LETTER
FROM
THE SECRETARY OF AGRICULTURE
TRANSMITTING
IN RESPONSE TO SENATE RESOLUTION NO. 289
A REPORT ON THE WESTERN RANGE—A GREAT BUT NEGLECTED NATURAL RESOURCE

DEPARTMENT OF AGRICULTURE,
Washington, April 28, 1936

The President of the United States Senate,

Sir: In compliance with the request in Senate Resolution 289 (74th Cong.; 2d sess.), introduced by Senator Norris, I have the honor to submit herewith a report on the range problem of the western United States prepared by the Forest Service of this Department.

The resolution reads:

Whereas large parts of the western range have been subject to unrestricted use since settlement and are commonly believed to be more or less seriously depleted; and
Whereas the range resource constitutes one of the major sources of wealth to the Nation; and
Whereas the Department of Agriculture has through many years of research accumulated a large amount of information on the original and present condition of the range resource, the factors which have led to the present condition, and the social and economic importance of the range and its conservation to the West and to the entire United States; Therefore be it

Resolved, That the Secretary of Agriculture be, and hereby is, requested to transmit to the Senate at its earliest convenience a report incorporating this information, together with recommendations as to constructive measures.

In transmitting this report I shall resist the temptation, despite my great personal interest in the range question, to comment at length on its findings and recommendations, and instead merely emphasize three of the most important phases of the discussion.

1. The first of these is the astonishing degree to which the western range resource has been neglected, despite its magnitude and importance.

One indication of this neglect is the lack of public knowledge. The general public knows less of the range resource, and as a result has been and is less concerned about its condition and conservation than of any other of our important natural resources. This is true in spite of the fact that the range occupies about two-fifths of the total land area of the United States and three-fourths of that of the range country; that the range territory produces about 75 percent of the national output of wool and mohair, and in pounds about 55 percent of the sheep and lambs, and nearly one-third of the cattle and calves. In fact, this report represents the first attempt, although much of the range has been grazed for 50 years at least, to make an all-inclusive survey of the range resource, its original and present condition, the causes and effects of changes, the social and economic function which it does and should render to the West and to the Nation, and, finally, to outline practical solutions for at least the more important problems.
The entire history of public-land disposal under both Federal and
State laws reflects this neglect. These laws have with few excep-
tions been framed and administered without regard to range condi-
tions and requirements. The result is an ownership pattern so com-
plex that satisfactory handling of the range is seriously handicapped.
In this pattern is intermingled an enormous area that all of the
available information indicates is submarginal for private ownership.
Further evidence of neglect is failure to regulate the use of range
lands in such a way as to maintain the resource. This failure has
been so general under all classes of ownership that in contrast ex-
amples of good management are decidedly conspicuous. The result
is serious and practically universal soil and desertion, which
already has gone far toward the creation of a permanent desert over
enormous areas. An even more serious result has been an appalling
waste of the human resource. And three-fourths of the range area
is still on the downgrade.

The commonly accepted theory that private ownership in itself is
enough of an incentive to insure the satisfactory handling of range
lands has proved to be true only in the case of exceptional ranches.
State range lands have been leased without provision for the man-
agement of the resource or its perpetuation. Federal holdings are
scattered among many bureaus in several departments. The national
forests, which afford an example of large-scale range conserva-
tion, are administered by the Department of Agriculture. The grazing
districts, which are only now being placed under administration after
a half century or more of neglect, and the public domain, which is still
subject to unrestricted use, fall under the Department of the Interior.
These three classes of land make up the bulk of Federal holdings.
Neglect is further shown by the meager scale of research by both the
Federal and State Governments. A reasonable program of research
might have prevented such serious mistakes and maladjustments.
Extension to carry research findings in better range practices to pri-
vate owners has been practically nonexistent.

The second phase of the situation to which I wish to call atten-
tion is the fundamental character both of the range resource and of
its use.

