

**Feather River
Coordinated Resource Management**

**2005
Report to
Signatory Agencies**

**Prepared by
Plumas Corporation
July 2005**

Introduction

The year 2005 marks the Feather River Coordinated Resource Management Group's (FR-CRM) twenty year anniversary. This commemorative year highlights the success of the FR-CRM through the support and cooperation of many agencies, both private and public. Over the last twenty years, the FR-CRM with this collaboration has accomplished a total of 87 projects. This includes current projects and those in the planning stages. Of this total, 53 have been on-the-ground work, 11 studies/strategies, 13 planning and coordination, and 11 education projects. On-the-ground projects have treated approximately 30 miles of stream, directly restoring approximately 2,789 acres of meadow/floodplain within the Feather River watershed. (These totals include 5 miles of creek and 470 acres of meadow to be completed in 2005-2007.) All of this could not of been possible without the support from your agencies. The FR-CRM's accomplishments are your agency's accomplishments, and we hope that you include these projects in your accomplishment reports. The FR-CRM is a fine example of what can be achieved by government agencies supporting local communities on mutual goals.

This report briefly describes the FR-CRM's program activities for 2004 and 2005, with potential out-year projects listed at the end. These projects could not go forward without your agency's participation. This is the second annual report to the agencies that the FR-CRM has produced. Previously, we have reported to your agency via your FR-CRM representative. This report is a vehicle to report accomplishments to a broader audience of our participants.

These 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.

Budget Table:

Year	Total Program Expenditures ¹	State/Federal Funding	County Cooperative Grants ²
2003-04	\$785,000.00	\$730,000.00	\$55,000.00
2004-05(proj.)	\$844,000.00	\$769,000.00	\$75,000.00
2005-06(est.)	\$936,000.00	\$771,000.00	\$165,000.00
2006-09(est.)	\$5,000,000.00	\$4,500,000.00	\$500,000.00

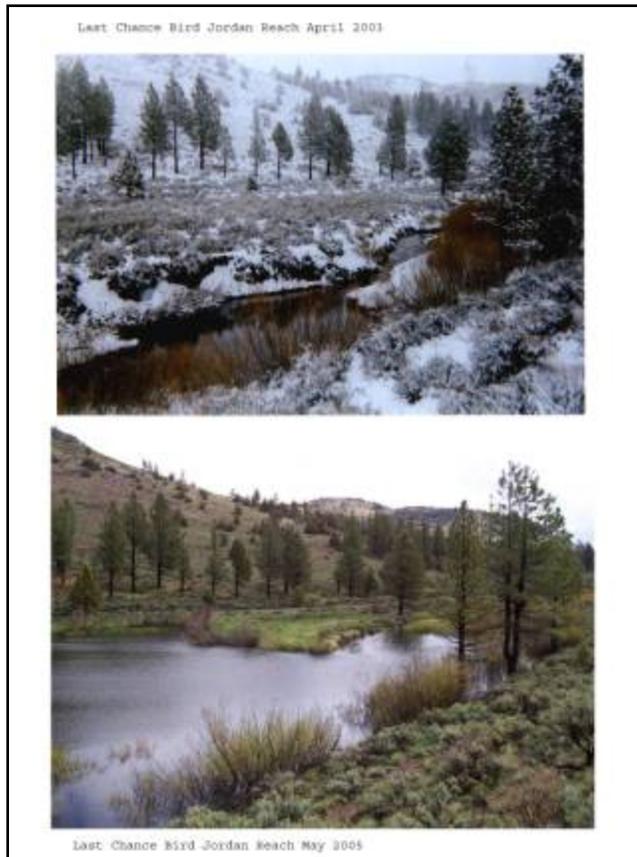
¹Does not include funds expended through partner contracts (i.e. PC Public Works Prop. 204 construction contracts)

²Collaborative Grants/Participating Agreements (Prop. 204, CalTrans, Water Forum, etc.)

