction were inspected by Public Works for installation or ongoing maintenance of treatment control BMPs. The results of these site investigations are summarized below. See Appendix 5D for a summary of inspection procedures.

Table 5-2 Treatment Control BMP Inspections

Name	Address	Area	Treatment Features	Installed per plan?	Maintenance Status
Better Cooling	2780 Telephone Road	Santa Maria	There is a Kristar filter on the parking lot drainage.	Yes.	Maintained regularly by contract (Drainage Protection Service); dates of service stamped on unit.
Clubhouse Estates	Tract 14,629, off Clubhouse Drive.	Vandenburg Village	Roof runoff infiltration perforated pipe; curb inlet filters (Kristar); bioretention in detention basin.	Under construction, not completed	NA
Thacker / Village Veterinary Clinic	3883 Constellation Dr.	Vandenburg Village	landscape bioswales for parking	Yes	Bioswales in excellent condition.
Knollwood	4012 Cedarhurst Dr	Orcutt	Condo residential units. Filterra bioretention in parking lot.	Under construction, units in place but no plants or soil.	NA

Proposed Modifications: Ongoing inspection of treatment control measures will continue; no changes are recommended.

Planned Year 3 Activities: Continued inspections to verify compliance with measures as projects are constructed.

Measurable Goal 5.4.2: *Take enforcement actions on all non-compliant conditioned projects.*

Status: No enforcement actions were taken in Year 2 because no violations were found.

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Effectiveness: NA.

Proposed Modifications: None.

Planned Year 3 Activities: No change in activities proposed.

BMP 5.5 Staff Training

Measurable Goal 5.5.1: *Existing staff attend annual training, 75% all planners Year 1.*

Status: Completed. See Year 1 Annual Report.

Proposed Modifications: NA.

Planned Year 3 Activities: Continue to provide training to all existing and new P&D staff see MG 5.5.2.

Measurable Goal 5.5.2: *Train 100% of all planners annually by year 2*

Status: P&D development review staff received training during Year 2. Training material was developed and presented by Project Clean Water staff. The focus of training opportunity for Development Review staff was to facilitate procedural awareness, including application completeness, content of Negative Declarations, and review process of Public Works.

Table 5-3 Development Review Staff Training

Location	Date	Attended	Total staff	Percent trained	Meet Measurable Goal?
Santa Maria	3-31-08	14	15	90%	Yes*
Santa Barbara	4-18-08	11	14	80%	Yes*
		Total	26		

*The four staff unable to attend (one Santa Maria, three Santa Barbara) include two senior level staff, one of whom was the planner responsible for the initial program development with the NPDES General Permit and another who was a former Project Clean Water staff, and another two staff who are no longer in service at the County. Therefore, no follow-up training was necessary or required.

Material used during the trainings is shown in Appendix 5E, including the powerpoint presentation used to guide discussion, and all handouts. The handouts were provided to all planners, and intended to be used a desk resource containing all relevant documents associated with the planner’s responsibilities to implement the General Permit provisions. Tabs were placed at the bottom of the planner’s material that tracked to major topics from the presentation (shown by asterisk).

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The follow-up survey and results are shown in Appendix 5F. This survey was modified from the pop quiz used during Year 1 to include effectiveness questions. Specifically, the survey was modified in an effort to comply with Regional Board staff recommendation to determine the effectiveness of this BMP to “increase the knowledge and awareness of the target audience”.

In order to meet the requested half-hour schedule for training, the survey was not filled out during the training, but rather as a follow-up to be returned to Clean Water staff. The survey was not completed by all attendees. Even with repeated reminders to return the survey to Clean Water staff, only 12 out of 28 individuals responded.

Results, however, were helpful in determining areas of training effectiveness and areas where staff lacks understanding as shown in Appendix 5F. For example, all responders missed the question “an excessive expense to the implementation of any single BMP is enough justification for not using it”. Unlike Year 1, this topic was not discussed during the training. So this topic will be noted in Year 3 – in this case, discussion will include various options and varying costs associated with acceptable treatment control BMPs. Another area illustrated by the results was the need for projects to identify their proposed treatment measures before the application is deemed complete (there were 5 incorrect answers, the second most-frequently missed question). This will be stressed during the presentation next year.

