



**Memorandum**

**Date:** 5/2/2018

**To:** Maryland's Municipal Separate Storm Sewer System (MS4) Community

**From:** Maryland Department of the Environment (the Department), Sediment, Stormwater, and Dam Safety Program (SSDS)

**Re:** Stormwater Best Management Practices (BMPs) and Completion Dates for MS4 Permitting Purposes

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Stormwater management has been a part of the land development process in Maryland since the early 1980s. In some jurisdictions, flood control has been an important local program initiative since the late 1970s and has involved the construction of large regional practices such as ponds. The Department recognizes that there are situations where historical stormwater BMPs, constructed prior to 2000, exist in good condition but as-built plans or construction completion documentation may be incomplete or non-existent. The purpose of this memorandum is to provide guidance to local governments on how to record stormwater BMP implementation dates to capture missing as-built or construction completion documentation. The memo also addresses how to determine the level of water quality treatment for these structures for the purpose of meeting NPDES MS4 permit requirements. Jurisdictions shall use the minimum criteria outline below to establish standard operating procedures for documenting BMP built dates and determining water quality treatment for the Department's review and approval.

1. All BMPs for water quality treatment credit must be in good condition, well maintained, and functioning in accordance with their approved designs.
2. When as-built plans or construction completion documentation is unavailable, each jurisdiction will need to perform a BMP water quality and impervious area verification inspection. Assurance of BMP water quality treatment and impervious acres treated shall be based on Maryland's Stormwater Design Manual (2000) and the Department's *Accounting for Stormwater Wasteload Allocations and Impervious Acres Treated, 2014*. The BMP verification inspection must include:
  - a. A review and documentation of all existing BMP approvals, designs, reports and databases;
  - b. Digital imagery documenting construction dates and BMP location;
  - c. A well-documented field inspection that shall include, at a minimum, the following BMP measurements:
    - surface area measured at the water quality design elevation

- bottom surface area
    - permanent wet pool or water quality feature depth
    - maximum ponding depth or depth at top of berm
    - depth of accumulated sediment (if removal is part of the acceptance plan)
    - inflow and outfall sizes, location, and relative invert
    - location, dimensions, and material of control structure and presence of trash rack(s)
    - location and surface area of forebays or micropools
    - infiltration trench, infiltration basin, or filtering system dimensions, i.e., length, width, depth
    - photographs and descriptions of any additional water quality features
    - description of current conditions, e.g., vegetation, trash, debris blockages, erosion, seepage, corrosion
  - d. Additionally, a stormwater management report documenting:
    - drainage area map
    - actual impervious acres that drain to the BMP
    - water quality treatment credits up to a maximum of 1 inch (1/2 inch for in-stream facilities)
  - e. To ensure safe operation, additional review and documentation will be required for all BMPs that fall under Maryland Pond Code 378 criteria or can be classified as a dam.
3. Stormwater management BMPs constructed prior to Maryland's Stormwater Design Manual (2000) may receive credit for up to a maximum of 1 inch of water quality treatment based on locally documented stormwater management ordinances, policies, plans, or reports.
- a. Water quality treatment credit will be accepted for water quality BMPs including stormwater ponds, wetlands, infiltration, filtering systems, and open channel systems.
  - b. Dry ponds, extended detention or otherwise, and hydrodynamic structures do not provide adequate water quality and will not be accepted for water quality treatment credit.
  - c. In-stream stormwater management facilities may receive up to a maximum of 1/2 inch of water quality treatment credit on a case-by-case basis when:
    - The water quality volume provided in the facility can be related back to a depth of rainfall managed for the contributing impervious drainage area
    - Runoff conditions and streams in the contributing drainage area are shown to be in good condition with no signs of erosion or known flooding problems
    - The stream characteristics below the facility have been well-documented, photographed, and found to be in good and stable condition
4. Jurisdictions shall have the appropriate legal access to inspect BMPs and ensure that they are being maintained. Where legal access is not provided, jurisdictions need to develop procedures for obtaining BMP access for inspection prior to receiving water quality treatment or impervious acre credits.