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LAND of the FREE



CONSERVATION BULLETIN

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Oscar L. Chapman, Secretary of the Interior





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UNITED STATES DEPARTMENT OF THE INTERIOR

Oscar L. Chapman, Secretary

BUREAU OF LAND MANAGEMENT

Marion Clawson, Director

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Introduction

We, the people of the United States, have a vested interest in approximately 500 million acres of public lands, located in 26 States and the Territory of Alaska. The Bureau of Land Management of the Department of the Interior manages these lands for us.

At its greatest extent—totaling 1,807,749,120 acres—the public domain included the land which became Florida, Alabama, and Mississippi and all of the States north and west of the Ohio and Mississippi Rivers, except Texas. In other words, all the States and Alaska, except the Thirteen Original States, and the States of Kentucky, Maine, Vermont, West Virginia, Tennessee, and Texas are called the public land States.

Today the area of vacant Federal land in the States has shrunk to 170,000,000 acres of which 142,000,000 acres are within grazing districts and 28,000,000 acres lie outside of districts. Vacant lands in Alaska amount to 270 million acres. The total area of public lands within grazing districts, including lands administered under agreement and Pierce Act leases totals 156,000,000 acres and is sometimes known as the Federal range. Together, the Federal range and vacant lands in the West are commonly referred to as the public range. Including 2,600,000 acres of forest land in the Oregon and California Railroad and Coos Bay Wagon Road revested land grants and other miscellaneous tracts, the Bureau of Land Mañagement is responsible for the management of a total of more than 185 million acres in the United States and 290 million acres of land in Alaska.

The total area of land under the jurisdiction of the Bureau is equal to one-fourth the area of continental United States and is exclusive of land in National Forests, National Parks and Monuments, and most other tracts of Federal land reserved for the armed services and other public agencies.

This booklet, issued as Conservation Bulletin No. 40 of the Department of the Interior, gives basic information on the people's unreserved acres and the conservation programs that are essential to develop and maintain our land heritage for this and future generations.

BRIEF HISTORY OF THE BUREAU OF LAND MANAGEMENT

Formed July 16, 1946, by consolidation of the General Land Office (1812) and the Grazing Service (1934) the Bureau of Land Management, this year, 1951, marks its fifth anniversary as a Federal agency.

The economy of the country is linked very closely to the wise administration of our public lands. We have progressed from a period of wholesale disposal of vast acres of public lands to one of selective disposal and proper management of the rest of the land in the people's interest.

The history of the public domain and the evolution of the laws which Congress has passed to govern it is a history of the development of the country. From a study of the period of the late 18th century, when the Nation first began to acquire the public domain to the present period of conservation management, we learn about the increasing importance of natural resources in the strengthening of our national defense and in the continuation of our individual prosperity.

Major landmarks in the history of the Bureau of Land Management and its predecessors are a helpful guide in tracing the pattern of settlement of a free nation. Some of these landmarks are:

- 1785—Establishment of the system of rectangular land surveys, which provided land descriptions essential to the orderly settlement of the country and to the maintenance of present land titles.
- 1800—Creation in Ohio of the first District Land Offices for direct service to the people.
- 1812—Establishment of the General Land Office in the Treasury Department.
- 1820—Inauguration of the general system of sales of public lands in small parcels with a low minimum price of \$1.25 per acre.
- 1849—Transfer of the General Land Office from the Treasury Department to the Department of the Interior.
- 1862—Enactment of the Free Homestead Act.
- 1872—Creation of Yellowstone Park, the first great national reservation.
- 1872—Enactment of the General Mining Law.
- 1891—Establishment of the principle of continued Federal ownership of forest lands as forest reserves, generally recognized as one of the big, early, forward steps in American forestry.
- 1902—Beginning of Federal irrigation development programs.
- 1914—Reservation of oil, gas, phosphate, etc. to the United States in patents.
- 1916—Enactment of the Stock-Raising Homestead Act which included the reservation of all minerals in stockraising homestead patents.
- 1920—Enactment of a leasing act for public fuel and fertilier minerals.
- 1934—Conservation of the unreserved public domain authorized by the Taylor Grazing Act. Grazing Service created to manage grazing districts, to conserve the land, and help stabilize the dependent livestock industry. General Land Office authorized to undertake



The development of water on arid ranges is an important part of the range improvement program conducted by the Bureau of Land Management, under authority of the Taylor Grazing Act. This structure, in Colorado, is typical of those which make possible most advantageous seasonal use of the Federal range.

selective disposal of the public lands through classification of the unreserved lands in the States according to their proper use, and the leasing of these lands for grazing purposes pending their disposition.

