U.S. Fish & Wildlife Service

We Are The Pacific Southwest Region

Spring 2010

Highlights:

More inside

Heather Abbey, biologist with the Ventura Fish and Wildlife Office, plants the federally-endangered marsh sandwort and Gambel's watercress at Guadalupe-Nipomo Dunes National Wildlife Refuge. Photo: Ashleigh Blackford, USFWS

From The PSW Regional Director

Note: On March 3 Regional Director Ren Lohoefener spoke with the Project Leaders, and some of the Regional Office Staff about the reorganization of the RO. This article is based on that meeting.

With the passing of Director Sam Hamilton earlier this year, Rowan Gould will serve as the Acting Director. And he will likely hold this position until a new Director is appointed. It would be hard to imagine a person more dedicated to the Service than Rowan. Dan Ashe will continue to serve as Deputy Director.

As you are probably aware, there are an increasing number of retirements throughout the Service. With these retirements come increasing opportunities for building pathways to leadership at all levels of the organization. Ask yourself what your impediments are – what keeps you from taking the next step?

Regional Office Organization
The Pacific Southwest Region has many challenges and we often gain national attention. The Region is still in transition to a fully-functioning region of the Service and we need to take some reorganization actions to ensure we continue to succeed in the future. The recent retirement of John Engbring provided an opportunity to assess our structure within the regional office and we have decided to make some adjustments.

Mike Fris, currently Assistant Regional Director for Ecological Services, will become Assistant Regional Director for Endangered Species. No other region has the endangered species workload of the Pacific Southwest Region. By creating this position, we will be able to focus on this critical program and help lead the nation.

We will create the Assistant Director for Fisheries, Habitat Conservation, and Conservation Partnerships. This position will mirror the Washington Office organization and will allow us to focus on aquatic habitat and species conservation and partnerships. This position is basically the vice-John Engbring position and will be advertized at the GS-15 level.

We owe thanks to Tom McCabe for managing an office that answered to three different Washington Office programs: Migratory birds, state programs, and the Partners and Coastal programs. That task is too great for any single individual. We will advertize an Assistant Regional Director for Migratory Birds and State Programs at the GS-15 level. This position is similar to the organization of most other regions.

In addition, to better manage the interest we get from the Department, political interests, and the press, we have gained approval and are advertizing a new position, the Deputy ARD for External Affairs. This will allow the region to increase our ability to respond to the people we serve.

We are committed to the development of LCCs, or Landscape Conservation Cooperatives. Key to the success will be building partnerships. This will bring a number of new opportunities to Service employees. We have responsibility for two LCCs; California and the Great Basin. To lead this program we have hired Rick Kearney as the Assistant Regional Director for Climate Change and Science Application. He and Deb Schlafmann are doing a great job in launching the partnerships. In fact we are one of the leaders in the nation in this area. There are a number of partners who will be key in working on this with us, primarily the states of California and Nevada, as well as BLM and many, many others. On March 18 they led a meeting of nearly 100 stakeholders of the California Landscape Conservation Cooperative in Sacramento. The purpose of the workshop was to develop a common vision for the CA LCC, define the LCC's essential functions and organization and identify next steps in developing the partnership.

More about the future...
Telework is good for the environment and good for our hard-working folks. At this time we have about 12 percent of employees participating. We need to make sure we are not discouraging telework.

In 2011 our travel budget is going to be reduced by at least 4 percent. That means we need to find ways creative ways to continue to do our jobs. We must also invest in other means to reduce our need to travel. Web conferencing, video conferencing are all ways we can accomplish this. There will be more opportunities as technology evolves.

Success and communications
We should continue to share our successes. One way I plan to do this is by starting a blog. I'd like you to find ways to share your successes too. Writing articles for the FWS Journal is one way. Talking to community groups might be another.

Give it some thought...

Ren Lohoefener

Connecting People with Nature Event

On Feb. 18, staff from Stockton FWO, Sacramento FWO and the Regional Office joined Stone Lakes Elementary students and parents for a day of native species planting at Stone Lakes NWR.

Together they planted coyote bush as part of a refuge restoration project.

Photo: Amy Hopperstad, USFWS

Region 8 ARRA Project Update

Big Bear Flat Restoration Project

By Ken White, ARRA Communications

It's all about conservation and recovery. The 2009 American Recovery and Reinvestment Act (ARRA) puts people back to work, while addressing many of the challenges our country is facing with aging infrastructure.

For the Fish and Wildlife Service that means investing in projects that conserve America's natural landscapes and wildlife heritage. It means helping working families and their communities prosper again. To accomplish this, the Service is developing partnerships with local stakeholders in communities across the country to perform a wide range of work promoting the Service's mission to conserve, protect, and enhance fish, wildlife, plants and their habitats. In North Central California, the Red Bluff Fish and Wildlife Office did just that by partnering with local natural resources agencies on the Big Bear Flat Restoration Project.

The Partners for Fish and Wildlife (PFW) Program staff identified local partners to worked with them to successfully plan, manage, and implement this restoration project. They worked with a diverse group of stakeholders on the Big Bear Flat restoration, which was recently completed and was the last in a series of water quality improvement projects.

Bear Creek originates in the highlands of Northeastern California and flows to its confluence with Fall River in Shasta County. It's the largest surface water tributary of the Fall River and is a headwater stream of the Sacramento River watershed. Bear Creek once flowed freely across Big Bear Flat, a 400-acre wet-meadow habitat. Over time, nature and land management practices changed its course and the stream carved a wide and deep gully across the face of the floodplain, severely eroding the meadow, lowering the water table, and altering the landscape.

Since the mid-1900s, most of the region has been logged, with many miles of roads and railroads constructed to support the logging. The land has also been used for open pasture cattle grazing. Major floods between 1950 and 2000 did damage downstream and to some of the culverts designed to move water around these roads and railroad tracks.

There were other issues that had also gotten worse over the years. Sediment produced by streambank erosion had reduced water quality, which affected fish and other aquatic species habitat. The lowered water table led to a transition from the wet-meadow, riparian habitat to a dry meadow of conifers.

In 1999, the Fall River Resource Conservation District (RCD) identified six projects that would minimize sediment input into the Fall River. And in 2001, they partnered with the Bear Creek Watershed Technical Advisory Group and private landowners to launch the Big Bear Flat (BBF) Restoration Project in the Fall River Watershed.

Funding for the wet-meadow and stream restoration was a combination of Service funds through the Partners for Fish and Wildlife Program ($46,000), Private Stewardship Grants ($80,000), and American Recovery and Reinvestment Act (ARRA) funds ($435,000), plus contributions from the California Department of Conservation and Cantara Trust.

"This project represents a great use of Recovery and Reinvestment Act funds," said Jim Smith, project leader at the Red Bluff FWO. "It's a win-win. We were able to improve fish and wildlife habitat, water quality, and benefit the community at the same time."

In October 2009, the final restoration project was completed. This last project was designed to reconnect one of the remnant channels with the floodplain and to restore the meadow water table to its "pre-disturbance" elevation. The goal was to revitalize the riparian community, eliminate obstructions to fish passage in the channel, and improve fish habitat.

"The restoration of meadow systems is increasingly becoming a focal point for addressing water shortages and flooding issues within the state and arid west," said Todd Sloat, Todd Sloat Consulting and FRRCD coordinator. "Research has demonstrated that restored meadows reduce peak flood flows by storing shallow ground water within the meadow," he said.

The finished project will benefit the mountain meadow habitats in the area and will also improve water quality habitats downstream. This will benefit native trout, as well as many sensitive state and federal species, including the Western pond turtle, Cascade frog, willow flycatcher, yellow warbler, bald eagle, northern goshawk, sharp-shinned hawk, Cooper's hawk, and California roach.

