U. S. Fish & Wildlife Service
Nevada Fish and Wildlife Office

Conserving the biological diversity of the Great Basin, Eastern Sierra & Mojave Desert

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Inside This Issue:

New Vistior Information And Picnic Area At Marble Bluff Dam and Fish Passage Faciltiy

A new interpretive visitor area has just been completed at Marble Bluff Dam and Fish Passage Facility. The display includes five new interpretive panels featuring Lahontan cutthroat trout, cui-ui, American white pelicans and the history of the area. Visitors will be able to learn about on-going research and monitoring activities that take place as well as how fish make their way up and over Marble Bluff dam to spawn.

The Marble Bluff Dam and Fish Passage Facility are located near the terminus of the Truckee River, approximately three miles upstream of Pyramid Lake. It was constructed in 1976 to provide grade control for the lower Truckee River and to move the endangered cui-ui and threatened Lahontan cutthroat trout, upriver to spawn.

The fish lock is a 40 foot deep chamber that fills with water and allows fish to migrate over the dam without being lifted out of the water. In 2005, biologists were able to move approximately 2,500 cui-ui every five minutes above the dam. The fish lock is an automated system but requires round the clock staffing during spawning season.

Lahontan cutthroat trout are reared from eggs incubated at the facility so they will “imprint” on the Truckee River. Since trout generally return to spawn where they were reared, managers and biologists hope this will help reestablish Lahontan cutthroat trout in its historic habitat in the Truckee River.

The Facilities are operated and maintained by the Service in partnership with the Bureau of Reclamation and the Pyramid Lake Paiute Tribe. The facility is open to the public during the spawning season (March through early June) and intermittently the remainder of the year.

Multiple-Species Habitat Conservation Plan In Place For Coyote Springs Planned Development

Recently, the Service issued a 40 year incidental take permit to Coyote Springs Investments, LLC (CSI) under the authority of section 10(a)(1)(B) of the Endangered Species Act (ESA) for the Mojave population of the threatened desert tortoise *(Gopherus agassizii)*. The permit will also cover the banded Gila monster *(Heloderma suspectum cintum)*, and western burrowing owl *(Athene cunicularia hypugaea)* should they become listed in the future.

The CSI Multiple-Species Habitat Conservation Plan (MSHCP) includes a number of conservation measures to minimize and mitigate the effects of development activities on covered species. An MSHCP is a planning document that is a mandatory component of an incidental take permit. The MSHCP must ensure that effects of the authorized incidental take will be adequately minimized and mitigated to the maximum extent practicable. "Take" is defined in the ESA as any action that would "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect" any threatened or endangered species.

"The CSI MSHCP was negotiated over several years requiring the permittee and the Service to come together in identifying detailed conservation measures for the covered species. The MSHCP has resulted in outstanding conservation actions and management prescriptions providing protection for both listed and unlisted species. The reconfiguration of the lease and private land will create a reserve that protects habitat for the desert tortoise and other Mojave Desert species and is one of the key components of the plan," said Bob Williams, State Supervisor for the U. S. Fish and Wildlife Service's Nevada Office.

CSI plans a phased development of up to 21,454 acres of private lands in Lincoln County depending on the availability of water. In addition, CSI proposes to manage 13,767 acres of lease lands in Clark and Lincoln counties as the CSI Conservation Lands in partnership with the BLM and the Service. The private and lease lands occupy most of the eastern portion of Coyote Spring Valley, straddling the Pahranagat Wash and the Kane Springs Wash. The covered area is located approximately 55 miles northeast of Las Vegas and bordered by the Delamar Mountains to the north, U.S. Highway 93 (US 93) to the west, and the Meadow Valley Mountains to the east.

Mitigation measures included in the MSHCP are as follows:

- Collection of mitigation fees of $800 per acre of disturbance and an additional fee of $750,000 for use in recovery and research efforts including: desert tortoise head-starting program and translocation program; fire ecology and post-fire habitat restoration; invasive species management; habitat modeling for banded Gila monster; and surveys for western burrowing owls.
- Permanent conservation of 7,548 acres of habitat.
- Designation, management, and restoration of the 13,767 acre CSI Conservation Lands (including the 7,548 acres above).

An Adaptive Management Plan will be implemented to monitor effectiveness of conservation actions and management prescriptions in meeting established biological goals. A phased approach to development (including up to 2,000 acres of disturbance per year for the first eight years) will help ensure there is effective monitoring of implementation of the proposed avoidance, minimization, and conservation measures for the covered species in the MSHCP. Recommendations for alternative conservation actions could be made and implemented through the Adaptive Management Plan if necessary, before the next 2,000 acres are disturbed.

