

Feather River Coordinated Resource Management

PLUMAS CORPORATION

550 Crescent St., P.O. Box 3880 Quincy, CA 95971 (530) 283-3739

2009 Annual Report to Signatory Agencies



Red Clover/McReynolds Creek Restoration Project. Pre-project photo June 2006. Post-Project photo June 2008.

February 2010

- California Department of Conservation •California Department of Fish and Game •California Department of Forestry and Fire Protection •California Department of Parks and Recreation
- California Department of Transportation •California Department of Water Quality Control Board •California Department of Water Resources •Feather River College •Feather River Resource Conservation District •Natural Resource Conservation Service, USDA •North Cal-Neva Resource Conservation and Development Area •Pacific Gas & Electric •Plumas Corporation
- Plumas County •Plumas County Community Development Commission •Plumas National Forest USFS, USDA •Plumas Unified School District •University of California Cooperative Extension
- Salmonid Restoration Federation •Sierra Valley Resource Conservation District •Trout Unlimited
- U.S. Army Corps of Engineers •USDA Farm Services Agency •U.S. Fish & Wildlife Service

Introduction

This report summarizes the Feather River Coordinated Resource Management Group's (CRM) 2008 and 2009 accomplishments, and program activities and projects for 2010. The CRM's work could not go forward without your agency's participation. The Feather River CRM has twenty-four signatory partners, whose participation and levels of involvement have varied over the years, but without them we would not be successful in implementing watershed restoration in the upper Feather River Watershed. In these difficult economic times we acknowledge the difficulty for partners to be involved, but it is our hope that as a partner you will continue a precedence of ongoing communication and interest in the work being accomplished in the upper Feather River Watershed.

This is the fifth annual report to all signatory agencies of the Feather River CRM and interested stakeholders. This report serves as an account of accomplishments to all our participants. For more detailed information, please visit our website at www.feather-river-crm.org.

The Feather River CRM has successfully implemented a total of 115 projects over the last twenty-four years through the support and cooperation of many agencies and landowners, both private and public. Of this total, 66 have been on-the-ground constructed restoration projects, 13 studies/strategies, 19 planning/coordination projects, and 17 education projects. On-the-ground projects have treated approximately 44 miles of stream, directly restoring approximately 3,900 acres of meadow/floodplain within the Feather River watershed. Your continued support has made these collaborative achievements possible. These are your accomplishments, contributing to and advancing your agency's mission. Please feel free to include these projects in your organization's progress reports. The Feather River CRM is your example of what can be achieved by public and private agencies supporting local communities on mutual goals.

All projects, as well as general program outreach and coordination, have been funded by a variety of federal, state and local funds on a project-by-project basis. Current state and federal budget situations affect these funding sources in different ways depending on whether they are appropriated or bond funded. In December 2008, the state froze all bond funded grants. Due to the completion of many local and federal sponsored projects at the end of 2008, the freeze resulted in the CRM having no funding sources to maintain the program. All but one CRM staff was laid off in January 2009 for five to six months, until other funding sources were available. During this period, all staff volunteered their time to keep the program going and seek other funding sources. Currently, with new funding sources secured and the prospect of state funding slowly thawing over the next year, we are hopeful the CRM budget and work plan will be steady for the next two to three years.

Budget Table:

Year	Total Program Expenditures ¹	State/Federal Funding	County Cooperative Grants ²	Non-program Match ³
2004	\$690,000.00	\$640,000.00	\$50,000.00	\$135,000.00
2005	\$990,000.00	\$740,000.00	\$250,000.00	\$135,000.00
2006	\$1,393,000.00	\$1,000,000.00	\$190,000.00	\$203,000.00
2007	\$1,089,394.00	\$806,870.00	\$247,828.00	\$34,696.00
2008	\$1,158,669.00	\$848,287.00	\$253,577.00	\$56,805.00
2009	\$415,903.00	\$303,580.00	\$85,197.00	\$27,126.00
2010-11(est.) ⁴	\$4,582,636.00	\$1,564,129.00	\$2,606,768.00	\$411,739.00

Note: 2007 figures were slightly amended for adjustments in 2008.

¹Does not include funds expended through partner contracts (i.e. PC Public Works Prop. 204 construction contracts)

²Collaborative Grants/Participating Agreements (Prop.50 IRWM, CalTrans, Plumas Watershed Forum, etc.)

³Direct partner project match contributions (private landowners, PG&E, QCSD, NFWF).

⁴Includes secured out-year funds and project applications awarded, but not yet contracted.

