

Water Facility (614) Requirement Sheet

2012 Environmental Quality Incentives Program (EQIP)

Eligibility: Livestock Operations

Purpose: To provide planning guidance for using Water Facility scenarios in arriving at least cost alternative to address resource concern.

Requirements: Livestock should be excluded from currently accessed water bodies or streams where drinking water is supplied to:

- Meet daily water requirements
- Improve animal distribution and grazing by application of multiple pasture rotation and a planned prescribed grazing system.

Scenario	Description
Galvanized, HD Poly, tire trough or other material	This scenario is for the installation of a galvanized steel or heavy duty polyethylene livestock watering tank which has capacity of approximately 200 gallons. It is located to serve multiple pastures and to supply water needs for a herd of 8 to 15 head of cattle. The cost includes all field preparation, excavation, sand, gravel, compaction, and plumbing as needed to install the tank. This size tank will supply 2 days of water to herd of 10 head if water supply is lost due to mechanical or other failure. It does not include the pipeline to deliver the water to a tank or trough.
Open Concrete (500 to 1000 gal)	A 500 to 1000 gallon permanent concrete watering trough is installed on a compacted gravel pad with geotextile to meet the 2 or more day requirements of the herd. It is located to serve multiple pastures. A large capacity water supply is needed due to the slow rate of replenishment into the watering facility from the water source. Due to the available soil conditions, the gravel/geotextile surface is necessary to provide a stable surface for where the watering facility can be placed and will not settle. Cost includes trough, valves, and appurtenances. Trough is located on 8" thick compacted gravel underlain by geotextile. The gravel/geo extends 8' past the base (11' radius, 9.5 CY, and 54 SY geo).
Open Concrete (> 1000 gal)	A greater than 1000 gallon permanent concrete watering trough is installed on a compacted gravel pad with geotextile to meet the 2 or more day requirements of the herd. It is located to serve multiple pastures. A large capacity water supply is needed due to the slow rate of replenishment into the watering facility from the water source. Due to the available soil conditions, the gravel/geotextile surface is necessary to provide a stable surface for where the watering facility can be placed and will not settle. Cost includes trough, valves, and appurtenances. Trough is located on 8" thick compacted gravel underlain by geotextile. The gravel/geo extends 8' past the base (11' radius, 9.5 CY, and 54 SY geo).
Portable or Small Troughs for Rotational Grazing	This scenario is for a pasture rotation or enhanced pasture management and utilization by installing small water troughs (100 gallon). The trough is generally sized to provide adequate water supply for the herd based on a fast refill rate and requires frequent management checks. Installation of the trough includes the float valves, and hose. Because the system does not flow continuously a float is needed to maintain the water level within the portable trough. Trough is moved from paddock to paddock as needed.
Wildlife	To provide wildlife water in the area, a shallow pool is excavated in heavy clay to create a pool to collect water for wildlife access. Excavated pools are typically 4000 SF with average depth of 2 feet deep with 4:1 side slopes around edge (336 CY). Additional practices will need to be planned with this scenario such as critical area and conservation cover for the disturbed areas.
Freeze Proof Automatic (2	For herd size of 100 head or less. A 2 ball freeze proof pressurized watering facility is installed to provide water to livestock; it is placed on a compacted gravel surface with

hole)	geotextile to meet the daily requirements of the herd on approximately 30 acres of rotated pasture. Due to the available soil conditions, the gravel/geotextile surface is necessary to provide a stable surface for where the watering facility can be placed and will not settle. The 2 ball watering system is permanently mounted on typical 6 x 6 concrete pad (0.5 CY) to prevent overturning by animals and includes an 8 foot border of compacted gravel on geotextile.
Freeze Proof Automatic (4 hole)	For herd sizes over 100 head. A 4 ball freeze proof pressurized watering facility is installed to provide water to livestock; it is placed on a compacted gravel surface with geotextile to meet the daily requirements of the herd on approximately 60 acres of rotated pasture. Due to the available soil conditions, the gravel/geotextile surface is necessary to provide a stable surface for where the watering facility can be placed and will not settle. The 4 ball watering system is permanently mounted on typical 6 x 6 concrete pad (0.5 CY) to prevent overturning by animals and includes an 8 foot border of compacted gravel.
Storage Tank 1200-1500 gallon	Installation of one (1) permanent storage tank for distribution of livestock drinking water. The setting is to supply adequate water to several pastures where the water supply from other sources does not meet livestock needs on demand or is somewhat unreliable during certain times of the year, so storage is needed so collection can occur when livestock are not drinking. Water is pumped at slow rate into the permanent storage tank from the designated water source then delivered by gravity to moveable or permanent watering tanks in the pastures. The typical setting is a multiple pastures where multiple water tanks are used to achieve rotational grazing system. Install underground, permanent freeze proof tank (plastic or PE has to meet 20 year life) on a 6 to 12" thick sand base.

Producer requirements for payment:

Install practice according NRCS plans and specifications. Payment is made following certification by appropriate NRCS staff with engineering job approval authority or acceptance by NRCS staff that system was installed as designed and certified by TSP and applicable NRCS standards and specifications.