FRCRM staff has, since the 2004 report, secured coordination funding to pursue out-year projects for landowners seeking assistance. This funding has been made available through the CalFed Watershed Restoration Program (Proposition 13) for the Red Clover Creek/McReynolds Creek Restoration Project and from Plumas County Water Forum Monterey Agreement funds. Landowners requesting project assistance will be assisted at an adequate level through 2006. A new staff person was hired in early February of 2005 to help meet the ever increasing program coordination demands. Additional coordination funding is being sought for 2007 and beyond.

Summary of Projects Completed in 2004:

Upper Last Chance Creek Restoration Project



This project was on lands managed by the United States Forest Service (USFS), Plumas National Forest, but is part of a bigger project which includes private land. The public land phase of the 9-mile long Last Chance Creek Project entailed obliteration of 20,255 feet of gully with pond and plug, directly including 800 acres of meadow and remnant channel. The construction contract was awarded to Kingdon Backhoe of Indian Valley. Construction began in July of 2003 and was completed by mid-November. The remaining 5,000 feet was completed in August of 2004. Project budget was \$650,000, funded by CalFed through the National Fish & Wildlife Foundation (NFWF). Major partners: Plumas National Forest (PNF), Plumas County, California Department of Water Resources (DWR), and Fred Mallory, permittee.

Last Chance at Charles Creek- This project reach is also in the Upper Last Chance Creek restoration project area. It was identified but not funded in the initial project schedule to accommodate grazing management changes. This 2,000 foot-long reach was completed in Oct./Nov. 2004 using Plumas County Water Forum funds (\$35,000), which supplemented CalFed, NFWF funds (\$20,000). The restoration entailed obliterating two gully systems and returning streamflow to an existing remnant channel system. Wilburn Construction of Quincy was the construction contractor. Construction in 2004 enabled the landowner to better manage grazing. Major partners: The Nature Conservancy (landowner) and John and Corinne Matley (lessee). Photos on Last

Chance at Charles Creek pre-project in March 21, 2003 and post-project in April 4, 2005.





Poplar Creek Crossing- This project is on Soper Wheeler Lumber Co. lands and is a PNF system road. Soper Wheeler has been working with the FR-CRM since 1994 to improve channel conditions in Poplar Valley. The project entailed replacement and modification of the single culvert system with a multi-culvert array raised to meadow elevation in order to restore the floodplain function of the meadow. Approximately 800' of gully downstream of the road was obliterated and flows re-introduced to a well-vegetated remnant channel. Folchi Construction of Beckwourth received the construction contract. Funding was provided by PL 106-393, Secure

Schools, Title II funds, with contributions from Soper Wheeler and the Plumas NF. Total project cost was \$130,000 with construction completed in September of 2004. Photo of multiple culverts post-project in 2004.



Big Flat Modification- Big Flat, located on Cottonwood Creek, tributary to Last Chance Creek, was the first pond and plug meadow restoration project designed and implemented by the FR-CRM in 1995. The channel design was over-sized (1' too deep). As a consequence, full re-watering of the meadow had not occurred. Gravels from the upper watershed have slowly been filling the channel, but not fast enough. This project used locally available basalt gravel/cobble to fill the riffles to the correct elevation. The project was funded by PL 106-393, Secure Schools, Title II funds with

contributions from the PNF Watershed Program. Construction was completed in July of 2004 by Kingdon Backhoe of Indian Valley. Project cost was \$14,000.00. This photo was taken post project in the spring of 2005.

Humbug/Charles Creek- This project was on the private lands of Bill and Judy Michelson, north of Portola. The project consisted of gully obliteration using the pond and plug technique on 800 feet of Charles Creek, and on 1500 feet of Humbug Creek. The landowner is also working with the Natural Resources Conservation Service (NRCS) to implement grazing management changes. The project was predominately funded by SWRCB 319 funds for non-point source pollution (sediment, temperature) and the landowner. Total project budget was \$156,000. Construction was completed in September of 2004 by Wilburn Construction of Quincy. Post-project photo on Humbug Creek in the Spring 2005.



