

# Sierra Valley RCD

## Middle Fork Feather Watershed



**Amount Funded:** \$185,460

**Additional Funding Obtained to Date:** \$811,980

### **Background**

The mountainous, forested landscape provides crucial habitat for many different species of plants and animals. Throughout the watershed, small rural communities thrive. The area hosts visitors who come to outdoor recreational activities such as hiking, biking, bird watching and skiing. As the population increases, so does the impact on the region's natural resources. The potential threat from wild fires is greater today than ever before. Old roads, once used by timber and mining companies, can contribute sediment in rivers and creeks. On the valley floor, naturally meandering streams have been altered to accommodate flow-controlled irrigation ditches. The issues are complex and the need great. Therefore, it is imperative that a comprehensive, collaborative approach be used to address the many problems facing this watershed

### **Benefits to the Watershed**

- ◆ Finalized the Carman Valley Watershed Restoration project, a large-acreage, multi-year partnering venture that has shown definitive positive benefits to various natural resources in a large tributary to the Feather River.
- ◆ Partnered with the High Sierra RC&D and the UCCE to plan a workshop that will focus on conservation easements, water rights, restoration projects, and the Williamson Act.
- ◆ Finalized the Smithneck Creek Watershed Improvement Project Proposal. Seeking funding opportunities.



*Field Tour of Little Last Chance Creek.*

### **Benefits to CALFED Program**

**Watershed Management** – The Sierra Valley Watershed Assessment is complete and currently being printed. This will be a major guiding document in the management of natural resources in the valley. Assisted the Upper Feather Management Group in obtaining funds to assist landowners in meeting the requirements of the Conditional Agricultural Waiver Program.

**Ecosystem Restoration-** Participated in the completion of the Carman Valley Watershed Restoration Project. It has improved the habitat for various bird and bat species. The rewetting of the meadows increased water availability and timing. This has increased insect populations, leading to more food for the birds and bats.

**Water Use Efficiency** – Completed the Carmen Valley Watershed Restoration Project, which has increased water timing in the valley and the water table. The Little Last Chance Creek project is progressing with emphasis on facilities improvements that will result in less sedimentation and increasing the base flow elevation so that more of the valley is wetted in the winter months, extending the water timing and reducing the need for early irrigation.

# Sloughhouse RCD

## Lower Cosumnes-Lower Mokelumne and Upper Cosumnes Watersheds



**Amount Funded:** \$149,044

**Additional Funding Obtained to Date:**

### **Background**

The Cosumnes River Watershed is one of California's most pristine river systems. It is a significant contributor to the San Francisco Bay-Sacramento Delta water supply and home to many threatened and endangered species. However, U.S. Army Corps of Engineers surveys show that the watershed suffers from many water quality problems including excessive sediment transport and degradation of the riverbed, erosion and channel incision, levee failure and flooding, and loss of aquatic and riparian habitat.

### **Benefits to the Watershed**

- ◆ Coordinated and produced a Ranching Workshop in the foothill community of Jackson. The workshop was attended by 33 ranchers and covered many topics, including grazing management, regulatory programs, conservation easement opportunities, EQIP practices and water quality.
- ◆ Continued planning the first Cosumnes River Watershed Council meeting, and distributed over 60 agendas to stakeholders.
- ◆ Completed draft of the first BMP fact sheet (tailwater recovery systems) and submitted it to the NRCS for review and comment.
- ◆ Assisted in coordinating efforts between agencies with water quality data needs.



*Ranching workshop in Jackson.*

### **Benefits to CALFED Program**

**Watershed Management** – Met with five other watershed coordinators in El Dorado, Placer and Nevada Counties to create a watershed portal for data collection and information sharing. Participated in four Cosumnes River Task Force (CRTF) meetings and provided updates on projects in and adjacent to the watershed. Attended training sponsored by DOC to learn how to improve communication and coordination in the watershed. Initiated discussion with Florin RCD about conducting a joint “train the trainers” workshop on water quality. Polled new homeowners about their interest in and commitment to developing a watershed plan.

**Storage** – Coordinated a meeting between El Dorado Irrigation District and the Southeast Sacramento County Agricultural Water Authority to discuss potential recharge projects.

**Ecosystem Restoration** – Distributed 159 Backyard Conservation brochures to homeowners that provide information on habitat friendly landscaping, native species, and sediment reduction.

