Allotment Management Planning (NEPA)

Martin Basin ◆ Winnemucca, Nevada

"The process required a tremendous amount of effort and time; however, the outcomes were significant and valuable to all concerned. This process developed relationships and group understanding of ecological processes that will be beneficial in other management decisions, planning processes, etc. in this area and surrounding locales."

Gary McCuin (November 2007)
Nevada Department of Agriculture

Background

In the summer of 2005, the Humboldt-Toiyabe National Forest was in the process of completing an EIS for grazing allotments in compliance with the Rescission Act, which requires environmental analysis be completed on all FS grazing allotments prior to renewal of 10-year permits. The forest staff set out to complete this task by lumping allotments together within each ranger district and issuing a programmatic EIS for each district. The Martin Basin Rangeland Project Area within the Santa Rosa Ranger District was the first with a completed draft EIS.

Following the release of the draft EIS, the Martin Basin permittees, in conjunction with Nevada Cooperative Extension Service; University of Nevada, Reno, College of Agriculture, Biotechnology, and Natural Resources; Humboldt County; Nevada Department of Agriculture; and local rangeland consultants submitted an alternative to the forest staff, which they agreed to incorporate into the final EIS. Generally, the alternative was based on the collaborative development of AMPs. Riparian PFC assessments were to be used to clarify riparian resource issues. Plans were to develop resource management strategies based on objectives and the use of trend-based assessment and monitoring, with a focus on adaptive management rather than on annual indicators, for both riparian and upland communities.

Throughout the NEPA process, a number of resource issues and differences of opinion surfaced (current resource conditions and grazing impacts, Lahontan cutthroat trout (LCT), and opportunities/techniques for proper and sustainable grazing). Central to the overall conflict was using the FS's matrices outlined in the EIS (which generally described the relationship of ecological condition) as a basis for prescribing levels of riparian and upland utilization standards (guidelines) for grazing.

Collaborative Adaptive Management

In response to these issues, the Nevada Department of Agriculture, the Martin Basin permittees, and the Santa Rosa Ranger District jointly requested NRST assistance. They sought help to open a dialogue regarding the establishment of a collaborative education and resolution effort among the Martin Basin permittees, FS, FWS, Nevada Department of Wildlife (NDOW), and other interested parties. The objective was to establish a mutual understanding of the resource issues and assessment and monitoring strategies to collaboratively develop grazing strategies that were acceptable to all parties. The ultimate goal was to develop an ongoing educational and collaborative strategy focused on resolving conflicts in Martin Basin, as well as in neighboring FS and BLM allotments.

Partners

Martin Basin permittees, Resource Concepts, Inc. (range consultants), FS, BLM, FWS, NDOW, Nevada Department of Agriculture, Nevada Cooperative Extension Service, Nevada Cattlemen's Association, Humboldt County commissioners, and local permittees.

Process Steps and Timeline

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

Planning meetings:
March – May 2005 – Completed a series of conference calls between requestors and NRST. The requestors took the lead in setting up the workshops and conducting the outreach.

Introductory workshop:
June 8, 2005 – Conducted a community workshop with 30 diverse participants. The purpose was to begin to build relationships among participants, explain the Creeks and Communities strategy, discuss examples of how riparian recovery can be compatible with grazing, and provide an overview of an adaptive management approach. The intent was to foster group discussion of their situation and show how a collaborative process to identify, assess, and positively affect on-the-ground riparian conditions might be applied to help address and resolve issues in the Martin Basin and Winnemucca area. At that time, a planning meeting to design the next steps was scheduled among the FS, NDOA, and NRST, with an open invitation for group members to participate.

Collaborative Adaptive Management Workshop:
August 4-5, 2005 – Held a community workshop with 16 participants. The first day consisted of visits to three field sites on Cabin Creek where short reaches were assessed to build a common understanding of stream function and the ecological condition matrices among participants. This was followed by a discussion of how the FS and permittees could jointly approach working out changes to the matrices where site-specific conditions were determined to be different than the descriptions and conditions provided in the matrices. Additional time was spent in developing an approach for AMP development among permittees and the FS. The second day was spent inside working through a root cause analysis as a means for establishing objectives, standards, and monitoring parameters on a specific site. The root cause analysis was a critical element of understanding both the current condition of streams and also the likely evolution the stream must go through as it improves over time. The large group then broke into smaller groups to discuss consultation for LCT, EIS and record of decision (ROD) contents, and definitions.

FS and FWS decision:
June 2, 2006 – The FS ROD determined that current grazing management would continue in the Martin Basin Rangeland Project Area until more specific ecological assessments were completed on various vegetation communities within the project area. Additionally, the FWS biological opinion (BO) described specific standards for livestock management in streams that contain LCT. These

requirements could be modified based on the completion of site-specific ecological assessments of the specific stream reaches.

New NRST request:
June 28, 2006 – The second request for the NRST was submitted by the Santa Rosa Ranger District for assistance in assessing and monitoring specific streams to gather data for the purpose of determining if the terms and conditions in the BO for LCT are being met. To meet the intent of the ROD, this was to be done in a collaborative manner and support an adaptive management approach as well as the development of appropriate standards.

The expected outcomes were: 1) a collective understanding of site potential and capability, 2) baseline information on the physical functioning condition of the two streams assessed as well as specifics and rationale for the components of a monitoring strategy, 3) understanding and agreement relative to both physical functioning condition and ecological condition and how they are linked, 4) a sense of how to deal with the elements of uncertainty, including initial use of the matrices as guidelines, the time it may take to determine change in stream systems, and both the human and financial capacity to do adequate/required assessment and monitoring.

