

Case Study: North Cal-Neva RC&D & Pit River Watershed Alliance

Watershed: Pit River Watershed

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Table 1:

Year	Grant Program	Project Title	Watershed	Award Amount
2001-2004	CALFED Watershed Program	Pit River Watershed Alliance Watershed Management Program (Watershed Assessment)	Upper Pit River	\$542,456
2006-2009	CALFED Watershed Program	Pit River Alliance Watershed Management Strategy Development Program (Watershed Management Strategy)	Upper Pit River, Lower Pit River	\$399,676

Introduction

This report describes the history, administration, and outcomes of two CALFED Watershed Program project grants. This case was initially chosen to assess a single grant (see bottom row of Table 1) received by the North Cal-Neva Resource Conservation and Development Council (North Cal-Neva). As the case developed, it became clear that North Cal-Neva was one of several entities acting as the fiscal agent for a collaborative watershed group, the Pit River Watershed Alliance (PRWA), to apply for and receive grant funding. For this reason, a second grant (see top row of Table 1) from a different recipient was included in this assessment to provide greater context for the original grant identified for study. Overall, the two grants demonstrate the first two phases of a relatively common watershed management process that includes first, a comprehensive watershed assessment; second, a strategy for addressing issues identified in the assessment; and third, implementing projects based on the strategy.

While North Cal-Neva received CALFED Watershed Program funding, this report will refer to the PRWA as the primary organization accountable for the grant objectives. Interviewees emphasized the collaborative involvement of PRWA members in seeking, applying for, and implementing CALFED Watershed Program funding. Any organizational assessment outlined in this report therefore centers on the collaborative group and not the technical recipient of the grant.

Geography

The Upper Pit River Watershed lies predominantly in rural Modoc County in northeastern California, with a population density of approximately two people per square mile. The North and South Forks of the Pit River converge in the town of Alturas, which has a population of approximately 2,800 and is the largest city in the watershed. The Pit River ultimately flows into Shasta Lake in Shasta County leading into the Sacramento River. Overall, The Pit River provides 20% of the water flowing into the Sacramento River (Doppelt, Shinn, & DeWitt, 2002).

Background

The Pit River Watershed Alliance (PRWA) is a “cooperative, non-regulatory, working group of public and private land managers who are working together to address ecosystem and watershed issues in the Upper Pit River Watershed” (VESTRA Resources Inc., 2004). Prior to the PRWA, there were no large-scale collaborative efforts within the Pit River Watersheds. A founding member of the PRWA described two significant influences that led to the formation of a collaborative including:

- Following the Public Rangeland Improvement Act of 1978, a collaborative effort was instituted between federal agencies (USFS, BLM) and landowners in Modoc and surrounding areas. The partnerships expedited the range allotment process and increased communication between private and public entities in the Pit River Area.
- Modoc National Forest was designated as a National Watershed Demonstration Area. Two major projects stemmed from this initiative including rangeland improvement and fuels reduction (Doppelt, Shinn, & DeWitt, 2002). A key component of this program was to demonstrate a watershed-scale approach to land management.

The Modoc National Forest staff and several key stakeholders organized the first stakeholder meeting in 1999, which led to the formation of the PRWA. While the USFS was the self-identified catalyst for this initiative, one informant described the process resulting from the actions of key individuals or “champions” within the agency that spearheaded the effort with conditional managerial support. A 2002 independent review of the USFS’ involvement in the PRWA generally supports this view, noting that Modoc National Forest was at a crossroads in terms of collaboration. The review indicates at the time of the PRWA formation, Modoc National Forest appeared “stuck between two different views of how it should operate: as an internally-oriented agency that makes its own decisions...or as an open and transparent organization that seeks out and meaningfully incorporates new information and different views from all sources in its planning and decision-making process” (Doppelt, Shinn, & DeWitt, 2002).

The PRWA created ground rules for conduct at meetings. The group also required consensus for most, if not all, decisions affecting the group. Generally, informants described the consensus process as a successful approach for managing multiple perspectives within the collaborative; however, some held the opinion that the interests and values of group members were too diverse to rely on consensus and the process was slow. A memorandum of understanding (MOU) was created to outline the objectives of the collaborative group. See Appendix B for the MOU and a list of PRWA partners.

Grants

Pit River Watershed Alliance Watershed Management Program (2001-2004)

The PRWA Watershed Management Program proposal included a number of different components including monitoring, leading a cooperative rangeland management project, building capacity of the PRWA through outreach, and conducting a watershed assessment. When introducing this study of CALFED Watershed Program grants to informants initially, the

majority recalled the watershed assessment as the first major initiative of the PRWA that utilized CALFED funding. Other components of this grant were not largely discussed in interviews. The summary and findings of this initial grant will therefore focus on the watershed assessment.

