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RANGELAND ISSUES IN THE EASTERN SIERRA NEVADA REGION OF CALIFORNIA, USA, AND THE ROLE OF THE NATURAL RESOURCES CONSERVATION SERVICE IN ADDRESSING RANGELAND RESOURCE CONSERVATION

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ABSTRACT

The Eastern Sierra region of California is on the western edge of the Great Basin Desert of the United States. Livestock are typically grazed on a mix of private and public lands. Public lands are primarily managed by either the US Department of Interior-Bureau of Land Management or US Department of Agriculture-Forest Service. Some operators in the Eastern Sierra also lease land from the City of Los Angeles, Department of Water and Power. Grazing livestock in the Eastern Sierra presents producers with many conflicting uses and issues for rangelands, including economic, environmental, recreation, and housing development demands.

Livestock operators may seek assistance from the Natural Resources Conservation Service (NRCS), an agency of the United States Department of Agriculture (USDA). The NRCS provides technical and financial assistance for private land owners and native American tribes. The goal of the NRCS is to conserve soil, water, air, plant, animal, and human resources (SWAPA+H) on private agricultural lands and rangelands in the USA.

INTRODUCTION

This paper presents brief background information on livestock grazing and gives an overview of rangeland and livestock issues in a portion of the Eastern Sierra region that includes Inyo County and the southern half of Mono County. The Bishop Field Office of NRCS services this 2,832,800 hectare area.

Livestock operators in the area are primarily cow-calf producers, but there are also some sheep operations and some yearling/stocker cattle. Most cattle and sheep spend the winter months on a combination of rangelands (about 13 cm annual precipitation), riparian areas, dormant irrigated pastures, or receive supplemental feeding. During the early spring livestock often graze on irrigated pasture and rangelands, then livestock are moved, either by trucking or trailing, to high altitude (1830 m to 2750 m) mountain grazing permits, and in the fall return to the desert rangelands and pastures.

This paper also illustrates some of the cooperative efforts of NRCS with private landowners and public land agencies in the Eastern Sierra in developing conservation plans, which include grazing and vegetation management. NRCS staff also assists federal agencies with vegetation monitoring for livestock management.

BACKGROUND AND HISTORY

Livestock Grazing

Livestock grazing and agriculture in Inyo and Mono Counties has a long history (Lidecap 2005, Sauder 1991). Livestock were first brought into the area about 1859 by L.R. Ketcham (Schumacher 1962).

The Inyo and Mono County Agriculture Department estimates about 25,000 head of cattle and 8,000 head of sheep graze in Inyo and Mono Counties. Since the NRCS Bishop Field Office covers all of Inyo, and only the southern $\frac{1}{2}$ of Mono County, the Mono County Livestock numbers reported by the Agriculture Department will be a little higher than the areas covered in this paper (Annual Crop and Livestock Report 2003).

Many livestock producers within the Bishop Field Office area graze on public lands, including Bureau of Land Management lands (BLM) and US Forest Service Lands (USFS). There are about 2,300 head of cattle and approximately 5,400 head of sheep grazing on BLM allotments within the area (BLM Grazing Bill 2006) and during 2005 about 3,800 cattle and about 11,800 sheep grazed USFS allotments. Livestock graze on Forest Service Lands primarily during the spring through fall season for about 3 months on average, depending upon the specific allotment (INFRA USFS Database 2006). Not all livestock utilizing USFS lands spend the entire grazing season within the Eastern Sierra region. Some are transported by truck to other areas of California.

The City of Los Angeles, Department of Water and Power (LADWP) owns about 121,405 hectares in the area and leases most of the land to livestock operators. These lands contain a combination of irrigated pasture, rangelands, alfalfa fields, wetlands, riparian corridors, and uplands. The city of Los Angeles began purchasing the lands in the early 1900s to secure water rights for their growing urban population (Hoffman 1981).

There are also numerous private land ranches in the area. Many of the ranching operations in the Eastern Sierra rely on a combination of the different public land agencies, LADWP, and private land holdings for the grazing operations.

Natural Resources Conservation Service (NRCS)

The United States Congress established the Soil Conservation Service (SCS) in 1935 as a result of "the Dust Bowl" era in the Great Plains Region of the US, and in 1994 the SCS was renamed the Natural Resources Conservation Service. In 1937 Conservation Districts were established to address soil conservation issues at the local level. NRCS (a Federal Agency) service centres and field offices work within local conservation districts (often delineated by county boundaries and whose boards are made up of local residents) to establish conservation priorities. There are nearly 3,000 conservation districts in the US (Helms 2006).