Sulphur Creek Assessment and Restoration

Strategy- This project included public and private lands in the 33 square mile Sulphur Creek watershed. The intent of the project was to provide landowners with the necessary information to develop a long-term restoration strategy for Sulphur Creek and its tributaries. This project was begun at the request of Sulphur Creek landowners that were concerned about the loss of their land due to erosion. Activities in 2004 focused on detailed strategy development with affected landowners, and developing stakeholder consensus. The assessment and strategy are available on our website at www.feather-river-crm.org. Other project components included a significant citizen monitoring effort.

The project was funded by a Proposition 13 watershed grant running from April 2002 through March 2005. We are currently seeking a second extension to continue funding citizen monitoring through 2005. The project budget was \$177,000. Additional funds are also being sought for high priority/demonstration projects identified in the strategy. Photo of TAC meeting on Sulphur Creek.



Other 2004/05 Projects:



sediment, nutrient, and realtime precipitation data. These data will be the hydrologic inputs into the model. The product is a field-validated watershed model that will be left within the county for future use on project planning. Model completion is expected by June 30, 2005; however, additional funding is needed to refine the model. Photo of Leslie Mink, FR-CRM staff, collecting streamflow data on Last Chance at the Million Dollar Bridge.

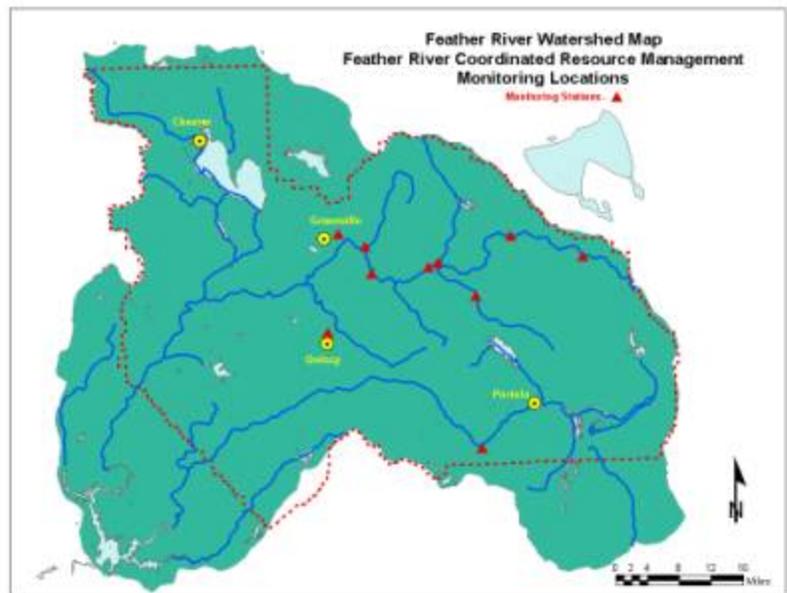
Last Chance Creek Watershed Modeling- This project is intended to demonstrate a state-of-the-art watershed model developed by UC Davis on a large (125 mi²) watershed. The model has shown much greater accuracy in smaller watersheds over more commonly used model types. This grant was a collaborative submission to CalFed by the FR-CRM and UC Davis to integrate the model application with the ongoing Last Chance Creek Watershed Restoration Project. Total budget is \$675,000. The UC Davis team is currently loading GIS database information into the model. FRCRM staff are conducting field monitoring of the watershed, collecting streamflow, groundwater, snowpack,

Spanish Creek Assessment and Restoration Strategy- This project is on both public and private lands along the reach of Spanish Creek in American Valley. The intent of this project is to provide landowners with the necessary information to develop a long-term restoration strategy for Spanish Creek to address accelerated bank erosion. Since 1997, numerous landowners along Spanish Creek have requested assistance from the FR-CRM. Proposition 13 grant funding for this project is administered by the State and Regional Water Quality Control Board (SWRCB) and began in early 2004. Other major partners include DWR and Desert Research Institute, who are contributing to the total project budget of \$255,000.



