Sheridan County Conservation District The Conservation Gazette • Fall 2015

MISSION

The mission of the Sheridan County Conservation District is to protect Sheridan County's water and land quality through assistance programs, education, monitoring and planning.



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Insert

Tree Order Form

Brucellosis and Risk Assessment

Preparing Individual Brucellosis Herd Plans

During the 2012-2014 hunting seasons, Brucellosis has been found in several hunter-killed elk in the Bighorn Mountains. The Wyoming Livestock Board (WLSB) has responded to these findings by naming Sheridan and Big Horn counties as a "Brucellosis Area of Concern." Staff veterinarians have been asking producers in the area to conduct testing on test-eligible, female cattle which are in the vicinity of the elk herd units from which the sero-positive elk were found. They are also asking producers in the area to obtain an Individual Brucellosis Herd Plan with the WLSB.

An Individual Brucellosis Herd Plan is a list of best management practices for a producer's herd that is developed in consultation with the Wyoming Livestock Board's staff veterinarians. The herd

plan is a *voluntary* agreement between the producer and the WLSB. Its purpose is to educate the producer about the disease as well as management strategies that can be put in place to minimize the risk of Brucellosis exposure to a cattle herd. Additionally, a herd plan can offer the producer the benefit of having the state pay for Brucellosis testing and/or adult and booster vaccinations if the risk assessment shows it is warranted.

Mitigation efforts in the herd plans are primarily common-sense management activities that most ranches are already engaged in. Components of the standard herd plan include calf-hood vaccination of heifers, fencing haystacks to avoid depredation by wildlife, keeping cattle separated from wildlife, maintaining accurate herd records, and cooperating with state and federal agencies to prevent Brucellosis. Depending on the potential for exposure of cattle to infected wildlife (elk and bison), a herd plan may also include a test requirement and adult vaccination may be recommended.

To get a herd plan, producers are asked to fill out a Herd Plan Risk Assessment - a questionnaire that will help WLSB staff veterinarians determine a producer's level of risk. Once a risk assessment has been submitted, one of the staff veterinarians will review it with the producer and work with him/her to develop the herd plan. A copy of the herd plan will then be sent to the producer for his/her approval. The herd plan will become valid once it has been signed by both the producer and the state veterinarian.

Herd plans are reviewed annually and renewed with concurrence of the producer and the Wyoming Livestock Board. Many of these producers, who are located both within and outside of the Brucellosis Designated Surveillance Area (DSA), want to renew their plans to help protect the marketability of their livestock and also as protection in the event the state loses its Brucellosis Free Status.

To get a copy of the Brucellosis Herd Plan Risk Assessment, or for more information about Brucellosis Herd Plans, please call the Riverton WLSB field office at 307-857-4140. A copy of the Brucellosis Herd Plan Risk Assessment can also be found on the WLSB website at: http://wlsb.state.wy.us/animalhealth.htm.

Information provided by the Wyoming Livestock Board, Riverton Field Office

WATER QUALITY IMPROVEMENT PROJECT Batching Date Reminder

The Sheridan County Conservation District has funds available for water quality improvement projects in Sheridan County. To help prioritize projects and efficiently allocate grant funds to those water quality improvement projects, the SCCD has reinstated batching date deadlines. The SCCD will accept project applications for septic system replacements and livestock improvement projects



(including grazing management, stockwater and riparian fencing) for review at the April and August board meetings. To be considered for funding, project applications must be submitted no later than March 1st and July 1st. Please keep in mind, contracts take time to develop so its best to have budget estimates and other contracting requirements underway well before the desired project start date. Funding is awarded to projects on eligible waterbodies (*Goose Creeks, Tongue River, Prairie Dog and their tributaries*), and is subject to availability and other funding criteria. Funding criteria and project applications are available on the SCCD website (sccdwy.org) or by calling the office. SCCD provides 50-80% cost-share on eligible projects, depending upon available funding resources.

TONGUE RIVERTMDL

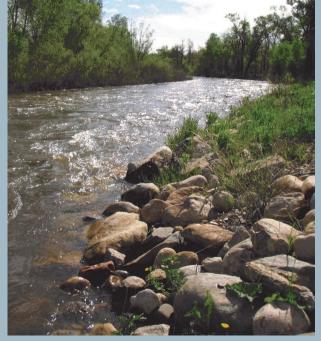
Total Maximum Daily Load

The SCCD, in cooperation with the USDA Natural Resources Service (NRCS) have been working in the Tongue River Watershed for nearly 20 years. The Tongue River Watershed Project began with recognition of the importance of water quality as a key indicator of

the health of the adjacent landscape. We believed if we understood something about the water quality and watershed health, we would be able to prioritize projects and activities better.