Additional training opportunities that occurred in Year 2 are summarized below. Since the “Project Clean Water Engineer” is the same individual who trains Flood Control and Planning and Development staff, in this way, information from these training opportunities was passed directly to 25 development review staff from P&D.

Table 5-4 Additional Staff Training Opportunities

Training Title	Sponsor	Date	Staff Participation	Number attending
LID one-day seminar	ASCE	June 4, 2008	Flood Control, Design Engineer	1
LID one-day workshop	Ocean Protection Council	April 21, 2008	Project Clean Water Engineer Planning & Development, Development Review	1 2
LID seminar	SCCWRP seminar online	June 6, 2008	Project Clean Water Engineer	1

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<u>Training Title</u>	<u>Sponsor</u>	<u>Date</u>	<u>Staff Participation</u>	<u>Number attending</u>
Urban Stormwater Retrofit	EPA (web cast)	April 9, 2008	Project Clean Water Engineer	1
BMP Performance	EPA (web cast)	February 6, 2008	Project Clean Water Engineer	1

Proposed Modifications: Ongoing annual training for planners will continue; no modifications to measurable goal are recommended.

Planned Year 3 Activities: Continue to provide training to all existing and new planning staff using similar format and materials as Year 2, except the follow-up survey will be filled out *during* the staff training, as opposed to *afterward*, to encourage better participation and responsiveness.

Measurable Goal 5.5.3: *New staff: 100% attendance in annual training(Years 1-5)*

Status: Complete. A special one-hour training was offered to all new P&D development review staff in addition to their attendance at the general training sessions described in MG 5.5.2. This special training included the same material used for MG 5.5.2 with an additional powerpoint presentation and discussion.

Table 5-5 New Development Review Staff Training

<u>Location</u>	<u>Date</u>	<u>Attending</u>	<u>Number New Employees</u>	<u>Attendance</u>
Santa Maria	3-31-08	1	1	100%
Santa Barbara	4-14-08	3	3	100%

Proposed Modifications: Ongoing commitment will continue; no modifications are recommended.

Planned Year 3 Activities: Continue to provide training to all new P&D staff using similar format and materials as Year 2.

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BMP 5.6 Incentive Program for Innovative Site Design

Measurable Goal 5.6.1: *Incentive program established by year 3.*

Status: Not implemented.

Proposed Modifications: It is proposed to modify this measurable goal. The goal says to “establish” an incentive program. Options considered to date such as economic incentives (via storm water credits which we don’t have or reduced fees) or timing incentives (reduced permit process time) may not be possible to implement, much less establish. Therefore the County may not be able to achieve this measurable goal as currently written.

This measurable goal is proposed to be:

Incentive programs evaluated during Year 3.

Planned Year 3 Activities: Several of the Wallace Group report recommendations address incentives for innovative site design and will be addressed during Year 3+. These include:

Recommendation

Develop incentive program to implement source and site design BMPs. Examples of incentives that were suggested by the public during initial workshops for this evaluation included: density bonuses, in-lieu fees, awards and flood-control storage credits.

To promote LID concepts, consider defining a minimum ground water recharge rate, or percent vegetative cover/landscaping necessary for categories of development similar to City of Portland.

Consider requiring large building projects to achieve Leadership in Energy and Environmental Design (LEED) ‘Certified’ standards.

Evaluate opportunities for community-wide special stormwater utility districts, especially for new, very large subdivision developments.

Resources and opportunities we will consider in this evaluation include:

- Evaluation of Rainfall-Runoff Relationships to Develop Stormwater Reduction Approaches for Watersheds in Southern California, A UCSB Bren School Project. (May 2007).
- Updates from Ocean Protection Council concerning their Resolution Regarding Low Impact Development (May 15, 2008)
- Central Coast Regional Water Quality Control Board initiation of a LID Institute

Measurable Goal 5.6.2: *Establish annual award program in following year 4.*

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Status: Not implemented in year 2.

Proposed Modifications: NA

Planned Year 2 Activities: NA.