

CONSERVING NATURAL RESOURCES IN NEVADA

BRUCE PETERSEN
State Conservationists
775-857-8500
bruce.petersen@nv.usda.gov
www.nv.nrcs.usda.gov

Who We Are

Inspired by a shared vision of agriculture as a valued component of the landscape, NRCS works in partnership with farmers, ranchers and many others to improve, restore and protect the Nation's natural resources.

Side-by-side, we work with these partners to sustain and improve the quality of our soil, water, air and wildlife habitat, and we develop conservation plans that work for the land and for farmers and ranchers. Farm Bill programs help with the cost of putting conservation on the ground, which benefits the farm, the watershed and the community. Conservation easement programs, also in the Farm Bill, help to protect the agricultural and natural resource values of the land over the long-term.

With our help, Nevada is balancing economic goals with a high quality environment— ensuring productive lands to supply food, fiber, forest and energy products for the Nation and the world.



Sage-grouse hunt for insects on a grazed meadow near Austin, in central Nevada.

Sage-Grouse Initiative Improves Wildlife Habitat and Rangeland

The NRCS Sage-Grouse Initiative helps ensure the enhancement and preservation of sage-grouse habitat and the sustainability of working ranches and farms in the western United States.

Nevada ranchers, concerned about the potential listing of sage-grouse under the Endangered Species Act, have installed a variety of conservation measures to improve habitat for sage-grouse. Most of the practices installed also benefit other wildlife species and improve rangeland for livestock grazing.

Practices implemented by Nevada landowners to protect, enhance and restore sage-grouse habitat include:

- removing invasive pinyon and juniper trees from nearly 4,000 acres of private and public land
- removing, marking or installing over 15 miles of sage-grouse friendly fencing, reducing the chance of fence collisions and sage-grouse mortality near breeding sites
- installing conservation practices such as spring developments and watering facilities to enable easy access to water
- implementing conservation measures such as prescribed grazing, habitat management and wetland restoration

Water Quantity

Water is the most precious natural resource in Nevada, the driest state in the Union. Agriculture is the largest user of freshwater resources, consuming approximately 70 percent of the available water. NRCS is working with farmers and ranchers to improve existing irrigation systems to save both water and energy.

New irrigation systems are based on customer goals and crop needs. Replacing pumping plants with high efficiency pumps, leaky steel pipe with PVC, and nozzles for more precise control of water flow ensure even distribution and less waste. The new systems are approximately 30 percent more efficient, saving both water and energy. In addition, surface water runoff, leaching of nutrients, and soil erosion are significantly reduced, improving both ground and surface water quality.



The new, highly efficient pump installed near Yerington, Nev. will improve water distribution and reduce the producer's energy bill.

Local, Healthy Food Supplies

For two years, the NRCS has offered a pilot program to help local growers install seasonal high tunnels. The high tunnels, or hoop houses, are temporary structures that extend the growing season, enabling farmers to plant earlier and grow longer. Their popularity is on the rise. Eighteen high tunnels were installed in Nevada in Fiscal Year (FY) 2011, and more applications have been received for FY 2012.

In addition to extending the growing season, high tunnels help ensure a local supply of fresh produce and are helping connect people with the land, a goal of the *Know Your Farmer, Know Your Food* Initiative.



A farmer in the heart of north Las Vegas raises produce in his 91-foot high tunnel for sale at the local farmers' market

Rangeland Management

Approximately 45 million acres in Nevada are rangeland. Rangelands produce a wide variety of goods and services desired by society, including livestock forage, wildlife habitat, water, mineral resources, wood products, wildland recreation, open space, and natural beauty. NRCS works with private landowners and public allotment holders to assure that these areas are managed sustainably.

NRCS is helping ranchers install conservation practices such as energy efficient watering facilities, wildlife friendly fences, and plantings of native species to help ensure that Nevada's rangelands will remain productive for future generations.



Thinning brush on rangeland reduces wildfire risk and promotes growth of other native species, benefitting wildlife and livestock.

Conservation Technical

Assistance (CTA) is simply about helping people help the land. NRCS has used CTA successfully for more than 75 years to reach out to American farmers, ranchers, and other private landowners and managers.

America's farmers and ranchers invest in conservation with help from CTA to care for the more than 70 percent of our land, water and other natural resources that are in their hands. In FY2011, Nevada received **\$3.3 million** in CTA funds.

