



Montana NRCS Conservation Update

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Helping People Help the Land

Message from the State Conservationist

Joyce Swartzendruber, State Conservationist

Retirement

This week we said goodbye to three members of the State Leadership Team. The Baby Boomers are starting to trickle out of their NRCS careers and are being replaced by the Generation Xers and Generation Yers. We had a nice farewell to Ron Nadwornick, state resource conservationist; Dave Kascht, assistant state conservationist for field operations in Bozeman; and Larry Cooper, state public affairs specialist; at the Bozeman Pond. The barbeque was great and the water and scenery was beautiful. It was fun to honor these people for their years of service and their unique personalities.



Joyce Swartzendruber presents retirees with mementos. Top: Ron Nadwornick; middle: Dave Kascht; left: Larry Cooper.

Snowpack

The snow and wet weather this spring has created a flooding problem for many Montana creeks and rivers. Our staffs have assessed over 200 sites through June 30 and we are tapping into the Emergency Watershed Protection (EWP) program to protect bridges, homes, irrigation canals, and other infrastructure. EWP will continue through the summer as water levels are still very high in many places, and snowpack continue to melt.

Budget

We finally received a 2011 appropriation bill in mid-April. There was sad news for many in that the Resource, Conservation & Development (RC&D) program was not funded for the first time since its creation in the 60s. In Montana, we had five NRCS employees who were immediately impacted. RC&D coordinators across the country were offered a buyout which will end this month, and all USDA employees were offered an early retirement if they met minimum years of service and age requirements.

As Congress struggles with the federal deficit, we can safely assume that there will be some more adjustments to our programs. We must continue to hire just to keep pace, and we have a great group of Student Career and Temporary and Business Management Leaders Program employees who joined us this summer. There is still a great future for conservationists in NRCS.

Above Average Snowpack Contributes to High Streamflows

Photo: USDA NRCS Dennis Loreth

NRCS Montana SNOTEL sites have recorded above average snowpack all winter long. With continued La Nina-like weather patterns through the month of May 2011, the snowpack of Montana maintained well above average conditions.

Below average temperatures have resulted in low snowmelt rates, ultimately allowing seasonal snowpack to remain on the ground, in some locations later than ever before. Typically, more than 50 percent of the automated SNOTEL sites are void of snow at this point in the year.

SNOTEL data indicates a significant amount of snow remains in the mountains primed for runoff into streams and rivers, and most basins have yet to reach streamflow peak due to snowmelt.

June 1 streamflow forecasts are a reflection of the current above average snowpack conditions. Assuming average future precipitation and temperatures for the remainder of the snowmelt season, streamflow volumes are forecast to be well above average across all basins within Montana.

Below are averaged streamflow forecasts, by river basin, for the period June 1 through July 31. These forecasts assume

near normal spring conditions and do not account for well below average (70% or less) or well above average (130% or more) snowmelt or spring rain.

For detailed information about snowpack and streamflow forecasts, visit the Montana NRCS Web site at www.mt.nrcs.usda.gov/snow/.

RIVER BASIN	June to July This Year Percent of Average	June to July Last Year Percent of Average
COLUMBIA	188	78
<i>Kootenai</i>	168	68
<i>Flathead</i>	200	93
<i>Upper Clark Fork</i>	194	77
<i>Bitterroot</i>	162	71
<i>Lower Clark Fork</i>	183	66
MISSOURI	191	88
<i>Jefferson</i>	183	78
<i>Madison</i>	149	64
<i>Gallatin</i>	156	87
<i>Missouri Mainstem</i>	173	79
<i>Smith-Judith-Musselshell</i>	251	124
<i>Sun-Teton-Marias</i>	194	73
<i>Milk</i>	193	117
ST. MARY	155	93
YELLOWSTONE	200	88
<i>Upper Yellowstone</i>	170	79
<i>Lower Yellowstone</i>	231	101
STATEWIDE	190	84

NOTE: The June-July Last Year Percent of Average column above is what was forecast last year on June 1 and not what actually occurred.



Cory Wolfe, NRCS Engineer, and Omer Krueger, landowner, survey flood damage to property on Greasewood Creek near Forsyth, Montana.