They have to do with land; with the production on that land of
forage crops, with the utilization of the crops in livestock and, in a
lesser degree, wildlife production; with the management of land and
its forage cover to obtain watershed protection and the services needed
primarily by agriculture for irrigation. Effectiveness in all of these
depends upon the biological and agricultural sciences. In short, they are a part, and in the West one of the most important
parts, of agriculture.

Furthermore, through the free play of economic forces, range live-
stock production—once almost wholly an independent pastoral enter-
prise—and cropland agriculture have become closely integrated, in-
separable parts of the agricultural structure of the West. Except for
specialty farms, a high percentage of the hundreds of thousands of
western farm or ranch units represent widely varying combinations
of range and crop agriculture. More than one-third of the feed for
range livestock now comes from croplands or irrigated pastures.
Problems of one part have become problems of both. Major malad-
justments in either—of which there are far too many—now inevitably
affect the other. No comprehensive program can be prepared for
either which does not take the other definitely into account.

3. The third phase of the range situation to which I wish to call
attention is a limited number of remedial measures of outstanding
importance among the many that are required. The range problem
as a whole has been allowed to drift for so long that its difficulties
have been accentuated. It has become exceedingly broad and com-
plex, beginning with the basic soil resource at the one extreme, and
extending through a wide range of overlapping interrelated problems
to human welfare at the other. No single measure offers hope of
more than a partial solution.

One of the most important of the measures required is to place all
range lands under management that will stop depletion and restore
thereafter maintain the resource in perpetuity, while at the same
time permitting its use. This will involve many difficult operations
such, for example, as drastic reductions of stock on overgrazed ranges.
It will involve various forms of use such as livestock grazing, watersh
services, wildlife production, etc., which should be so correlated as
to obtain the maximum private and public benefits.

A second line of action involves the return to public ownership of
lands so low in productivity, or so seriously devastated, or requiring
such large expenditures to protect high public values, that private
owners can hold them only at a loss. Closely related are a far-reaching
series of adjustments in size of ownership units to make both
private and public ownership feasible and effective, each in its proper
sphere.

A third line of action is to put jurisdiction over privately owned
range lands on a sound basis. Unquestionably the only plan which
can be defended is to concentrate responsibility for the administration
of Federal lands in a single department to avoid unnecessary duplica-
tions, excessive expenditures, and fundamental differences in policies,
and to obtain the highest efficiency in administration and the maxi-
mum of service to users. Since the administration of the range
resource and its use is agriculture, and since the administration of
federally owned ranges can and should be used as an affirmative means
in the rehabilitation of western agriculture, the grazing districts and
the public domain should be transferred to the Department of A
griculture.

Furthermore, the concentration of jurisdiction over federally owned
range lands is a vitally important step toward the concentration in a
single department of the still more inclusive functions, including aid
and services to private owners of range lands, which should be exer-
cised by the Federal Government on the entire range problem. Such
a concentration is a fundamental principle of good organization if
the Federal Government is to redeem its full responsibility in the
restoration and care of this much-neglected resource.

The States have similar jurisdictional problems which demand
attention.

A fourth measure which should be emphasized is the wide scope
of research necessary to put range use for all purposes on a sound
footing. Closely related is extension, which will carry the informa-
tion obtained to the private owner and help him constructively in its
application.
With these and other recommendations of the Forest Service, I am in general accord, and I hope that in carrying them out there need not be too serious a delay, since further delay will merely serve to accentuate difficulties and increase costs.

The solution of the range problem can be made an important contribution to the conservation of our natural resources. It can be made an important contribution to the rehabilitation of western agriculture. Finally, and most important, it can be made an important contribution to social and economic security and human welfare. Public neglect is partly responsible for the aggravated character of the range problem, and this makes all the more urgent and necessary public action toward its solution.

Respectfully,

H. A. WALLACE, Secretary.

UNITED STATES DEPARTMENT OF AGRICULTURE,
FOREST SERVICE,
WASHINGTON, April 28, 1936.

The Secretary of Agriculture.

