

Collaborative Adaptive Management

Swamp Creek ♦ Enterprise, Oregon

"The National Riparian Service Team has been invaluable for us in Wallowa County. We invited them to come and assess the progress that was being made on Swamp Creek, where efforts of improved management and riparian projects were ongoing, however, we didn't have agreement on appropriate next steps to take. The progress made by the group was exceptional. This was because during the visit all parties had the opportunity to participate in the team's assessment tour, the educational forum and the follow-up meeting. What was learned, agreed to and set in motion for subsequent years is still talked about today and referenced in the current planning sessions and assessments."

John Williams (March 2007)
Oregon State University



Background

Historically, this portion of Swamp Creek was privately owned. Past uses of the area included logging, homesteading, roads and heavy grazing. Today, in public ownership, it is part of a large FS allotment (19 pastures) grazed by four different permittees.

In the late 1980s, the permittees' management focus on the allotment began to shift from simply maintaining a viable livestock operation to improving riparian area management, addressing the ESA requirements, dealing with pressures from environmental groups to better manage or remove grazing from public lands, and balancing other public land use policy changes. As a result, several agencies and permittees began discussions of how best to manage and improve riparian areas within the Swamp Creek watershed. Restoration projects have taken many forms such as plantings,

fencing, instream structures and different grazing management strategies. Additionally, many of these projects have been implemented cooperatively on both private and public lands. One such example is the Swamp Creek Restoration Project.

In 2001, the FS and Wallowa Resources (community-based nonprofit organization) cosponsored a grant for the Swamp Creek Restoration Project. The goal of this multiyear planting and fencing project was to draw beavers back to the area to help the downcut stream channel aggrade and reconnect with the old floodplain. The intent of the project was to improve riparian areas, and fish (steelhead) and wildlife habitat, as well as recreation and education opportunities, while maintaining grazing.

By 2004, the parties involved were concerned the Swamp Creek Restoration Project was not fully achieving stated goals. However, various people

had different ideas regarding the condition of Swamp Creek and the severity of grazing impacts. Although additional funding was available for phases two and three of the restoration project, there was disagreement on what the project goals actually were and how best to achieve them. At the same time, the FS was nearing completion of a draft EIS for the Swamp Creek AMP.

Upon receipt of the FS request for NRST assistance, a series of phone discussions with a primary group of stakeholders was initiated to get a better understanding of the current situation and its historical development, overarching issues/concerns/conflicts, points of agreement and disagreement, group/relationship history, and individual expectations for NRST assistance and to identify other key players and increase individual commitment to participate. The extensive information obtained during these discussions helped the NRST in deciding to accept this assignment and indicated that a subsequent situation assessment was not needed. The information was then used to design the upcoming community session.

The discussions revealed that the community had a long history of working together to address natural resource issues. Specifically, various entities had been working together since 1992 to develop the Wallowa County–Nez Perce Tribe Salmon Habitat Recovery Plan in advance of listing the Snake River Chinook salmon under the ESA. This plan reviewed the watershed conditions in the county and offered a menu of possible solutions to address the needed actions. In 1996, the Wallowa County Board of Commissioners appointed the Natural Resources Advisory Committee (NRAC) to implement the salmon plan, which was updated and expanded to include a multispecies strategy in 1999 following the listing of summer steelhead and bull trout. Three of the Swamp Creek permittees were involved in this effort. One result of their participation in this effort was that they began working with the FS to look at Swamp Creek and assess what could be done to benefit the resource and preserve their way

of life. As part of this effort, a number of training sessions were sponsored on the forest, including PFC assessment, stubble height monitoring, and grazing management for riparian-wetland areas.

Because of the historical working group, there was a high level of existing capacity in this area (both in terms of technical knowledge and good relationships as well as financial resources). While many folks did not agree with each other, all were able to have civil, professional, and respectful discussions (county commissioners and citizen-based natural resource planning committee, environmental organizations, university extension, and Wallowa Resources). The permittees were viewed as open, honest, and “willing to work hard and do what’s right for the resource.” FS IDT members got along well despite high turnover.