The initial Tongue River Watershed Plan was developed in 2000 following 2+ years of water quality data collection and analyses. Samples were collected for a variety of parameters, including bacteria. The plan, which was developed with input from watershed residents, included a variety of voluntary action items to facilitate water quality improvement. In addition to education activities, the plan recommended administration of financial and technical assistance programs for landowners to implement projects that benefit water quality.

When levels of a pollutant, such as bacteria, exceed state water quality standards, the stream is considered to be impaired; and the state is required by the Clean Water Act to develop a Total Maximum Daily Load (TMDL). A TMDL is the amount of a given pollutant that a waterbody can receive and still meet water quality standards. SCCD water quality monitoring has shown that concentrations of *E. coli* bacteria exceed state



water quality standards, and that *E. coli* TMDLs for the impaired streams are needed. In mid-October, the Wyoming Department of Environmental Quality (WDEQ) and SWCA Environmental Consultants (SWCA) began working in cooperation with the SCCD on the Tongue River Watershed (TMDL) Assessment Project. SWCA also completed the Goose Creek TMDL project in 2010. The Tongue River project will address *E. coli* impairments for seven impaired stream segments in the Tongue River Watershed, and will be completed in the Fall of 2016. The TMDLs will include watershed characterizations, streamflow based water quality targets, pollutant





Goose Creek Monitoring 2015

From May through October 2015, the Sheridan County Conservation District sampled water quality in the Goose Creek Watershed. Every three years the District has a monitoring effort on the Goose Creek Watershed. During the recreation season, the District monitors temperature, pH, dissolved oxygen, conductivity, turbidity, and *E. coli* bacteria. The District also collects flow data and macroinvertebrates.

Monitoring water quality is one part of a larger Goose Creek Watershed effort. In 2001-2002, the District conducted a Goose Creek Watershed Assessment. The Assessment provided baseline water quality data to help the District develop a more comprehensive program to try and improve water quality in Goose Creek, Little Goose Creek, Big Goose Creek and their tributaries.

Since 2002, the District has been in the Goose Creek Watershed on a three year rotation (the other two years are spent in the Tongue River and Prairie Dog Creek Watersheds). The District collects water quality data to try and see how the watershed is changing and responding to additional efforts along the creeks. These efforts include cost-share assistance for improvement projects to clean up failing septic systems, removing livestock from the creek by providing assistance for corral relocation, stock water, riparian fencing and grazing management, and information and education to residents in Sheridan County on ways to maintain and improve water quality.

What's Next! Upcoming Watershed Activities District staff are currently working on analyzing the information collected for the 2015 Goose Creek

Watershed Interim Monitoring report. Staff are also finishing up on the 2014 Prairie Dog Creek Interim Monitoring report as well as gearing up for the 2016 interim monitoring on the Tongue River Watershed. Information about all three of these efforts will be provided to the public at annual steering committee meetings held in early 2016. At that time, the District will provide a summary of activities to residents in each watershed on the ongoing efforts, as well as garnering feedback from the community on the best ways of reaching out to those in the community who are most in need of the services and cost-share assistance provided through District programs.

If you would like more information on watershed programs, or want to be notified of upcoming steering committee meetings, please send an email to amy.doke@sccdwy.org. Please include your name, phone number and mailing address, as well as the watershed you currently live in or are interested in receiving more information about. All steering committee meetings are open to the public, regardless of the watershed you currently live in. The District welcomes your input and looks forward to meeting with you in the upcoming months. Tune in to the District's website, www.sccdwy.org or "Like Us" on Facebook to stay up to date on District happenings and upcoming meetings.



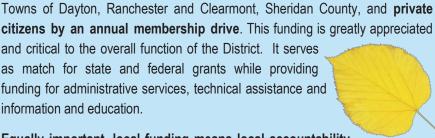
2016 Sheridan County Conservation District Membership Drive

The Sheridan County Conservation District is once again **ASKING FOR YOUR SUPPORT**. Please consider a contribution as part of our annual membership drive. Membership dollars go toward supporting water quality and other natural resource programs in Sheridan County.

The Sheridan County Conservation District (SCCD) is one of 34 Conservation Districts in Wyoming. Wyoming Conservation Districts are funded through a variety of funding sources including local mill levies or appropriations,

state and federal grants, private grants and others. The SCCD is funded primarily through state and federal grants. A portion of SCCD's annual budget is provided through the City of Sheridan, the

Members who contribute \$50.00 or more to the 2016 Sheridan County Conservation District membership drive will receive a FREE COPY (while supplies last!) of the book "Plants with Altitude" a field guide for regionally native plants for Wyoming gardens (only one copy per household—members who received their copies last year are not eligible for an additional copy).