NRCS Offers Flood Recovery Assistance

Spring flooding is the issue at hand for Natural Resources Conservation Service (NRCS) employees in Montana. Melting of snowpack and record rainfall has created widespread flooding across Montana causing significant damage to private property as well as public infrastructure.

NRCS received an initial allocation of \$1.8 million in the Emergency Watershed Protection Program to aid flood recovery efforts in Montana. NRCS Montana has committed more than \$1 million in project agreements to stabilize bridge abutments in Valley County, repair an irrigation canal in Yellowstone County, and

remove debris from a waterway on the Fort Belknap Reservation. NRCS has logged more than 200 potential projects to evaluate, and that number continues to grow.

The Emergency Watershed Protection Program provides assistance to sponsors in areas that have been damaged by natural disasters, such as floods. The program safeguards lives and property by installing conservation measures to reduce storm water runoff and prevent soil erosion. Eligible practices include removal of sediment and debris in channels to restore hydraulic capacity; repair of irrigation canal or drainage ditch embankments; measures that prevent massive soil erosion, landslides, or excessive runoff; removal of structures and obstructions that impede or im-

A local sponsor can request assistance through a local NRCS field office. Office locations can be found at www.mt.nrcs.usda.gov/contact/offices/. More information is available on the Web at www.mt.nrcs.usda.gov/technical/eng/ewp/.

pair the floodplain; disposal of animal carcasses if they pose a public health hazard or could impede channels; and measures to prevent damage to public and private roads, culverts, and bridges when failure of those facilities would impair the watershed.

To the extent possible, NRCS state and field personnel are surveying damaged areas and working with their local partners to identify the full scope of the damage and prepare disaster recovery projects. NRCS is coordinating with other state and federal agencies (FEMA, Farm Service Agency, and Montana Disaster and Emergency Services) in order to match needs with the appropriate available assistance program.

Although individuals are not eligible for assistance through the Emergency Watershed Protection Program, local sponsors are and can be any unit of government with authority under state law to accept financial assistance. These include state government, counties or cities, tribes, irrigation districts, and conservation districts.



Valley County.



Carter County.

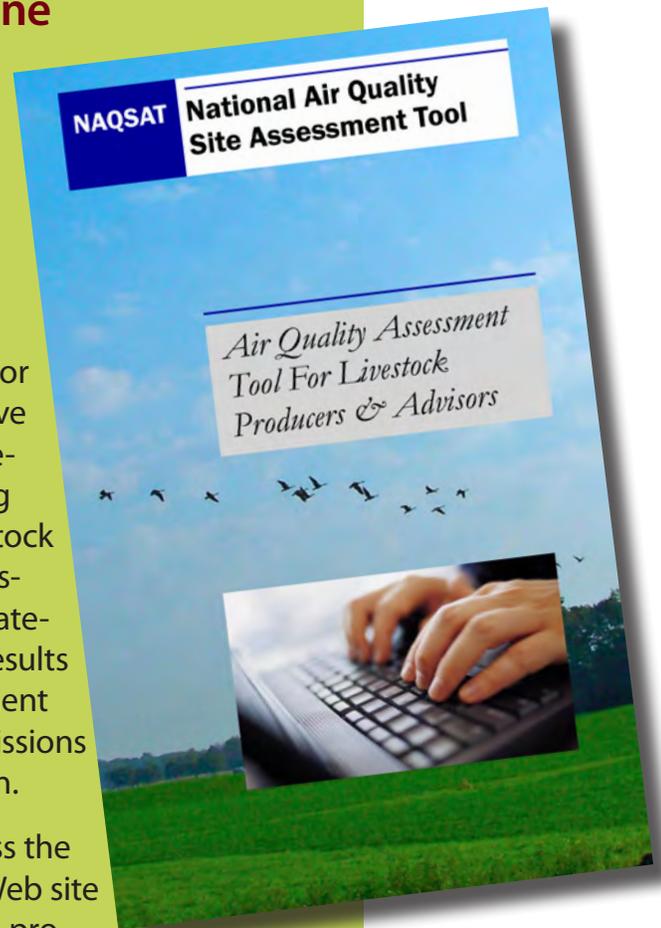


Sheridan County.