The Upper Pit River Watershed Assessment was completed in 2004. As stated in the introduction of the assessment, goals of developing the assessment included “[preparing] a balanced document that will serve as an educational tool; provide available information to stakeholders; build consensus within the watershed; and provide a baseline for future action. The watershed assessment will include a historical perspective and summary of physical and ecological conditions within the watershed” (VESTRA Resources Inc., 2004).

The PRWA was ultimately responsible for developing the watershed assessment. VESTRA Resources Inc., an environmental consulting firm based in Redding, CA, was hired to organize and compile the report. Subcontractors were hired by VESTRA to address specific technical aspects of the assessment; technical advisory committees were also created internally to provide review and recommendations on the assessment components submitted by VESTRA. Informants described regular public meetings and technical advisory committee meetings to address concerns and advance the project; “every word” of the assessment was agreed on through review and consensus of group members.

Informants did not describe any major roadblocks or conflicts in the assessment development process; however, there was one instance involving a subcontractor that created minor conflict. The subcontractor had, as it was described, a “political agenda” counter to the objectives of the PRWA, mainly, supporting the designation of the Pit River as an impaired waterway under Environmental Protection Agency regulations. The PRWA technical advisory committee also found inconsistencies with the subcontractor’s data and associated interpretations. Ultimately, the subcontractor’s open support of regulations in the Pit River region and data inconsistencies led to dissatisfaction with members of the PRWA and their contract was terminated by VESTRA.

Outcomes and Insights

When discussing the watershed assessment and subsequent PRWA activities, the 303(d) section of the Clean Water Act was mentioned frequently as a source of contention by interviewees. The 303(d) list includes impaired waterways designated first by states, with final ruling of included waterways determined by the Environmental Protection Agency. The majority of informants described the 303(d) listing as a broad brush in terms of the overall impairment of the Pit River. One of the main pollutants contributing to the 303(d) listing was, and remains to be, water temperature. Temperature as an impairment is disputed by those living and working within the area; this conclusion is, in part, derived from historical data presented in the watershed assessment that states “elevated temperatures have been present for more than 30 years and are not protective of cold-water fisheries” along the main stem of the Pit River. The assessment additionally recommends that “watershed activities to enhance cold-water conditions should focus on identifying and improving conditions along marginal tributaries” (Pit River Watershed Alliance , 2004). There were members of both natural resource agencies and industry/landowner groups that advocated for state regulatory boards to revisit the listing. A state regulatory body member noted that the Pit River is impaired under regulatory criteria; however, current

hydrology and climate conditions make it unlikely to restore the Pit River to a state conducive to cold-water species. For this reason, the regulatory body member supported revisiting the 303(d) listing and instituting more pragmatic goals for restoration and improvement of the watershed. Despite the support, however, the time and financial resources required to delist, either through California's Water Quality Control Policy guidelines or litigation, was infeasible for PRWA members or organizations. In 2017, The Central Valley Regional Water Quality Control Board (RWQCB) began a process of reevaluating the beneficial uses and impaired designation for the Pit River.

The watershed assessment proved useful for a leading member of the Northeast California Water Association (NECWA), a landowner/industry collective. This individual utilized the assessment consistently in grant proposals to portray the impact of agriculture within the watershed using the assessment data. NECWA members also use the watershed assessment in preparing water quality and nitrogen management plans, which are required under state water regulations.

For natural resource organization and agency members, the document was considered valuable for its comprehensive data and analysis, but the information alone did not provide measurable ecological benefits. Nearly all of these informants agreed, however, that having the watershed assessment opened the door for future funding opportunities.

Despite the variability in overall impact of the watershed assessment, informants generally agreed that the project was successful in terms of collaborative process, coordination, and execution. The consensus process PRWA followed played a major role in widespread acceptance of the watershed assessment, along with the inclusive and transparent nature of PWRA meetings and outreach.

Pit River Watershed Management Strategy Development Program (2006-2009)

The Pit River Watershed Management Strategy development program consisted of two main program elements. In interviews, informants mainly focused on one, The Upper Pit River Watershed Management Strategy (PRWMS), a document described as "a collaborative effort to identify management actions to improve watershed conditions" (Pit River Watershed Alliance, 2010). The second component of the grant was a K-12 watershed education program to "give students and others in and around Modoc County a hands-on opportunity to learn what it takes to maintain a healthy watershed" (PRWA, 2010); this program was developed in partnership with Adopt-A-Watershed, a nationally recognized organization for place-based learning, and the Modoc National Wildlife Refuge.