## Solano RCD

### Lower Sacramento and Upper Putah Watersheds



**Amount Funded:** \$208,100

**Additional Funding Obtained to Date:** \$434,450

### Background

Solano County is undergoing rapid development and urbanization as a result of its proximity to the San Francisco Bay and the Sacramento Metropolitan areas. Excessive erosion and sedimentation are major concerns in the watershed. The Regional Water Quality Control Board believes agricultural runoff is an issue as well. Baseline testing is needed to provide understanding of the current state of the watershed and to plan for best management strategies and practices.

### Benefits to the Watershed

- ◆ The coordinator was instrumental in coordinating and attracting stakeholders to the Lake Berryessa Watershed Partnership. Through the Partnership the coordinator has facilitated summer water quality events at the lake, development of a water education poster for display at kiosks around the lake, development of a water protector pledge program for children and adults, and the creation of a website highlighting watershed activities.
- ◆ Facilitated the formation of a watershed group to approach the Ag Waiver process, coordinating development of preliminary test sites, response protocols and determination of appropriate BMPs to respond to contaminant events. Stakeholders are monitoring off field flows to improve agricultural water quality on 190,000 acres of irrigated farmland, and the coordinator has presented information about the Solano/Dixon program to regional and Central Valley peers.
- ◆ Created a “Bird Box Highway” along Pleasants Creek to provide monitored habitat for bluebirds, and actively involve local landowners in the birds’ stewardship.
- ◆ Developed and completed a countywide weed mapping project to facilitate eradication of invasive exotics and foster better regional management of weed issues.
- ◆ Established a youth-based watershed stewardship program in two sub-watersheds. The High School Citizen Monitoring program for Ledgewood and Laurel Creeks involves four high schools and 220 students in hands-on care of the watersheds they live in. Lab manuals, monitoring manuals and a syllabus were created for student and teacher participants



*High school students planting a vegetative buffer between creek and crop field.*

- ◆ Began working with local partners to create a consolidated Agricultural Center for all of the ag-related agencies in Solano County.
- ◆ Partnered with Yolo County RCD to conduct a Conservation Planning for Farmers workshop, which was attended by 12 farmers.
- ◆ Gave a presentation to the Solano County Board of Supervisors on the Solano Watershed Partnership.

### **Benefits to CALFED Program**

**Watershed Management** – The coordinator is providing ongoing facilitation of five active watershed groups including the Solano County Watershed Partnership, the Lake Berryessa Watershed Partnership, the Dixon-Ulatis Ag Waiver Watershed Working Group, the Pleasants Creek Watershed Group and the Alamo Creek Watershed Group. Coordination of all five groups is fostering broad watershed stakeholder involvement.

**Ecosystem Restoration** – Completed nine Putah Creek cleanup events, funded with Integrated Waste Management grants, to remove garbage and debris, and began habitat and vegetative restoration on privately owned sections of the creek. Facilitated two restoration projects on Pleasants Creek to eradicate and control *Arundo*, restore habitat and control downstream sedimentation.

**Drinking Water Quality** – Created a Source Water Protection Plan for Lake Berryessa. The plan is in its final review stage and should be completed by June 2005.

# Sonoma Ecology Center

## San Pablo Bay Watershed



**Amount Funded:** \$155,193

**Additional Funding Obtained to Date:** \$181,793

### Background

Land ownership in Sonoma Valley is 85% private holdings, with land uses ranging from redwood groves to chaparral, oak savannah to diked tidal marsh, vineyards to hayfields, rural estates to dense low-income neighborhoods. Watershed impacts arise from a history of ranching and agricultural uses since 1823, and increasing urbanization and ranchette development since the 1950s. However, the watershed's fishery is one of the best left in the Bay-Delta region due to its diversity and lack of non-native species.

### Benefits to the Watershed

- ◆ Consulted with two landowners of housing complex sites that are under construction regarding fish passage and stream bank stability issues. Discussed the merits of using natural materials (i.e. boulders, logs and vegetation) in place of riprap and concrete.
- ◆ Actively participating on a TMDL Steering Committee that is helping to decide what TMDL implementation measures to use.
- ◆ Partnering with the Sonoma County Roads Department and other groups to fund two fish passage projects.
- ◆ Developed road remediation plans for 300 acres of newly acquired state park land.
- ◆ Conducted two community outreach events (an evening presentation on watershed stewardship and a half-day watershed tour).
- ◆ Developing a reach-scale restoration and enhancement approach for a five-mile stretch of Sonoma Creek between Kenwood and Glen Ellen.



