

Dirt Roads are for Exploring

The lack of trees in Nevada provides vistas where a person can see what lies beyond the highways, which makes it easier to explore the great open spaces. In fact, if you go exploring, you will find dirt roads going almost everywhere from every direction.

Historical uses of public lands, like mining, ranching and recreation, created a network of roads and trails. Over the past decade, an explosion in population and tourism and the proliferation of off-highway vehicles has increased the network of roads and trails at an exponential rate. Some of the impacts caused by unrestricted cross-country travel include habitat fragmentation, stream sedimentation, wilderness area incursions, conflicts between users, cultural disturbance, vandalism and the spread of noxious weeds.

Of 48 million acres of public land managed by BLM in Nevada, nearly 37 million acres are designed open, nine million designated limited and two million designed closed. The closed designation is mostly for wilderness areas. Limited means staying on existing or designated roads or it could include seasonal limitations, and open is unrestricted.

As motorized use increases it is becoming necessary for the BLM to develop travel management plans for all

areas in the state. Comprehensive travel management addresses all resource uses such as recreational, agricultural, commercial and educational. In developing these plans BLM considers the resource management goals and objectives, the primary travelers in the area, and the primary means of transportation.



Water Canyon
BLM photo by Stan White

The first step in travel management planning is to inventory roads and trails throughout the state. These efforts are already started. Other considerations include public access, resource management and regulatory needs through land-use planning. Through the land use planning process, which is a public process, area designations—open, limited, and closed—are determined. The recommended designations will be phased in as existing land use plans are amended or new land use plans are developed.

In the meantime, BLM urges all off-highway vehicle users and other dirt road drivers to stay on existing roads, there are plenty to choose from.

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State Director's Column

The end of the year is a time for reflection. In cooperation with our partners, a lot of good work has been to meet the demands on the public lands in Nevada. BLM strives to meet the changing needs of the American people for their public lands, which we are entrusted to manage. Those needs drive our list of priorities for 2006.

Shortly after I assumed duties as the Nevada state director, our management team got together to develop the priorities for the fiscal year, and how we will focus the work of our employees. Keeping focused is critically important when we are facing increasing demands from public land users who all feel their need or interest is a priority. We must set priorities and stay focused if we hope to accomplish real results on the ground.

In setting Nevada's priorities, the management team made choices that are realistic and attainable. How we achieve our priorities is as important as achieving them. We are committed to fulfilling our partnership obligations, sustaining employee morale and providing customer service.

BLM's four national emphasis areas: to contribute to the domestic energy supply; to improve dispersed recreational opportunities; to manage rangelands and forests to have healthy and productive watersheds; and to protect and preserve heritage resources.

Starting with those four areas, Nevada developed four major priorities. They are not all encompassing, and they do not address every program or activity. They do require the efforts of every employee in every program area to achieve.

Land Health

Rangeland management will focus on completing grazing permit renewals and rangeland health assessments; wild horse and burro rangeland monitoring and gathering excess animals to reach the appropriate management levels; and continuing the fight against noxious weeds through inventory, treatment, preventions and working with cooperative partnerships.

Urban Growth and Development

Land acquisitions, disposals, and rights-of-way permits and recreation management, particularly off-highway vehicle use, greatly challenge our capacity to meet the demands.

Energy and Mineral Development

Nevada continues to work on permits for developing environmentally sound energy production from the public lands. We will want to increase our responsiveness for oil, gas and geothermal exploration by stepping up preparation of land parcels for oil and gas leasing and processing applications for permits. And we will continue our ongoing effort to update cost estimates for reclamation bonds.

Resource Protection and Serving Communities

We will manage our fire preparedness and suppression to emphasize safety and cost effectiveness. Law enforcement will emphasize the protection of lives, resources and property with a primary focus on special use areas, such as recreation areas and the urban interface where recreation use continues to increase dramatically.

There is plenty to do and I am excited to keep the BLM moving in a responsive and responsible direction. I welcome good ideas from our public land stakeholders and our employees. Those of us who live in the western United States have an outstanding resource in our public lands. It is my privilege to join with our employees, contractors, and partners to strive toward making them healthy, productive and enjoyable for our generation and those who will follow.

- Ron Wenker

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Shredded Piñon and Juniper Heating Ely School

An experimental hot water boiler has been burning shredded piñon and juniper wood at an Ely elementary school since the building's heating system was retrofitted in October 2004. The boiler retrofit, which cost \$972,000, was part of a \$3 million energy retrofit for the White Pine County School District. So far, the district has been able to save \$16,000 to \$18,000 a month. When the debt repayment is made, the district expects to save about \$197,000 a year on energy costs.

