




Southern Nevada Agency Partnership



Overview of Accomplishments
December 2008

Southern Nevada Agency Partnership



Who are we?



Bureau of Land Management



National Park Service



U.S. Fish and Wildlife Agency



USDA Forest Service

“We work with each other, our communities and our partners to conserve and enhance the Federal Lands of Southern Nevada for current and future generations.”

SNAP Legacy Statement, 2007

Since 1997, the Southern Nevada Agency Partnership (SNAP), a partnership of federal land professionals from the U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service and the National Park Service, has been working to coordinate the protection, conservation and use of the federal lands of Southern Nevada. The accomplishments that

follow reflect the long-term commitment to collaboration by the four SNAP agencies.

Resource-Rich Southern Nevada

At first glance Southern Nevada may appear as nothing more than endless, empty desert. However, those who take a second look are never disappointed. It’s here, in an area the size of the states of Connecticut, Massachusetts and Delaware combined, where you’ll find the nation’s largest national recreation area ([Lake Mead](#)), the largest national wildlife refuge outside of

Alaska (**Desert**), the first national conservation area (**Red Rock Canyon**) and three of the four North American desert ecosystems. Life, culture and history are just some of the rich resources of the federal lands of the Las Vegas Valley.



Deadman Canyon/Hidden Forest, Desert National Wildlife Refuge

Southern Nevada is a living archive of over 10,000 years of human history, home to unique ecosystems and a lively assortment of outdoor activities. Within the lands are ancient Bristlecone Pine trees (**Mount Charleston**), pre-historic human occupation sites (**Sloan Canyon**), the forested spring-fed “oasis” (**Spring Mountains**),

alkaline desert uplands, spring-fed wetlands and the largest contiguous block of habitat for desert bighorn sheep in the United States. Species such as Moapa dace, razorback sucker, Ash Meadows sunray, desert tortoise, Las Vegas bear poppies and other plants and animals found nowhere else in the world survive and thrive here. Recreational opportunities include kayaking, mountain biking, wildlife photography, hiking, skiing and more.

Challenges and Opportunities

Unprecedented population growth with up to 5,000 new residents per month, urbanization throughout Clark County coupled with 38 million annual visitors to Las Vegas Valley, have changed and increased recreational use of federal lands. This creates opportunities and challenges for the agencies managing these lands.

More visitors mean more opportunities to introduce people to their federal lands and engage them in stewardship and volunteer projects. With Clark County having the fifth largest school district in the U.S., the opportunity to use wildlife refuges, parks, forests and other public lands as classrooms to connect children with the natural world is endless. Connecting youth directly with natural and cultural resources increases understanding of their significance, and develops a stewardship ethic in these future leaders.

Enhanced stewardship is a key to overcoming the challenges that accompany increased discovery of the rich resources of the vast federal lands in Southern Nevada. Challenges include litter, graffiti, desert dumping, theft and vandalism of

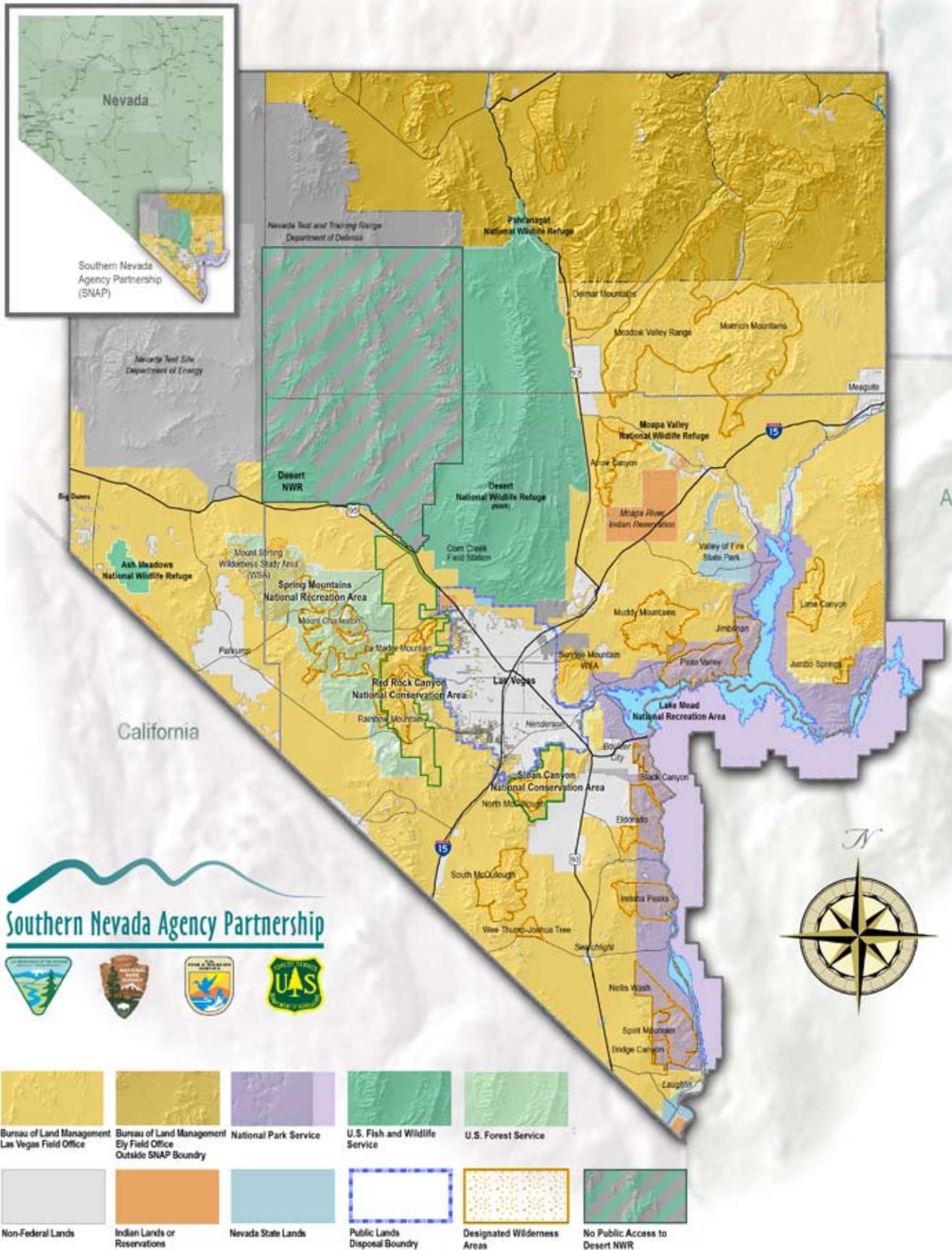


Volunteer restoration project

cultural resources, disturbance of fragile desert soils by illegal off-highway vehicle use and the accidental introduction of exotic species into natural plant communities.

Stewardship:

Taking personal responsibility to actively care for and protect public resources for future generations



Collaboration is Key

To address these common challenges, the four federal agencies that make up SNAP create a culture of collaboration. Fourteen teams of biological and restoration scientists, archaeologists, law enforcement officers, educators, recreation planners, computer specialists and senior managers are reaching across bureaucratic lines and shaping new ways of caring for resources in Southern Nevada. They have engaged others to join them by partnering with organizations such as the Southern Nevada Conservancy, State Historic Preservation Office, and the Outside Las Vegas Foundation. The University of Nevada Las Vegas emerged as a natural community partner with SNAP in 2004. The University created the Public Lands Institute to work with land managers in Southern Nevada, and across the nation. The Institute has become an academic leader in creative land management practices.

“I have been privileged to be a small part of this multi-faceted partnership since 1998. I have seen the members display uncommon commitment to the long-term success of this partnership.”

Bill Dickinson, SNAP Board Member
National Park Service, 2005

Funding for projects comes from grants, donations and special legislation. Several years after SNAP was formed, Conservation Initiatives were legislated as an addendum to the Southern Nevada Public Land Management Act. This event allowed the SNAP Teams to secure significant funds to support specific SNAP programs.

SNAP Teams and Projects

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In 2008, SNAP and its partners entered into their second decade of working collaboratively on behalf of the rich federal resources of Southern Nevada’s treasured landscape.

Anti-Litter and Desert Dumping Team Accomplishments



“This is a cause so important to me and those generations of Nevadans yet to come.”

U.S. Senator John Ensign, Nevada, 2008

As a result of the rapid growth in population in the Las Vegas Valley, litter and desert dumping became pervasive on SNAP managed lands. In addition to damaging the natural beauty of the landscape, hazardous litter (e.g., drug paraphernalia, automobile batteries, used motor oil, and recreational vehicle dumping) poses a threat to humans and animal and plant species. Individual agencies were effective with localized clean-ups on a small scale. However, factors such as minimal recycling programs

and lack of public education inhibited capacity to solve the problem on a long-term, landscape wide basis.

This SNAP Team took action to create a unified, community-based anti-litter partnership program covering over eleven million acres of federal land. From producing litter bags to sponsoring events to designing an effective public website (www.DontTrashNevada.org), this Team continues to build public understanding and

appreciation for the desert and forest environments, and to increase awareness of the adverse effects caused by litter.



Desert Dumping before clean-up



White Mountain Volunteer Clean-up, 2007

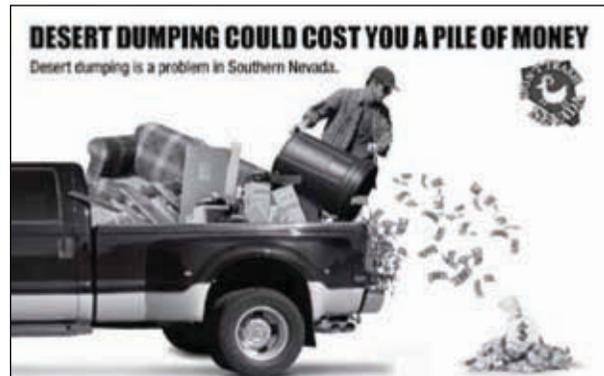
Don'tTrashNevada.org Website

Launched in 2006, the Don't Trash Nevada official website shares information related to illegal dumping and litter prevention, scheduled clean-up events, recycling and household hazardous waste management. Nearly 900 people have taken the online anti-litter pledge so far. Traffic to the site has shown a steady increase, with 618,000 web visitors last year.

Messaging

The Don't Trash Nevada campaign continues to run media on television, radio, newspaper, magazines, bus stops, billboards and Spanish

language media outlets. The campaign added messaging that targets contractors and residents. Phase II of the messaging campaign featured a new public outreach event, Don't Trash Nevada Day, held at Red Spring Picnic Area in the Red Rock Canyon National Conservation Area in 2008. Local newspapers and television covered the event which helped spread the word about litter and dumping prevention.



