representatives from state and regional agencies gave presentations and participated in discussions.

In addition to results of season-long water-quality monitoring from across the watershed, most participants received a copy of the October-December 2007 *California Agriculture* with the excellent article by Knox et al., “Management reduces *E. coli* in irrigated pasture runoff.”

Co-author Ken Tate, a member of the Project Team, discussed management practices that local agricultural owners who irrigate for forage and livestock could implement on their ranches, based upon work conducted at the UC Sierra Foothill Research and Extension Center and summarized in *California Agriculture*. Based on the article and Kent’s comments, members of the Upper Feather River Watershed Group felt that greater efforts could be undertaken to reduce *E. coli* levels in local streams by having tailwater go through grassed waterways or mini-wetlands before returning to the main channel. Ranchers also felt that they could improve their grazing practices to minimize the time cattle are in actively irrigated fields. We will continue to monitor *E. coli* levels on behalf of ranchers next year and hopefully see some improvements.

**To our readers**

**Laue leads Cal Ag into digital future**

Andrea Laue joined *California Agriculture* journal as Web Editor on Aug. 1, 2007. Laue is leading a new digital publishing initiative to digitize copies of the journal dating back to 1946, and to redesign the information architecture of the journal’s Web site. She will also work on increasing the journal’s exposure in research databases and popular search engines such as Google. “*California Agriculture* content should be more findable, retrievable and usable online very soon,” Laue says. In concert with *California Agriculture* and Communication Services staff, Laue is implementing a comprehensive proposal that integrates the ideas and skill sets of collaborating staff.

Laue earned her Ph.D. in English and Digital Humanities from the University of Virginia in 2006. She has worked on several scholarly digital publishing projects, including the Mark Twain Project Online at UC Berkeley. Laue can be reached at (510) 642-2431, ext. 16, or andrea.laue@ucop.edu.

**Outreach news**

**Service grants allow 4H-ers to build healthier communities**

On the morning of a school holiday in mid-November, 12-year-old Sean Boerger got a ride across town and presented his ideas for installing benches in a wetland to officials of the Siskiyou Land Trust. Boerger is junior leader of the Strawberry Valley 4-H woodworking group, and he knows about making and installing public benches. Last year, his group won a 4-H service-learning grant to provide benches at Siskiyou Lake. This year, a new grant of $1,100 will allow the group to make benches for the Sisson Meadow Wetlands, which the land trust has recently restored in downtown Mt. Shasta.

“I think it’s going to be fun for the group,” Boerger says. “The benches will give people a place to sit and make the area look nicer, and we get to learn more woodworking skills.”

That’s exactly the concept of service learning — serving the community and, in the process, gaining educational opportunities. Last year, the community of Lake Siskiyou received beautiful, sturdily built benches, and Boerger and his group learned many things, including how a cedar snag is felled and turned into lumber at the town mill.

On the new project, Boerger is looking forward to the trickiest aspect: “I’m not quite sure how we’re going to do the foundation, because it’s kind of swampy out there,” he says.

The service-learning grants are part of the California 4-H Youth Development Program sponsored by the University of California Division of Agriculture and Natural Resources (the 4 H’s stand for “Head, Heart, Hands and Health,” and members pledge their hands to “larger service”).

“The goal,” says Pat English, California 4-H program representative, “is to expand members’ skills in citizenship, leadership and life.”

With support from a 4-H service-learning grant, the Strawberry Valley 4-H woodworking group built and installed benches at Siskiyou Lake.
Citizenship has three definitions: who or what we are, what we believe, and what we do, English explains: “The service-learning projects provide teachable moments, opportunities for reflection and the means to gain experience in community building.”

This is the fifth year California 4-H service-learning grants have been awarded; distributions have ranged from $5,500 to $14,900 per year and are a gift from the Thomas and Dorothy Leavey Foundation. Proposed projects must contain aspects of community service and education; address significant environmental, economic and/or social issues affecting California’s youth, families and communities; and involve collaboration with other community-based organizations.

Grants for four other service-learning projects were awarded in 2007. Another Siskiyou County 4-H group received $1,000 to organize a “senior prom” for elderly residents. In Sacramento County, a 4-H club has $2,000 to provide environmental education and outdoor living experience to 1,000 elementary students from economically disadvantaged neighborhoods. In San Mateo County, members of the Belmont 4–H Clothing Project were awarded $233 to create dyed-silk scarves for a local hospital. Also, $500 of seed money was awarded for surely the most ambitious youth service-learning idea ever, the 4-H Million Trees project.

The Pacifica 4–H club is developing plans to plant a million trees across the United States to combat global warming; their estimated budget for the project is $1 million. High-school freshman Laura Webber saw Al Gore’s An Inconvenient Truth with her father last winter and was galvanized to do something; she and the other club members worked out the details.

Although the Pacifica group will plant some trees, the aim of the project is to enlist the help of the 90,000 other 4-H clubs in the country, a total of 7 million youth. Each club has to plant only 12 trees to achieve the goal (www.4hmilliontrees.org).

Engaging in public projects that serve the community, or the whole world, in tangible, recognizable and important ways motivates young people (see page 40). The projects inspire their adult leaders also. Todd Ellorin, the Siskiyou Woodworking project leader says, “These kids want to know where the lumber is coming from and how the project affects the environment. I really learn from them.”

The Siskiyou Land Trust listened to Boerger’s new bench ideas “and made some changes,” Boerger says. Ellorin says he will discuss with the group a way to respect the client’s wishes and also try something new. That’s another skill that’s definitely useful for the adult world. — Hazel White

Oiled birds cleaned up and sent home; research studies launched

The 58,000-gallon oil spill in San Francisco Bay on Nov. 7, 2007, was the worst in a decade, and weeks later rescuers were still collecting coated birds from beaches. The oiled birds — primarily grebes, scapaus and surf scoters — were brought to the Cordelia facility of the Oiled Wildlife Care Network, which comprises 25 organizations and a dozen facilities from Crescent City to San Diego, and is directed by UC Davis wildlife veterinarian Michael Ziccardi.

Saving oiled birds is far from a sure thing. “They arrive cold and weak because oil coats their feathers, forcing them to come out of the water to survive,” Ziccardi says. Many die before they can even be cleaned, and more die in the rehabilitation pools prior to release. By the end of November, more than a thousand birds had been collected, nearly 800 had been washed, and more than 340 had been rehabilitated and released in Tomales and Half Moon bays, which lie beyond the reach of the oil spill. Nearly 1,750 birds were collected dead, and about 600 died or were euthanized in captivity.

The Cordelia center — called the San Francisco Bay Oiled Wildlife Care and Education Center — is a 12,000-square-foot, $2.7 million facility capable of caring for between 1,000 and 1,500 sick birds, and is co-managed by the International Bird Rescue Center. The Oiled Wildlife Care Network is funded by the California Department of Fish and Game, with interest on the $50 million California Oil Spill Response Trust Fund built from assessments on the oil industry.

Studies aimed at survival of oiled birds

Little is known about what happens to the relatively few birds lucky enough to make it back to the wild, but Ziccardi and his colleagues are trying to find out. The veterinarians are implanting about 25 oiled and rehabilitated birds and an equal number of