Summary of Projects Completed in 2008 & 2009

Meadow Valley Projects: Silver Creek and Spanish Creek @ Kellett-

Project development funds from the Plumas Watershed Forum funded the data collection, analysis and project design for both projects in 2005/6. Project design for Spanish Creek at Kellett included constructing boulder vanes, utilizing vegetation transplants, bank reconstruction, and removal of gravel berms within the active floodplain, treating .32 miles of channel. Project design for Silver Creek, a tributary of Spanish Creek, involved the enhancement or construction of whole tree and other small log jams, the construction of rock-riffles and a long-term management plan for recruiting large woody debris into the channel, treating .44 miles of channel. Plumas County Department of Public Works is a partner on the



Spanish Creek @ Kellett portion of the project. Public Works is contributing match for installation of floodplain culverts when they replace the bridge in two to five years. Plumas Watershed Forum funding for \$198,000 was approved in May 2006 (\$51,000 for Silver and \$147,000 for Spanish @ Kellett). Construction on Spanish @ Kellett was completed in July 2008 and on Silver Creek in August 2008 by Genesis Systems, Inc from Sloat, CA. **Photo of boulder vanes on Silver Creek before revegetation work, 8/2008.**

Long Valley Creek- A project development grant from the Plumas Watershed Forum funded the data collection, analysis and project design for this project in 2005/6. Project objectives were to restore the bedload capture function of the alluvial fans, reconnect 11,200 feet of stream channel with their historic floodplain, eliminate erosion, and raise the water table to its historic elevation utilizing the pond and plug technique. Partners included the landowner, Dean Panfili, and NRCS, who contributed funds for project revegetation, fencing, and grazing management. Primary funding was provided from the RAC PL 106-393 Secure Schools Title II funds and a SWRCB Prop. 40 Non-point Source Pollution grant, for a total budget of \$352,000. The landowner/NRCS completed the fencing and began grazing management changes around the 168 acre project area/riparian zone in 2007. Construction was completed from August to October 2008 by Genesis Systems, Inc. from Sloat, CA. **Photo of Long Valley project area in July 2009.**





Sulphur Creek Complex- Rapp-Guidici (aka Haskell) and Boulder Creeks are tributaries to Sulphur Creek within the Whitehawk Ranch development. Both project areas were identified as high priority sites in the Sulphur Creek Watershed Assessment due to the active channel incision which is delivering high levels of destabilizing bedload material to Sulphur Creek. Rapp-Guidici (Haskell Creek) was constructed in two phases, treating a total of .4 miles of channel and restoring 13 acres of meadow floodplain. Construction on the downstream end of the project was completed in 2007, with construction

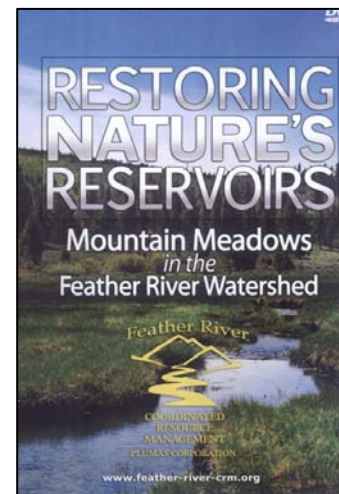
on the upstream end and on Boulder Creek completed in 2008. Boulder Creek restored 20 acres of meadow floodplain, treating .4 miles of stream channel. The RAC (PL106-393 Secure Schools Title II) funded the Rapp-Guidici project for \$131,575, with a total project cost of \$170,720. Total project budget for Boulder Creek was \$75,000 provided by SWRCB Proposition 40 Non-point Source Pollution grant funds. **Photo of “new” remnant channel on Boulder Creek in July 2009.**

Meadow Carbon Project- This research project was initiated in 2007 with funding from the Plumas County Board of Supervisors Title III funds (\$17,000) to develop a protocol that would quantify the amount of carbon sequestered by restored meadows. In 2007, the Feather River CRM, with technical review from researchers at the University of Nevada, Reno, submitted a draft protocol to the California Climate Registry. As per the protocol, sample meadows were surveyed and mapped for soil and vegetation types in the fall of 2007. The purpose of these surveys was to provide a stratification scheme for determining representative sample sites. Collection of vegetation and soil samples at six sites (3 restored and 3 un-restored) was completed in summer 2008.



The samples were sent to a lab for testing of total carbon content. Data analysis and draft report of findings has been completed and is out for TAC review at this time. **Photo of Jim Battagin, Jessica Albietz, and Jim Wilcox sampling soil and vegetation at Coyote Flat for carbon content.**

