

**New Development Subcommittee
Special Meeting on Draft LID Feasibility/Infeasibility Report
Proposed Agenda
March 1, 2:00 to 4:00 pm
Redwood Shores Library, Meeting Room B
399 Marine Parkway
Redwood City**

- I. Introductions & Agree on Agenda** – Matt Fabry, All (5 min.)
Objective: Meet attendees and agree on agenda.
- II. Review Draft Feasibility/Infeasibility Criteria Report** – Laura, All
Objective: Understand and provide input on draft report.
- ➔ Review the requirement for the LID feasibility/infeasibility report (5 min)
Reminder that the criteria will be used to determine when it is infeasible to treat stormwater runoff with infiltration, evapotranspiration, and rainwater harvesting/use – in which case biotreatment will be allowed.
 - ➔ Flow chart of LID feasibility process (15 min.)
Flow chart gives overview of the process to determine LID feasibility.
 - ➔ Bioinfiltration standard sizing (20 min)
“Bioinfiltration” areas are bioretention areas that are modified to treat the full C.3.d amount of runoff using evapotranspiration and infiltration.
 - ➔ Infiltration infeasibility factors and procedures (20 min)
These factors will be used to determine where bioinfiltration is infeasible.
 - ➔ Rainwater harvesting infeasibility thresholds (20 min)
Thresholds will be provided to identify the quantity of non-potable water demand that is needed for rainwater harvesting to be feasible for treating the C.3.d amount of stormwater runoff.
 - ➔ Standards for tree retention credits (10 min)
Trees provide significant rainwater retention and evapotranspiration. Standards will be provided for projects to receive stormwater treatment credit for including trees.
 - ➔ Assumptions regarding green roofs as self-treating areas (10 min)
Green roofs will be considered self-treating areas. No stormwater treatment will be required for runoff from green roofs, but green roofs will not be used to treat runoff from conventional roofs.
- III. Next Steps** – Matt, Everyone (10 min.)
Objective: Review schedule for submitting comments on the draft report and obtaining TAC approval of the final draft report.

DRAFT

**LID Feasibility/Infeasibility Criteria Report
Municipal Regional Permit Provisions C.3.c.i (2) (b) and C.3.c.iii (1)**

Detailed Schedule (shading indicates tasks completed)

Task	Deliverable	Due Date
Task 1 Prepare Literature Review and Case Study Analyses	Draft Technical Memorandum	December 3, 2010
	Attend Meeting	December 2010
Task 2 Develop Proposed Feasibility Process, Criteria, and Supporting Tools	Draft Technical Memorandum	February 1, 2011
	Attend Meeting	January 2010
	Attend Meeting	February 2011
Task 3 Prepare Draft and Final Feasibility/ Infeasibility Criteria Report	Draft Report for review by BASMAA/ Copermittees	March 1, 2011
	Comments due to Geosyntec	March 15
	Final Draft Report to BASMAA/Copermittees for final review	March 25
	Final comments due to Geosyntec	April 1
	BASMAA Development Committee approval	April 7
	Final Report to Copermittees for approval	April 12
	San Mateo TAC meeting	April 19
	Contra Costa Management Committee (MC) meeting	April 20
	Santa Clara MC meeting	April 21
	Alameda MC meeting	April 26
	BASMAA Board approval	April 28
Submittal to Water Board	May 1	

BASMAA Development Committee Meeting Highlights
LID Feasibility Meeting
February 15, 2011

Discussion Highlights:

- **Flow Chart of Feasibility/Infeasibility Process**
 - Geosyntec will revise the flow chart reviewed at the Countywide Program’s February 1 New Development Subcommittee meeting, outlining the process for evaluated LID feasibility/infeasibility to show the following:
 - 1) Add footnote that evapotranspiration is assumed to occur in self-retaining areas, infiltration measures/devices, and in rainwater harvesting systems.
 - 2) Make minor revisions to clarify ambiguity in some of the text.

- **Infiltration Feasibility Factors Table**
 - A table listing potential factors for determining feasibility/infeasibility of treating the C.3.d amount of runoff with infiltration was reviewed.
 - The table will be simplified and will list the following factors:
 - Native soil infiltration rate
 - Geotechnical concerns
 - High groundwater table
 - Steep slopes
 - Required setbacks

- **Bioinfiltration Modeling**
 - To infiltrate and evapotranspire the full C.3.d amount of runoff, bioretention areas will be redesigned as “bioinfiltration areas.” The key difference is a generous permeable storage layer (maximum 3-foot depth) under the bioretention soil, with underdrain at top of this layer.
 - Geosyntec is conducting a sensitivity analysis of bioinfiltration area design, based on precipitation from rain gauges throughout the MRP region. The output of the analysis will be tables that show, for each rain gauge, and given a proposed project’s runoff coefficient, what level of hydraulic conductivity (Ksat) the native soils must have in order to use bioinfiltration.

- **Self-Retaining Area Sizing**
 - In March, if time permits, Geosyntec will review the 2:1 ratio currently used by stormwater programs for sizing “self-retaining” landscaped areas to retain runoff from roofs and driveways without any other treatment, and to see if any adjustments should be made to this sizing assumption.

- **How Do Green Roofs Fit in the LID Feasibility Criteria and Procedures?**
 - Geosyntec submitted a memo on green roofs, concluding that – given winter storm patterns in the Bay Area – green roofs do not achieve C.3.d volume-based sizing criteria of 80% capture of annual runoff.

- Geosyntec's findings need to be reconciled with the draft Green Roof Specifications Submittal prepared by BASMAA, and BASMAA's Development Committee needs to provide direction on how to characterize green roofs in the LID feasibility criteria and procedures.
- **Interceptor Tree Criteria**
 - Geosyntec submitted a comparison of existing criteria in various stormwater permits/guidance that provide stormwater treatment credits for including trees in the design of development projects.
 - The March 1 draft report to be submitted by Geosyntec will include assumptions for interceptor tree credits.
- **Rainwater Harvesting Criteria**
 - Geosyntec submitted a memo on rainwater harvesting that includes criteria and procedures used in Southern California. The purpose of the memo is to give BASMAA an idea of the type of information on rainwater harvesting that will be included in the March 1 draft report. The Bay Area-specific analysis needed to complete this part of the March 1 draft report had not been conducted in time for this meeting.
- **Next Steps**
 - Next work group meeting is Tuesday, March 1, from 9:30 a.m. - 12 noon.
 - BASMAA will incorporate comments by BASMAA on materials provided to date, complete the incomplete analyses (bioinfiltration sensitivity and rainwater harvesting) and submit the Draft LID Feasibility and Infeasibility Criteria and Procedures Report on Tuesday, March 1.

Attendees: Adrienne Miller, Geosyntec; Dan Cloak, Consultant to CCCWP; David Swartz, CCC; Geoff Brosseau, BASMAA (phone); Jack Betourne, Napa County (phone); James Paluck, Fairfield Suisun; Jill Bicknell, EOA/SCVURPPP; Jim Scanlin, ACCWP; Laura Prickett, EOA/SMCWPPP; Lisa Austin, Geosyntec; Matt Fabry; SMCWPPP; Michael Rhoades, City of San Jose; Tom Dalziel, CCCWP (phone); Will Lewis, Geosyntec;