- 1937—The General Land Office authorized to manage the Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands in western Oregon on a sustained-yield forest management basis. This was the first time in the history of American forestry that such a plan had been authorized for a specific Federal forest property.
- 1940—Grazing Service and General Land Office authorized to undertake soil and moisture conservation operations on their lands.
- 1944—Sustained-yield Forest Act enacted to apply to Interior Department forest lands (in addition to O and C lands) as well as national forests.
- 1946—Bureau of Land Management organized for unified management of the unreserved public domain.

A BLM CHART, Highlights in the History of the Public Domain, shows these and additional landmarks in the history of the public domain. Copies of the chart and explanatory pamphlets, Brief Notes on the Public Domain, and Graphic Notes on the Public Domain, may be obtained by writing the Bureau of Land Management, Department of the Interior, Washington 25, D. C.

BLM

an income-producing agency

Through consolidation of two Interior agencies, the General Land Office and the Grazing Service, the Bureau of Land Management assumed the responsibility for revenue-producing activities such as administration of minerals, and the management of timber and grazing lands, as well as the rendering of many free services to the people.

Receipts during the first 4 years of BLM administration totaled about 125 million dollars. Of this amount more than 50 million dollars were transferred to the Bureau of Reclamation for investment in dams and other land development projects in the West. Almost 50 million dollars were paid to States and counties for use of schools, roads, and other local purposes. Part of the remaining amount, when appropriated, was used for improvement of grazing lands and the balance was deposited in the miscellaneous funds of the Treasury.

During the fiscal year 1950 alone, income from Bureau of Land Management sources amounted to \$36,177,349 as compared to its appropriation of \$5,939,187—representing a ratio of over 6 dollars return for every 1 dollar appropriated.

A table comparing receipts and appropriations over a 10-year period follows:

Year	Receipts	Appropriations
1941	\$8, 654, 796. 56 9, 914, 134. 99 10, 543, 207. 25 15, 168, 693. 69 14, 147, 035. 24 13, 840, 333. 83 21, 012, 154. 34 33, 286, 434. 23 37, 149, 433. 89 36, 177, 349. 42	\$2, 962, 841 2, 983, 958 3, 411, 957 3, 526, 818 3, 636, 241 4, 124, 622 4, 398, 804 4, 540, 677 4, 917, 500 5, 939, 187

In addition to being one of Uncle Sam's revenue-producing agencies, BLM also provides low-cost or free services in relation to the public domain in the form of cadastral engineering surveys, compilation of plats of surveys, supplying information about land titles, as well as disposing of tracts of land under the homestead, mining, and other land laws.

Major Conservation Objectives

This agency is making rapid strides in the application of sound conservation practices on the public lands. Protection of wildlife, soil, and moisture conservation to guard the lands and prevent flood and erosion, are all a part of BLM's job under the Taylor Grazing Act of 1934, and the National Soil Conservation Act of 1935.

It has been pointed out that wise stewardship of America's public lands is essential to the protection of the Nation's resources, since both the public lands and neighboring private lands suffer when the public lands are neglected.

The following major conservation objectives are earmarked in the Bureau's priority list:

1. A program of soil and moisture conservation, particularly on the more important watershed lands, which will

preserve their productivity and curtail harmful erosion.

- 2. A program of management of renewable surface resources, such as timber and forage, in order to obtain maximum benefit from such resources.
- 3. A more efficient and simplified administration of publicly owned natural resources.
- 4. Settlement and wise use of land in Alaska.
- 5. Protection of public resources from fire and other destructive agents.

