

Community-Based Riparian Assessment

North Fork Crooked River ♦ Prineville, Oregon

"Overall I am very impressed and supportive of the effort. [The Forest has drafted] a letter of follow-up actions that we intend to take. That, on top of participants' efforts to forestall lawsuits and potential improvements on private lands, I would say the outcomes are more than I had hoped for. The education, collaboration and joint assessments are a wonderful model."

Larry Timchak (January 2005)
Ochoco National Forest Supervisor



Background

The North Fork Crooked River (NFCR), a wild and scenic river (WSR), is wholly within Crook County—a county in cultural and economic transition. Livestock operations, timber harvesting, and mining were the earliest economic generators, with ranching beginning in the North Fork and adjacent lands as early as 1850. Thousands of head of livestock (cattle, sheep, and horses) grazed the land and caused significant degradation in the early days, much of which is now in a state of recovery. By the end of the 1800s, water rights were held by local ranchers for amounts equal to nearly all the mid- and late-summer streamflows.

Today, in the face of increasing industrial and residential growth, agriculture remains an important economic factor (cattle production and a variety of crops including alfalfa, wheat, and garlic). Maintaining water resources for agriculture is seen as critical not only for economic agriculture production, but also as a way of protecting and perpetuating open space for biodiversity values. As a

result, the Crook County Court, citizens groups, and other agencies place primary emphasis on improving the management of water resources within the county.

The NFCR, with some exclusion, was added to the National Wild and Scenic Rivers System as part of the Oregon Omnibus Wild and Scenic Rivers Act of 1988. The FS/BLM management plan (1993) classifies the scenery and botanical values as “outstandingly remarkable,” and calls for their protection. The NFCR is also home to redband trout (a sensitive species). However, from the mouth to the headwaters, the river is on the Clean Water Act’s section 303(d) list for temperature. Issues and challenges brought forth from the situation assessment include:

- **Dewatering:** Many people are concerned with water use on private lands. Although these lands are not part of the WSR, there is concern over dewatering and effects on fish (temperature, flows) and other values. Others are firm in their beliefs that water is

appurtenant to the private lands, important to ranch operations, and should not be part of a discussion regarding public land management.

- **Public Lands Grazing:** Some people feel that grazing on public lands in general is an inappropriate use, while others believe that grazing is simply inappropriate within a designated WSR corridor. Some are more concerned that where grazing occurs it is well-managed and done in a way that maintains or enhances vegetation and stream resources. For permittees, these areas can be important to maintaining the economic viability of their operations. In terms of utilization and resource condition, there are very different perceptions among these same groups. Some believe that the resource condition is better now than it has been in the past. Others argue that the grazing pressure is too heavy in some areas and damaging stream condition.
- **Upland Condition:** There is concern over the heavy concentration of small-diameter trees and the need for thinning and burning.
- **Restoration Techniques:** Some people favor engineered restoration approaches, which are typically more expensive but may speed up the stream recovery process. Others prefer the consideration of management options designed to promote natural recovery while allowing livestock grazing. For some people, the WSR designation brings out additional concerns regarding the appropriateness of certain restoration techniques because of the language in the act call for the “free-flowing” nature of the designated river reach.
- **Analysis Paralysis:** There is concern that the FS is embarking on another planning

process for the NFCR. A management plan was created in 1993, but many of the management and monitoring recommendations were not implemented.

- **WSR Litigation:** There has been an increased amount of successful litigation by environmental groups regarding WSR management in Oregon, leading to court-ordered deadlines for plans to be developed and livestock to be removed until plans were finalized. Litigation on the NFCR would divert resources from accomplishment of on-the-ground restoration and management and make it difficult to build community relationships.

Community-Based Assessment Process

In response to these concerns, the staff at the Ochoco National Forest chose to proactively initiate a community-based assessment. The information gathered would be used in ongoing allotment planning.

The forest staff requested NRST assistance to:

- Identify the level of functionality of the riparian corridor during a field review
- Determine the factors contributing to current conditions
- Evaluate the capability and potential of the system
- Work with forest staff and involve interested publics in the process
- Prepare a written assessment of the situation
- Provide management and monitoring recommendations

Partners

The Wild and Scenic Rivers Act of 1968 espouses the need for partnerships among landowners (federal agencies and tribal, state, and local governments) in determining the future of these rivers. The ensuing PFC assessment was designed to focus on three

segments of the wild and scenic river, including FS land, BLM land, and private land. Given the importance of watershed management to the county, Crook County Natural Resources Planning Committee (CCNRPC) was also a principal partner in this effort, along with the Ochoco National Forest and the NRST (and associated network members).