Meadow Restoration DVD- The Feather River CRM received \$43,285 from the Plumas County Board of Supervisors Title III funds to produce a DVD on meadow restoration technology. The Feather River CRM has implemented numerous, very successful meadow restoration projects since 1995. The purpose of this video was to expose the general public across the region to meadow restoration technology and its use as a management tool for many of California's water issues such as flooding, drought and water storage. While meadow restoration using the “pond and plug” technology has been implemented in the McCloud, Pit, Feather, Truckee and Kings River watersheds, little is known of the



technology and benefits outside these watersheds. The goal of the video was to convey the benefits of restoration to a much broader audience, including downstream water users. In light of the ever-increasing demands on water resources, presentation of this information to a wide audience is especially timely given the ancillary ecological benefits that accrue from its implementation. The final product was a 24-minute DVD. A 6 minute segment of the program aired nationally on PBS America's Heartland in February 2009, and the DVD was selected for the 2010 Wild and Scenic Environmental Film Festival in Nevada City, CA in January 2010. **Photo of Meadow Restoration DVD cover.**

Indian Creek Modeling Project- In 2006, researchers at University of California (UC) Davis were awarded a DWR CalFed Bay Delta Watershed Program grant under the Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002 for a research project entitled "Assessment of Restoration Activities at the Indian Creek Watershed". UC Davis subcontracted with the Feather River CRM to assist in the data collection for the research project. The purpose of the project was to develop, implement, and field calibrate an assessment protocol for restoration projects in the Indian Creek Watershed. The assessment protocol will examine the effects of multiple, large-scale restoration projects in the watershed, primarily, modeling potential changes in streamflow timing and water temperatures. As part of the assessment, a watershed model will be developed using the UC Davis Hydrological



Research Laboratory watershed model (UCDHRLM). Data collection began in June 2007 and continued through summer 2009. Total funding for the CRM monitoring staff, data collection, and equipment was \$80,000. **Photo of Kara Rockett measuring groundwater well levels in Red Clover Valley.**

Sulphur Creek Bank Stabilization

Project- In support of other restoration efforts in the Sulphur Creek watershed, this project was initiated upon landowner request in 2006 when the bank receded nearly 12 feet undermining the fence during high flows in the December 31, 2005 flood event. The project area, immediately upstream of the Highway 89 Bridge, is grazed by landowners on either side of the creek. The project area landowners worked with the Natural Resource Conservation Service to construct a fence in 2005 to restrict cattle access to the channel. They also funded environmental surveys (\$5,040) for the CEQA



analysis. The adjoining landowner across the creek fenced their cattle from the creek in 2008. In 2008, the FRCRM received a Sierra Nevada Conservancy (SNC) Proposition 84 Strategic Opportunity Grant (SOG) for \$7,500 to complete the CEQA analysis and obtain all required permits for construction. In 2009, \$50,000 was awarded to the CRM for implementation as part of an American Recovery and Reinvestment Act (ARRA) grant that funded the completion of the Prop 40 Middle Fork Feather River Complex suite of restoration projects. Construction along a .13 mile reach of channel was completed in September 2009 by Feather River Materials of Quincy, CA and entailed laying back approximately 500

feet of vertical bank to a 1:1 slope, reducing 200 feet of over-steepened terrace slopes upstream of the cut slope, building a floodplain bench, constructing eight boulder vanes to direct flows away from the newly sloped banks, and planting the project area with willows and other native shrubs and seeds. **Photo of newly constructed bank and boulder vanes September 2009.**

Other On-going Feather River CRM Programs and Projects:

Watershed Monitoring Program-



The Feather River CRM initiated a watershed-wide continuous monitoring program in 1998 to examine the effects of watershed restoration projects on a larger watershed scale. Monitoring stations are located in the eastern two-thirds of the Feather River Watershed on public and private lands. Primary program parameters collected include streamflow and temperature at ten continuous recording stations. Two of those sites also collect turbidity measurements. Twenty stream condition inventory (SCI) sites have been established throughout the watershed. Data collection on these reaches is targeted every two years pending available funding; however, they have not been re-surveyed since

2003. Two years of funding (2004-2006) for \$60,000 was provided by the Plumas Watershed Forum, which covered maintenance and operation of the continuous recording stations. Indian Creek watershed modeling project funds also provided support for continuation of the watershed monitoring program through 2008. Plumas County was awarded a Proposition 50 Integrated Regional Water Management grant in 2007 (contract was not signed until 2009) that will provide funding for program watershed monitoring and Last Chance Phase II project monitoring through 2011. The CRM is submitting a grant application to the Plumas County RAC in February 2010 to fund one year of continuous station operation, and one year of SCI surveys. The program also entails a Citizen Monitoring component with local resident and student volunteers collecting data in Indian, Spanish, and Sulphur Creek watersheds. Program and project monitoring results can be found on the Feather River CRM website www.feather-river-crm.org. Data have been used by a variety of local entities, as well as the Feather River CRM to assess watershed trends and the effects of projects. **Photo of Jessica Albietz in 2008 measuring streamflow on Indian Creek at Taylorsville.**

