

**OPERATION AND MAINTENANCE PLAN  
GRADE STABILIZATION STRUCTURE  
CODE 410**

Landowner/Operator \_\_\_\_\_

Job Location \_\_\_\_\_

Prepared By \_\_\_\_\_ Date \_\_\_\_\_

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**Operation and Maintenance Items**

This structure was designed and installed to stabilize a watercourse. The life of this installation can be assured and usually increased by developing and carrying out an effective operation and maintenance program. An effective program includes:

- Periodically inspect all structures, earthen embankments, spillways, and other significant appurtenances.
- Promptly repair or replace any damaged components.
- Periodically inspect spillways and control gates, valves and weirs for proper functioning and their ability to maintain the water level to design elevations. Remove debris or flow blockages.
- Inspect concrete for accelerated weathering, spalling, settlement, misalignment or cracks. Repair defects.
- Inspect rock riprap for accelerated weathering and displacement. Repair to original grades if necessary.
- Inspect metal surfaces for rust and other damage. Especially inspect sections in contact with earthfill and/or other materials. Repair or replace damaged sections and apply a protective covering.
- Check for unusual seepage on the backside of dam earthfills. Check for water flowing underneath pipes through earth fills, water flowing in the inlet but not out the outlet, and for water flowing out the outlet but not in the inlet. Make sure all structure drains are functional and soil is not being transported through the drainage system. Screens and/or rodent guards must be maintained and in place.
- Check earthen structures for evidence of sloughing on the embankment.
- Check the earth fill for evidence of lateral cracking, erosion on the upstream face of the embankment, sloughing of the embankment at the plunge pool or aggrading of the downstream channel over the pipe outlet.
- Repair any rodent, burrowing animal, vandalism, vehicle, or livestock damage.
- Periodically remove any trees, brush, or invasive species from the structure.
- Maintain a vigorous growth of vegetation. This includes reseeding, fertilization, and application of herbicides when necessary. Periodic mowing or short term grazing may also be needed to control height.
- Limit vehicle traffic along earthen slopes and in the direction of flow in the earthen spillway.
- Maintain fences to prevent unauthorized human or livestock entry.
- Remove sediment if it exceeds planned sediment storage in the structure.

Other \_\_\_\_\_

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