

## Trout Creek Mountains Restoration

**AGENCY:** U.S. Department of the Interior, Bureau of Land Management, Vale District, and the U.S. Fish and Wildlife Service

**INVOLVED PARTIES:** The Trout Creek Mountains Working Group, which consists of representatives from the Oregon Environmental Council, Oregon Cattlemen's Association, Izaak Walton League, Trout Unlimited, six ranch operators, Oregon State University, and participants over time such as the Oregon Department of Fish and Wildlife, Oregon Department of Environmental Quality, concerned citizens from ranching, environmental groups, local government, and the Fort McDermitt Paiute-Shoshone Tribe

**POINT OF CONTACT:** Jack Wenderoth, 541-473-6231, [Jack.Wenderoth@or.blm.gov](mailto:Jack.Wenderoth@or.blm.gov)

**DATES:** *Began:* 1988 - Scoping and Working Group *Ended:* Ongoing

**INTERNET SITE:** <http://ecorestoration.montana.edu/rangeland/histories/troutcreek/default.htm>

### PROJECT DESCRIPTION:

The Trout Creek Mountain Project Area is located within the Jordan Resource Area of the Vale District and encompasses over 540,000 acres in southeastern Oregon. This project includes four grazing allotments with numerous watersheds in portions of three subbasins.

The Trout Creek Mountain Restoration and Working Group Project (*This name for the project does not actually exist in any document but is used to cover the collection of National Environmental Policy Act [NEPA] documents and working group recommendations over the past 17 years for this case study*) focuses on compatibility between livestock grazing and critical habitat for listed Lahontan cutthroat trout within the Trout Creek and Oregon Canyon Mountains. The Trout Creek Mountain Working Group was created in 1988 to craft a long-term solution that would provide for both the ecological health of the land and the economic well being of the ranching community. The goals of this project, crafted from the *Whitehorse Butte Allotment Final Environmental Assessment* (EA), are to: (1) improve ecological condition and increase forage production through the development and implementation of feasible grazing systems and economically prudent range improvements; (2) ensure water quality meets or exceeds State Department of Environmental Quality standards; and (3) increase productivity of riparian areas for water storage, vegetation diversity, bank stability, and fish and wildlife habitat, with emphasis directed toward the Willow/Whitehorse (now Lahontan) cutthroat trout population.

Attainment of these overarching goals would be determined on the basis of periodic evaluations of riparian and upland conditions that demonstrate the following: (1) upland herbaceous plant cover is being maintained or improved on the basis line intercept and 3 foot x 3 foot study plots; (2) riparian plant communities are supporting more desirable species adapted to wetland conditions as shown in annual line-intercept riparian monitoring and long-term aerial imagery studies; (3) annual regrowth of herbaceous plant cover is occurring subsequent to grazing use in riparian pastures; and (4) livestock impacts on woody riparian plants do not exceed 30 percent incidence of use.

Three alternatives were considered to remedy resource issues in 1988. These alternatives include (1) high-intensity, short-duration grazing; (2) removal of livestock from upper elevation pastures; and (3) a variation of the project mix included under the proposed action. Finally three ideas that were entertained in the negotiation process but were not analyzed included: 20,000 acres of new land treatments, intensive livestock herding as the primary management mechanism to improve riparian habitat, and a no grazing option for the Whitehorse Butte allotment.

The Trout Creek Mountain area is presently going through an assessment for Healthy Rangeland Standards and Guidelines. This assessment will incorporate all projects, ecological changes, working group proposals and recommendations, and data collected over the past 17 years into an updated evaluation of all four allotments. It will recommend findings, and implement new management. The assessment also incorporates the AM that the 2001 *Southeastern Oregon Resource Management Plan* (SEORMP) and record of decision integrated as a tiered step-down process from the *Upper Columbia River Basin Draft Environmental Impact Statement (1997)*.

#### **ADAPTIVE MANAGEMENT (AM) ELEMENTS:**

*What management issue was the primary driver?*

The main management concern of this project is the continued protection and improvement of listed Lahontan cutthroat trout habitat in association with existing grazing systems.

*What uncertainties led to an Adaptive Management approach being selected?*

Whether it was possible to obtain sustained livestock operations on four grazing allotments while protecting and improving fisheries and riparian habitats needed for a listed species.

