

Colorado Natural Resources Conservation Service Employee Newsletter



Colorado

CONSERVATION PLANNING

Our Purpose. Our Passion.

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Highlights

by Allen Green State Conservationist

Summer is almost here and NRCS employees in Colorado have more reason than ever, this year, to warmly welcome in this most favorite time of the year.

Although we are still in the midst of uncertainty regarding the Farm Bill, I wanted to take this opportunity to stress our commitment to conservation planning and bringing it back into the forefront of how and why we do business.

All too often the importance of the work we do gets lost in the minutia of the numbers and rarely do we take the opportunity to step back and look at the larger picture of what all those numbers add up to, which is, real conservation on the ground.

The conservation of soil, water, air, plants, and animals is not a catchphrase or an annual event within NRCS, it is our everyday agenda. We may be going about it in a different fashion than we did 5 or 10 years ago, but those numbers indicate that we are applying more conservation on the ground than we ever have in the history of the agency. That is something to be very proud of.

Shifting our focus back to conservation planning has multiple benefits. First it helps us utilize our technical expertise and training as we work directly with land users.

It also helps assure that what gets applied (and possibly paid for) is part of a planned

system that best meets the resource and producers needs.

We will be implementing a number of changes in the way we do business to further demonstrate our commitment to this conservation planning effort, from changing program signup deadlines, increased technical training, reduction of emphasis on fund obligations, increased ranking for preplanning, increased partnership efforts, etc.

I fully appreciate the efforts that everyone has and continues to make toward assuring that we get the most and best conservation planned and applied. I also continue to ask for your input on how we can improve our conservation planning efforts.

Allen Green

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Why Do A Conservation Plan?



by Karen Mandujano, Soil Conservationist
Brighton Field Office

A conservation plan is the starting point for managing the natural resources on a farm or ranch while maintaining productivity and meeting the operator or landowner's objectives.

Every farm or ranch has its own natural resources concerns. Without the application of proper conservation systems and management, human activities may cause natural resource problems or concerns that may include:

SOIL being washed into bodies of water;

WATER quantity problems because of over-pumping ground water supplies, or water quality degradation because of polluted streams;

AIR transporting livestock odors or soil particles;

PLANTS overgrazed, the intrusion of invasive plant species, or the decline of wildlife habitat; and

ANIMAL waste not properly managed.

After soil, water, air, plant, and animal (SWAPA) resources on the property are assessed and evaluated, a Natural Resources Conservation Service certified conservation planner will review several alternatives to consider. With the NRCS advice, landowners select the best combination of conservation practices to meet natural resource needs and individual management goals.

The alternatives selected are recorded in the conservation plan, which becomes a roadmap for bet-

ter management of the natural resources on the farm or ranch.

What is a Conservation Plan?

A conservation plan is a written record of management decisions, conservation practices, and systems that are planned to be used and maintained on the property.

Carrying out the plan will achieve the management objectives as well as protect the surroundings on and off the property.

A Conservation Plan Includes:

- Operator/landowner objectives
- Aerial photographs or a diagram of the fields
- Soils map and soil descriptions
- Resources inventory data which can include forage or crop production potential, or potential livestock carry capacity.
- List of treatment decisions
- Location and schedule for applying conservation practices and systems; and
- Plan of operation and maintenance of conservation practices and systems

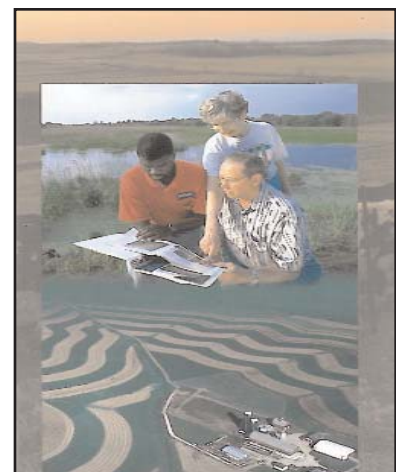
Benefits of a Conservation Plan

The benefits of having a conservation plan will provide the following:

- Identification of immediate and potential problems that will result in the degrading of resources and the decrease in productivity.
- Protection of soil's and land's productivity.
- Help comply with environmental regulations.
- Qualification for various USDA conservation programs that can assist with the implementation of the conservation plan.
- Adaptation to changes on the property's operational goals.
- Establishment of reasonable schedules for applying needed conservation practices that will fit the landowner's timetable and resources.

To learn more about conservation plans, financial incentives and how an individual can get help creating a conservation plan.

Please visit the NRCS office located in the local USDA Service Center or visit www.nrcs.usda.gov.



EQIP Invasive Weeds Projects on the Ute Mountain Ute Indian Reservation

by Stephen Myers, Tribal Liaison
Towaoc, Colorado

The Ute Mountain Ute Indian Reservation is located in Montezuma and La Plata counties, Colorado; San Juan County, New Mexico; and San Juan County, Utah.

The tribal headquarters is located in Towaoc (pronounced 'toy awk'), which is eleven miles southwest of Cortez, Colorado.

Approximately 2,000 tribal members live, work, and use the reservation that has 597,288 acres of Trust land and 27,354 acres of fee land.

The Ute Mountain Ute Tribe has made a commitment to protect its natural resources by taking steps to improve the conditions that the invasive species have created.

These invasive species are having a devastating effect on rangeland health, riparian and wetland areas, and water quality and quantity. Sacred areas and plants that have cultural significance to the Ute people are endangered by these invasive species.

A range inventory, completed by the Natural Resources Conservation Service (NRCS) for the Bureau of Indian Affairs in 2005, documents the decline in ecological condition.

In 2006, the Colorado Department of Agriculture completed a mapping inventory of the tamarisk and Russian olive inva-

sion. Approximately 1,300 acres on the reservation are infested with these two species.



Tribal employees stump cut the tamarisk.

In 2007, a noxious weed inventory was completed by the NRCS.

Information from these three inventories has been used to develop an integrated pest management plan and as a basis to request funds for controlling the tamarisk and Russian olive.

The Mancos River Basin was identified as a priority watershed in the Clean Water Action Plan Unified Watershed Assessment process by the Colorado NRCS, the US Forest Service, and the Ute Mountain Ute Tribe.

The river is also a receiving water body from most of the Mesa Verde National Park. The Park has "Outstanding National Resource Water" designation for all tributaries to the Mancos River.

The Tribe intends to reestablish natural aquatic functions and related physical and biological functions through control of the tamarisk and Russian olive.

A five-step methodology has been developed and implemented that includes: *inventorying, control, revegetation, monitoring, and maintenance.*

This five-step process proved effective on test plots prior to the request for funding. This process has allowed the Tribe to develop solutions that contribute to the long-term protection of riparian areas and wetlands.

Nine Federally listed threatened and endangered species may occur on the reservation. Four of these species associated with riparian and wetland areas include: bald eagle, southwestern willow flycatcher, Colorado pike minnow, and the razorback sucker. The reservation is also home to several species of concern.

Tamarisk and Russian olive control is planned for approximately 375 acres at the present time. This control will be accomplished with two Environmental Quality Incentives Program cost-share contracts.

The primary method of control is stump cutting followed with a chemical application to the stump to prevent regrowth.

Insect release sites have been identified for future insect releases. Insects will provide a third means of controlling the tamarisk.



Picture taken during the second growing season after tamarisk treatment.

Because the insects released for biological control do not consume their entire food source, it is necessary to utilize additional methods such as chemical and mechanical treatments.



A close up of tamarisk taken before treatment.

One to Grow On...



The measure of a man's real character is what he would do if he knew he would never be found out.

~ T.B. Macaulay

Insanity: Doing the same thing over and over again and expecting different results.

~ Albert Einstein

Judge a man by his questions rather than his answers.

~ Voltaire

There is no comparison between that which is lost by not succeeding and that which is lost by not trying.

~ Francis Bacon

Failure is only the opportunity to begin again more intelligently.

~ Henry Ford

The greatest discovery of my generation is that a human being can alter his life by altering his attitude.

~ William James

There is nothing impossible to him who will try.

~ Alexander the Great

We are what we repeatedly do. Excellence, therefore, is not an act but a habit.

~ Aristotle



Losses from Wildfire: Home Ignitability Key Cause

By: Jim Mietz, San Luis Valley RC&D Coordinator

Recently, research into the cause for loss of homes during wildfires indicates that home ignitability, rather than wildland fuels, is the principal cause of home losses during wildland and urban interface fires.

Key items are flammable roof materials and the presence of burnable vegetation (ornamental trees, wood piles, and pine needle accumulation) immediately adjacent to homes, according to Jack D. Cohen, Research Physical Scientist, Fire Sciences Laboratory, Rocky Mountain Research Station, Missoula, MT.

To reduce the threat of wildfires to the many communities at risk throughout the San Luis Valley (SLV), the SLV Resource Conservation and Development (RC&D) Council has raised nearly \$108,000 in grant funding for twelve community wildfire protection plans (CWPP) in the San Luis Valley in Colorado.

A CWPP is a local wildfire protection plan that is based upon the needs of the community. A CWPP generally addresses wildfire response, hazard mitigation, community preparedness, and structure protection.

The CWPP process helps a community clarify and refine its priorities for the protection of life, property, and critical infrastructure in the wildland-urban interface (WUI).

In addition, it may

lead community members through valuable discussions regarding management options and implications for the surrounding watershed.