"This kind of job was a dream come true for us," said Craig Joiner, owner of Joiner Construction based in Lookout, California, about 35 miles from the project. "This is work we've wanted to do, and have been trying to do, for the last 10 years. It's nice to be a part of a project that gives back to the environment instead of destroying it."

In large part the project's success was collaboration between landowners, project management coordinators, and natural resource agencies. "That cooperation was key," said Sheli Wingo, Fish and Wildlife Service's Partners program coordinator in Red Bluff.

Economic recovery for the local community was an important goal as well.

"This contract meant our survival as a business," said Joiner. "We had no other work scheduled for the year. It's been that bad. Fortunately, we had the right skills and experience for the project," he added. "The financial trickle down in the form of wages for us, the loggers, chippers, and other workers, as well as parts, fuel, and the other materials we all bought was great for the local economy."

The Big Bear Flat restoration project benefits the community as it improves fish and wildlife habitat. (Photo: Todd Sloat, FRRCD)

Klamath Agreements Are Special Milestone

By Matt Baun, Yreka FWO

More than 500 people jammed themselves inside the Oregon Capitol building in Salem this February to witness the signing of a pair of agreements that will, in the words of Oregon Governor Ted Kulongowski, "save the wonderful Klamath Basin."

Secretary of the Interior Ken Salazar, also on hand for the signing ceremony, noted that the news of this day would extend far beyond the standing-room-only, marble-walled venue under the rotunda.

"The eyes of the nation, the eyes of the world, are on the Klamath," Salazar proclaimed.

Salazar noted that if these agreements move forward (they require Congressional and state action), the result would be the largest river restoration project in American history, which would include the removal of four Klamath River dams (which, in itself, would constitute the largest dam removal effort in history).

The Klamath agreements are about much more than river restoration alone. As the Oregon Governor stated they are about saving the Klamath basin. That means providing stability and security for farmers and ranchers, Tribes, commercial fisherman and recreation users. The agreements also play an important role in providing more water to the Klamath Basin National Wildlife Refuges, which is considered by many to be among the most important refuges for migratory birds in the world.

The signing of the Klamath Agreements was especially meaningful to the U.S. Fish and Wildlife Service's Pacific Southwest Region, and the four Service offices in the Klamath Basin, which have long supported the efforts of these stakeholders.

The Service has a huge presence in the Klamath Basin, with four offices – Arcata FWO, Yreka FWO and the Klamath Falls FWO. There are also six national wildlife refuges that make up the Klamath Basin National Wildlife Refuge Complex.

Each of these offices and its many employees contributed in some way to the Klamath Agreements over the years. The Service was represented at the signing ceremony by Ren Lohoefener, Regional Director for the Pacific Southwest Region. Joining Lohoefener were some of the members of the Service's Klamath team including, Alex Pitts and David Diamond of the Regional Office, Phil Detrich, Darla Eastman, and Matt Baun of the Yreka FWO, and Laurie Sada of the Klamath Falls FWO. Former Regional Director Steve Thompson, who for several years was the Department's lead negotiator for these agreements, also attended the signing ceremony.

Thompson played an important early role for the Service when Klamath irrigation water was curtailed. He played a key role in encouraging some of the Klamath stakeholders to find common ground and supported a process that attempted to help local stakeholders find local solutions.

The Service's role in the Klamath Agreements was also shaped by PacifiCorp's relicensing process with the Federal Energy Regulatory Commission. The Service, along with NOAA Fisheries, stated that if PacifiCorp's license was to be renewed for another 30 or 50 years, the company would have to install fishways to allow salmon and other fish access to more than 300 miles of habitat above the dams.

The Service continued to meet with PacifiCorp and the various stakeholders numerous times between 2005 and 2010. It was under Thompson's direction that the Service decided to host and sponsor a number of stakeholder meetings. The challenge was clear: can this stakeholder group work together; can they agree on functional, local solutions to the Klamath water conflicts?

To help address this challenge, and to really try to move things forward, the Service hired Portland-based facilitator Ed Sheets. Sheets had just recently facilitated a challenging settlement agreement on the Columbia River.

Phil Detrich, who attended all of these stakeholder meetings and coordinated Klamath issues for the Regional office, until his retirement last month, said that Sheets brought a tremendous amount of order and discipline to the negotiations. Detrich said Sheets' role was crucial in getting the diverse stakeholder groups to start putting words onto paper, and ultimately, in the form of a proposed agreement.

By January 2008, the stakeholders agreed to release a draft Klamath Basin Restoration Agreement (KBRA). However, the KBRA also made dam removal a sticking point. PacifiCorp was not involved in writing the KBRA and did not want to be a party to this agreement.

Talks continued between PacifiCorp and the stakeholder group but it wasn't until a May 2008 that a real breakthrough occurred. Michael Bogert, who was also at the signing ceremony in Salem, was a top aide to then-Secretary Dirk Kempthorne in the previous administration. Bogert asked top-level officials from DOI, Oregon, California and PacifiCorp to attend a meeting at the Service's National Conservation Training Center in Shepherdstown, West Virginia.

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Secretary Salazar signs the Klamath Agreements on Feb. 18, 2010. The Service played a years-long role in supporting local Klamath Stakeholders in finding local solutions to Klamath Basin water-related conflicts. (Photo: Tami A. Heilemann-DOI)

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This meeting proved to be the turning point in the negotiations and laid the foundation for moving forward.

Kempthorne and Bogert understood the passions of the Klamath Water Wars of 2001 and 2002 still ran deep. In the Klamath negotiations with PacifiCorp, they saw the remarkable progress that the stakeholders made in working together and they saw an opportunity for a more permanent solution to the Klamath issues. They asked PacifiCorp if they could accept a dam removal option if it made sense as a business decision.

PacifiCorp indicated that they were willing to listen and negotiate on that point as long as decisions about dam removal would be made on science, and not politics. PacifiCorp also wanted a deal that protected their customers from liability and costly rate hikes.

Still, PacifiCorp did not wish to be a part of the KBRA so they asked that there be two agreements. After the meeting in Shepherdstown, the utility negotiated with California, Oregon and the Department of the Interior. Eventually, a delegation of stakeholders joined these negotiations. By November 2008, the four parties (U.S., California, Oregon and PacifiCorp) announced that they had arrived at an Agreement in Principle (AIP) that for the first time endorsed a process that paved the way for the potential removal of the Klamath River dams.

November 2008 also brought the election of a new president, and a new administration. So the path was set; but practically speaking, further negotiations would have to wait until the new President and a new cabinet was seated.

After the inauguration in January 2009, the various settlement parties sought out Secretary Salazar as soon as they possibly could to make their case. In their eyes, they had something special with the KBRA and the AIP, which would eventually become one of the Klamath Agreements signed last month. In his remarks, Salazar recounted his initial meeting with the Klamath stakeholders in the spring of 2009.

"I told you two things when we first met, when you came to my office last spring and asked me to support your good work," Salazar stated.

"I told you that the diverse interests I saw before me – people who had not sat at a table together before – told me much of what I needed to know about your plans to restore the Klamath Basin. I asked you to stick together because all of you together are strong.

"And then I told you that "failure is not an option."

Salazar at the initial meeting gave the stakeholders what they were looking for: support. He also gave them specific deadlines to finish work as soon as possible.

At the ceremony in Salem, Salazar put his name on the final product.

An End to the Klamath Water War?