CRM Education Program- The Feather River CRM Watershed Education Program was established in 2004 with an \$110,000 grant award from DWR, which established two half-time positions, a citizen monitoring/outreach coordinator and a school-based education coordinator. Both of these positions were subcontracted out to Kristy Hoffman and Rob Wade, respectively. The DWR grant funded the education program through 2006. Subsequent funding has come from the Plumas Water Forum (\$33,668) for a *Feather River Watershed Awareness Campaign* and RAC (\$34,290) for school-based watershed education support, public outreach, and citizen monitoring efforts. Continued funding for the sixth grade Watercourse Program ("Plumas to the Pacific") has been provided by the Plumas County Board of Supervisors Title III funds for the 2006-07 and 2007-08 school years. In 2009, the Sierra Nevada Conservancy awarded a



contract for \$99,544 to continue education efforts; however, this funding was suspended until October 2009 due to the state funding freeze. “WATERS”: Watershed Awareness through Education, Recreation, and Stewardship is a committee of Feather River CRM partners and interested stakeholders that oversees the regional and collaborative efforts on behalf of stewardship education and community outreach. Restoration work in the watershed provides educational opportunities for local high school and college students. In 2008, students from Jim Beckwourth High School in Portola participated in restoration efforts through willow planting, learned about Stream Condition Inventory, and helped to complete a post-project channel survey. In 2009 a Youth Environmental Stewardship Summit (YESS) conference was held in partnership with Feather River College for 6-12th grade students region-wide. Public outreach efforts included a storm drain stenciling event in Quincy and Greenville, trash cleanups in Quincy, Greenville, Portola and Lake Almanor, classroom presentations, “Clean Water Starts Here” signs posted around Lake Almanor, and participation in community events, such as the Pioneer Quincy Elementary School Family Science Night, the US Forest Service Fishing Derby, and Quincy Earth Day celebrations. **Photo of Quincy Elementary 6th grade students participating in storm drain stenciling in 2008.**

FRC Community Greenhouse-



In 2007, the Feather River CRM started a Revegetation Committee to heighten awareness and inspire collaboration on vegetation needs in the watershed. Committee members include representatives from many of our already existing partners, including Department of Water Resources, U.S. Forest Service, Trout Unlimited and Feather River College. Initial efforts in 2007 focused on re-vitalizing the community greenhouse located on the Feather River College campus with funding from the Plumas County Board of Supervisor’s Title III funds (\$14,000). The Forest Service contributed \$5,000 for greenhouse maintenance. Using Title III monies, the CRM helped organize native plant outings and native grass seed collection in the watershed, in addition to coordinating subcommittee meetings and getting the greenhouse operational. In 2008, the CRM sponsored a Native Plant Workshop offered through FRC. Gary Romano of Sierra Valley Farms taught the class and

students helped fill the greenhouse with starters of a variety of native plant species including sedges, rushes, bitterbrush, willows, and cottonwoods. The starters were used in re-vegetation efforts on several projects in fall 2008. The CRM subcontracted with Terri Rust to manage the greenhouse in 2008-09. In 2009, Rust successfully secured RAC funding for FRC to continue the greenhouse operations with match support from the Forest Service and CRM. Over 5,000 native plants were propagated in 2009 and used for watershed restoration projects. **Terri Rust in the community greenhouse top dressing planted flats with potting mix during the Native Plant Workshop in February 2008.**

Update of Projects Completed in 2007:



Dixie Creek- The project on Dixie Creek - a major tributary to Red Clover Creek – was completed in September of 2007. Total project budget was \$62,000 provided by Plumas Watershed Forum (\$56,704) and PNF Beckwourth Ranger District (\$5,000 of rock). The project eliminated 2,000 feet of gully on Dixie Creek. Additional vegetation work was completed by the CCC in 2008 and CRM staff in 2009. **Photo of Dixie Creek in spring of 2008.**



Smith Creek- Pond and plug construction on Smith Creek was completed in December 2007, and bank stabilization on the Longnecker property was constructed in July 2008. Total project budget was \$252,000 funded by California State Water Resources Control Board (SWRCB) Proposition 40 Non-point Source Pollution funds for a complex of projects within the Upper Middle Fork Feather River watershed. Ten landowners in partnership with Trout Unlimited (TU) contributed time and funding to the preliminary design surveys, environmental surveys and reports, fish monitoring surveys, fish relocation during construction, and re-vegetation efforts for a total in-kind contributions of approximately \$13,000. Work

completed in 2009 included re-vegetation by the CCC and some project component modifications, using American Recovery and Reinvestment Act (ARRA) funds that re-authorized work begun under the SWRCB Prop 40 grant. **Photo of Fall Tour on Smith Creek Project November 2008.**

