

Recent Developments in Administration of Federal Range Land

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TODAY as never before, public land administrators find themselves confronted with urgent though conflicting demands. They are faced with the need for increased livestock production to meet the growing demands of an increased population and to provide a margin of safety for national defense. Pressure for greater forage production is not the only land-use in demand. There has been a sharp increase in other uses of the public lands. And, to add to further complexity, there is an ever increasing requirement for better conservation on the public lands.

Before exploring possible solutions that may resolve the conflict of interests and pressing needs, let us take a closer look at the factors giving rise to these. An increase in our Nation's population of 10 million persons in the last decade, together with a high level of consumer prosperity, has resulted in an unprecedented demand for meat products. Of even greater significance to the range livestock producer is the marked increase in population of the Pacific Coast States, greatly improving local market outlets for his products. Some of the far western states that historically were large exporters of sheep and cattle are now deficit areas that must import substantial quantities of beef and lamb to meet domestic needs. The net result of this trend has been a constantly increasing demand for more and better range forage.

There is every reason to expect further increases in the demand for range forage. With the Nation's economy now shifting toward national defense, there is a de-

mand for increased use of Federal rangelands¹ on those areas where the carrying capacity exceeds the present use. Even as we face the need for greater forage, we must also realize the necessity to make downward adjustments to bring stocking within carrying capacities. Other adjustments will have to be made as they are needed if we are to avoid dangers inherent in overgrazing. The increased demand for forage is very real and very potent and must be met squarely to the limits of range productivity.

OTHER DEMANDS

What are the other demands for public land use? Of major importance is oil and gas leasing activity that is proceeding at record rates. The same is true of mineral exploration.

Of lesser total significance, but by no means unimportant locally, are the major withdrawals of public lands for national defense and other purposes. The withdrawal of over 400,000 acres for the Atomic Energy Commission in the Lost River Grazing District near Arco, Idaho, serves as an example. Parenthetically, this withdrawal illustrates the decentralized nature of Bureau of Land Management functions, since much of the negotiation leading to the withdrawal took place locally between the district range man-

¹ Reference to Federal rangelands is to land managed by the Bureau of Land Management in organized grazing districts or under Section 15 of the Taylor Grazing Act, and is to be differentiated from grazing lands managed by the Bureau of Indian Affairs, Forest Service, etc.

ager and local representatives of the Atomic Energy Commission.

Recreation and wildlife interests are also requesting increased consideration. More people, with higher per capita incomes, require and demand more land for outdoor recreation. They want more areas of land and more of the range carrying capacity set aside for these purposes. An appraisal of the watershed values of the public lands in the major drainage basins of the West by the President's Water Resources Policy Commission focuses attention on this form of land use. Preliminary recommendations of this Commission furthermore include adjustments in uses designed to promote greater watershed protection at the expense of forage utilization. Increased emphasis on woodland management for watershed protection may have a like effect.

With the public land administrator's time and facilities fully occupied as he attempts to keep pace with and meet some of the foregoing use demands, he is also under pressure to perform a better job of conservation on the public lands. The growth of public sentiment toward conservation in recent years is a national phenomenon. In the course of conducting nine regional public hearings during the past summer, the Water Resources Policy Commission took testimony from over 400 individuals whose knowledge of resource conservation amazed members of the Commission. This increased public awareness of conservation, including conservation on the public lands, is being translated into action through all types of organizations. Conservation groups are the most articulate but are no more forceful in their demands for action than are some of the other organizations. Congressional interest in conservation on the public lands is a matter of record.

RANGE IMPROVEMENT AND DEVELOPMENT

A partial solution to some of the foregoing conflicting demands lies in range development and improvement. If we are to provide multiple use of these lands . . . if we are to increase forage production so vital to national defense, the public range must be developed and used to its maximum sustained productive capacity consistent with holding the soil in place.

How can we realize our objectives? About 21 million acres of Federal rangeland are in need of revegetation. Half of this acreage, by virtue of soil quality and other factors, can be successfully reseeded. Based on present knowledge of reseeded ranges, this area, if reseeded, would add several million animal-unit-months to the total carrying capacity of Federal rangelands. This increased production on the public lands is of major import in these critical times.