The Klamath Basin is synonymous with water-related conflicts. In 2001, a full-blown 'Western water war" unfolded as irrigation deliveries to local farms and ranches ceased in order to benefit endangered suckers and threatened salmon. Irrigation deliveries were reduced by about 90 percent. This was done by turning off the headgates that allow irrigation water to begin its journey to the fields. Farmers and ranchers blamed the Endangered Species Act, and organized large-scale protests that accused the federal government of favoring fish over people. Protestors, at one point, were able to turn the water back on by forcing their way through a chain link fence. Federal agents were eventually called in.

The following spring, irrigation deliveries resumed. Fields and ranches received water; and those who worked the land, could do so once again. Another disaster was looming, however. This time it would be fisherman and Native Tribes who were the victims. In late summer 2002, tens of thousands of migrating adult salmon died in the lower Klamath River as they were making their way to their spawning grounds.

In-river conditions were proved unfavorable to salmon that year and many people blamed the Upper Basin farmers and ranchers for taking 'too much' water.

The battle lines had been drawn and all the ingredients to a long-term, intractable water war were evident. It looked like division and conflict would be a permanent feature of the entire Klamath landscape.

A little less than eight years later, the tribes, fisherman, farmers and ranchers were in Salem to sign a pair of agreements. They stood side by side in support of a proposed solution – the Klamath Basin Restoration Agreement – that they themselves had created through years of negotiations. The atmosphere in the Klamath Basin has changed to one of hope and unity.

Klamath Basin stakeholders spent over five years trying to develop a settlement agreement that could lead to the largest river restoration project in history, which includes the potential removal of four privately owned hydroelectric dams on the mainstem Klamath River. The agreements will also provide security for farmers who rely on Klamath water for irrigation. The two agreements call on the Secretary of the Interior to make a determination of whether removal of the four dams: 1) will advance restoration of Klamath fisheries; and 2) is in the public interest, which includes but is not limited to the consideration of potential impacts on affected local communities and tribes. Before the Secretarial Determination can be made, however, the Department must undertake a thorough review of the relevant science as well as conduct a robust environmental analysis as required by National Environmental Policy Act. A multi-agency team of federal scientists will be working to collect scientific information over the next several months.

Service Played Key Role

Former Regional Director Steve Thompson offered support and steady leadership early on. Thompson pin-points his involvements in the Klamath conflict to a single phone call. He was serving as Refuge Chief in Atlanta and happened to be in Washington, D.C. for meetings when his cell phone rang, and the voice on the other end summoned him upstairs. It was the Secretary's office.

"They sat me down and said 'can you help the people and the refuges in the Klamath Basin?'"

Thompson said he wasn't sure but he would try. He would end up serving for several years as one of the lead negotiators for the Interior Department on what was to become the Klamath Agreements. Thompson relocated to Sacramento and served as director of the regional office. Soon, Thompson paid a series of visits to the Klamath Basin. It was 2001 and the irrigation water had already been curtailed.

"It was so depressing," Thompson said of his initial visits to the Basin. "You had farmers with tears running down their cheeks talking to you about not knowing whether their farms would survive, or if they'd be able to pass their livelihoods on to their kids. It was a very difficult time."

The negotiations that resulted in the Klamath Agreements being signed in February 2010 were not easy and, at times, stood at a standstill. Asked what motivated him

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to keep supporting the Klamath stake holders, Thompson describes an image that was etched upon his mind.

"When I saw people who looked like my grandparents coming over the headgates in civil disobedience, I became totally convinced that whatever we were doing [at the time] was not going work – not for the people or for the resource."

Thompson then spent a lot of time in the Klamath Basin just listening to Basin farmers and tribes. As he was trying to understand stakeholders' positions and their ideas for improving how the federal government works in the Basin, Thompson thought he saw a slight opening.

During one meeting at the Yreka Fish and Wildlife Office, he posed a question to the local tribal leaders: who is the most influential group in the Klamath Basin? The tribes said they were.

Thompson then asked the tribal leaders, who the second most influential group was? The farmers.

"Well," Thompson inquired, "how powerful would it be if you and the farmers got together and agreed on some common ground?"

The tribes said the farmers would never meet with them.

Thompson then met in Klamath Falls with a group of farmers and posed the same questions to them:

He asked the farmers, who the most influential group in the Klamath Basin? The farmers. Who was the second-most influential group? The tribes.

Thompson then asked if the irrigators would be willing to sit down with the Tribes to "see if you don't have a whole bunch of common ground, because in listening to both parties, I think you do."

The farmers said the tribes would never meet with them.

After several more meetings with various stakeholder groups, the farmers and tribes eventually sat down. Troy Fletcher, one of the Yurok negotiators, and Greg Addington, a representative of the Klamath Water Users Association put their differences aside came and the first real seeds of what would eventually become the Klamath Agreements were sown.

Progress was slow. Thompson and his superiors at the Department were convinced that the only hope was to let the tribes and farmers find 'functional solutions' that worked for the local communities.

"For a long time we didn't have a facilitator," Thompson said. "By default, I ended up being facilitator, and one of the parties actually fired me. There were a lot of ups and downs."

The Service and the Department, realizing that future years would bring more conflict over scarce water resources, made the decision that supporting the stakeholders in this process was the best path forward.

Eventually, more parties came to the table and real solutions began to surface. Soon an actual negotiation table started to take shape and through years of negotiations a measure of unity between former warring factions emerged.

The Service also hired an accomplished facilitator – Ed Sheets – to help with the negotiations and a draft of agreement began to take shape.

While he we was supporting the efforts of local stakeholders, Thompson also insisted that the Klamath National Wildlife Refuges be part of the mix.

"We started thinking about it as one basin, instead of fish vs. farmers. We felt we could improve the basin by improving some of the marshes both on private property and on the refuges."

By January 2008, this group, to the surprise of many on the outside, had what appeared to be an agreement full of local solutions that settled many water-related conflicts between Tribes, farmers, fisherman and conservation groups. It was called the Klamath Basin Restoration Agreement (KBRA).

In time, PacifiCorp started their own negotiation table with the feds, Oregon and California.

By September 2009, the Klamath Hydroelectric Settlement Agreement was released. The KBRA was then revised and updated for consistency with its companion agreement.

On February 18, 2010, both agreements were signed and everyone celebrated the occasion.

Farmers and tribal leaders were there, too. As someone noted that day in the Capitol, they no longer stood toe-to-toe, but rather hip-to-hip.

Refuge Manager Kelly Moroney Awarded Turkey Federation's Partner of the Year


USFWS photo

By Courtney Ashe, Sacramento NWR

Sacramento River National Wildlife Refuge Manager Kelly Moroney was presented with the National Wild Turkey Federation's California Partner of the Year Award Feb. 27, during the Chico Chapter's annual banquet. The Federation's regional biologist Ryan Mathis said Moroney was selected for his enthusiasm and hard work towards the improvement of wild turkey habitat and hunting opportunities on the refuge, part of the Sacramento National Wildlife Refuge Complex. The Federation also cited Moroney's work enforcing turkey hunting regulations on the refuge, as well as his continued support and partnership with the Chico Chapter.

The Federation has partnered with the refuge on restoration projects since 2006. That year, $19,000 was donated to complete 100 acres of native grassland restoration along the Sacramento River. These grasslands are important habitat to turkey and other ground nesting species, providing both food and cover. Their location adjacent to riparian habitat will benefit a number of other wildlife as well, including federally listed threatened and endangered species such as the Swainson's Hawk, Elderberry Beetle, and Yellow-billed Cuckoo.

The Federation's most recent refuge project is funding assistance for visitor facilities at the Capay Unit, which includes a new parking lot and information kiosk. These new facilities will be opened this spring. The 660-acre unit will offer wildlife viewing, trail exploration, and hunting opportunities.

Colestin Valley Partnership To Restore Oak Woodlands

By Dave Ross, Klamath Falls FWO

Oregon oak woodlands have declined by more than 90 percent due to expansion of subdivisions and urbanization as well as agriculture use.