ISSUES

Individuals and groups interested in livestock grazing, water use, environmentalism, public land management, and recreation and tourism often find themselves with conflicting goals for rangelands (Huntsinger and Hopkinson 1996). Recreation and tourism contain many aspects including, but not limited to hunting, fishing, rock climbing, bouldering, bicycling, all terrain vehicles, motor-cross, birding, horseback riding, hiking, canoeing, skiing, backpacking, and many other activities. Some participants in recreation and tourism activities find grazing conflicts with their goals. It is often extremely challenging for livestock producers in the area to maintain a viable livestock operation while addressing the many conflicting rangeland issues, including urban encroachment (Liffman et al. 2000) and watershed management.

NRCS ASSISTANCE TO LIVESTOCK PRODUCERS

NRCS staff work with livestock producers by providing technical and financial assistance to land owners to help with conservation goals, environmental issues, and the interactions among competing stakeholders.

Technical Assistance – In General

Technical assistance from NRCS staff may take many forms, including the design specific NRCS conservation practices (i.e., stockwater tanks and fences), providing conservation planning, developing prescribed grazing plans, serving on Coordinated Resource Management Groups and Local Resource Groups, etc. It is the conservation planning that may provide the most benefit to livestock producers. NRCS Conservation Planning is a nine step process: 1) Identify Problems and Opportunities, 2) Determine Objectives, 3) Inventory Resources, 4) Analyze Resource Data, 5) Formulate Alternatives, 6) Evaluate Alternatives, 7) Make Decisions, 8) Implement the Plan, and 9) Evaluate the Plan (NPPH 2000). Through this planning process livestock producers are able to evaluate environmental and land use impacts and will be better able to address and understand conflicting rangeland uses.

Financial Assistance – In General

NRCS offers multiple financial assistance programs, including the Environmental Quality Incentives Program (EQIP), Wildlife Habitat Incentives Program (WHIP), Wetland Reserve Program (WRP), Grassland Reserve Program (GRP), Farm and Ranchland Protection Program (FRPP) and the Grazing Lands Conservation Initiative (GLCI), among others. Most of the NRCS programs require matching funding from the landowner, ranging from a 10% to a 50% match. Goals of the programs vary, including those designed specifically to install conservation practices, to others where increasing wetlands and wildlife habitat may be the goals, to other programs where NRCS purchases easements on farms and ranches to maintain agriculture when it is threatened by development. All NRCS programs are competitive, applicants fill out an application form, it is ranked against other applicants, and then funding is awarded until all available funding is exhausted for that year.

NRCS Assistance – Inyo/Mono Counties

The Bishop NRCS office is actively involved in developing Conservation Plans for livestock producers. These plans include development of grazing systems, vegetation monitoring, stream channel monitoring, goal setting, and potential use of NRCS financial programs. The Bishop NRCS participates in a 670 hectare WRP project, where NRCS, with cooperation of many other stakeholders, is designing the restoration of wetlands, riparian corridors, bird habitat, and rangelands. Part of the WRP plan includes developing a Conservation Plan, which includes a grazing plan for sheep. Bishop NRCS staff also participate in a Coordinated Resource Management Program (CRMP) for a local college that has livestock grazing on BLM and USFS lands. The Bishop NRCS provides technical assistance to livestock producers in many ways, including conducting vegetation condition and trend studies, utilization monitoring, stream cross section monitoring, among others.

SUMMARY

Livestock grazing on public and private rangelands has come under much criticism over the recent decades (Fleischmer 1994, Kondolf 1984), some of that criticism is warranted, some of it is not. Ranching in the Great Basin Region and within the Eastern Sierra has a long history. Those families involved in ranching operations have their own culture and heritage. It is something that should not be treated lightly. Ranchers have the responsibility to sustainably manage their operations and at the same time other land use stakeholders shouldn't

necessarily have greater preference given to their interests than the livestock operators. Balancing the needs between the diverse groups is difficult and challenging. NRCS staff can contribute to resolving conflicts and helping producers develop sound and sustainable rangeland practices.

The NRCS planning process, combined with technical and financial assistance, provides an opportunity for Eastern Sierra livestock producers to address the many demands on their operations. Developing a sound Conservation Plan helps producers identify environmental issues, and thereby address the concerns of many environmental groups. NRCS financial assistance provides an incentive for producers to install conservation practices that enhance wildlife habitat, water quality, improve water use efficiency, and help with the economic success of ranching operations. NRCS Conservation Easement programs give a rancher the potential path to preserve rangelands from developmental pressures and enhance the environmental health of their rangelands. Therefore, the NRCS staff working with landowners, concerned citizens, conservation districts, BLM staff, USFS staff, and other stakeholders can assist in helping address the many, and often conflicting, land use issues on rangelands in the Eastern Sierra Region of California.

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