2008 anti-desert dumping advertisement

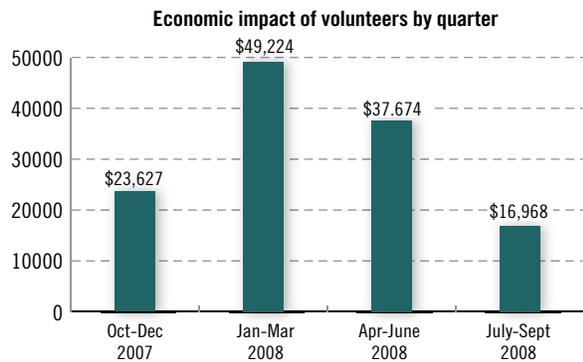


In 2008, messaging was expanded to the Spanish speaking community.

Clean-Ups

One way this Team makes a difference for federal lands is by organizing and conducting litter and dump site clean-up events. In 2008, the Team worked with 1,485 volunteers who donated over 6,500 work hours on 35 different clean-up projects. The volunteer time donated has an economic value of \$127,493. Volunteers

removed 2,368 cubic yards of waste from our federal lands. Seven cleanups were coordinated with new partners such as the Great Basin Institute, Spring Mountain Youth Camp and Nevada Division of Forestry, for an additional 254 cubic yards of waste.



Outreach

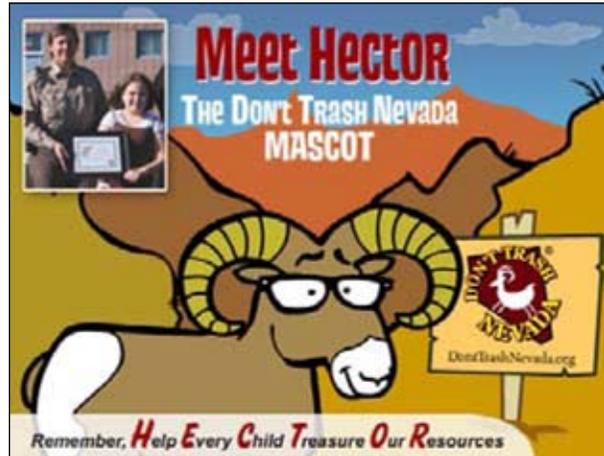
The anti-litter message continues to be promoted through public outreach events and attracts positive media coverage. The Team attends events to speak with people about the program, sign people



Don't Trash Nevada Day, May 31, 2008

up for the pledge, answer questions, distribute promotional materials and network with potential partners. The Team participated in many local environmental events and activity fairs this year including the Summerlin "EarthFaire", Public Lands Institute Open House, HSBC World Environment

Day, University of Nevada Las Vegas student orientation, and Henderson Trail Days.



HECTOR, the desert bighorn sheep, mascot of the Don't Trash Nevada 2008 messaging campaign, was named by O'Roarke Elementary School student Jacey Caulfield, shown with BLM Southern Nevada District Chief Ranger Schumacher (inset).

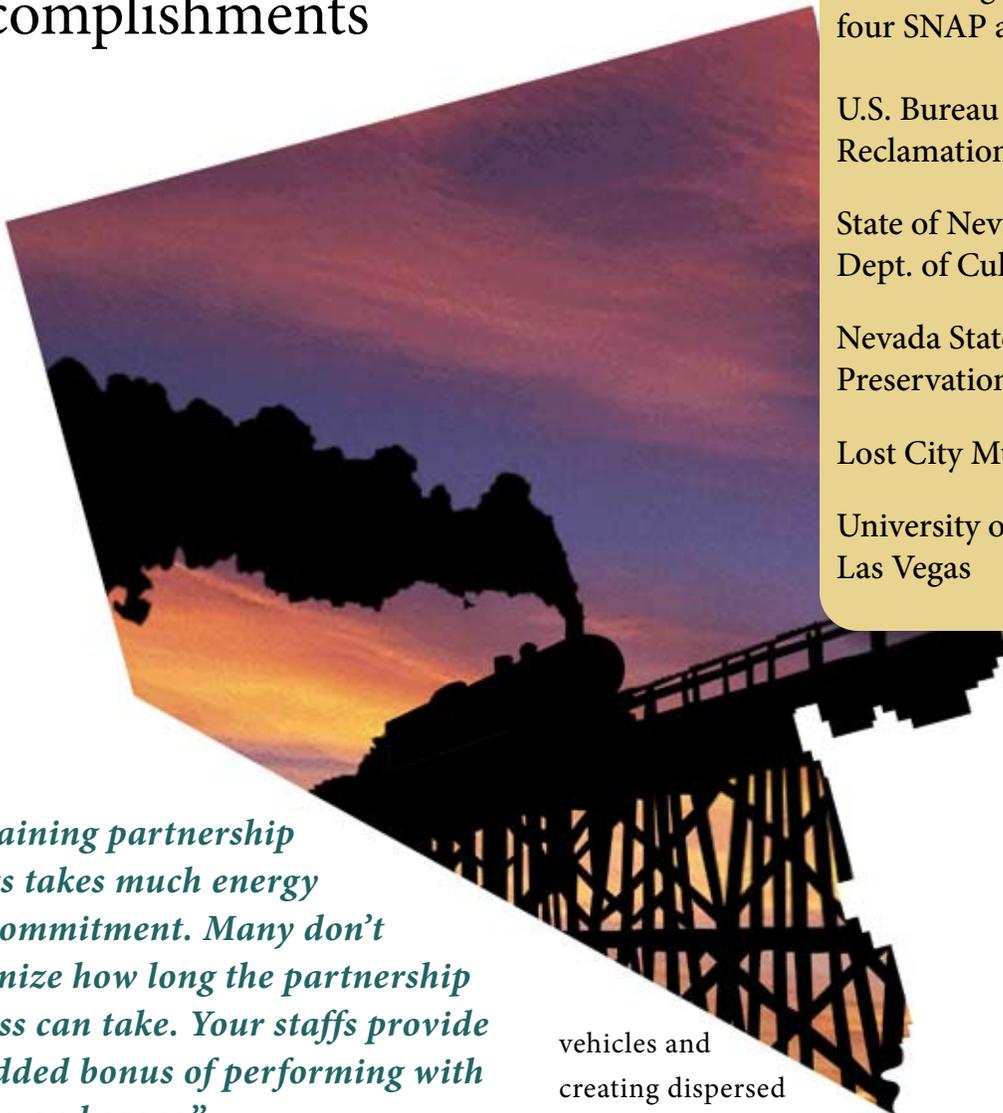
"Since its inception, Take Pride in America in Southern Nevada has picked up enough waste that, if stacked, would reach a height 11 times higher than the Stratosphere on the Las Vegas Strip."

U.S. Senator John Ensign, Nevada, 2008

If each cubic yard of waste removed by the anti-litter team were piled on top of each other, the stack would reach 7,104 feet high.



Cultural Resources Team Accomplishments



Who are the Partners?

Archaeologists from the
four SNAP agencies

U.S. Bureau of
Reclamation

State of Nevada
Dept. of Cultural Affairs

Nevada State Historic
Preservation Office

Lost City Museum

University of Nevada
Las Vegas

“Sustaining partnership efforts takes much energy and commitment. Many don’t recognize how long the partnership process can take. Your staffs provide the added bonus of performing with humor and grace.”

Jennifer Eberlien
Interagency Service First Coordinator
Washington D.C., 2008

The people of Southern Nevada are genuinely interested in America’s heritage, and yearn for opportunities to explore and experience the cultural and natural environment around them. Burgeoning population growth resulting in accelerated development threatens the integrity of Clark County’s cultural resources through unwitting activities such as using off-highway

vehicles and creating dispersed campsites, along with illegal looting and vandalism.

These activities result in irreparable loss of artifacts and thousands of dollars worth of damage to prehistoric and historic sites. Cultural resource professionals formalized their collaborative efforts under the SNAP banner in 2006. With additional resources from Southern Nevada Public Land Management Act, the Team doubled their efforts to identify, evaluate, protect and educate the public about important cultural resources both on land and

in water. Fascinating information about these resources can be shared with the public while still keeping them protected from inadvertent and malicious damage. Respect for the fragile, nonrenewable, and sacred qualities of remnants of our collective heritage continues to build.



Historic photo of “Ragtown” where families of workers at Boulder Dam lived in temporary shelters

Understanding our Past

An important goal is coordinating efforts to survey cultural resources across boundary lines, and create a comprehensive understanding of our collective human history in Southern Nevada. A centralized database of cultural resources sites and reports, called the Nevada Cultural Resources Inventory System, is under development in partnership with the Nevada State Historic Preservation Office. All research on Native American life at the time of Euroamerican contact in Southern Nevada is being compiled and synthesized into a reference guide for consultation with affiliated tribes.

Archaeological Field School

The Lost City is a large complex of prehistoric Puebloan sites along the lower Muddy River, now the Overton Arm of Lake Mead, initially reported in the early 1930s. Through cooperative agreements with the University of Nevada

Las Vegas, an archaeological field school was conducted to identify Lost City remains using current technology, such as remote sensing. This research provides information on the impacts of fluctuating lake levels on cultural resources and a better understanding of how prehistoric people lived in a harsh desert environment.

Exhibits

The Lost City Museum opened the “Southern Nevada Landscapes of Change” exhibits featuring work from the SNAP Cultural Resource Team. The Grand Opening was a main event during Nevada’s Archaeology and Historic Preservation Month in 2008.

New Surveys

The town of St. Thomas, originally settled by Mormons in 1865, was inundated by Lake Mead in 1938 after the completion of Hoover Dam. As lake levels dropped, archaeologists were provided the opportunity to study newly exposed



A view of St. Thomas in 2008

site remains. St. Thomas is being managed as a heritage tourism site with trails, brochures and interpretative signage in the works. It routinely receives local and national media coverage.

Submerged Resources

The National Park Service Submerged Resources Team is surveying and documenting historic resources beneath Lake Mead and Lake Mohave. Findings include remains associated with the construction of Hoover Dam, for example, railroads and a gravel plant, along with a World War II era B-29 bomber. The bomber is now a



Divers, after undergoing special training, can explore the underwater site.

heritage tourist site with a diving stewardship program in place. This work, including SNAP's partnership with the Woods Hole Oceanographic Institute, is featured in a History Channel program.

Corn Creek Railroad Tie Cabin

The U.S. Fish and Wildlife Service recently received recognition from the Nevada State Historic Preservation Office for its "contribution to the preservation of Nevada's rich heritage" at Desert National Wildlife Refuge.



Visitors to Corn Creek can visit the historic railroad tie cabin

The refuge rehabilitated the historic Corn Creek railroad tie cabin, dating from the 1920's, built with ties scavenged from the discontinued Las Vegas and Tonopah Railroad.

"Partnerships are not always easy. In order to get through the difficult issues year after year, partnerships require a high level of skill in communication, collaboration and a dedication to purpose. The Southern Nevada Agency Partnership (SNAP) displays these qualities every day in a wide array of ongoing projects and programs."

Department of Interior Award Nomination, 2005

Vision:

The SNAP Cultural Resources Team's vision is to enhance knowledge of heritage resources throughout Southern Nevada, based on strong science, research, and sociological processes that contribute to comprehensive heritage tourism and public outreach programs that provide awareness and advocacy for the protection and enjoyment of heritage resources now and in the future.