Little Last Chance Creek- Located in Sierra Valley, the Little Last Chance project area was broken into three treatment reaches: the Guidici Ranch, North Creek, and East Creek. The Guidici Ranch, located at the top of the alluvial fan, involved treating nine bank sections along a one-mile stretch of channel through reshaping of vertical banks, vegetating, and installing boulder vanes. On the North and East Creeks, restoration consisted of using riffle augmentation to raise the channel base level back to the root zone of the meadow vegetation allowing the riparian vegetation to again protect the stream banks from high flow velocities. The project also included grazing management changes through the use of fencing. Total project budget was \$951,227. The Plumas



Watershed Forum and Plumas County Resource Advisory Council (RAC) provided 25% funding match for the Prop 40 grant. Partners included Plumas National Forest, California Department of Water Resources, Sierra Valley Resource Conservation District and the Natural Resources Conservation Service. Construction was completed in December 2007. Further revegetation work was completed by the California Conservation Corps (CCC) in October 2008, and a second year of post-project monitoring was completed in 2009. 6,300 feet of riparian corridor fencing was constructed on North Creek, using ARRA funds re-authorized for the SWRCB Prop 40 grant. **Photo of the CCC planting willow waddles on terrace banks along Little Last Chance Creek-Guidici Ranch in October 2008.**

Last Chance-Ferris Fields- This project restored an “in-fill” reach of the original Last Chance Creek Watershed Restoration Project that was constructed in 2002-04. This project connected the previous pond



and plug work, which eliminated 2,200 feet of gullied channel on Last Chance Creek at the downstream end of Ferris Fields, and another 2,500 feet on Ferris Creek above the confluence with Last Chance Creek. The Ferris Fields project eliminated an additional 4,500 feet of gully on Last Chance Creek using the same techniques and included 2.5 miles of fence repair/replacement around the Ferris Fields pasture. Project construction was completed in August 2007. Total project budget was \$160,011. Funding was approved from the Plumas Watershed Forum (\$107,011) and the RAC (\$47,000), with a \$6,000 match from

Plumas National Forest for fence materials and re-vegetation. **Photo of the CCC willow staking the Ferris Fields Project area in May 2008.**

2010 Planned and Proposed Projects:

Because of unforeseen shifts in project implementation funding, much of 2009 was spent on project development, and completion of environmental review, so that projects would be eligible for implementation funds. Much of this type of work will also continue through 2010.

Last Chance Phase II- This project involves private land owned by the Vasey family and Plumas National Forest lands. The Phase II project proposal involves restoring 800 acres of relic meadow and reducing the incision risk to stabilize functional tributary meadows. The project, with a budget of \$3,700,000 was submitted as part of Plumas County's Proposition 50 IRWM application. The County was awarded 66% of the funding in 2007, but did not receive a final signed contract from the Department of Water Resources until 2009. Project surveys, environmental analysis, design development, technical reviews, and permit applications began in 2008 and are scheduled to be completed in 2010-11. Construction is tentatively scheduled to begin in summer 2011



spanning two seasons, with completion planned for the fall of 2012. Additional project funding (\$400,000) has been awarded to the CRM from the National Fish and Wildlife Foundation. The remainder of the full implementation budget is still being sought. **Photo of Coyote Flat gully in Last Chance II project area taken in 2008.**