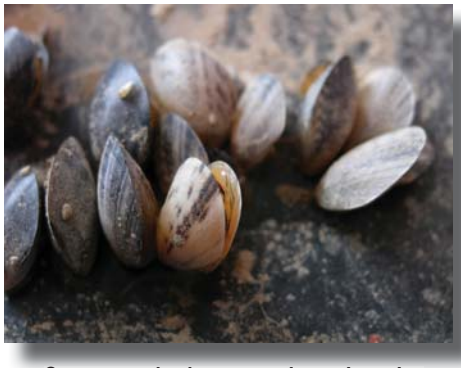
Preventing And Controlling Aquatic Invasive Species In Lake Tahoe

Following the first discovery of the highly invasive quagga mussel in the western U.S. in January 2007, the Service established an Aquatic Nuisance Species (ANS) Coordinator for the Lake Tahoe Basin and Nevada. Steve Chilton, the new ANS coordinator, chairs an Aquatic Invasive Species Coordination Committee composed of representatives from local, state and federal agencies. One of the charges of the committee is to oversee the development of an Aquatic Invasive Species Integrated Management Plan for the Lake Tahoe Basin.

The Service has been instrumental in developing a boat inspection program targeting eleven public launch locations around the Lake. The goal of the inspection program is to intercept boats from infested waters and decontaminate them prior to launching into Lake Tahoe. This program has received significant assistance from local marina owners and public launch ramp operators who have had their staff certified as inspectors.

The Service is working closely with researchers from UC Davis and UNR in developing a pilot project to control the invasive Asian clam in Lake Tahoe. The clam has been linked to algal blooms which may contribute to a more suitable habitat for survival of Quagga mussels.

The Committee will focus on the following activities in the future: removal, containment and reduction of existing aquatic invasive species (AIS) in Tahoe Keys Marina; implementing control and removal actives lake-wide for AIS source populations to improve near shore habitat; AIS environmental education; and watercraft inspections.



Quagga and zebra mussels are invasive freshwater mollusks (bivalves) that infest waters in large numbers, attaching to a variety of surfaces. These mussels cause drastic changes to the environments they invade, are a nuisance for anglers and boaters, and are a significant problem for water conveyance systems because they clog water pipes and intake valves.

Volunteers Monitor Burrowing Owls

During 2008, the Service partnered with the Red Rock Audubon Society to conduct an urban burrowing owl monitoring study in the Las Vegas Area. Thirty-five volunteers helped Christiana Manville, Service Biologist, document and map known burrows, survey for new burrows, and monitor nest sites. Volunteers included employees of local governments, residents who have been watching owls for years in their neighborhoods, college students, and members of Red Rock Audubon Society.

The monitors observed the owls once a week around sunrise or sunset throughout the breeding season and documented the number of owls observed, the age of the owls, and their behavior. The results of the study will be used to assist the Service with burrowing owl conservation in southern Nevada.

“A few minutes after I had completed my official thirty minutes of monitoring,” said volunteer Billy Champan, “I took one more look through my scope. Suddenly, a young owl exited the burrow and then another one appeared. Shortly after, a third baby owl came out of the burrow. I stood there silently grinning from ear to ear, but I felt like jumping up and down, shouting, they’re here!”

Adult Burrowing Owl With Chick

Employee In the News

Kim Field (left) attaches a radio transmitter to the tortoise so it its movements can be tracked when released into the wild. Tortoises at the Desert Tortoise Conservation Center (below)

Kim Field, Desert Tortoise Recovery Biologist has long recognized the potential of the Desert Tortoise Conservation Center (DTCC) in making a stronger contribution to desert tortoise recovery. Her initiative and foresight has been instrumental in creating a new partnership that is the first large-scale collaborative effort between the Service and the Conservation Centers for Species Survival (C2S2), in the contiguous 48 states. This new partnership will serve as a national model to encourage new approaches to complex conservation issues.

The DTCC was constructed in Las Vegas in 1990. Since its construction, the DTCC has been used primarily as a holding facility for formerly wild tortoises removed from development sites and for tortoises from Clark County's tortoise pick-up service. Although the Center has occasionally hosted various research projects, it has had limited value to conservation and recovery of the desert tortoise.

In 2005 and 2006, Kim coordinated the development of a Master Plan. The plan envisions the transformation of the DTCC into a facility that would enhance desert tortoise recovery, provide for improved desert restoration techniques, foster cooperative scientific research that supports our knowledge of Mojave Desert ecosystems, and enhances public education and awareness of conservation needs of the Mojave Desert.

