



We Are Region 8

Winter 2009

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Sharon Taylor and Judy Gibson of the Carlsbad Field Office administering emergency triage to birds from the Cosco Busan oil spill

Ren Lohofener, Regional Director for Region 8

Ren Lohofener has assumed leadership of the U.S. Fish and Wildlife Service's Region 8. Dr. Lohofener comes to Sacramento, Calif., from Portland, Ore., where he was the Regional Director of the Service's Pacific Region.

"I am looking forward to helping the excellent Service people in this region further our strong commitment to work with all partners to conserve natural resources," Lohofener said. "We face many difficult conservation challenges in Nevada, California, and the Klamath Basin and meeting these challenges will require innovation, adaptability and strong partnerships."

As Regional Director, Lohofener will oversee management of 46 National Wildlife Refuges, three National Fish Hatcheries, California-Nevada Fish Health Center and nine Ecological Services field offices in California, Nevada and the Klamath Basin in southern Oregon.



USFWS photo

Ren Lohofener

Lohofener joined the Fish and Wildlife Service in 1989 after working for six years as an ecologist for the National Marine Fisheries Service. Before that, he was a Research Associate and Adjunct Professor at Mississippi State University.

Since joining the Fish and Wildlife Service, Lohofener has been a

field biologist, the agency's Texas State Administrator and Assistant Regional Director of the agency's Southwest Region. While in the Southwest, he worked with 11 National Wildlife Refuges, four National Fish Hatcheries, two Fisheries Management offices and the Ecological Services program. He became Regional Director of the Pacific Region in September 2006. A native of Kansas, Lohofener received his Bachelor of Science and Master of Science degrees from Fort Hays State University in Kansas and his Doctorate degree from Mississippi State University. He is also a veteran of the U.S. Army.

News Flash!

The new name for Region 8 is **Pacific Southwest Region**. Thanks to everyone for coming up with suggestions. We will now begin phasing in the name on our websites and publications

Latino Students Introduced to Service Careers

By Michael Woodbridge
Hopper Mountain NWRC

On November 17, 2008, Richard Posey, Wildlife Biologist, Ivett Plascencia, Office Automation Clerk and Marc Weitzel, Project Leader for Hopper Mountain National Wildlife Refuge Complex (NWRC) attended the second annual Environmental Charter High School (ECHS) Environmental Awareness/Career Day. Sponsored by the National Hispanic Environmental Council (NHEC), the event reaches out to students about career options in the environmental/conservation fields.

ECHS is a non-profit public charter school located in Los Angeles County, focused on making students lifelong stewards of their



USFWS photo by Marc Weitzel

Ivett Plascencia at FWS booth

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Project Fosters Children's' Connections With Nature

By Kate Eschelbach
Ventura Fish and Wildlife
Office

The Service has been working to connect people to nature, especially children, and the Ventura Fish and Wildlife Office (VFWO) is participating in a new project called SCALE – Spatial Connections Around Our Local Environment. The project is a partnership between the Service and a team of geographers at the Spatial@UCSB Center at the University of California Santa Barbara.

SCALE is already under way at two 6th grade classrooms: the Ventura Open Classroom and the Kermit McKenzie Junior High in Guadalupe. Even though the Junior High is located only 30 minutes from the coast, most students say they have never seen the ocean.

The SCALE project will provide experiences for students in their local environment through instruction in spatial literacy – the understanding of geographic concepts used in map creation and map reading – such as scale, resolution, and pattern recognition. The pilot curriculum is based not only on spatial principles but also the connections these tools provide to understanding nature.

The classroom activities focus on spatial theory and techniques with local species, habitats, and land uses in



Ventura Open Classroom teacher Jeff Zimmerman helps his 6th grade students with mapping trash locations.

USFWS photo by: Diane Noda

their watershed. Activities include map reading, aerial photography interpretation, pattern recognition across landscapes and scales, cartographic principles, way finding, and Global Positioning System (GPS) data collection.

The curriculum was compiled from existing lesson plans developed by National Geographic, ESRI, U.S. Geological Survey and by the Spatial team. The UCSB team brings special expertise. They recently launched the new Spatial Center dedicated to projects both on the campus and in the community that promote spatial thinking and its application.

VFWO and UCSB team members think a field component is an essential part of the curriculum. This will allow the students to visit the areas they see on the maps, understand connections between people, habitats and wildlife, and enable them to use spatial techniques for themselves.

The Open Classroom students took their field trips to a Nature Conservancy area along the Santa Clara River. There students learned about wildlife on the property and the impacts that people have on a local and watershed scale. The students gathered data with their GPS units on the locations of insects, amphibians and reptiles, and trash on the site. They brought the data back to the classroom for evaluation and created maps with using Google Earth. They also prepared power point presentations for TNC, UCSB, and the VFWO with their findings and recommendations.

Their results? The students all agreed that The Nature Conservancy property was special and that it should remain protected – and that they would like to get outside more to explore their watershed in other places like this one, too.

The students in Guadalupe have been busy exploring their watershed and collecting GPS data in the neighborhood around their school. This summer and fall, Josh Bader, the lead for the project at UCSB, will be working with the teachers and VFWO to improve the curriculum based on the results of classroom pre- and post-evaluations, lessons learned, and California curriculum standards, as well as building partnerships to grow the program. He will be investigating how best to expand to other schools.

“The trip was wet and wild!. In other words, a good trip... one kid said ‘we don’t need to go to Disneyland if we can play like that’.

All agreed that it was ‘better than science camp’..... because at ‘science camp you knew what was going to happen..... and this was just more free’,” said McKenzie Junior High science teacher Jeff Foote.



