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## DEPARTMENT OF PUBLIC WORKS

**DATE:** March 12, 2024

**FROM:** Division of Environment and Sustainability  
Bureau of Stormwater Management

**TO:** Harford County Engineering, Developer and Consultant Community

**RE:** Stormwater Review Directive: Pond Repair Spillway (Barrel and Riser) Replacements

***This directive will apply to Final Pond Repair Review submissions received by Harford County after April 23, 2024.***

The Maryland Department of the Environment Dam Safety Division has instructed the Harford Soil Conservation District to have design engineers provide the following updated analyses for in-kind replacement of barrels and riser structures (pond repairs):

**Breach Analysis:** A new breach analysis is necessary unless the design engineer can review the old breach analysis to determine its adequacy. A new analysis or review of the old analysis needs to evaluate the downstream conditions to see if they have changed (i.e., more housing, development, etc.) and if the quality of the original study is still acceptable by current standards. [2018-05-15-Breach-Analysis-Guidance.pdf \(maryland.gov\)](#)

**Hydrology & Hydraulic Analysis:** A new analysis or an update of the old study is necessary to evaluate the changes in the upstream watershed. In addition, design rainfall values have now changed by adopting the NOAA Atlas 14 precipitation values with the Type C rainfall distribution. [Policy Memorandum No. 17 - In-Kind Replacement of Spillways.pdf \(maryland.gov\)](#)

Please provide the two analyses; depending on the results, the county reviewer may require modification of the riser structure, storage area, pipe size, and/or emergency spillway.

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**Reminder:** The TP 40 and NRCS Type II rainfall distribution no longer apply. Please use the Type C rainfall distribution and use the following (Harford NOAA-C) 24-hour rainfall duration values:

1-year 2.69 in  
2-year 3.26 in  
5-year 4.19 in  
10-year 5.00 in  
25-year 6.25 in  
50-year 7.34 in  
100-year 8.58 in

**Note:** Filter Diaphragms are preferred over anti-seep collars but not required for Small Ponds.

**EFFECTIVE DATE: April 24, 2024**