Why is such a change important?

Oak woodlands are the most important terrestrial wildlife habitat in the Pacific Northwest. Oak woodlands harbor sensitive and endangered species such as Genter's fritillary and northern spotted owl. They are crucial for cavity nesting birds and several species of birds of management concern, including Lewis' woodpecker and the olive-sided flycatcher. Species such as acorn woodpeckers and oak titmouse are totally dependent upon oak woodlands.

With the importance of oak woodlands to Oregon's wildlife, the Partners Program in the Klamath Falls FWO has teamed up with the USDA Natural Resources Conservation Service in Jackson County to restore oaks woodlands in Colestin Valley.

Located in the Klamath River watershed, this valley and has been identified as a focus area in the Oregon Conservation Strategy, a document developed by Oregon Department of Fish and Wildlife to provide a blueprint and action plan for the long-term conservation of Oregon's native fish and wildlife and their habitats.

Initially, the Service started working with just three landowners in restoring oak woodlands and savanna habitats by thinning and removing encroaching conifers.

The Colstein Valley is home to Gentner's fritillary, an endangered plant. It is closely linked to oak woodlands; however, woodlands that have dense canopies and have been encroached upon by conifers tend to have less light reaching the woodland floor. This environmental change has affected the populations of this rare plant. Work with private landowners has enabled restoration efforts to move forward and benefit a host of species associated with oak woodlands, truly a multi-species approach. The restoration ball is rolling!

Because of the positive attitudes and partnerships that developed early on, other partners have since joined. Oregon Department of Fish and Wildlife has offered the use of their equipment including a range drill and roller to reseed the oak savanna habitats to native bunchgrasses including blue wild rye and California oatgrass.

Because of historic grazing practices, the native grass component was lost and noxious weeds primarily medusahead and yellow star thistle displaced the native bunchgrasses on the open ground.

These exotic plants affect habitat for native wildlife and increase soil erosion. The Bureau of Land Management and Jackson County Soil and Water District offered their technical assistance in re-establishing the native plant community. The District also may provide the funds to offset some of the landowner's costs. The high costs of some restoration projects make it important to develop partnerships to obtain funding from several sources.

One of the landowners is so excited about the prospects of restoring his oak woodlands, he has offered to grow the endangered frillary in his personal greenhouse so young plants would be available to plant on his property!

This level of participation is encouraging and is indicative of the value of oak woodlands to private landowners in the Pacific Northwest.

By the way, do you know what the national tree of the United States is?
If you guessed the oak, you are correct!

Nicola Giardina, Jackson County NRCS District Conservationist, measures a very large legacy California black oak in Colestin Valley, Jackson County Oregon. The Service is working with Giardina and local landowners to restore oak woodlands. Oak woodlands are the most important terrestrial wildlife habitat in the Pacific Northwest. (Photo: Dave Ross, USFWS)

Researchers Investigate Potential Effects of Wastewater Discharges on the Threatened Santa Ana Sucker

By Jane Hendron, Carlsbad FWO

The federally threatened Santa Ana sucker currently inhabits three disjunct areas in southern California. Threats to this native fish include alterations of natural stream hydrology from dam construction and operations; loss of habitat to development; and decline in water quality. Recently, interest in determining whether alterations in water quality may also negatively impact the breeding success of the sucker prompted a research study to determine the types and concentrations of certain chemical compounds present in waters inhabited by the fish. The study focused on determining if Santa Ana suckers are being potentially exposed to organic wastewater compounds and endocrine disrupting compounds.

Endocrine disrupting compounds have the potential to affect growth and reproduction in both animals and people. A variety of compounds have been identified as potential endocrine disruptors, including prescription and non-prescription drugs, steroids, insect repellents, fragrances, and fire retardants.

Western mosquitofish were used for the study as a surrogate for the Santa Ana sucker because mosquitofish are abundant in the areas where suckers are found; they have strong site fidelity, meaning they spend their lives in the same area; and they are easily caught.

Contaminants experts from the U.S. Fish and Wildlife, along with scientists from the U.S. Geological Survey, and other entities, captured adult mosquitofish from five sites – immediately adjacent to a Tertiary Treated Wastewater Effluent (TTWE) pipe and the Rialto Drain; Sunnyslope Creek; and Prado Dam. A control site at Thousand Palms Oasis was used for sampling because it is closed off from any direct outflows of treated wastewater. The mosquitofish were collected from all sites during the month of June 2004 and June 2005.

In addition to collecting adult mosquitofish, two separate types of passive water sampling devices were placed at each of the study sites – a Polar Organic Chemical Integrative Sampler to capture hydrophilic compounds (pharmaceuticals, personal care products); and a Semipermeable Membrane Device used to capture bioaccumulative hydrophobic organic compounds.

Researchers wanted to determine whether compounds in the water where the Santa Ana sucker lives might have potential effects on the species' reproduction. To assess potential reproductive effects researchers looked at sperm counts and sperm motility of male mosquitofish; compared gonopodial lengths; and counted the number of hooks and serrae present near the gonopodial tip because these are used by the males to grasp females during mating.

Researchers specifically tested for the presence of 28 different chemical and organic compounds at each of the sampling sites. Chemical analysis was conducted for various compounds and emerging contaminants, including those not regulated or monitored in discharger effluents.

The following table shows what percentage of the different compounds were found at each site.

Sample Site	% Compounds Detected
TTWE	33.4
Rialto Drain	36.0
Prado Dam	25.4
Sunnyslope Creek	4.9
Thousand Palms Oasis	0.4

It was clear that the amount of compounds present in the water decreased the further away from the source point one sampled, with the control site having the far fewest detections.

Beyond this information, the next step was look at the specific attributes of the mosquitofish from each of those sample sites to determine if there were significant differences in sexual organ development.

Several secondary sex characteristics in sampled male mosquitofish showed impairment compared with the reference site. For example, the gonopodial hooks and serrae were significantly lower at all the sites along the Santa Ana River (TTWE, Rialto Dam, Prado Dam, Sunnylsope Creek); and sperm motilities, counts, and percentage of mature cells were lower at the sites along the Santa Ana River, although overall there was no demonstrable difference in viability of the sperm.

Although numerous organic wastewater and endocrine disrupting compounds were detected at all sites along the Santa Ana River, the study could not pinpoint a specific compound as being the primary cause of reproductive impairment. However, multiple lines of evidence for impaired reproductive and endocrine function in western mosquitofish due to organic wastewater and endocrine disrupting compounds found in the Santa Ana River can signal potential reproductive impairment for the Santa Ana sucker inhabiting the same and nearby sites.

To promote a healthy environment for both wildlife and people, the U.S. Fish and Wildlife Service has partnered with the American Pharmacists Association, and the Pharmaceutical Research and Manufacturers of American to launch the SMARxT Disposal campaign. The SMARxT campaign aims to educate people about ways to dispose of unwarranted medications in a safe and environmentally protective manner.