TNC's Rich Handley shows Ventura students their location on an aerial photograph.

USFWS photo by Kate Eschelbach

New Film Explores Farallon Islands' Human History and Conservation Future

The nonprofit Oceanic Society, in cooperation with the U.S. Fish and Wildlife Service, have developed "The Farallon Islands, Past Present and Future," a 30-minute film that provides a behind-the-scenes glimpse of the Farallon Islands and the Farallon National Wildlife Refuge, a remote wilderness refuge located 27 miles off San Francisco's coast.

"Even San Franciscans are mostly unaware of this wilderness teeming with wildlife just off their coast," said Birgit Winning, Executive Director of the Oceanic Society which pioneered educational excursions to the Farallon Islands to raise awareness of this important and sensitive wildlife refuge and marine sanctuary. "The Farallones have a rich natural history and a fascinating human history dating back 400 years. Since the refuge is not open to the public and not everyone is prepared for eight hours at sea to cruise around the islands, this film opens a window to the world of the Farallones."

The film, available as a DVD, takes a look at the islands' natural and human history, as well as threats to the islands and the ongoing conservation, research and restoration efforts, among other topics. It also highlights the work of PRBO Conservation Science and the Service.

The film documents a 2008 visit to the islands by Linda Murray, who last set foot on Southeast Farallon Island in 1953 when she was eight years old and her father was stationed there with the Coast Guard. The DVD documents Murray's return with her parents, Lucky and Dell Jackson, who share their impressions and provide a personal sense of the place and its history.



USFWS photo

"This special film brings the history and nature of the Farallon National Wildlife Refuge to the millions of Bay Area residents and others who want to know more about this jewel of the Pacific," said Gerry McChesney, acting manager of the Farallon NWR.

Managed by the Service, the Farallon National Wildlife Refuge, supports the largest seabird rookery in the lower 48 states. The refuge is home to 12 nesting species and island beaches are covered with California sea lions, northern elephant seals, harbor seals, fur seals and the threatened Steller sea lion.

The waters surrounding the islands – known as the Gulf of the Farallones – are part of the California Current System, one of the four most productive marine ecosystems on the planet. Nutrient-rich gulf waters not only sustain huge populations of seabirds and pinnipeds, they support some of the larg-

est feeding populations of endangered humpback and blue whales in the world. The Farallon Islands are the centerpiece of the Gulf of the Farallones National Marine Sanctuary - 1,255 square miles of federally protected ocean just beyond San Francisco's Golden Gate.

Produced for the Oceanic Society by award-winning Earthviews Productions, the DVD sells for \$15. Proceeds benefit the research and conservation work of the Oceanic Society and U.S. Fish and Wildlife Service cooperators. The DVD can be purchased at the Don Edwards San Francisco Bay National Wildlife Refuge and online at: www.oceanicsociety.org/merchandise.



USFWS photo

Biologists Discover Invasive Species While Surveying for an Endangered One

By Matt Baun

Arcata Fish and Wildlife Office

Earlier this fall, a team of biologists from the Arcata Fish and Wildlife Office discovered thousands of invasive New Zealand Mudsnails (NZMS) in Big Lagoon, a popular Humboldt County recreational destination that lies north of the coastal town of Trinidad in northern California.

“Knowing that the New Zealand mudsnails are very small, we decided to collect a sample and have them positively identified,” said Greg Goldsmith, one of the biologists who made the discovery.

Goldsmith and colleagues Tony Scheiff and Katrina Wright captured the snails in their seine nets while they were surveying for the presence of the tidewater goby in the shallows of the lagoon.

On September 18, the FWS received preliminary confirmation that the species is the NZMS. In total, tens of thousands of the tiny snails were observed since they were discovered on September 9.

Goldsmith noted that he had never seen snails approaching the density that he and his crew encountered in Big Lagoon, adding that all of the snails were uniform in size.

Mudsnails were first discovered in the U.S. in Idaho’s Snake River in the 1980s, and have rapidly spread throughout the west. They have been discovered in waters throughout California. The discovery in Big Lagoon is believed to be the first confirmed occurrence in the North Coast region.

The mudsnail should not be confused with invasive mussels, such as



USGS photo

quagga and zebra mussels, which are often much more detrimental to ecosystems and underwater infrastructure. Still, mudsnails are a threat to native waters and they compete with native invertebrates for food and habitat, which may have serious consequences for fish populations, vegetation, and other native biota.

The mudsnails are brown or black in color and can be as small as a grain of sand and reach lengths of up to an 1/8 of an inch.

Mudsnails can tolerate a wide range of habitats, including brackish water, and are found living in high densities (often more than 400,000 snails/sq meter) on many different substrates such as rock, gravel, sand, and mud). They reproduce asexually and in vast numbers.

There are no effective eradication procedures once these species are established.

The NZMS is primarily spread into new waters by people. Anglers, boaters, researchers and others who transport potentially contaminated gear and equipment can easily move these species to new locations.

Public education and preventive measures are the best means for controlling the spread of these invasive species.

You can help

Here’s what you can do to prevent the spread of New Zealand mudsnails:

- Have extra waders and boots for use in infested waters only. Store them separately.
- After leaving the water inspect waders, boots, float tubes, boats and trailers, and any gear used in the water.
- Remove visible snails with a stiff brush and follow with a rinsing.
- If possible, freeze or completely dry out wet gear before reuse.
- Never transport live fish or other aquatic animals or plants from one body of water to another.

For more information on New Zealand mudsnails in California, visit the California Department of Fish and Game Web site at: www.dfg.ca.gov/invasives/mudsnail.

More information can be found at: www.esg.montana.edu/aim/mollusca/nzms/.