While there were good working relationships among the parties involved, it was apparent that the group was at an impasse over an information conflict (disagreement over data, assumptions made, or lack of data). Some of the concerns included:

- Swamp Creek was private land prior to FS acquisition, and some felt the area is currently suffering “legacy effects” from historical uses.
- Since Swamp Creek supports a steelhead fishery, ESA consultation on grazing recommended avoiding grazing in streams during spawning. As a result, riparian areas were grazed during late summer. Some felt that this increased resource pressure in areas that were just coming out of 4-year drought in 2004 (permittees voluntarily took limited use to aid rangeland recovery).
- There was concern about bank instability and how to best manage it. Some believed the stream system was in the process of recovering; however, existing cut banks continued to contribute sediment to the system, negatively affecting fish habitat.

- Another primary concern centered on vegetation issues, particularly the lack of willow and alder regeneration. In the past, Swamp Creek supported both willow and beaver. Some believed that willow and alder (and beaver) should still exist in this system and that livestock grazing was hindering this. Others felt that the site potential had changed over time and the area could no longer support these woody species.
- Individuals were divided over the relative contribution of livestock grazing to these various concerns and how best to manage and monitor livestock use in the future. Suggestions ran the gamut from reducing grazing, fencing out riparian areas, removing water access points, intensifying herding efforts, to leaving the current management system in place.

Collaborative Adaptive Management

In an effort to address these concerns, the Wallowa-Whitman National Forest opted for a joint, field-based, problem-solving session. As determined during the discussions, all parties wanted access to an outside perspective/opinion and were satisfied with the selection of the NRST. The forest staff requested that the NRST help their IDT and the community reach agreement on specific riparian resource objectives, a management strategy to meet those objectives (an alternative that could be analyzed as part of the National Environmental Policy Act [NEPA] process), and a short-, mid-, and long-term monitoring framework in order to guide adaptive management.

As previously noted, the forest staff was also in the process of completing a draft EIS for the Swamp Creek allotment. One of the grazing alternatives in the EIS focused on adaptive management, and the group needed help agreeing on the information to be incorporated into the final alternative. In short, the group needed a process for discussing, negotiating, and reaching agreement on a variety of

issues: site potential, current condition, ability to get to desired conditions while continuing to graze, a streambank assessment tool, the type of restoration needed, the type of management system needed; and a cooperative monitoring strategy that is simple to comply with, incorporates riparian and terrace utilization, focuses on standards and indicators that relate to desired conditions, sets a reasonable recovery timeframe, and accounts for wildlife utilization.

Partners

Wallowa-Whitman National Forest, NRAC, permittees, Wallowa Resources, OSU Extension, Nez Perce Tribe, Oregon Department of Fish and Wildlife, National Oceanic and Atmospheric Administration (NOAA) Fisheries Service, FWS, The Nature Conservancy (TNC), and the Grande Ronde Model Watershed.

Process Steps and Timeline

This assignment was conducted jointly by the NRST and Oregon State Riparian Team.

Situation assessment for NRST:

June 2004 – Had discussions by phone with a number of diverse individuals directly associated with or concerned about future management of Swamp Creek. A cursory discussion report was developed and recommendations were made regarding the design of subsequent steps.

Planning meetings:

July 16, 2004 – Held a session planning conference call with NRST, forest staff, and the district ranger.

Collaborative, adaptive management workshop:

August 17-19, 2004 – Held a community workshop with 35 diverse participants. The first 2 days were spent at various field sites (hotspots) conducting riparian assessments as a group and discussing management and monitoring options. The third day was spent inside documenting findings and reaching

agreement on site objectives and brainstorming a variety of management and monitoring options.

Followup group meetings:

September 20, 2004 – The group (without NRST) met to finalize the (wildlife) site objective for Swamp Creek and brainstorm management and monitoring options.

October 1, 2004 – The group met in the field again with the forest ecologist to further investigate the site potential of Swamp Creek and determine how to proceed with subsequent phases of the restoration project.

The forest staff then took that information, prioritized monitoring strategies, and built a plan for group review and ultimate inclusion into the NEPA adaptive management alternative for the Swamp Creek allotment.

NRST letter:

October 1, 2004 – The NRST sent out a follow-up letter highlighting agreements and providing additional information on vegetation and grazing management and the BLM/FS memorandum of understanding for cooperative monitoring.

NRST review of plan:

April 2005 – The NRST reviewed and commented on the FS adaptive management alternative.