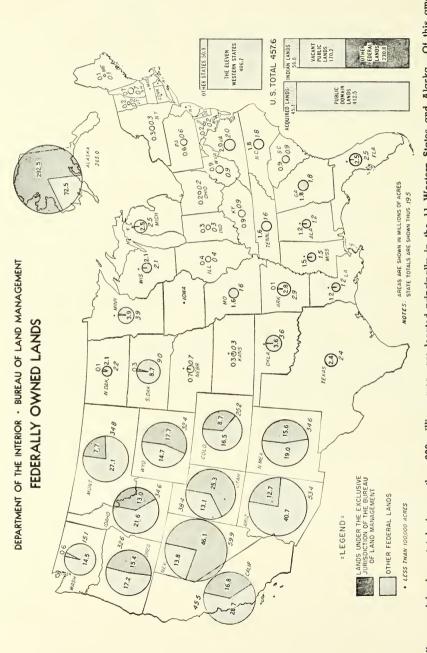
HOMESTEADING by Covered Wagon or Jeep

With thousands of veterans and others seeking free land and the opportunity to pioneer, it is especially important to know a few facts about homesteading opportunities and the difficulties encountered today in finding a suitable piece of unclaimed public land.

Hundreds of thousands of people migrated West following the passage of the Homestead Act of 1862. The lands beyond the Mississippi were partially peopled and the American economy strengthened by homesteading of approximately 90 million acres of land before the turn of the century. During the next few decades, an additional 175 million acres were transferred to homesteaders. In all, the Bureau of Land Management records show that title to about one billion acres of land in the United States has in the past been transferred by that agency or its

predecessors, to applicants under the public-land laws.

The vast majority of remaining public lands in the United States are not suitable for homesteading—since they are mostly arid and semiarid rangelands. The law permits homesteading only on tillable land. Most of the land in Alaska is also unsuited to farming, but the largest amount of agricultural land available for homesteading is nevertheless in Alaska, and it is there that most homestead entries are now being made.



The federally owned lands—a total of more than 800 million acres—are located principally in the 11 Western States and Alaska. Of this amount, 180 million acres in the United States and 290 million acres in Alaska are under the jurisdiction of the Bureau of Land Management.

HOMESTEADS

Before jeeping West to hunt for a homestead, a modern pioneer will do well to take a look at the map of the United States (page 6) to gain an idea of the percentage of public lands in each State and in Alaska. Part of this land, however, has been withdrawn for military or other reservations. In the Western States very little land remains that can be cultivated successfully without the aid of irrigation, and thus little remains that can be homesteaded.

Maps or lists of public land for homesteading are not available, and anyone desiring to locate a homestead must find a piece of public land which he believes suitable for farming and make application to have it so classified. At the present time, however, the requirement for classification prior to homesteading does not apply to Alaska.

A national-forest homestead entry can be made on land within national forests which has been found to be agricultural in character by the Forest Service, Department of Agriculture. After selecting land which the applicant thinks is suitable for farming, he sees the national forest supervisor. The supervisor then takes steps to have the land examined to determine whether it is suitable for homesteading. There is very little chance of finding such lands in national forests, particularly since national forests are generally at higher elevations.

Briefly stated, the requirements that must be met to earn title to a homestead are: residence on the land, to the exclusion of a home elsewhere, for 3 years, with not more than two absences a year, totaling not more than 5 months absence a year; cultivation of at least one-sixteenth of the area of

the land during the second year, and at least one-eighth of the land each year thereafter until submission of satisfactory final proof of 3 years' compliance with the law; and the construction of a habitable house on the land. Generally, the rights and privileges of veterans result in a relaxation of these requirements—except the one requiring a habitable home on the land and residence there for a period of 7 months in 1 year.

A reclamation homestead entry can be made on a tract of land suitable for agriculture through irrigation with water supplied by a Federal reclamation project. The program for the development of irrigation project lands is under the jurisdiction of the Bureau of Reclamation, Department of the Interior, and applications to enter such lands must be cleared with that agency before they can be filed in the Bureau of Land Management. Residence and cultivation requirements as well as the necessity of constructing a habitable house are the same with respect to these entries as they are on regular homestead entries. Requirements for irrigation of the land and payment of water charges are matters under the iurisdiction of the Bureau of Reclamation.