New Interpretive, Visitor Area at Marble Bluff Dam and Fish Passage Facility

Story & photos by Jeannie Stafford
Nevada Fish and Wildlife Office

A new interpretive visitor area has just been completed at Marble Bluff Dam and Fish Passage Facility.

The facility includes five new interpretive panels featuring Lahontan cutthroat trout, cui-ui, American white pelicans and the history of the area. Visitors will learn about on-going research and monitoring activities that take place during spawning season, as well as how fish make their way up and over Marble Bluff Dam to spawn. In addition to a much-needed parking area, visitors can now make use of a new picnic area while enjoying the view of Truckee River delta and local wildlife.

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 facility consists of four major components: Marble Bluff Dam, fish lock, fish-way and fish handling building.

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



Completed visitor picnic and interpretive area

USFWS photo



USFWS photo

2005, biologists were able to move approximately 2,500 cui-ui every five minutes above the dam. The fish lock is a fully automated system but requires round the clock staffing during spawning season. Biologists sample a small portion the fish as they move through the lock. This sampling helps biologists and fishery managers determine the overall health, size, and sex of the species as they make their way up the river to spawn.

Tufa - a calcium carbonate deposit - is a centerpiece of the interpretive display.

Lahontan cutthroat trout are reared from eggs incubated in the fish handling building 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 re-establish Lahontan cutthroat trout in its historic habitat in the Truckee River. In 2007 (the first year of operation) the incubation system produced approxi-

mately 28,400 Lahontan cutthroat trout fry, which were stocked into upstream tributaries of the Truckee River.

The Marble Bluff Fish Passage Facility is 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 when staff is on-site throughout the remainder of the year.



Roy Hicks helps prepare the display for installation.

USFWS photo



The visitor area and sign before the improvements.



USFWS photo

Nancy Hoffman Has Left the Building...

Story & photo by Scott Flaherty
Region 8 External Affairs

Nancy Hoffman, assistant refuge supervisor at Region 8, is swapping sandals for snowshoes, fresh fruit for fresh salmon as she departs Sacramento for a new job as refuge manager at Izembek National Wildlife Refuge in Alaska.

Nancy came to Region 8 in March 2007, after six years as the assistant refuge complex manager at Oahu National Wildlife Refuge Complex in Hawaii.

“After years of tropical living I really needed a change and was happy to come to the mainland,” said Nancy. “I’ve learned that regional offices are not the scary, mysterious places, which people in the field think they are. I’ve participated in management decisions at the regional level, and will take that experience with me to my new job.”

Nancy began her federal career in 1990 as a wildlife biologist with the U.S. Forest Service, first in Washington D.C., then to Targhee National Forest in Idaho. She joined

the Service in 1998, working as a wildlife biologist at the National Elk Refuge and was the refuge wildlife biologist at Midway Atoll NWR. Her transitory role as assistant refuge supervisor in Region 8 is by design, part of the Refuge Program’s commitment to develop future leaders by exposing mid-level refuge employees to a broader scope of program management responsibilities. The positions typically turn over every two to three years.

Nancy said she appreciates support she’s received from project leaders and regional office staff, with special thanks to Dan Walsworth, refuge supervisor, Marge Kolar, refuge chief, and Ken McDermond, deputy regional director. “The nature of this job is toughest on them because they have to train someone new every 2-3 years, but it demonstrates their willingness to invest in people. I’d encourage anyone in the refuge program to apply for this job.”



USFWS photo

During her 20 months in Region 8, Nancy has been engaged with projects and issues affecting the Region’s 48 refuges, and has even visited about half of them.

“It’s been cool to be here during the transition from CNO to Region 8 and I’ve enjoyed helping our program start to shape its identity and set a course for where we’re going in the future.” Nancy said. “But, I’ve always wanted to work in one of the last wild places, Alaska, and to be able to go there as a refuge manager is icing on the cake.”

Or, on the salmon, as she’ll learn.

California Families Enjoy Return of Salmon and Outdoors

By Tricia Parker

Coleman National Fish Hatchery

Smilng parents and delighted children are celebrating the return of fall Chinook salmon at a no-cost local attraction here in the northern Central Valley/Sacramento River area. Hundreds of families are visiting Coleman National Fish Hatchery to see one of the wonders of nature – the return of the salmon.

The past few weekends, many families with young children watched salmon in the fish ladder and holding ponds at Coleman National Fish Hatchery. Young children and parents alike tend to squeal with

delight when they see the adult salmon jumping in the ponds. At Coleman National Fish Hatchery, people of all ages and abilities can access salmon viewing areas to witness the phenomenal return of these magnificent fish.

The life cycle of Chinook salmon includes two amazing migrations. Born in freshwater streams, young salmon migrate to the ocean to live and grow for a few years. When they have grown to an adult they make another incredible journey and return to freshwater to spawn. Although these adults will end up dying, their successful spawning will lead to a new generation of

young fish and the cycle continues. Witnessing salmon returning to spawn is one of the highlights of the fall season here in Northern California. In addition to the salmon spawning naturally in the creeks and river, many salmon return to Coleman to be spawned. Following the construction of Shasta Dam in the 1940s, CNFH was constructed to help provide a place to make up for the lost natural spawning habitat that was blocked by the dam.

To view salmon in their natural setting, consider visiting the historic Battle Creek bridge (Gover Rd. and Jelly’s Ferry Rd.), or along the trails upstream of the Sundial Bridge in Redding.