Results, Recommendations, and Next Steps

The group determined that although the functionality of Swamp Creek had been impacted by historical management practices and natural events, the current condition indicated that the system is in a state of recovery. Management in recent years had allowed an upward trend on the riparian-wetland vegetation attributes, which is very important for the dissipation of stream energy associated with high waterflow. Key parts of the discussion were centered

on the site potential, including vegetation species,¹ water gap hardening and placement, streambank stability, browse monitoring methods, offsite water development, fencing, and trend of the overall drainage. Objectives were then developed for both the livestock grazing allotment and an ongoing riparian restoration project.² In addition, the group agreed that long-term monitoring of vegetation and channel characteristics will be implemented and the data used in conjunction with the annual stubble height measurements being taken.

Lessons Learned

The use of a situation assessment proved to be very important for a number of reasons:

- Further discussions with the requestor helped expand the list of participants in initial discussions and sessions to include the restoration project cosponsors and funding organizations, as well as Forest staff, NOAA Fisheries Service, and the permittees.
- The discussions helped NRST understand the nature of the conflict and group. Given the results, the NRST was able to immediately focus on the technical information rather than spending a lot of time building relationships within the group. Furthermore, the discussions helped NRST understand the specific resource questions and prepare to address those issues during the 3-day session.

¹ Many thought the site should be a willow/sedge plant community with beaver dam complexes. At the time of the assessment, the site was an alder/small seed bulrush/common snowberry site, with a few willows found on the floodplain.

² Regarding the restoration project, the group went back to the field with the forest ecologist (Oct. 2004) to reevaluate site potential. The ecologist agreed that the system had a fair amount of stability, as well as an overall upward trend, and that the potential is likely an alder dominated system with some willow. The conclusion was reached that the money might be better spent somewhere else in the forest that is not as stable or in an upward trend. As a result, the group will continue to plant some willow during subsequent project phases—but not as many.

- Finally, the discussions helped NRST understand the depth of the questions/concerns and the amount of time required to address issues at this depth. This understanding resulted in a decision to narrow the scope of the original request from two streams to one, which allowed adequate time for the type of in-depth conversations that were needed.
- Rather than the standard operating protocol where the NRST provides a long and detailed report following an assistance trip, the decision was made to add a day for group planning that ultimately resulted in the group producing their own documentation. The feedback received was that group documentation of findings, strategies, and actions was an effective process that helped build group ownership. As a result, the NRST has shifted to using this type of approach more frequently.

The success of a visit by the NRST is dependent more upon what happens after the visit than what happens during the visit. It is important to have the right people participate and have the appropriate conversations at key locations; however, the followup action by those involved is what will determine success or failure.

Wallowa County has been working collaboratively for many years on natural resource issues and in particular issues that involve the federal government and county cooperation. The success of this type of project is not something that just happens, it is due to the long history of Wallowa County's efforts to work together to develop open and honest communications and to be prepared to take

advantage of opportunity when it becomes available, such as the NRST visit.

Wallowa County represents a population with a diverse set of interests. Some have different visions about expectations and end results pertaining to natural resources. One thing is for certain, livestock producers play a significant and positive role in all natural resource issues and are very willing to work with other interest groups to solve differences, as demonstrated by this case.

Wallowa County has progressed very well in moving toward the objectives identified in 2004. Much of this is due to the FS seeking funding sources to get many of the projects done, although some progress is still limited by lack of funding or personnel. Much of the success is due to the permittees' active involvement and support and the interest of other local agencies.

The NRST was critical in the success of this overall project. There were many different ideas among members of the local group, and working with the team made it possible for all folks involved to have a voice and be listened to and respected for their input. Given the large diverse group that was involved in this project, total consensus was not reached on a few discussion points, but complete consensus is not always expected in these situations. In the instances where consensus could not be reached, the working group agreed to disagree while continuing to work cooperatively toward the shared goal of improving or maintaining wildlife, riparian, and fish habitat while at the same time allowing for other uses (such as grazing in this case).

Although the permittee on the adjacent allotment further up in the watershed did not participate,

"In 2004 this 3-day meeting took place ...[that]...helped both sides come to more of an understanding of each other's interest and move forward. We agreed to work to implement more monitoring and to give the creek some time to see if the restoration work already completed would give the desired effects that we hoped for. As time has passed, the permittees are still dedicated to this process and are working hand in hand with the Forest Service to reach the desired goals"

Rod Childers, permittee (2008).

he later became interested through talking to and observing some of the efforts of the Swamp Creek permittees. This peer-to-peer learning has resulted in his willingness to make improvements on his allotment, benefiting overall watershed health.