Sulphur Creek at Barry Creek and Whitehawk Ranch-

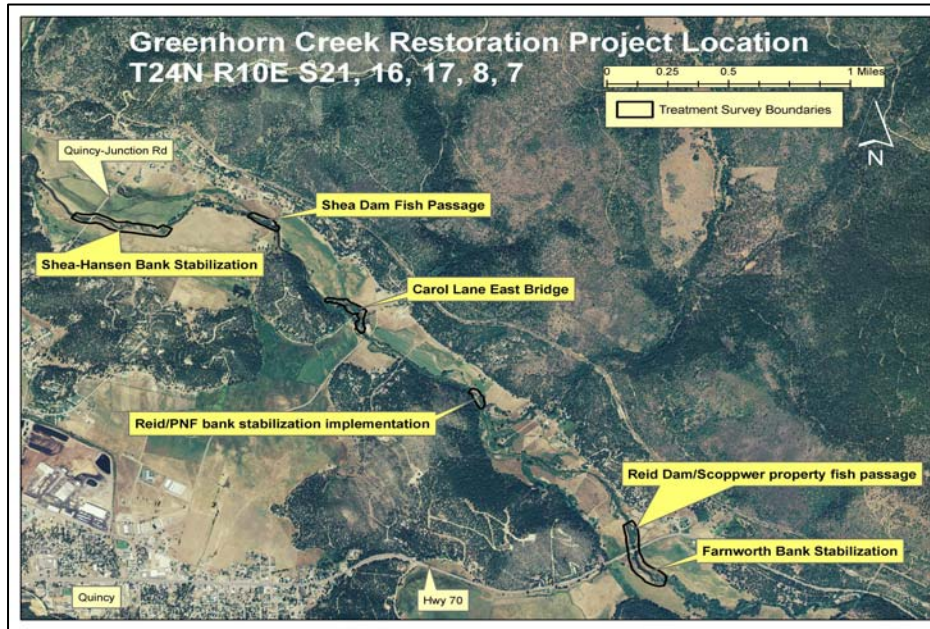


Sulphur Creek at its confluence with Barry Creek ranked as the highest priority site in the Sulphur Creek Watershed Assessment, with the Whitehawk Ranch ranked as fourth. The second and third ranked priorities were the previously discussed Rapp-Guidici and Boulder Creek projects completed in 2008. In 2007, Highlands Management of the Whitehawk development provided \$10,000 to complete field surveys and develop project design proposals necessary to begin the environmental analysis process for both project areas. All design surveys and conceptual design for Barry Creek have been completed. In early 2008, the FR-CRM received a Sierra Nevada Conservancy (SNC) Proposition 84

Strategic Opportunity Grant (SOG) for \$19,530 to complete the environmental surveys, CEQA and NEPA analyses, and obtain all required permits for the Barry Creek project. The Highlands Management Group has been asked if they would be willing to fund the environmental surveys, analysis, and permit applications for the Whitehawk Ranch reach. CEQA and NEPA documents and permit applications were started in winter 2008/2009, but funding was frozen in December 2008. Implementation funding was requested in November 2008 through the Caltrans Environmental Enhancement and Mitigation Program (EEM), but was not funded. Funding was recently reauthorized by SNC in September 2009, but the

project has been postponed to work out concerns brought forth by the Forest Service. **Photo of Sulphur Creek at Barry Creek July 2009.**

Greenhorn Creek- Funded in 2007 for project development through the Plumas County Board of Supervisors Title III funds, \$19,550 was awarded for preliminary data collection and analysis for the planning and conceptual design phase of a stream bank restoration project on Greenhorn Creek in American Valley. Project work completed in 2008 included contacting other landowners (including the Forest Service), field data collection, data analysis, development of conceptual designs, and holding one stakeholder meeting. Because of the many landowners along the channel, and the inter-connected irrigation system, coordination with landowners is a substantial element in the development and



conceptualization of this project. An application to the RAC for funding the CEQA/NEPA analysis, permits, and construction was awarded in 2009, with analysis work to begin in 2010, and bank stabilization implementation on National Forest land in 2011. **Map of proposed project locations on Greenhorn Creek 2009.**

Quincy Community Services District Wetland Project- This is a Proposition 50 project funded through



Plumas County's IRWMP grant with the Department of Water Resources for \$253,561. Quincy Community Services District (QCSD) has subcontracted out the project to the Feather River CRM. Project purpose is to expand their tertiary treatment capability. Work in 2008 entailed completing the environmental surveys and CEQA documentation, finalizing the design, and acquiring the necessary permits. Construction of berms within the emergency pond area to increase the area for tertiary treatment was completed in the fall of 2009. Additional work in 2010 will include installation of a gate on the tertiary treatment pond area with a piped outlet directly to

Spanish Creek with a diffuser and treatment of headcuts on Clear Stream. **Photos of discharge test performed on Spanish Creek in August 2009.**

Spanish Creek Restoration and Gravel Management- The Spanish Creek Assessment and Rehabilitation Strategy were completed in 2006 with Proposition 13 grant funds from the State Water Resources Control Board. Additional funding through the Plumas County Resource Advisory Committee PL106-393, Secure Schools, Title II funds were awarded in 2007 to do additional work on the Spanish Creek Restoration Demonstration Projects which included: 1) revegetation and maintenance work on the

Dyrr Bank Stabilization Project (constructed in 2006); and 2) determining a site to relocate the vortex gravel sampler (removed in 2006). The Feather River CRM conducted a watershed tour in May 2008 for all stakeholders and other interested parties to review the proposed sites identified in the Strategy. The restoration strategy has two components: 1) streambed and bank structural and vegetation stabilization; and 2) developing passive gravel management locations where excess bedload can be removed from the system without impacting the channel function or stability. To that end, the FRCRM has focused on developing the details for gravel management in 2008. This entailed securing site access, developing permanent monitoring cross-sections, and acquiring necessary permits. Recently, an easement across the



McMorrow property was received, including an easement to the stream channel area where the majority of the bedload is expected to deposit. All permanent cross-sections had been surveyed by December 2008. An implementation proposal was submitted for Prop. 84 Urban Streams funding in 2008, but due to the state budget freeze no awards have been made to date.

Photo of Spanish Creek tour in May 2008.

In 2009, the Plumas Watershed Forum funded \$82,400 for project design and environmental analysis work on Spanish Creek in Meadow Valley and American Valley. Specific stream

banks were identified for stabilizing treatments within the gravel management zone and two of these banks were surveyed in 2009. The Feather River College watershed-study students surveyed one of the banks and channel reach and the FRCRM completed surveys for the second bank. Detailed project designs will be developed for these banks in 2010 followed by a CEQA analysis and submittal of applications for construction funding and permits.