DEAR MR. SECRETARY: I am transmitting herewith the report requested in Senate Resolution 289. This incorporates information obtained by many years of research on the range and watershed problems, by special surveys which have been made during several years, and by 80 years' administration of the national forests. It includes the pertinent information now available in the Forest Service and that which could be obtained from other Federal and State agencies. It necessarily has the limitations inherent in the first attempt to treat the range resource as a whole, but it is believed that its findings are essentially sound.

One of the primary reasons for the neglect, and hence the serious deploration of the range resource and a series of major maladjustments in land use, has been a division of responsibility among public agencies. No one Federal agency has been responsible for an all-inclusive, affirmative handling of the entire range problem. A similar situation obtains for every western State in which the range is an important factor.

If the Federal Government is to redeem its responsibilities, one of the first and most important needs is, therefore, the concentration of responsibility in a single Federal department. This should include responsibility for whatever additional and feasible action is required to put privately owned range lands in a satisfactory status. Such concentration affords the only effective way to stop the depletion of range under way for 50 years, and to start them on the upgrade. Furthermore, such concentration affords the only effective means to integrate range use soundly with the other forms of western agriculture of which it is an essential part. Since the problem is wholly agricultural, concentration must be in the Department of Agriculture.

To redeem their obligations, the States must face and meet similar problems of jurisdiction and responsibility.

Sincerely yours,

F. A. SILcox,
Chief, Forest Service.
13. Unsuitable land laws and policies have made the range a bewildering mosaic of different kinds of ownerships and of uneconomic units, which together constitute a serious obstacle to range management and profitable livestock production.

14. Range livestock production was once almost wholly pastoral. Thirty-five percent of the feed for western livestock is now supplemental feeds raised on croplands or irrigated pastures—a threefold increase in 45 years. Except for highly specialized crop farming, mostly on irrigated land, western agriculture is now primarily an integration of range livestock grazing and crop farming.

15. Excluding irrigation improvements, the 1930 census values farm lands and buildings, privately owned range lands, and farm and range livestock, etc., at nearly 12.9 billion dollars.

16. Most spectacular among the maladjustments of range-land use has been the attempt to use more than 50 million acres for dry-land farming. About half, ruined for forage production for years to come, has already been abandoned for cultivation, much of it even before going to patent.

17. A more serious but much less spectacular maladjustment has been the private acquisition of many million acres, either submarginal for private ownership as shown by high tax delinquency and relief rolls, abandonment, etc., or having high public values for watershed protection which private owners cannot maintain, or both.

18. Four-fifths of the 282 million acres which yield 85 percent of the water of the major western streams is range land, and low precipitation makes water the limiting factor in nearly all western development.

19. No less than 589 million acres of range land is eroding more or less seriously, reducing soil productivity and impairing watershed services. Three-fifths of this area is added to the silt load of major western streams.

20. It will probably require more than 50 years of management to restore the depleted range sufficiently to carry even the 17.3 million livestock units now grazed, and probably an additional 50 years to restore it to the nearest possible approach to its original grazing capacity of 22.5 million units.

21. Action of greatest immediate urgency and importance is to—
   Stop soil and forage depletion, and start both on the upgrade;
   Reduce excessive stocking, place all range lands under management, and restore cheap range feed;
   Rectify land ownership and use maladjustments, and obtain a sound distribution of ownership between private and public agencies;
   Build up economic private and public units;
   Balance and integrate crop and range use;
   Correlate the livestock, watershed, forest, wildlife, and recreation forms of range-land uses and services;
   Obtain a recognition of the responsibility of stewardship by private owners;
   Minimize or remove various financial handicaps of stock producers;
ACKNOWLEDGMENT

The preparation of this report has largely been a group effort in which a large number of Forest Service employees have participated. Authorship credited under the various titles only partially indicates the contribution made by these authors, who for the most part have also given a large amount of time and effort to the technical review and constructive criticism of sections other than their own.

The following employees whose names do not appear as authors contributed in such ways as the compilation of data and the preparation of material for the report, or in the critical review of manuscripts, or in an advisory capacity:


A still larger group at the western forest and range experiment stations, regional offices, and on the national forests has over a period of several years collected the large volume of data which has constituted the main basis for the report.