Cultural Site Stewards Team Accomplishments

Service First is a Government initiative promoting interagency partnerships. Service First has three broad goals: improve customer service, increase operational efficiency, and enhance land stewardship, resource protection and conservation.

“Service First is a vibrant initiative with great potential. The SNAP is congratulated on their selection from a very competitive pool of nominations.”

James Caswell, Director,
Bureau of Land Management, 2007

Priceless resources on federal lands are being damaged by inappropriate off-highway vehicle use, looting and vandalism (more on page 9). This SNAP Team created an “adopt a cultural site” program to recruit and train volunteers to act as stewards for areas of special concern. Through this program, Las Vegas Valley residents can become engaged as protectors of important sites managed by SNAP agencies. Volunteer stewards also have a

voice at the table through an ex-officio representative on the SNAP Team.

Often driving miles of dusty dirt roads to reach sites sometimes hundreds of miles from their residence, Site Steward Volunteers donate time and personal funds to monitor, document, photograph and provide a watchful eye on pre-historic and historic sites. From retired professional archaeologists to folks just keenly interested in the heritage of Clark County, volunteers do important work to care for valuable cultural

resources. Increased understanding, cooperation and partnership among federal and local agencies, Native Americans and concerned citizens are intangible benefits of this program, one of the most successful in the Southwest. The work of these volunteers is so highly recognized for its value that SNAP will be creating other citizen steward programs.

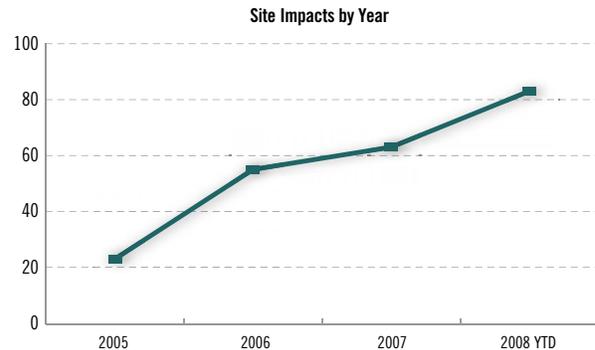


A site steward negotiates a difficult path to a rock shelter.

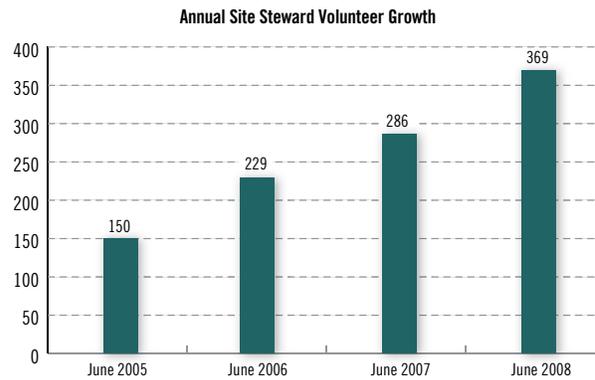
Volunteer Training

From its inception in December 2004, the Team has trained 365 volunteers both in the classroom and in the field. After completing training, Stewards are assigned their adopted site based on their interest and expertise. A minimum of three basic stewardship classes are offered each year, with

additional enrichment classes to deepen stewards' knowledge base.

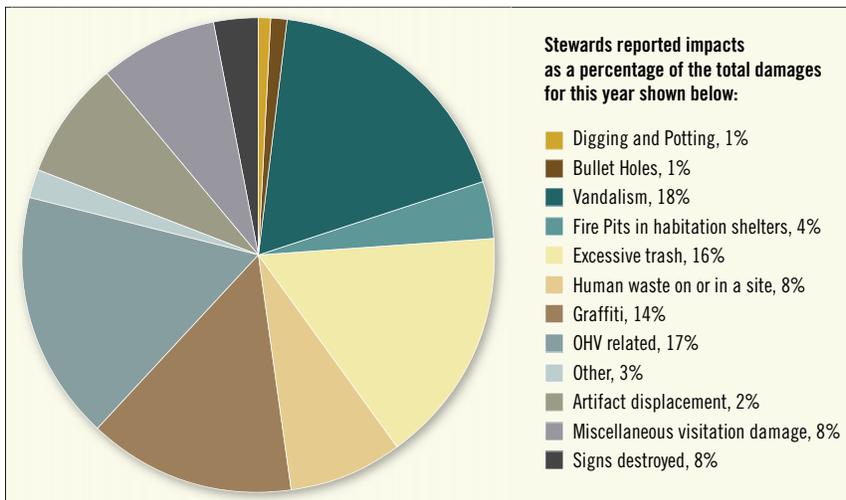


Reports of site impacts have increased each year reflecting both the subsequent expansion of the program's monitoring capability and the population growth of Clark County.



Monitoring and Reporting

During the last twelve months, stewards donated more than 3,270 monitoring hours to SNAP and reported 63 significant cultural site



impacts. Site Stewards visit their areas at least four times a year. Their reports are entered into a unique relational database which contains information about the areas being monitored (i.e. location, type of resources, managing agency), steward information (i.e. contact information, hours donated



Petroglyphs interpreted as depicting desert tortoises.

and areas monitoring) and monitoring reports. Content of the database system is cumulative, maintained in perpetuity and is the only one of its kind in the Southwest. The Team reports the results of monitoring activity to the agencies on a quarterly basis. If Site Stewards report finding a damaged site, however, the information is immediately reported so that corrective actions can be taken.

Caught on Film

In early summer 2008, three SNAP Cultural Site Stewards hiking deep in a remote mountain wilderness observed a commercial helicopter illegally landing on and taking off from archaeological sites. The pilot set the helicopter directly on the roof of an ancient habitation shelter, then circled away unaware that the three Stewards were photographing him from less than one hundred feet away. The Stewards contacted law enforcement who pursued both the pilot and the commercial flight organization.

Due to the confidential nature of site location information, Stewards sign a Code of Ethics agreeing not to disclose site location information before participating in the program.



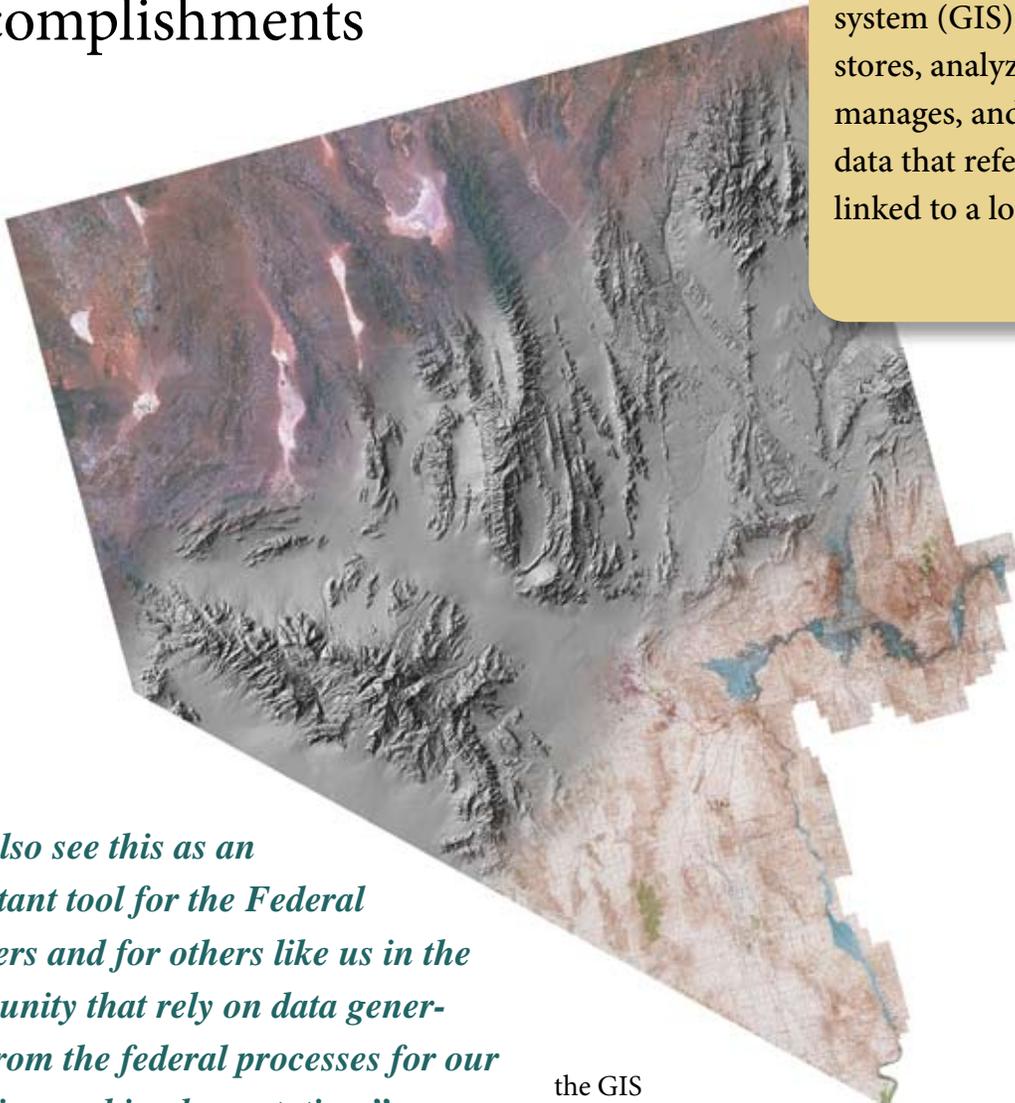
Sites are often in remote locations.

GIS and Data Management Team Accomplishments

What is GIS?

A geographic information system (GIS) captures, stores, analyzes, manages, and presents data that refers to or is linked to a location.

Wikipedia



“We also see this as an important tool for the Federal Partners and for others like us in the community that rely on data generated from the federal processes for our planning and implementation.”

Alan O’Neill, Executive Director
Outside Las Vegas Foundation, 2004

It became clear that there was a need for an informational bridge across agency lines for spatial data, tabular data, images and documents (More on page 17). The mission of this SNAP Team is to develop a seamless, transparent data management system that serves the needs of the SNAP team, agencies and partners. Teams are better able to make more efficient decisions and implement projects faster due to increased knowledge using

the GIS information.

Data collection and management standards were developed that enhance the common framework for all SNAP and multi-partner projects. Long-term stewardship for the data and informational products will also be provided.

Partners in the project include the University of Nevada Las Vegas (UNLV) departments, including the Public Lands Institute, National Supercomputing Center for Energy and the Environment, Harry Reid Center for Environmental Studies, Center



SNAP communications center dispatcher monitors federal lands in Southern Nevada.

for Cybermedia Research, and Departments of Computer Science and Geoscience, who provide personnel, technical expertise, resources, and project experience.

Assessing Capacity and Needs

In 2008, the Harry Reid Center for Environmental Studies at UNLV completed an Environmental Needs Assessment with thirteen SNAP Teams. This provides to the GIS Team a better understanding of the types of GIS data needed for a variety of SNAP Team projects. An assessment of spatial data currently held by each agency will be completed in January 2009, with assistance from the U.S. Geologic Survey. Results of both assessments will be used to guide development of collaborative systems for sharing spatial data and other GIS information.