Judy Gibson takes water samples as part of the endocrine disrupter study. (Photo: USGS)

New Strategy to Control Lake Tahoe Invasive Species

By Steve Chilton, Nevada FWO

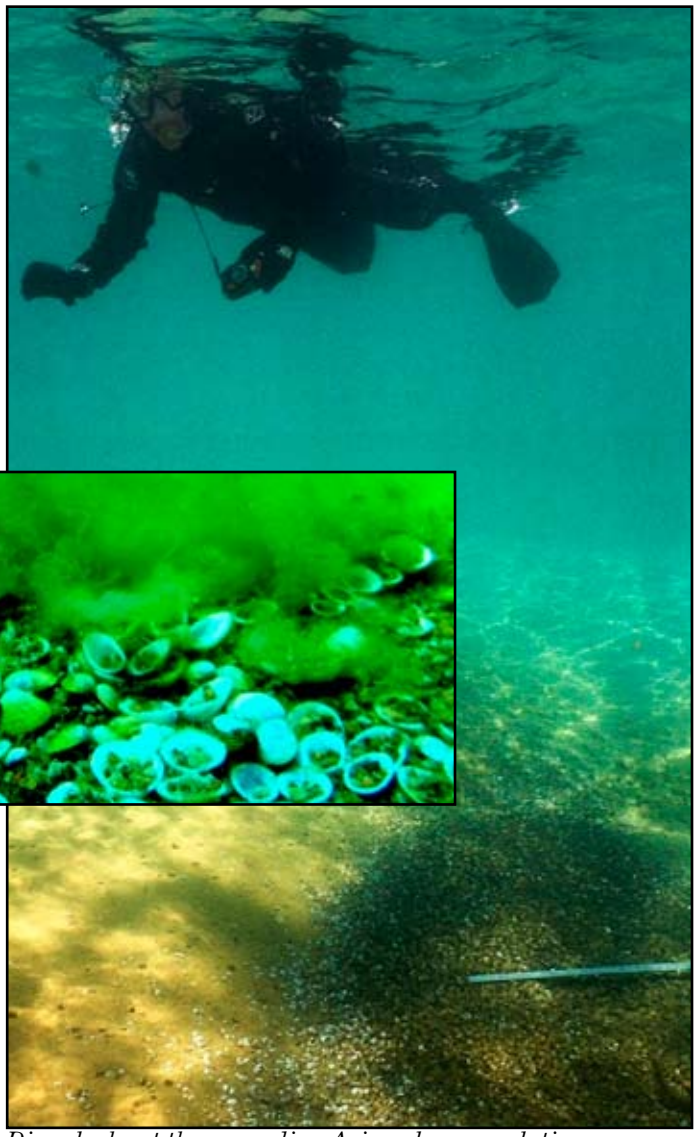
Asian clam (*Corbicula fluminea*) populations in Lake Tahoe have expanded greatly since they were first detected in 2002. At that time populations were sparse and not densely occupied. Their growth and expansion in Lake Tahoe – coupled with filamentous green algal blooms in 2008 that have been linked to the increased populations – triggered a significant effort by many agencies and universities to control source and satellite populations. While the clams can produce immediate problems, such as algae blooms, we are more concerned they could chemically alter Tahoe's waters to allow successful invasion of other non-native species such as quagga or zebra mussels.

Since 2008, the Asian clam working group (ACWG) has been actively planning and implementing a pilot project to determine the most efficient treatment strategies to control Asian clam populations in Lake Tahoe. In 2009 a strategy was implemented, incorporating the placement of small scale (10' x 10' plots) experimental applications of 45 mil rubber pond liner sheets.

These rubber bottom barriers created a zero dissolved oxygen environment underneath the sheet, and after 30 days at peak summer lake temperatures (16-19 °C) caused Asian clam and other benthic macroinvertebrate mortality. The pilot project provided the ACWG with valuable information and the pilot is being scaled-up in July to 10' x 100' sheets of this rubber material covering two half-acre plots. This expanded pilot will provide information on the logistics and cost effectiveness of large-scale implementation, impacts to Asian clam and other benthic macroinvertebrates, and the recolonization rates of these species on a large scale.

The bottom barriers will be installed during July 2010 and will remain for 50 days. During this time, field delineation of the project area site, baseline condition sample collection, delivery of rubber materials from land to field site, placement of rubber material at field site (underwater), removal and decontamination of the barrier material and permit monitoring requirements (primarily water quality) will occur. Post-treatment monitoring of the sites will continue throughout 2011. Several domestic drinking water intakes are located adjacent to the implementation sites and those water purveyors have been continually involved in the planning and implementation of this project.

A test run of the bottom barrier deployment apparatus (designed by U.C. Davis engineers) was conducted on March 19, 2010, at Sand Harbor in Lake Tahoe. The test run showed that deployment and retrieval of one 10' x 100' section could be accomplished with little complication.



Diver looks at the expanding Asian clam population (Photo: USFWS)

The coalition of agencies involved in this project through the Lake Tahoe AIS Coordination Committee have been working together since 2007 to prevent new introductions of aquatic invasive species, limit the spread of existing AIS populations, and abate harmful ecological, economic, social and public health impacts resulting from AIS. The group developed the Lake Tahoe Region Aquatic Invasive Species Management Plan in 2009.

The plan was signed by Governor Gibbons of Nevada, and California Governor Schwarzenegger and approved by the national Aquatic Nuisance Task Force at their meeting in November, 2009. The work has been funded in part by appropriated FWS funds and Southern Nevada Land Management Act funds administered by FWS.

Note: The Asian clam working group is comprised of members from the Tahoe Resource Conservation District, U.S. Fish and Wildlife Service, Lahontan Regional Water Quality Control Board, Tahoe Regional Planning Agency, California Department of Parks and Recreation, Nevada Division of State Lands, Nevada Division of Wildlife, UC Davis Tahoe Environmental Research Center and U.N. Reno.

Removal of Exotic Plant Helps Save Rare Habitat for Species in Santa Cruz County

Acacia trees encroaching on Zayante Sandhills habitat. (Photo: Ken Moore)

By Lois Grunwald, Ventura FWO

As a young man in Yosemite, the naturalist John Muir watched a grasshopper's zig-zag flight on top of one of the valley's domes."Braver, heartier, keener, care-free enjoyment of life I have never heard or seen in any creature great or small," Muir wrote in his book, "My First Summer in the Sierra."

Muir might recognize the same attributes in the Zayante band-winged grasshopper, an endangered species hanging on to survival in a small corner of the Santa Cruz Mountains in Santa Cruz County, Calif.

But through the Ventura Fish and Wildlife Office's Partners for Fish and Wildlife Program and other conservation groups, there might be hope for the grasshopper and three other federally-endangered species that inhabit the Zayante Sandhills habitats of the Santa Cruz Mountains near Felton, Calif.

The Partners for Fish and Wildlife Program is providing cost-share assistance to the Land Trust of Santa Cruz County for removal of invasive broom and acacia on 54 acres of the 370 acres of Sandhill habitat near the community of Felton. Part of this acreage is owned and managed by the Land Trust of Santa Cruz County and the other by the San Lorenzo Valley Water District. The project is expected to take three years.

"We were so pleased to work on this project with the FWS," said Matt Freeman, director of Conservation with the Land Trust of Santa Cruz County. "Funding from the Partners Program helped us to eradicate five acres of acacia and broom in order to protect the very important Sand hills habitat from further encroachment by these weeds. The Sandhills are so limited in distribution that these small projects can make a huge difference."

The invasive species threaten the habitat of the grasshopper along with the federally endangered Mount Hermon June beetle, Ben Lomond wallflower, and Ben Lomond spineflower. The nonnative plants take over the rare Sandhills habitat that is needed for the species' survival.

The Zayante band-winged grasshopper exists in only five locations in the Zayante Sandhills. The Ben Lomond wallflower occurs in only 11 areas. The Ben Lomond spineflower is known from only 13 locations.

The Sandhills are a unique community of animals and plants found only on outcrops of Zayante sand soil. What is called "sand parkland" consists of sparse stands of ponderosa pines with an understory of native wildflowers.

The Sandhills originally totaled more than 6,000 acres. Sand quarrying and development has reduced this acreage to fewer than 4,000 acres of fragmented habitat.

