

Reporting Range Resource Management Activities

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Many Forest Service personnel believe that the status of the range resource is not being adequately portrayed to Congress and constituency groups because the existing measures of range management do not adequately reflect what is happening to the resource. Multiple products flow from range management; yet traditional budget and accounting procedures force separation of the benefits and costs into functional program areas.

Legislation (for example, the Forest and Rangeland Renewable Resources Planning Act [1974], National Forest Management Act of 1976 [U.S. Laws, Statutes, etc.,; Public Law 94-588], and Federal Land Policy and Management Act of 1976 [U.S. Laws, Statutes, etc.,; Public Law 9-2743]) directs the Agency to integrate the management of all resources into one consistent Forest management plan. A task group of Agency personnel assembled in January 1988 to evaluate this problem and make recommendations on measurements that would reflect the jobs being performed through range resource management.

Background

The perception that range resource management is synonymous with livestock grazing predates the Forest Service. Tradition inside and outside the Agency holds to this theme. In his book, *The Forest Service*, Robinson (1975) describes the range resource strictly by livestock grazing. Early textbooks on range management were heavily oriented to livestock management. This orientation met the needs of the Agency and the range management profession during the first half of the 20th century.

Traditional measures used to report to Congress and the public reflect this strong orientation to livestock grazing. Numbers of permitted livestock, actual use by livestock, grazing fees collected, wild horse and burro use, noxious weed infestations, and range condition were the primary emphasis. Based on this data base, Congress, interest groups, and the Agency formulated opinions and decisions on range management budgets and allocations.

Do these measures accurately depict the range resource and its management today? Do the measures reflect range resource program budgets? The ideal measures would convey to Congress and all interested publics the current ecological status of the range resource, any changes occurring, and an assessment of management practices. The measures would also reflect how range resource management changes when budgets change.

Present measures fail to do this. A poor correlation exists between budgets received from and outputs reported to Congress. Range budgets have been declining in the last two decades, yet reported outputs have remained nearly the same. Is the appropriate conclusion from this that the resource is being managed adequately and that managers are becoming more efficient at management? The consensus of the range management personnel of the Agency is that the measures are not adequate indicators of status.

Based on the recommendations from the review of below-cost timber sales (USDA Forest Service 1987), the GAO made it clear that the timber harvesting program on National Forests should compare actual costs and benefits. The resulting Timber Sale Production Information Reporting System (TSPIRS) permits the inclusion of more than just timber receipts in the benefits of the timber sale program. TSPIRS has caused questions to be asked about whether other resources, such as range, watershed, and wildlife, should each have similar information reporting systems or be integrated into an all encompassing resources reporting system.

Starting at a National Range Directors Meeting in 1983, the Agency began critically examining its need to measure the important elements of range management. The task group used a set of criteria to develop the recommended measures and make them useful and responsive to the issues raised by the Agency, Congress, and others. The criteria reflect concerns about the availability of information, compatibility, consistency, and impact on the Agency. Each measure was evaluated according to the following criteria:

1. Measurements should be for resources under the control of Forest Service management and reflect work accomplished.
2. Measurements should represent the work and objectives of the Forest Service range management program.
3. Measurements should be easily obtained and verifiable.
4. Measurements and their units should be easily understood both inside and outside the Agency.
5. Measurements should directly correlate with funding; that is, they should be responsive to and adequately reflect changes in funding.
6. Measurements should respond to and reflect the public's interests.
7. Measurements should have standardized definitions throughout the Forest Service (and be reasonably compatible with those used by other agencies and organizations).

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8. To the extent possible, measurements should be directly linked with existing measurements and outputs to provide continuity.

9. Measurements should respond to efforts for integrated management; that is, be suitable for or complementary to information used for budget, Resources Planning Act (RPA), resource management, and land management planning at all levels of the Agency.

10. Measurements should not be restricted to those with economic values established in existing markets; both market and nonmarket values should be considered.

11. Measurements should be compatible to efforts underway by the Agency to formulate an integrated resource management system.

Description of Range Resource Management

Range resource management depends on several inputs, outputs, and related efforts. The inputs include precipitation, solar radiation, vegetation species, use by grazing animals, fire, fertilizer, herbicides, seeding, and water developments. The application of knowledge and the use of inputs constitute the management effort.

The intended outputs include desirable vegetation, watershed protection, wildlife habitat, forage for wildlife and livestock, recreation, sustained population levels and diversity of animal and plant species, water production and quality, protection of riparian areas, noxious weed management, and desired ecological status of plant communities.