Air Quality Site Assessment Tool On-Line

NRCS provided Conservation Innovation Grant (CIG) funding over the past few years for the development of the National Air Quality Site Assessment Tool, or NAQSAT. NAQSAT is a web-based tool that livestock producers and their consultants and advisors can use to assess air emissions from livestock and poultry operations. The tool gives livestock producers the opportunity to evaluate 'what is' against 'what could be' or the potential for their operation. The tool allows relative evaluation of eight management categories for six livestock classes (dairy, beef, swine, broiler chickens, laying hens, turkeys) and six types of air emissions from livestock operations and their related facilities. Assessment questions embedded in the tool provide pictures to help categorize the facilities and management scenarios. The results provide livestock producers with a qualitative assessment of areas that can be improved to result in reduced emissions and improved air quality associated with the operation.

A nice video describing the NAQSAT is online. To access the tool and/or a brochure on the tool, visit the NAQSAT Web site (<http://naqsat.tamu.edu>). The brochure can be used to provide awareness to producers who can then access the on-line system for a completely non-regulatory and anonymous self-evaluation of their operation.



MACD Partner in CAFO Planning and Assistance

As a service to small livestock confinement operators, the Montana Association of Conservation Districts has contracted Steve Schmitz to serve as a Conservation Advisor for Livestock Operations (CALO). Schmitz will provide free, voluntary, and confidential assistance to individuals seeking technical advice for water quality

improvements on their confinement areas. His focus will be small animal feeding operations.



NRCS will be supporting these efforts and provide assistance as appropriate. NRCS is partnering with MACD on this effort by serving on the CALO Advisory Board and offering guidance and technical support.



Photo by Ashley Stevick Photography.

The Montana Wetland Council presented the 2011 Montana Wetland Stewardship Award to the Flathead River to Lake Initiative in Helena in May. From left to right: Ken Siderius, Flathead Land Trust; Lynn Ducharme, Confederated Salish & Kootenai Tribes; Hannah Dondy-Kaplan, Bonneville Power Administration; Robin Steinkraus, Flathead Lakers; Constanza von der Pahlen, Flathead Lakers; Janet Ellis, Flathead Audubon; John Wachsmuth, Montana Fish, Wildlife and Parks; Kris Tempel, Montana Fish, Wildlife and Parks; Angel Rosario, Natural Resources Conservation Service; Marilyn Wood, Flathead Land Trust; Gael Bissell, Montana Fish, Wildlife and Parks; and Lynda Saul, Montana Wetland Council and Montana Dept. of Environmental Quality.

Flathead River to Lake Initiative Honored for Keeping Flathead Lake and River Clean

Landowners, volunteers and agencies involved in the Flathead River to Lake Initiative were honored for their work protecting the clean water and healthy habitat upstream from Flathead Lake.

The Montana Wetland Council presented the 2011 Montana Wetland Stewardship Award to the Flathead River to Lake Initiative in Helena in May.

“The clean water and stunning beauty of the Flathead River and Flathead Lake are economic engines of north-western Montana,” said Ken Siderius, a longtime Flathead Valley resident involved in the initiative. “They also contribute to our unique way of life in ways that cannot be measured in dollars alone.”

The Montana Wetland Council praised the initiative for outstanding work helping private landowners protect and restore critical wetlands

along the main stem of the Flathead River and the north shore of Flathead Lake. Wetlands act as natural filters to protect water from runoff and are habitat hotspots for fish and wildlife.

The Flathead River to Lake Initiative includes local landowners, the Natural Resources Conservation Service, Flathead Land Trust, Flathead Lakers, Montana Fish, Wildlife & Parks (MTFWP), Flathead Audubon, American Bird Conservancy, Montana Land Reliance, Confederated Salish & Kootenai Tribes, and the Flathead Conservation District. Its mission is to help landowners conserve and restore the farmlands, wetlands, streamside and lakeshore areas that keep our water clean and lake beautiful, provide for abundant hunting and fishing opportunities, and protect family farms.

“The Flathead Basin sets the global gold standard for wildlife and clean

water,” said MTFWP biologist Gael Bissell. “By working together now, we can keep resources for future generations to use and enjoy as our valley grows and develops.”

Siderius and Bissell thanked the many generous landowners who have exercised their property rights and protected and restored habitat along the river and north shore. In particular, several members of the Loudon family were recognized for their recent project to conserve 1,088 acres along 3.7 miles of the Flathead River, including Church Slough.