In-kind contributions are also being provided by Plumas County and Quincy Community Services District. This project is funded through November of 2005. Terry Benoit, FR-CRM Staff, and Jennifer Weller of Desert Research Institute install bedload samplers in Spanish Creek in March 2005.

Watershed Monitoring Program (on-going)- This program is being conducted at various locations, on both public and private lands, throughout the Feather River watershed in Plumas County. This effort began in earnest in 1998 in response to the question “How do we know if the FR-CRM program is having an effect on a watershed scale?” Using a variety of grant sources and contributions the monitoring program currently collects continuous streamflow and temperature data at ten locations (and turbidity at two of those), and biennially collects data on 20 stream reference reaches. The program also involves continuation high school students collecting data in Portola and Quincy. The watershed monitoring data (as well as project information) is available on our website at www.feather-river-crm.org. The data has been used by a variety of local entities, as well as the FR-CRM to assist in meeting project and regulatory mandates. The cost of this ongoing program is approximately \$70,000 annually.



CRM Education Program- The CRM received \$110,000 in DWR funding for two years for an education and citizen monitoring coordinator position in the spring of 2004. This position is divided between two subcontractors, Rob Wade and Kristy Hoffman. Ongoing efforts within the program include: implementation of a sixth grade watershed education program; establishing a river education center in the Feather River Canyon; organizing and planning a Feather River Headwaters Festival in October of 2004; teacher trainings; community and classroom presentations; citizen monitoring training and coordination; and the development of outreach materials for the Feather River Watershed Awareness Campaign. Photo of citizen monitors, Ceci Reynolds, Arick Biggs, and Darrel Jury, conducting measurements on Spanish Creek.



Upcoming Project Overview:



Spanish Creek Restoration Demonstration Projects (Vortex Sampler and Dyrr Bank Stabilization)-

This project is integral with the Spanish Creek Watershed Assessment and Restoration Strategy referenced above. The project has two components that demonstrate potential restoration technologies that may be applicable to the future implementation of the Spanish Creek Restoration Strategy. The first component is re-operation of the vortex gravel sampler installed in 1997 at the Snake Lake Bridge. This is a new technology that has potential for providing aggregate supplies without physical disturbance to the riparian areas. FRCRM staff operated the sampler for three years under a Clean Water Act

grant and collected very useful data both on the sampler operation, as well as quantifying the actual gravel load in Spanish Creek. The sampler plugged during a high load event in 2001 and funds were not available to restore its function until 2004. These funds (\$47,000) were obtained from PL 106-393, Secure Schools, Title II funds, with in-kind contributions from the Quincy Community Services District, Desert Research Institute, Plumas County Department of Public Works, and Plumas National Forest. The second component is to stabilize two eroding banks on the Dyrr property upstream of the Hwy 70 bridge. This will be accomplished using boulder vanes. Vanes are an innovative technique that protects the lower portion of eroding banks while maintaining the energy dissipation role of a channel meander. These have been used successfully on Wolf, North Canyon, Greenhorn and Indian Creeks. They are specifically applicable to channels like Spanish Creek where the flood flows are confined and there is a high sediment load. Funding (\$20,000) is from PL 106-393, Secure Schools, Title II funds with equipment contributions from Feather River Materials. Photo taken in December 2004 of the vortex sampler at the Snake Lake Bridge.



Dooley Creek/Downing Meadow Restoration Project- Downing Meadow is an 80 acre, 1+ mile-long, meadow system on the Dooley Creek tributary to Last Chance Creek. The project is predominately on private lands belonging to Alan Nichols. The channel has moderate to severe entrenchment resulting in gully formation, gully wall erosion and lowered meadow water table. A road/culvert crossing at the lower end has exacerbated the entrenchment locally.