Desert Land Entry

Under the desert land law, an applicant may ask for an entry on a maximum of 320 acres. He must show in his application that the land is arid and is of such character that it can be cultivated and irrigated and that he has good reason to believe that a permanent and sufficient supply of water can be obtained or developed for the irrigation and reclamation of all the irrigable land covered by the application. Experience has shown that the successful reclamation of a tract of desert land is an expensive and frequently hazardous venture. Most surface waters in the West have been appropriated and underground water is generally scarce and expensive to develop and use.

Persons interested in this type of land should carefully weigh all of the factors involved before embarking on a project that may result in failure and disappointment. Once a desert land entry is allowed, to obtain patent, the entryman must show that he has an adequate supply of water to irrigate and reclaim all of the irrigable land in his entry and that he has actually cultivated, irrigated, reclaimed, and produced crops on at least one-eighth of the acreage. In addition, he must pay a purchase price of \$1.25 an acre. Ditches and laterals for irrigation must extend to all the irrigable area. desert land entry, unlike the reclamation entry, is a private venture, and the applicant makes his entry through the Bureau of Land Management.

Small Tracts

Although the great day of homesteading has gone with the covered wagon, there are scattered acreages available for homesites under the Small Tract Act of June 1, 1938, applying to the United States and an act of July 14, 1945, extending the provisions of the act to Alaska. The purpose of the Small Tract Act is to provide small parcels of the public lands for the use of veterans and others under conditions safeguarding the best interest of both the individual and the community.

Small tracts are defined as portions of the public domain not exceeding 5 acres in size which may be leased or purchased for homesite, cabin, camp, health, convalescent, recreational, or business purposes. A small tract homesite lease is for residential purposes only and it is expected that the applicant will conform his improvements to the residential nature of the community in which the land is located. Regulations favor the bona fide applicant as against speculators.

Leases may be granted for periods of 5 years or less, but before a tract may be leased, it is necessary that the land be examined and classified as suitable for the purpose for which it is sought. If the land is classified for lease and sale it is appraised and a lessee may have an option to purchase the tract after showing compliance with the regulations for a period of at least 1 year and upon payment of the appraised price.

Public Sale of Lands

Tracts of public lands may be offered for sale; the size of individual parcels being limited to 1,520 acres of isolated tracts or 760 acres of rough and mountainous acres which need not be completely surrounded by patented lands, i. e., isolated. Such lands must be

appraised and may not be sold for less than the appraised price.

Owners of adjoining land have preference in purchasing lands offered at public sales and only such owner can apply for sale of rough and mountainous tracts. Regardless of whether the land is sold on the application of another person, an adjoining owner may purchase the land within the 30-day period following the sale by bidding not more than three times the appraised price or meeting the highest bid of a person who is not an adjoining land owner, whichever is the lower. In the event of equal bids by adjoining owners, an equitable division of the lands among them is made.

An additional public sale law applying to Alaska provides for the sale, at public auction, of tracts up to 160 acres, which have been classified as suitable for industrial or commercial purposes—including construction of housing. The land is sold subject to the condition that all authorized improvements must be completed within 3 years to obtain title to the land. Additional information on this law can be obtained by writing the Regional Administrator, Bureau of Land Management, Federal Building, Anchorage, Alaska.

Rights-of-Way

No individual or corporation may, without permission, construct any pipeline, telephone, telegraph or transmission line, canal ditch, reservoir, road, or any other improvement upon the public lands. Numerous laws have been enacted by Congress to authorize such construction work. Information may be obtained from local land, grazing, and forest offices, in public land States.

Special-Use Permits

There are various uses that persons may wish to make of public lands which are not covered by applicable laws. In such cases an applicant may file a request for a special-use permit with a land office. Special uses may include advertising signs, production of movies, erection of a ski lift, and other uses of public lands which are not covered by or forbidden by specific law.

More specific information on acquiring or using public lands may be obtained by writing any office of the Bureau of Land Management. A list of these offices is given in the back of the pamphlet.

WHO OWNS THE LAND

One of the questions the prospective settlers often ask is how does Uncle Sam know what lands he owns and what acres have been transferred into private ownership. The basic records of the Bureau of Land Management show which tracts of Federal land have been transferred into private ownership and which tracts are still federally owned. These records because of their great value are being microfilmed so that there will be no danger of future generations of Americans losing these irreplaceable land records. Copies of the microfilm will also serve for speedier identification of titles of private lands which once were public domain.



