

Land Management Planning: An Assessment

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Increasing public concern with the management of public lands focuses attention on the land management planning process. Specifically, questions are being raised about management objectives and the tracking of accomplishment. Management plans are often the only record available to track and support the agency's decisions. With an increasing number of natural resource decisions being contested, management planning becomes more important. To defend their actions federal land management agencies need to strengthen their documentation and be more systematic in developing and updating their management plans and monitoring records.

Planning-An Overview

Planning is a systematic approach to decision making or problem solving. Lindzey and Aronson (1985) identified four separate but sequential phases of generalized planning. This planning process has been modified and widely adopted for public land management. The most commonly applied public land planning processes are land use planning (resource management plans) and land management planning (activity plans). The first is the layman's forum for deciding what public land uses are desired by the public over a large region (i.e., a national forest or resource area). This process should prioritize land use goals based on existing and desired uses and resource capability (land use plans or forest plans) rather than define management specifics. The second phase, land management planning, approaches the technical aspects of achieving these goals by developing site specific management plans (i.e., allotment management plans or herd management plans). Land management planning is primarily the job of professional resource managers.

The model for land management planning involves several sequential steps (Figure 1). As broad land use goals are applied to local planning areas, specific resource issues and problems are identified and resource management objectives are formulated. Ideally, these are specific resource objectives identifying the desired plant communities needed to meet land use goals and that are consistent with site capabilities. The final steps involve the application of management tools (grazing systems, range improvements, etc.) that hopefully will achieve the objectives and the necessary monitoring/evaluation to determine if management is indeed succeeding. This



Fig. 1. Land Management Planning Model.

sequential land management planning model (Figure 1) was used to evaluate the allotment management plans (AMPs) selected for this study.

Twenty AMPs covering over 825,000 acres in northwest Nevada were evaluated. These BLM plans were written between 1980–1984. Four AMPs were completely implemented, 14 partially implemented and 2 were not implemented at all. These AMPs were the result of Coordinated Resource Management Planning (CRMP) through the Modoc-Washoe Stewardship Program. Motivation for this review came from both the BLM and the stewardship committee. They were concerned about the overall quality of the plans they had drafted.

Each plan was compared to the planning model for consistency of process and idea development. The plans were then evaluated for statement content.

Results and Discussion

Review of the selected AMPs revealed inconsistencies in the flow of ideas through the planning steps and problems with content or organization of the ideas presented. It was evident that in developing land management plans more attention to the systematic planning model and better definition of management ideas was needed.

Systematic Flow of Ideas

Inconsistencies found in the flow of ideas through the planning documents can be considered as follows:

This study was jointly funded by the Bureau of Land Management, Washington Office Range Management Program, and the University of Nevada, Reno in cooperation with the Modoc Washoe Stewardship Program. While the work was being completed the authors were, respectively, graduate student and associate professor, Department of Range, Wildlife and Forestry, University of Nevada, Reno, 1000 Valley Road, Reno, NV 89512. N. Crystine Olson is currently a Range Conservationist on the Cannell Meadow and Greenhorn Districts of the Sequoia National Forest, P.O. Box 6, Kernville, CA 93238.

1. **Stranded Issues** (found in 16 of the 20 AMPs):
This occurs when the planning document identifies a resource issue, then fails to carry that issue into the AMP objectives, action plan, monitoring schedules and evaluation reports. The resource issue is identified as a problem and then left stranded. An example involved the identification of wild horses as a management problem on allotment. The technical report raised the issue, yet no other sections of the plan carry the idea forward. There was no definition of the problem, no corrective action suggested and no monitoring or evaluation prescribed.
2. **Isolated Objectives** (found in 3 of the 20 AMPs):
This occurs when management objectives do not derive from identified resource issues and when there is no carry-through of the objective into the action plan or monitoring/evaluation components. The objectives simply stand alone. An example of an isolated objective found in one AMP was "Reduce soil erosion to less than 2 tons/acre/year according to the Universal Soil Loss Equation." The technical report did not identify erosion as an issue on the allotment and the AMP contained no management action designed to reduce erosion nor a monitoring plan to evaluate erosion.
3. **Abandoned Objectives** (found in 8 of the 20 AMPs):
This occurs when the stated management objectives that derived from resource issues are not carried through into the action plan, the monitoring schedule or the evaluation reports. Abandoned objectives frequently surfaced when dealing with wildlife issues in the AMPs. Issues regarding critical winter or spring habitat for bighorn sheep, deer or antelope were stated and often vague management objectives, typically in the form of "maintain good condition habitat", were formulated. Thereafter the matter was usually dropped from the remaining planning components. No management actions were prescribed and no monitoring or evaluation suggested. Without such follow through it is impossible to draw any conclusions regarding management of wildlife habitat.
4. **Indirect or Surrogate Objectives** (found in 15 of the 20 AMPs):
This occurs when the stated management objective is indirectly related to the resource issue or is a surrogate to the real resource issue. Often the technical reports would identify poor distribution of livestock grazing on the allotments as a problem. Areas of excessive or insufficient forage use were the actual resource issue. The related management objectives were often statements about providing new watering sources on the allotment. While statements about water development touch on possible actions to solve the resource issue, the real problems were grazing use distribution. By jumping directly from poor livestock distribution to objectives about water, we not only obscure the real prob-

lem, but risk overlooking numerous other potential solutions to poor livestock distribution (i.e., riding, salting, drift fencing, season of use, class of livestock).