The shredded piñon and juniper wood is a more economical source of heating fuel than commercially available heating oil and natural gas. The shredded wood is the end result of hazardous fuels reduction efforts near the Mount Wilson Guest Ranch, 22 miles north of Pioche. Shredding piñon and juniper trees in areas of high fuel loads reduces the threat of wildland fire danger to a community. Additionally, clearing some areas of piñon and juniper trees promotes the health of the rangeland by allowing the growth of grasses and shrubs that had been shaded out by the woodlands.

The BLM, Nevada Division of Forestry and the U.S. Forest Service have provided 1,000 tons of shredded piñon and juniper biomass to the White Pine County School District. That is enough to meet the district's heating needs for more than six years, if all the schools were using the system.

The David E. Norman Elementary School was retrofitted with the wood-burning boiler, under an innovative program called Fuels for Schools. The Nevada Division of Forestry started the wood-burning boiler pilot project with funding from

the Forest Service. Similar pilot projects are ongoing in selected Idaho and North Dakota schools.

The high-tech boiler burns the shredded wood at temperatures exceeding 2,000 degrees F., producing mostly water and ash. Particulate matter emissions are well below Environmental Protection Agency standards.

Students at Norman Elementary monitor the boiler system's performance as part of their science curriculum, so the pilot project adds to their educational experience.

Under the Fuels for Schools program, the pilot project schools serve as demonstration models and information sources, gathering monitoring data and hosting tours for interested groups.

Should the pilot program at Norman Elementary be successful, similar boilers may be retrofitted in other White Pine County Schools.



- Richard Brown
Nevada State Office

- Chris Hanefeld
Ely Field Office

Thinning piñon and juniper trees improves the productivity of rangelands by allowing more grasses and shrubs to grow. Thinning also lessens the danger of wildland fire. The

thinned out trees are shredded and hauled to the David E. Norman Elementary School to be burned in a boiler that heats the building.

COMMUNITY SERVICE Two Girl Scouts Take On Four Big Dangerous Mine Shafts

Mining is not a renewable resource. But, many mined lands are getting renewed public interest as places for bike trails and off-highway vehicle recreation. Spruce Mountain, about 40 miles south of Wells, is a case in point. Spruce Mountain was an active mining area from 1869 to 1952, yielding silver, copper, lead, manganese and zinc. There is still some exploration going on, but what is growing exponentially is the public pursuit of recreation.

Abandoned mine shafts are an opportunity for tragedy for public land recreationists.

There are several hundred abandoned mine shafts and mine adits on Spruce Mountain. Some are on private land and some are on active claims. There are about 40 openings known to be on public land.

"Mine shafts are exceedingly dangerous," said Deb McFarlane, BLM Elko Field Office geologist. *"They can be hundreds of feet deep."*



Jenny Giraudo (left) and Christina Martinez post warning signs in front of abandoned mine shafts on Spruce Mountain south of Wells.

Two members of Girl Scout Troop 638 decided to fence four of the shafts as a community service project. **Jenny Giraudo** and **Cristina Martinez**, both of Spring Creek, posted warning signs and fenced four shafts near a road that has a lot of recreational use.

Materials and expertise for the fencing project were supplied by the Nevada Division of Minerals. BLM approved the project and assisted with fence construction.

"This project was a great service to the community and all the people who visit and recreate on Spruce Mountain," said McFarlane.

- Mike Brown
Elko Field Office



Christina Martinez (front) and Jenny Giraudo build a barbed wire fence to warn people of a dangerous mine adit.

PUBLIC LANDS Abandoned Mine Sites: Stay Out, Stay Alive

Outdoor enthusiasts who visit the public lands near Rhyolite, near Beatty, or Perry Canyon, north of Spanish Springs, have 55 fewer hazards to avoid—55 abandoned mine sites in these areas are no longer public safety hazards.

Thirty-seven of the backfilled sites were in Rhyolite, a BLM-managed historic mining town. Abandoned mine sites were backfilled near high-traffic areas such as tourist roads and the cemetery parking area. The remaining backfilled sites were in the Perry Canyon area.

Backfilling operations involved bulldozing the rock and dirt that came out of the mine back to where it came from. In some cases, mine openings will be filled with polyurethane foam to protect cultural resources. Bat gates may be installed at other sites where bats use the shafts and adits as their homes.

