

Pond Owner Assessment Checklist for Earthen Embankment Dams



This checklist is designed for use by all dam owners in South Carolina. It is recommended that pond owners perform dam assessments semi-annually and after large storm events. Dams regulated as part of the SC DHEC Dam Safety Program may have additional requirements for inspection, maintenance, and/or repair. If you operate a regulated dam and are in an emergency situation, contact the DHEC 24-hour phone line: 803-898-1939.

Date of Inspection: _____

Inspection Item	Issue?	If YES, Recommended Actions
Are trees <i>smaller</i> than 4" in diameter on the slopes or crest of the dam?	Yes / No	Maintenance should be performed to cut all trees less than 4" to the ground level. Use an herbicide approved for aquatic use on cut stump to deter regrowth.
Are trees <i>larger</i> than 4" in diameter on the slopes or crest of dam?	Yes / No	Under direction of qualified engineer, remove large trees and repair voids in dams.
Are vines and shrubs growing on the slopes (upstream/downstream) or crest of the dam?	Yes / No	Remove vines and shrubs; use an herbicide approved for aquatic use on cut stumps to deter regrowth.
Are there bare or exposed areas of the slope not stabilized by a perennial grass cover?	Yes / No	Establish a perennial grass cover across bare areas. Site prep may need to include a soil test and use of erosion control blanket until vegetation established.
Are there signs of burrowing animals (beavers, otters, other) that could compromise the condition of the dam?	Yes / No	Reduce or eliminate nuisance wildlife species. If professional assistance is needed, consult SC Department of Natural Resources list of Wildlife Control Operators.
Is there evidence of animal burrows, slides, or paths on the slopes or crest of the dam?	Yes / No	Fill burrows with clean earthen material, compact and stabilize area with perennial grass cover. Slides and paths should be smoothed so that the surface is even and grass cover also established.
Are there livestock trails on the slopes or crest of the dam?	Yes / No	Use fencing to eliminate livestock access to dam. Paths should be regraded so that the surface is even and grass cover established. Contact the Natural Resource Conservation Service for information on financial assistance programs.
Is there trash or debris that has accumulated in the spillway(s), including the riser, auxillary and/or emergency spillway?	Yes / No	Remove debris (trash, limbs, logs, etc.) at all spillway structures. Identify the source of debris to reduce occurrence.
Is there evidence that dam control structures (gates, valves, boards, siphon) are not working properly?	Yes / No	Non-functioning valves should only be exercised under the direction of a professional engineer. Regulated dam owners should contact DHEC Dam Safety Program for guidance.
Are there areas with minor erosion (12" deep or less) on the slopes or crest of the dam, or in the auxillary and/or emergency spillway?	Yes / No	Areas with minor erosion should be smoothed so that the surface is even and grass cover established. Consider use of additional best management practices, like rip-rap or turf reinforcement matting, to provide additional erosion protection.
Are there areas with major erosion (more than 12" inch deep) on the slopes or crest of the dam, or in the auxillary and/or emergency spillway?	Yes / No	Seek the assistance of a professional engineer for repair.
Is there water seeping through the dam in an open path or eroded channel, or around the outlet pipe or sides of dam?	Yes / No	Regulated dam owners should contact the DHEC Safety Program for guidance. Unregulated dam owners should lower the water level in their lake or pond and seek the assistance of a professional for repair.
Are there sinkholes present or signs of cracking in the dam crest or slopes?	Yes / No	Regulated dam owners should contact the DHEC Safety Program for guidance. Unregulated dam owners should lower the water level in their lake or pond and seek the assistance of a professional for repair.

For more information on the *Dam Ownership in South Carolina* class, visit: www.clemson.edu/extension/water/dam-ownership.

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