*Native plants being revegetated on the bank of Sonoma Creek. Project resulted from a partnership with Sonoma County Regional Parks and community volunteers.*

### Benefits to CALFED Program

**Watershed Management** – Working to coordinate the activities of seven watershed-based community groups in north San Pablo Bay. If these groups can articulate a shared message to funders and local governments, more resources can be leveraged than when they speak alone. Represented Sonoma Creek, the North Bay, and watershed issues in general in four regional forums: the San Francisco Bay IRWMP, the North Bay IRWMP, the Critical Coastal Areas Program, and “Conservations about Watersheds.”

**Ecosystem Restoration** – Developed a comprehensive plan for Nathanson Creek and an application to SWR for funding via the Urban Streams Restoration Program.

**Science** – Designing a study with a Lawrence Berkeley Lab researcher to address shallow groundwater/surface flow dynamics.

# Stockton East Water District

## Lower Calaveras-Mormon Slough



**Amount Funded:** \$106,472

**Additional Funding Obtained to Date:**

### Background

Accelerated urban growth within the valley has increased the demand for water. As water use grows, so do the conflicts. Storm water runoff, agriculture, recreation, mining, unscreened diversion operations, and other land uses have impacted water quality and wildlife habitat. Stakeholders are concerned about aquatic habitats, fish populations, and the availability of water for both people and animals. It is imperative that stakeholders work together to identify and implement water improvement and monitoring projects that restore and protect resources within the watershed.

### Benefits to the Watershed

- ◆ Assisted in establishing the Calaveras River Watershed Stewardship Group (CRWSG). The coordinator facilitates the meetings and ensures that information is disseminated throughout the group. CRWSG developed a mission statement, which is “to restore, protect, preserve and enhance the lower Calaveras River watershed resources through education, collaboration, and project implementation.”
- ◆ Developed an education website for CRWSG. It is updated monthly with news articles, fisheries reports, educational documents, and administrative information such as meeting times and agendas.
- ◆ Formed new partnerships with conservation groups, local governments, and other stakeholder groups.
- ◆ Created a PowerPoint presentation for recruitment and outreach. It provides information about the watershed and CRWSG.
- ◆ Hosted an educational tour of the Calaveras River. The event was well attended and provided participants an opportunity to learn about issues and to discuss potential solutions.
- ◆ Collaborated on a community river clean-up day. The event was well attended.
- ◆ Contributed to the development and submission of the proposal “Calaveras River: Bellota Fish Ladder Evaluation.”



*Calaveras River clean-up event.*

## **Benefits to CALFED Program**

**Watershed Management** – Instrumental in forming the Calaveras River Watershed Stewardship Group (CRWSG), consisting of 12 organizations and numerous local residents. CRWSG has agreed upon a mission statement and has begun identifying issues for the development of a Watershed Implementation Plan. During the first year, numerous partnerships have been formed with various groups, local governments, and interested stakeholders. Participated in Calaveras Fish Group meetings, a technical advisory group that provides scientific and technical expertise on anadromous fish populations. Collaborated with other conservation groups in a community Calaveras River clean-up day. Continued to expand educational and informational outreach activities. The CRWSG website provides residents with information on meeting times, agendas, news articles and educational materials, including a document that identifies effective ways of preventing the spread of New Zealand mud snails.



*Calaveras River Watershed Stewardship Group meeting.*

**Science** – Contributed to the development and submission of the proposal “Evaluation of Juvenile *Oncorhynchus Mykiss* Migration and Life History Expression in the Calaveras River using Streamwidth Passive Integrated Transponder Technology.”

**Ecosystem Restoration** – Participated in a review of the “Draft Interim Bellota Ladder Operations Criteria.” Based on comments and recommendation received, the final version will establish a protocol for operating a fish ladder in the lower Calaveras River in a way that best facilitates passage for threatened and candidate salmonids.

# Tehama County RCD

## Sacramento-Lower Thomes Watershed



**Amount Funded:** \$132,196

**Additional Funding Obtained to Date:** \$30,000

### Background

The Sacramento-Lower Thomes Watershed lies in the heart of Tehama County and covers 1,055 square miles. The watershed comprises approximately 5% of the center of the CALFED Sacramento Valley Regional Area and includes a 24-mile stretch of the Sacramento River. Most small tributaries in the watershed have been used as dumps for all types of waste, and the loss of riparian vegetation in both the mainstem and tributaries has had damaging effects on salmonid populations. Other issues in the watershed include in-stream barriers, mining practices, non-native noxious species, wildfires and fuels management, and excessive sediment from wildland roads.