The Flathead River to Lake Initiative has worked with local property owners to protect more than 5,000 acres of lands along the river and at the lake’s north shore. For more information visit the River to Lake Web site at www.flatheadrivertolake.org/.

Do Sage-grouse Really Collide with Fences?

Bruce Waage, BLM-NRCS Liaison

It is only natural that this idea is hard to accept: Sage-grouse colliding with fences! I, like many ranchers, have spent untold hours in the field and have never witnessed or seen evidence of a sage-grouse colliding into a fence or any grouse for that matter. When I think back on my career, a career in the field, I can only think of one direct fence collision and that involved a great-horned owl whose wing was caught in a fence and one non-fence collision: a sharp-tailed grouse which struck a power line and then dropped straight to the ground. That's it; thirty-five years in the field.

No wonder it's difficult to convince people that fences are a problem. I was resistant to the idea too. When you are out in wide-open sagebrush country, it's even harder to visualize. It was a long process for me to start to accept that this could be a problem. And so, I will offer some of the reasoning I went through to accept that this actually could be a problem for sage-grouse.

Here are some explanations why sage-grouse might be vulnerable: One thought is that grouse, being large birds, are predisposed to fence collisions. They are heavy-bodied birds making them less maneuverable and gaining altitude quickly may be a challenge to avoid a fence. Golden eagles are a major predator of sage-grouse and this would fit that scenario. As an example, an eagle could easily flush an escaping sage-grouse into a fence. Another concept that was enlightening for me was when I thought of something I learned in elementary school that is basic to predator-prey physiology. Predators hunting for

prey have their eyes located forward and prey species have their eyes on the sides of their heads, needing a wide range of view to watch for predators. Owls, for example, have eyes forward in the front, while sage-grouse eyes are on the sides of their heads. Eyes located on the side of the head results in reduced binocular vision straight ahead, which explains how a fence could present a challenge for sage-grouse to see.

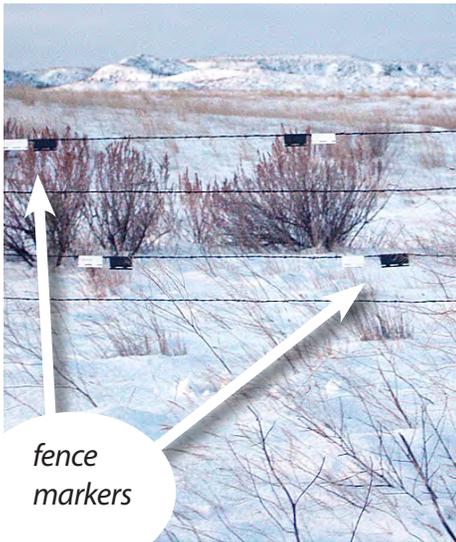
A new Idaho study which evaluated the effectiveness of fence markers placed on fences to reduce fence collisions was significant. There was nearly a six-fold increase in collisions on unmarked fences over marked ones. I can imagine readers are wondering how this could be! I just got done stating that in 35 years I have not directly witnessed a sage-grouse collision with a fence, and now a study documents 142 collisions over two years. How can this be?

I will try to shed light on this by using this analogy. At a previous job, my boss, out-of-the-blue informed me that a few professors and several biology students were arriving the next day from Montana State University. They were herpetologists and wanted to see sagebrush lizards, which I had

not seen for years. My initial thought was that I had better begin looking, but I decided it would be a waste of time. The next day we went to the place where I had seen one several years previously and, to my relief, within minutes we had located several in a small area. This is not unlike the fence collision issue and finding collision evidence. If you are merely driving around, you have a slim chance of seeing evidence of a sage-grouse fence collision. If you are focused on examining the fence and surrounding terrain methodically, you might be surprised at what you find.

What complicates communications on this issue is the propensity to show the worst photo examples of fence collisions for their dramatic effect. To that point, photos showing sage-grouse dangling from a fence make it harder for people out on the land to accept. If they have a dangling sage-grouse in mind, they won't see one. None of the 142 documented sage-grouse collisions in the Idaho study above were birds dangling from a wire. If dangling birds is the expectation, it's understandable that people would conclude it's just "hyped-up-bunk." So, until I understood that collisions were often logged by looking for very small feathers lodged in the





wire and grouse feather piles (grouse remains) some distance away from a fence, I could not get my head around it either.

