## Rangeland Management Criteria in the Federal Regulations

## Harold F. Heady

My assignment is to make recommendations on rangeland management criteria in the Federal Regulations. Before doing so it is well to review for you that Federal Regulations come at three levels. The first is exemplified in Public Law 94-579, the Federal Land Policy and Management Act which became Law October 21, 1976. Congress and the President thereby declared as rangeland resource policy that public lands will be retained in Federal ownership; the land will be periodically and systematically inventoried; and management will be on the basis of multiple use.

The second level is, for example, the Grazing Regulations, those amendments published in the Federal Register January 19, 1981, to the 1978 Regulations as amended in 1980. This level of rulemaking refines policy, sets guidelines for decision making, and clarifies definitions of terms. In short, it stipulates how PL94-579 and other laws applicable to rangeland resources will be administered by the Department Secretary.

The third level is on-the-ground land management. These regulations dictate the actual use of the resources and activities of range conservationists. The written rules at this level are in agency manuals. They prescribe in considerable detail such items as how to inventory forage and how to establish a permanent photo station.

I believe that most controversies as well as most opportunities for rangeland conservation exist at the third level, the level of application of national policies to specific situations. All of us want application of land management policy on a scientifically sound basis. Political forces and national priorities change but good resource management should always be based on the best technology available. Unfortunately, ideal decisions do not always result when the best biological technology does not satisfy economic forces, political expediency, and sociological custom at a given time.

My recommendations and further remarks are given in the spirit of constructive suggestions and cooperation through further discussion. Let us build upon the great progress that has been made. Policies and procedures need to be improved in four major areas. Implementation of these suggestions needs attention at all three levels of Federal regulation.

(1) The Rangeland Stewardship Programs should be broadened in two directions to cover all the public lands and

to bring all users together on an equal basis. Section 12 of the Public Rangelands Improvement Act of 1978 established an Experimental Stewardship program based on the principles of (a) cooperation and coordination among Federal and State agencies and local private range users; (b) payment of user fees up to 50 percent of the amount due in the form of improvement works; and (c) such other incentives as may be deemed appropriate. While this program was conceived and is slowly being established largely for improvement of range livestock grazing, it needs expansion in practice, to include all users who will benefit from resource management. Stewardship can bring all users and land owners together in a spirit of cooperation to plan for resource use and preservation. I see this as being done primarily through application of existing federal regulations without relinguishment of administrative responsibilities by any agency or private land holder. Also, I believe that a successful public land management program is less likely without stewardship than with it.

(2) All users of rangelands should pay their fair share for rangeland management. One often hears that grazing fees for livestock are too low, that ranchers make profits from the use of forage grown on public lands and that ranchers are subsidized. Generally these assertions are accurate but on single ranches or grazing allotments they may not be true.

Livestock grazing is not the only subsidized use of rangelands. The establishment and management of wilderness areas is a subsidy to wilderness enthusiasts and the larger public who just want to know that wilderness is there. Hunters pay a license fee to the state and taxes on ammunition and equipment for research into wildlife but few of these dollars ever find their way to support of land improvements. The hunter is subsidized by free access to public land. The rockhound uses road systems that may be justified and maintained for fire control or some other use. If the rockhound pays a fee, most of them don't, the money does not cover the value received. The rockhound is subsidized on public land. All rangeland users pay taxes to community and nation to help pay part of public lands management costs so tax issues do not separate the public land users.

The rancher receives a profit from harvesting the grass from public land. Other users also receive profit from their purchases of privileges. The profit may be called "the best hunt I ever had" or "a truly wilderness experience" rather than dollars for beef, wool, and lamb. In principle these values received should be comparable. All users should pay but the problems of equity among them and management of

Author is Director of the Wildland Resource Center, University of California, Berkeley. These remarks were given at the Western Governor's Conference, Jackson Hole, Wyoming, September 10, 1981.

the sales are difficult. Perhaps the old adage: "When you get into trouble, appoint a commission and call for research" applies here. Diminishing supplies per capita of the nation's renewable natural resources require that equitable privileges for their use are best determined in a free market for everyone. Let the actual purchases sort out these values within the American free enterprise system.