The cooperative effort to backfill these abandoned mines was the result of an ever-evolving partnership among state and federal agencies, the mining industry, conservation groups and volunteers. All backfilling operations were funded by donations of time, materials, equipment, and labor from the Nevada Mining Association, Cashman Equipment, and Round Mountain and Chemical Lime mines.

Among the volunteers who donated their work to the project was Dr. Rick Sherwin, noted bat and abandoned mine expert from Christopher Newport University in Newport News, Virginia, and Alvin McClane.

Employees of the BLM, Nevada Natural Heritage Program and Nevada Division of Minerals completed bat surveys and cultural resource clearances.

- Richard Brown
Nevada State Office



BLM photo by Chris Ross

OUTSTANDING

Two Nevada ranchers, **Arnold Settlemeyer** and **Ken Conley**, received Outstanding Rancher awards at the Nevada Cattlemen's Association conference in November. The awards were presented by Nevada Cattlemen's Association member **Bill Wright** and are jointly given by the association, the Bureau of Land Management, the Nevada Farm Bureau, the U.S. Forest Service and the Nevada Department of Agriculture. Two other ranchers were nominated this year that also have exemplary operations: **Stanley L. Hunewill** of Wellington and **Buster Wines** of Ruby Valley. The awards have been given since 1996, with the exception of 1999 when no award was given because of massive wildland fires that affected many ranchers with public land grazing permits.

2005 Arnold Settlemeyer, Minden

Ken Conley, Beowawe

2004 Agee Smith, Elko

2003 Dean Baker, Baker

2002 Wilfred Bailey, Eureka

2001 Fred Fulstone, Smith

Tim DeLong, Imlay

2000 Benny Romero, Wellington

Jack Neal, Ely

1998 Richard Fulstone, Smith Valley

1997 Dan Gralian, Elko

1996 Steven Carter, Lund

Ira H. Kent, Fallon

Dr. Molly Flagg Knudtsen, Reno

Peter Talbott, Battle Mountain

Ken Conley and the Gund Ranch

The Gund Ranch in central Nevada is a typical Great Basin ranch—rugged and dry terrain with an alkali lake bed at lower elevations and punctuated by a few springs as the elevation moves up a mountain slope. Many ranches in Nevada include public rangelands that are attached to the private property.

Unlike many Nevada ranches, the Gund Ranch is operated by the University of Nevada's College of Agriculture, Biotechnology and Natural Resources. The ranch has been in continuous commercial operation since the 1800s and has been operated by the college since 1973. Ken Conley has been the ranch manager for the past 21 years. His job has been to make the ranch a profitable and ecologically sound livestock operation while trying out the latest science and technology innovations. He also works on management techniques to enhance a quality of life issue for ranching families—more free time for recreation, vacations or spending time together. Conley and his wife Beverly know about that, their three children have all grown up on the ranch.

Conley has developed a grazing system that will improve the conditions of watersheds in the Simpson Park Range and will ultimately reduce the need for feeding hay during the winter. He has achieved more efficient use of available forage through an aggressive weed management program, managing hot season grazing to improve riparian plant communities, and improving livestock distribution by shifting to earlier turn

UNDER CONLEY'S GUIDANCE, CALVING RATES ON THE RANCH HAVE INCREASED AND THE CALVING PERIOD IS SHORTER.

RANCHERS

out on uplands. Getting management more in tune with available resources meant moving calving dates to later in the year to better match nutritional needs of animals with the available forage.

Under Conley's guidance, calving rates on the ranch have increased and the calving period is shorter. He worked on narrowing the calving window by breeding in controlled environments like private pastures where there is maximum control over genetics. This close-in, controlled breeding requires fewer bulls to achieve the calving numbers possible on open range.

Managing a ranch with public land grazing and University ownership increases the responsibility to work cooperatively, intelligently and economically. Conley achieves this by promoting a cooperative monitoring program with the BLM to assess progress toward allotment management objectives; works with UNR researchers and BLM to study affects of post-fire livestock grazing on rehabilitated rangers; and conducts livestock industry demonstration programs, such as, implants, vaccines, eartags, record-keeping, estrus synchronization and artificial insemination.

— **Jon Hutchings**

Eureka County Department of Natural Resources, nominated Conley for the Outstanding Rancher award.