Equally important, local funding means local accountability.

The District values its commitment to local resource conservation and local funding helps keep that commitment! Financial stability supports the District staff and resources needed for effective operation. In addition to state and federal grants and private

donations, the SCCD will continue to build and maintain partnerships to provide long-term stability in district operations.

The Sheridan County Conservation District greatly appreciates your support.

Please send back your membership contribution today!

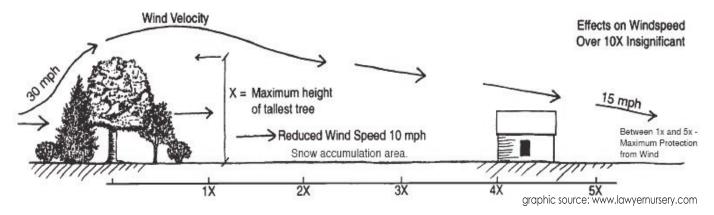
Sheridan County Conservation District Membership Pledge Form

Name [.]		education, monitoring a	
Address:			
City:	State:Z	Zip:	
Phone #:	E-mail:		
I'd like to join SCC	D as a NEW Member:	I'd like to RENEW my men	nbership with SCCD
\$50 \$100 \$15	50 <u>\$</u> Other	\$50 \$100 \$150	\$Other
ignature:			

checks payable to the "Wyoming Natural Resources Foundation." This tax-exempt, statewide organization, will return 95% directly to the SCCD with the remaining 5% going to fund state-wide conservation programs.

Planning & Planting a Windbreak By Kathy Roth, Master Gardener Colorado State University Extension, Larimer County

article source: http://www.ext.colostate.edu/sam/ar070609.html



In general, when designing a windbreak, the denser the shrubs and trees are, the better windbreak they make. Dense shrub choices include peashrub, cotoneaster, lilac, sumac, buffaloberry, mountain mahogany, privet and willow. Dense tree choices for the foothills include Colorado blue spruce, Eastern redcedar, Pinyon pine and Rocky Mountain juniper.

Design your windbreak as part of the landscape with rows perpendicular to prevailing winds-the rows do not need to be necessarily placed on a straight directional axis. The wind-protected area extends to a distance of approximately ten times the height of the tallest trees. Wind eddies can form around the ends of a windbreak, so plantings should extend 100 feet beyond the protected area. Gaps within the row will funnel and accelerate wind, reducing the windbreak's effectiveness, so it's better to plant the *same type* tree within the *same row*. Ideally, windbreaks consist of at least three rows. Diversity of tree or shrub choice will yield not only a more visually pleasing outcome, but will increase the disease and insect resistance and enhance the windbreak as a wildlife habitat. The row closest to the wind should be shrubs and the row closest to what you are screening

should be trees. To determine spacing between the rows, refer to the plant's mature size. At maturity, the sides of each plant should slightly overlap or "touch."

In general, shrubs need spacing of four to six feet; junipers and cedars need six to eight feet; pines and spruce need ten to 14 feet. The distance between rows should be a minimum of eight feet, with a maximum of 15 feet, dependent upon available space. If windbreaks are planted too close to driveways or roads, the windbreak can actually cause snow to pile up and drift. It's best not to plant trees any closer than 60 to 70 feet from the desired protected area-snow can drift a distance of three times the height of the windbreak.

CSU Planting Tips

http://www.ext.colostate.edu/sam/windbreaks.html

- Plant while local trees are dormant, in the fall, late winter, or spring.
- Use a tree bar, shovel, auger, or tree planter.
- Planting holes or furrows must be deep enough so that the roots are not curled or crowded. If holes are augured, break up the compacted layer caused by the auger along the edge of the hole.
- Soil must be gently but firmly compacted to remove air pockets in the soil. Watering after planting helps remove air pockets as well.



Conservation Program Update Andrew Cassiday, NRCS District Conservationist

This time of year always seems to be a rush to finish projects for the year and get done all the things that we said 'I'll do that this summer' about. For some, it is also the beginning of planning for the spring. Here in the NRCS office we are already processing applications for the first round of 2016 funding and are taking applications for the second round of funding for 2016 through February 19th.

With the Environmental Quality Incentives Program (EQIP) as well as our Tongue River Initiative Partnership Program there is now good opportunity for financial incentives for installation of structural conservation projects including fencing and livestock water development to improve grazing management, irrigation system upgrades and irrigation structure enhancement, as well as wildlife habitat and stream corridor enhancement projects. There are also incentive payment programs including both EQIP and the Conservation Stewardship Program (CSP) for those who are looking to make improvements in management to improve conservation efforts on their land.