### Benefits to the Watershed

- ◆ Prepared the Tehama County Voluntary Oak Woodland Management Plan in coordination with the Tehama County Oak Woodland Advisory Committee. The plan was approved by the Tehama County Board of Supervisors, and will assist local non-profit organizations when applying for grant funding.
- ◆ Coordinating the preparation of the Tehama West Watershed Assessment. The significant watersheds in the project area have been identified along with numerous resource and conservation issues.
- ◆ Coordinating the field and GIS mapping work for the Tehama West Fire Plan. The plan will identify areas within the western portion of the county at risk from wildfire as well as various protective measures currently in place to reduce the intensity and impact of wildfire events.
- ◆ Completed a historical survey within the Bend Area of Critical Environmental Concern (ACEC) for the Bureau of Land Management (BLM). Also completed the first phase of an elderberry survey for the BLM. These surveys will be used to protect resources when the BLM conducts prescribed burning and other project work within the Bend area.
- ◆ Conducted several public education workshops relating to oak woodlands as well as wildfire ecology and wildfire prevention.
- ◆ Coordinate the county's Hardwood Advisory Committee and the Tehama-Glenn Fire Safe Council meetings and activities.
- ◆ Partnered with the Department of Forestry and Fire Protection in the preparation of a fire hazard component of Tehama County's DMA 2000 Multi-Hazard Fire Plan.



*Oak woodland in western Tehama County.*

### **Benefits to CALFED Program**

**Watershed Management** – A number of new relationships and collaborative efforts have been developed in connection with the preparation of a riparian habitat and gravel mining impacts inventory of the Thomes Creek watershed located in southern Tehama County. Participation in the Tehama-Glenn Fire Safe Council continues to allow the coordinator the opportunity to develop and promote community involvement in fire related environmental issues that impact local watersheds.

**Ecosystem Restoration** – The array of fuel management projects that have been developed in the Tehama West Fire Plan are designed to reduce the negative impacts of wildfire. Among these undesirable effects are deterioration of vegetative cover, which often leads to the introduction of invasive weeds as well as excessive soil erosion and deterioration of water quality.

# Upper Putah Creek Stewardship

## Upper Putah Watershed



**Amount Funded:** \$153,400

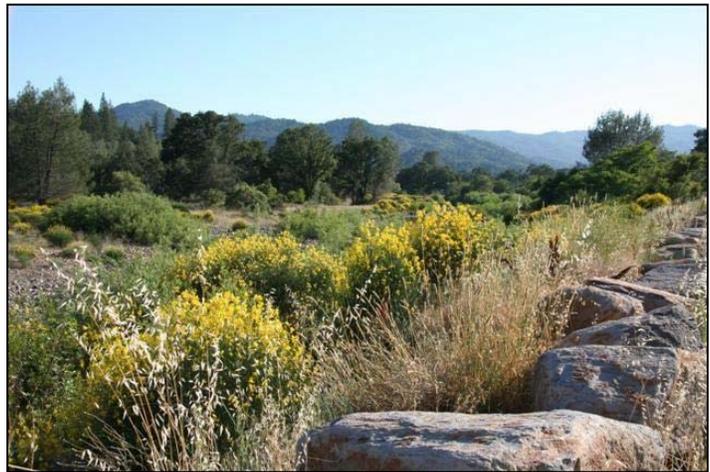
**Additional Funding Obtained to Date:** \$5,000

### **Background**

Rapid urbanization has created tremendous pressure on the natural resources within the watershed. Many residences have been built along creeks causing erosion, reducing habitat, and increasing the potential for catastrophic flooding. *Arundo donax*, a non-native noxious weed, and other brooms have proliferated and adversely affected water quality. More than 40 sites have been identified where Mercury was mined. It is imperative that stakeholders receive information to reduce polluted run-off, minimize habitat destruction, and curtail the spread of noxious weeds. A watershed coordinator would bring together stakeholders to address these critical issues and begin the process of developing baseline data.