In addition, a considerable number of Government units, both within and without the Department of Agriculture, have cooperated generously in supplying needed information; among these, acknowledgment is due especially to the Agricultural Adjustment Administration, the Bureau of Agricultural Economics, the Bureau of Biological Survey, the Farm Credit Administration, the Rural Resettlement Administration, the Weather Bureau, and the Bureau of the Census. The ready cooperation of the State agricultural experiment stations in a number of the Western States was also of great assistance.
Principles of Rest-Rotation Grazing and Multiple-Use Land Management

INTRODUCTION

About 728 million acres of wildland west of a line south from Canada through North and South Dakota, Nebraska, Kansas, Oklahoma, and Texas make up what is commonly called the western range. Grazing management is discussed in this publication in relation to ranges in this area.

The western range is semiarid. Annual precipitation averages about 15 inches for the entire area. But in some localities, it averages less than 5 inches; in others, more than 60 inches. In some areas precipitation falls mainly in winter and in others mainly in summer; generally, winters are cold and snowy, summers are warm and dry. Topography varies from gentle, nearly flat to rough mountainous. Livestock ranges extend from sea level to altitudes of 12,000 feet.

This range area is covered by grassland, shrub, and tree types (table 1). The vegetation consists mainly of perennial plants, although annuals are abundant in some places. The vegetation provides excellent forage for livestock and also food and cover for a variety of wildlife, including such big game as deer, elk, and antelope. Cattle and sheep are the principal kinds of livestock grazed. The land also yields water, timber, recreation, and other values all of great importance to the people of the country. Sustained high-level production of these many values is vital to the Nation.

<table>
<thead>
<tr>
<th>Type</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tall grass</td>
<td>18,513,000</td>
<td>2.5</td>
</tr>
<tr>
<td>Short grass</td>
<td>196,092,000</td>
<td>27.2</td>
</tr>
<tr>
<td>Pacific bunchgrass</td>
<td>42,534,000</td>
<td>5.8</td>
</tr>
<tr>
<td>Semidesert grass</td>
<td>89,274,000</td>
<td>12.3</td>
</tr>
<tr>
<td>Sagebrush grass</td>
<td>96,528,000</td>
<td>13.3</td>
</tr>
<tr>
<td>Southern desert shrub</td>
<td>26,896,000</td>
<td>3.7</td>
</tr>
<tr>
<td>Salt-desert shrub</td>
<td>40,859,000</td>
<td>5.6</td>
</tr>
<tr>
<td>Pinon-juniper</td>
<td>75,728,000</td>
<td>10.4</td>
</tr>
<tr>
<td>Woodland-chaparral</td>
<td>13,406,000</td>
<td>1.8</td>
</tr>
<tr>
<td>Open forest</td>
<td>126,367,000</td>
<td>17.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>728,196,000</td>
<td>100.0</td>
</tr>
</tbody>
</table>


* Does not include dense forest, barren or inaccessible areas, or areas from which livestock grazing is excluded, such as national parks, military reservations, and municipal reservoir sites.
About half the range area is privately owned (table 2). About 7 percent is Indian land. The rest is publicly owned and administered by Federal, state, county, and municipal agencies.

The Forest Service and Bureau of Land Management administer about 29 percent of the total rangeland acreage—the former about 88 million acres and the latter about 128 million acres. The management goals of these agencies are prescribed by law: Public Law 86–517, June 12, 1960, guides the Forest Service, and Public Law 88–607, September 19, 1964, the Bureau of Land Management. The essence of these laws, commonly called multiple-use laws, is expressed in the following excerpts:

Lands shall be administered for livestock grazing, timber, watershed, wildlife, fish and recreation purposes, and for preservation of public values under principles of multiple use and sustained yield production.

Multiple-use means: Management of all the various renewable surface resources of the land so that they are utilized in the combination that will best meet the needs of the American people—with consideration being given to the relative values of the various resources and not necessarily the combination of uses that will give the greatest dollar return or the greatest unit output.