Yellow Creek in Humbug Valley- The Feather River CRM is assisting PG&E and the Humbug Valley Subcommittee of the Ecological Resources Committee (ERC) in development of a potential restoration project on Yellow Creek in Humbug Valley upstream (north) of the county road. The area is currently

subjected to gully widening and active head-cutting on both the main stem of Yellow Creek and irrigation ditches that have captured perennial stream flow. PG&E ERC provided \$20,000 in 2006 to complete initial field surveys and monitoring; in 2008 an additional \$77,000 was contracted to develop conceptual project design alternatives, complete resource surveys, continue site monitoring, facilitate stakeholder meetings and seek implementation funding. Resource surveys and field data collection have been completed. FRCRM staff has designed three restoration alternatives, including an inset channel design, and two “pond and plug” designs. A consensus decision by the ERC on the restoration design is expected in early 2010. **Yellow Creek in Humbug Valley looking downstream in June 2009.**



Red Clover/Poco Creek (USFS)- This Plumas National Forest (PNF) project located on the Beckwourth Ranger District would extend restoration of the Red Clover/McReynold's Creek project constructed in 2006 for another three miles downstream. The CRM and Forest Service have been working on the NEPA analysis in 2009, and should have a final decision in 2010. Environmental analysis work was funded by Plumas Watershed Forum (\$12,600) and USFS, PNF (\$26,000). Implementation funding was awarded in January 2009 through a CalFed Watershed Program-Implement Watershed Management Plan grant for \$1,169,000. However, due to state fiscal difficulties, this award has not yet been funded, but is expected sometime in 2010.



downstream of Chase Bridge taken June 2009.

Red Clover/Poco Creek project area



Red Clover Dotta- The Red Clover Dotta Project is a 253-acre headwater meadow on Red Clover Creek currently downcut to an elevation six to eight feet below the surface of the floodplain. The proposed project would reconnect the channel to the floodplain using the “plug-and-pond” technique. The project area encompasses the ranchlands of the Goodwin Ranch and public lands administered by the Plumas National Forest, Beckwourth Ranger District. The Feather River CRM received \$109,700 for design development, environmental surveys, CEQA/NEPA analysis, and permit application work on Red Clover Dotta and Meadowview/Rowland Creek

projects from the Plumas County RAC in Cycles 8 & 9 (called the Eastside Meadows Project). Preliminary design work is complete. 2010 work will consist of completing the NEPA, CEQA, and permitting, as well as seeking implementation funds. **Photo of Red Clover Creek – Dotta mid-channel looking upstream in July 2009.**

Rowland/Meadowview- These two projects are in the contiguous meadow system that straddles the watershed divide between Last Chance Creek, tributary to the North Fork Feather River (NFFR) and Rowland Creek, tributary to the Middle Fork Feather River (MFFR). Rowland Creek has been tributary to both watersheds in historic times through natural channel migration. Currently, Rowland Creek contributes the bulk of its flow to the MFFR drainage, with only flood flows contributing discharge to the NFFR. Meadowview is the



uppermost meadow on Last Chance Creek. Both channels, including tributaries, are currently downcut six to eight feet below the surface of the floodplain. The proposed projects would reconnect the channel to the floodplain using the “plug-and-pond” technique. The projects encompass both private and public lands, and would restore functionality to 252 acres of montane meadow floodplain resulting in improved channel stability for 4.4 miles of Last Chance Creek, Rowland Creek and tributaries. The Feather River CRM received \$109,700 for design development, environmental surveys, CEQA/NEPA analysis, and permit application work on these projects and Red Clover Dotta (Eastside Meadows). Preliminary design work was completed in 2009. Like the Dotta Canyon project, 2010 work will consist of completing the NEPA, CEQA, and permitting, as well as seeking implementation funds. **Photo of Meadowview (Last Chance Creek) in October 2009.**

Red Clover Creek (Clover Valley Ranch)- The largest tract of private land in Red Clover Valley in between two parcels of Goodwin Ranch property was purchased by Beartooth Capital Investments at the end of 2009. The firm contacted the CRM in January 2010 to request assistance in developing a restoration plan for the property. The firm has offered \$75,000 to complete resource surveys and reconnaissance cross-sections. In 2010, CRM staff will coordinate resource surveys, complete cross-sections, and help find project funding sources.

