



B A S M A A

Project: Biotreatment Soil Mix Review

Description: Provision C.3.c.i.(2)(b)(vi) of the Municipal Regional Permit (MRP 1.0) required that the soil media used in biotreatment systems must be designed to: 1) sustain healthy vigorous plant growth; 2) maximize stormwater runoff and pollutant removal; and 3) infiltrate runoff at a minimum rate of 5 inches/hour. In 2010, BASMAA developed and submitted to the San Francisco Bay Regional Water Board a biotreatment soil specification to meet these requirements. On November 28, 2011, the Regional Water Board adopted Attachment L and revised the MRP to incorporate the specification in the permit. A similar provision in MRP 2.0 required biotreatment soil to meet the same specification.

Permittees have been using the soils specified in Appendix L of MRP 1.0 in biotreatment systems since 2011 and in that time, permittees identified several components of the soil specification for which review was warranted. The following tasks were conducted as part of this biotreatment soil mix review:

- Reconvene the soil roundtable
- Modify / create biotreatment soil specification(s)
- Create plant palette(s) to match specifications

The project produced reports on various aspects of biotreatment soil media.

- Specification of Soils for Biotreatment or Bioretention Facilities
- Biotreatment Soil Mix – Specification Verification Checklist
- Biotreatment Soil and Tree Roundtable Summary – Improvements for the Health of Trees
- Biotreatment Soil Media and Specification: Current Research on Trees and Water Quality Treatment – Literature Review
- Bioretention Design for Tree Health – Literature Review

FY: 15/16

Overseer: Development Committee (BSM Work Group)

Contracting Agency: BASMAA

Contractors: WRA Environmental Consultants

Budget: \$10,000

Status: Done

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Deliverable(s): *Specification of Soils for Biotreatment or Bioretention Facilities* (April 2016); *Biotreatment Soil Mix – Specification Verification Checklist* (May 2016); *Biotreatment Soil and Tree Roundtable Summary – Improvements for the Health of Trees* (July 2016); *Biotreatment Soil Media and Specification: Current Research on Trees and Water Quality Treatment – Literature Review* (September 2016); *Bioretention Design for Tree Health – Literature Review* (September 2016)
