

STAFF ONLY	

Permit No	
Revision No.	
Date	

<u>BMP Group 2 Checklist</u> Stormwater Wetland

Instructions: All stormwater management plan submissions that use a Stormwater Wetland from BMP Group 2 (W-1 through W-4) shall contain the following information for each facility that is a Stormwater Wetland. Any submissions brought to the County with missing or incomplete plans, may be rejected and not reviewed until all necessary information has been provided. It should be noted that not all items contained below will, necessarily, be required for every project.

Consulting Engineer shall place one of the following marks (as appropriate) on each line (engineering reviewer shall verify each mark). N/A - not applicable Y- provided

Note: The following checklist is provided to assist the design professional in developing a complete stormwater management plan set to expedite review by the Department. All final stormwater management plans submitted for review are to include a copy of the checklists(s) signed by a registered design professional in responsible charge with the firm. Submittals made that do not include the checklist will be returned without review, comments, or approval. Compliance with the checklist, however, in no way is meant to relieve the design professional of responsibility for project design.

1. Performance Criteria for BMP #_____ (see 2000 Maryland Stormwater Design Manual page 3.25)

- a) Stormwater Wetland Feasibility Criteria
 - Analysis to assess Stormwater Wetland ability to maintain water balance without complete draw-down during thirty day drought in summer season is provided. (Shortcut assessment may be found in Appendix D.3 of the state manual)
 - 2) Section 404 permit is provided for Stormwater Wetland located within jurisdictional waters.
 - 3) Stormwater Wetland is founded at seasonal high groundwater table or underlying soil meets permeability rate as outlined in Chapter 4 of the county design manual.
- b) Stormwater Wetland Conveyance Criteria
 - 1) Inflow to outflow path length through Stormwater Wetland is maximized by meandering or circuitous routing.
- c) Stormwater Wetland Pretreatment Criteria
- 1) Fore-bay is located at the inlet and micro-pool is located at the outlet of the Stormwater Wetland.
- *d)* Stormwater Wetland Treatment Criteria
 - 1) The surface area of the complex is either one-percent of the contributing drainage area for a Stormwater Wetland or one and one-half percent for a shallow Stormwater Wetland.
 - 2) Either 25% of the Wqv is in deepwater zones of depth greater then four feet or between 10-25% of the volume is in deepwater zones if the Stormwater Wetland is locate where thermal impact are of concern.
 - 3) Extended detention volume is not more then 50% of total storage volume.
 - 4) Maximum water surface elevation is not more then three feet above normal pool elevation.
- e) Stormwater Wetland Landscaping Criteria
 - 1) Method to establish and maintain wetland species coverage for life of Stormwater Wetland is detailed on plans, including methods to deal with naturally occurring invasive native and non-native species.
 - 2) Wetland species habitat zones are indicated on plan and species are selected based upon zones.
 - 3) Planting configuration, quantity of planting, and species are appropriate for size and location of Stormwater Wetland.

- 4) Sequence of construction and material listing includes soil bed preparation, additive mixture and appropriate soil testing requirements.
- 5) Soil for Stormwater Wetland mulch is not borrowed from natural wetlands or appropriate permits for removal are to be obtained. Indicate permit number if appropriate.
- 6) Stormwater Wetland Maintenance Criteria
 - (a) Note for bonding of two year maintenance agreement indicating a minimum of 50% of each habitat zone be established in thriving vegetation or removal of invasive species and reinforcement planting will be required is on plans.
- f) Additional Criteria required by Anne Arundel County Practices and Procedures Manual
 - 1) When the stormwater wetland is located where thermal impacts are a primary concern (e.g., Use III watersheds), at least 10% but not more than 25% of the total WQ_v is in deepwater zones with a minimum depth of four feet (the forebay and micropool may meet this criteria).
 - 2) A wetland buffer shall extend 25 feet outward from the maximum water surface elevation (100 Year storm event), with an additional 15 foot setback to structures.

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