Sustained yield of the several products and services means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the land without impairment of the productivity of the land.

Thus, the management objectives of these two agencies are sustained, high-level, regular, periodic output of the various renewable resources of the land. These are desirable objectives on all rangelands whether privately or publicly owned.

Much of the western range, however, has been deteriorated in the past hundred years. The productivity of the land has been reduced by both livestock and big-game grazing, fires, insects, rodents, plant diseases, weather, and a host of man’s activities. Many desirable plants have been killed out

<table>
<thead>
<tr>
<th>Table 2.—Ownership of western rangelands¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership or control</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>Private</td>
</tr>
<tr>
<td>Indian</td>
</tr>
<tr>
<td>Federal:</td>
</tr>
<tr>
<td>National Forests (Forest Service)</td>
</tr>
<tr>
<td>Public domain (Bureau of Land Management)</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>State, county, and other</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

and replaced by inferior ones. The plant cover has been thinned in most places, causing erosion and loss of soil fertility. It is estimated that grazing capacity for livestock has been reduced by half or more. Heavy stocking and long seasons of use by livestock year after year have been major factors in deterioration of the range.

Management must recognize that all renewable rangeland values stem directly or indirectly from vegetation. Sustained high-level production of these values therefore depends on proper management of the vegetation. The principal tool the rangeland manager has for managing vegetation is livestock grazing. It is the only force under firm control of the manager that can be applied on practically the entire range area.

Livestock grazing is desirable, if not essential, on rangelands for several reasons. A large portion of the vegetation on rangelands can be converted to more useful products only by livestock. As the Nation’s population grows, an increasingly greater portion of its meat supply will have to be produced on rangelands. Arable lands will be used more and more to produce grain, vegetable, and fruit crops for human consumption. Furthermore, desirable vegetation and the overall productive capacity of rangelands can be increased more rapidly with livestock grazing than without. Livestock can be used to perform many important functions that can be achieved no other way over the entire or major portion of the range. They can be used to trample seed into the soil thereby promoting more forage and a better soil cover; to remove stifling old growth on plants, thus increasing plant vigor and production of usable herbage; to stimulate adventitious growth and higher quality forage; and to reduce fire hazard.

The biological facts for development of sound grazing methods have been known for a long time. As far back as 1914, A. W. Sampson outlined many principles of good grazing management. However, relatively little use has been made of these facts and principles. Reluctance to relinquish certain established ideas on management, even though proved ineffective in practice, has been a major deterrent to the development and use of better grazing methods.

Much of this publication is devoted to a review of some of the more important facts on which good grazing management is based. The use of this information in formulating effective grazing methods is described.
The management of range and also of forest lands is agriculture pure and simple. It deals with the soil, the interrelation of soil and plant cover, water and climate, with plants and animals, the diseases and insects affecting both, with the maintenance of biological balances between plant and animal life, with the growing and harvesting or utilization of crops, in fact, with all of the "problems relating to the growth from the soil." It deals with the economic and social as well as the biological problems of land use in all of their phases. It must rest upon the biological and economic sciences which have to do with soil, water, climate, plants, animals, and land.

The forage on public ranges is used by livestock from the farms and ranches, which are fed increasingly on farm forage crops. Western crops are largely dependent on irrigation water from forest and range watersheds. The use of the public range and forest land and private range and farm land is interrelated in innumerable other ways.

The Department of Agriculture, as one of its major projects, is attempting to meet the Federal obligation to help agriculture develop a sound program. In this undertaking the problems of the public range and forest lands cannot be separated from those of other range and crop lands.

Nearly all the Federal bureaus charged with research and administration relating directly and vitally to forestry and range management and to the development of a land-use program are in the Department of Agriculture (fig. 84). It is the duly constituted and authorized Federal agency for dealing with the agriculturist. It works in close cooperation with the State agricultural colleges, experiment stations, and extension services.