Sierra Nevada Range-wide Meadow Restoration Coordination- In 2009 CRM staff, along with many others, assisted the National Fish and Wildlife Foundation (NFWF) in developing a business plan for their Sierra Nevada Meadow Restoration Initiative. The Foundation plans to contribute \$10 to \$15 million in the next decade on such projects, and has set a goal of improving water storage and wildlife habitat in Sierra Nevada meadows at a rate of 20,000 acres per year by 2014. Ultimately, the foundation hopes to leverage \$200 million for meadow restoration, which is called for in the State Water Plan. In helping to spread the technology of meadow restoration up and down the Sierras, NFWF approved re-directing \$51,000 from the Last Chance Phase II grant to assist in coordinating their efforts range-wide in 2010. This will include educating private and public landowners about meadow restoration methods and incorporating new funding sources, such as NRCS Wetland Reserve Program (WRP).

Coordination:

Program coordination is vital to the CRM’s ability to carry out restoration projects. With the assistance and contributions of our partners, CRM staff have coordinated and implemented over 75 restoration projects and watershed studies in the last twenty-four years, sharing this experience with other restoration practitioners. These projects all entail coordination and collaboration between private landowners, agencies, funders, and other stakeholders. Project development requires one to two years of outreach, discussion and data collection in order to develop goals, objectives and design concepts for funding. As the CRM program of work has grown both in project scale and annual number of projects, the need for effective coordination has increased. Landowner requests for assistance are at an all time high, requiring significant resources to provide quality service. All members of the staff, as well as agency partners, have responded to assistance requests as available. Expanding outreach and restoration efforts increases visibility of watershed issues and helps build watershed understanding in local communities and regionally. Watershed monitoring of restoration efforts also continues to expand, as more projects are implemented throughout the watershed. Coordination funding in 2007 was covered through the SWRCB Proposition 40 funding for the Middle Fork Complex projects. Sufficient funding to maintain coordination in 2008 through 2010 was provided through a Proposition 84 Department of Conservation Watershed Coordinator grant and the remaining Proposition 40 monies which were reauthorized under an American Recovery and Reinvestment Act grant in 2009. Proposition 50 IRWMP grant funds for the Last Chance II project will provide coordination dollars in 2010-2011, if state funding remains viable. To date we have still not received any reimbursement on work completed for Last Chance II under Prop. 50. Leaving only the DOC funding for coordination as a viable source for 2010; this is limited solely to the Watershed Coordinator position and does not cover coordination work of other staff.

Direct project funding from state and federal entities has been a reliable source to secure project funding; however, given the 2009 state budget crisis, we have learned a valuable lesson in maintaining a diverse funding portfolio. Several local/federal sources that have funded past projects have, or are completing their final funding cycles (i.e. Plumas Watershed Forum and PL 106-393 Secure Schools Title II). Feather River CRM is continually seeking future funding sources for both coordination and project resources. An application to the National Fish and Wildlife Service (NFWF) was submitted for funding work in 2010-2011, and was successful in securing half of the requested financial support.

In January 2009 due to the loss of all state funding and the completion of several federal grants, all but one of the Feather River CRM staff was laid off. Immediately prior to the state budget freeze, Kara Rockett, AmeriCorp member in 2008 for the CRM was hired as our Monitoring Coordinator, and Jessica Albietz, hired in 2007, was re-assigned as a Project Coordinator. Following the lay-offs, Kara willingly agreed to serve another year as an AmeriCorp member to keep the monitoring program going through this difficult period. For six months, staff volunteered their time to secure funding and keep projects moving forward. In June 2009, all of the staff was back to work except for Albietz, who had moved out of the area. Rockett was hired on full-time in January 2010, after her 2009 AmeriCorp service commitment. If funding and project work load continues to grow, we may hire another project manager in the future.

2009/10 FRCRM staff consists of (5) full-time positions. These positions are as follows:

1- Project/Program Manager- Wilcox	80% Project funded/20% Coordination
1- Program Coordinator- Martynn	80% Coordination/20% Project funded
1- Project Manager - Mink	90% Project funded/10% Coordination
1- Project Manager- Benoit	90% Project funded/10% Coordination
1- Monitoring Coord.,– Rockett	80% Project funded/20% Coordination

Unfunded Project Requests:

Proposed Projects with no current funding	Potential Funding Sources
Willow Creek (single landowner)	Landowner; unknown
Last Chance Charles-North (The Nature Conservancy, Lessee, Matley)	NRCS Conservation Innovation Grants (CIG)
Indian Creek @ Garr Ranch	unknown
Thompson Valley	Landowner; Natl Fish and Wildlife Foundation; North American Wetland Conservation Act
McReynolds Creek	“
Upper Dixie Creek	“
Humbug Creek @ Markwell's	unknown
Sulphur Creek Complex - McKenzie Creek, McNair Meadow	unknown
• Sulphur Creek Roads/Plumas County Rd 114	unknown
• Yarrington Meadow, Wash Creek, Sulphur below	unknown
• Whitehawk, Calfpasture Creek, Mowhawk/Chapman	unknown
• Road Closure	unknown