Building Capacity

Capacity to manage GIS data has been built over the past three years within each of the agencies through GIS training. Classes in data management and stewardship (2006), beginning GIS (2007), intermediate GIS (2008) and metadata creation (2008) have been offered with GIS experts from the Bureau of Land Management, Nevada State Office and U.S. Geological Survey. Classes in beginning GIS will be offered again in early 2009.

Improving Resource Protection

In 2007, Positron Public Safety Systems was contracted to install an updated Computer Aided Dispatch (CAD) system within the Interagency Dispatch Center at Lake Mead National Recreation Area. This new CAD system utilizes GIS data from the agencies to provide an improved interface for dispatchers to direct ranger activities in the field and to track incidents. In addi-

tion, the new CAD system provides a new, robust reporting capability which will allow the agencies to review and analyze resource-related incident data to better understand these incidents and to improve response and resource protection. More data terminals will be installed in ranger vehicles within each agency and tie in to the new CAD system. This will enable rangers in the field to



SNAP Resource Protection and Law Enforcement officers will soon be aided by in-vehicle data terminals.

utilize agency GIS mapping data for improved response and resource protection.

Developing Collaborative Systems

Collaborative systems for sharing data, information and documents among agencies, SNAP Teams and the Board of Directors is being developed. In 2008, the Team began discussions with personnel from Environmental



Using data supplied by GIS, volunteers help to restore wetlands

What is Tabular and Spatial Data?

Tabular data refers to any data in a table, such as spreadsheets and databases. Examples of spatial data are features that can be described by a point, line or polygon. These features can be both physical like a tree (point), road (line) or building (polygon), and nonphysical like meeting spot (point), state line (line) or study area (polygon).

Wikipedia

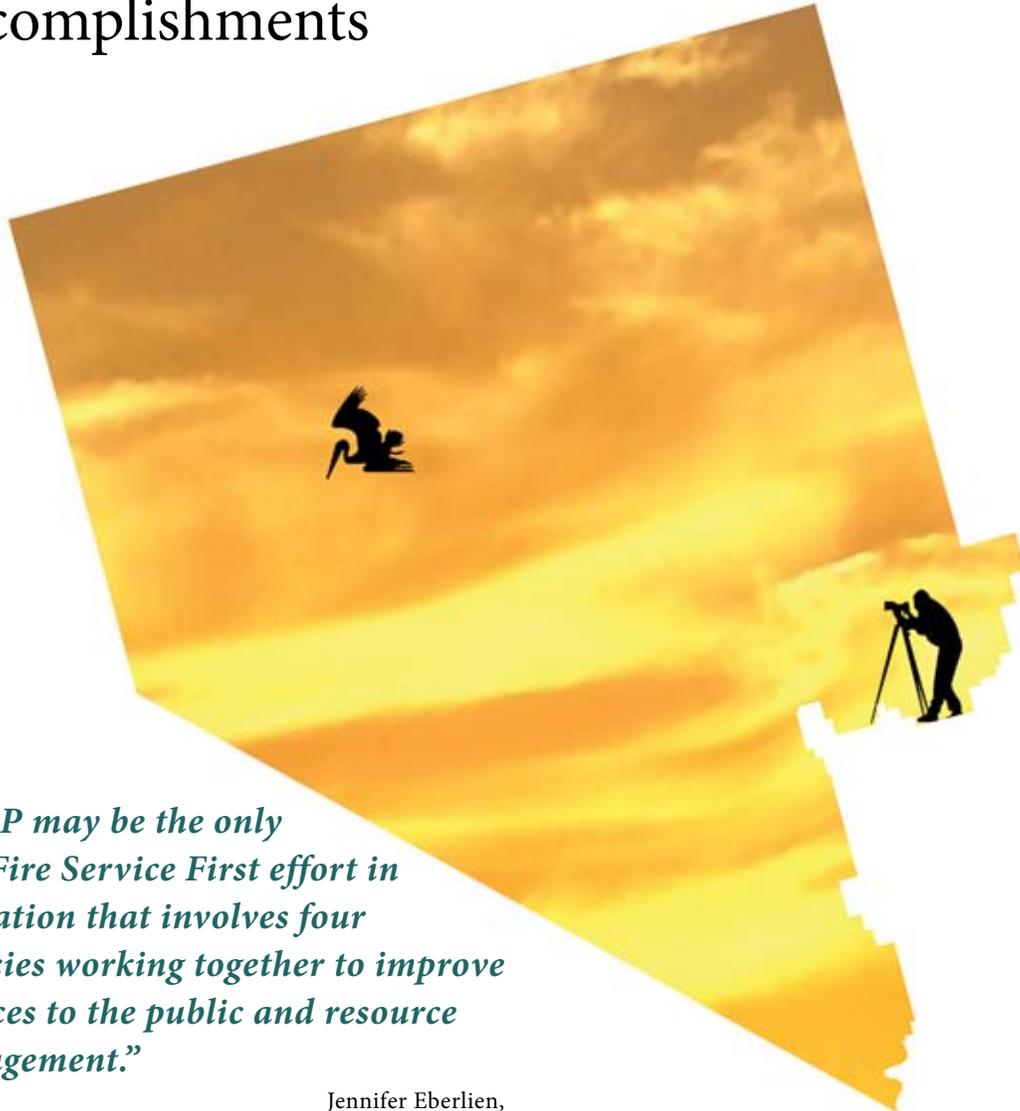
Systems Resource Institute to develop a similar system to share spatial data among SNAP participants. The GIS Team is currently working with the director of the National Supercomputing Center for Energy and the Environment at UNLV on a proposal to deploy both of these collaborative systems on Supercomputing Center computers in support of SNAP activities. Implementation will begin in 2009. The GIS Team has been working with the Restoration Team along with the U.S. Geological Survey and the Harry Reid Center for Environmental Studies over the past three years to help develop interagency standards for collection of disturbance and restoration data. A prototype electronic field data collection system was developed. This system, along with a common database for interagency restoration data is currently being updated and is expected to be operational in 2009.

“SNAP brings a shared understanding of each agency’s mission, and builds stronger relationships. The benefit of working so closely with the other agencies is immeasurable.”

Mary Jo Rugwell
SNAP Board Chair

Bureau of Land Management, 2008

Natural Resources Team Accomplishments



“SNAP may be the only non-Fire Service First effort in the nation that involves four agencies working together to improve services to the public and resource management.”

Jennifer Eberlien,
Interagency Service First Coordinator,
Washington D.C., 2008

In May 2007, the SNAP Board of Directors approved the recommendations for a task force to form the first SNAP Natural Resources Management Team. The Team’s main mission is to coordinate and integrate, where appropriate, landscape-wide natural resource management issues in Southern Nevada.

Their efforts will result in a more comprehensive understanding of the natural resources

managed by the four agencies. In addition, more efficient and consistent natural resource management programs, leveraged funding and standardized methodologies will be developed. The efforts of this Team will result in better management of natural resources and improved resource quality across Southern Nevada.

The scope of the SNAP Natural Resources Team is broad. It includes wildlife, botany, soils, hydrology, geology, air quality,



Desert bighorn sheep herds are tagged and monitored for research purposes.

rare plants and animals, inventory and monitoring, abandoned mine lands, restoration, fire related natural resource programs, non-native and invasive wildlife, pest and vector control and other natural resource programs as collaboratively determined. The Team will work across agency boundaries and implement projects as appropriate on all lands managed by the four SNAP agencies in Southern Nevada.



Water and natural springs are important resources in desert environments.

Team goals include developing priority regional source or baseline maps, reducing duplication of management efforts and providing recommendations to the SNAP Board of Directors on natural resource needs and priorities.

Ecosystems of Southern Nevada

Alpine – herbaceous, high-altitude tundra vegetation generally above timberline.

Bristlecone pine – evergreen conifer woodland on exposed, dry rock slopes and ridges. Occur in the Spring and Sheep Mountains. Elevation 9,000-11,500 feet.

Mixed conifer – includes white fir, ponderosa pine and pine/mountain shrub communities. Occurs in the Spring and Sheep Mountains.

Piñon-juniper – mountain shrub, piñon and juniper community types. Elevation 4,900-8,200 feet.

Sagebrush – sagebrush/perennial grass communities. Occurs in the Spring, Sheep and Virgin Mountains. Elevation 4,900-9,200 feet.

Blackbrush community – occurs on upper bajadas (alluvial fans), slopes and valleys. Elevation 4,500-5,900 feet.

Salt desert scrub – mosaic pattern within stands of creosote-bursage and blackbrush communities. Elevation 3,250-5,800 feet.

Mojave Desert – most widespread ecosystem in Clark County, with Mohave mixed scrub and creosote-bursage as major plant communities.

Mesquite and catclaw community – nested within Mojave Desert scrub biogeographically.

Desert riparian/aquatic – associated with rivers and streams. Virgin and Muddy Rivers, Las Valley Valley Wash and Colorado River. Elevation below 4,000 feet

Perennial springs – more than 500 known warm and cold water springs widely distributed from high mountains to low deserts. They range from small pools to spring-fed rivers such as the Muddy River.

Recreation and Off-Highway Vehicle Use Team Accomplishments

Enjoying the Outdoors

Skiing, mountain biking, hiking, off-highway vehicle and all-terrain vehicle riding, picnicking, swimming, camping, bird watching, kayaking, rock climbing, cliff rappelling, hunting, virtual geo-caching, wildlife observation, photography, fishing, recreational boating, backpacking, scuba diving, horseback riding

“We will leave a legacy of interagency collaboration in the planning and management of interconnected and sustainable recreational opportunities, facilities and services honoring the natural setting and complementing the quality of life in Southern Nevada.”

Recreation Team Vision, 2007

Southern Nevada is one of those special places where you can snowboard in the morning, swim in the afternoon and end the day gazing at a distant vista. A recreational mecca for the Las Vegas Valley since the 1950s, facilities on the surrounding federal lands have become outdated, and struggle to meet the needs of today’s

visitors.

The SNAP

Recreation/OHV Team

was formed to address these problems and, together, determine where and how to meet the needs and interests of twenty-first century visitors to SNAP lands and water. Through the interagency context, this Team envisions a suite of complementary recreational services using a strategy that avoids construction of competing facilities and recreational infrastructure.

Initially, very little data existed about the demographics, activity patterns, experiences and

values of visitors to Southern Nevada. Critical information regarding visitor preferences and expectations was not available to guide major planning efforts for new facilities. It was also necessary to identify primary trail corridors on federal lands that create new links to adjacent communities. This need was particularly acute in the urban interface zone where trail connections must be identified before the land is committed to residential development.

In 2007, the Team and the SNAP Board participated in a collaborative visioning session where a vision, mission and operating mandate were developed. The Regional Recreation Strategy Market Analysis, which will provide guidance



Hiking in the Spring Mountains National Recreation Area

regarding recreation niches for each agency and logical locations for future facilities that address the demands of the larger community, was proposed. This key next step will result in a landscape-based regional approach to determining appropriate recreation services for each agency. Las Vegas Valley residents and visitors will be better able to safely recreate and enjoy their federal lands.