The Downing Meadow Project would utilize pond and plug, sod transplants and some rock to restore the base level of the stream channel. Fencing,

cattle guards, and off-site water improvements are additional components of the project to facilitate livestock management on both public and private land. The main access road across the meadow would have the culvert removed and replaced with a rock low-water crossing. The project is being funded by PL 106-393, Secure Schools, Title II funds, with contributions from the USFS Range Program and the landowner. Environmental investigations have been completed with permit applications submitted to all appropriate agencies. Construction is scheduled for October 2005. Project budget is \$55,000. Photo of gully on Dooley Creek taken in 2003.

Hosselkus Creek Phase II- This project is an extension of work undertaken in 2002 under Plumas County's Proposition 204 Indian Creek Watershed Project grant. The project encompasses both private land, the Neff Ranch, and public land of the Plumas National Forest. The initial grant completed approximately 1500 feet of channel/meadow restoration integrated with County road drainage improvements. The Phase II work is entirely meadow channel restoration that will extend from the upstream end of the Phase I reach up-valley to the tree line, completing the entire meadow. The project budget includes \$80,000 in water Forum funding with approximately \$30,000 in in-kind contributions from USFS, DWR, Natural Resources Conservation Service (NRCS) and the landowner. CEQA documentation was updated and permit applications submitted to all appropriate agencies in February 2005. Updated NEPA documentation is being coordinated with the USFS. Construction is scheduled for Sept./Oct. of 2005.

Red Clover/McReynolds Creek Restoration Project- This project on the Goodwin Ranch and USFS lands is now under contract between Plumas Corporation and SWRCB. Design development and environmental investigations archeological surveys are being completed in spring/summer 2005. Final design and permitting is scheduled for winter 2005-06, with construction planned for the summer of 2006. This project also includes fencing and off-site water improvements to maximize livestock management and land productivity. Primary funding is being provided by Proposition 13 CALFED Watershed Program, with contributions from DWR, NRCS, USFS, and the landowner. Total project cost is expected to be \$1.3 million. Photo of gully on McReynolds Creek taken in November of 2004.



Jamison Creek Restoration in Plumas-Eureka State Park – This project was initiated by Cyndi Walck, State Park Geologist. The project entails removal of a failed irrigation dam, and replacing the dam with a fish-passable series of step-pools that will raise the elevation of the streambed to the intake of the existing Lundy irrigation ditch. Raising the bed with step-pools will also address a head-cutting problem that has caused channel degradation. CRM staff at Plumas Corporation assistance on the project includes initial CEQA preparation, survey contract administration, and design and construction consultations. Construction is scheduled for August 2005.

Big Grizzly Creek- Sierra Health Foundation requested FRCRM assistance in early 2004 on Big Grizzly Creek immediately north of Hwy 70. FRCRM staff has met with the landowner, adjacent landowners and other interested stakeholders to determine goals and objectives for the channel. The Water Forum has provided \$5,000 to accomplish initial data collection and analysis for the purpose of developing design alternatives and seeking implementation funding.

Dixie Creek- One landowner, Bill Mapel, had requested FRCRM assistance in protecting/restoring Dixie Creek through his property. Subsequently, FRCRM staff discussed the project at the annual Dixie Valley Landowners Association meeting, which resulted in additional landowner interest for a potentially more comprehensive restoration project in the future. This project also has \$5,000 earmarked from Water Forum funding. This funding will be used to accomplish initial data collection and analysis for the purpose of developing design alternatives and seeking implementation funding.

Smith Creek- This project encompasses approximately thirteen landowners that requested FRCRM assistance in 2003. Both FRCRM staff and DWR have conducted some initial data collection. With another \$5,000 earmarked from the Water Forum, this project will require significant design development and coordination with Plumas County Road Department to determine feasible restoration options and costs. Then implementation funding can be sought.

Little Last Chance Creek- One landowner, Don Guidici, had requested FRCRM assistance in protecting/restoring Little Last Chance Creek through his property. Subsequently, FRCRM staff discussed the project at the Little Last Chance Creek Irrigation District meeting and at a Sierra Valley Resource Conservation District organized landowner tour. This has resulted in five additional landowners now requesting and/or showing interest in inclusion with project planning and discussion. This project has \$5,000 earmarked from Water Forum funding. This funding will be used to accomplish initial data collection and analysis for the purpose of developing design alternatives and seeking implementation funding.

