

# Stormwater C.3 Update

## Changes in Effect Dec. 1, 2011

### Changes

- Applications for development approvals must include an evaluation of the feasibility of stormwater infiltration, evapotranspiration, and harvesting/reuse. The evaluation method has been updated.
- Categories of projects eligible to use non-LID treatment—in-vault filters or tree-well-type high-rate biofilters—have changed. See page 2.
- The soil mix for bioretention facilities now includes a specified gradation for the compost fraction as well as for the soil fraction.
- Consult with municipal staff to understand how these changes may affect your project.
- Current information is on the Contra Costa Clean Water Program [website](#).

The San Francisco Bay Regional Water Quality Control Board (RWQCB) adopted the Municipal Regional Permit (MRP) in 2009 and amended the MRP on November 28, 2011. The requirements apply to 76 Bay Area municipal agencies and are phased in through 2012.

As of December 1, 2011, applicants proposing Regulated Projects must analyze the feasibility of infiltrating, evapotranspiring, or harvesting/reusing runoff on-site. If none of these are feasible, runoff from impervious areas may be routed to bioretention facilities.

A new procedure for assessing the feasibility of infiltration, evapotranspiration, and harvesting/reuse employs criteria developed regionally and submitted to the Water Board on May 1, 2011. The new procedure supersedes



Carefully setting in place the overflow structure for a bioretention facility in Pittsburg.

criteria and procedures in the *Stormwater C.3 Guidebook*, 5th Edition.

Applicants may propose in-vault filter systems or tree-well-type biofilters only on specific categories of projects (see p. 2), and only if bioretention is also infeasible.

The November 28, 2011 amendment changed soil mix specifications for bioretention facilities (in Appendix B to the *Stormwater C.3 Guidebook*, 5th Edition). Gradation requirements apply to the compost fraction, as well as the sand fraction, of the

*(Continued on page 2)*

## Assess Feasibility of Harvesting and Reuse

Applicants proposing Regulated Projects will identify and list impervious areas from which runoff might be feasibly captured and stored for reuse. All rooftops 10,000 square feet and larger must be listed.

For each listed area, appli-

cants will calculate demands for toilet flushing and irrigation using project-specific information or provided occupancy factors. They will compare that demand to the demand required to consume 80% of average annual runoff. The maximum storage required is 50,000-gallons per

acre of impervious area.

Draft instructions and calculation tables are available from municipal staff. Once made final, the instructions and tables will be included in the 6th Edition of the *Stormwater C.3 Guidebook* (anticipated February 2012).



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## Special Projects Categories Eligible for Non-LID Treatment

Category	Impervious Area	Project Characteristics	Criteria	Max. non-LID	Notes
A: Lot Line to Lot Line	$X \leq \frac{1}{2}$ Acre	Urban/Pedestrian design in Business/Downtown Districts	No density criterion	100%	Zero surface parking; $\geq 85\%$ Site Coverage
B: High-Density	$X \geq \frac{1}{2}$ Acre $X \leq 2$ acres	Urban/Pedestrian design in Business/Downtown Districts	Floor Area Ratio (FAR) $\geq 2:1$ ; OR for Residential projects, 50 Dwelling Units (DUs)/Acre	50%	Zero surface parking
			FAR $\geq 3:1$ ; OR for Residential Projects $\geq 75$ DU/Acre	75%	
			FAR $\geq 4:1$ ; OR for Residential Projects $\geq 100$ DU/Acre	100%	
C: Transit Oriented Development (TOD)	No limit	TOD characteristics Non-auto-use project FAR $\geq 2:1$ or for Residential, 25 DU/Acre	<i>Location Credits (count only one)</i>		
			Within $\frac{1}{4}$ mile of transit hub	50%	50% of site w/in distance
			Within $\frac{1}{2}$ mile of transit hub	25%	
			Within a Priority Development Area	25%	100% of site w/in PDA
			<i>Density/FAR Credits</i>		
			FAR $\geq 2:1$ , OR for Residential Projects $\geq 30$ DU/Acre	10%	
			FAR $\geq 4:1$ , OR for Residential Projects $\geq 60$ DU/Acre	20%	
			FAR $\geq 6:1$ , OR for Residential Projects $\geq 100$ DU/Acre	30%	
			<i>Minimized Parking Credits</i>		
$\leq 10\%$ at-grade surface parking	10%	Parking uses LID			
Zero surface parking	20%				

LID has been found to be feasible for nearly all development sites. Projects that meet the criteria in the table above may, subject to local staff review and approval, use tree-box-type high-flowrate biofilters or vault-based high-rate biofilters. Local staff is required to assess and report on the feasibility of using LID on sites where these other methods are approved. This table is a summary only, and additional conditions apply. See local municipal staff for more information.

## C.3 Requirements and Changes

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specified mix.

Contra Costa municipalities operate their storm drainage systems in compliance with National Pollutant Discharge Elimination System (NPDES) permits issued by the San Francisco Bay RWQCB and Central Valley RWQCB. Provision C.3 was added to the permits in 2003. Municipalities must require new developments to incorporate permanent pollution-prevention measures, often including stormwater treatment.

Contra Costa municipalities have required Low Impact Development (LID) design be used for stormwater treatment wherever feasible. The goal of LID is to reduce runoff and mimic a site's predevelopment hydrology by minimizing disturbed areas and impervious cover and then infiltrating, storing, detaining,

evapotranspiring, and/or biotreating stormwater runoff close to its source.

In 2006, the San Francisco Bay RWQCB approved Contra Costa's LID approach to meet new hydrograph modification management (flow-control) requirements as well as treatment requirements.

Contra Costa municipalities' ordinances require applications for development approvals for projects subject to Provision C.3 be accompanied by a Stormwater Control Plan that meets the criteria in the most recent version of the *Stormwater C.3 Guidebook*.

The *Stormwater C.3 Guidebook*, 5th Edition was published in October 2010 and incorporates requirements in the 2009 MRP. Chapter 4, the LID Design Guide, includes advice for conceptualizing a project LID design and instructions for preparing and presenting the re-

quired calculations. An Integrated Management Practice Sizing Calculator, also available at [www.cccleanwater.org](http://www.cccleanwater.org), facilitates calculations.

A 6th Edition of the *Guidebook* is anticipated in February, 2012. The following changes to the 5th Edition are in effect December 1, 2011:

- Refer to the RWQCB's November 28, 2011 amendment to determine eligibility of a project to use non-LID treatment.
- Refer to the RWQCB's amendment for updated soil mix specifications for bioretention facilities.
- Consult with municipal staff, and refer to the draft updated *Guidebook* Chapter 4, to determine the feasibility of infiltration, evapotranspiration, and harvesting/reuse.

This fact sheet is a summary only. See the Regional Water Board Orders and the Contra Costa Clean Water Program's *Stormwater C.3 Guidebook* for actual requirements.

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