National Visitor Use Monitoring Survey

Building on the success and approved survey protocol used by the USDA Forest Service in the Spring Mountains National Recreation Area, this SNAP Team coordinated visitor use surveys on lands managed by the other three SNAP agencies. The survey collects information about visitor usage and satisfaction, and helps recreation planners develop facilities that better meet visitor needs. A final report and recommendations is expected in 2009.

Off-Highway Vehicle (OHV) Outreach and Awareness Program

The SNAP Recreation Team, in collaboration with SNAP Educators and the Resource Protection and Law Enforcement Team, is developing an interagency OHV Strategy and Outreach Program that aims to meet the needs of OHV enthusiasts while maintaining sustainable landscapes. The program informs the public about OHV recreational opportunities and responsible use, builds partnerships between federal agencies and OHV users, and reduces negative impacts on resources caused by inappropriate OHV activity.

The U.S. Forest Service has been a leader in this effort by implementing their Travel Management and OHV Program. Routes at the Spring Mountains National Recreation Area have been designated, mapped and signed, which has greatly reduced illegal OHV use. The next step is to develop user maps, a logo and educational messages.

Southern Nevada Open Space and Trails Summit

The Outside Las Vegas Foundation, a local non-profit and SNAP partner, organized the historic



ATV rider on designated trail.
Inset: Deputy Forest Supervisor Phillips signs Statement of Intent.

Southern Nevada Open Space and Trails Summit in October 2007. As a result, fourteen co-hosting government agencies concluded the Summit by signing the “Statement of Intent” that commits them to work together to define, implement, manage and maintain an integrated and interconnected trail and open space system. The SNAP Recreation and OHV Team was an active participant on the Summit Planning Team and continues to collaborate with local, regional and community partners through participation in the Regional Open Space and Trails Workgroup in order to develop an interconnected regional trails and open space system.



Kayaking in Lake Mead National Recreation Area.

Trails and Roads Inventory

There are many designated and informal trails and roads on Southern Nevada’s public lands.

In order to complete future trail and transportation

planning, an inventory of over 9,000 miles of existing roads and trails has been completed. Based on aerial photography, priority areas were identified and confirmed using global positioning system (GPS) technology. The level of difficulty and quality of road surface (i.e. gravel, primitive, paved)

has been identified for all routes

and catalogued into a database. While currently in draft form and not yet available for release, this data will be utilized during the upcoming Bureau of Land Management Recreation Area Management Plans (RAMPs) and other planning venues in order to evaluate trail and roadway locations, areas of restoration and educational needs.

OHV Education

Appropriate use of OHV’s is now taught in some driver’s education classes, as a result of efforts of the SNAP Recreation/OHV Team.

“I have seen team members speak up for each other’s issues when all four agency representatives weren’t at the table. To me, that is what SNAP is all about.”

Cynthia Martinez, SNAP Board Member
U.S. Fish and Wildlife Service, 2008

Resource Protection and Law Enforcement Team Accomplishments



“Our SNAP Law Enforcement Team has only begun writing the story of collaborative partnerships. We are excited about the progress we have made and what lies ahead. The barriers that once kept our agencies working in isolation and only on agency-specific problems have been removed. Field officers and managers have gained respect, appreciation, admiration and understanding of what we accomplish together.”

SNAP Team Report, 2008

The recent explosive growth in the community of the Las Vegas Valley results in continual and expanding impacts to the federal lands that

surround the valley.

Impacts include significant increases in litter, desert dumping, graffiti, artifact collecting and the formation of illegal off-highway vehicle trails and expanding mountain bike trails, all of which have long term, if not permanent, effects on the health of the public lands. Prior to the formation of this Team, the staffing and funding levels of the four agencies did not allow an adequate response to these rapidly expanding pressures of growth nor a consistent backcountry resource protection presence. Significant

funds received through the Southern Nevada Public Land Management Act in 2006 greatly enhanced this Team's capacity to make headway in addressing the often dramatic and devastating impacts on federal lands.



Graffiti mars the landscape of the desert ecosystem.

The pool of personnel involved in this SNAP Team includes law enforcement managers, field rangers, interagency dispatchers and special agents from all four agencies, and a Special Assistant to the U.S. Attorney, Southern Nevada Judicial District. Together, they are accomplishing what one agency with limited resources cannot. Rangers are often the first point of contact for the public when emergencies arise, creating both a visible deterrence to illegal activities and an enforcement action element to public safety on these lands. It is difficult to measure when a crime has been prevented, but through increased visibility of SNAP rangers/officers and increased number of contacts, citations and enforcement actions, there is a strong likelihood that deterrent of crime is occurring.

Team rangers also work with restoration crews, community workers, volunteers and anti-litter groups to perform rehabilitation activities in backcountry locations. Twenty abandoned and vandalized vehicles have been removed from

remote areas to improve the aesthetic values for visitors. More signed trail designations and more barriers on illegal routes and fences now clearly identify public access points. The work of SNAP field rangers has always had an educa-



Illegally abandoned cars are costly to remove.

tional component directed toward instilling a respect and stewardship of the land, ecosystems and conservation ethic. This Team is clearly a pioneer of interagency resource protection modeling appropriate and responsible use by instilling respect and appreciation of public lands.

Saturation Patrol Success Stories

The Team has focused its efforts on areas with repetitive destruction, improper recreation and criminal activities on public lands. Placer Cove, one of the focus areas, is a remote area 29 miles from Boulder City and 37 miles from the Las Vegas Valley. Part of Lake Mohave, its cliffs attract divers and the Cove provides a protected area for swimmers. The Cove's isolation is also attractive for underage drinking, drug use,

Seventy-four interagency patrols targeting illegal off-highway vehicle use, illegal fireworks, unpermitted activities and water safety issues have been conducted.

competing racial groups and gang members, excessive littering and vandalism. Proactive, recurring saturation patrols with 10 -16 rangers, conducting litter clean-ups, assisting resource management with graffiti removal and enforcing regulations and laws has reduced a number of the issues within the Cove.

A second focus area is Sunrise Mountain Management Area. A scenic view for the lights of Las Vegas, it is also known as a hot spot for abandoning stolen vehicles that are either burned or stripped, dumping large quantities of used tires and burning the insulation from stolen copper wire. A repetitive cycle of volunteer clean-ups, patrols, public contacts and barrier and sign installations has reestablished scenic value.



Box Car Canyon SNAP Law Enforcement Team Clean-up, 2008

Finally, the Upper Las Vegas Wash is a Bureau of Land Management area of cultural, archeological and paleontological significance near the Desert National Wildlife Refuge. The wash was once a remote area of the desert. However, urban sprawl resulted in home construction within a quarter mile of its boundary. Off-highway vehicle (OHV) usage inundated the landscape, created large dust clouds and caused resource damage, while unabated dumping of household items and construction waste occurred. Saturation patrols enforcing closure orders for OHV's and intervention with target shooting and dumping have had

great success in promoting responsible use of the upper Las Vegas Wash.

Reduced Wildland Fires

Emphasis on fire prevention, public education and fireworks enforcement in the Spring Mountains National Recreation Area and other public lands has resulted in only one human-caused wildland fire in the Las Vegas Valley in the past three years.

Training and Communications

Cross-delegation training that was developed for SNAP officers has now been adopted by the Federal Law Enforcement Training Center and the Grand Canyon Parashant National Monument. This SNAP Team hosted wilderness training provided by the Carhart Wilderness Center, as well as Command Spanish training for law enforcement officers. The Team also provides staff and technical support for an interagency dispatch center hosted at Lake Mead National Recreation Area, which will soon have state of the art GIS, CAD and in-vehicle computers (more on page sixteen).

5,600 pounds of litter were removed in just one cleanup in 2008 within the Las Vegas Wash Conservation Transfer Area.

“When there is a lot of funding available, agencies are encouraged to build partnerships. Then when money is tight, that is when partnerships become really crucial to meeting your goals, when they are really the most important.”

Carrie Ronning
SNAP Science and Research Team Member, 2008

Restoration and Invasive Species Team Accomplishments

“Each team has an individual and sometimes complex network of community partners committed to the conservation of natural and cultural values on our public lands.”

U.S. Department of Interior
Award Nomination, 2005

Thousands of acres of federal lands in Southern Nevada are in need of habitat restoration because of disturbances, such as exotic plant invasions, abandoned mines, illegal off-highway vehicle use and dumping of trash and graffiti. These disturbances diminish the environmental sustainability of these lands through changes in water retention, run-off, and plant germination. Disturbances also increase the potential for

the spread of invasive weeds, and diminish the experience of recreational users.

Nearly a decade ago, the four SNAP agencies established the Southern Nevada Restoration Team as a collaborative forum where members of the four federal agencies would discuss and coordinate a response to major ecosystem disturbances and restore important habitats. This comprehensive partnership approach enables the development of common databases,



Before and after photographs of a road removal and restoration project.

documents program effectiveness and assesses the magnitude of overall restoration needs. It also provides for increased efficiency by sharing limited resources.

In 2008, working together across political boundaries, the SNAP Restoration Team implemented restoration projects including riparian (riverbank) restoration, road and trail removal, expanding native plant seed collections, trash and graffiti removal, treatment and removal of invasive plants, and data management. Community volunteers are becoming involved through the Restoration Education and Volunteers program (REV) which restores federal lands in the Las Vegas Valley. (More about RE Ving Up! on page 33).

Riparian Restoration

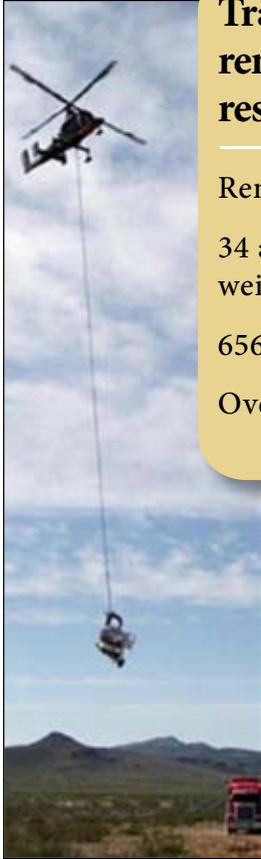
In 2008 the Team planted 535 trees, actively restoring more than 33 acres of riparian habitat. Additionally, a habitat-mapping project was initiated with the goal of prioritizing invasive plant treatments and restoration of the Virgin River.

Roads and Trails

Random and unapproved routes can negatively impact natural areas by fragmenting habitats, compacting soils, increasing erosion and contributing to the spread of weeds. A major component of the Restoration Team's work consists of removing roads and trails (see above photos) and reconnecting the surrounding habitats and processes. In 2008, 23.5 linear miles of unapproved roads and trails were removed and restored on federal lands.

Native Plant Program

Through time, plants adapt to their immediate surroundings. Locally collected seeds increase the rate of success with re-vegetation projects, and are an essential step in developing a native plant program and successfully restoring arid lands. This year, more than 150 pounds of seeds from 23 plant species were collected and 650 plants from construction areas were salvaged and used. Other native seed projects included post-fire seeding projects where 8,119 pounds of seeds were sown across 212 acres of recently burned land.