(3) Rangeland management criteria should not be written into the Federal Regulations, except in a most general way. The land manager at level three must have flexibility to make the best of continually changing conditions. The range site is the basic rangeland unit. It is an area of land that has physiographic features, soil characteristics, and vegetational potential sufficiently uniform so that management can be specified and the results predicted. Unfortunately, livestock management units usually include several range sites, wildlife move from one site to another, and human users prefer different sites for different purposes such as hunting or aesthetics. The land manager must apply sound judgement in recommending use and management on these never-twoalike situations. The regulations should permit the range professional the flexibility to make these decisions.

As much variation occurs in the natural vegetation, especially the grasslands, from one year to another as it does from one place or site to another. Drought and wet periods result in yearly differences in plant growth exceeding 100% in nearly all areas. Without grazing or any managerially controlled influence, grassland and some shrubland vegetational types change greatly in species composition within a few years. Inventories of the natural resources done in one or two years, as in most environmental impact analyses, are suspect in light of expected ecological changes. The land manager needs regulations that permit or even require flexibility to accommodate such variation. The stewardship program mentioned earlier will be a valuable part in the informational transfer leading to a common and accepted understanding of resource variability.

(4) Basic and applied research is needed into the management requirements of rangeland plants and animals and their responses to various rangeland users. The previous point on flexibility in decision making fully illustrates the missing research into rangeland resources problems. Much is needed into range site classification, inventory of vegetation and responses to the impacts of livestock, wildlife, human use and the interactions among them. Both basic research and applied research can work together as illustrated at the project for the validation of managerial practices on the Saval ranch in northern Nevada.

During the last 5 years some 15 conferences, committee reports and technical society documents have described the shortcomings of rangeland research. The "shopping list" of projects is a long one but let me make only two suggestions. One is that considerable summarization and evaluation of present knowledge would be valuable. The land management agencies, the Society for Range Management, and academia should prepare manuals or "state-of-the-art" treatises on a number of subjects. Probably the most important at the moment is an evaluation of procedures for monitoring changes in vegetation throughout the rangeland areas and taking into account the vast array of range sites and their vegetations. This is a national problem that is beyond the resources of any state and it should have interagency support at the national level.

The second suggestion for research is to bring to your attention again that Congressman de la Garza from Texas and Senator John Melcher from Montana have incorporated an authorization (Subtitle M) for Rangeland Research into the Farm Bill now before Congress (1981). This amendment draws attention to the need for studies into the management of rangelands for food, fiber and water, into the remedies for unsatisfactory and unstable rangeland conditions, into the revegetation and rehabilitation of rangelands and into such other matters as the Secretary considers appropriate. My own position is one of great appreciation to Congressman de la Garza, Senator Melcher, and others who have worked for the bill. Presently, rangeland research is young and only partly done; the need for new and better information has never been greater. The opportunities for beneficial research are abundant and need your support.

*Editor's Note:* Dr. Heady gives us all food for thought, not just the governors who attended the Conference in Jackson Hole, Wyo., in 1981.

## **Resources Monitoring Conference**

Renewable Resource Inventories for Monitoring Changes and Trends is the theme of an international conference, August 15 - 19, 1983, at Corvallis, Ore.

The conference is sponsored by Forest inventory and Remote Sensing Working Groups, Society of American Foresters, International Society of Tropical Foresters, Society for Range Management, the Wildlife Society, American Society of Photogrammetry, IUFRO, and Renewable Natural Resources Foundation, in cooperation with: FAO; USDA, Forest Service; and Oregon State University.

The Technical Program Committee of the Conference requests that persons interested in submitting a paper for consideration do so NO LATER THAN November 1, 1982.

Accepted contributed papers will be presented in concurrent sessions addressing the following topics from an international/national, regional/Province/State, or local perspective: (1) Selecting attributes with which to measure change; (2) Selecting inventory systems with which to measure change; (3) Inventory methods and implementation; (4) Statistical analyses, implications, and reconciliation; and (5) Reporting changes and trends.

Anyone interested in submitting an abstract should include: Title of proposed paper; author's name, address, phone number, and affiliation; and a 200-word (maximum) abstract of the paper's technical content.

Abstracts must be received no later than *November 1, 1982* for consideration. Authors of papers accepted for presentation will be notified no later than January 1, 1983. Submit abstracts to Mr. Toby Atterbury, Crown Zellerbach Corp., 1500 SW First Avenue, Portland, Ore. 97201