The **home ignition zone** includes a home and immediate surroundings within 100 to 150 feet of the structure.

Fuel conditions within this zone, to a large degree, will determine whether a home will survive a wildfire.

Generally, high intensity fire behavior beyond the home ignition zone does not transfer enough energy directly from its flames to ignite a wooden structure.

A home's ignition potential from firebrands is determined by its exterior materials and the fuels surrounding it.

For more information on the proposed San Luis Valley CWPP project, contact Jim Mietz, SLV RC&D Coordinator, at (719)589-3907, x124.

Defensible Space



NRCS hosts workshop for construction contractors

by Tony Panek, Soil Conservationist
Cortez Field Office

The Cortez Field Office, with support from the Mancos and Dolores Conservation Districts, recently hosted a workshop to provide technical information to contractors who routinely engage in construction of Natural Resources Conservation Service (NRCS) conservation projects.

This workshop also functioned as an outreach opportunity to solicit interest from contractors currently underrepresented in NRCS projects.

The Navajo Nation sent a strong contingent of contractors to this workshop as a result of a recommendation by NRCS Soil Conservation Technician Tracy Daily, Shiprock, NM.

The purpose of the workshop was to promote a greater understanding of NRCS Standards and Specifications, explain inspection requirements and methods of inspection, how to read NRCS construction designs, and to discuss safety issues that affect pipelines.

Bill Volf, NRCS Archeologist, produced a segment on navigating

the local archeological landscape due to the culturally-rich environment of Montezuma County, CO.

Lastly, **Joel Lee, Soil Conservationist**, Cortez Field Office, provided the connection between what the NRCS is attempting to accomplish and why - the "why" referring to programs such as the Environmental Quality Incentives Program and the Basin Program that pay for the projects.

We wanted to stress NRCS design systems based upon known engineering principles, which consists of selected components assembled together to achieve a conservation objective.

Mistakes in construction can occur when there is a misunderstanding in the relationship of the design to the standards and conservation objectives.

By providing this understanding, we hope to make NRCS conservation projects more profitable to the contractor and the Agency by simply reducing errors.

The workshop provided an opportunity for contractors to discuss

issues that often go unresolved in the course of day-to-day activities.

During the feedback session at the end of the workshop, the participants made it clear that the class was a worthwhile event that should be continued in the future.



Joel Lee, Soil Conservationist, Cortez Field Office, provides program information (EQIP, Basin) to contractors.

LOOKS CAN KILL!

Field Bindweed
(Convolvulus arvensis)

- Control Methods -



Field bindweed is difficult to control without herbicides.

To control established bindweed in field crops, you must deplete the roots' energy resources by repeatedly destroying the top growth.

Persistence is necessary to control this plant as its extensive root system can store a three-year food supply and its seeds can remain viable in the soil up to 40 years. Multiple weed management tools should be used to continually stress the plant.

Mechanical

Begin mowing, cutting, or digging in May and repeat every 14-21 days until the first frost.

Cultural

Competitive grasses can keep it under control. However, alternative control measures should be considered when grasses go dormant.

Chemical

Apply herbicides during full bloom or the first week in September. For sensitive areas, 1.5 to 2 pt. per acre of 2,4-D. For non-sensitive areas, 2 pt. per acre Tordon + 1 pt. per acre 2,4-D year round.



Colorado CONSERVATION PLANNING

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Irrigation Water Management

by Katherine Burse-Johnson
Public Affairs Specialist

What is Irrigation Water Management?

Irrigation Water Management (IWM) is the act of timing and regulating irrigation water application in a way that will satisfy the water requirement of the crop without waste or damage to soil, water, air, plant, and animal resources.

Irrigation is vital to produce acceptable quality and yield of crops, especially in Colorado's drought conditions. Currently, Colorado has well over two million acres of land under irrigation.

Applying water too soon or in excess of crop needs results in inefficient irrigation application. Too often irrigation decisionmakers subscribe to "when in doubt irrigate," rather than scheduling irrigations based on soil moisture monitoring and measured crop need.

Proper water management results in conservation of water quantities, maintenance of onsite and offsite water quality, soil chemical management (salinity, acidity, applied fertilizers, and other toxic elements), and irrigation-related erosion control.

Common Types of Irrigation Systems in Colorado

There are many things to consider when deciding on which type of irrigation water system to use for crop production.

There are many systems to choose from and each irrigation system has its own unique characteristic, function, and management style.

Planning for an irrigation water management system should take into account physical conditions of the site, producer resources, cropping pattern, market availability, water quantity and quality, and the effects on local environment.

In Colorado, farm and ranch irrigation assessments are administered and, based on the results, an irrigation system is recommended to the land manager. Some of the criteria assessed include:

- Field layout, topography, and length
- Soil properties/texture/infiltration rates
- Irrigation capital cost vs. crop value
- Irrigation energy requirements

Below are some of the more common types of irrigation systems used throughout Colorado.

Sprinkler Systems

Center Pivot - a moving irrigation system (lateral that rotates around a fixed point, or pivot). The application rate depends on the water requirements of the crop and the application time.

Side Roll - the system is moved from set to set by an engine mounted on the lateral pipe, usually

in the middle. This system is best adapted for rectangular fields and requires more labor than center pivot systems.

Surface (Flood) Water Systems

Gated Pipe - uses portable rigid pipes or flexible tubing with uniformly-spaced rectangular adjustable outlets for diverting water into furrows.

Siphon Tube - uses curved aluminum or plastic pipes that are laid over the bank of an open ditch to divert water into furrows. Water flows into the submerged end of the tube, is siphoned over the bank of the open ditch, and delivered into the furrow when there is sufficient operating head and the tube is positioned correctly and primed.

Micro Irrigation Systems

Surface Drip - a method of irrigation in which water is applied to the land by allowing it to flow by simple gravity, before infiltrating the soil.

Subsurface Drip - a low-pressure, low-volume irrigation system that allows water to drip slowly to the roots of plants, either onto the soil surface or directly onto the root zone, through a network of valves, pipes, tubing, and emitters.

Water users are strongly encouraged to contact their local Natural Resources Conservation Service to get assistance in developing an irrigation water management plan.

Watershed Meetings Address Forest Health

by Levi Montoya, District Conservationist
Trinidad Field Office



Locally-led watershed groups discuss concerns in the Upper Purgatoire River Watershed during a recent meeting held in Las Animas County.

The Trinidad Natural Resources Conservation Service (NRCS) Field Office, in cooperation with the Spanish Peaks-Purgatoire River Conservation District and the Culebra Range Community Coalition (CRCC), is in the process of sponsoring a number of locally-led conservation meetings in Las Animas County.

The area is targeted to the Upper Purgatoire River Watershed, located west of Trinidad, Colorado.

The meetings are a collaborative effort between private landowners, subdivision private land ownership associations, local, state and federal agencies, agricultural and environmental partners, and Coal Bed Methane Gas Industries that reside in the watershed.

The need for the meetings was determined during our first scoping meeting sponsored by the CRCC that specifically addressed forest health issues.

Like many mountain areas along the front range of the Rockies, the Upper Purgatoire River Watershed has many activities that affect the overall health of natural resources.

The purpose of the meetings was to identify the top five concerns from the stake holders within the watershed.

After the information was com-

plied, the top five concerns were identified and a second watershed meeting was held to bring together the technical experts, landowners, and stakeholders to address and compile information that specifically addressed those issues.

The top five concerns included: Coal Bed Methane Industry affects, fragmentation caused by development, agricultural activities, forestry activities, record keeping availability, and lack of information and education.

The group pulled together the four main questions and two action items for each concern to compile information and education for the public:

1. What benefits do these activities bring to our area?
2. What are the potential negative effects of these activities on the watershed?
3. What are the Best Management Practices to minimize or mitigate these negative effects?
4. How can we access data and records to "keep score" and measure the effectiveness of our efforts?

The action items included:

- Prepare a list of contact people and websites that will enable any interested citizen to pursue any personal situation applying to their property or area of concern; and
- Put together a packet of educational material that will inform the public and answer many of their questions about these activities and the most responsible way to conduct them.

We are now in the process in hosting our third meeting, which will be this winter, with the same participants who attended the second meeting.

The goal of this meeting is to compile the information from the questions and action items and present them by category using the same format.

The fourth meeting planned this spring will provide the information to the general public, agencies, groups, partners, and all the stakeholders in the watershed.

This meeting will not only provide education and informational materials, but will also determine the next steps in addressing the impacts that affect our watershed.

The Spanish Peaks-Purgatoire River Conservation District applied for and received a grant from the Colorado State Conservation Board to assist in cost of the watershed meetings.

NOTE: The Culebra Range Community Coalition is made up of technical agencies, partners, and landowners to address strategies to implement good science techniques to address forest health concerns, provide education outreach, and identify economical development. The Trinidad NRCS Field Office participates in an advisory role in a collaborative effort with many partners. The CRCC membership includes the USDA-NRCS, Spanish Peaks Purgatoire River Conservation District, Colorado State Forest Service, Colorado Division of Wildlife, The Natural Conservancy, The Stone Wall Volunteer Fire Department, BNI-Ranch, Hill Ranch, Vermejo Park Ranch, Sante Fe Trail Subdivision, local ranchers, and concerned citizens.

