Livestock Grazing Management and Watering Systems

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BEEF BRIEF

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Streams, lakes, and wetlands contribute to Michigan's precious water resources. Although these water resources within pasture lands can be used for livestock, protecting water quality is the producer's responsibility.

Pasture management Pasture systems require good management to achieve optimal productivity of forages utilized by grazing livestock. Controlled grazing is a strategy to manage pasture vegetation and livestock for the greatest productivity of both. When managed correctly, the vegetation is maintained in good condition to supply ample feed and reduce erosion. Rotational grazing is a system that includes rotating livestock from pasture to pasture, keeping the vegetation controlled according to a specific management strategy. Flash grazing is used primarily for vegetation management of a filter strip, or other vegetated area along a waterway, by allowing livestock to quickly graze off the vegetation during dry periods. It also replaces the need for mowing and provides additional feed for livestock.

Fencing In many cases, excluding livestock from waterways is the best choice. A convenient method of exclusion is fencing. Fence-lines should be designed so that livestock travel patterns do not border on, or include, a stream bank or lake shore. Fencing decisions should include slope, animal species, as well as animal and vegetation density. In addition, materials should adequately confine the livestock. It may be as simple as a single strand of high-tensile, electrified wire, or as robust as woven-wire fencing. Materials should be selected based on the livestock needs and management goals.

Alternative watering and shade source Given a choice, cattle will drink from the most convenient source available, which may be a stream or lake. In addition, sediment and nutrient deposition also occurs when livestock loaf in or next to the water to cool off. Maintaining these areas will help maintain healthy aquatic and wildlife habitat. An alternative watering source may be more desirable or necessary. There are several alternatives that are cost-effective and easy to install and maintain. Other practices, such as supplemental feeding and shade sources away from surface waters, will further reduce livestock impact.

Controlled access Stream crossings provide livestock access to pasture on the other side of a stream and limited access to water. A firm and stable crossing will also help maintain or

improve water quality and provides solid footing for livestock. Watering access sites provide controlled access to drinking water. A well managed access site will reduce erosion and improve water quality while giving access to surface water sources.

Cost-share opportunities Your local Natural Resources Conservation Service (NRCS) office may have programs such as CREP or EQIP that provide cost-share funds for installation and management of livestock watering systems. These programs are funded through the farm bill and should be considered when attempting to manage surface waters. The Michigan Department of Environmental Quality may need to issue a stream crossing permit prior to installation.

Technical assistance For help with a grazing and watering system plan for your grazing operation, contact your local NRCS or Michigan State University Extension Livestock Educator. MSU Extension has a booklet available "Watering Systems for Grazing Livestock" that can be helpful for planning a livestock watering system. To purchase a copy of this booklet for $3.00, contact Dr. Ben Bartlett at bartle18@msu.edu or by phone at 906-439-5880.

NRCS can help with cost-share in the following areas:

- Water wells associated with a planned grazing system
- Watering facility which includes a variety of tank options
- Heavy use protection
- Pasture and hayland plantings
- Prescribed grazing
- Pest management for pasture
- Nutrient management for pastures
- Animal walkways
- Stream crossings