



**Operation and Maintenance Plan**  
**Stream Crossing, Code 578**



Landowner/Operator:				Date:	
NRCS Service Center:			Conservation District:		
Location of Practice:	Lat:		Long:		
UTM Coordinates:					
	SEC:		TS:		R:      Field ID:

GENERAL

A properly operated and maintained stream crossing is an asset to the farm. This practice was designed and installed as a travel-way across streams. Estimated life span of this installation is at least 10 years. The life of the practice can be assured and usually increased by developing and carrying out a systematic operation and maintenance program.

O&M REQUIREMENTS

This practice will require periodic maintenance and may also require operational items to maintain satisfactory performance. Your operation and maintenance program requirements include:

- Inspect the crossing regularly, especially after heavy rains. Stream crossings will need periodic maintenance throughout the lifespan. Damaged areas will be filled, compacted, and re-graded immediately. Remove debris or blockages. Repair and/or restore flow capacity as needed.
- Maintain the crossing surface in good condition, which includes periodic grading and the addition of stone or other surface material when necessary. Prevent surface ponding by localized grading or addition of stone to remove depressions. Fill low areas in travel treads and re-grade, as needed, to maintain road cross section. Road base rock may be required to stabilize the foundation.
- You can expect the top surface of the stone to be eroded away during flooding. This stone must be replaced to ensure a safe and stable travel surface for the livestock.
- Maintain all concrete work, rock riprap, grouted rock, flagstone or precast panels. Replace to original grades with similar materials as necessary.
- Culvert type crossings impose a restriction to stream flow, and can receive excessive damage from floods, requiring regular maintenance to preserve their integrity. Risk can be minimized by crowning the backfill over culvert pipes above bank elevation, leaving a low space on one or both abutments to serve as an emergency spillway during out-of-bank flow. Check the wearing surface for ruts, replacing the displaced



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fill with gravel. Check for erosion of earth fill slopes, upstream and downstream, especially if the crossing has been over topped. Riprap stone can be added to help hold the fill slopes, and may be grouted with high slump concrete to anchor the armor. Check for abnormal settlement around pipes, water passing outside of the culverts can erode fill material. Replace missing fill with large stone prior to replacing the wearing surface. Remove debris blocking pipe inlets and check for scour at the pipe outlets in the channel. Fill eroded channel bottom with riprap stone.

- The fencing component should be checked after every high flow event as well as on a regular basis. Any fencing that has been damaged due to high flow should be repaired immediately. Care should have been taken during installation to minimize the damage caused to the corridor fencing (parallel to the stream) by the cross-fencing (perpendicular to the stream). Replace or repair any fencing as necessary during the life span of the practice.
- If the crossing is also used as a watering location, the landowner should check the site during periods of low flow to ensure the livestock have an adequate source of water.
- Maintain road ditch and drainage facility capacities. Maintain vegetated areas in adequate cover. Re-seed and mow as needed.
- Eradicate or otherwise remove all rodents or burrowing animals. Immediately repair any damage caused by their activity.
- Immediately repair any vandalism, vehicular, or livestock damage to earthfills, side slopes, spillways, outlets or other appurtenances.
- If flooding has caused excessive damage to the crossing, contact your local NRCS or SWCD office for assistance.

Additional Operation and Maintenance Requirements Specific to this Plan: \_\_\_\_\_

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