Demonstration Planting Off to a Good Start

Story and photos by Manual Rosales, Conservation Agronomist
Upper Colorado Environmental Plant Center

Upper Colorado Environmental Plant Center (UCEPC) usually holds tours, field days, training, and other events for the general public and other guests.

In the past, the Center has shown the array of production fields and experimental studies being conducted.

However, guests are often times interested in other species besides the ones being studied at the Center.

In order to fill this need, a demonstrational planting was initiated on August 2, 2006.

A total of 60 entries consisting of 40 grasses and 20 forbs species were included in the planting. Thirty entries are UCEPC releases and experimental species, the other 30 entries are plant releases from other Plant Materials Centers within the region.

Each entry was planted in plots three feet by twenty feet long with two rows per plot.



Plot of Hycrest-Crested wheatgrass

The demonstrational planting contains a block of 10 warm season grass species which are plant releases from other plant Materials Centers.

The warm season grasses did not make it through the first winter,

however, they were replanted on May 24, 2007. By July 2007, all warm season grasses had germinated, and the entire planting was showing excellent plant stands.

We are hoping to get the warm season grasses established so that we can have a good array of cool season and warm season grasses for demonstration and educational purposes.



Bad River-Blue Grama (warm season grass)

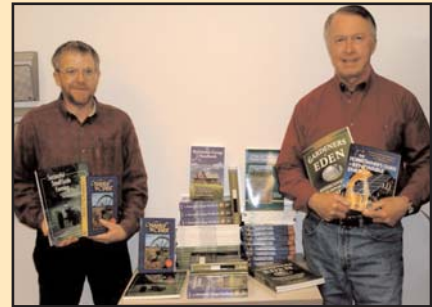


Pueblo Germplasm - Squirreltail



Great Northern Germplasm - Yarrow

Big Country RC&D Donates to Local Public Library District



Colorado Big Country Resource Conservation and Development Council (RC&D), in partnership with a program of the USDA Natural Resources Conservation Service, has donated reference books to the Garfield County Public Library and other libraries in Mesa, Rio Blanco, and Moffat counties most affected by the recent surge in energy exploration and extraction.

Colorado Big Country RC&D also received funding assistance for purchase and delivery of the books from the energy companies that are most active in the area.

The selected titles reflect Colorado Big Country RC&D's goal to promote conservation of natural resources, improve the level of economic activity, and enhance the standard of living in northwest Colorado.

Garfield County libraries received books dealing with invasive plant species identification and control, farm and ranch science and business techniques, water resource management, and renewable energy technologies.

Donated titles include "Weeds of the West," "Successful Small-Scale Farming," "Blue Revolution," and "The Homeowner's Guide to Renewable Energy."

on the pulse

State Office News

NRCS Welcomes...



Cyndee Hjelmstad, *Administrative Assistant to the State Conservationist and Programs*.

Cyndee joined the NRCS in March and comes to us from the NRCS in Montana. She has been employed with the Agency for three and one-half years.

Cyndee has a bachelors of science degree in Marketing from Montana State University.

In her spare time, she loves to travel, ski, and fly fish. She also likes reading, playing cards, and spending time with her cat, Brick.



Crystal Manzanares is Administrative Management's new *Administrative Support Trainee*.

She began with the NRCS in February. Crystal attends Red Rocks Community College and is pursuing a Business Technology degree.

In her spare time, Crystal likes doing crafts with her six-year-old daughter, Armani, and she likes being outdoors in the warm weather, having BBQs, and hanging out in the park with her daughter and fiance, Leonard.



**Earth Day -
April 22, 2008**

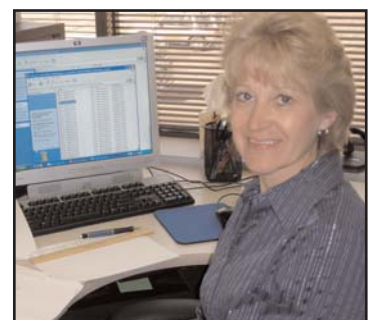
Helen Abbey works part-time as a *Voucher Examiner* in the Financial Management Office.

She began with the Agency in October 2007 and was previously employed at the Small Business Administration as an accountant.

When she's not at work, Helen does volunteer work at her church and at her granddaughter's elementary school.

She enjoys gardening, camping, going for walks, and putting together custom DVD slideshows and audio projects.

Helen is married with two children and two granddaughters. She also has two dogs.



State Office News

Administration Office - What Are They Up To?

Management Services



Management Services welcomes **John Vallejos, Contract Specialist**. John started with the NRCS in March and will be the main point of contact for real property issues for Areas 3 and 4. He will also assist **Bethany Mills, Contracting Officer**, with solicitations, contracts, FOIA requests, tort claims, etc.

John was previously employed with the Lakewood Post Office for 22.5 years. He earned his bachelor's degree in Marketing and is currently working on his master's degree in Acquisition Management.

In his spare time, John likes to fly fish. He and his wife, Donna, have four children, a dog, and a cat.

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The Agricultural Conservation Enrollees/Seniors (ACES) program responsibilities have moved to Management Services.

If you know of someone who would be interested in this program, please contact **John Vallejos, Contract Specialist**, 720-544-2827.

Human Resources

LincPass Comes to NRCS Colorado

President George W. Bush issued the Homeland Security Presidential Directive 12 on August 27, 2004.

The goal of the Homeland Security initiative is to eliminate wide variations in the quality and security of forms of identification issued to government employees and contractors.

This initiative will help standardize ID cards and processes across the Federal government. All NRCS employees must obtain the new ID card by October 2008.

NRCS has begun the process of enrolling and issuing the new identification cards, which are named the LincPass, in honor of President Lincoln.

The deployment of enrollment stations across the Colorado will be executed over the coming months.

Employees will be notified in advance when an enrollment station is coming to their location. They will also be notified via email when they need to begin to enroll for the LincPass.

The LincPass is designed with smart card technology (computer chip embedded into the card).

This technology will allow employees to access Federal buildings by 2011 and computer systems by 2009.



Financial Management

Here are a few frequently asked questions about travel. If you have other questions on travel or other topics you would like to see included in the next newsletter, please e-mail them to ra.lakewood.nrcsfinance.gov

Who can approve travel authorizations?

Area Conservationists and Principal Staff may approve most authorizations. Only the Budget Officer or the State Administrative Officer can approve limited open blanket authorizations and actual expense authorizations. See 250-GM, Amend. C010, Part CO404.11 (E) for further explanation of when actual expense will be approved.

Who can approve travel vouchers?

Supervisors can approve travel vouchers. A subordinate employee may not approve travel vouchers for the supervisor.

Do I have to go through Fedtraveler for all travel?

You must go through Fedtraveler for airline and rental car reservations. You may also use Fedtraveler for lodging reservations.

What travel authorization number do I use when making reservations through Fedtraveler?

You should use the limited open blanket authorization number. If you do not know the number, contact your area administrative coordinator or your state office timekeeper.

Tune in next issue.....

on the pulse

Area Office News

Area One

John Scott, District Conservationist, Gunnison Field Office, helped to present a short workshop to the Gunnison County Stockgrowers Association, on Rangeland Monitoring.

The Stockgrowers were looking for some simple techniques to help them get started on gathering monitoring data to help them manage their livestock grazing on both private and public lands.

John presented information on interpreting the Gunnison Sage-grouse habitat guidelines and how to monitor success in achieving those guidelines in their livestock operations.

Kathie Barrie, local landowner in the Bookcliff Conservation District, received a commendation from the District for her efforts in noxious weed control.

Kathie had applied for cost-share through the noxious weed program, partially funded by Garfield County.

The program requires the landowner to provide a map and document treatment.



Kathie Barrie and Larry Sweeney, Bookcliff Conservation District Supervisor.

Kathie did a tremendous job not only on treatment this year, but on documenting successes and failures over the last several years.

Thank you, Kathie, for your conservation efforts!

John Scott, District Conservationist, Gunnison Field Office, and Liz With made presentations at sever-

al meetings in Gunnison to provide information on where to find, and how to interpret, snowpack, runoff, and historic weather-related information.

Since there are two to three feet of snow still covering most of the Basin and nightly temperatures are still down in the single digits, citizens are beginning to worry about the potential for flooding.

Gunnison County has come to the Field Office for help with educating the public on where to find needed information about our current weather situation and how to use historic data to make some comparisons.

The Field Office is using many of the online products within the Colorado web page to help users find information to make those comparisons.

The Glenwood Springs Field Office is Moving!

Effective **July 1, 2008**, the new address will be:
214 Center Drive, #250
Glenwood Springs, CO 81602

Area Two

John Fusaro,
Rangeland Management Specialist, Ft. Collins Field Office, spent a day in the field with five Front Range Community College students teaching them about wildlife habitat planning, plant identification, and resources available to aid them in the planning process.

John also made a presentation on grass-fed beef to the Laramie Foothills Committee and members of the public to provide background information on grass-fed beef in an effort to begin promoting and coordinating this commodity.

There were thirty in attendance with backgrounds in ranching, organic farming, natural resource conservation, Colorado State University, wildlife, open space and parks, and the Fort Collins natural resources department.

There was a whole lotta "Show Down" going on in Phillips County on Feb 4, 2008.

Phillips County held their first annual Taste of Agriculture event. The event was to support local agriculture and to "show" what

agriculture can offer in fine cuisine and to support the new Phillips County event center.

There were 38 booths total and each business brought their own tastes.