None of the twenty AMPs evaluated completely tracked all the identified resource issues through the model planning steps. Inconsistencies or breaks in the systematic flow of ideas through the planning documents were common.

Content and Organization

Aside from the problems of consistency and follow-through, review of the AMPs also revealed weaknesses related to organization and content. They are:

1. Actions as Goals, Objectives and Issues:

The most frequent problem involved the substitution of management action statements for land use goals, resource issues or management objectives (12 of the 20 AMPs). Actions are directive statements about how to accomplish something on the ground in terms of habitat requirements for an identified resource use, as opposed to descriptive statements about what uses should occur (goals), what problems exist (issues), and what these habitats should look like (objectives). Numerous land use goal and management objective statements were noted which detailed livestock stocking rates and turn-out dates, specified shrub control treatments, provided for allotment divisions or set grazing use levels. These action statements describe tools for achieving land use goals and management objectives but they certainly do not represent the goals or objectives. As action statements they are more logically part of the action plan within the AMP. The purpose of a resource objective is to give the managing agency a vegetative benchmark to attain or maintain. The objective should describe a particular plant community, not how to achieve that community.

2. Land Use Goals as Management Objectives:

Given their definitional similarity it is not surprising that land use goals and management objectives are often carbon copies of each other. Over half of the objective sections of these AMPs mimic the original goals laid out in the beginning of the planning process. Most often they were the same "God and motherhood" statements about improving or maintaining range condition, or providing habitat for "reasonable numbers" of certain wildlife species. Such statements are often mutually exclusive and provide little measurable management direction to the land manager, the resource user or the interested public. Using the habitat example, areas within an allotment suitable for a given species were rarely identified; seasonal habitat preferences were not delineated, and even the most general estimates of "reasonable numbers" of wildlife were not provided. Without a basic idea about these parameters any objective dealing with requirements for game species lacks direction, focus and measurability.

Range condition objectives also suffer from over generalization. Most of these statements blanket an allotment at large, if not the entire resource area. The usual statement of management objectives were "manage for good range condition" or "improve range condition on allotment." While these may be reassuring statements, they do not describe the desired habitats or plant communities which management seeks. Few people can argue with the good intentions inherent in such objectives, yet due to their unspecific nature it becomes impossible to track their success. Rarely did these generalized management objectives contain any time frame for accomplishment, or any assurance of being possible to achieve within site capability.

3. Monitoring and Evaluation:

Given the common problem of generalized management objectives in the AMPs, it was inevitable that problems would exist with monitoring and evaluation. Efficient trend monitoring and evaluation of management effectiveness was thwarted by poorly defined objectives. Most of the AMPs contained a creditable amount of annual event monitoring, i.e., information on growing conditions, actual grazing use by livestock, use by other grazers, use pattern maps and records of other events. Such information is essential for determining whether resource use actually occurred as prescribed in the plan and is needed for interpreting causal relationships for changes in the plant community. What was often missing but absolutely necessary for the evaluation of management effectiveness was the trend monitoring. While insufficiencies of trend monitoring in these AMPs may in part relate to recentness and partial implementation of most of these plans, poorly defined objectives were central to the problem.

Conclusions

A quality control assessment of twenty AMPs developed by the BLM and the Modoc-Washoe Stewardship Committee was recently completed. This study indicates that problems exist in the structure and content of these plans: resource issues were not consistently followed through, management objectives were vague, and the necessary feedback for determining management suc-

cess was inadequate. Poorly defined management objectives were central to most of these problems. Rarely did the AMPs contain any description of the type of habitat or vegetation that was needed to support the prescribed land uses (land use goals). Without such objectives, management actions and subsequent monitoring/evaluation lack focus. Realistic and measurable statements of those desired plant communities should be the focus of management.

Additional problems found in these AMPs relate to the lack of continuity in the flow of ideas through the plan. Too often the plan components did not sequentially tie together. Land management planning and the resultant plans, such as AMPs, involve several steps or components. Each component should relate to the others in a way that provides a consistent flow of ideas through the entire document. The planning model (Figure 1) illustrates this linkage. Land use goals and resource issues should be translated into realistic, measurable objectives describing the desired habitat from which management actions, monitoring and evaluation parameters can be derived.

In general there needs to be a sharper recognition of the separate functions and purposes of land use vs land management planning. Land use planning should be a public forum for prioritizing land use goals; land management planning should be the resource manager's determination of how to achieve those land use goals. The land management planning process needs to be more holistic in terms of integrating management planning for all resources on a given planning unit. Perhaps the product of land management planning should be a resource management plan rather than separate AMPs, habitat management plans and herd management plans, each dealing with coexisting resource uses on the same geographic area.

Literature Cited

- Burkhardt, J.W., and I. Hackett. 1987.** Monitoring Rangeland Grazing. University of Nevada, Reno, Cooperative Extension Fact Sheet 87-50.
- Lindzey, G., and E. Aronson. 1985.** Handbook of Social Psychology. Third Edition Random House Publishers. N.Y., p. 154-168.
- Swanson, S., and J.L. Artz. 1986.** Resolving issues with people, not for them. *Our American Land* (1) p. 114-117.