What are other ways to increase production? We are convinced from careful study that a substantial increase in forage volume can be obtained by developing all potential water-spreading sites and by the use of moisture-conserving-structures. In the Northern Great Plains region, considerable progress is being made in water spreading development. Many persons are familiar with our soil and moisture projects. But to the uninitiated, let me point out briefly what is happening in some of these going projects. Perhaps the best known is the Alzada Water Spreading System, located on the headwaters of the Little Missouri River in the southeastern corner of Montana. As a result of moisture conservation, the initial 1,000 acres of the Alzada system, bordering on Thompson Creek, have increased over threefold in grazing values. Briefly, the system consists of a series of low dikes constructed to retard the runoff from the surrounding low hills and to spread the water over the

land. The velocity of the runoff is retarded sufficiently to enable deep percolation of the moisture which otherwise would be lost.

The system is dual purpose in that it prevents soil erosion and at the same time provides for flood irrigation of the land. The installation on Thompson Creek has proved so successful that systems like it have been constructed on several nearby drainages with the help of participating range users. An impartial appraisal of the Alzada system by a representative of the Federal Land Bank showed an annual net return of 13 percent on the original investment in structures.

In addition to water spreading projects, there are ample ways to increase the service area of the range through stock water developments on dry ranges. In some areas where surface water sources are lacking, ground-water studies are needed.

Reduction of competition from useless brush species on millions of acres of rangeland will increase forage production enormously.

Thousands of miles of fences are needed to control livestock distribution and exclude trespass animals—control measures which will ultimately increase grazing capacity of the lands.

In spite of natural limitations, by application of all the measures of which we have knowledge, it is *physically possible to increase total usable forage production in the West by as much as one-third of the present forage production of the public lands.*

In the final analysis, however, *costs* of range development must be consistent with expected returns. Some of the increase which is physically possible may be too costly to be economic, and hence will not be, or should not be, carried out. But with the increased demand for range forage, some costs can now be borne that would have been prohibitive in the past.

Nevertheless, every effort must be made to keep costs down if range development is to be sound.

How can we hold down costs at the same time that we increase production? One approach is in the improvement of present methods. Much remains to be done in perfecting range reseeding techniques, eradication and control of unpalatable and noxious vegetation, and in the construction of certain range improvements.

Another approach is in encouraging user participation in contributing labor, materials and funds to range improvement and development projects. User contributions to improvement and conservation programs on the Federal range in 1950, totalled over a million dollars or, roughly, the equivalent of about eight cents per animal-unit-month. This amounts to about 50 percent of the total cost of the improvements made on the Federal land. These expenditures are in addition to the regular grazing and range improvement fees paid by the range users, and are approximately equal to them. Additional contributions were offered and would have been forthcoming had public funds been available to initiate the work. Personnel in the Bureau of Land Management believe that sounder projects will be constructed, and that they will be better maintained, if the range user puts some of his own money into them.

While the demand for more forage can be met in part through the direct methods suggested, there is no simple approach to a reconciliation of multiple uses when conflicts arise. Multiple-use management on the ground calls for a high degree of managerial skill. Sometimes it is possible, by exercise of ingenuity and application of all known techniques, to give each applicant for public land substantially what he wants, without injury to others or to the basic resource. In other in-

stances, some choice between applicants and uses is unavoidable.

Maintaining harmony among several unrelated uses requires the exercise of carefully considered judgments and adherence to recognized principles of use priorities. Frequently a mutual understanding of interests and problems leads the way toward reconciliation. For instance, conflicts growing out of petroleum exploration have been disposed of in this manner. Seismographic crews have agreed to a code of ethics in the interest of the conservation of the range and the livestock owner.

The Federal Range Code makes provision for setting aside a sufficient carrying capacity to support a reasonable number of game animals. While the definition of "reasonable" may be open to controversy, it becomes an important measure when the welfare of the range user is at stake. In effectuating these provisions, joint meetings have been held by district advisory boards and representatives of wildlife agencies to determine allowable big game populations and kills, and to plan improvements resulting in mutual benefits for big game and livestock. Numerous cooperative agreements have been entered into with State wildlife agencies covering a wide range of wildlife conservation measures; such as management plans, big game transplants, water developments and withdrawals for specific game ranges.