### **Benefits to the Watershed**

- ◆ Expanded outreach within the community by opening a Watershed Center. The facility provides residents with a place to hold meetings and contains a digital photo library that can be used for reports and articles.
- ◆ Worked with the Lake County Weed Management Area team to establish a weed removal program in the watershed. As part of the program, homeowners were contacted to obtain permission to map and eradicate weeds on their property. Already 22 homeowners have signed up for the program. Attended a workshop that provided information on establishing protocols for weed removal, many of which should be integrated into the weed removal program. Water quality should be improved and riparian habitat protected benefiting both flora and fauna.
- ◆ Partnered with the West Lake RCD to conduct a three day water quality monitoring workshop. Eighteen volunteers received training. They will begin collecting baseline data that will be used to identify problem areas. This is the third in a series of such workshops.
- ◆ Collaborated with the Upper Cache Creek Watershed to produce a Quality Assurance Plan, which has been approved by the State.
- ◆ Arranged to use the Montesol Ranch property for a three day water quality training session. It is an ideal location to train local residents and to stimulate community involvement. This is the fourth one in this series.



*Noxious weed eradication will begin soon on this section of St. Helena Creek. The project is a result of collaboration within the watershed.*

- ◆ Increased outreach activities within local schools. Participated in the yearly “Field Days in the Creek” event. This is the tenth anniversary for this function. More than 200 students received hands on watershed stewardship training on St. Helena Creek. Implemented a new “Trout in the Classroom” program.
- ◆ Began a new relationship with the Adopt-A-Watershed program. A grant has been submitted that will provide \$35,000 dollars worth of training for Land Based learning in our local schools.
- ◆ Appointed to the Sacramento River Watershed Program as a trustee. Provides an ideal opportunity to expand existing partnerships and establish new ones. Issues can be addressed on a regional basis.

**Benefits to CALFED Program**

**Watershed Management** – Attended numerous meetings with partners over the past year. Provided many opportunities to collaborate and cooperate on workshops, grants, and projects throughout the watershed. Made presentations and provided information to various stakeholder groups. Instrumental in establishing the Hamman Family Environmental Award. The first award was given to an individual who demonstrated a long-term concern for the natural environment. The award provides an opportunity to reach out to the community and generate participation. Worked with partners to introduce “Trout in the Classroom.” Developed curriculum and will begin classroom instruction shortly. Arranged for use of Montesol Ranch for a three-day water quality monitoring workshop. Worked with local landowners, concerned citizens, Lake County Officials, and the State to write a grant that will restore the urban creek area in downtown Middletown.



**FIELD DAYS IN THE CREEK**

*Tenth Annual “In the Creek Field Days.” Students from Middletown schools are being taught about the types of species found in Helena Creek.*

**Ecosystem Restoration** – Began construction on the native plant greenhouse. Volunteers have donated equipment and other supplies. Other volunteers are learning about nursery operations so they can operate the facility themselves. Native plants will be used throughout the community to restore habitat. Applied for a grant to restore the urban area of St. Helena Creek. Sent letters to landowners requesting entry permission to map and eradicate noxious weeds.

# Upper Sacramento River Exchange

## Sacramento Headwaters



**Amount Funded:** \$163,944

**Additional Funding Obtained to Date:** \$49,381

### **Background**

The Upper Sacramento River Watershed and surrounding Klamath-Siskiyou forests represent some of the most pristine, bio-diverse, and critical habitats in the western United States. This region faces a multitude of threats, such as hydroelectric development, resource extraction, transportation impacts, poor land use practices, human development and degraded waterways. This “headwater region” is critical to the down stream health of the Bay-Delta due to its bio-diversity richness, water abundance and ecological processes.

### **Benefits to the Watershed**

- ◆ Implemented an on-going non-source water sampling program with the Regional Water Quality Control Board and the City of Dunsmuir. Data will be used for establishing biological baselines, and established sampling procedures in the event of a future spill or discharge.
- ◆ Completed a Community Guide to Healthy Waterways for distribution in Siskiyou County. The guide provides information on collection sites, household disposal of pollutants, alternative products, reporting, and stewardship programs.
- ◆ Coordinated an on-going citizen bio-monitoring program in partnership with the Department of Fish and Game, and established biannual monitoring. Data will be established for biological baseline, and future damage assessment.
- ◆ Negotiated a community notification agreement with Union Pacific Railroad for accident disclosure in the Upper Sacramento River canyon. Improved reporting will improve community notification, and appropriate response by agencies and conservation organizations.
- ◆ Facilitated a spill response meeting and established a response protocol for responding agencies and the City of Dunsmuir. Response agencies refined protocols and established response plans and notification procedures for future spills.
- ◆ Implemented an angling survey in partnership with the Department of Fish and Game. The survey assesses angling success, angling mortality, use rates, and baseline river condition information.



