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REDUCING BACTERIA WITH BEST MANAGEMENT PRACTICES FOR LIVESTOCK: WATER HARVESTING CATCHMENT

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Description

A facility for collecting and storing precipitation to provide water for livestock, fish and wildlife, recreation, or other purposes.

Benefits to Producer

- Reduces herd health risks associated with livestock standing in muddy areas, such as foot disease and injuries due to unstable footing.
- Provides a clean source of water for livestock.
- Decreases herd injuries associated with cattle climbing steep and unstable stream banks.
- Improves water quality by reducing sediment, nutrient, bacterial, organic, and inorganic loading to the stream.
- Reduces stream bank destabilization and associated erosion due to trampling and overgrazing of banks.
- During drought, when surface water sources are dry, an alternative water source provides the water necessary for beef cattle producers to remain in business.

Rainwater harvesting captures, diverts, and stores rainwater for later use. Captured rainwater can then be used for a variety of different purposes, including clean water for livestock. *Photo courtesy of Texas AgriLife Extension.*

Bacterial Removal Efficiency

- Water harvesting catchments are primarily designed to control and reduce runoff. Water quality is enhanced by reducing water flow across impervious surfaces and waste areas thereby minimizing pollutant loads (sediment, nutrients, bacteria, organic matter) to surrounding water bodies.
- Water harvesting catchments can be used in conjunction with other practices such as fencing, filter strips, and heavy use area protection. These practices have been shown to reduce concentrations of bacteria.

These four 2,500-gallon water harvesting tanks capture rainwater from the barn's roof and help save over 162,000 gallons of water a year that would otherwise be pumped from the groundwater aquifer below. *Photo courtesy of Yamhill Soil & Water Conservation District.*

Other Benefits

- Reduced salt concentrations in soil which can be detrimental to vegetative growth.
- Can be adapted for use as domestic water supply in rural areas.
- Reduced utility bills.
- Decreased stormwater runoff volumes and peak runoff flow rates in urban areas.
- Reduced sedimentation and increased flood mitigation.

Estimated Installation Costs

- Check with your local NRCS Service Center.
- Prices are estimates and can vary depending on location and economic conditions.

For Technical or Possible Financial Assistance

- Contact your local County Extension Agent, Soil and Water Conservation District (*https://www.tsswcb.texas.gov/swcds*).

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