The process for developing the PRWMS was similar to that of the watershed assessment described in the previous section. VESTRA Resources Inc. was contracted as a consultant for the project. Subcontractors were employed to develop specific sections and technical advisory committees created within the PRWA reviewed the draft documents. Public meetings were held regularly to inform and discuss the direction of the project. In this case, there was also dedicated funding for an individual to act as coordinator for the project.

There were funding challenges associated with the PRWMS. One interviewee noted that there was, at times, difficulties maintaining contractors due to funding irregularities. "Irregularities"

were said to include the process of reimbursements through the grant administrator, which were often delayed. In 2008, there was a state bond “freeze” which halted all funding for the project. In response, PRWA members reformatted the PRWMS to complete the document with the resources available, including alternative funds sought through other grants and partner contributions. A CALFED funded watershed coordinator and member of the PRWA described the bond freeze creating an air of uncertainty for the implementation of watershed projects, as well as the continuation of their own employment.

Outcomes and Insights

The PRWMS is still in use by natural resource agencies working within the area; a Natural Resources Conservation Service (NRCS) representative used the strategy in applying for project funding within the watershed. The strategy is still being used by a private environmental consultant to identify restoration projects. As with the watershed assessment of 2004, informants described the strategy development process as a successful collaborative effort.

Although not largely discussed, a focus group of PRWA participants described the K-12 watershed education program as a successful outcome. The program still functions through the Modoc National Wildlife Refuge, although, due to refuge funding limitations, the scope has been significantly reduced (focus area is on one grade level as opposed to all grade levels). The limited number of informants directly involved in this program element, however, renders this result limited and tentative.

The majority of informants described the Integrated Regional Water Management Plan (IRWMP) for the Upper Pit River watershed as one of the major long-term outcomes of both the watershed assessment and the watershed management strategy. The Upper Pit River Watershed IRWMP was adopted in 2013. The assessment and strategy “laid a foundation” for instituting the IRWMP, notwithstanding the complex application process. Informants agreed that the IRWMP benefited from the groundwork laid with the CALFED grants. There were, however, differing opinions on the success of the CALFED process in contributing to long-term outcomes. A member of a water regulatory body noted the inability to see projects through as a result of changing CALFED objectives and the ultimate shift towards IRWMP; to this individual, watershed restoration as initially envisioned by the PRWA members has changed course significantly, as the group now operates within the IRWMP framework. Other interviewees supported this view, noting the inefficiency in altering objectives to comply with new sources of funding. Other informants provided an alternative view, stating the IRWMP is a great benefit to the area and the CALFED program paved the way to that result. NECWA, the recipient organization of the IRWMP funding, are particularly supportive of the IRMWP process which has provided multiple infrastructure improvements near residential areas.

Key Findings

Although the PRWA has recognized members (signatories) formalized in an MOU, the collaborative group is not an incorporated entity and operates in a largely decentralized way. Characteristics of decentralization within the PRWA include: 1) utilizing fiscal agents to prepare and administer grant funding; 2) conducting meetings/discussion without a designated leader or facilitator; and 3) employing contractors, subcontractors, and technical advisory committees to

accomplish diverse tasks/assessments. As demonstrated through both the Pit River watershed assessment and watershed management strategy, the PRWA was able to employ these methods to build the capacity necessary for large-scale projects. Members described the decentralized model as particularly successful during the “glory years” of watershed funding. Glory years, to informants, described a period of relatively consistent funding for watershed projects. This period was also characterized by a number of vocal champions within the PRWA who, although not formally recognized as leaders, demonstrated a unique willingness to engage stakeholders and collaboratively address resource concerns. The combination of consistent funding, energetic leaders, and consistent participation by local agencies and the public contributed significantly to the effectiveness of the PRWA during this era.

Inevitably, the composition of participants in the PRWA has changed over time. In some cases, the original champions have moved on from their positions at local agencies or organizations, or out of the area altogether. The PRWA currently functions within the IRWMP context. A founding member of the PRWA described this transition resulting from CALFED “changing course” on their focus and objectives. It was clear to members that the IRWM offered an avenue towards consistent funding for the Upper Pit River watershed. The PRWA, due to their organizational structure, did not have the internal capacity to complete the application process for IRWMP; however, an independent contractor offered to complete the process in exchange for an exclusive contract. The Upper Pit River IRWM has ultimately led to multiple public infrastructure improvements in Alturas and surrounding areas. For some natural resource organization representatives, the nature of IRWMP is valuable, but inconsistent with the original intent of the CALFED funded projects and the dynamics of the group itself. For example, the Upper Pit River IRWM includes a governing body to oversee the implementation of the IRWM management plan. Prescriptive structural elements and governance are in some ways contrary to the decentralized structure of the collaborative and may contribute to the perceived shift in PRWA objectives.

