

BREACH PLAN GUIDANCE

General Note:

Spillway Design Flood (SDF), as defined in 15A NCAC 02K .0205.

Breach Plan Guidelines:

1. A dam breach should consist of an excavated notch through the embankment with a lined channel throughout.
2. The excavated notch should be large enough to convey the pre-decommissioned dam's Spillway Design Flood without re-impounding the reservoir. Per the agreement of the Division, the engineer may attempt to demonstrate that a smaller event is warranted other than the SDF.
3. The invert of the notch should be at the lowest elevation in the reservoir so the lake doesn't re-impound water.
4. The excavated notch's side slopes should be designed to be stable under long term static conditions. 3H:1V (or flatter) slopes are recommended. Steeper slopes/benched slopes/other configurations may be considered if supporting calculations are provided.
5. The channel through the notch should be lined up to the 100-year peak flow level.
6. The channel lining should be robust enough to withstand the velocities of the 100-year flow. The slopes above the channel may be grass-lined.
7. Ensure placement of filter/cushion layers underneath the rip-rap (geotextile and gravel).
8. Provide a Water Control plan for draining the lake and keeping it drained during construction so that sediment is prevented from moving into the stream.
9. Provide a Sediment and Erosion Control plan.
10. Breach plans need to be prepared by a licensed NC Professional Engineer and submitted to DEMLR for review. The plans must be approved by Dam Safety before the project can proceed.