The Department of Agriculture is, therefore, the logical and, in fact, the only well-equipped department for the administration of federally owned range and forest lands.

**PRINCIPLES OF ADMINISTRATION**

The principles which should govern the administration of all federally owned range lands, whether on the national forests or the grazing districts, including the public domain and other Federal withdrawals and reservations, are:

1. Management which will restore and maintain in perpetuity on a sustained yield basis, and utilize, all of the resources of the land.
2. The correlated use of all the resources to obtain the highest net public benefits.
3. The integration of the public-range resources with privately owned crop and range lands to obtain the highest benefits from all of the lands locally, regionally, and nationally.
4. An equitable distribution of the grazing privilege, based on the highest net public benefits, to those who are dependent upon and are entitled to use the range.
5. Readjustments of land ownership and use where needed and justified to facilitate economical and efficient management and administration of public range lands.
6. A decentralized administration qualified to settle local problems in accordance with local requirements, and responsive to the advice.
The Tulead-Home Camp Area is being managed on a multiple-use sustained yield basis so the proposed action will be applied in this context. The terms multiple-use and sustained yield have not been entirely clear to many nor how the concepts were applied in practice.

The terms were defined and brought into common usage by the Forest Service in connection with management of the national forests practically from the time the national forests were established. They were defined somewhat formally in Public Law 86-517 of June 12, 1960, an act to authorize and direct that the national forests be managed under principles of multiple use and sustained yield.

(a) "Multiple use" means: "The management of all the various renewable surface resources of the national forests so that they are utilized in the combination that will best meet the needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; that some land will be used for less than all of the resources; and harmonious and coordinated management of the various resources, each with the other, without impairment of the productivity of the land, with consideration being given to the relative values of the various resources, and not necessarily the combination or uses that will give the greatest dollar return or the greatest unit output.

(b) "Sustained yield of the several products and services" means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the national forests without impairment of the productivity of the land."

The Taylor Grazing Act of 1934 conferred broad power upon the Department of the Interior (and the Bureau) for multiple-use management of natural resources. A more specific charger for the Bureau was enacted by Congress in 1976 in the form of "The Federal Land Policy and Management Act, Public Law 94-579. The terms multiple-use and sustained yield were defined in this act in essentially the same way as in the national forest multiple-use act. Since its formation the Bureau has been practicing multiple-use management as described here.
Some twenty-four years earlier in 1936 the Forest Service explained in some detail how these concepts were being viewed and applied on the ground and with particular reference to management of livestock grazing (199).

"The national forests contain a variety of resources or values, including timber, water, range forage, game, fishing, and recreation. Rarely is there an instance where two or more of these values are not associated on any given tract of land. Some one may be dominant but others are nearly always present in an amount sufficient to require consideration in land management. This association of resources injects the necessity for "multiple use" management—or management which will yield the highest social and economic benefit from all of the resources combined. Accomplishment of multiple use is one of the important objectives of national-forest land management. Obviously its attainment involves due consideration for local and present-day needs, as well as long-range planning to meet the future requirements."

"Ordinarily multiple use has been accompanied with only minor sacrifices in the use of any one resource. Exclusion of other uses is unnecessary and undesirable except where the highest public good can be attained in no other manner."

"One of the chief requirements in multiple-use management has been to foresee the needs and gradually adjust the various uses to meet them. Livestock seldom can be removed on short notice without sacrifice by the dependent user. However, sudden adjustments have rarely been necessary."

