Conclusion

Springs can be developed into an economical source of water for livestock and wildlife. However, caution should be used when developing springs so the “wetland” is protected from environmental damage and contamination. Separating the tank and livestock from sensitive environmental areas is a good way to ensure this does not happen.

Adding a float valve to your livestock watering system can provide a good source of drinking water and protect the wetland.

Spring Development–Water Supply for Livestock

For more information on spring developments and float valves, contact your local Natural Resources Conservation Service (NRCS) office for technical assistance with planning, survey, design, and installation.

*A float valve on a tank.*

*A spring or wetland area is fenced off to reduce trampling of these natural areas by livestock.*

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Spring Development—Water Supply for Livestock

When ranchers are considering a water supply, they often overlook developing springs or “wetlands” that can provide an excellent and plentiful source of clean water for livestock.

Compared to (water) wells or dugouts, spring development costs are relatively inexpensive. Electricity and pumps are not required. Excavation is at a minimum, and landscaping is inexpensive.

Traditionally, livestock were allowed access to springs, ponds, and creeks. Research has shown how direct access by livestock to springs can negatively affect animal health, water quality, and wildlife habitat.

Without fencing, livestock may trample grass and wade and muddy the water.

Benefits

- Improve the distribution of water and livestock grazing distribution
- Increase the quantity and quality of water for livestock, wildlife, or other uses

Springs located on hillsides often have sufficient slope to deliver water by gravity to a location for use. This results in significant savings on electricity and pump costs.

A float valve on the spring outlet pipe should be considered for flow control and maintenance.

Float Valves

Float valves conserve water and help maintain tank water levels. Float valves can help minimize the removal of water from a wetland system, improve water conservation, and maintain and improve the wetland functions and values.

As animals drink or water evaporates, the valve opens and allows more water to flow down into the tank.

When the tank reaches the full level, the float holds the valve in the closed position.

Considerations

- Spring developments should also include the protection from contaminants, potential damage to cultural resource areas, wetlands, woody cover, and existing wildlife habitat and potential changes in surface flow.
- A float valve should be considered to minimize environmental damage.
- Native vegetation adapted to wet conditions may be used as an alternative to introduced grasses on some wet sites.