Since 2007, Kim has worked with the DTCC manager to improve husbandry conditions and coordinate various aspects of the DTCC operations. She secured clinical training for staff enabling them to better evaluate health of the tortoises. She has worked diligently to secure operational funds, to account for both expenditures and tortoises at the DTCC, and has coordinated with the BLM on a successful grant proposal to continue the development of the Master Plan.

Last year, Kim spearheaded the development of a new partnership with the C2S2, consisting of five American Zoological Association accredited institutions with a keen interest in assisting with the conservation of rare species worldwide. In March 2009, a Memorandum of Understanding between the Service, C2S2, BLM, and Nevada Department of Wildlife for the operation of the DTCC was signed. A Cooperative Agreement between the Service and the Zoological Society of San Diego (a member institution of C2S2) for the operation of the Center was also signed. In addition to

animal husbandry expertise, the San Diego Zoo and other C2S2 members will bring innovative outreach, training, and education techniques, along with a reputable applied conservation science background to the partnership. This new partnership will be a great step forward in conservation and recovery efforts for the desert tortoise.

Hydrological and Biological Monitoring Plans Complete For Spring Valley Hydrographic Basin

A biological monitoring plan for the Spring Valley Stipulation was recently finalized that will document baseline condition of groundwater-influenced ecosystems and track response of these systems to Southern Nevada Water Authority's (SNWA) withdrawal of groundwater from Spring Valley. A hydrological monitoring plan was completed earlier this year.

These plans were developed in cooperation with the Service, BLM, National Park Service, Bureau of Indian Affairs and the SNWA. They are components of the Stipulation for Withdrawal of Protests between SNWA and the Department of Interior.

"We have worked together to develop a monitoring system that will be able to identify potential changes in the groundwater table, effectively providing an 'early warning' system that helps protect water-dependent ecosystems and the sensitive wildlife species they support," said Bob Williams, State Supervisor for the Fish and Wildlife Service in Nevada.

In April 2007, the Nevada State Engineer granted SNWA groundwater rights in the amount of 60,000 acre feet per year (afy) in the Spring Valley Hydrographic Basin subject to a monitoring and mitigation program and staged development. Per the State Engineer's ruling, SNWA will collect a minimum of five years of biological and hydrological baseline data, which must be approved by the State Engineer prior to exporting any groundwater from Spring Valley.

Copies of the plans are available at http://www.fws.gov/nevada.

Service Participates In UNR Career Fair

This winter, the Service joined numerous other federal agencies, state agencies, and local businesses in a career fair sponsored by the University of Nevada, Reno (UNR). Jody Brown and Selena Werdon kicked off the Service's participation in the fair by providing an evening presentation on the wide range of career opportunities within the Fish and Wildlife Service.

Students joined the agencies and businesses the next day and had the opportunity to meet one-on-one with staff. Sue Lackey, Kathleen Erwin and Jeannie Stafford met with students and answered questions about specific course requirements, upcoming vacancies, and volunteer opportunities.

The career fair was a great opportunity for agencies to meet some of UNR's students. The Service is looking forward to working with these young professionals as they establish their careers in the natural resources field.

Sue Lackey (left) and Kathleen Erwin (below) discuss career opportunities within the Service with UNR students.

US Fish & Wildlife Service
Nevada Fish & Wildlife Office
1340 Financial Boulevard, Suite 234
Reno, NV 89502

Phone: 775-861-6300
Fax: 775-861-6301

We're on the web!

http://www.fws.gov/nevada

A Message From The State Supervisor

I am pleased to announce a new partnership with Conservation Centers for Species Survival (C2S2) for the operation of the Desert Tortoise Conservation Center in Las Vegas. The partnership with C2S2 and the San Diego Zoo is a great step forward in conservation efforts for the desert tortoise. The animal husbandry expertise and reputable science that they bring to the partnership, which also includes the Bureau of Land Management and Nevada Department of Wildlife, will help us transform the Center into an asset that will aid us in furthering desert tortoise recovery.

We have also completed hydrologic and biological monitoring plans for the Spring Valley Hydrologic Basin. These monitoring plans provide the structure for tracking the response of groundwater-influenced ecosystems to the withdrawal of groundwater within Spring Valley and will provide an early warning system that helps protect the sensitive wildlife species they support.

I invite you to visit our new visitor and interpretive area at Marble Bluff Dam and Fish Passage Facility. The displays focus on the Truckee River, Pyramid Lake and the species that occur there. If you have any questions or would like additional information about any of the items featured in our newsletter, please do not hesitate to contact us.

Sincerely,

Robert D. Williams
Nevada State Supervisor