



DAM SAFETY
POLICY MEMORANDUM #4

TO: Dam Owners, Operators, and Engineers

FROM: Sediment, Stormwater, and Dam Safety Program
Water and Science Administration

DATE: April 5, 2019 (Updated December 21, 2022)

SUBJECT: Hazard Classification: Small Impoundments

Policy Statement

It is the policy of the Maryland Department of the Environment (the Department) that the hazard classification of a dam or waterway impoundment is essential to understanding its threat posed to public safety. This policy memorandum clarifies that certain small impoundments, by virtue of their height and storage volume, may automatically qualify for a low hazard classification (class “a”) without performing the analyses described in the Department’s “Guidance for Completing a Dam Breach Analysis for Small Ponds and Dams in Maryland.” This policy supplements all other design requirements for construction of dams and impoundments.

Conditions Where this Policy Applies

Table 1 includes characteristics of certain small impoundments that may automatically qualify for a low hazard classification (class “a”) provided all criteria listed below are met.

Table 1

		Criteria
Upstream Embankment Height (feet)		≤ 6
Downstream Embankment Height (feet)		≤ 12
Max. Storage Volume (acre-feet)	No Emergency Spillway	≤ 1.0
	With Emergency Spillway	≤ 1.5

The upstream embankment height shall be measured from the upstream toe (or top of filter media, if present) to the low point at the crest of dam. The downstream embankment height shall be measured from the downstream toe to the low point at the crest of the dam. Storage volume is to be measured from the bottom of the pond (or bottom of filter media if present) to the low point at the crest of the dam. Within the filter media, include the volume of “free” water only.

Responsibility of Dam Owner and Designer

At all times the engineer must exercise their best judgement, with consideration of public safety being paramount. The use of the concepts presented in this policy memorandum in lieu of conducting a dam breach analysis requires that the applicant provide a signed and sealed statement by a professional engineer, registered in the State of Maryland, that the location of the impoundment does not present an undue risk to downstream properties or life, and that failure of the embankment will not result in loss of life or in damages that exceed the ability of the owner to pay.

The Department reserves the right to require a dam breach analysis or a modification to the design where judged necessary and in the public interest.

Additional Information

For additional information on this subject, refer to “Guidance for Completing a Dam Breach Analysis for Small Ponds and Dams in Maryland” (Maryland Department of the Environment / May 2018).

Questions about this policy or other items relating to ponds and dams can be directed to the Chief of the Dam Safety Permits Division at 410-537-3552.