Cindy Einspahr,
District Conservationist, Holyoke/ Julesburg Field offices, made pheasant soup with wild rice; and Denise Swanson, Haxtun Conservation District manager, made thumbprint cookies using our native fruit jellies to fill them.

More than 225 people from the community attended this successful event.



"Get along little doggie"
 The Prairie Management, which targets prairie dogs and weed control, held a meeting at the Haxtun Community Center on January 28, 2008 with both conservation districts



attending and 20 producers.

The topic of choice was how to combat pests on rangeland.

There was a "Catch and Release" of a different kind that the Holyoke and Julesburg NRCS offices (**Cindy Einspahr and Joe Crowder**) got to experience.



They teamed up with Division of Wildlife to capture, band, and test Wild Turkeys in the South Platte River near Julesburg on February 14, 2008.

They also put tracking devices of a few birds to find out their traveling patterns and what they have been up to.

We hope to find healthy, happy turkeys living in the Platte.

With the increase of outstanding Wetlands Reserve Program projects, the South Platte basin is producing some high quality birds!

cont. on page 13

area news cont.

During March 2008,

District Managers, clerks, and supervisors from eleven conservation districts in northeastern Colorado learned more about the Direct Assistance process and how these applications are evaluated.

Mark Cronquist, Conservation Specialist with the Colorado State Conservation Board, used PowerPoint presentations, handouts, and interactive discussion to help districts feel more comfortable with this important district funding program.

District participants also had the opportunity to make suggestions on how the Direct Assistance procedure could be revised to better meet the needs of conservation districts around the state.

More than 100 partici-

pants attended the "Terrestrial (Agriculture and Forestry) Carbon Sequestration Opportunities in Colorado: the Science, the Policy and the Market" educational meeting at Adams County Regional Park in Brighton on February 29.

The meeting provided attendees with a broad knowledge of issues surrounding carbon sequestration and the markets that are emerging for carbon credits. The meeting was a collaborative effort among many agencies.

Area 2 Welcomes....

Andy Piszkin Soil Conservation Technician Fort Collins Field Office

Hi, my name is Frank Andrew Piszkin, but I go by the name Andy. I hold a Bachelor of Science degree (Notre Dame) and Professional Engineer license in Civil Engineering along with a Professional Certificate in Hazardous Materials Management. My experience over the past 15 plus years includes working for the Department of the Navy as an environmental engineer/manager/spokesperson.

In pursuit of a higher quality of lifestyle and a more rewarding work environment, my wife, Yvonne, and I moved to Fort Collins in 2005. In 2007, I earned an Associate of Applied Science degree in Forestry, Wildlife, and Natural Resources as well as a Certificate in Wildland Fire. Yvonne and I married more than three years ago in Denmark. We reside in southwest Fort Collins with our dog Nougat and travel when we find time.

Lana Armon Soil Conservationist Simla – Franktown Field Offices

Hello, my name is Lana Armon. I am a graduate of the University of Arkansas at Pine Bluff with a major in Regulatory Science-Environmental Biology option. I am originally from Milwaukee, WI, but I grew up in Pine Bluff, AR. I became interested in Agriculture by helping my grandmother in her fields during the summer as a little girl. I began my career through the Student Career Experience Program in May 2006. I have worked in the Colorado Springs and Brighton field offices before being stationed in the Franktown field office as a permanent employee. My hobbies include billiards, swimming, kickboxing, and reading. I'm very excited to be working in the State of Colorado as an NRCS employee.

Susan Pfaltzgraff Soil Conservation Technician Holyoke – Julesburg Field Offices.

My name is Susan Pfaltzgraff and I am the new Soil Conservation Technician for Phillips and Sedgwick Counties. I have a Bachelor of Science degree in Geology from the University of the Pacific in Stockton, CA, and a Master of Science degree in Soil Science from the University of California in Riverside, CA. I worked for almost two years in South Dakota as a Soil Scientist for the NRCS before I was swept off my feet by a farmer in Colorado--that's how I came to live in this area. My husband and I are expecting our first baby in September.

Mike Moore Soil Scientist Fort Morgan Field Office

Hi, I'm Mike Moore. I am originally from Missouri where I started my career as a soil scientist with the Missouri Department of Natural Resources. In 2001, I moved to Riverton, Wyoming, to work for the NRCS mapping soils for the Wind River Indian Reservation. I moved to Fort Morgan in December and am working as a Soil Scientist. I earned my degree in Wildlife Management with a minor in Soils from Southwest Missouri State University in Springfield, Missouri.

Area Three

Charlene Richardson,

Farm Bill Administrative Clerk, and Beth Fortman, Soil Conservationist, Pueblo Field Office celebrated St. Patrick's Day by wearing extra green accessories.



Beth Fortman, Pueblo

field office, and Rick Romano, Canon City field office, judged the Southeastern Colorado Regional Science Fair held February 28.

The Burlington,

Cheyenne, and Flagler Conservation Districts and the East Central Colorado and Northeast Resource Conservation and Development Councils recently sponsored a carbon credits meeting. Ted Dodge from the National Carbon Offset Coalition was the speaker.



The Cheyenne Wells

field office was busy helping plant 12 windbreaks this spring.

Some producers received cost-share dollars through the Environmental Quality Incentives Program or funding from Pheasants Forever, while others paid for the installation on their own.

As part of the 12 windbreaks, they laid approximately 30,000 feet of weed barrier and planted approximately 5,000 trees.

Carol Waugh, District Conservationist, Cheyenne Wells Field Office, has been planting windbreaks in Cheyenne County for 13 years.



Area 3 held four engi-

neering training sessions recently. Sessions were on center pivot design, terrace design, basic surveying, and AgPipe.



The Pueblo and Rocky

Ford field offices have

increased the partners that are working with them and the landowners on the Apishapa Tamarisk Project.

In addition to NRCS EQIP funding, monies are coming from the Colorado Division of Wildlife, US Fish and Wildlife Service (USFWS) Challenge Cost-Share Grant, USFWS Partners for Wildlife, and the Colorado State Land Board.

Besides the aerial spraying, there will be small amounts of chemical and mechanical treatments.



Two State Acres for

Wildlife Enhancement (SAFE) proposals in Southeastern Colorado have been funded. One is for the Lesser Prairie Chicken and one is for a Shortgrass Prairie buffer.

SAFE projects are designed to address high priority State and regional wildlife objectives by providing wildlife habitat targeting specific needs of high value species on nearly 260,000 acres.

David Miller, District Conservationist, Rocky Ford field office, moderated a session on proposed irrigation

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area news cont.

efficiency rules in Division 2 water district during the recent Arkansas

Valley Farm, Ranch, and Water Symposium in Rocky Ford. Frank Riggle, Assistance State Conservationist-Water Resources, Lakewood, CO, was one of the speakers.



The Cheyenne Wells

Field Office, along with the Colorado State Forest Service, Colorado Tree Coalition, Cooperative Extension Service, Cheyenne CD and the Cheyenne Wells Improvement Committee sponsored the 2008 Eastern Colorado Forestry Conference that was held in Cheyenne Wells on February 28.

Approximately 80 people attended the conference. Participants came from a 250-mile radius, from diverse locations ranging from Hays, Kansas, to Denver, to south-eastern Colorado.



Topics included proper planting and care of trees and long term tree care.

Pruning techniques for the structural soundness of trees was presented with a hands-on workshop.

Presentations on tree species suitable for planting and common insects and diseases that affect trees in Eastern Colorado also were given.



Prescribed burn training was held in Prowers County on March 25 and 26.

With state office, area office, local NRCS, and wildlife partner's support, a producer, Rick Enstrom, north of Granada, CO, within the Northeast Prowers Conservation District, was chosen as a demonstration project.

This training opportunity was the first of its kind in Colorado NRCS history.

Pat Shaver, NRCS national burn coordinator, Portland, Ore., conducted the training.

Shaver's years of experience and vast knowledge of prescribed burning highlighted the significance of NRCS' role in the planning process.

Proper planning techniques, including 338 standard and specs, job sheets, technical assistance, critical parameters, weather forecasting, fire safety, pre- and post application analysis, policy, and job approval authority were discussed.

Participants, including NRCS, DOW, and CSFS received 18 hours of training. This training is required prior to considering burning in conservation planning.

Day one was spent in the classroom planning and preparing. Day two was spent in the field scouting and actually applying fire.

Enstrom's goal is to improve wildlife habitat in his Salt Meadow ecosites.

Overgrown stands of vegetation were burnt to allow for new and more favorable types of grass production.

Enstrom plans to apply more prescribed burning on his acreage in the future.



Area Four

The Pagosa Springs

Field Office is continuing restoration work on Stollsteimer Creek by assisting the San Juan Conservation District (SJCD) with the implementation of conservation practices through a cost-share program made possible by a \$70,000 Grant from the Colorado Division of Wildlife's Wetland Wildlife Conservation Program.

The goal of the grant is to improve riparian area condition and function, increase wildlife habitat values, improve water quality, and reduce streambank erosion.

The Natural Resources Conservation Service will provide technical assistance for the design and installation of the conservation practice, while the SJCD will provide grant administration.

Work on Stollsteimer Creek is guided by the Stollsteimer Creek Watershed Master Plan, which was completed in July 2006.



This plan outlines physical work needed to improve current watershed conditions, as well as policy changes that needed to be made for protection of the watershed in the future.