We are always happy to discuss any idea or concern you have about land management, natural resources, or conservation efforts. We are able to work with both landowners and operators who don't own the land they use. Most importantly, NRCS is able to provide technical advice and assistance to all land users, agricultural or otherwise, free of charge. Depending on the need this can include engineering, agronomy, geology, biology, streams, grazing management and irrigation system planning.

We tend to be busy all the time, but we can always squeeze another project into the queue and would be happy to discuss your ideas or concerns. You can contact the Sheridan NRCS staff at 672-5820 ext. 3 to discuss any project, idea or concern.

Total Maximum Daily Load, continued from page 2

reduction estimates, pollutant source identification, pollutant source allocation, and a watershed based implementation plan. Public involvement is also a large part of the TMDL process, and SCCD has assisted with outreach and coordination efforts to ensure local participation.



The first step in the public involvement phase of the project is to form the Technical Advisory Committee (TAC), which will be asked to review the various components of the TMDL as they are developed. In addition to the TAC, two public meetings will be held in Dayton, Wyoming, in February and May, and there will be a 45-day public comment period for stakeholders and the public to review the

draft TMDL documents. Comments will be addressed by WDEQ and SWCA, and the TMDL documents will be finalized. Commenters will have a 60-day administrative review period to review comment responses after which the final TMDL documents will then be submitted to the EPA for approval. Meeting dates, times, and locations will be publicized through local media and SCCD's website/facebook page.

The SCCD wants to advocate local concerns and provide as much local feedback and input as possible to SWCA/WDEQ. In doing so, we hope the TMDL will satisfy local stakeholders while meeting the provisions of the Clean Water Act. We will continue to keep residents updated on the progress of the TMDL as well as any new information that becomes available. SCCD programs will remain consistent with a nonpoint source watershed approach, which is voluntary, incentive-based, and avoids targeting individual land uses and producers within the watershed.

CONSERVATI TOR KIDS



Jack Melger, Tongue River Elementary School

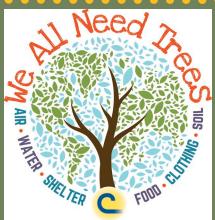


1st Place Winner: Ahnya Ivie, Big Horn Elementary School

The Sheridan County Conservation District is pleased to announce the winners of the 2015 Soil and Water Stewardship Week Poster contest "Local Heroes: Your Hardworking Pollinators". Local winners received a \$15.00 gift certificate to Sheridan Stationery.

2016 Poster Contest Theme "We All Need Trees"

Please go to http://www.nacdnet.org/education for complete contest rules and information.



- Trees properly placed around buildings can reduce air conditioning needs by 30%
- A single tree produces approximately 260 pounds of oxygen per year. That means two mature trees can supply enough oxygen annually to support a family of four!
- One tree can absorb as much carbon in a year as a car produces while driving 26,000
- Over the course of its life, a single tree can absorb one ton of carbon dioxide.
- An average American uses about 750 pounds of paper every year, and 95% of homes are built using wood. That means each person uses the equivalent of one 100 foot tall, 16 inch diameter, tree every year for their paper and wood product needs.
- About one third of the United States of America is covered by forests.
- According to the last forest inventory, there are almost 247 billion trees over 1 inch in diameter in the U.S.
- The average tree in an urban/city area has a life expectancy of only 8 years.
- The tallest tree in the country is a Coast Redwood growing in northern California's Redwood National Park. It is 369 feet tall and over 2000 years old!





Jim Manor 307-751-4051 2061 East Brundage Lane Sheridan, WY 82801



SHERIDAN COUNTY Sheridan County Conservation District

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Find us on "Facebook" or check out our website at www.sccdwy.org!!

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2016 SEEDLING TREE PROGRAM

sales November 2015 through March 31,2016

Conservation Trees Are What We Sell

The Sheridan County Conservation District 's Seedling Tree Program makes conservation grade seedling trees available for purchase at a nominal price. These low cost seedling trees are available for purchase through the District from November through March.

This year the District is returning to Colorado State University as the main supplier for seedling nursery stock. The trees are bundled in groups of 25 or 50 based on size and species selection. Trees range between \$1.28 and \$2.27 per tree. The District is once again offering the popular variety package. This package is a bundle of 25 trees, five each of Chokecherry, Buffaloberry, Red-osier Dogwood, Native Plum and Rocky Mountain Juniper. The variety package is only available in limited quantities and sells out quickly. Other species tend to sell out quickly as well, so if there is something you really have your eye on, it's best to get your order in quickly before it's gone!

A seedling tree order form is available in this newsletter or you may download an order form off our website at www.sccdwy.org.