Field Office Sponsors Science Talks

By Alexandra Pitts,
Assistant Regional Director
External Affairs

With two major universities (UC Davis and Sacramento State University), two major research centers (U.S. Geological Survey-BRD Western Ecological Research Center and U.S. Forest Service-Sierra Nevada Research Center), as well as a large community of doctoral and post doctoral research scientists located in the area, Sacramento provides a wealth of opportunities to learn first hand about current research. Every year Ken Sanchez, assistant field supervisor of the Endangered Species Program at the Sacramento Fish and Wildlife Office (SFWO), contacts area scientists, academics and researchers and solicits their participation in the SFWO's Science Talks Program. The goal of these presentations is to tap into this wealth of current state-of-the-art science and expose our, mostly office bound, biologists to this information.

What could be the price for such a rich and varied program? Ken assures me there is no budget for this and for the price of a SFWO hat these scientists are happy to come share their research and field experience with field office. Oh, and the milk and cookies are free so it's best to arrive early.

Below is the program for 2008:

March 20: "Fisher Research in the Southern Sierra; Habitat Use and Limiting Factors," Kathryn Purcell-Research Scientist, U.S. Forest Service-Sierra Nevada Research Station.

April 9: "Altered Hydrologic Regimes in the Sierra Nevada and

Native California Amphibians," Amy Lind-Research Scientist, U.S. Forest Service-Sierra Nevada Research Station.

May 6: "Pika Association With Rock Glaciers in the Sierra Nevada; Implications of Climate Change," Connie Millar-Research Scientist, U.S. Forest Service-Sierra Nevada Research Station.

May 8: "Current Research on Great Gray Owls in the Sierra Nevada; Addressing Habitat Requirements, Genetics, Disease, Survey Work, etc," John Keane-Research Scientist, US Forest Service-Sierra Nevada Research Station.

May 15: "Conservation of the Snow Leopard in India," Jerry Roe-Consulting Biologist on contract to U.S. Fish and Wildlife Service.

August 21: "Habitat Dynamics of the Yellow-billed Cuckoo on the Sacramento River," Steve Greco-Associate Professor UC Davis.

September 25: "Nonnative Trout Impact on Alpine-Nesting Birds by Altering Aquatic Insect Subsidies," Peter Epancion-Doctoral Candidate at UC Davis.

October 15: "Status of Vernal Pools in California – Changes since 1997," Robert Holland wetlands researcher and consultant.

October 22: "Ecology of the Giant Garter Snake- a Model of GGS Habitat Statistically Derived From Data Collected Over a Number of Seasons," Glenn Wylie-Research Scientist, U.S. Geological Survey-Biological Resources Division.

December 4: "Native Amphibians and Non-Native Trout," Curtis Milliron, Senior Biologist, California Dept. of Fish and Game.

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community. NHEC is a national non-profit organization based in Washington, DC. The Council is the only national Latino environmental organization in the country.

The Complex staff set up an informational booth in the school's outdoor lunch area. Other groups also set up booths, including Angeles National Forest, Heal the Bay and Aquarium of the Pacific. Many excited students stopped by the Hopper Mountain NWRC booth, asking questions about what the Service does and how they can start a career with the agency.

After lunch, refuge staff were assigned to three different classes to give presentations. Ivett Plascencia spoke to students about all the career areas USFWS offers and shared her story as a student worker (STEP). She also explained the two student programs USFWS offers (STEP and SCEP) and encouraged students to contact their local USFWS office to learn more about STEP and SCEP opportunities. Richard Posey talked about his career as a California condor wildlife biologist and encouraged students to take courses in GIS. "The ECHS Environmental Awareness/Career Day is an important event that creates future environmental leaders and has the potential to grow USFWS workforce diversity," said Project Leader Marc Weitzel.



Richard Posey

USFWS photo by Marc Weitzel

California Condor Recovery Reaches Milestone; Wild Condor Population Now Exceeds Captive Population

By Michael Woodbridge
Hopper Mountain NWRC

Seven wild California condor chicks have left their nests in California this year—marking a successful breeding season for this rare bird. With these new chicks, and others in Arizona and Baja, the wild population of California condors now outnumber those in captivity for the first time since the birds started being reintroduced in 1992.

The addition of seven more endangered California condors brings the population in California to 80+ birds flying free in the wild. The total number of California condors existing in the world today is more than 320. This is a remarkable turnaround, after the total population reached a low of only 22 wild birds in 1982.



USFWS photo

“This is an exciting time for the California condor recovery effort,” said Marc Weitzel, project leader for the U.S. Fish and Wildlife Service’s Hopper Mountain National Wildlife Refuge. “We’ve come a long way since the Recovery Program began reintroducing captive-bred condors to the wild, and while we still have a ways to go, we are making tremendous progress—with more condors in the wild than there have been in 50 years.”

A captive breeding program was started in 1983, and in 1987 all California condors were brought in to captivity to start an urgent breeding program at the Los Angeles Zoo and San Diego Wildlife Park. After all the wild birds were captured in 1987, the California Condor Recovery Program worked to steadily grow the number of condors in captivity and in the wild. The recovery plan for California condors calls for three distinct populations, each with at least 150 birds and 15 breeding pairs.

As the Recovery Program works towards this goal, it has reached an



USFWS photo

important milestone in the process. There are now 167 condors flying free in the wild, and 160 currently in captivity.

The California condor was placed on the federal Endangered Species List in 1968. Threats to the condor’s survival include lead poisoning from spent ammunition, collisions with power lines, and accidental and intentional shooting, among others.

Settlement to Restore Habitat Damaged by Sewage Spill in San Diego County’s Buena Vista Lagoon

By Stephanie Weagley & Sharon Taylor, Carlsbad FWO

On September 10, 2008, the San Diego Regional Water Quality Control Board fined the cities of Vista and Carlsbad approximately \$1.1 million for a 7.3 million gallon raw sewage spill into Buena Vista Lagoon in April 2007. Out of this fine, \$895,000 will be used to fund two Supplemental Environmental Projects (SEP) to help restore Buena Vista Lagoon and Creek.