Approximately 20

farmers attended an irrigation water management (IWM) and nutrient management workshop at the US Forest Service District Office in La Jara on Wednesday, March 5.



The IWM workshop has been an annual and growing event for four years, but the addition of a nutrient management segment brought in several more EQIP participants.

Richard Sparks, Irrigation Water Management Specialist, Center Field Office and La Jara field office staff members **Pete Gallegos, Soil Conservation Technician,** and **Cathy Dix, Soil Conservationist,** gave presentations at the workshop.

Sparks spoke to the farmers about monitoring soil moisture, managing crop residues, and understanding

evapotranspiration.

Gallegos discussed graded border irrigation systems and calculating acre-inches applied to surface irrigated fields.

He also demonstrate how to estimate flow capacities through siphon tubes.

Dix reviewed how to take a soil sample and discussed the various components of a nutrient management plan.

The San Luis Field

Office recently hosted its third annual Irrigation Water Management seminar, led by **Ray Gekosky, Soil Conservationist,** San Luis Field Office and **Richard Sparks, IWM Specialist,** Center Field Office.

Approximately ten producers attended this year's meeting where they learned about documentation tools and resources that will assist them during the upcoming irrigation season.



Acequia agriculture is a hallmark of Costilla County. The earthen ditches created 150 years ago by territorial settlers to irrigate crops and pastureland and to water

cont. on page 17

area news cont.

livestock are still in use, maintained every year by water-rights holders.

Acequias are not only culturally significant, with families passing down the art of flood irrigation to their children, but are also grass-roots, with an annually elected *mayordomo*, or ditch coordinator, who oversees the functions and repairs of the ditch.

The *mayordomo* is responsible for organizing a schedule of water delivery for all of the *parciantes*, or water-rights holders.

Alfalfa, small grains, grass mixes, and gardens are often grown on lands irrigated by acequias in Costilla County.

This spring, in an effort to assist the needs of acequia producers, the Costilla Conservation District will undertake a large-scale GPS and survey project that will eventually include assessment of all acequias in Costilla County, which amounts to approximately 108.

Through meetings with acequia farmers, goals have been determined for the project, including a noxious weed inventory, the pinpointing of areas of sediment and erosion, and an assessment of current acequia infrastructure such as headgates and turnout structures.

The San Luis Field Office is very excited to partner with acequia farmers to provide this information and to assist landowners with Environmental Quality Incentives Program (EQIP) contracts under EQIP's distinctive acequia program.

The District will also be purchasing 125 goats this spring in an effort to control noxious weeds and other encroaching vegetation through a grant from the Colorado State Conservation Board.

The District will work with landowners to graze goats along ditch banks and in other infested areas.

George Beck, Professor of Weed Science at Colorado State University, presented useful information on goat grazing during a public outreach meeting in San Luis in March hosted by the Costilla Conservation District and Costilla County Commissioners.

The San Luis Field Office hopes for a productive, fruitful year for the farmers and ranchers of Colorado.

The San Luis Valley

(SLV) Resource Conservation and Development Council (RC&D) found new ways to do things that they never had done before. Collaboration is a major tool that has evolved for the Council.

In 1998, SLV land man-

agement agencies, the weed districts and conservation districts collaborated on managing noxious weeds across the Valley.

New ways for RC&D include: maintaining local services by expanding our fee-for-service program (managing a water quality project for a fee).

Six solar photovoltaic center pivot irrigation corners systems were installed on six farms in 2007.



The goal is to lower energy costs for center pivot systems. A dialogue has been started between the participating farmers and the utility.

Maria Mondragon-Valdez was hired as our solar coordinator in 2007 from an El Pomar grant.



The focus of the solar coordinator is to promote solar energy in the Valley including solar electric, solar thermal, and passive solar technologies.

Colorado CONSERVATION PLANNING

Our Purpose.
Our Passion.

Nutrient Management Planning

by Petra Barnes
Public Information Officer

Developing a nutrient management plan (NMP) is not only a good idea but it just makes good business sense.

Nutrient management refers to controlling the amount, source, placement, form, and timing of plant nutrients and soil amendments. How does this translate into a sound land management business practice?

Producers who implement NMPs are able to minimize fertilizer costs; increase the nutrient efficiency of their cropping systems; comply with mandated environmental regulations; and decrease potential negative impacts of nutrients on the environment.

NMPs vary in complexity from providing a budget for all potential

sources of nutrients to planning amendment applications to improve the condition of a soil.

“Nutrient management is an essential practice for a cropland agriculture resource management system,” states Jim Sharkoff, Natural Resources Conservation Service (NRCS) State Conservation Agronomist, Lakewood, CO.

“For crop producers, the process begins with a soil test to evaluate the fertility status of the soil. Then the nutrient requirement for the crop to be grown is determined based on realistic yield goals.”

NRCS recommends nutrient management plans for cropland resource management systems because they help landowners

1. Budget and supply nutrients for plant production;
2. Properly utilize manure and organic by-products as a plant nutrient source;
3. Minimize agricultural non point source pollution of water supplies;
4. Protect air quality; and
5. Improve the physical and biological condition of soil.

At a minimum, nutrient management plans include aerial site photographs or field maps, and a soils map; the current and/or planned production sequence or crop rotation; soil test results and recommended nutrient application rates, form, placement, and timing. NMPs may stand alone or combined with other practices to make up a management system.

The complexity of nutrient management plans is as varied as their purposes for planning and application. Therefore, it is highly recommended that landowners considering developing and implementing an NMP, contact their local NRCS field office or Conservation District.

While nutrient management is an essential practice for cropland, it is only one piece of the conservation planning puzzle,” states Jeff Burwell, NRCS State Resource Conservationist, Lakewood, CO.

“Producers are encouraged to visit their local NRCS field office for information about developing a resource management system for their agricultural operation.”



Trading Carbon Credits: Landowners in Haxtun and Sedgwick County attend Workshop

by Denise Swanson, Conservation District Manager
Holyoke Field Office

Over 100 landowners gathered Monday, January 14, at the Peerless Theatre to listen to a presentation on trading carbon credits hosted by the Haxtun and Sedgwick County Conservation Districts.

Ted Dodge, a representative of the National Carbon Offset Coalition (NCO), explained to the audience how carbon credits are accounted for and traded on the Chicago Climate Exchange, or CCX.

The NCO assists landowners in signing-up their carbon credits and then sells them on the CCX to businesses who need to offset their own carbon emissions.

Carbon emissions, such as

carbon dioxide, are widely believed to be a factor in global warming.

Many industries are now striving to lower their emissions or offset them to promote a healthy and sustainable ecosystem.

Offset can occur through activities that sequester, or store, carbon in the soil. Planting trees, establishing grasslands, trapping methane, and using "no till" practices are all ways to sequester carbon.

Markets like the CCX make it easy for businesses to invest in those practices and claim the offset.

The Haxtun and Sedgwick County Conservation Districts decided to act as an affiliate to the NCO because carbon credit trading is based on conservation practices that are already strongly in effect in this area.

"We see this as an opportunity for our land owners to get paid for something that they're doing anyway," said Haxtun Conservation District Manager, Denise Swanson.

Large amounts of acres need to be grouped before carbon credits can be traded on the CCX, so the conservation

districts will collect applications from landowners and group the acres for trading. If an application is accepted, the landowner must promise to continue that practice through 2010. Landowners will be paid annually for their acres based on the going market rate at the time of trading.

To trade carbon credits, landowners need to have one of the following:

- Permanent grass planting
- Grazing management systems on rangeland
- Continuous no-till management on cropland
- Methane collection/combustion systems on feedlots
- Tree plantings (tentatively accepting applications)

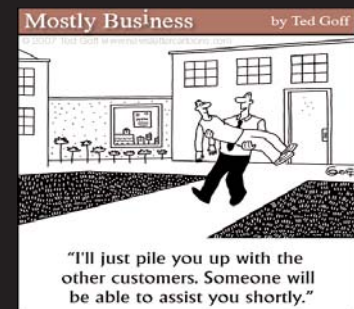
There are criteria that must be met for each of the above practices.

For more details, please visit or call the Haxtun Conservation District in Holyoke at 970-854-2812 x110 or the Sedgwick County Conservation District in Julesburg at 970-474-3684. You may also visit our website at <http://www.ncoc.us>.



Landowners gather to listen to a presentation on trading carbon credits hosted by the Haxtun and Sedgwick Counties Conservation Districts.

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Business
Cartoon
Features
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Morgan CD Hosts Small Acreage Roundtable

By Val Loose, District Manager
Morgan Conservation District

Saturday March 1, 2008, over 50 small acreage landowners gathered at the Country Steak Out for round table discussions hosted by the Morgan Conservation District.

These discussions were to answer questions that these Morgan County landowners had regarding their properties.

Barb Gorrell, Morgan County Planning and Zoning Administrator, answering many questions on building regulations, Morgan County's right to farm, animal and fencing regulations, and planning, zoning, and development.

Michael Rigirozzi, High Plains Weed Specialist from the Colorado Department of Agriculture showed landowners how to identify noxious weeds, such as goat heads and all of the thistles, and then how to eradicate them.

Dennis Schwartzkopf represented Sharp Brothers Seed Company. He talked to his groups about the types of grass seed for the different types of soils.

Josh Saunders, NRCS Range Management Specialist, worked with his groups on grazing management. He stressed the importance of maintaining cover on their "stomp lots."