The demands for more conservation on the public lands can only be met when sufficient funds are provided to carry out some of the approaches mentioned above and for conducting an expanded program of conservation treatment of the lands. Attention to conservation needs of the public lands is now receiving emphasis by such agencies as the Water Resources Policy Commission and the various river basin planning groups.

Regardless of the course of action selected, heavy reliance by the Bureau of Land Management will be placed on the district advisory boards for assistance in securing results.

ADVISORY BOARDS

¶ The district advisory boards occupy a key position in the administration of Federal rangelands and play a major role in effecting needed adjustments. They facilitate cooperation with the range users, which is so essential to the administration of large land areas with a limited staff.

District boards advise and make recommendations on the carrying capacity and seasons of use, applications for grazing licenses and permits, allotments of range by classes of livestock for community or individual use, applications by stockmen for permits to construct or maintain range improvements, range improvement and soil and moisture conservation projects, reservations of grazing capacity on Federal rangelands for wildlife use, and other management problems. They may also act on any matter which they wish to bring to the attention of the Secretary of the Interior or on which he may request their advice.

The advisory boards serve as a vast reservoir of range livestock experience, knowledge of the range, and practical judgment to be drawn upon for advice on range management matters. Invaluable service has been rendered in securing adjustments in range use. Some of these adjustments have been of major consequence but with the board's assistance, the number of appeals from reduction orders has been greatly reduced. In one Wyoming district a reduction of 50 percent in stocking was accomplished without a single appeal filed by the affected range users. Objections to the reduction were strenuous, which is to be expected,

but with the board's help general acceptance was obtained.

A further example illustrates how the advisory boards operate in actual practice. Of major importance, and a matter which received the consideration of all advisory boards, is the recently announced increase in grazing fees on Federal rangelands. The grazing fee question has been studied for some time, and since it was a subject of national scope, initial consideration of it was undertaken by the National Advisory Board Council. The Council adopted a resolution recommending an increase in grazing fees and stipulating the maximum amount. The resolution was referred to State and district boards for consideration and recommendation. The local boards were in a position to readily assess the sentiment of individual range users toward an increase in fees and to take into account all local aspects of the question before approving or disapproving the National Council's resolution. In this instance, approval of the resolution by state and district boards was almost unanimous. A complete canvass of state and district boards' recommendations was made as required by Section 18 of the Taylor Grazing Act.

Effective May 1, 1951, grazing fees for the 58 grazing districts in 10 Western States were increased from 6 cents to 10 cents per animal-unit-month. The present range improvement fee of 2 cents per animal-unit-month remains unchanged as an additional charge to the grazing fee. The increase in grazing fees based on recommendation made by the National Advisory Board Council, the state advisory boards and a preponderant majority of the district advisory boards representing range users in all of the grazing districts, is an example of democracy in action. It is an excellent and valuable example of the way Government and local land users through district advisory

boards can cooperate on a range program basic to national economy.

Another example of the functioning of district boards concerned a very knotty problem of reduction-in-use on the King-Hill Gooding Area of the Wood River Grazing District in southern Idaho. This area embraces several grazing units of common-use spring-fall range which is used by 135 operators. For a number of years the area has been seriously overgrazed and has been steadily going downhill. The district advisory board recommended that a reduction be made, and an action by the district range manager placed the recommendation into effect. The range manager's decision precipitated 74 appeals and a public hearing was held before a hearings examiner.

Prior to the hearing, a resurvey of the area was made which supported the contention that the area was deteriorating, and survey finds were introduced as evidence at the hearing. The hearing continued for a week during which testimony was taken from a large number of the appellants and interveners. The appeals, however, were denied, and livestock was ordered removed from the range by the recommended closing date. General compliance with the order was due largely to the efforts of the advisory board in securing an understanding of conservation needs among the operators.

With greater demands for the public lands, greater attention is focused on the pressing requirement for a wise program of coordinated use, conservation, and development of the lands. The outlook for achieving such a program—and of making it work—is very favorable. The Bureau of Land Management is ever alert to cooperate with farsighted range managers and range users to make every reasonable adjustment of public land uses—to the best interests of the American people.