Trash must be removed before restoration can begin.

Removed in 2008:

34 abandoned vehicles weighing 77,400 pounds

656 cubic yards of debris

Over 5,000 feet of old fence

Invasive Plants

One of the more insidious problems impacting federal lands are invasive plants. Invasive plants alter ecosystem processes and food web dynamics, crowd out native plants, change

the fire regime and diminish wildlife habitat.



For five days last summer, 111 volunteers harvested 70 pounds of blackbrush seeds, a plant that blooms only once every 5-10 years. The final yield of 1,850,000 seeds were placed in mud “seed balls” and replanted in fire-ravaged areas.

Over the past year, more than 3,900 acres were restored and 21 different invasive species were treated. In addition to these new efforts the Team monitored 2,213 previously treated acres. One

specific project included conducting an inventory and removing 14,990 Sahara mustard plants from 120 acres of desert tortoise habitat.

Data Management

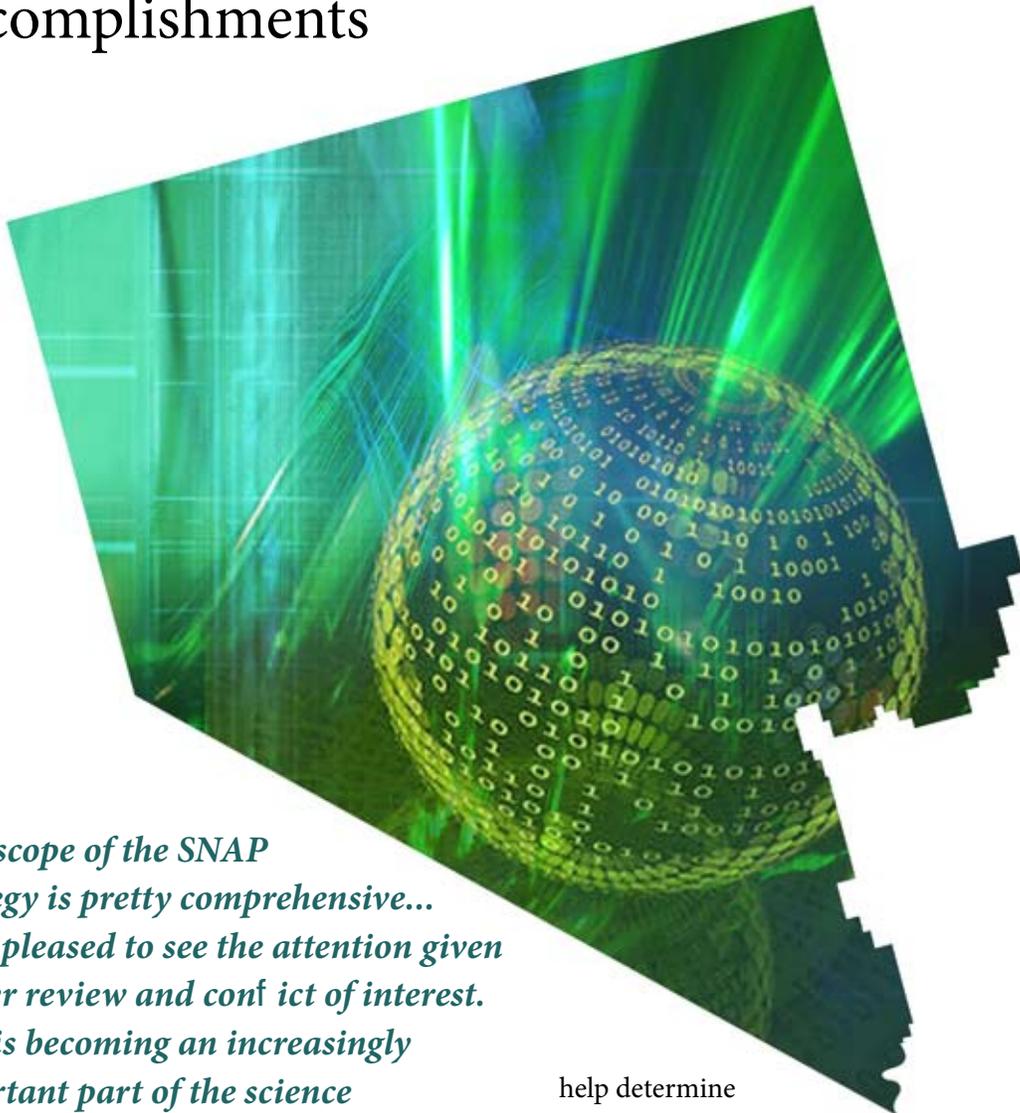
In April of 2008, SNAP began working with the University of Nevada Las Vegas to develop and implement an interagency restoration database. This database will allow the agencies to analyze disturbance at a landscape level, prioritize restoration efforts where needed and manage effectively and efficiently across political boundaries. A common language and protocol allows for analysis and informed “big picture” decision making.

Saltcedar — Got to Go!

The roots of the saltcedar plant, otherwise known as tamarisk, capture and use water from deep underground. With less than six inches of rain per year in much of Southern Nevada, this invasive plant severely reduces the amount of water available for native plants and animals. In addition to decreasing plant diversity and limiting wildlife habitat, saltcedar also increases the frequency of fire. Many native plants like coyote willow and Fremont cottonwood compete poorly with saltcedar.

Through the efforts of this Team, saltcedar has been removed from hundreds of springs across Southern Nevada. Many degraded areas have also actively been restored by agency staff and volunteers planting and seeding with native plants. In the absence of future fires, these areas should once again sustain a more natural community of plants and wildlife, and be protected from further degradation.

Science and Research Team Accomplishments



“The scope of the SNAP Strategy is pretty comprehensive... I was pleased to see the attention given to peer review and conflict of interest. That is becoming an increasingly important part of the science implementation process.”

Ron Huntsinger, National Science Coordinator,
Bureau of Land Management, Washington D.C., 2008

Resource managers face a growing list of increasingly complex issues that impact natural resources as well as cultural and heritage resources. This reality is no more obvious than in Southern Nevada where rapid growth and increased visitation dramatically impacts over eleven million acres of federally managed lands in the area. Science and research projects and products can

help determine consistent and cross-boundary management decisions that have practical application.

Development of the SNAP Science and Research Strategy has drawn upon the goals of all four federal agencies. Science and research needs are addressed more efficiently and effectively by (1) conducting research on an ecosystem basis rather than traditional localized administrative-unit approaches, (2) leveraging limited funding to address common issues, (3) exchanging and sharing data

and results, (4) minimizing redundant research efforts and focusing effort on prioritized land-management needs and (5) establishing uniform study protocols.

In addition, the SNAP Science and Research Strategy provides a much needed opportunity to allow priority management needs to drive science and research activities. It enhances research partnerships and ensures that the highest priority needs are addressed to benefit federal land resources in Southern Nevada. The Strategy also documents common science and research goals, sub-goals and questions that both meet and further the collective needs of each agency and various SNAP Teams. Finally, the Strategy establishes a process to identify, evaluate, document and communicate SNAP’s science and research needs and priorities annually, and to synthesize and incorporate completed work on a regular basis.

Natural Resource Goal

The Strategy’s natural resource goal encompasses a series of sub-goals related to fire, invasive species, watersheds and landscapes, and biodiversity. Sub-goals include science and research questions that further focus priorities. This work resulted from workshops held among agency staff and

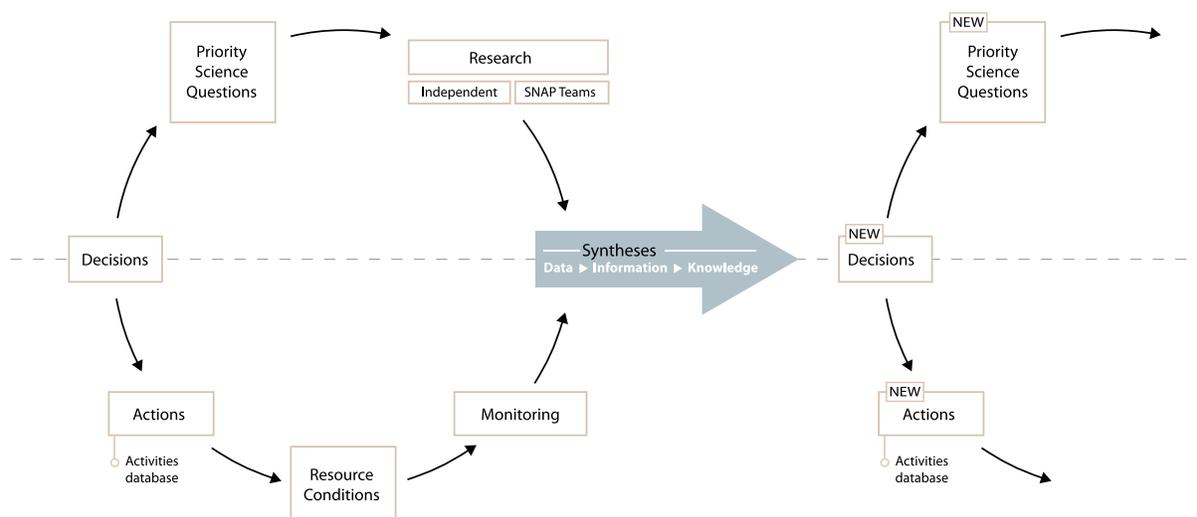
regional researchers. The resulting goal, sub-goals, and science and research questions represent shared priorities for natural resources-related scientific activities on federal lands in Southern Nevada.

Human Interaction Goal

The sub-goals of the human interaction goal are related to cultural resources, historic context, recreation, land use and education. Included are questions that address cultural resource stewardship, impacts to natural and cultural resources resulting from human use, research related to recreational needs and issues arising from authorized resource utilization on public lands.

Adaptive Management

The SNAP Science and Research Strategy proposes a conceptual model that includes both monitoring and research approaches to adaptive management. An adaptive management approach involves exploring alternative ways to meet management objectives, predicting the outcomes of alternatives based on the current state of knowledge, implementing one or more of these alternatives, monitoring to learn about the impacts of management actions and using the results to update knowledge and adjust management actions.



Volunteer Management Team Accomplishments



“It was exciting to be part of a group of volunteers collecting seeds with tennis rackets! Now I’m helping make the blackbrush seed “balls” to plant in burned areas.”

Gloria T, SNAP Volunteer, 2008

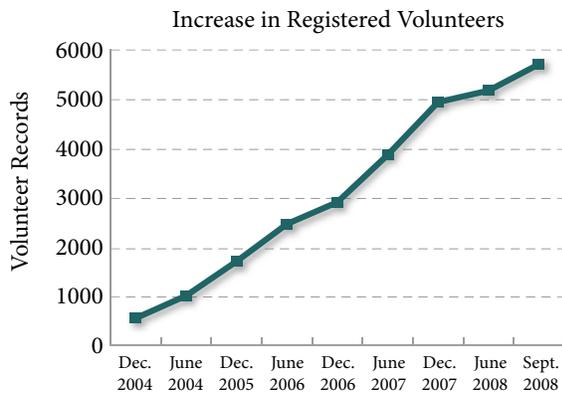
As visitation and pressures on federal lands increase, so does the need for agencies to better engage with the large pool of volunteers in Southern Nevada. By working collaboratively, competition among agencies and organizations for volunteers has been reduced, and effectiveness increased. SNAP partners work seamlessly in joint recruitment, project development, training, management, evaluation, support and recognition.