Bruce Bosley, Colorado State University (CSU) Extension Agent, had several requests on lawn care and Xeriscape. Dave Musgrave, Operations Manager for Quality Water and Jeff Canfield, part owner of Canfield Drilling, worked together to inform landowners on how to get water to their property, either by drilling or having it piped in.

Musgrave also had three quarters of a penny to show everyone how much one gallon of water costs compared to one bottle of water.



Marlin Eisenach, CSU Extension Agent, in front of laptop, talks to a group regarding alternative livestock and small acreage farms.

Ron Neher, NRCS Resource Conservationist, Fort Morgan Field Office, helped landowners with wind-break design and planting. Norland Hall, CSU District Forester, talked with his groups on seedling planting and care and tree diseases.

Marlin Eisenach, CSU Extension Agent on Livestock, talked with several people on raising livestock and alternative livestock on small acreages.

Todd Cozad, District Wildlife Manager for Colorado Division of Wildlife, talked with many groups on living with wildlife, wildlife laws, and wildlife habitat. He also had several questions asked of him regarding prairie dogs.

April Hess, Morgan Conservation District Technician, talked with her groups on conservation planning and explained what wildlife guzzlers were.

Jeanne Klemm, Farm Service Agency Loan Officer, talked with her groups on farm loan programs. Keith

Florian, Bee Keeper, showed several people his bee hive and honey combs and explained to them the different kinds of honey. He also told the landowners how important bees were in pollinating. Two types of honey that he talked about were sunflower and clover honey.

The Northeast Colorado Health Department was represented by Mel Bustos, who was very busy answering questions on septic systems.

Val Loose, District Manager for the Conservation District, started the workshop by introducing the round table presenters.

Each landowner had a chance to go to eight round table topics throughout the day. It was a great turnout with important information shared by everyone.

Loose plans to have another workshop this fall as a followup to this workshop, as well as a fall preparation workshop on small acreage.

NRCS Makes History in Colorado:

Trust for Public Land on the Lowell Ranch FRPP

by Petra Barnes,
Public Information Officer



"We've been proud partners with numerous land trusts, environmental and natural resource organizations for some time now and are thrilled when these kinds of opportunities present themselves."

-Gary Finstad
NRCS Easement Coordinator

True partnership and commitment to land stewardship was the driving force behind three local organizations, one local unit of government, and one Federal agency coming together to preserve more than 12,000 acres of some of Colorado's most desirable agricultural and majestic landscapes.

Recently, the Trust for Public Land (TPL), Great Outdoors Colorado (GOCO), Colorado Cattlemen's Agriculture Land Trust (CCALT), and the Natural Resources Conservation Service (NRCS) purchased a conservation easement that would protect the wildlife habitat and grand views encompassed on the Middle Bijou Creek Ranch.

This project is the largest easement ever funded through the NRCS's Farm and Ranch Lands Protection Program (FRPP).

"Conserving natural resources, our soil, water, air, plants, and animal habitat is the primary reason NRCS exists," says Gary Finstad, NRCS Easement Coordinator, Lakewood, CO.

"We've been proud partners with numerous land trusts, environmental and natural resource organizations for some time now and are thrilled when these kinds of opportunities present themselves. It's a

testimony to what true cooperation can do."

NRCS's Farm and Ranch Lands Protection Program provides matching funds to help purchase development rights to keep working farms and ranch lands in agricultural use.

"It's an important program," Finstad goes on to say. "It's probably one of the most important we have here in Colorado because Colorado is one of the fastest growing states population-wise as numerous cities continue to be cited within the top 10 places to live in the US."

"Many of those cities are along the Front Range, which contains prime agricultural lands. Statistics have shown that agricultural lands were being converted at a rate of more than 120,000 acres per year and that was more than 10 years ago."

The Middle Bijou Creek Ranch contains 20 square miles of rural open space and provides habitat for numerous plant communities, including 93 native plant species, countless wildlife like the endangered western burrowing owl, and is also an important habitat for the northern leopard frog.

According to a recently published article about this project, Chris West, Executive Director of the CCALT said, "This is what conservation should look like."

The NRCS is the primary Federal source of technical and financial assistance to private landowners for natural resources conservation.

The Agency's mission is to help people help the land and with more than \$200,000,000 invested in the conservation of Colorado's natural resources and countless hours of hands-on technical assistance provided to Colorado landowners and producers over the past five years, the Agency continues to realize its vision of ensuring productive lands and a healthy environment.



View of Wilson Creek on the Lowell Ranch.

Colorado River Basin Salinity Program



Irrigation Water Management Seminars

By Larry Kawanabe, Irrigation Water Management Specialist, McElmo and Mancos Salinity Projects

The Colorado River Basin encompasses seven states: Wyoming, Utah, Colorado, Nevada, New Mexico, Arizona, and California.

The Colorado River is over 1,400 miles from the headwaters in Wyoming and Colorado and terminates at the Gulf of California.

It encompasses 244,000 square miles. It provides water to 1.4 million acres of irrigated farm ground as well as numerous municipalities along its drainage and Southern California via the Colorado River aqueduct.

Reduction of the salinity level in the Colorado River Basin is important due to the 1944 International Treaty with Mexico.

The Colorado River Basin Salinity Control Act of 1974 obligates the United States to deliver water to Mexico having an average salinity no greater than 115 PPM over the annual average salinity of the Colorado River at Imperial Dam which is 879 mg/L.

The Colorado River Basin Salinity Control Act of 1974 was amended by Public Law 98-569 authorizing the U.S. Department of Agriculture to initiate the Salinity Control program which cost shares on-farm irrigation improvement projects throughout the Colorado River Basin.

Fifty percent of the salt reduction comes from irrigation system improvements and the other 50 percent salt reduction is derived from irrigation water management.

The McElmo Salinity Unit fund-

ing was started in 1990 and the Mancos Salinity Unit began in 2005.

The McElmo salinity unit comprises of approximately 96,000 irrigated acres and the Mancos salinity unit comprises of approximately 9,200 irrigated acres.

Both the McElmo and Mancos Salinity areas are being subdivided and the lands are being purchased by landowners who have had no experience in agriculture, thus magnifying the importance of Irrigation Water Management.

Larry Kawanabe, Irrigation Water Management Specialist,

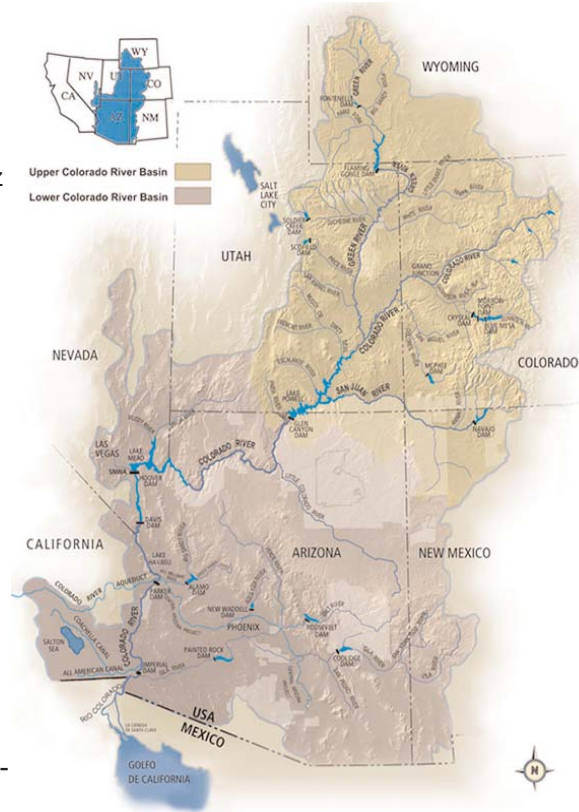
Cortez Field Office, has held thirteen Irrigation Water Management seminars for the local landowners as well as for the Cortez Field Office staff and Dolores and Mancos Conservation District Staff and Board Members since arriving at his position on May 1, 2005.

Larry and Tony Panek, Soil Conservation Technician, have developed several spreadsheet tools to assist the field office staff and landowners with irrigation water management.

The PowerPoint presentation at the seminars covered the water-holding capacity computation, Management Allowed Depletion, infil-

tration rates, root depths of various crops, root formation, crop curves, Evapotranspiration rates from CoAgMet, checking soil moisture, the results of over-irrigation, and irrigation scheduling.

There was a field trip that followed the presentation and demonstrated the various equipment involved in irrigation water management, soil moisture sensors, and how to adjust the gated pipe for proper application of irrigation water.



The Colorado River Basin.

Conservation Loses a Quiet Champion

by Mary Miller
Area Public Affairs Specialist

On February 18, 2008, the conservation movement in Colorado lost a quiet champion—Edgar Cannon.

Edgar retired in 2003 after being a founding member and then serving on the Olney-Boone Conservation District (CD) Board for 52 years.

At his service, I was struck by the display table that his family had set up. Prominently displayed were the Goodyear Conservation Award, his two Awards of Merit from the Olney-Boone Conservation District for 40 years then 50 years of service, and his 2003 Distinguished Supervisor Award presented to him by the Colorado Association of Conservation Districts (CACD).

There was also a photo that I took of Randy Loutzenheiser presenting him the CACD Award. His family said that these awards meant a great deal to Edgar.

What struck me is that Edgar did not make a big “to do” about his conservation work or his service to the conservation movement and districts. He just felt it was the right thing to do.