Arnold Settlemeyer's Ranch

Arnold Settlemeyer had the good fortune to be born into a family that had a ranch in one of Nevada's most beautiful valleys. His grandfather established

the Settlemeyer Ranch in the Carson Valley in the 1890s. Through the years, the Settlemeyer family took good care of their property. Now, Arnold has put his own stamp of excellence on the ranch with his economic, environmental and social savvy. He is credited with changing the face of agriculture in Nevada over the last 40 years through his leadership on conservation stewardship.

With Arnold's vision, the ranch has developed into a highly diversified agricultural enterprise. He has about 500 brood cows, grows alfalfa and pasture grass hay, as well as garlic seed, onions and carrot seed. He nurtures the natural resources on the ranch, particularly along the Carson River, which is fenced from livestock, and has made numerous bank stabilization and wildlife enhancement improvements. Projects to improve wildlife habitat increased wildlife production and added hunting and fishing resources to the ranch income through the creation of agro-tourism enterprises with a local pheasant/upland game club, fishing clubs and participation in the annual Eagles & Agriculture, a bird watching event that is rapidly growing in popularity.

Ranching continues to be a family affair for the Settlemeyers. Arnold and his wife, Patricia, with their daughter Annalyn, and son James, are achieving the goals they set for themselves: to provide a living for their families while living the ranching lifestyle.

— **Steve Lewis**, *University of Nevada Cooperative Extension*, and **Dan Kaffer**, *Natural Resources Conservation Service*, nominated Settlemeyer for the Outstanding Rancher award.

ARNOLD HAS PUT HIS OWN STAMP OF EXCELLENCE ON THE RANCH WITH HIS ECONOMIC, ENVIRONMENTAL AND SOCIAL SAVVY.

Adopt a Horse in 2006

Cheer up a dreary winter day by marking your calendar for special days in 2006 when you can adopt or participate in a wild horse event. **For adoption requirements and an application, call 1 866-4Mustangs or visit www.wildhorseandburro.blm.gov.** The horses shown in these photos are bridle and saddle trained by inmates at the Warm Springs Correctional Center and will be offered for adoption at the Correctional Center adoptions.

- Maxine Shane
Nevada State Office



Warm Springs Correctional Center, Carson City

Three dates have been selected for saddle horse adoptions at the Warm Springs Correctional Center in Carson City. The inmate-trained wild horses will be offered for adoption by oral, competitive bid on Feb. 11, June 3 and Oct. 14. All of the geldings have about 120 days of training. These Saturday morning events begin with a chance to view the horses and talk with the inmates, followed by a parade in which all the trained horses strut their stuff. Each animal is showcased by the inmate as the auctioneer and trainer give qualified bidders information on each animal. Photos of the animals are posted on BLM Nevada and Silver State Industries websites prior to each adoption, www.silverstateindustries.com.

National Wild Horse and Burro Center, Palomino Valley

The National Wild Horse and Burro Center at Palomino Valley, 20 miles north of Sparks on the Pyramid Lake Highway, will help you forget the tax day blues with its special adoption on Saturday, April 15.

The Center will also be open all day on August 18, 19 and 30 during the Western States Wild Horse and Burro Expo which returns to the Reno Livestock Events Center. The April 15 adoption will be by silent competitive bid, while the August event will be a walk-up event.

The Center, which is the BLM's largest preparation facility, has expanded services to accommodate adopters. It is open Saturdays from 8 a.m. to noon, as well as weekdays from 8 a.m. to 4 p.m. You can look over the selection of horses and burros which have been gathered from Nevada rangelands and then make an appointment to adopt directly from the Center for \$125 per animal.



Horse of the Week

Want to see the Horse of the Week at Palomino Valley? Sign up with Michael_Myers@nv.blm.gov and he will e-mail you a photo and information on the animal. Each week Myers, the Center's assistant manager, features a different horse. Occasionally Center volunteers gentle and train an animal, especially an orphan, which is then available for adoption.



ADOPTIONS

Warm Springs Correctional Center

Feb. 11
June 3
October 14

National Wild Horse and Burro Center, Palomino Valley - Special adoptions

April 15
August 18, 19 and 30

Ongoing adoptions

Weekdays 8 a.m. to 4 p.m. and
Saturdays 8 a.m. to noon

NEW CULVERTS

Swimming Upstream Easier Now

Populations of threatened Lahontan cutthroat trout, spotted frogs, and other aquatic species are getting a major boost for survival with the completion of an extensive culvert replacement project in northeastern Nevada.