Descendants of Hatchery Namesake Visit Livingston Stone NFH

By John Rueth, Livingston Stone NFH

The Livingston Stone National Fish Hatchery was recently honored with a visit by the grandchildren of the hatchery's namesake, pioneering fish culturist Dr. Livingston Stone. Stone's granddaughter Rebecca McCue and great grandchildren Bonnie Case, Bob Kirstein and Ned Kirstein.

The family members were in the area to help open an exhibit at Redding's Turtle Bay Museum: "Native Images: The Works of Edward Curtis and Thomas Houseworth Celebrate the Native American Heritage of the West and Take an in-depth Look at the McCloud River Wintu." The exhibit displays many of the early pictures of the hatchery and the surrounding area. It also included some of the families' personal artifacts.

Assistant Hatchery Manager John Rueth provided the family a short tour of the hatchery which is located at the foot of Shasta Dam north of Redding.

According to the American Fisheries Society, Stone was named Deputy of the U.S. Fish Commission (forerunner of the U.S. Fish and Wildlife Service) in 1872, and assigned to establish the Baird Hatchery in California, the state's first freshwater hatchery. He published the classic fish culture book "Domesticated Trout" the same year and it soon became a standard manual for fish culture. Stone recognized the interaction between the biological science and fish culture and was the first to recommend and request a trained biologist for hatchery staff.

John Rueth (left) pictured with the descendants of Dr. Stone. (Photo: USFWS)

Service Employees Honored for Work With Lange's Metalmark Butterfly

David Kelly/Chris Nagano

When a tiny orange and brown butterfly with just over a 1-inch wingspan emerges from its cocoon on a blazing hot day this August, it will mark another big success in a remarkable effort to thwart extinction. In 1976, the endangered Lange's metalmark (*Apodemia mormo langei*) was one of the first insects to be protected under the federal Endangered Species Act.

Home to the butterfly, the Antioch Dunes National Wildlife Refuge is a postage-stamp parcel of riparian sand dunes, just 67 acres along the San Joaquin River hemmed in on either side by large industrial plants and even split in two by another factory. A major rail line is its southern boundary.

The refuge was established in 1980 to help save the Lange's and two federally-listed plants, the Contra Costa wallflower and the Antioch Dunes evening primrose. Another rare plant on the refuge, the naked stem buckwheat, is the Lange's sole food supply.

For a while just having the refuge seemed enough to protect the Lange's and its numbers grew to 2,342 specimens in 1999. But the small size of the refuge and rapid expansion of non-native plants that crowd out the Lange's food supply caused its numbers to plunge, with just 45 adults found in 2006.

That is when the Service pulled together a group of concerned people – public agencies, companies, academic specialists and volunteers– to plan and carry out a recovery effort of the highest urgency. This effort was multi-faceted, involving fire prevention, controlled grazing, weeding out non-native plants, fostering the one plant that is the Lange's only food, captive breeding and release of both butterflies and larvae, involvement of neighboring industrial landowners and education.

Just four years later life is looking more hopeful for the Lange's. And in March the Service recognized as Recovery Champions, Dave Kelly and Chris Nagano, biologists in the Sacramento Fish and Wildlife Office, for assembling and coordinating a recovery effort.

Butterfly numbers crept back up in the summer of 2008 when 30 female Lange's raised in a special breeding program were released on the refuge. Last year nearly 100 Lange's larvae were released and this year they hope to release another 300 larvae.

That is a good start but, as Kelly says "we still have a long way to go!"

In the mid-2000s, a recovery strategy was in early discussion by Service biologists, including Christy Smith, manager of the San Pablo Bay unit of the San Francisco Bay NWR, and Craig Aubrey (now the Service's Coastal Program Coordinator in Charleston, S.C.). When Aubrey left Sacramento, Kelly stepped in as Recovery Coordinator, just as the butterfly's numbers reached an alarming low. Kelly helped bring key people together in what became a last-ditch effort to restore the Lange's population.

Kelly, with insight from Nagano, a veteran lepidopterist and a Deputy Assistant Field Supervisor in SFWO, was able to focus on the butterfly's problems and identify solutions. Kelly and Nagano drew together a team of butterfly experts from universities and the private sector to define the problems and shape solutions.

Because the refuge is the only place the butterfly lives, Louie Terrazas, on-site manager, biologist Susan Euing and Joy Albertson are key members of the recovery effort. Working closely with them, Nagano and Kelly identified funding and expertise to establish a propagation program, a managed grazing program and an aggressive habitat improvement program, including extensive invasive plant removal by California's Conservation Corps.

Much of the struggle is like infantry work, fighting yard by yard to reduce and remove invasive plants that crowd out the Lange's only food source. Jim Griffin headed up weed removal. A number of volunteers and teams from the CCC, led by Frank Arzaga, plug away, carefully removing the non-native plants that had distorted the delicate natural balance at Antioch Dunes.

Kelly and Nagano drew in outside butterfly experts. Biologist Jana Johnson is one. A Moorpark College butterfly breeder, Johnson began a Lange's breeding program that has successfully released 30 pregnant butterflies and nearly 100 hungry larvae onto the refuge in two seasons. Butterfly experts Travis Longcore (Urban Wildlands) and Ken Osborn captured butterflies for captive propagation and determined release areas on the refuge.

And the effort couldn't have gone forward without financial support. Miriam Morrill, part of the Service's fire fighting unit, helped bring fire control dollars into the early effort. And Carolyn Prose facilitated key funding through the Central Valley Project Improvement Act to help the recovery plan to move forward.

Kelly and Nagano also enlisted support from neighboring utility PG&E Company that assisted with surveys and provided information. In March PG&E signed a Safe Harbor Agreement with the Service, agreeing to make its adjacent power plant property more hospitable for the Lange's so they can spread a little farther afield.

With the recovery team's hard work and the cooperation of many parties, the Lange's metalmark butterfly is on the rebound, although long-term survival means more years of recovery work and research. What they are sure of is that extinction was certain without immediate and aggressive measures. Their essential first steps have bred success and a diverse group of players have partnered to help the Lange's metalmark make those first important steps on the road to recovery.

This August long freight trains still will rumble by and PG&E's power plant will continue generating electricity to fuel California's economy. But just yards from these industrial giants a biological recovery will continue as the unique Lange's metalmark butterflies break out of their cocoons again, the unknowing beneficiaries of a team of recovery champions and their urgent work.

Release of light-footed clapper rails illustrates partnership effort. Pictured: Dick Zembal, Clapper Rail Study Team (CRST); Mary Talle, SeaWorld San Diego (SeaWorld); Sue Hoffman (CRST); Richard Sardena, SeaWorld; Joyce Remp, Chula Vista Nature Center; Brian Collins, Sweetwater Marsh National Wildlife Refuge; Laurie Conrad, SeaWorld. (photo: USFWS)

Recovery Champion Award Given to Partner For Work To Save Federally Endangered Bird

Dr. Richard Zembal with the Orange County Water District has long been considered the "heart and soul" of initiatives to save the federally endangered light-footed clapper rail.

Zembal has brought together a range of partners– including the U. S. Navy, California Department of Fish and Game, and the Unified Port of San Diego. Founder of the Light-footed Clapper Rail Study and Management Team, Zembal has engaged two major zoological institutions; the San Diego Zoo and SeaWorld Adventure Park, to help maintain the health, demographic variability, and genetic endowment of the species.

Along with breeding more than 250 of the birds in captivity and releasing them into the wild, Zembal's team has conducted wetland-by-wetland monitoring that has guided habitat restoration, predator management, and population enhancement by managers who implement conservation actions based on the high-quality data that his team has developed.

The number of light-footed clapper rails has steadily increased from 163 pairs range wide in 1989, to a record of 443 pairs in 2007, a tribute to his leadership.