*How was the monitoring and science framework designed to support timely management adjustments to changing resource conditions and increased certainty?*

Once grazing systems were developed to provide proper resource use for entire watershed compatibility, NEPA analysis and documentation were conducted and proposed rangeland projects were implemented. Monitoring was then developed in association with new grazing systems and projects to provide information to determine whether proposed changes were conforming to NEPA impact expectations and requirements contained in the biological opinion issued for the Lahontan cutthroat trout by the U.S. Fish and Wildlife Service (USFWS).

*Please describe the process used for involving partners/stakeholders.*

Since the inception of the Trout Creek Mountains Working Group, annual coordination meetings are held by members and invited guests with field tours arranged to view habitat conditions. During these meetings, any landscape changes that occurred during the year are discussed, monitoring information is shared, and new ideas are entertained.

*Please describe the mechanism for adapting decisions based on monitoring results. Was an Environmental Management System (EMS) used?*

The mechanism for adapting decisions based on monitoring results follow an EMS model. Bureau of Land Management (BLM) district staff developed monitoring to address both short-term and long-term direction of desired conditions based on objectives within the Whitehorse Butte EA and required in the biological opinion issued by the USFWS. Monitoring includes use of standard BLM-approved methodologies, such as low-level aerial photography, line intercept studies, and livestock utilization studies, for detecting changes in woody and herbaceous plants. Management changes may become necessary based on these monitoring data.

Annual monitoring data for resource condition are collected, presented to the working group, and incorporated into the required annual biological opinion report. Depending upon the information

gathered annually, the working group then may craft unified proposals or recommendations to the BLM for those management actions considered necessary to change. Changes are normally made during the subsequent grazing season. The Trout Creek Mountain Restoration and Working Group Project follows an EMS model that was incorporated into the SEORMP, outlining processes for planning, implementation, monitoring/corrective action, and management review.

*Was the AM approach established as a result of a National Environmental Policy Act (NEPA) process (analysis and documentation supporting the decision to implement the AM)? If so, how did the NEPA process address subsequent adaptive decisions and actions?*

No. The AM process was integrated into the *Whitehorse Butte Allotment Final Environmental Assessment* (1989) and described as a check and balance system over time that incorporates input from the working group and monitoring gathered by BLM staff to address needed changes. Changes were scheduled at the end of complete grazing cycles (e.g., 6 to 8 years) when adequate information was obtained to make adjustments. Because impacts to the environment were mainly positive during this period, some voluntary reductions in livestock numbers made in 1990 were restored in 1996 in one allotment. After NEPA was conducted for the Trout Creek Mountains in 1990, the SEORMP (2001) was written, incorporating the AM process that allows the BLM to address problems as encountered on an annual or as-needed basis.

*Has the AM approach been evaluated in subsequent NEPA process? If so, what has AM contributed to the NEPA process?*

Adaptive management (AM) concepts that were described in the *Upper Columbia River Basin Draft Environmental Impact Statement* (1997) have been the model used for the Trout Creek Mountains Restoration Program. In 2001, the *Southeastern Oregon Resource Management Plan/Environmental Impact Statement* (SEORMP/EIS) was written. This further defined the AM process of planning, implementation, monitoring/corrective action, and management review. The AM process allows the BLM to address problems as encountered without conducting additional NEPA analysis, as long as the proposed actions and associated impacts are addressed within the SEORMP/EIS. Any action proposed outside of the scope of the SEORMP/EIS would require new NEPA analysis or an amendment. Most management adjustments that have been implemented have been within the range of actions analyzed in the Whitehorse Butte EA, but a few were not. For example, a rancher requested his permit be amended to allow for a different fencing arrangement, triggering additional NEPA work for the reauthorization of a new term permit. The Vale District, Jordan Resource Area is currently assessing the Trout Creek Mountain area for Healthy Rangeland Standards and Guidelines and will issue a new EA and grazing decision in 2006 that incorporates the redefined AM process. The Oregon Department of Environmental Quality did a total maximum daily load (TMDL) analysis at Trout Creek, and the results of that effort will be incorporated into the AM program revisions the work group will be taking up in the near future.

## **RESULTS:**

*Benefits provided by AM to date (i.e., reduced uncertainty, improved project efficiency and efficacy compared with other management options):*

The AM process used for the Trout Creek area may be interpreted as a way to build a “better” NEPA process in the sense that all parties involved were able to move ahead with changes in management with the understanding that modifications could become necessary if resource monitoring data indicated the need. Changes can occur without additional NEPA as long as impacts from proposed changes remain within the scope of the original environmental analysis.

