

## Livestock Water Storage

### Definition/Purpose

Livestock Water Storage means to construct a system of water storage for the purpose of watering livestock. These systems may include any of the following: construction of impoundments, water storage tanks, pumps and/or water conveyances. This practice can accompany a water collection/supply BMP to allow for additional pumping and storage of water. Benefits may include increased water storage.

### Policies

1. The practice is primarily intended to be used for watering livestock; however other agricultural uses are allowable.
2. The system must be certified by a PE or an individual with appropriate job approval authority.
3. This BMP may only be used to store water supplied by the following sources:
  - Municipal Water
  - Water Supply Wells
  - Spring Developments
  - Streamside Pickups (baseflow interceptors)
4. This practice can be used to enhance water storage capacity for existing water collection and supply practices including but not limited to Water Supply Wells and Streamside Pickups (baseflow interceptors).
5. Cost shareable components related to storage of the water include:
  - Water storage tanks, including concrete pads
  - Pumps and piping required for collection and transfer of water to storage
    1. If pumps are cost shared, adequate housing for the pump must be provided and is cost sharable.
    2. Piping required from storage to livestock waterers is **not** cost sharable.
  - Electricity required for pumping
  - Excavation for impoundment storage and the burying of underground storage tanks
  - Vegetation establishment
  - Components needed as designed by a PE
6. A method for distributing the water from the storage site to points of use must be available. This is **not** a cost shareable component.
7. Any components needed to treat the stored water before its use for livestock watering is the responsibility of the cooperator.

Agricultural Water Resources Assistance Program

8. Livestock shall be excluded from the water storage areas, where appropriate.
  - For fencing to be eligible for cost share assistance, the minimum standard the cooperator shall follow is the NRCS 382 standard for the appropriate type of operation for stream exclusion/interior fencing.
  - Where fencing is installed, but not cost-shared, the applicant shall not be required to meet the NRCS 382 standard, only to demonstrate that the fencing is adequate to exclude livestock.
9. Cooperators are responsible for obtaining and complying with all required permits.
10. Recommended guidelines for minimum water storage capacity:

Municipal or Community Water System	1 to 2 days
Privately Owned Well	3 to 5 days
Solar Powered Well	3 to 7 days
Spring or Stream	7 to 10 days

<b>LIVESTOCK WATER STORAGE</b>	
<b>Maintenance Period</b>	10 YEARS
<b>BMP Units</b>	EACH
<b>Required Effects</b>	<ul style="list-style-type: none"> <li>• Volume (gallons) of Water Storage Increased or Created (annually)</li> <li>• Number and type of livestock</li> </ul>
<b>JAA</b>	<ul style="list-style-type: none"> <li>• Professional Engineer</li> </ul>
<b>Supporting NRCS Standards for Reference</b>	<ul style="list-style-type: none"> <li>• ENG – 516 – Livestock Pipeline</li> <li>• ENG – 614 – Watering Facility</li> <li>• ECS – 382 - Fencing</li> <li>• ENG – 533 – Pumping Plant</li> <li>• ENG – 378 – Pond</li> <li>• ENG - 574 - Spring Development</li> <li>• ENG - 642 - Water Well</li> <li>• ENG - 561 - Heavy Use Area Protection</li> <li>• ECS – 342- Critical Area Planting</li> <li>• ECS – 484 - Mulching</li> </ul>
<b>Cost Information</b>	<ul style="list-style-type: none"> <li>• Average and actual cost for components on AgWRAP and ACSP</li> <li>• BMP cap of \$15,000</li> </ul>
<b>CS2 Reference Materials</b>	<ul style="list-style-type: none"> <li>• NC-ACSP-11 Signature Page</li> <li>• Map with BMP location, fields, and roads.</li> <li>• Cooperator Acknowledgement Form</li> <li>• Conservation Plan</li> </ul>
<b>Additional Spot-check requirements</b>	The district shall inspect the site annually during the first five years of maintenance period.