**Treatment BMPs
Checklist T-1, Part 13**

Prepared by: Date: District-Co-Route:

PM: Project ID/EA: RWQCB:

***Bioretention***

***Feasibility***

1. Does local Basin Plan or other local ordinance provide influent limits on quality of water that can be infiltrated, and would infiltration pose a threat to groundwater quality? [ ]  Yes [ ]  No
2. Does infiltration at the site compromise the integrity of any slopes in the area? [ ]  Yes [ ]  No
3. Is site located over a previously identified contaminated groundwater plume? [ ]  Yes [ ]  No

If “Yes” to any question above, Bioretention TBMP must be lined to prevent infiltration.

1. At the invert, does the soil type classify as NRCS Hydrologic Soil Group (HSG) D, or does the soil have an infiltration rate < 0.5 inches/hr? [ ]  Yes [ ]  No

If “Yes”, the location can only be considered if vector control has been addressed (e.g., underground).

1. (a). Does site have groundwater within 5 ft of basin invert? [ ]  Yes [ ]  No

(b). Does site investigation indicate that the infiltration rate is significantly greater than 2.5 inches/hr? [ ]  Yes [ ]  No

If “Yes” to either part of Question 5, adequate groundwater information must be available or contact RWQCB for concurrence before approving the site for infiltration.

1. Does adequate area exist within the RW to place Bioretention? [ ]  Yes [ ]  No

If “Yes”, continue to Design Elements sections. If “No”, continue to Question 7.

1. If adequate area does not exist within RW, can suitable, additional RW be acquired to site Bioretention and how much RW would be needed to treat WQV, or a portion thereof? \_\_\_\_\_\_\_\_\_ acres [ ]  Yes [ ]  No

If Yes, continue to Design Elements section.

If No, continue to Question 8.

1. If adequate area cannot be obtained, document in Section 6 of the SWDR that the inability to obtain adequate area prevents the incorporation of this Treatment BMP into the project. [ ]  Complete

***Design Elements – Bioretention***

**\* Required Design Element –** A “Yes” response to these questions is required to further the consideration of this BMP into the project design. Document a “No” response in Section 6 of the SWDR to describe why this Treatment BMP cannot be included into the project design.

**\*\* Recommended Design Element –** A “Yes” response is preferred for these questions, but not required for incorporation into a project design.

1. For unlined basins, has an investigation been conducted, including subsurface soil investigation, in-hole conductivity testing and groundwater elevation determination? (This report must be completed for PS&E level design.) \* [ ]  Yes [ ]  No
2. Has an upstream bypass or overflow spillway with scour protection been provided? \* [ ]  Yes [ ]  No
3. Is the Bioretention size sufficient to capture the WQV, or portion thereof, with a maximum 96-hour drawdown time? Longer drawdown times may be allowable if vector controls have been implemented (e.g., underground chamber with flap gates) and coordinated with the District/Regional Design Stormwater Coordinator.\* [ ]  Yes [ ]  No
4. Can access be provided to the invert of the Bioretention? \* [ ]  Yes [ ]  No
5. Can the Bioretention accommodate the freeboard above the overflow event elevation (reference Appendix B.1.6.1)? \* [ ]  Yes [ ]  No
6. Can the Bioretention be designed with interior side slopes no steeper than 3:1 (h:v)\* [ ]  Yes [ ]  No
7. Can vegetation be established in the basin at the invert and on the side slopes for erosion control and to minimize re-suspension? If No, consider rock or similar protective system.\* [ ]  Yes [ ]  No
8. Can diversion be designed, constructed, and maintained to bypass flows exceeding the WQV? \*\* [ ]  Yes [ ]  No
9. Is the media layer at least 18 in deep with a subsurface drainage layer at least 12 inches deep? \*\* [ ]  Yes [ ]  No
10. If an underdrain is installed, is the pipe 3 to 6 inches above the bottom of the subsurface drainage layer?\*\* (This may vary depending on pollutant of concern for receiving water and site conditions.) [ ]  Yes [ ]  No
11. Does the CDA for the device have trash treatment requirements?\*\* [ ]  Yes [ ]  No

If Yes, design and certify as Multi Benefit Trash Treatment (*See Caltrans Multi Benefit Treatment BMP Trash Full Capture Requirements Design Guidance*).