By partnering with University of Nevada Las Vegas, the Team is building efficient oversight of volunteers through a central clearinghouse. The volunteer program builds on existing relationships and continues to develop new partnerships with groups such as Clark County Parks and Recreation, Friends of Nevada Wilderness, Clark County School District, City of Henderson, homeowner’s associations and more.



Volunteers work to restore a trail in 2008.

Through hands-on involvement, volunteers become actively involved in learning about the environment and responsible use of federal lands. Active participation encourages an individual's sense of ownership of the resource and its stewardship. Volunteers are utilized in areas of environmental education, resource management and conservation. At www.getoutdoorsnevada.org individuals and groups can elect to monitor desert tortoises and remote weather stations, lead naturalist hikes, collect plant seeds, edit a newsletter, trim trees, clean up dump sites and become a volunteer "backcountry ranger".



The website and Get Outdoors Nevada branding unifies the interagency effort, encouraging

Field Day

Fifty eager volunteers were treated to an in-depth "get to know your federal lands" field day in the Fall of 2008. Focusing on Bureau of Land Management and National Park Service managed areas, volunteers interacted with range biologists, hydrologists, submerged cultural resource experts and environmental educators to better understand the opportunities and challenges they face everyday. There were opportunities to discuss the fluctuating water levels of Lake Mead, submerged cultural resources such as a World War II era B-29 aircraft and wild horse and burro management. The day was proclaimed a great success. Next spring, this in-depth training day will focus on USDA Forest Service and U.S. Fish and Wildlife Service managed lands.

a positive general public perception and creating a memorable catch phrase for potential volunteers. The accompanying slogan, "Volunteer and make the land your own," defines the purpose of the Team's brand and establishes expectations for the program.

Get Outdoors Nevada is the focal point of all marketing/recruiting efforts, including the website which is the portal to SNAP volunteer opportunities. Linked to the volunteer database, information entered in the online volunteer interest form is automatically added to the volunteer database, enhancing the ability to match volunteer skills and abilities with land managers' needs. Since the inception of Get Outdoors Nevada, potential volunteers need only make one phone call or visit one website

to learn about all offered volunteer and training opportunities on eleven million acres of federal lands.

RE Ving Up!

REV stands for Restoration, Education and Volunteers. The first REV event in 2008 combined collecting blackbrush seeds with conservation education programs that helped volunteers better understand the significance of their efforts. The REV program facilitates meaningful action, understanding and long-term commitment to environmental stewardship for volunteers. Over 25 civic and corporate groups have become involved in public land stewardship. These partners provide volunteers and contribute donations to enrich volunteer events.

Orientation and Enrichment Training

The SNAP Volunteer Team coordinates two levels of training: basic orientation and enrichment. The orientation course provides clear direction and relevant information to correctly and safely perform volunteer duties. The enrichment course enhances volunteer knowledge of Southern Nevada’s federal lands

and the agencies that manage them. Training also includes federal workplace standards of conduct and ethics.

Supporting Volunteers

This SNAP Team centralizes coordination of interagency volunteer orientation and training to benefit the volunteers and land management agencies alike. Broad advertising and easy public access results in more efficient use of agency resources, including training instructors and meeting space.

Encouraging Partnerships

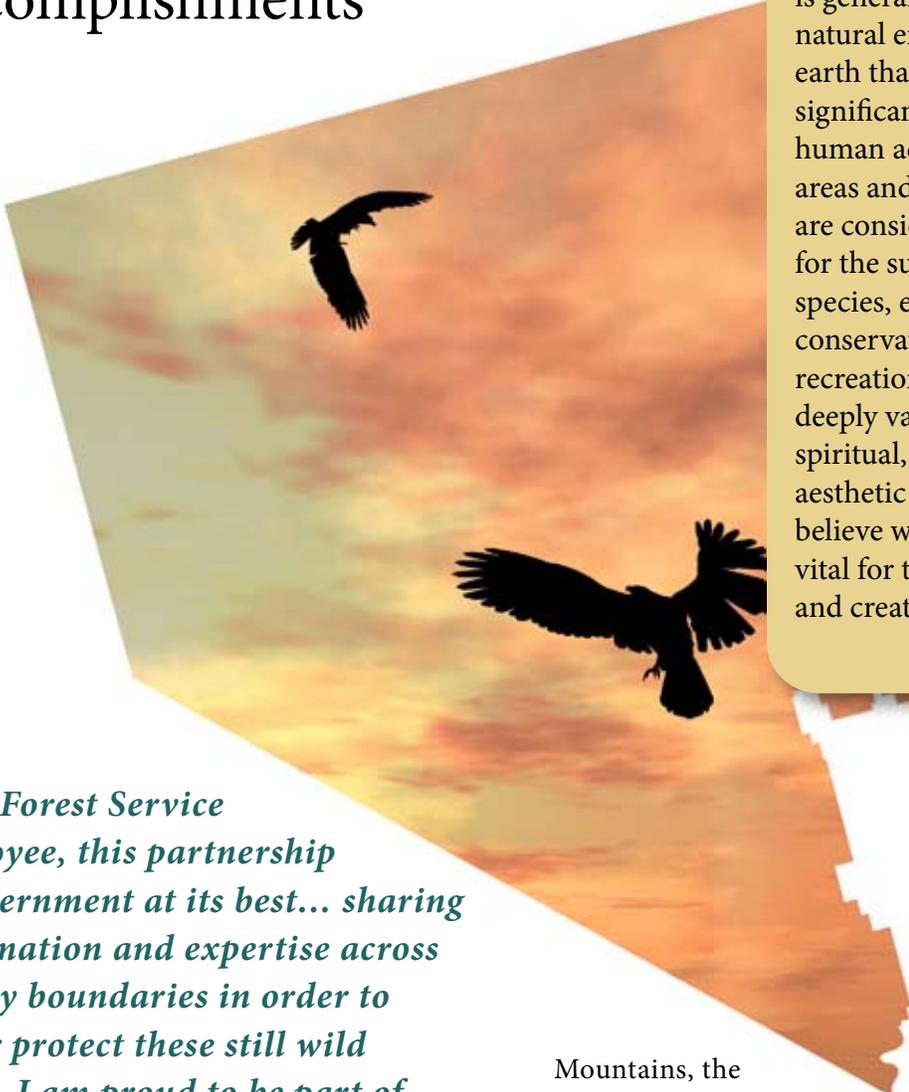
In the early years of SNAP, the Volunteer Team coordinated and led most of the interagency volunteer events. With the additional capacity from the centralized website and database that gathers information on volunteer location, skills, abilities and interests, more SNAP Teams are able to achieve their goals through volunteerism.

Year	Number of Volunteers	Total Hours	Volunteer Time Value ¹	Result Highlights
2005	658	2,806	\$54,745	Litter removed: 140 yd ³ Trails restored: 19,940 ft Streams restored: 500 ft
2006	678	3,010	\$58,725	Litter removed: 140 yd ³ Trails restored: 13,240 ft; 40 tons of gravel applied
2007	567	2,665	\$51,944	Litter removed: 33 yd ³ ; 75 lbs Trails restored/Property improvements: 7,817 ft
2008	1,540	7,271	\$141,847	Litter removed: 931 yd ³ Trails restored: 3.5 miles Native Seed collected: 80 lbs

1. The dollar value assigned to volunteer time is as follows: 2005: \$17.55, 2006: \$18.04, 2007: \$18.77, 2008: \$19.51. This is based on the average hourly earnings of all production and non-supervisory workers on private non-farm payrolls as determined by the Bureau of Labor Statistics. In the Independent Sector, this figure is increased by 12 percent to estimate for fringe benefits.



Wilderness Team Accomplishments



WILDERNESS...

is generally defined as a natural environment on earth that has not been significantly modified by human activity. Wilderness areas and protected parks are considered important for the survival of certain species, ecological studies, conservation, solitude, and recreation. Wilderness is deeply valued for cultural, spiritual, moral and aesthetic reasons. Some believe wilderness areas are vital for the human spirit and creativity.

Wikipedia

“As a Forest Service employee, this partnership is government at its best... sharing information and expertise across agency boundaries in order to better protect these still wild lands. I am proud to be part of this important work.”

Carol Reott Hotchkiss,
SNAP Wilderness Team Leader, 2008

Wilderness has long been a part of our nation’s heritage. People journey to the wilderness to view distant vistas, hike to secluded desert valleys, take memorable pictures or camp out at night to stargaze. Wilderness can be a place to reconnect with oneself and with the land. In Southern Nevada, wilderness is the forested desert oasis along the crest of the Spring

Mountains, the Keystone “thrust” and ancient rock shelters of Brownstone Canyon, the surprising number of small springs scattered through South McCullough, El Dorado, Meadow Valley Range and 15 other places where cultural sites survive and natural processes occur without human interference.

Three of the four SNAP agencies are responsible for nearly 800,000 acres of wilderness, most of which were designated as recently as 2002. Congress is considering an additional



Ancient bristlecone pines dot the heights of the Mount Charleston Wilderness Area.

1.3 million acres at Desert National Wildlife Refuge for wilderness designation.

The SNAP Wilderness Team was established to develop a coordinated recreational and educational effort for an improved visitor experience on backcountry federal lands in Southern Nevada. With the unique situation of cross-jurisdictional boundaries, SNAP is in a position to become a national model for wilderness planning, management and interagency collaboration.

To address substantial public interest in these remarkable backcountry areas, boundaries have been posted and surveyed as well as informational literature and maps developed. With no on-site agency presence to inform the public about the new status of these lands and clarify appropriate backcountry activities, a volunteer-based monitoring and stewardship program is being developed in 2009, modeled on the successful SNAP Cultural Site Stewards Program (More on pages 9-11).

Boundary Surveys

Boundary posting, legal descriptions and congressional maps have been completed for many of the 20 wilderness areas. The boundary surveys are 75% complete.

First In the Nation

The first interagency Wilderness Management Plan in the nation was completed for the Muddy Mountains Wilderness, which is jointly man-

aged by the Bureau of Land Management and the National Park Service. Joint planning for North McCullough, South McCullough and Wee Thump-Joshua Tree Wilderness Areas is complete. Planning for other jointly managed areas such as El Dorado, Ireteba Peaks, Spirit Mountain, Pinto Valley, Jimbilnan, Black Canyon, Bridge Canyon and Nellis Canyon are underway and 40% complete. Joint management planning by the USDA Forest Service and the Bureau of Land Management in the La Madre and Rainbow Mountain wilderness areas is 20% complete.



