



Tongue River Watershed Annual Newsletter

Sheridan County
Conservation District

Tongue River Watershed
Watershed Group

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(An excerpt from the University of Wyoming publication "Barnyards and Backyards, Summer 2008")

HEALTHY PASTURES mean healthy horses

By Kellie Chichester

DID YOU KNOW

Several factors contribute to bacteria concerns in the Tongue River Watershed. Bacteria can enter waterways through direct inputs from animals (including livestock and pets), run-off carrying animal waste, and discharge of human wastes through faulty septic systems.

The health of horses – one of the most celebrated symbols of life in Wyoming and other Western states – is intricately connected to the health of the lands they inhabit. Poor quality pastures can lead to poor health in horses. This arrangement is reciprocal in that grasses and many other Western plants have evolved with grazing so that properly managed grazing can remove older growth, allowing new growth to occur and leading to healthier plant communities. Poor grazing management will lead to poor plant health.

If horses are kept in a confined area and grazing is not managed, they will choose certain plants over and over again. Without giving the grass time to recover, growth can slow, and damage to the root system can occur leading to poor plant health, and, ultimately, the death of the plant.

Horses are heavy, active animals and can exert 23 pounds per square inch per hoof. They like to run and play, and, with their iron-shod hooves, can seriously damage a pasture, especially in wet conditions. Too much of this activity can destroy a pasture over time. ***If the ground is bare and has been compacted, rain infiltration will be lessened allowing for more water runoff. Healthy grass causes the soil to capture rainfall better, leading to less erosion, better water quality, and a healthier pasture.***

A number of health issues can arise with horses living on poor quality pastures caused by overgrazing, compaction, and poor manure management practices.

The first issue is nutrition. Proper grazing (not allowing horses to graze all the time, changing the times of year they graze a particular spot, using rotational grazing if possible, feeding them on hay and grain during part of the year, having a sacrifice area, etc.) will allow your pasture to be a quality part of their diet.

The appropriate grazing intensity depends on the growing conditions, intensity of pasture management, and plant (continued on page 2)

COST-SHARE OPPORTUNITIES for livestock facilities management and septic system replacements in FY 2015

The Sheridan County Conservation District continues to offer cost-share programs for individuals looking to improve livestock facilities (including corral relocation and grazing management/fencing) that have a significant impact on water quality. There are also funds available for septic system replacements. To qualify for funding, projects must have a significant impact on water quality and be located on or near streams in Sheridan County listed for bacteria impairments. There are additional requirements for septic systems. If you are interested in these cost-share programs please contact the Sheridan County Conservation District at (307) 672-5820 ext. 3. This year the District will impose a series of batching dates (TBD) for all projects funded in 2015 (the batching dates help to prioritize projects with available funding, so individuals must have their applications turned into the District by the batching date). Stay tuned to the SCCD website (sccdwy.org) or Facebook page for more information.

TONGUE RIVER WATERSHED STEERING COMMITTEE MEETING



The annual Tongue River Watershed Steering Committee Meeting will be held on **Thursday, March 12th at 6:00 p.m.** at the **Ranchester Town Hall** (next to the Tongue River Branch Library). The Tongue River Watershed Steering Committee, which is comprised of landowners and interested parties, was formed in 1997 with the main purpose of identifying water quality sampling areas in the Tongue River Watershed. It has transformed into a steering committee that provides input and recommendations to the SCCD for implementing resource programs within the Tongue River Watershed. The meeting is open to anyone living in or interested in the Tongue River Watershed. This year the meeting will focus on monitoring objectives, as well as public information and education action items. Please come join us on March 12th, your input is always welcome!

TONGUE RIVER SEPTIC SYSTEM REPLACEMENT straight-pipe to septic; improving water quality one house at a time



Top: A pipe carried waste water from the landowner's home to a spring-fed channel connected to the Tongue River.

Bottom: The new system includes a 1,100 square foot gravel leach field.



Landowners throughout Sheridan County benefitted from the Sheridan County Conservation District's (SCCD) septic system replacement cost-share program this past year. One of these projects was located along the Tongue River between Dayton and Ranchester. Prior to construction, the system had no known septic tank. The previous system was plumbed from the house to a leach pit beneath the landowner's driveway. From there, a straight-pipe discharged directly into a spring-fed channel. The channel is part of an old oxbow that carried the untreated waste discharge and spring-fed water to the Tongue River.

Since the landowners met the distance requirements to an impaired stream (Tongue River), lived in a single-family dwelling, and had their previous system installed prior to July 1, 1973, they qualified for funding assistance through the District's septic system replacement cost-share program. The new system was installed north of the landowner's home, approximately 350 feet away from the spring-fed channel and 850 feet away from the Tongue River. The new system includes a new 1,250 gallon concrete septic tank and an 1,100 square foot gravel leach field.

Since 2005, the Sheridan County Conservation District has helped replace 35 septic systems in Sheridan County. All of these systems were providing bacteria inputs into one of Sheridan County's impaired waterways. The District would like to express a sincere thanks to all landowners who participated in cost-share programs. The SCCD would also like to remind folks who have not yet participated, that the District has funds to help with septic system replacements and livestock facilities located on or near impaired waterways in Sheridan County.

Cost-share assistance is at least 50%. Landowners are responsible for the remaining match, but can use in-kind for their portion if they have the time and equipment to do the work themselves. For more information please stop by the office or give the District a call!

(continued from page 1) species in the pasture. Establish a sacrifice area used to keep horses off pastures for extended periods of time to benefit the rest of the pasture. Generally, horses need supplemental hay in Wyoming as there is not enough grass to meet their needs.

Manure can be a liability or asset depending on how its managed. Improperly managed manure can be a health issue for not only your horse but also for your family and neighbors. **If pastures are grazed too heavily, mud and manure runoff may affect underground or surface water sources. Proper management of animal waste and knowing the soil type and runoff direction can lessen chances of contaminating drinking water.** Mud and manure harbor undesirable bacterial and fungal organisms that can cause health problems. When horses are directly exposed to manure, they are more susceptible to internal parasites. Another potential problem – insects – occurs with a buildup of mud and manure. Flies not only breed in the mud and manure but annoy horses. Insects can also carry diseases and may cause allergic reactions in some horses due to biting. Proper manure management can help control insects. A 1,200-pound horse produces about one cubic foot of fresh manure every day. Manure should be hauled off or put into an area to be composted if the horse is kept in a small corral or pasture. Properly composted manure can then be applied to pastures.

In summary, if you only have a corral or small pasture for your horse, be sure to keep it clean and sanitary. Be sure to monitor and recognize when to move horses to the sacrifice area or to another pasture. By doing this, you will better utilize available grass, and keep a horse healthy and happy.

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