*Upper Sacramento River at Tauhindauli Park. The River Exchange coordinated the removal of invasive plants and replaced them with 150 native trees and shrubs.*

### **Benefits to CALFED Program**

**Ecosystem Restoration** – Worked with students and community volunteers to remove fennel and blackberry from 1½ acres of riparian habitat along the Upper Sacramento River. Planted 150 native plants in the riparian zone at Tauhindauli Park.

Coordinated a community restoration day with the U.S. Forest Service at Panther Meadows. The day's efforts resulted in the repair of degraded trails and restored watercourses. Completed trail and stream course repair on Cold Creek at the Mt. Shasta Fish Hatchery. Repaired degraded trails and surface runoff, and restored eroded stream banks. Participated in planning with the U.S. Forest Service and designed a meadow restoration project on Squaw Valley Creek.

# Urban Watershed Project

## San Francisco Bay Watershed



**Amount Funded:** \$63,600

**Additional Funding Obtained to Date:**

### **Background**

The watershed is heavily urbanized with relatively small areas of restored ecological habitat. Many of the contaminants found in the San Francisco Bay are a result of stormwater runoff. Experience with urban runoff indicates that contaminants from road surfaces, nutrient loading from fertilizer application, and illicit dumping into storm drains contribute to the problem. Unfortunately, limited data exists and further studies are necessary. It is vital that the community work together to get a better understanding of the problems and develop appropriate strategies in order to preserve the Bay and the small areas of habitat that remain today.

### **Benefits to the Watershed**

- ◆ Continued development of modified cooperative agreements with partners, including the National Park Service and Presidio Trust that support the restoration of Tennessee Hollow watershed and include water and macro invertebrate sampling and analysis.
- ◆ Added 4 new schools and 120 students to the educational outreach program. One group participated in eight sessions in the watershed over eight-month period. Another group of students met weekly for more than 30 weeks. All the students had an opportunity to conduct hands-on activities that not only taught them valuable skills but also improved the watershed.
- ◆ Received advance notification that the watershed coordinator had received the Crissy Field Center “Community Hero” award for work performed in the watershed for the past 10 years.
- ◆ Rebuilt water quality testing laboratory. Obtained new equipment that will be instrumental in testing and detecting contamination throughout the watershed.
- ◆ Met with educational partners, Galileo High School and San Francisco Unified School District, to double the number of students from 25 to 50 that could attend an environmental education program at the Presidio. It would allow students to meet every week for the entire school year.
- ◆ Presented educational program at the Geological Society of America international conference in Denver. Over 5,000 physical science professionals and educators attended the event. Provided a phenomenal opportunity to interact with leaders in the field and to obtain ideas for future activities, events, and educational programs.
- ◆ Joined steering committee to implement an Eco-Career day at the Presidio where over 300 students were given access to environmental job-related opportunities and workshops.

### **Benefits to CALFED Program**

**Watershed Management** – Continued to expand outreach efforts within the community. Attended numerous meetings with partners and other stakeholders. Met with a coalition of 10 environmental and

community groups to discuss watershed conditions in the Presidio. Wrote over 20 comment letters discussing upcoming environmental assessment of 278 acre Tennessee Hollow watershed restoration. In addition met with the San Francisco Regional Water Quality Control Board to add Tennessee Hollow watershed to their regional sampling plan. This would provide more exposure to a greater audience and potentially increase funding opportunities. Met with several natural resource partners to discuss methods for reducing potential emerging contaminants from entering the water supply from water recycling and treatment processes. The monitoring program now covers all the creek systems within the Presidio. This was accomplished by working diligently with partners throughout the watershed. Baseline data is being collected. As additional data is collected, sources will be identified through trend analysis.

**Drinking Water Quality** – Worked with local partners and stakeholders to stop sewage from leaking into a local creek. Extensive coordination and collaboration were instrumental in identifying the leak and getting it repaired.

**Ecosystem Restoration** – Instrumental in facilitating the implementation of a long-researched project to excavate 50,000 tons of contaminated debris from a creek and “day-light” the creek in this 150-yard section of creek. Over the past year, numerous water samples have been collected and testing. This effort has been used to establish baseline data and to identify potential projects.