Bowl of Fire in the Muddy Mountains Wilderness Area



Wee Thump Wilderness Area

Wilderness Education Plan

The SNAP Wilderness Education Plan is complete, and new wilderness information posted on multiple agency and SNAP websites.



Bridge Canyon Wilderness Area

Interagency Workshops

A three-day Wilderness Awareness Workshop was hosted in Las Vegas in March 2008. The target audience was personnel involved in



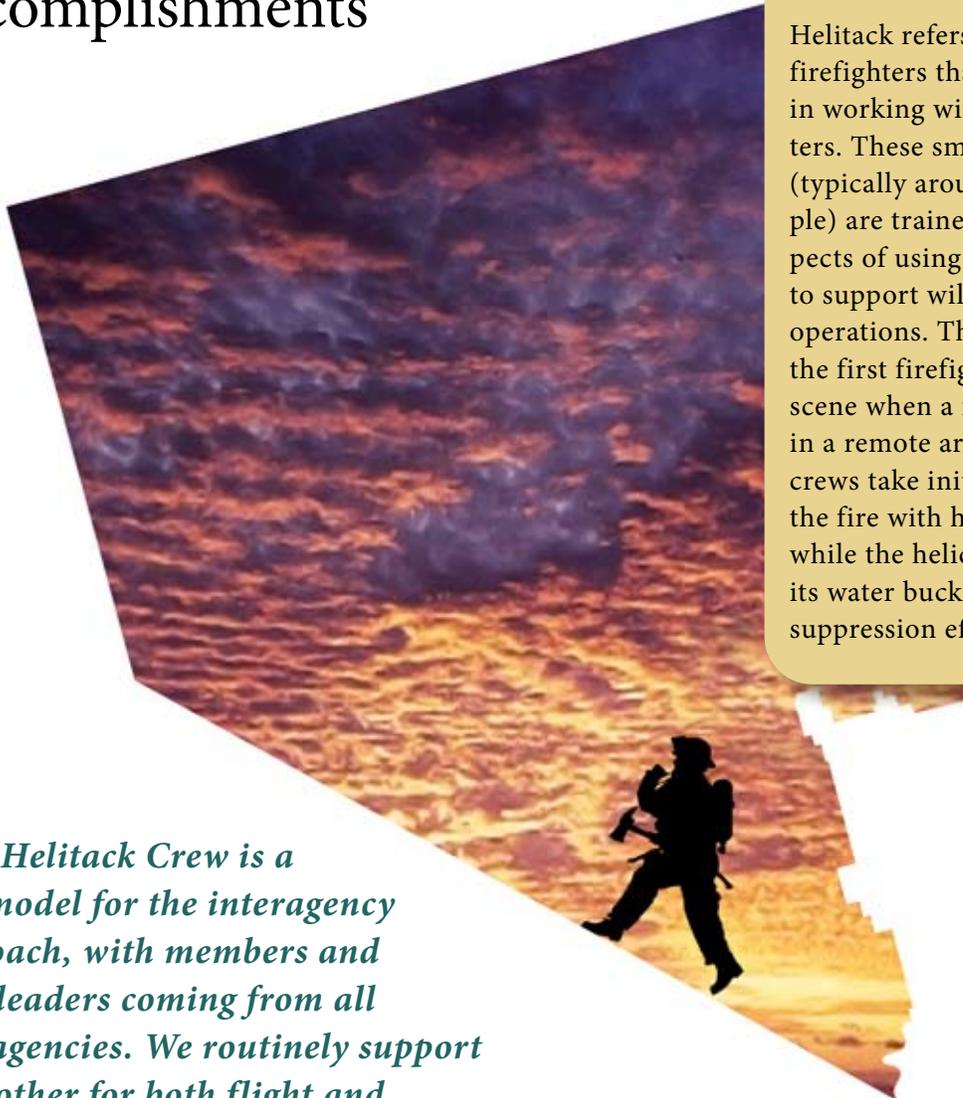
Acoustic monitoring in the Lime Canyon Wilderness Area

management of wilderness including line officers, public information specialists, law enforcement, and resource managers from the areas of recreation, wilderness, fisheries, wildlife, fire, range and heritage. Wilderness experts from the Carhart Wilderness Training Center as well as local resource specialists provided a broad view of federal wilderness management perspectives and information.

LISTENING TO NATURE

Hearing the sound of coyotes howling or wind whistling through the pines is part of the experience people expect in wilderness areas. Documenting actual sound levels and their sources is the first step in planning a strategy to maintain this important character of wilderness. The SNAP Wilderness Team has set up acoustic monitoring stations in four SNAP wilderness areas to develop a database of natural sounds. Hikers to remote areas of the Ireteba Peaks and Spirit Mountain Wilderness Areas may be surprised to find tripods and solar-powered microphones along the trail.

Wildland Fire Management Team Accomplishments



Helitack? What's that?

Helitack refers to wildland firefighters that specialize in working with helicopters. These small crews (typically around 10 people) are trained in all aspects of using helicopters to support wildland fire operations. They are often the first firefighters on scene when a fire is started in a remote area. Helitack crews take initial action on the fire with hand tools, while the helicopter uses its water bucket to assist in suppression efforts.

“The Helitack Crew is a real model for the interagency approach, with members and crew leaders coming from all four agencies. We routinely support each other for both flight and on-the-ground operations, no matter where the fire is.”

Stephanie Phillips
SNAP Board Member, USDA Forest Service, 2008

Fire management in Southern Nevada is important for a number of reasons. First, unwanted wildland fires can threaten lives and property. There are thousands of acres of wildland urban interface, where both human habitation and wildland fuels are interspersed. Fires in these areas can destroy

property and threaten the safety of both the public and firefighters.

Second, wildfires in some areas can do great harm to ecosystems that are not adapted to fire. For example, fueled by a bumper crop of non-native grasses that resulted from a wet winter in 2005, over a million acres burned in Southern Nevada. These burned areas are very slow to recover, if they ever do. Often they end up void of native plants, and infested only by weeds.



A member of the wildland fire crew sets a protective backfire.

Prior to the existence of the Southern Nevada Fire Management Operations Group, federal, state and local agencies operated independently, and without adequate coordination. This resulted at times in redundancy and inefficient operations. The federal wildland fire agencies formed a partnership under SNAP which expanded to the Southern Nevada Fire Operations Group. The group includes the Nevada Division of Forestry and Clark County Fire Department.

New Interagency Type II Hand Crew

One of the great successes in 2008 was the development of a new interagency resource for the wildland fire community. The fire operations group trained approximately 40 firefighters primarily from Clark County's Fire Explorer program. An interagency cadre conducted the training, ensuring that the trainees had a clear



Southern Nevada Interagency Type II Handcrew, 2008

understanding of the basics of safe wildland fire suppression.

The top twenty students were selected from the group and formed into the Southern Nevada Type II Handcrew. Supervision for the new crew came from the interagency partners on a rotating basis. The crew learned to function as a team by working on non-fire projects, then responded to their first interagency fire assignment, ignited by a plane crash on Mount Charleston. As the season progressed, the crew was assigned to wildland fires throughout Nevada and other out-of-area fire management/support assignments, including wildland fires in northern California and Wyoming.

Helitack Operations

The Las Vegas Interagency Helitack operation was staffed with a crew of nine people from various agencies. Their helicopter was available for 90 days, during which they flew 110 hours in support of fire response and other missions. They delivered nearly 25,000 pounds of equipment and supplies to remote locations. The helicopter supported several wildland fire incidents with water drops from its external bucket, delivering over 14,000 gallons.

Interagency Dispatch

The interagency dispatch center dispatched resources to over 145 fires reported in Southern Nevada this year, including 12 false alarms. Fires ranged in size from 1/10 acre to around 105 acres. The dispatch center also supported fire management across the country.

Wildland Fire Skills Training

The SNAP partners provided over 350 hours



Searching for hot spots after extinguishing a wildland fire

of training in order to maintain and improve response to wildland fire.

Prescribed Fire/Special Projects

Interagency partners assisted each other with personnel and equipment to accomplish over 1,100 acres of prescribed burns on several agencies' land. In addition, interagency resources worked together to accomplish several special missions such as preparing a water regulation culvert at Upper Pahranaagat Lake on the Pahranaagat National Wildlife Refuge for robotic inspection, and conducting fuel reduction work at Moapa Valley National Wildlife Refuge.

WHAT IS A HAND CREW?

Hand crews of typically 20 firefighters work in areas that fire engines can not access, such as remote or steep terrain. They use hand tools (hence the name) to scrape, cut and dig fire lines (a break in fuel) along the head and flanks of fires, as well as to perform other fire suppression duties.

www.SNAP.gov



Next spring, SNAP will launch its first website specifically designed to be a one-stop centralized location for information on the federal lands of Southern Nevada. There, people can find a trail to go hiking at Mount Charleston in the Spring Mountains, read studies on how non-native quagga mussels affect boating on Lake Mead, discover azure blue springs at Ash Meadows National

Wildlife Refuge and download a “Pocket Ranger” tour of ancient petroglyphs in Sloan Canyon National Conservation Area.

SNAP.gov does not duplicate the websites of the four SNAP partners, but instead directs people to the agencies’ existing content through an interactive map, links and dropdown menus covering all of Southern Nevada. Volunteers (and potential volunteers) can discover their niche for any number of opportunities to help care for the land and resources managed by SNAP agencies.

SNAP feels it is important to help visitors and residents in the Las Vegas Valley better understand, appreciate and help protect the national treasures found in Southern Nevada. SNAP.gov is designed to do just that.

Watch for the launch of [SNAP.gov](http://www.SNAP.gov) in 2009.



Significant Awards Received to Date

2007

Resource Protection and Law Enforcement Team
Service First Award

“Acknowledged for exceptional public service through
multiple partnerships”

2007

Anti-Litter and Desert Dumping Team

Take Pride in America Best State Program 2007

“For efforts in stewardship through volunteerism”

2007

Cultural Site Stewards Team

Department of the Interior Cooperative Conservation Service Award

“Received for protecting at risk cultural sites”

2007

Anti-Litter and Desert Dumping Team

United States Senate Certificate of Recognition and Distinction

“For outstanding commitment to the enhancement and preservation of
Southern Nevada’s public lands”

2007

Resource Protection and Law Enforcement Team

Bureau of Land Management Law Enforcement Group of the Year

“In recognition of the Team’s interagency efforts in the protection of federal lands and resources”

2007

Anti-Litter and Desert Dumping Team and Public Lands Institute

Bronze Quill Award, International Association of Business Communicators/Las Vegas Chapter

Merit Award for Single Print Ad “Don’t Trash the Neighborhood”

2006

Southern Nevada Agency Partnership

Service First

“Recognized for outstanding achievements in area of natural resources stewardship”

2006 and 2005

Volunteer Management Team

Take Pride in America, Federal Volunteer Program Category

“For outstanding stewardship of public lands and work in habitat restoration, historic/cultural
restoration improvement, and host/site stewardship, among others”

*“I am delighted to
see these worthy
objectives success-
fully combined in the
kind of innovative
way that merits this
special recognition.”*

Mary A. Bomar,
Director, National Park Service.
Service First Award, 2007

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