Light-footed Clapper Rail

The light-footed clapper rail are hen-sized marsh birds that are long-legged and long-toed. They use southern California coastal salt marshes, lagoons, and their maritime environs.

The birds nest in the lower intertidal zone of coastal salt marshes where dense stands of cordgrass are present. They also build nests in pickleweed. Light-footed clapper rails have also been known to reside and nest in freshwater marshes, although this is not common. They require shallow water and mudflats for foraging, with adjacent higher vegetation for cover during high water.

Destruction of coastal wetlands in southern California has been so extensive that many estuaries where light-footed clapper rails were once abundant have been reduced to remnants. Although salt-marsh habitat loss, degradation, and fragmentation are the leading threats to light-footed clapper rails, they are also threatened by disturbance, diseases, contaminants, and predation by non-native red foxes, feral cats, crows, and some hawks or owls.

The light-footed clapper rail was federally listed as endangered in 1970.

It remains one of California's birds most endangered with extinction.

Transitions

Arcata FWO

Nancy Finley has joined Arcata as the Field Supervisor. For the past four years, Nancy has served as the Chief of Resource Management and Science at the Great Smoky Mountains National Park. In this role, she supervised roughly 60 staff, and oversaw Park compliance under NEPA, ESA, NHPA, and all other environmental laws and regulations. Prior to this position, Nancy was the Chief of Natural Resource Management at Cape Cod National Seashore for seven years. She supervised an interdisciplinary team of scientists, and directed an inventory and monitoring program within the park. Before working for the Park Service, Nancy spent seven years with the Fish and Wildlife Service's Contaminants Program in Arlington, Vero Beach, and White Marsh. Nancy has a B.S. in biology from the University of Maine, an M.S. in Environmental Health and Toxicology from East Carolina University, and has completed some doctoral work at Rutgers and the Virginia Institute of Marine Science.

Ernie Clarke has been hired as the Science Program Coordinator, Fisheries Program New Service position that the Arcata office will be sharing with the Bureau of Reclamation's Trinity River Restoration Program Office in Weaverville. Ernie comes from the Army Corps of Engineers, Jacksonville District, in Florida where he most recently participated as the liaison with Everglades National Park for the Modified Water Deliveries project. Ernie will be working directly with the Restoration Program's Technical Modeling and Analysis Group. Ernie has an M.S. in Marine, Estuarine, and Environmental Sciences from the University of Maryland, and a B.S. in Zoology from the University of Florida.

Steve Kramer joins Arcata as a Fish and Wildlife Biologist, Endangered Species Program. Steve most recently worked with private consulting firms H.T. Harvey and Associates and Stillwater Sciences, and had previously been an employee with the National Marine Fisheries Service. Steve has a B.S. in Fish Biology from University of Massachusetts and an M.S. in Fish Biology from Humboldt State University.

Greg Schmidt, Fish and Wildlife Biologist, Endangered Species Program. Greg Schmidt has lived in Humboldt County since finishing graduate school (U of Minnesota) in 1990. Greg spent nine years (1990-1999) as wildlife data and GIS manager and project coordinator for the Pacific Fisher Ecology Study for the Six Rivers National Forest in northern California. He also was the wildlife representative for the forest on numerous multi-agency, multi-disciplinary teams dealing with spotted owl habitat, marbled murrelet range and distribution, Del Norte Salamander distribution and with various wildlife species as part of the watershed analysis process. He also spent nearly nine years (1999-2007) with a nonprofit wildlife research institute working on endangered species conservation and recovery primarily with the island fox, bald eagle, and San Clemente loggerhead shrike. In the past two years Greg has conducted wildlife and fish surveys for Redwood National and State Parks and wrote biological assessments of potential impacts to listed fish and wildlife species for a local engineering consulting firm.

CA-NV Fish Health Center

Jay Bigelow, hatchery supervisor for the Lahontan National Fish Hatchery Complex in Reno, Nev., is on an extended detail to the CA-NV FHC to assist with delta smelt investigations. The center will develop and apply experimental techniques to investigate the possibility of immune dysfunction, pathogen infection, tissue abnormality, and physiological impairment in delta smelt resulting from exposure to delta water.

Star Awards:

Kimberly True: Kim demonstrated scientific leadership for the Service's Fish Health program in her extensive work to organize and participate in a molecular technique validation effort. The National Wild Fish Health Survey uses an ELISA technique to screen for Renibacterium salmoninarum in fish tissue that has certain drawbacks in efficiency and accuracy. A system-wide effort to validate a molecular screening and conformational method required all centers to standardize their QPCR analyzers with plasmid produced DNA standards. Kim produced this reagent and organized the standardization effort. She was an instructor and organizer at a recent QPCR workshop on the subject in Seattle.

Ron Stone: Over the past decade the FHC has attempted to recreate diurnal temperatures in our wet lab research to patterns that resemble river temperatures. Ron has put considerable effort and ingenuity into re-building the wet lab's cool and warm water systems to accept a new controller system. The first trials with the new temperature system were largely successful due to diligence of this individual in working with the contractor of the system controller to overcome programming and mechanical problems. This long-term effort will provide the FHC with a unique experimental tool for examining the response of native fishes to adverse water quality.

Ryan Fogerty: Over the past decade the FHC has attempted to recreate diurnal temperatures in our wet lab research to patterns that resemble river temperatures. Ryan was instrumental in building and testing one prototype. He has put considerable effort and ingenuity into re-building the wet lab's cool and warm water systems to accept a new controller system. The first trials with the new temperature system have been successful. This long-term effort will provide the FHC with a unique experimental tool for examining the response of native fishes to adverse water quality.

Carlsbad FWO

Ken Corey has been selected as the Assistant Field Supervisor for the Carlsbad Office's new Inland Area Sub-

office. Ken has been at the Carlsbad Office since 1993 and has worked on many different species issues, including Peninsular bighorn sheep conservation, Habitat Conservation Planning efforts on the Palos Verdes Peninsula, and overseeing efforts to reintroduce endangered Palos Verdes blue butterflies to their native habitat. The Carlsbad Office's Inland Area Suboffice will handle the desert portion of San Diego County, all of Riverside County and Imperial Counties, and southwestern San Bernardino County. This new suboffice will be busy addressing numerous proposed renewable energy projects. The new office will likely be located in the Palm Springs area, but until office space is secured, Ken will remain stationed in Carlsbad.

Dixie Ward retired from the Carlsbad Fish and Wildlife Office in January. Dixie was first brought on board the Carlsbad Office in January 2000, as a Receptionist. She soon showed she was ready for more challenges and spent the next nine years serving as the Secretary to the Project Leader and Deputy Project Leader. Always willing to assist any way possible, Dixie undertook numerous diverse tasks including helping with public hearings; and organizing special events, meetings, and conferences. Prior to joining the Fish and Wildlife Service, Dixie spent 10 years with the Veterans Affaris Department, and also served in the U.S. Air Force. We are sad to see Dixie go, but wish her all the best for a well-deserved retirement.

The Carlsbad Fish and Wildlife Office is fortunate in having many talented employees. **Jaime Johnson** joined our office in April 2009 as an Office Assistant, and has now been selected as the Secretary for the Field Supervisor. In her new position Jaime will be handling the scheduling, correspondance, and other tasks for both the Field Supervisor and Deputy Field Supervisor. Prior to joining the Service, Jaime was in the U.S. Navy and worked at the Pentagon as a Strategic Planner. She has jumped right into her new role at the Carlsbad Office, including successfully planning several public hearings in Palm Desert, California, and Yuma, Arizona this month.