NRCS employees work with customers to identify natural resource problems, inventory resources, develop conservation alternatives and help individual farmers, ranchers, Tribes, local governments and urban landowners with their conservation decisions. This prepares the way for using Farm Bill and other conservation funding.

Environmental Improvement:

Agricultural Management Assistance (AMA) encourages agricultural producers to address water management, water quality, and erosion control by incorporating conservation into their farming operations.

Environmental Quality Incentives Program (EQIP)—promotes agricultural production, forest management and environmental quality as compatible goals.

Wildlife Habitat Incentive Program (WHIP) improves wildlife habitat on private agricultural, forest and Tribal lands.

Conservation Easements:

Grassland Reserve Program (GRP)—restores and protects grassland, rangeland and pastureland, and helps maintain viable ranching operations.

Wetlands Reserve Program (WRP)—restores wetlands and wetland habitat on marginal agricultural land.

Conservation Stewardship:

Conservation
Stewardship Program
(CSP)—encourages
long-term comprehensive
conservation by
maintaining and improving
existing conservation
measures.

Watershed and Communities:

Emergency Watershed
Protection Program (EWP)
—undertakes emergency
measures in watersheds
where there are imminent
threats to life and property
resulting from fire, flood
and other natural disasters.

Nevada in The National Landscape Helping Sage-Grouse and Native American Youth

Eight Native American young adults spent their summer working to improve habitat for Greater sage-grouse in central Nevada. The young adults, ranging in age from 18 to 26, were from the Duck Valley Indian Reservation near Owyhee and the Battle Mountain Indian Colony.

Bringing the bird and the young adults together is the Bootstraps Program, an ambitious human development and natural resource enhancement program. Bootstraps teaches life skills and job responsibility by combining formal classroom instruction with real work experience like removing pinyon pine and juniper (PJ) trees from some of the most threatened sagebrush communities in central Nevada. PJ is invading sagebrush habitat, destroying critical habitat needed by sage-grouse and other species to survive.

Craig Plummer, district conservationist with the NRCS in Winnemucca, Nev., found a landowner who wanted to help restore sage-grouse habitat. Together they developed a conservation plan that identified removal of PJ in key sage-grouse areas, and the rancher signed up and was approved for financial assistance under the Nevada

NRCS Sage-Grouse Initiative of the Environmental Quality Incentives Program. Landowners receive financial assistance to remove PJ and implement other conservation practices to help protect sage-grouse and improve its habitat.

After receiving intensive training in use of chainsaws, two-way radios, automotive maintenance, and general safety, they started removing PJ from 1,000 acres of public land and 400 acres of private land. They were taught which

trees to remove, to leave the old growth PJ, and to leave PJ on the steep slopes where removing it would cause other environmental damage. The cut trees were left on the ground to protect the soil from erosion and provide shelter for wildlife.

When the crew wasn't cutting PJ, they were fencing springs and meadow areas to protect them from overuse by livestock or wild horses. Meadows provide critical habitat for young sage-grouse.

The young adults were compensated for their work, and all of them found personal satisfaction working on this worthwhile project. Several had worked in previous years and returned to train and mentor the newcomers.

Many partners contributed to the success of this project, including the local rancher, the Bureau of Land Management, NRCS, Lander County



2011 Farm Bill Program Funding*

NRCS Program	Number of Contracts	Financial Assistance to Producers
Agricultural Management Assistance (AMA)	18	\$ 81,000
Conservation Stewardship Program (CSP)	14	\$ 201,000
Environmental Quality Incentives Program (EQIP)	100	\$7,902,000
Grassland Reserve Program	1	\$ 618,000
Wetlands Reserve Program (WRP)	3	\$3,321,000
Wildlife Habitat Incentive Program (WHIP)	9	\$ 624,000

*Financial Assistance (FA) is provided directly to producers. Conservation Technical Assistance (CTA) funding is used for professional planning and expertise to help carry out conservation activities. For GRP easements, NRCS and Farm Service Agency financial assistance dollars are combined. Data source: Foundation Financial Information System Status of Funds Report October 2011, revised.

The top five conservation practices planned in FY 2011, by amount of dollars obligated, were:

- 1. Irrigation System, Sprinkler
- 2. Irrigation Pipeline, Low Pressure
- 3. Water Control Structures
- 4. Brush Management
- 5. Irrigation Pipeline, High Pressure

Top Resource Concerns:

- 1. Water Quantity
- 2. Animal Health
- 3. Plant Health
- 4. Wildlife Habitat
- 5. Soil Erosion