The Pit River Watershed has a unique political landscape. Multiple informants described a culture of libertarian ideals amongst landowners. This culture included the conservative Tea Party which was, at times, a minor, yet disruptive voice in the public engagement process; they “focused negatively” on the use of state funds, but in the case of IRWM, this view was largely outweighed by general public support for infrastructure improvements. NECWA, an industry/landowner group, was created in conjunction with the PRWA to, in one opinion, “keep an eye on” the management of the watershed. Interviews with both members of NECWA and other participating PRWA groups suggest that while this may have been a driver for NECWA initially, the role of NECWA in the PRWA ultimately led to strong working relationships. A NECWA founder described a member of a California regulatory body as an advocate for the people in the area, and they, for example, “worked hard to mitigate the effects of the California Irrigated Lands Program” (a state initiative regulating discharge from irrigated agricultural lands). Furthermore, the same individual described the PRWA enabling NECWA to seek and receive funding for state water monitoring requirements. Ultimately, NECWA’s formation and involvement in the PRWA “saved a lot of hassle” for landowners and industry representatives when presented with strict regulations.

The CALFED Watershed Program, with consistent funding and support from regulatory agency members, allowed the PRWA to establish a process of collaboration amongst stakeholders in the

Upper Pit River Watershed. The PRWA demonstrated a unique ability to remain flexible and inclusive through their decentralized structure and consensus approach to decision making. While the PRWA operated effectively during the “glory years” of CALFED, changes in watershed funding trends and the composition of participants has created mixed feelings amongst participants regarding the lasting impact of their initial projects. The IRWM is undoubtedly a beneficial product of the PRWA’s efforts, although, the new collaborative context has not retained the same level of participation exhibited throughout the CALFED era.

Methods

A site visit was arranged for Alturas, CA, the county seat of Modoc County and operations center for federal and state agencies working in that area. Prior to the site visit, three phone interviews and one in-person interview took place. In Alturas, two researchers spent one full-day and one half-day speaking with 5 stakeholders involved in management of the Upper Pit River Watershed. While roles differed amongst the participants, they were all members of a collaborative watershed group, the Pit River Watershed Alliance, which oversaw the implementation of the grants shown in Table 1. Relevant grant documents were largely unavailable during the initial stages of this case; however, documents were received and reviewed through an ongoing correspondence with informants. A table showing the available documentation can be found in Appendix B.

References:

Doppelt, B., Shinn, C., & DeWitt, J. (2002). *Review of USDA Forest Service Community-Based Watershed Restoration Partnerships*. Review, Portland State University, Bowdoin College.

VESTRA Resources Inc. (2004). *Upper Pit River Watershed Assessment*. Assessment, Pit River Watershed Alliance.

Appendix A

List of Pit River Watershed Alliance (PRWA) partners

- Big Valley Water Users Group
- Bureau of Land Management
- Cal Trout
- California Waterfowl Association
- Central Modoc Resource Conservation District
- Central Valley Regional Water Quality Control Board
- Department of Water Resources
- Fall River Resource Conservation District
- Goose Lake Resource Conservation District
- Lassen County Farm Bureau
- Modoc National Wildlife Refuge
- Modoc County Board of Supervisors
- Modoc National Forest
- Modoc County Farm Bureau
- Modoc/Washoe Experimental Stewardship
- Natural Resource Conservation Service, Alturas
- Natural Resource Conservation Service, Redding
- Natural Resource Conservation Service, Susanville
- North Cal-Neva Resource Conservation & Development Council
- Northeastern California Water Association (NECWA)
- Pit Resource Conservation District
- Shasta County Farm Bureau
- Sierra Pacific Industries

Appendix B

North Cal-Neva RC&D Pit River Watershed Alliance	Grant Proposal (Submitt ed to granting agency)	Quarterly or Annual Update(s)	Final Report (Submitted to granting agency)	Catalogued Description (Published by granting agency)	Catalogued Final Report (Published by granting agency)	Other
Pit River Watershed Alliance Watershed Management Program				X		
Pit River Alliance Watershed Management Strategy Development Program (Watershed Management Strategy)	X		X	X		