"The administration of the national forests provides for the following:

1. Conservation and use.—Perpetuation of all of the resources through wise use, protection, and development.
2. Multiple use.—Correlation in management and use of the different resources in order to obtain the highest net benefits from the combined resources of the land.
3. Equal opportunity.—Protection of the settler and home builder against monopoly and unfair competition in the use of resources.
4. Integration with agriculture.—Relating the use of range and other resources on the national forests to farm-grown forage crops, range, and other agricultural resources in a manner to obtain the highest benefits from the several classes of land.
5. Stability of use.—Safeguarding livestock agriculture by affording maximum stability in the use of the range resources, consistent with the objectives of the national forests.
6. Cooperation with users.—Provision for livestock growers, other users, and local governments to have advisory voice in the administration of the national forests which they use.
7. Local administration.—A businesslike, decentralized, and technical administration designed and organized to settle local problems according to local conditions without delay."
21. Action of greatest immediate urgency and importance is to—
Stop soil and forage depletion, and start both on the upgrade;
Reduce excessive stocking, place all range lands under manage-ment, and restore cheap range feed;
Rectify land ownership and use maladjustments, and obtain a sound distribution of ownership between private and public agencies;
Build up economic private and public units;
Balance and integrate crop and range use;
Correlate the livestock, watershed, forest, wildlife, and recreation forms of range-land uses and services;
Obtain a recognition of the responsibility of stewardship by private owners;
Minimize or remove various financial handicaps of stock pro-
ducers;
"Under national-forest policy, users are entitled to exercise freedom in the use of the national forests in accordance with the established rules and regulations, and to be heard on all matters affecting their own or the public welfare. Through the free exchange of ideas most problems are harmoniously settled on the ground."

In order further to facilitate dealing with various local problems, the organization of national-forest users into associations is officially recognized and encouraged.

"Range users, however, are usually outnumbered by others interested in watershed protection, recreation, wildlife, timber, mineral development, and a variety of minor uses, upon which a substantial part of the support of many communities is dependent. The people so involved are as fully entitled to a voice in national-forest administration as are the stockgrowers. Recognition of these interests is also provided for in the national-forest regulations. Counsel and assistance are also invited from city, county, and State governments concerned either directly or indirectly with national-forest administration.

With so many interests involved it becomes the task of the Forest Service, as the public agency concerned, to harmonize conflicts and arbitrate differences between groups or individuals. The Forest Service also has the duty and the responsibility to protect the public interest whenever there is difference of opinion regarding established national-forest policy. Many of the latter cases arise out of the inclination of some users to disregard the requirements for range conservation in order to satisfy their immediate needs. In such instances the Forest Service proceeds on the basis of the best information available and, with due consideration of all the circumstances, adopts the procedure which will lead in the direction of the "greatest good to the greatest number in the long run."

It is the aim of the Forest Service always to settle locally all matters submitted for consideration. However, appeal may be taken successively from the decision of the forest ranger, forest supervisor, regional forester, and Chief of the Forest Service to the Secretary of Agriculture, with whom final regulatory authority rests."

"The first regulations incorporating these basic policies were put into effect on July 1, 1905, except for an advisory voice, which came later. The regulations have been modified from time to time to meet new conditions, for clarification of purpose, and for better definition of their application."
REST-ROTATION GRAZING AND MULTIPLE-USE MANAGEMENT

Rest-rotation grazing and multiple-use

With rest-rotation management of livestock grazing the basis of renewable resources production, vegetation, is improved and maintained. The purpose of rest-rotation grazing management, periodic resting of vegetation from use - is simply that, to maintain the vegetation. Rest-rotation grazing plays no further role in multiple-use management.

Allocation of the vegetation to various land uses and values is a management decision and the responsibility of the land manager. He ultimately has to decide the most equitable apportionment of the vegetation in the best interest of the environment and the public. For example, as a representative of the public he must decide on the amount of vegetation that will be given to livestock production and the amount that will be given to big game production and this in terms of numbers of livestock and numbers of big game. Allocation is made to wildlife and other values under rest-rotation grazing as under any other grazing system namely by regulating stocking rate, season of grazing, kind of livestock and livestock distribution or by fencing from use.

With a rest-rotation grazing system a substantial portion, a third or more of the vegetation produced each year, is already fenced off from livestock grazing and is available for other uses.

Multiple-use management of wildland is best carried out on the basis of management plans prepared cooperatively by the various public
and private wildland interests. Such plans have been prepared for each of the grazing allotments on the Tuledad-Home Camp Project Area and provide the basis for the present environmental statement.