Coordinated Resource Management Planning in New Mexico

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New Mexico, the Land of Enchantment, is a state diverse in people, cultures, and natural resources. The uses and management of these resources are as varied as the resources themselves.

Land ownership and land use in New Mexico is a mix similar to that in other Western States. Of the State's land area, 54% or approximately 42 million acres is privately owned rangeland that is used for cattle and sheep ranching. Federal lands make up 34% of the land area, and consist of both rangeland and woodland. This land is also used to support livestock grazing. The rangelands and woodlands of New Mexico also support a wide diversity of wildlife species, with mule deer, elk, and pronghorn antelope being the dominant large animal species. Ownership is comprised of public lands, administered by the Bureau of Land Management; National Forests, administered by the USDA Forest Service; State lands, administered by the New Mexico State Land Office; Indian land; and private land.

Many of the State's ranching operations use the intermingled public lands and forest lands through permits, leases, or allotments. The USDA Soil Conservation Service is charged with providing technical assistance to landowners and users in planning and applying conservation programs on private land. The respective public management agencies must decide how lands under their jurisdiction will be used. To properly plan and apply conservation measures to the land, cooperation among state and public land management agencies and private land owners is necessary.

Coordinated resource management planning in New Mexico is carried out under the terms and guidelines set forth in the Memorandum of Understanding signed and agreed to by the various state and federal agencies including the N M Cooperative Extension Service. The purpose of the Memorandum of Understanding is to foster statewide development and coordination of sound resource management and conservation programs.

The Memorandum of Understanding specifies the following areas to be coordinated when mutual interest and responsibilities exist:

1. Implementation of conservation and management programs
2. Watershed protection and flood prevention
3. Environmental procedure and documentation
4. Recreation programs
5. Resource conservation and development
6. Great Plains Conservation Program
7. River basin studies
8. Water uses and rights
9. National cooperative soil survey
10. Cooperative forest programs
11. Wildlife habitat management

Coordinated resource management planning begins at the local level with an annual coordination meeting attended by local representatives of the different state and federal agencies. The results of this meeting and recommendations for coordinated plans are then reviewed at the intermediate and state levels.

Many coordinated resource management plans have been developed in New Mexico. This planning process has resulted in the development of Great Plains Conservation Contracts, Flood Control Projects, and Watershed Management Plans.

One example of such planning is the Colin McMillan ranch located in South Central New Mexico. This CRM plan was developed in 1987 on private, state, and public land. The plan called for construction of 20,000 ft. of cross fence. This fencing allowed for implementation of three planned grazing systems on the ranch. With the

Sacramento Mountains central New Mexico. Photo by Dan Abercrombie.
use of these grazing systems the ranch has better utilized the forage resources for livestock. The grazing systems have also benefited the mule deer and elk that are found on the ranch. The grazing systems have provided a tool to manage both forage for livestock and the habitat for wildlife. Also planned was a spring development and construction of 11,000 ft. of new pipeline. This work was needed to improve the existing livestock watering system on the ranch. With these improvements better quality water for livestock and wildlife will be available. The system also improves grazing distribution by livestock and improves habitat for wildlife.

Mr. McMillan's plan established a prescribed burning program on the ranch. The purpose for the burning is two fold. First, burning will improve the forage quality for livestock and wildlife on productive bottomland range sites. The second objective was to control mesquite invasion on these sites.

This coordinated resource management plan and the implementation of the conservation practices have led to the enhanced water and forage quality and erosion control on 60,000 acres of New Mexico rangeland. Mr. McMillan received the 1989 Rancher of the Year award from the Otero Soil and Water Conservation District, recognizing him for his excellence in resource management on the ranch.

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Cross Fence. CRMP Harkey Ranch and National Forest Service. Photo by Greg Haussler.

Salad Creek Water Shed Dam. CRMP BLM and SCS. Photo by Greg Haussler.

management through coordinated efforts. This study started in 1991 as a joint effort between the USDA Soil Conservation Service and the National Forest Service. The study will determine if vegetative change in the basin has influenced water yield and if improvement of the watershed condition can increase the water quality and/or improve the water quality of the Pecos River. The study area includes an area of sixteen million acres in central New Mexico. The predominant land use is agricultural. Rangeland makes up the majority of the area. The rangeland is used for cattle and sheep ranching, and provides wildlife habitat for pronghorned antelope, mule deer, elk, and numerous species of birds ranging from quail, to prairie chickens, to song birds.

Over the past 100 to 125 years, the rangeland has undergone a vegetative change from short grass prairie to brush encroached grassland. The woody species that now dominate the area are broom snakeweed, mesquite, juniper, creosote bush, tar bush, and catclaw species. At the same time water yields of the Pecos River have declined by as much as 58% in some areas.

Does coordinated resource management planning work? You bet it does. More importantly if New Mexico is going to continue to meet the demands placed on its natural resources by its people, coordinated resource management planning must play an even greater role in the future.