The two projects, proposed jointly by the Service’s Carlsbad’s Fish and Wildlife Office and California Department of Fish and Game provide \$500,000 for Buena Vista Lagoon Ecological Reserve Restoration Engineering Studies & Analyses, and \$395,000 for Buena Vista Creek Ecological Reserve Habitat Restoration.

The Water Board’s unanimous vote to fully fund both projects was a precedent-setting success. Typi-

cally, the Water Board considers funding a SEP project at a level significantly less than 50 percent of the fine.

For the past 18 months Sharon Taylor and Judy Gibson from the CFWO Environmental Contaminants Division, and Scott Sobiech, Deputy Field Supervisor, along with CDFG employees, have been working with the cities, Water Board staff, California Coastal Conservan-

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New Building Method Means Speedy Completion

An Alternative to Sheet Pile and Cobble Cofferdam Construction

Story & photo by Mike Keeler
Assistant Hatchery Manager,
Coleman National Fish Hatchery

Coleman National Fish Hatchery is located on Battle Creek, six miles upstream from its confluence with the Sacramento River, in northern California. Coleman Hatchery began production in 1942 as partial mitigation for anadromous fish habitat lost due to construction of Shasta Dam. With the construction of Shasta Dam, Battle Creek is one of the few remaining Sacramento River tributaries available to salmon and steelhead providing year round habitat for natural as well as hatchery production. State, federal, and private stakehold-

ers – along with the Pacific Gas and Electric Company– are working to restore 42 miles of Battle Creek for natural salmon and steelhead production.

Coleman NFH has recently re-designed its hatchery fish collection ladder. The new structure includes two new ladders to provide increased attraction flow and increased passage opportunity to naturally produced salmonids. Forming and placing concrete during construction of the ladders necessitated a temporary diversion of Battle Creek around the construction area. Instead of hauling and placing hundreds of tons of cobble material to form the upstream and

downstream coffer dams needed for the creek diversion, a method called PORTADAM was used to divert the creek into a temporary channel. PORTADAM uses a system of interlocked steel A-frames to support plastic tarps which form the water barrier for the diversion. The tarps extend upstream from the toe of the A-frame supports for several yards and are fixed in place with sandbags.

This effectively forms a nearly watertight seal, making it possible to maintain a dry work area with the use of a single small pump.

The use of PORTADAM instead of cobble for the creek diversion reduced the time needed for placement of the coffer dam from weeks to days. Two days were required for the placement of the upstream and downstream structures, four days total. The contracting agency (the Bureau of Reclamation) recovered more than \$200,000 in savings as a result. The elimination of the substantial noise and dust associated with transporting and placing hundreds of tons of cobble material was an added bonus.



USFWS photo

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USFWS photo

cy and other organizations to have the Water Board consider reallocating some of the potential fine so the monies could benefit the lagoon resources injured as a result of the spill.

This settlement is unique in several aspects, but primarily because it provides monetary damages for injuries to trust resources under the Clean Water Act rather than through the Comprehensive Environmental Response, Com-

pensation, and Liability Act or Oil Pollution Act. Additionally, these monies were awarded without the documented presence of hazardous substances or petroleum products.

The CFWO and CDFG have worked diligently and cooperatively to meet everyone's concerns while caring for our natural trust resources. Furthermore, by having 82 percent of this fine stay at the local level and go toward habitat restoration, it opens the door for future settlements on sewage spills in southern California.

Urban Burrowing Owl Monitoring Project in the Las Vegas Valley

By Christiana Manville
Nevada FWO

In 2008, the Nevada Fish and Wildlife Office in Las Vegas partnered with the Red Rock Audubon Society to conduct an urban burrowing owl monitoring study. This project used volunteers to document and map burrows, survey for new burrows, and monitor nest burrows. Thirty-five volunteers monitored 34 nest burrows throughout the breeding season in the Las Vegas Valley.

Monitoring consisted of watching the owls for half an hour once a week around sunrise or sunset, and filling out a data sheet to record the number of owls they observed, owl age, and their behaviors. Volunteers included local government employees, residents who have been watching owls for years in their neighborhoods, college students, and members of Red Rock Audubon Society.

The project mapped 393 burrows. Burrow locations were shared with landowners who were developing several sites where owls occurred. As a result, landowners avoided take of owls, and in two locations are mitigating for the loss of natural burrows by installing artificial ones. The majority of the nests monitored occurred in the north end of the Valley with the largest numbers of nests at Knells Air Force Base along Range Wash; Floyd Lamb Park; adjacent

to Gilcrease Orchard; and adjacent to RC Farms. Owls mostly nested in animal burrows but some nested in other structures, including a hole under a sidewalk, and under an old box spring mattress.

Many monitors observed their owls mating and males bring females food during incubation. Young were first seen between May 22 and June 20, and were estimated to be between 11 and 23 days old when they were first seen. We learned that adult owls become much more sensitive to people once young have emerged from the nest. Observation distances had to be increased, in some cases up to 400 feet away, to avoid alarming the adults.

Approximately 79 percent of nests produced young that survived to the intensive monitoring period when the juveniles were 21 to 28 days old and most easily observed (79 percent of 33 nests). These nests are considered successful nests. Fewer nests produced young that survived to the fledgling stage when the young are at least 44 days old (68% of 31 nests). Unfortunately due to incomplete monitoring data or improper monitoring methods no all the data for each burrow could be analyzed.

