To: BASMAA Development Committee

From: Special Projects Reporting Workgroup  
(Dan Cloak, Michael Rhoades, Jill Bicknell, Laura Prickett)

Subject: Draft Guidance for Reporting Special Projects Non-LID Treatment: Narrative Discussion of Feasibility or Infeasibility of 100% LID

Date: 17 January 2012

Background and Purpose

The Water Board amended the Municipal Regional Permit (MRP) on November 28. The new Provision C.3.e.vi., Reporting on Special Projects, includes the following:

For each Special Project listed in Table 3.1, Permittees shall include a narrative discussion of the feasibility or infeasibility of 100% LID treatment, onsite and offsite. Both technical and economic feasibility or infeasibility shall be discussed as applicable. The discussion shall also contain enough technical and/or economic detail to document the basis of infeasibility used.

Notably, the MRP does not require permittees to find LID treatment infeasible before allowing a Special Project to use non-LID treatment. However, the above language does require that an analysis of feasibility/infeasibility be made and documented. During a 14 November conference call to discuss the proposed language, Water Board staff stated that these feasibility analyses would be reviewed in preparation for the 2014 MRP reissuance.

The purpose of this memorandum is to provide guidance to applicants and permittees in preparing the “narrative discussion of the feasibility or infeasibility of 100% LID treatment, onsite or offsite.”

Guidance

Infiltration, Evapotranspiration, and Harvesting/Use

Criteria for evaluating the feasibility of infiltration, evapotranspiration, and harvesting/use are in the May 1, 2011 BASMAA submittal to the Water Board, as refined and updated in guidance prepared by the countywide programs. Applicants for approvals for Special Projects should use the same criteria used for other Regulated Projects.

Biotreatment

The fundamental requirements for implementing biotreatment facilities (including flow-through planters) are:

- A level area free of structures and underground utilities and suitable for landscaping, and large enough to accommodate flow from the area tributary to the facility while meeting the hydraulic sizing requirements in Provision C.3.d. and the Provision C.3.c.(vi)
requirement that the facility have a surface area no smaller than what is required to accommodate a 5 inches/hour surface loading rate (this requirement may be met by sizing facilities to have a minimum surface area equal to 4% of the tributary area times any applicable runoff factors).

- Surface drainage or a route for pipes to convey runoff from the tributary area to the facility, with sufficient head for positive flow.

- Daylighting or subsurface pipes from the underdrain to a storm drain or other disposal point, including sufficient head.

Generally, biotreatment can be feasible on Special Projects if these conditions can be met.

**Proposed Framework for Narrative Discussion of Feasibility/Infeasibility for Onsite Treatment**

1. Describe site drainage generally, including division of the site into discrete drainage management areas.

2. Describe drainage management areas for which LID features such as self-treating or self-retaining areas (including pervious pavement) or LID treatment facilities are provided (if any).

3. Explain how the routing of drainage has been optimized to route as much drainage as possible to LID features and facilities (if any).

4. For drainage management areas draining to tree-box type high flow rate biofilters and/or vault-based high flow rate media filters:
   a. Briefly describe all areas within these portions of the site that are not covered by buildings.
   b. Describe the uses of all impervious paved areas, and why the uses preclude the use of LID treatment.
   c. For any landscaped areas, note and briefly describe the following technical constraints as applicable:
      i. Inadequate size to accommodate biotreatment facilities that meet sizing requirements for the tributary area;
      ii. Slopes too steep to terrace;
      iii. Proximity to an unstable bank or slope;
      iv. Environmental constraints (for example, landscaped area is within riparian corridor);
      v. High groundwater or shallow bedrock;
      vi. Conflict with subsurface utilities;
      vii. Cap over polluted soil or groundwater;
      viii. Lack of head or routing path to move collected runoff to the landscaped area or from the landscaped area to a disposal point;
      ix. Other conflicts, including required uses that preclude use for stormwater treatment (describe in more detail).
Proposed Framework for Narrative Discussion of Infeasibility for Offsite Treatment.

1. Describe whether the project proponent owns or otherwise controls land within the same watershed of the project that can accommodate in perpetuity off-site bioretention facilities adequately sized to treat the runoff volume of the primary project.

2. Identify any regional Low Impact Development stormwater mitigation program available to the project for in-lieu C.3 compliance.