After serving his country in World War II, Edgar returned to build the 13,000-acre ranch his son

and daughter-in-law, Mike and Jeanette, now operate.

To pull the unit together, Edgar reseeded 2,000 acres of dryland farm ground to native grasses with no cost-share or program help.

He also reseeded 400 acres of dryland farm ground in the ‘50s Conservation Reserve Program (CRP) and 160 acres of the last dryland crop fields in the 1980s CRP program.

When the county commissioners in the Arkansas Valley decided to ignore the Colorado State Dust Blowing Act, Edgar took them to court to force County Commissioner action on dust blowing complaints.

He was successful in his court case and the result has been that the Southeast Colorado County Commissioners have vigorously enforced the dust blowing complaints since then.

Edgar was very influential in getting No Plow Ordinances passed in Otero and Crowley counties.

He worked with the County Commissioners in both counties to document the adverse affects that plowing out native range has on the resource in a 10” precipitation area.

Based on Edgar’s efforts and

the USDA Natural Resources Conservation Service demonstrations, Otero and Crowley counties passed no plow land use ordinances in the 1980s.

Edgar also helped organize revegetation demonstration plots for land that had the water sold off of it.

He worked in the political and legal arena to make sure that all irrigation water transfers recognize that abandoned land must be left in a protected state, before irrigation water is removed.

Today’s court rulings guarantee proper reclamation be applied to all dewatered land.

Over the years, Edgar served on special conservation committees organized by the local conservation districts, CACD, and the Lower Arkansas Valley Watershed Association.

He helped form the Crowley-Otero Counties Association of Conservation Districts to encourage better communication between the conservation districts in Pueblo, Crowley, and Otero counties.

The Colorado Conservation movement is fortunate to have had such a quiet champion in Edgar Cannon. He will be missed by those of us who knew him.

“The Effective District Conservationist”

At a recent district conservationist training, soil and range conservationists from the Natural Resources Conservation Service were able to learn first-hand the roles and responsibilities of being a district conservationist (DC).

More than 25 conservationists attended the training to learn about conservation districts, cooperative relationships, and various programs throughout the agency.

The purpose of this training was to identify the key roles and how the role of an employee changes when they become a DC and how the DC fits into the organizational structure.

To date, a total of six trainings have been held: two for new district conservationists with less than five years with the agency; two for veteran district conservationists; and two for soil and range conservationists.



Soil and Range Conservationists get lessons on being a District Conservationist.



Kristi Gay awarded National Earth Team NRCS Employee

by Katherine Burse-Johson, Public Affairs Specialist

Kristi Gay, District Conservationist, received the National Earth Team Award for Earth Team NRCS Employee.

Kristi worked for the Flagler Field Office in Flagler, Colorado, at the time she won this award.

She now serves as the Resource Conservation and Development (RC&D) Coordinator for the East Central Colorado RC&D in Hugo, Colorado, and is known for getting conservation on the ground through use of Colorado's Earth Team Volunteers.

She volunteers for many organizations in her community outside of work so it is second nature for her to look for volunteer to help her to manage her workload in the office.

Kristi has used volunteers such as the local boy scouts to help with tree and wildlife habitat plantings, the local 4-H group to assist in completing mandatory CRP tree row replacements, and local producers to volunteer their time, energy, land, and

equipment to generate on-farm bio-fuels.

In addition to her tireless efforts, Kristi volunteers her time at the Annual Pikes Peak Camp where 500 boy scouts between the ages of 14-18 gather to learn about conservation.

Kristi spends her time putting materials together for this camp and working with other professional organizations to present information and education focused on fish and wildlife, soil and water conservation, and forestry merit badges that will be awarded to scouts who meet the criteria.

She is also involved with a Colorado Division of Wildlife effort called Teaching Environmental Science Naturally.

This continuing education

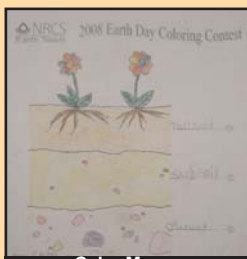


Allen Green, State Conservationist, presents Kristi Gay with the local NRCS Earth Team Award - NRCS Employee. Kristi also won on the National level for her outstanding efforts.

unit offers local teachers hands-on education in conservation, which Kristi teaches them how to incorporate the instruction into the classroom.

Kristi received the Earth Team Employee Award for her devotion to volunteerism and for her exemplary accomplishments in using volunteers, or volunteering herself, in an effort to get conservation on the ground.

Earth Team Coloring Contest Winners!



Caha Myers
Kindergarten



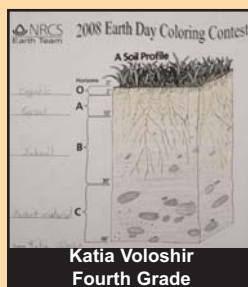
Lane Walter
First Grade



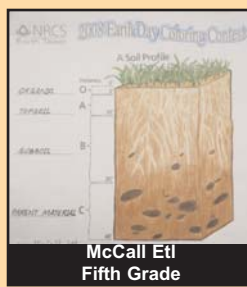
Jakob Juul
Second Grade



Kylie Deal
Third Grade



Katia Voloshir
Fourth Grade

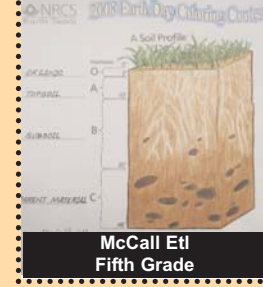


McCall EtI
Fifth Grade

Statewide Winners!



Jakob Juul
Second Grade



McCall EtI
Fifth Grade



Techno Tips

What are Internet GIS Servers and how can they benefit geospatial data users?

by Chris Mueller, State GIS Specialist

Server GIS is growing rapidly because of business advantages and its capability to leverage valuable GIS information and resources that are managed and authored by GIS professionals.

In an effort to maximize efficiency in how GIS data is stored, accessed, and used, GIS professionals are extending their desktop applications with server-based solutions that provide a streamlined approach to accessing GIS resources and information via Web-services.

GIS internet servers are similar to the servers we have in our Colorado field offices except that they have an added functionality which allows ArcGIS users to access GIS data via the internet.

The benefit is a relational database management system (RDBMS) e.g. Oracle, SQL software, installed on the server that stores the geographic information in a relational database.

The primary benefit for this storage technique is its ability to store huge (terabytes) amounts of data in its native format and process multiple user requests of the data, and deliver the requests of information very quickly to the client.

The geodata is accessed from the client to the server via ESRI's GIS gateway software spatial database engine (ArcSDE); the data is converted on the fly from relational database format to ESRI geographic format and streamed to your desktop almost as fast as accessing large datasets from your desktop.

In most cases, accessing NAIP imagery or other large datasets via a GIS server will be faster than retrieving the data from the standard field office F:\geodata drive.

In addition to the benefits of increased performance, the data served is seamless based on the area extent developed by the host.

If, for example, you are working with imagery covering multiple counties, you need only add the web-served statewide imagery once rather than wasting valuable time adding multiple huge county image files that may, or may not, have seamless coverage across county boundaries.

In several examples currently in use by USDA agencies, the UTM zone, and state/national boundary are common formats for data distribution.

As NRCS works on updating its geospatial strategy, agency experts will focus on solutions to optimize and standardize how the agency stores,, manages, and distributes its geospatial data.

Currently, in Colorado, we manage 50+ geospatial

drives. In the future, we will increase our bandwidth and most likely will have a single geodatabase housed nationally or on the state level with a thin desktop client, with the majority of our GIS business being handled directly through web-based GIS services.

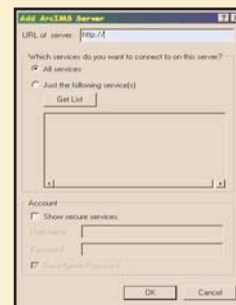
Until then, with the existing IT functionality we have in place we can access several databases with lots of seamless geospatial information.

Accessing the data in ArcMap is simple –



1. Click the add data button, in the Look in: window, scroll down to Internet servers, and click on Add ArcIMS Server.

2. Type in the URL to the server and click OK. The server will be added to the list.

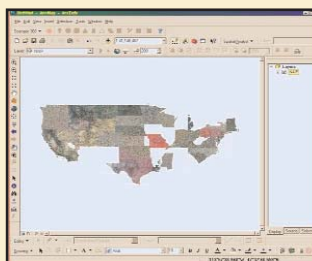


3. Double click on the server and the available data layers will be visible.



4. Click on the layer of choice to add the layer to the table of contents.

Some of the layers with large resolution or scale will be scale-dependent and will require you to zoom to that scale or larger to activate the layer.



Soil Sampling Demonstration



Lee Neve, Soil Scientist, Trinidad Field Office, demonstrates the use of a soil sampling technique to 5th grade, 8th grade, and high school students.

The students are participating in a grant funded through School District 60 to create a reclamation display at the CF&I Mining Museum.

The grant is designed to encourage participation, mentoring, and cooperation by multiple grade levels, targeting minority students, and students whose parents and grandparents worked at the CF&I steel mill.

The grant also seeks involvement from natural resource professionals as a way to encourage careers in natural resources.

NRCS's involvement included **Rich Rhoades, District Conservationist,** Pueblo Field Office, presenting classroom instruction to South High School Biology class and a Bessemer Academy Middle School classes.