Of the nests successful to the intensive monitoring period, there were on average 3.1 young per nest ($n=23, \pm 1.4$). The number of young ranged from 1 to 6. Of the nests successful to fledgling stage, there were on average 2.7 young per nest ($n=14, \pm 1.2$). The number of young also ranged from 1 to 6. At two nests predation of young and possibly adults were documented. Remains of the owls were observed near the burrow entrances.

Owls were observed bringing the following food items to their nests:



© Photo by M.J.Kammerer: with permission

mice, snakes, grasshoppers and other insects, scorpions, lizards, and antelope ground squirrels. Threats to nests that volunteers observed include children on motorized and non-motorized bikes, off-road-vehicles, placement of large objects in borrow entrances, domestic dogs, cats, and weeds at burrow entrances.

Volunteers have said they greatly enjoyed their experiences. Volunteer John Baileki described his experience this way, “Yes, it was an effort to stake out and watch; and \$4 gas didn’t help, but the reward was worth it. I have a new and deeper understanding of the burrowing owl and its fight for survival. I can only wish that others could take advantage of a similar opportunity.”

Volunteer Billy Chapman describes the first time he saw young owls at his nest burrow, “A few minutes after I had completed my official 30 minutes of monitoring, I took one more look through my scope. Suddenly, a young owl exited the burrow. 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.”

The study results will be used to assist the Service with burrowing owl conservation in southern Nevada.



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Partner-Developed Water Agreement Boosts Resource Benefits

By Craig Isola & Greg Mensik, Sacramento National Wildlife Refuge Complex

Cooperation between the Sacramento National Wildlife Refuge Complex (NWRC), Bureau of Land Management (BLM) and conservation partners has resulted in a Long-term Water Agreement that will provide beneficial instream flows for salmon and steelhead, while helping flood 3,500 acres of private wetlands protected by U.S. Fish and Wildlife Service Conservation Easements.

In 1996, and again in 2001, the Trust for Public Lands purchased and conveyed to BLM, lands that included water rights on Battle Creek in Tehama County. BLM eventually determined that not all of the water was needed to manage these properties.

Long-standing concern about salmon and steelhead habitat in Battle Creek, and water supplies for private wetlands in the Willow Creek–Lurline Wildlife Management Area (adjacent to Sacramento NWR) gave rise to an innovative proposal. Sacramento NWRC, BLM and the Trust for Public Lands proposed that 1,450 acre feet of the water be used to provide instream benefits to salmon and steelhead in Battle Creek, while also helping to flood 3,500 acres of federally-protected wetlands lower in the Sacramento River watershed. To facilitate this, Sacramento NWRC and BLM worked with the Department of the Interior Solicitor's Office to develop a Long-term (25 year) Agreement. As a result, BLM agrees to forego diverting its entire water right and allows 9cfs to remain in Battle Creek. This provides increased instream flows beneficial to spring-run Chinook and Central Valley steelhead.



USFWS photo

Principle partners in getting the water flowing to Willow Creek (from left) Jim Kirsch, water master; Brig. Gen. Jack McMills (retired); and Craig Isola, USFWS.

These flows enter the Sacramento River and are diverted downstream at Glenn Colusa Irrigation District's "fish friendly" pumping facility. The irrigation district delivers the water to Sacramento NWRC, which conveys the water to Willow Creek Mutual Water Company. The water company is then responsible for delivering the water to individual FWS conservation easement wetlands within the Willow Creek-Lurline Wildlife Management Area.

To facilitate the water delivery, Sacramento NWRC, with the help of Dale Garrison of the Sacramento Fish and Wildlife Office and Willow Creek Mutual Water Company, was awarded a North American Wetlands Conservation Act Grant.

In fall 2007, the funding was used to construct new, and enhance existing, water conveyance facilities to deliver water from the irrigation district to WCMWC.

Water delivery to protected wetlands began in September 2008, and will continue to be available to benefit salmon, steelhead and a host of wetland-dependent wildlife, including waterfowl, shorebirds, wading birds, and threatened giant garter snakes. In addition, this innovative project helps to set a precedent and provide a model for future conjunctive use of water for natural resources.

Fish Passage Program

By Bob Clarke

Region 8 Fisheries Program

Staff from the Region 8 Fisheries, Partners, and Ecological Services programs met to discuss ways to improve delivery of the Region's Fish Passage Program during a two-day meeting at Red Bluff Fish and Wildlife Office Dec. 3-4.

Topics discussed the status of current and pending fish passage projects in the region, prioritization and funding of future projects, staffing as well as project design and engineering. This year, Region 8 expects to fund approximately \$890,000 worth of projects in California, Nevada and Klamath Basin of Oregon.

The Service's National Fish Passage Program works to restore native aquatic species to self-sustaining levels by reconnecting habitat fragmented by barriers. Examples of fish passage projects include screening of agricultural water diversions and removing or bypassing small dams that impede fish passage to or from spawning areas. Projects are accomplished through cooperative partner work including CDFG, CalTrans, local watershed groups and other non-governmental organizations.

Within Region 8, Fish Passage Program project funds have increased from \$283,000 in 2007 to more than \$890,000 in 2009. The meeting focused on improving cross-programmatic coordination between the Region's Fisheries, Partners, and Ecological Services programs.



