**Treatment BMPs
Checklist T-1, Part 3**

Prepared by: Date: District-Co-Route:

PM: Project ID/EA: RWQCB:

***Biofiltration Swales / Biofiltration Strips***

***Feasibility***

1. Do the climate and site conditions allow vegetation to be established? [ ]  Yes [ ]  No

If “No”, evaluate other BMPs.

1. Can biofiltration swale be designed with a slope between 0.25 and 6 percent (with 1 to 2 percent preferred)? [ ]  Yes [ ]  No

If “No”, Biofiltration Swales are not feasible.

1. Can biofiltration strips be designed with a maximum slope of 2H:1V (with 4H:1V or flatter preferred)? [ ]  Yes [ ]  No

If “No”, Biofiltration Strips are not feasible.

1. Are Biofiltration device(s) proposed at sites where known contaminated soils exist? [ ]  Yes [ ]  No

If “Yes”, consult with District/Regional NPDES Coordinator about how to proceed.

1. Does adequate area exist within the RW to place Biofiltration device(s)? [ ]  Yes [ ]  No

If “Yes”, continue to Design Elements section. If “No”, continue to Question 6.

1. If adequate area does not exist within RW, can suitable, additional RW be acquired to site Biofiltration devices and how much RW would be needed to treat WQF? \_\_\_\_\_\_\_\_\_ acres [ ]  Yes [ ]  No

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

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 these Treatment BMPs into the project. [ ]  Complete

***Design Elements***

**\* 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. Has the District Landscape Architect provided vegetation mixes appropriate for climate and location? \* [ ]  Yes [ ]  No
2. Can the biofiltration swale be designed as a conveyance system under any expected flows > the WQF event, as per HDM Chapter 800? \* (e.g., freeboard, minimum slope) [ ]  Yes [ ]  No
3. Can the biofiltration swale be designed as a water quality treatment device under the WQF while meeting the required HRT, depth, and velocity criteria? (Reference Appendix B, Section B.4.3)\* [ ]  Yes [ ]  No
4. Is the maximum length of a biofiltration strip £ 100 ft? Strips > 100 ft. may still be considered as long as potential erosion issues have been addressed. \*\* [ ]  Yes [ ]  No
5. Has the minimum width (perpendicular to flow) of the invert of the biofiltration swale received the concurrence of District Maintenance? \* [ ]  Yes [ ]  No
6. Can biofiltration swales be located in natural or low cut sections to reduce maintenance problems caused by animals burrowing through the berm of the swale? \* [ ]  Yes [ ]  No
7. Has the infiltration rate of the bio-filtration device been calculated and maximized through amendments where appropriate?\*\* [ ]  Yes [ ]  No
8. Have Biofiltration Systems been considered for locations upstream of other Treatment BMPs, as part of a treatment train or pretreatment? \*\* [ ]  Yes [ ]  No

If “Yes”, document the amount of runoff treated (WQV/WQF).

1. Has the lining material been selected based on the permissible shear and velocity (refer to HDM Chapter 860 and Table 865.2)?\* [ ]  Yes [ ]  No