The Idaho study also suggests that most of the collisions occurred in late March through early April. This is exactly the peak time when sage-grouse are moving more than usual as males and females are moving to and from communal display grounds (leks) where they mate. What is important to know is that the birds are making these movements to mating grounds in pre-dawn light when fences are more difficult to see under low light conditions.

Even though select fences can be a problem for sage-grouse, fences are certainly an important management tool to help achieve productive and sustainable ranches, important for both livestock and sage-grouse. That being said, the least amount of fence to accomplish the management goals should be a desired outcome. Research indicates that not all fences need to be marked in sage-grouse habitat. Also, new research indicates the majority of collisions can be avoided by the placement of very simple and inexpensive markers which help sage grouse detect the fences.

Energy Audit of Headquarters and/or Irrigation Systems

In Fiscal Year 2012, Montana NRCS will offer Environmental Quality Incentives Program (EQIP) program participants the opportunity to have an energy audit conducted on their headquarters and/or irrigation systems. The farm residence would not be part of the audit. Participants who sign up for this conservation activity plan would have the audit conducted by a certified Technical Service Provider. The contract length would be one year.

After the energy audit is complete, the participant would be able to sign up for conservation practices that would address energy issues identified in the audit. NRCS may add additional practices to address energy conservation measures identified in the energy audit. NRCS would provide a payment rate that would be approximately 75 percent of the cost of the audit. Audit payments would be based on geographic location in the state, the headquarters with the presence or absence of dairy or

other intensive operations, and the presence or absence of irrigation systems.



RC&D Funding

The Fiscal Year 2011 appropriations bill zeroed out funding for NRCS' Resource Conservation and Development (RC&D) program. The RC&D program was established in 1964 to help communities plan and carry out projects that increase natural resources conservation, support economic development, and enhance the local environment and standard of living.

There are eight RC&D areas in Montana that were formed under approval by the Secretary of Agriculture. These RC&D areas are multi-county non-profit organizations run by councils that include county supervisors and conservation districts. While the RC&D program is still an authorized program within NRCS, the agency will not receive funding to staff and house RC&D co-ordinators and other employees hired by the councils.

For more information about RC&D areas in Montana, visit the Montana NRCS Web site at www.mt.nrcs.usda.gov/partnerships/rcd where you will find a link to each of the RC&D area Web sites.

Human Resources Report

New Employees

- *Diana LaBuda, Office Assistant, Havre Field Office*
- *Devin Roloff, Biological Science Technician, Bozeman Field Office*
- *Michael Ruiz, Biological Science Technician, Bozeman Field Office*
- *Travis Caudle, Student Trainee Soil Conservationist, Columbus Field Office*
- *Brittany Mayo, Student Trainee Soil Conservationist, Billings Field Office*
- *Hayes Buxton, Hydrologic Technician, Bozeman State Office*

Promotions

- *Brian Ressel, Soil Conservationist, Kalispell Field Office*
- *Jessica Heptner, Soil Conservationist, Chester Field Office*
- *Ryder Simeniuk, Student Trainee Soil Conservationist, Malta Field Office*
- *D'Jeane Peters, Student Trainee Soil Conservationist, Big Timber Field Office*
- *Ronald Beaumont, Student Trainee Soil Conservationist, Lewistown Field Office*
- *Shilo Messerly, District Conservationist, Malta Field Office*
- *Byrhonda Lyons, Student Trainee Public Affairs, Bozeman State Office*
- *Ryan Witt, Soil Conservation Technician, Fort Benton Field Office*

Upcoming Events

For up-to-date conservation and agriculture-related events and activities in Montana, visit <http://www.mt.nrcs.usda.gov/news/events.html>.

July 2011

- ☐ **Western Association of Fish and Wildlife Agencies Conference, July 15-20, Big Sky, Montana**
- ☐ **Montana Natural Resources Youth Camp, July 17-22, Lubrecht State Forest, Greenough, Montana**

October 2011

- ☐ **Young Ag Leadership Conference, October 7-9, Lewistown, Montana**
- ☐ **Women Stepping Forward for Agriculture Symposium, October 11 - 13, 2011, Red Lodge, Montana**
- ☐ **Alternative Energy Resources Organization (AERO) Annual Meeting, October 28-30, Flathead Lake, Montana**



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