

Water System Maintenance

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Water systems serving livestock can be designed to survive the abuse and daily wear animals impose. The obvious damage to tanks and controls can be corrected. Problems that develop over time such as water intakes becoming plugged with algae, tadpoles and debris, cracked supply lines or corroded pipes creep up slowly and diminish water flow over time. Not until a hot July day do we realize a problem might exist. A few preventative maintenance measures can eliminate many of these situations.

1. Pressurize line or open gravity systems before the pasture is occupied. Inspect for leaks in above and below ground installations.
2. Inspect valves and controls for leaks or plugging - low flow water sources or ponds may not withstand wasting of water and be able to supply throughout the season.
3. Gravity systems from surface water sources have the potential for moss algae, insects or small animals to enter the intake. A lesson taken from dry fire hydrant maintenance is to back flush annually to remove this debris. Old intake pipes may not be fitted to allow a back-flushing operation. Rebuilt or new systems offer the opportunity to include a removable cap on a standpipe or a spring-loaded or weighted flap over the end of the intake. Back-flushing requires a pump, clean water source such as a portable tank or a suction line into the pond and a point where a connection can be made to introduce the flushing water.
4. Re-evaluate your tank size, location and float valves. If problems existed last year with water volume or flow and the supply lines are adequate, revisit the tank size used. Does it provide enough capacity for the animals to drink freely. Low-flow/low pressure water sources may not provide rapid refill capacity to utilize small tanks. Overly large tanks may become algae filled and reduce animal consumption. Portable locations need to be flexible to minimize bare muddy areas and allow some recovery of the forage between grazing cycles. If the water supply was adequate and the tank was the right size and refill time is not what it should be, examine the float valve. Smaller valves up to 3/4" in diameter work well with pressurized water systems. Larger float valves, up to 2", are available and cost from \$25 to \$45. Also, a larger valve is

less likely to become plugged by debris when using a surface water source and an intake strainer.

5. Water source maintenance is also important. Information on protecting private wells can be found at (WQ pubs). Public water sources are monitored and provide minimal maintenance if these are available. Ponds, spring sand streams are the most susceptible to contamination. (References on water quality).

WQ-9 is the pub on water quality for animals.