USFWS photo

Shasta River weir

Transitions

Coleman National Fish Hatchery:

Terry Freije was selected to fill the vacant Fish Biologist position. Terry's career began with the USFWS in 1990 through 1992, while in college, working at Garrison Dam NFH in Riverdale, North Dakota. After receiving his degree in Bachelor of Science in Fisheries and Wildlife Biology from the University of North Dakota, he worked at Kettle Moraine State Fish Hatchery in Adell, WI raising trout and salmon for stocking into Lake Michigan. Following his time at the state hatchery in Wisconsin, Terry returned to the USFWS working at Hotchkiss National Fish Hatchery in Hotchkiss, Colorado. While at Hotchkiss NFH, Terry worked with the staff culturing more than a million rainbow trout for distribution throughout Colorado and New Mexico. After spending three years in Colorado, Terry decided to return to North Dakota and work in the endangered species program at Garrison Dam NFH. Terry has spent the past three plus years rearing Pallid Sturgeon, and was responsible for running the day to day work of that program. As you can see Terry has a very diverse back ground in raising and rearing a variety of fish species and we at Coleman NFH feel he will be another great addition to our staff. Terry is an avid outdoorsman and enjoys hunting and fishing in his spare time.

Hopper Mountain NWRC:

In November, **Michael Woodbridge** joined the Hopper Mountain National Wildlife Refuge Complex in Ventura, CA, as the Information and Education Specialist. Previously, Michael was Director of Government Affairs for the National Wildlife Refuge Association in Washington, DC. His past experience also includes positions

in Florida and Colorado Congressional offices and the House Natural Resources Committee. Michael holds a Bachelor of Science degree in Natural Resources from Colorado State University and a Master of Arts in Public Policy, with a concentration in Environmental and Resource Policy, from The George Washington University. As the Information and Education Specialist, Michael will coordinate public affairs and outreach for the refuge complex and the multinational California Condor Recovery Program.

Richard Posey retired on January 8. He spent the past six years working on the California Condor Recovery Program. After serving in the Air Force, he got his start as an intern with the Condor Program and, for the past three years, has led the Program in his role as Supervising Wildlife Biologist. Richard's contributions extend throughout the Hopper Mountain NWRC. In addition to strengthening the Condor Program through new partnerships, he helped establish an active volunteer force to accomplish condor and refuge habitat projects. While his formal retirement will be in January, Richard was honored by volunteers and refuge staff during a Hopper Mountain NWRC volunteer appreciation day on December 13.

Klamath Falls FWO:

Laurie Sada has been selected as the Project Leader at the Klamath Falls Fish and Wildlife Office. Laurie had been the Deputy Project Leader for over a year and is a graduate of the Service's Advanced Leadership Development Program. Laurie started her 20-year federal career as a biotechnician with the National Park Service at the Delaware Water Gap National Recreation Area in Pennsylvania. She then transferred to the Service as a term Federal Projects/PFW biologist at the field office in State College, Pennsylvania. Her work in State College led to a perma-

nent position with EPA Region 3 in Philadelphia where she worked on wetland protection issues in Pennsylvania, Maryland, and Delaware. Eager to return to the Service, she accepted a position as the Assistant Regional Contaminants Coordinator in Newton Corner, Massachusetts in 1992. Laurie moved with the Regional Office to Hadley, Massachusetts and was promoted into the Regional Habitat Restoration Coordinator position overseeing PFW and Coastal Program activities for the 13-state Region. In 1996 Laurie took her first supervisory position as the Chief of the Branch of Habitat Restoration in the Western Washington Field Office in Lacey, Washington. After a one-year break in Service to get married and move to Bishop, California, Laurie and her husband Don were able to meet dual career goals by moving to Reno, Nevada in 2000. Laurie returned to the Service as the Assistant Field Supervisor for Ecological Services in the NFWO, a position she held for 7 years until her move to the KFFWO in September 2007 to take the Deputy Field Supervisor position.

Ruby Lake NWR:

Dan Johnson, Engineering Equipment Operator at Ruby Lake NWR, retired on October 31, after 23 years of government service (4 with the US Marine Corps and 19 with the FWS/National Wildlife Refuge System). During his career, he also worked at Ash Meadows and Izembek NWRs. Dan was an instructor for the equipment operator's certification course, and helped prepare Service policy for tying down and hauling heavy equipment. He will be remembered here for fabricating solar panels for use in pumping stock water to force cattle to use less sensitive habitat areas, as well as for designing and building a spray rig with a tank, pump, hose reels, and ATV-hauling attachment for use in treating invasive weeds (among many other things).

WE ARE REGION 8

Eric Johnson (no relation) arrived on November 9, 2008, to take Dan's place as EEO. Eric worked here from 2002 to 2004, and left to experience a different aspect of Service work at Coleman National Fish Hatchery. He says he missed 'country living', and we are more than happy to welcome him back with his "can-do" attitude.

Sacramento FWO:

Jana Milliken was promoted from Senior Staff Biologist to Chief of the Sacramento Valley Branch of the Endangered Species Division. She oversees staff and workload in the Sacramento Valley from Sacramento north to Redding.

Michelle Tovar has transitioned to a Senior Biologist. She started with the Service as a SCEP student in December 2003, and was hired on permanently in December 2004. Since starting at the Service in the Sacramento Office, she has been in the endangered species division, working in Section 7, working mostly in Solano county with vernal pool species

Stephanie Rickabaugh was promoted to a Senior Biologist, Watershed Planning. Stephanie first came to SFWO in 2004, from Kasilof, AK where she worked at the Kenai NWR. Her new position is still with Habitat Conservation, Flood and Waterway Planning Branch where she has worked until taking the new position in October. Stephanie's new duties will center around the San Joaquin River Restoration Project.

Eric Tattersall to Division Chief/Endangered Species

Chuck Friedrich from Division Chief to Division Chief/Administration

Jennifer Tepley was recently hired. She is a U.S. Air Force veteran, where she was an administrative

assistant in the security forces squadron at Minot AFB, ND. Prior to coming to the SFWO, she worked in the sales department of The Ritz-Carlton Hotel in Cleveland. She works as the OA for Recovery and Conservation Planning.