Other participants included: BLM, FWS, interested citizens, federal grazing permittees, private landowners, Juniper Chapter of the Sierra Club, Oregon Natural Desert Association (ONDA), Oregon Fly Fishers, Oregon Department of Agriculture, Oregon Department of Forestry, Oregon Department of Fish and Wildlife, Oregon State University (OSU) Extension, OSU Rangeland Resources Department, soil and water conservation districts, county planners, and the Deschutes River Conservancy.

Process Steps and Timeline

Planning Meetings with FS, CCNRPC, and other interested publics:

November 6, 2003 – Kickoff meeting, brainstormed 130 person contact list

January 22, 2004 – NRST–community briefing on riparian function and PFC assessment method

March 11, 2004 – FS–NRST interdisciplinary team (IDT) meeting

March 23, 2004 – Meeting of diverse group of agency employees and interested publics to design a community involvement strategy

Electronic Communication Network:

The FS district ranger and public affairs specialists established a website enabling interested individuals to access meeting/workshop notes, progress updates, and assessment results (<http://www.fs.fed.us/r6/centraloregon/projects/units/paulina/northfork/index.shtml>). The district ranger also sent regular e-mail communications to those on the contact list.

Situation Assessment:

April-May, 2004 – Conducted informal discussions with individuals directly associated

with or concerned about future management of NFCR. A discussion report was developed and recommendations were made regarding the design of subsequent steps.

Creeks and Communities Workshop:

May 14-15, 2004 – Held a community workshop with 27 diverse participants. The purpose was to explain the PFC assessment method, create a common vocabulary, and build relationships among participants. The first day was a classroom session on a Friday, and the second day was spent in the field on a Saturday. A workshop report was created and posted on the project website.

Community PFC Assessment:

July 19-23, 2004 – Representatives from NRST, Ochoco NF IDT, CCNRPC, and a variety (somewhat different each day) of interested government employees and citizens/landowners/user groups walked and assessed 10 stream reaches (8 FS, 1 BLM, 1 private), approximately 19 miles of stream.

Community Results Briefing:

October 26, 2004 – PFC assessment findings and management/monitoring recommendations were presented at a community meeting. Information stations on the PFC assessment, grazing management, and WSR were hosted by the NRST and FS.

PFC Assessment Report:

December 30, 2004 – The draft report was sent out for review.

February 10, 2005 – The final report was available on the website.

Evaluation and Followup Meeting:

January 21, 2005 – Held a meeting with NRST, FS, and CCNRPC members to discuss the process—what worked well and what didn't work well—and offer advice. FS also provided an update on the next steps.

Assessment Results and Recommendations

The PFC assessment method described in Technical Reference 1737-15 (Prichard et al. 1998) was used to complete the field assessment. The Forest IDT and the NRST reviewed existing references and files to gain an understanding of the reaches being assessed. Standard checklist forms were completed in the field by the IDT and assessment participants, and included the interdisciplinary discussions regarding the potential of each reach, current functional condition, and management and monitoring recommendations.

Management and monitoring recommendations were presented as ideas to be discussed by the collaborative group to develop the best course of action in each instance:

- Continue to seek public involvement in the understanding and management of the natural processes that are moving the NFCR toward full ecological potential.
- Continue to monitor the “necklace pools,” where flowing water has scoured the fine sediment soils resulting in an overwidened pool, to determine how the channel type is evolving. This monitoring will also provide an opportunity to arrest related headcuts that are believed to be too severe to maintain the current upward trend.
- In an IDT and community group forum, discuss the divergence of opinions on how to deal with the current constructed channel in William’s Prairie, which is failing, to determine a solution for this issue. The original design group should be included in this discussion to provide important background and original thought processes used for the project.
- Manage grazing to ensure that the woody shrub species are colonizing and maturing

and to improve distribution at a small area of livestock concentration called the “pinch point.” Also evaluate grazing management practices and make necessary changes to improve distribution and enforce compliance, or consider use of exclusion to allow recovery in the small reach where there is a downward trend.

- At a minimum, include in monitoring plans the measurement of vegetation attributes needed for attainment of PFC, which may involve the selection of designated monitoring areas (DMAs) to represent more than one reach. Stubble height should only be used in combination with long-term monitoring of vegetation and channel parameters.
- Enforce the riparian firewood cutting regulations. Use educational materials such as signs, the personal use firewood synopsis, or other means to inform the public of the need to retain large woody material in the stream and riparian zone.
- Consider suggestions provided by the collaborative group concerning the improvement of fisheries habitat. Some of those included allowing natural recovery processes to work over time through appropriate livestock management, channel construction to increase sinuosity and narrow the channel, channel manipulation, and placement of large woody material. No matter what next steps the forest staff and community decide to take for further recovery and management in the catchment (watershed), the foundation should always include natural recovery and riparian-wetland function and the recognition that implementation of engineered projects comes with both cost and an associated hydrologic and structural risk.