Where Are They Now?

A final EIS and record of decision that combined 11 different allotments to allow efficiency in planning for new AMPs was published in 2005. The objective and the corresponding management and monitoring strategies for Swamp Creek that were developed by the group were incorporated into alternative 3 of the EIS, which was the adaptive management alternative. Although appealed by a number of environmental groups, the FS upheld the decision and, in 2006, the Center for Tribal Water Advocacy filed suit. In response, the permittees filed for and received intervenor status. The Center for Tribal Water Advocacy withdrew their suit in May 2007. "I believe the NRST findings played a big role in showing the judge that all parties involved in the EIS had done their jobs" (Rod Childers, permittee, 2008).

Estimated progress toward meeting the objectives for the Swamp Creek riparian area are as follows:

Objective 1: Improve hardwood diversity (upland/riparian) in the Swamp Creek watershed, within site capability.

This objective entailed monitoring existing plantings, caging and monitoring native shrubs, planting others as appropriate, and assessing the site for research possibilities. The existing plantings, new plantings, and caged native plants have shown tremendous success in survival and vigor. It is estimated that 90 percent of these plants have survived and thrived during the past 3 years.

To assess the effect of grazing on the hardwoods, a small control plot will be constructed during the summer of 2008 to exclude livestock grazing, which will enable a comparison between rates of riparian recovery with and without livestock grazing.

Objective 2: Improve riparian/wetland vegetation to increase stream bank stability and appropriately process sediment.

Working towards this objective involves the hardwood plantings from objective 1 along with other strategies. To date, the water gaps that were being constructed during the visit have been completed and several upland water sources have been reconstructed to improve distribution. Adaptive management continues to be used as a way to adjust and improve on the structures and to ensure utilization of vegetation meets standards.

Current plans for 2008 include hardening of water gaps, moving and redesigning one of the gaps with a larger funnel type approach, and adjusting fences on others to limit adjacent streambank disturbance and reduce gap size. Within this objective, group members also discussed strategies such as caging selected cutbanks, cutting livestock trails, using low-moisture supplements, and seeding appropriate grass species; however, these have not been initiated yet.

Objective 3: Maintain grazing opportunities and strive to provide a sustainable and economically viable livestock operation while allowing for natural recovery processes.

Strategies to work towards this objective are continually in motion through grazing management and cooperation with Swamp Creek permittees, who strive to meet standards and are very quick to respond to any issues and try new strategies. For instance, this year the FS and permittees are pursuing, through consultation, the possibility of grazing some riparian pastures in the spring months rather than in the hot summer months.

Objective 4: Improve vegetation to provide fish and wildlife habitat for a diversity of species.

Specific strategies for this objective included gathering baseline information for wildlife and aquatic species and monitoring for a change in vegetation and wildlife species. This strategy is being accomplished as a secondary benefit from the

previous objectives and projects, including removing 40 instream structures, plantings, installing cages, hardening gaps, increased monitoring, and providing for upland water developments.

Monitoring Projects Completed Since Summer of 2004

- Annual utilization—terrace and greenline consistently meeting standards
- Streambank alteration assessment—planned for 2008
- Photo monitoring—completed annually
- Survival inventories—in 2004, 95 percent survival; from 2004 to present, 90+ percent (90 percent overall)
- Well monitoring—two sites with three wells each—established in 2006
- Fish populations—redd counts and fry counts have been used to monitor fish
- Inventory heritage resources—done in 2005 as part of the Lower Joseph Creek EIS
- Channel morphology measurements

Projects Funded by Bonneville Power Administration and Others

- Offsite waters—Cleaned five ponds, restored several springs in 2005-2006
- Removed 40 instream structures in 2005-2006
- Water gap hardening and fence adjustments in 2008—moving one gap and adjusting some fences and also hardening these gaps
- Lower Joseph Creek watershed assessment (2008 budget = \$80,000)
 - Three PFC assessments
 - Three riparian vegetation monitoring sites (Winward 2000) will be established; also, streambank condition assessment
 - Rereading or establishment of six condition and trend plots
 - Completing eight interpreting indicators of rangeland health plots
 - Surveying for threatened, endangered, and sensitive species
 - Surveying and mapping for noxious weeds
 - Inventorying the public land improvements