Community-Based PFC and Matrix Assessment:
July 17-21, 2006 – The NRST and other participants, including agency personnel and permittees, walked segments of Three Mile Creek (1-2 miles) and the South Fork of Indian Creek (5-6 miles) assessing both PFC and the matrices indicators. The third day, the group discussed the assessment results, livestock management techniques, and long-term monitoring strategies.

Results, Recommendations, and Next Steps

Following community workshops designed to build relationships among participants and provide information and hands-on experience in assessing riparian condition and applying an adaptive management framework, stakeholders conducted their assessments together. Using the understanding of the attributes and processes that drive physical functionality of streams gained from the PFC assessments, the group then related the current status of the stream reaches to their potential and long-term desired condition. This actually afforded the group a chance to work out a change to the matrix as it applied to Three Mile Creek. The existing condition of the stream reaches assessed did not indicate a need for a change in livestock management. However, an exclosure was under construction to make management easier and more effective, and there was discussion as to whether it was being built in the best location.

The group also identified the need to monitor trend for at least two purposes: 1) although the stream reaches were either in PFC or were functional–at risk with an upward trend (indicating reasonable assurance that current management was adequate to meet objectives), they were not yet at desired condition in relation to water quality and aquatic habitat (particularly for LCT, a federally listed threatened species), and 2) changes in livestock grazing strategies (either purposeful or inadvertent, e.g., problems with implementation) or climatic changes, could lead to a reversal of the existing upward trend. The group then used the information acquired to this point, as well as their collective knowledge and experience, to run through a root cause analysis to isolate livestock-related factors for the purpose of identifying appropriate annual, short-, mid-, and long-term indicators that would be monitored to detect and document trend in stream and riparian condition. From this list, a practical monitoring strategy was developed involving the FS, permittees, and NDOW, that should be possible to accomplish with the available funding and workforce. In this case, the primary indicator chosen by the group as a short-term management indicator for when to move livestock from the riparian areas was not an herbaceous utilization standard, but forage preference—detection of when

livestock switched from use of herbaceous to woody species.

These sessions initiated and enhanced the adaptive management processes within the EIS and the ROD, as well as incorporated PFC into the Biological Assessment (BA), BO, and ROD. The FWS was involved in the process and in agreement with the PFC methodology and focus on functionality of riparian systems for resource assessment and management. The group was able to reach consensus on the ability and process to change the matrices to fit site-specific situations and start the process for focusing on resource specific objectives rather than utilization standards. The science-based alternative that was jointly developed during these sessions was incorporated into the EIS and the ROD. Finally, permittee understanding and involvement in monitoring has increased.

Lessons Learned

Adaptive management plans must provide both flexibility sufficient to efficiently make changes necessary to deal with uncertainties encountered in management of natural resources and assurances that changes will be made to ensure that resource conditions will improve as promised in a timely manner.

A strong sponsor(s) is critical to success. For example, in this instance Nevada Department of Agriculture worked hard to ensure that the grazing community participated. Their participation was vital to building an understanding of the resource concerns (real and/or perceived) and how the management of livestock was related to those resource concerns and to obtaining commitment to develop and implement management and monitoring strategies to effect the desired change in resource condition. Of equal importance was the opportunity for permittees to make available their extensive local knowledge and experience and have that expertise incorporated at the assessment, planning, implementation, and evaluation levels. On the other hand, while working relationships across all individuals and organizations that participated in the workshops improved, the ROD was appealed by the Western Watersheds Project, an environmental organization that did not participate in the workshops. In hindsight, they should have been invited to participate at some point after the initial agreement among local interests and FS to pursue the collaborative approach.

To be successful, an adaptive management plan requires that stakeholders commit to sharing the assessment and monitoring workload. In return, stakeholders must be accorded a "place at the table" when assessment and monitoring results are interpreted and subsequent management responses developed.

This type of an approach helped to build understanding of ecological processes, agency management, and policy. More importantly, though, it helped increase group understanding of individual wants, needs, and desires. Once people began to listen to each other and focus on the functionality of ecological systems with a common language, it became apparent that what were seen as divergent goals were really different perceptions and verbiage for very similar goals. Group processes require a lot of time and effort, but eventually results can be far superior to individual or factional input into planning and management.

Where Are They Now?

The EIS was remanded back to the forest and district by the regional office, with a request to expand documentation of existing conditions and trends, including uplands, with monitoring to address an internal conflict between deteriorated conditions described in the EIS and continued similar grazing proposed in the ROD. The local staff reviewed numerous historic photos as well as vegetation transect data and related local conditions. Photos on 78 sites have been retaken to document trend and generally show demonstrable improvement. A revised EIS is expected to be out

for review in the spring of 2008. Following that, AMPs will be developed or finalized.

Regardless of the fact that the EIS/ROD was appealed, working relationships among all individuals and organizations who participated in these sessions have improved significantly. The Nevada State Riparian Team continues to communicate with agency personnel, permittees, and others to encourage further joint efforts. The new capacity, both in terms of technical knowledge and social dynamics, will be used to address the remainder of the streams in the Martin Basin planning area. To continue to build capacity within the area, a grazing course has been scheduled for the fall of 2008.