Josh Hull is now Chief, Recovery Branch. Josh most recently was at UC Davis working on the ecology of hawks and owls. He is now in the Recovery Branch working on contracts for recovery actions, recovery planning, and five-year status reviews.

Kim Squires was recently promoted to the senior biologist position in the Forest-Foothills Branch. She is currently working on listed species issues for timber harvests and general development projects. Prior to her new assignment Kim spent four years in the Coast Bay Delta branch working on section 7 consultations primarily in the East Bay Area.

Angela Picco was hired as a Biologist, Coast Bay Delta. Angela is a new employee and comes to Sacramento from Tempe, AZ, where she had completed her PhD on amphibian diseases and commercial trade. She grew up in the Bay Area and received an undergrad degree at UC Davis. Her past research mainly focused on red-legged frogs and tiger salamanders, specifically regarding diseases, the bait and food trades, conservation genetics, and hybrid zone dynamics. She is currently working on Section 7 consultations in the Coast Bay Delta Branch of Endangered Species Division.

Cathy Cracchiolo transitioned from Office Automation Clerk, to Office Assistant, Admin Branch.

Mike Hall has been hired as an Office Automation Clerk (receptionist), in the Admin Branch.

Steve Martarano has been hired as the Senior Information and Outreach Specialist in External Affairs. Steve came over from the CA Dept. of Fish and Game, where he worked for 11 years as the supervising information officer in Sacramento. He worked a total of 18 years with the state, and prior to that was a staff writer at The Sacramento Union newspaper for 10 years.

Stillwater NWRC:

AFMO **Tim Rash** came on board the Stillwater staff in 2008 from BLM Las Vegas and has many years of fire experience. Technically he is assigned to the Desert NWRC, but they graciously allowed him to be stationed at Stillwater NWRC to bolster the fire program in northern Nevada.

Stillwater's new fulltime LEO arrived in September - **Joe Ham** came from the fire program at the Texas Mid-Coast NWRC and has a background in waterfowl biology along with his fire experience. Joe will be attending FLETC starting in mid-February. And if you thought you were busy... Along with moving and starting a new job, Joe and his wife Andrea had their first baby (it's a boy!) on November 6, 2008.

Region 7 recently gained an outstanding employee when Stillwater's Park Ranger **Janet Schmidt** accepted the Visitor Services Manager position at the Kenai NWR. Janet started with Stillwater in 1997 as our very first Park Ranger and was instrumental in building the refuge's public use program literally from the ground up. Among her many accomplishments were developing the annual Springwings Bird Festival and working with a wide variety of partners to build public use infrastructure such as bathrooms, parking areas, viewing platform, auto tour route, and environmental education facilities.

Stockton FWO:

The Stockton Fish and Wildlife Office welcomes **John Netto** as a Supervisory Fishery Biologist in the Delta Juvenile Fish Monitoring Program. John comes to Stockton from the Green Bay National Fish and Wildlife Conservation Office in Green Bay, WI where he spent the last 6 years working towards native species restoration and inter-jurisdictional fisheries management throughout the Great Lakes. As the 1836 Treaty water assessment unit coordinator, John oversaw all office activities related to assessment in the treaty waters and chaired the multi-agency committee that generated harvest limits for tribal commercial and state recreational fisheries in the Michigan waters of Lakes Huron and Superior. His team provided modeling expertise and management assistance to the states, tribes, and Canadian provinces of the region and participated in several cooperative research projects. Prior to joining the Service, John was a fisheries analyst at Michigan State University where he applied statistical modeling and decision analysis to fisheries management and non-native species control decisions in the Great Lakes. John received a B.Sc. degree from the University of Idaho, and a M.Sc. degree from Michigan State University.

Regional Office:

Barry Christenson is our new Refuge Operations Chief, overseeing our Visitor Services, Biology, Facility Maintenance, Data Base Management and NEPA/Policy activities here in the Regional Office. Barry transferred to Sacramento in mid-August from Midway Atoll National Wildlife Refuge where he served as manager for 3.5 years. Previous to his stint in the Pacific, he worked as a Refuge Supervisor in R3 (supervising refuges in WI, MI, OH, and IN).

Also in R3 he served as Project Leader at the Litchfield Wetland Management District and Union Slough NWR (which also included the Iowa WMD). As an assistant refuge manager, he worked at Montezuma NWR (Region 5), Seedska-dee NWR (Region 6), and Great Meadows NWR (Region 5). Barry adds to the long list of Region 8 personnel who attended Humboldt State University for wildlife. But he points out that he did get his Masters from the University of Maine.

Sallie Hejl has been selected for the position of Regional Refuge Biologist. Although this is a Regional Office position, she will be physically located at Stone Lakes NWR. Sallie previously served as the Director of the Crown of the Continent Research and Learning

Center at Glacier National Park. National Park Service Research Learning Centers work to increase the effectiveness and communication of research and science results in the national parks.

She previously worked for the Forest Service as a research biologist in the Sierras and Rockies and also served as an assistant professor (avian ecology, management, and conservation) in the Wildlife and Fisheries Science Department at Texas A&M University. She earned her PhD at Northern Arizona University, but her Masters and Bachelor degrees are from U.C. Davis, so returning to Sacramento has an element of homecoming for Sallie. We are excited about adding Sallie to our Region 8 Refuges Team and are confident that her strong science background will help us all work towards the Service goal of using the best available science in our daily resource management decisions.

Bart Prose came to Region 8 from the Sacramento FWO to join the WSFR program as a grants manager specialist in August.

Jill Wright was promoted in July.

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