Newmont Mining, in cooperation with the BLM and other partners, replaced culverts on Coyote Creek, Little Jack Creek, Beaver Creek, and Maggie Creek about 25 miles north of Carlin. The partners include Trout Unlimited, TS Ranch, Maggie Creek Ranch, Elko County, Eureka County, Nevada Department of Wildlife, Barrick Goldstrike Mines, Inc., and the U.S. Fish and Wildlife Service. The cost of the project was about \$250,000.

"The old culverts stopped fish and other aquatic species from moving upstream," said Carol Evans, BLM Elko fisheries biologist and co-project coordinator, *"because the downstream height of the culverts above the stream channel created an impassible waterfall in most locations."*



Beaver Creek during spring runoff. The height of the "waterfall" creates a barrier that prevents fish and other aquatic species from swimming upstream.

The culverts are designed to maintain a natural channel inside the culvert which simulates the stream bed. Now, the downstream end of the culverts is the same level as the stream channel which allows fish and other species to travel throughout the Maggie Creek system including the tributaries during spring runoff.

"This is a tremendous project with long-term benefits for all aquatic species," said Evans, *"It is especially beneficial for the Lahontan cutthroat. There are isolated populations of cutthroat in the Maggie Creek system and isolated populations are vulnerable to extinction. The new culverts will allow these isolated fish populations to reconnect,"* said Evans.

The new culverts were designed by Porior Engineering in North Bend, Oregon, and installed by LeGarza Exploration, Inc. of Elko. The culverts are expected to withstand floods much better than the old culverts, so it is less likely that roads will wash out.

The culverts replacement projects are part of a larger effort to restore habitat for the Lahontan cutthroat trout in the Maggie Creek Basin. In 1993, Newmont Mining, in cooperation with BLM, developed the Maggie Creek Watershed Restoration Project which focused on improving stream and riparian habitat conditions as mitigation for

Newmont's South Operations Area Project. Trout Unlimited is conducting studies to evaluate the effectiveness of the restoration work.

- Mike Brown
Elko Field Office



The new culvert at Beaver Creek is the same level as the natural stream channel. Gravel inside the culvert slows down the water and allows fish to swim upstream more easily. Culvert project engineer Don Porior of North Bend, Oregon, shows the size of the new culverts.

DAM REPAIRS

Onion Reservoir Drained and Access Restricted

A popular destination for fishing, camping and hiking in the Pine Forest Range is closed temporarily. Repairs on the dam at Onion Reservoir required the reservoir be drained. The reservoir and the dam, about 70 miles northwest of Winnemucca, are on public land. But the improvements are authorized under a right-of-way agreement to the Alder Creek Ranch to provide water for agricultural use. The ranch owners hold the water rights. They have kept water levels high enough to support a fishery.

The dam is in need of routine, periodic maintenance and the outflow pipe valve requires repair. The Nevada Division of Water Resources is working with the landowner to assure that the dam is properly repaired. The Nevada Department of Wildlife removed and relocated as many sport fish as possible before the reservoir dried up.

In addition to repairing the valve, other work includes removing accumulated sediment from the bottom of the reservoir and adding new material, earth and rock, to the dam to re-establish its designed strength. If the work can be completed before winter sets in, the reservoir could refill by late next spring. If the work cannot be completed by then, the amount of water in the reservoir could remain low through the summer.

While the dam repair work is going on, the main access road up from State Highway 140, Blue Lakes Road No. 2014, will be blocked at the north end of the reservoir. Access to the Onion Valley camping area will be available only from the west on Sand Basin Road No. 2083.

- Jamie Thompson
Winnemucca Field Office

Robot car Stanley is first to cross the finish line in the Defense Advanced Research Projects Agency (DARPA) Grand Challenge. Stanley, a 2004 Volkswagen Touareg, is the Stanford University team's entry in the contest, which was established to foster the development of autonomous vehicle technology. Guided only by global positioning satellite waypoints, Stanley finished the 132-mile course in 6 hours and 53 minutes. The Stanford team received \$2 million for having the first robotic vehicle to complete the course that began and ended near Primm, south of Las Vegas. Three of 23 entrants finished the course. In the photo, Stanley is followed closely by a DARPA chase vehicle equipped with a kill switch to stop the vehicle in an emergency. The BLM's Las Vegas Field Office worked with DARPA under a memorandum of agreement to hold the race on public lands.

- **Kirsten Cannon**, *Las Vegas Field Office*



Photo courtesy of **William Brandom**

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