Integrating AM into the NEPA process reduced conflicts and improved consultation with the USFWS. In addition, monitoring data suggest natural resource conditions are much improved than if the AM program were not being implemented in the elevations where Lahontan cutthroat trout range. Monitoring data indicate that riparian habitat has dramatically improved and habitat conditions for fish (as measured by stream flow and water temperature) have also greatly improved. Upland habitat conditions have also improved with the removal of grazing pressure. Monitoring at lower elevations indicates that some impact conclusions pertaining to grazing levels were inaccurate, and the working group will be addressing modifications to those grazing levels as part of the evaluation process described above. Similar improvements could have been attained without the collaborative and AM practiced in this area; however, the cooperative atmosphere and management flexibility of the AM program have fostered a highly desirable outcome.

*Limitations of using AM:*

Two items that always surface as limiting factors are staff time and monitoring requirements. Annual coordination of resource conditions with numerous entities can utilize large blocks of time. Because management changes can occur as needed through the AM process compared to past management styles, where 10+ years elapsed between assessments, constant monitoring of each action is required to obtain current information for decisions.

*Financial cost of implementing AM:*

Cost will vary with type and extent of project. The Trout Creek Mountain restoration cost several hundred thousand dollars initially, but over the past 5 to 10 years, cost has been minimal. Currently, the brunt of required funding is for maintenance of existing projects or an occasional new project.

*How did the AM approach affect the timeline for managing the system?*

Because the working group has been in place for 17 years and meets once or twice a year, proposed management changes usually occur more rapidly with AM than under the past grazing management regime, where many years elapsed between evaluations.

*Degree of stakeholder buy-in:*

Commitment to the working group and the AM process is substantial. During the initial phases of the AM process, the most time-consuming achievement is bringing all affected members of the public to common agreement without any one entity dominating the process. AM program implementation for geographic management areas in Vale District has been more labor intensive and costly than had the program not been implemented but worth the effort considering the resource benefits, stakeholder buy-in, and management flexibility.

**CHALLENGES:**

*What impediments, constraints, and/or challenges were overcome? How?*

Consensus among all entities of the working group for allowing continuing livestock grazing while still providing upland, fisheries, and riparian habitat improvement was the greatest challenge. Consensus was achieved through persistent meetings and field tours over a 2-year period before the NEPA document was finalized and agreed to by all concerned members of the public. Continued meetings and field tours aid in the AM process today.

*What aspects of the project need improvement?*

As additional projects are changed over to the AM process, commitment of funds for staffing and monitoring information will continue to increase.

*How and when will the need for improvement be addressed, if at all?*

Despite declining budgets, the Trout Creek Mountain Restoration Program has continued to receive funding through the BLM budgeting process and through the grazing revenues. As a measure of proof that the geographic management area evaluation process is receiving support outside the agency and aside from what has transpired with the Trout Creek Mountain Working Group, BLM received a substantial Oregon Watershed Enhancement Board grant for the nearby Louse Canyon Geographic Management Area.

#### **SOURCES OF INFORMATION/REFERENCES:**

Bureau of Land Management. 1994. *IF THE MOUNTAIN COULD SPEAK* (Video, Time 13:16), A Story of Collaboration.

Bureau of Land Management. 1996. *White Horse Butte Allotment Evaluation*. Vale District Office, Vale, OR.

Bureau of Land Management. 1989, *Whitehorse Butte Allotment Final Environmental Assessment*. Vale District Office, Vale, OR., #OR-030-90-08.

Hatfield, Doc, and Connie. 1994. *History of the Trout Creek Mountain Working Group (1988-1993)*.

Hobert, M. R. June 1991. "Whitehorse Butte Allotment – Controversy to Compromise," *RANGELANDS* 13(3).

U.S. Department of the Interior, Bureau of Land Management. 2001. *Proposed Southeastern Oregon Resource Management Plan and Final Environmental Impact Statement*. Vale District Office, Vale, OR.

U.S. Department of the Interior, Bureau of Land Management. 2002. *Southeastern Oregon Resource Management*

USDA, Forest Service; DOI, Bureau of Land Management. 1997. *Upper Columbia River Basin Draft Environmental Impact Statement*, Walla Walla, WA.