The related effects are as diverse as the outputs themselves. Grazing animals affect watershed values, timber resources, recreation, plant diversity, wildlife habitat, vegetative condition, riparian values, the livestock industry, and other resources and outputs. These related effects are neither well understood nor defined. Complementary as well as competitive relations exist. In recognition of these interactions, Congress and the public are now demanding an accounting of Agency costs and benefits for managing range resources.

Because the outputs and effects of range resource management cross traditional boundaries of responsibility, demonstration of changes resulting from different management scenarios must include measuring water, timber, recreation, wildlife, vegetation, and livestock. The need for such measurements should not be viewed by range management personnel either as encroachment into the areas of responsibility of other professions or as a competitive stance to gain budgets and personnel. Including the measurements is a recognition that joint production processes are occurring. Competition for budgets and personnel are counterproductive to accomplishing the objectives of integrated management of all resources.

The availability of highly skilled personnel to work in specialized areas is critical to the accomplishment of the overall mission of the Agency. It is not appropriate for range personnel to establish the measure to use in reporting changes in timber resources; nor is it appropriate for timber personnel to establish the measures for reporting changes in range resources. Establishment of appropriate

and adequate measures for each program area must come from the personnel of that program.

Measures for Managing Range Resources

The major tasks of range managers can be summarized in five broad areas:

1. Range vegetation management.
2. Riparian vegetation management.
3. Grazing management.
4. Noxious weed management.
5. Wild horse and burro management.

Vegetation management is the major responsibility of range managers. The range vegetation management objectives of each Forest plan are used to monitor the effectiveness of actions designed to accomplish this task. A Forest does not have to have livestock grazing to establish range and riparian vegetation management objectives. The explicit expression of such objectives on Forests where no livestock are present would help to dispel the myth that range equals livestock.

Riparian vegetation management is really no different than range vegetation management. It is separated only to provide emphasis to that portion of range vegetation.

Grazing management remains an important portion of the overall Agency program, but with new emphasis on the interaction of the grazing animal with the management of vegetation. In addition to being an output, livestock grazing is a tool for range vegetation management. The typical grazing statistical reports may only need minor modifications to meet the needs of the Agency.

Management of noxious weeds is a vegetation management concern. It has been separated from the range vegetation management task for emphasis and reporting. Traditional measures with some modifications to clarify definitions and provide uniformity may be adequate to measure this area.

Management of wild horses and burros remains an important portion of range management within the Agency. Reports outlining population levels and results of capture programs may require only minor modifications to meet Agency needs at the National level.

Each of the broad tasks has measures useful in assessing accomplishments. These five main areas describe the major responsibilities and outputs associated with range resource management that are primarily under the jurisdiction of the Forest Service range management program. All outputs must be considered when budgets, programs, and projects are being justified. The measures appropriate to describe changes in timber, water, recreation, and other resources resulting from range resource management will be defined by their respective resource specialists.

Conclusion

Establishing measurements that are reflective of shifts in budgets and that realistically portray the status of range resources and their management has been the assignment of the present task group. The description of benefits and outputs associated with range management

should not be restricted to the traditional output of livestock. Integrated resource management leads to the cooperative atmosphere that can result in accomplishing the most goals for the Agency. The shift in management emphasis is broadened beyond livestock to emphasize vegetation.

The shift in emphasis toward vegetation can only be accomplished through an education process of all those affected. This process must involve professionals inside and outside the Agency, public interest groups, and Congress. It is entirely possible that new interest groups will become constituencies of the Agency, demanding and receiving increased levels of management on the Nation's range resources.

Literature Cited

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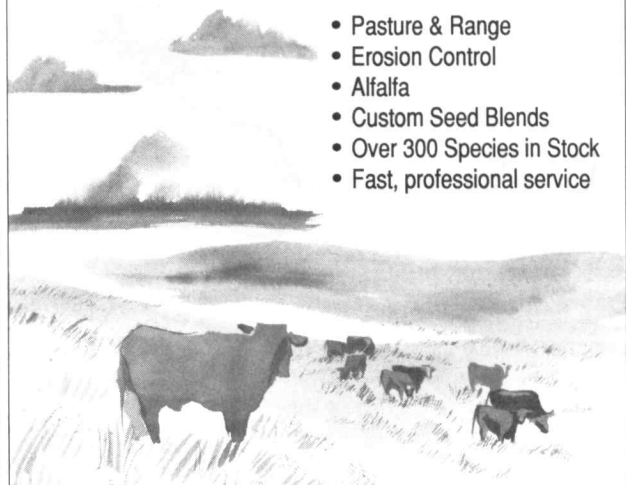
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