Humbug/Charles Creek Phase II- This project is an extension of the work done in 2004 under a State 319 grant. This grant has been extended to the end of the 2005, to fund repairs and complete the environmental documentation and acquire permits for the second phase. Phase II will entail treating 600 feet of degraded channel and headcuts along mid-Charles Creek, upstream of the ranch main access road. Restoration will include installing sod riffles to raise the existing channel, so it can access the floodplain when streamflows reach bankfull levels. Downstream of the access road, 700 feet of the channel will be filled with soil material left over from the first phase of the project. Flows will be diverted into the remnant channel system. On upper Humbug Creek, above the 2004 project, 800 feet of the degraded channel will be filled and flows diverted into the remnant channel system. A rock grade control structure will be constructed at the most downstream headcut to step flows down to the stable reach below. Implementation funding is being coordinated with the Natural Resources Conservation Service and the landowner.

The following projects have just recently been approved for project development under a Water Forum grant for approximately \$5,000 each. The funding will be used to accomplish initial data collection and analysis for the purpose of developing design alternatives and seeking implementation funding:

Silver Creek- This project involves one landowner, Bob Burney, who had requested FRCRM assistance to protect Silver Creek, a tributary to Spanish Creek at the head of Meadow Valley.

Spanish Creek, Meadow Valley- One landowner, Larry Kellet, had requested FRCRM assistance to stabilize the banks of Spanish Creek through his property in Meadow Valley.

Long Valley Creek- This project involves one landowner, Dean Panfili, who had requested FRCRM assistance to restore Long Valley Creek through his property.

Last Chance Phase II- This project involves one landowner, the Vasey Family, and the Plumas National Forest. It is part of an on-going larger restoration effort watershed-wide in the Last Chance Creek drainage. This project is also being submitted for Proposition 50 funds under a County-wide proposal.

Sulphur Creek Complex- The Sulphur Creek complex involves multiple landowners and project locations. Project development funds will be used to conceptualize project proposals and coordinate amongst landowners. Two demonstration projects are currently being submitted for funding through the PL106-393, Secure Schools, Title II funds and Proposition 50 (Rapp-Guidici and Boulder Creek).

Coordination:

The FRCRM program has been growing steadily with increasing demand from landowners and agencies for assistance in stream channel/meadow restoration. The program only works at landowner invitation. Direct project funding from state and federal sources has been reliable to secure. More problematic is the coordination and program capacity-building funds necessary to meet the increasing demand. The program does not charge for its services for initial contacts, conceptual project development, and subsequent grant writing. Project requests are exceeding the programs current ability to meet. Strategically, the FRCRM has secured sufficient funding to maintain coordination activities for current staff efforts and added an 80%-100% time program coordinator to fulfill current and expected landowner requests. FRCRM staff will be submitting a proposal to the Water Forum totaling approximately \$250,000 for FY 2005-06 for supplemental coordination, monitoring, and project implementation.

FRCRM staff now consists of (4) full-time positions. These positions are as follows:

1- Project/Program Manager- Wilcox	80% Project funded/20% Coordination
1- Monitoring- Mink	75% Project funded/25% Coordination
1- Project Manager- Benoit	90% Project funded/10% Coordination
1--Program Coordinator- Martynn	80% Coordination/20% Project funded

Unfunded Project Requests (potential funding sources):

Spanish Creek, American Valley- multiple landowners/locations	(Urban Stream, Prop 50, other)
Last Chance Creek Phase II- landowner/USFS	(CALFED Watershed Program)
Sulphur Creek Complex- multiple landowners/locations	(PL 106-393, Secure Schools,
- Two Demo projects: Rapp-Guidici; Boulder Creek	Title II funds; Prop 50)
Poplar Creek, Phase II- landowner, Soper-Wheeler	(PL 106-393, Secure Schools,
	Title II funds)
Willow Creek- single landowner	(landowner; unknown)