Rich Rhoades and Lee Neve gave a soil properties demonstration the combined classes of 5th, 8th, and high schoolers.

Students also toured mines and the Comanche power plant to learn more about mining, use, and reclamation of mined materials.

Cashing in on Carbon

By Misty George, District Manager
Baca County Conservation District

Getting paid more money for something you are already doing sounds too good to be true. But for once, it's not.

Southeast Colorado agriculture producers found that out at a Carbon Credit Program meeting March 18th in Lamar.

Southeast Rocky Mountain Farmers Union, Baca County Conservation District, and Southeast Colorado RC&D hosted the event.

Forty-three farmers and ranchers from five states learned detailed information about Farmers Union's Carbon Credit Program.

Basically producers can get paid for conservation practices they are already doing that store carbon in the soil.

Liz Mathern, Program Specialist, began her presentation with the history of carbon credit trading.

She then provided a comprehensive training on how to submit an on-line application via their website: <http://carboncredit.ndfu.org>.

Producers can enroll in five categories: conservation tillage, long-term grass seeding, rangeland management, forestry, and methane offset.

The website has a payment calculator where producers can input their acreages and see how much their payment would be based on the current market value of carbon.

Mathern stated that in 2007, Farmers Union cut checks to 1,050 producers in the amount of \$2.5 million dollars.

Lunch was provided by Laura and Burt Heckman with Southeast Rocky Mountain Farmers Union.

Colorado Water Supply Outlook Report as of March 1, 2008

For the third consecutive month, snowfall across the Colorado high country has been above average.

As snowpack totals continue to increase, the outlook for summer water availability has improved to the best conditions in more than a decade.

With slightly over a month remaining in the typical accumulation season, much of the state is already guaranteed an excellent water supply for the summer.

Reservoir storage remains in good condition across the state, and storage in some reservoirs is being reduced to accommodate expected inflows.

Only a few basins across northern Colorado remain vulnerable to a dry spring which could limit summer water supplies; however, these basins still await their wetter months.

About the only weather phenomenon that remains, which would set up a near-perfect season, is a long, slow, and steady melt, which extends into early summer.

For a detailed state report on Colorado's Water Supply Outlook, please visit <http://www.wcc.nrcs.usda.gov/cgi-bin/bor2.pl?state=co&year=2008&month=3&format=text>.

Information is updated every month.

The Million Dollar Millsap Creek Project

By Pat Galvin

Teller-Park Conservation District

"The Millsap Creek Project involved fifty-plus acres of mine tailings dating back to the 1920s.

*—Pat Galvin
Teller-Park CD*

While demonstrating the River Riparian Trailer at the 2006 National Western Stock Show in Denver, Vern Vinson, Teller-Park Conservation District (CD) supervisor, was approached by Loretta Pinetta with the Colorado Division of Reclamation, Mining and Safety, about a watershed rehabilitation project in Teller County.

Of course, Vern was very interested in assisting the DMG and eventually represented the CD at various meetings and planning sessions to carry out the million-dollar project.

The Millsap Creek project involved fifty-plus acres of mine tailings dating back to the 1920s.

Eighty-foot deep canyons had been gouged out of the countryside due to the type of soil material left there. The soil was ball mill "fines" that did not contain acid or heavy metals, however; the project was easier to rehabilitate due to this environment.



The Millsap Creek Project: Before (inset) and After photos.

"This area was selected as a demonstrating project on how individuals and government can cooperate," said Julie Annear, project coordinator with DMG.

The Teller-Park CD facilitated the hiring of the "contractor" who performed the work at a significant cost savings.

Through their past experience with the Buena Vista Department of Corrections, Heavy Construction Technology Program (BVHCTP), the supervisors, and the NRCS staff recommended that the prisoners do the rehabilitation work for the tailings project.

The CD is supportive of the BVHCTP because it benefits society not only in the good environmental work performed, but also because it teaches the prisoners a trade, which allows them to become productive citizens upon release from the institution.

The district also procured the reclamation seed mix suited for the high altitude mountain environment south of Victor, Colorado.

About a dozen sponsors completed the project in October, with the local mining company providing spoil material and sharing their knowledge of the local seed mixes that assisted in the revegetation efforts.

Some of those involved in the project were Teller County government, Cripple Creek-Victor Mine, Buena Vista Department of Corrections, Bureau of Land Management, Colorado Trout Unlimited, individual landowners, and the Teller-Park Conservation District.

Kids Farm Day Expo

NRCS staff **Deborah Clairmont, Soil Conservationist**, and **Jan Fritch, District Conservationist**, Brighton Field Office, and Sheryl Wailes, District Manager, Deer Trail and East Adams Conservation Districts, set up two demonstrations for 100 fourth graders from Hulstrom Option (Adams District 12) for the annual Kids Farm Day Expo at Adams County Fair Grounds.

David Rippe, Southeast Weld Conservation District, presented a demonstration and talked about the evolution of local irrigation methods over the past 50 years.

One exhibit, the **Riparian Trailer**, showed students how water erosion of a stream can damage our valuable land. Students explored different ways to prevent soil erosion from the stream banks of a dammed stream versus a natural running stream by doing hands-on activities.

In addition, students learned how creating buffer zones along riparian areas and how planting native grasses and shrubs will help against erosion and sediment loss. They also learned the importance of not building houses, corals, etc., in the flood plain of a stream or river.

The second exhibit, the **Soil Tunnel** (4'x4' square tent), showed the basics of how soil is created. Each wall of the tent showed the different attributes of soil.

Students identified the different layers of soil and how soil is made from the parent material and the environment. One of the walls focused on the particle sizes of the three main soils (clay, sand, and silt) with simulated texture examples of each.

Another wall explained how water travels through the soil (porosity) and how roots react to soil, water, and air. On the fourth wall, students explored what animals, insects, and invertebrates live in and use the soil.

Finally, students learned how important it is to preserve the soil for the next seven generations and how what we do to the soil now will affect the different cycles (carbon, nitrogen, hydrogen) of the earth in the future.

Featured Landowner

Colorado CONSERVATION PLANNING Our Purpose. Our Passion.

Reeves and Betsy Brown 3R Ranch Beulah, Colorado

Ranch Description

The 3R Ranch is approximately 10,360 acres. Six hundred forty acres of this is state land. The remainder is deeded land.

Grazable forest is approximately 5,110 acres. Rangeland is 4,530 acres, including river bottom.

Irrigated pasture and hayland are 720 acres. Elevation on the ranch ranges from 7,800 feet down to 5,700 feet.

The Browns have put 1,560 acres of prime farmland into the Farm and Ranch Lands Protection Program.

The have another 440 acres in a private conservation easement with Colorado Open Lands. The Colorado Open Lands easement is part of a greater effort to put conservation easements on surrounding lands to preserve the beauty and agricultural integrity of the area.

The easements are an effort to stem 40-acre ranchette subdivisions that are popular in the area.

Irrigated Pasture and Hayland

Hay is cut then baled into big bales in mid to late June. All haying is finished by July 4. The yield on all hayland is approximately three tons per acre. The Browns test the soil one in six years.

Results from these tests have not changed since they have begun testing.

Hayland species are smooth brome (70 percent), orchard grass, and alfalfa. The protein rate for their hay is six to seven percent protein due to the fact that it is cut at early bloom.

The hay is irrigated with center pivot sprinklers that run on gravity pressure to reduce energy costs.

Rangeland

The Browns use Holistic Resource Management (HRM) techniques to manage their grazing resources-- rangeland, forest land, and pasture land.

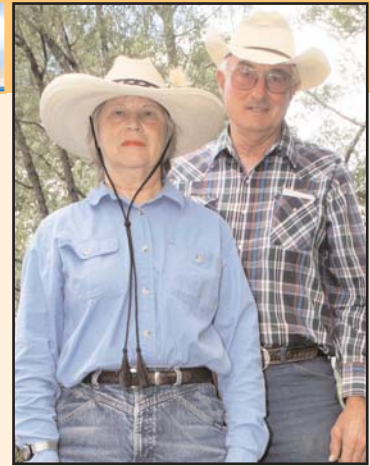
They have divided pastures into 64 paddocks. They use permanent and electric fencing. The average paddock size is 100 acres. They monitor their grazing resources and keep close watch on pasture conditions. The main cow herd consists of 600 brood cows.

Forestland

The Browns harvest timber on a small scale from their forest land. Most of this land is used for summer pasture for cattle.

General Comments

The Browns are very goal-oriented and have specific written goals for the resources they manage. Betsy is particularly excited about the change in the grasses—more diversity—due to their intensive grazing management.



The Browns have been generous with their time and expertise by hosting tours and an HRM workshop at their ranch. They participated in the Governor's Task Force on Grazing Land Initiative.

Organizations

The Browns are active in numerous organizations, including The Colorado Cattlemen's Association, Colorado Branch HRM, Pueblo County Stockman's Association, and the National Cattlemen's Beef Association.

NRCS Assistance

The Browns utilize both NRCS technical and financial assistance. However, they have installed many conservation practices on their own without Federal assistance.

NRCS has cost-shared one center pivot sprinkler, an underground irrigation pipeline, and a big gun sprinkler. They previously installed two center pivots on their own. All of their fencing has been done at their own cost. They request NRCS technical assistance to assist in range evaluation and forest health assessment.

OUR PURPOSE. OUR PASSION.