Humboldt Bay NWRC

Ken Griggs will be starting as the new Deputy Project Leader @ Humboldt Bay NWRC on April 12. He has been a wildlife biologist at San Luis NWR Complex for the past 7 years. His primary duties have focused on projects designed to measure wildlife response to various management activities, species specific inventory and monitoring plans, fire effects experiments, and development of the refuge GIS system and management tracking databases. " I will start a new position at Humboldt Bay NWR Complex as the Deputy Refuge Manager soon. I look forward to the challenges the job will provide and the opportunity to work on conservation issues in such a unique ecosystem. My first job in Refuges was at Humboldt Bay NWR Complex as a STEP employee while an undergraduate. I received my B.S. ('99) and M.S. ('03) from Humboldt State University, and I am excited to be returning to the northcoast!"

Klamth Falls FWO

Hydrologist Hoda Sondossi and fisheries biologists Josh Rasmussen and Tia Adams joined the Klamath Falls FWO.

Nevada FWO

The Nevada Fish and Wildlife Office in Reno welcomed **Michael Cotter t**o our Ecological Service's team in February as a fishery biologist. Mike joins us from the Mid-Columbia Fisheries Resource Office in Leavenworth, Wash. where he served as a supervisory fish biologist responsible for all field activities related to hatchery and wild production of spring Chinook, steelhead and bull trout in the upper and mid-Columbia river systems. He has a BS in aquatic ecology from the University of Washington with a minor in quantitative science. His new responsibilities in Nevada will include consultation and recovery actions for Lahontan cutthroat trout on the Truckee River as well as a multitude of other fish and wildlife issues in northern Nevada. In his spare time Mike enjoys duck hunting and fly fishing. We're fortunate to have Mike's expertise and experience to further the conservation of Nevada's natural resources.

Michelle Hunt joined the Nevada Fish and Wildlife Office in Las Vegas in February as the Schoolyard Habitat Program Coordinator. Michelle comes to us from Arkansas where she has worked as a Park Interpreter with the State Parks and a Wildlife Biologist with the Arkansas Game and Fish Commission. She spent several years as an environmental education specialist at the Mississippi Museum of Natural Science implementing interpretive programs on wetlands, herpetology, ornithology, endangered species and other topics. Michelle has also been employed as a seasonal naturalist with the National Audubon Society at Corkscrew Swamp Sanctuary where she was responsible for Wood Stork nest monitoring. Michelle enjoys traveling and her two years in the Peace Corps in Cameroon, West Africa, gave her cross-cultural expertise and experience in the field of agroforestry. She has an MS in biology from the University of Central Arkansas with a thesis focus on Kentucky Warblers and a BA in psychology from Tufts University.

Regional Office

Dan Walsworth retired from the U.S. Fish and Wildlife Service on April 2, after 32 years with the National Wildlife Refuge System. He has worked as a Refuge Supervisor in the Regional Office since 1998. Prior to that, Dan was the Project Leader at Stillwater NWR, and helped manage refuges in Regions 1, 3 and 6 (Malheur, Sacramento, Cresent Lake, and Ottawa NWRS).

Rick Kearney has become the Region's Assistant Regional Director for Climate Change and Science Application. Prior to joining the Service Rick served as the national coordinator for the U.S. Geological Survey Wildlife Resources program where he provided leadership for wildlife research and technical assistance activities involving more than 250 scientists at USGS science centers and cooperative research units nationwide. He personally led the USGS-USFWS Science Support Partnership (SSP), Amphibian Re-

search and Monitoring Initiative, and USGS-USFWS Radar Ornithology working group. Rick was instrumental in forming and leading the joint federal-state wild bird avian influenza surveillance program and establishing the USGS National Climate Change and Wildlife Science Center.

On March 31, 2010, Region 8 External Affairs bids farewell to **Aaron Roberson**, web contractor and member of the External Affairs team. Since the summer of 2007, Aaron has provided web development expertise to the regional office, and customer service assistance to field staff who manage or maintain station websites. Aaron's expert assistance and can-do attitude contributed immensely to the quality of the Region's web presence over the past 33 months. "Aaron transformed our ideas into action, and helped make our regional web presence among the best in the Service," said External Affairs' Scott Flaherty, who coordinated web work with Aaron. "His knowledge, skills and innovative approach to web function and design was emulated by other regions and used in some of their websites. We will miss him."

Sacramento FWO

Kevin Aceituno in May 2006 filled a Sacramento FWO SCEP trainee position in the Investigations and Prevention Branch of the Environmental Contaminants Division. In December 2009 he completed his Masters of Science (M.S.) degree and has been converted to a permanent, full-time Fish and Wildlife Biologist in the same Sacramento FWO branch. Kevin earned his M.S. degree at Sacramento State University. His thesis was titled "'Determining the Effect of Growth Rate on Methylmercury Bioaccumulation in Bioindicator Fish from the San Francisco Estuary."

Stephanie Jentsch filled a fish and wildlife biologist position with the Sacramento FWO Coast Bay branch on January 3. Stephanie comes from Tucson, Ariz., were she completed a M.S. from the University of Arizona working on research focused on the effects of prescribed fire on bird communities and worked as a Conservation Biologist at The Nature Conservancy. In Sacramento she previously worked as a wildlife biologist for EDAW, a local consulting firm.

Tyler Willsey filled a Sacramento FWO fish and wildlife biologist position with our Flood and Waterway Planning branch on January 3. Tyler graduated from U.C. San Diego with bachelors in Environmental Biology. He started as a field biologist working in San Diego, conducting endangered bird surveys for the Fish and Wildlife Service under Clark Winchell. Later became lead of a research project contracted by the US Navy studying the California Least Terns under Dr. Patricia Baird, Simon Fraser University. Before coming to Sacramento, he was a field supervisor of a project at the California Department of Fish and Game inventorying several California Species of Concern throughout Southern California.

Rebecca Walther filled a fish and wildlife biologist position with the Sacramento FWO Watershed Planning branch on February 28. Becky received a Bachelor's degree from U.C. Davis and a master's in biology from CSU, Chico. Her thesis assessed juvenile Chinook salmon and larval non-game fish use of seasonal habitats associated with the Sacramento River. She had previously worked as an Environmental Scientist for the California State Water Resource Control Board in Sacramento and as a Fish Biologist for the Spokane Tribe of Indians in Wellpinit, Washington.

Beverly Breen filled a cooperative agreements assistant position with our Budget branch on March 14. Beverly has been working in the private sector as an escrow officer and before that she worked for the U.S. Army Corp of Engineer as a Reality Specialist in the Home Owners Assistance Program.

Sacramento NWRC

Kevin Foerster, former Project Leader at Sacramento NWR Complex, received the Refuge Manger of the Year award from Secretary Salazar on March 9. Kevin was recognized for his outstanding work managing the Sacramento NWR Complex and the cooperative relationships he established with neighbors, local communities and other partners in the area.

Stockton FWO

Stockton FWO Admin hired **Jackie Donato** to fill our vacant Office Assistant (OA) position on Jan. 4. Jackie came from USBR, Tracy Pumping Plant and worked for the Stockton FWO before that.

Renee Capaul, Budget Technician, left Stockton FWO in January to accept a Procurement Assistant position with Defense Contract & Management Administration at Shape Depot in Stockton.

We Are the Pacific Southwest Region is an online employee publication produced by the Pacific Southwest Region's External Affairs Office, 2800 Cottage Way, Sacramento, Calif., 95825. Articles and photos were primarily incorporated from FWS Journal submissions. Questions regarding the newsletter can be sent to Erica Szlosek at erica_szlosek@fws.gov or by phone at (916) 978-6464.

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people. We are both a leader and trusted partner in fish and wildlife conservation, known for our scientific excellence, stewardship of lands and natural resources, dedicated professionals and commitment to public service. For more information on our work and the people who make it happen, visit: www.fws.gov and www.fws.gov/cno.