Lessons Learned

The following information was gathered during a followup meeting and additional post project review.

What worked well?

- There was commitment from FS line officers, staff, and knowledgeable IDT members to make it work.
- The spirit and actuality of being all-inclusive in inviting participation resulted in a high level of public involvement.
- The workshop was well run, information transfer and learning was effective, and there was diverse participation.
- The field assessment was very valuable and worked well for those that participated.
- The qualitative PFC assessment addressed key concerns and challenges of the NFCR (whole system perspective, good management information, scientific consensus on limiting factors).
- Communication gaps between public and agency folks were partially filled, and different opinions were openly discussed.

What didn't work well?

- More public involvement, as well as ways to keep the public involved throughout the process, was needed, especially involving ranchers and people from town in field assessments.
- There was a failure to meet with FS staff before the public meeting, so they felt uninformed about the NRST's products and role.
- The first meeting's objectives and process were not clearly understood. The team's facilitation method of allowing each person to speak uninterrupted resulted in some private individuals feeling attacked when critical comments were made about their management.
- The opportunity for line officer involvement during initial discussions and

FS involvement in closeout discussions after each process step was missed.

- The public information stations at the community results meeting were not well used by attendees.
- There were too many side conversations, particularly in the field.
- Better descriptions were needed of water quality, flow, upland character and condition, the context of PFC, and indicators of upward trend and better use could have been made of historical information and local experts.
- There was dissatisfaction over the lack of discussion about dewatering concerns.
- Relying solely on the local unit to conduct sufficient prework, including gathering and understanding local biophysical information up front, was not effective.

Advice to NRST?

- Continue targeting assessments at the watershed scale.
- Bring local public affairs officer into the process early.
- Improve startup coordination.
- Rather than simply requesting that the local unit conduct prework, NRST members should work one on one with them to gather the necessary biophysical information up front.
- Use personal outreach before every meeting.
- Continue to split NRST and Forest IDT into different vehicles in the field.
- Keep group together in the field better; continue to use "reach closeouts."
- Set ground rules for listening with respect (side conversations).
- Mentor agency facilitators, line officers, and IDT throughout the process.

Advice to FS?

- Keep NFCR on hot burner.
- Continue to communicate with those on contact list.

- Work with ranchers one on one to build trust, while remaining inclusive in the process.
- Use this type of approach on other projects.

Next Steps

Throughout the community-based assessment process, there were numerous opportunities to gather input from individuals. In each instance, the FS was quick to review and respond to this input. Following the October community results briefing, FS staff met to review and address the comments gathered. FS officials presented a draft response letter at the January 21, 2005, followup meeting. The next steps were to design an implementation and monitoring plan with continued community involvement.

Where Are They Now?

Lookout Mountain Ranger District employees and the district ranger met with the grazing permittee in August 2005 to discuss a small area of livestock concentration called the “pinch point.” The permittee had recently acquired this area and all agreed on the need to determine if the stream was in a recovering or degrading trend. Photo points were established at the pinch point in three locations. Photos were taken in 2006 of pre-, mid-, and postseason grazing time periods. Midseason photos were taken in 2007.

The district ranger and district range specialist met with another permittee in a lower section of the river in May 2005. FS staff and the permittee met to discuss the North Fork pasture and agreed to rest three reaches for 3 years but maintain the pasture as a gathering area. The pasture was rested for 3 years as agreed; however, some use by cattle occurred almost every year. A date was set in July 2008 to

reexamine the three reaches with the people involved in the original PFC assessment to determine current status and decide if and how grazing could be resumed.

Lookout Mountain District employees also discussed the possibility of installing a cattle guard at the downstream end of reach 6 to help control cattle access to the river. No decision has been made at this time. District employees planted riparian shrubs in 2005 and 2006 in the North Fork pasture. A survey was completed in September 2007, and the survival rate was estimated to be about 40 percent. There are designated monitoring areas established along the NFCR; they were not altered. District employees continue to monitor stubble height on these sites; however, the NRST recommended also including a long-term monitoring component. The assessment pointed to the need for large woody debris in the riparian system, so “No Firewood Cutting” signs were posted in 2005.

Paulina Ranger District employees have completed an environmental assessment for authorizing livestock grazing on the Roba allotment in the lower reaches, which includes monitoring the ecological status. Although the proposed action included early season grazing for a short time period, the permittee agreed to long-term rest for the riparian pasture. Some additional fencing is needed to prevent cattle access to the lower end of the river, and the FS and permittee have worked together to plan the location and installation of this fencing. The Roba AMP, PFC assessment report, and case study provide valuable written documentation of riparian conditions, needs, learning points, and decisions that enable consistent management over time. FS employees and community members would benefit from planned reviews at regular intervals to discuss accomplishments and actions and review any monitoring data.