Bounty Land Warrant issued to ABRAHAM LINCOLN

This interesting old document—found in the 139-year-old records maintained by the Bureau of Land Management—granted to Abraham Lincoln, Captain of the Illinois Militia, 120 acres of land for his services to his country during the Black Hawk War.

People from every State in the Union and even from other countries write the Bureau of Land Management to help them establish title to land by furnishing them with a copy of the patent (deed) showing that the United States has relinquished its title. The answers to their questions can usually be found in the 139-year-old records maintained by the Bureau of Land Management. These files contain the original evidence of titles to more than one billion acres of land that have passed from the United States into private ownership.

Historians, novelists, real estate men, lawyers, and others find a wealth of interesting old documents when they make a personal trip through the BLM files on the first floor of the Interior Department building in Washington, D. C. Here are recorded the first land patents which were issued—the record is dated 1788—by the Treasury Department for lands in the State of Ohio.

George Washington's name, as the first President, appears on the very early patent papers. Although there are no records showing transfer of land to him, a number of grants were made to other generals, officers, and enlisted men of the Revolutionary War.

Because of their worn condition, some of the old records are becoming illegible. One tattered, yellowed page, dated April 27, 1807, and cov-

ered with fine Spencerian penmanship, evidences the sale of land at Chillicothe, Ohio.

Another record, even earlier in 1804, and signed with the initials "A. G. Secretary of the Treasury," is for a patent to land in Jefferson County, Ohio, transferred to one Bazaleel Wells. Albert Gallatin was Secretary of the Treasury at that time. Later records, 1810, bearing the signature of President Madison, prove that a substantial number of patents for land in Louisiana were issued to America's great revolutionary friend, General Lafayette.

Land bounty warrants to soldiers always arouse considerable interest among researchers. There are records of two land bounty warrants issued to Abraham Lincoln. One in 1855, gave Lincoln 40 acres of land and another in 1856 gave the Captain of the Illinois Militia, in the Black Hawk War, 120 acres of land for his services to his country.

Prior to the Civil War, veterans were given warrants entitling them to a specific number of acres of public domain for service in various military engagements. After the Civil War, however, veterans were given special privileges making it easier for them to obtain lands under the public-land law. Today, only veterans of World War II have a preference right in acquisition of such public domain lands as are disposed of under certain land laws, but the requirements of obtaining title are reduced for veterans of all wars.

Other interesting documents include those based on Spanish, English, and French land grants in areas of the United States formerly claimed by those countries, and wagon road grants, railroad grants, school grants, swamp land grants, and desert grants.

The patents issued prior to 1908 can be located only if the description of the land according to the public land system of surveys is given, but patents since that time may be located either by the description, the name of the patentee, or the number of patent. With this information the patent clerk can locate the document in one of the 11,700 patent record volumes on the BLM shelves.

These patent records are not only important to the general public, as the primary link in the chain of title evidence to all real estate transactions, private and public, in the 29 public land States (although there are 29 public land States today, five of these States, Ohio, Iowa, Missouri, Indiana, and Illinois, do not contain any vacant public lands). The patent records and also the survey field notes and plats prepared by engineers in original surveys of the land are basic to the Bureau of Land Management's proper administration of the public land laws. These basic records help to identify the public lands still remaining in Federal ownership and they establish oil and gas and mineral rights reserved by the United States in patented lands—that is, lands transferred to individuals, States, or counties.

Microfilming of the records will insure their preservation and also make them more easily accessible. The Bureau of Land Management hopes eventually to have two sets of patent reproductions on 35 mm. film. One set of films will be housed in the National Archives, the other retained in the Bureau of Land Management files. Replacement of worn Bureau film can be made from the master film in Ar-

chives. The estimated life of the master film is from 200–500 years. By making new film copies from the master film, the records can be preserved indefinitely. From the experiences

of other countries which lost public land records during times of crises, we have learned that it is imperative to safeguard the records of our people's land.

CADASTRAL SURVEYS COME FIRST

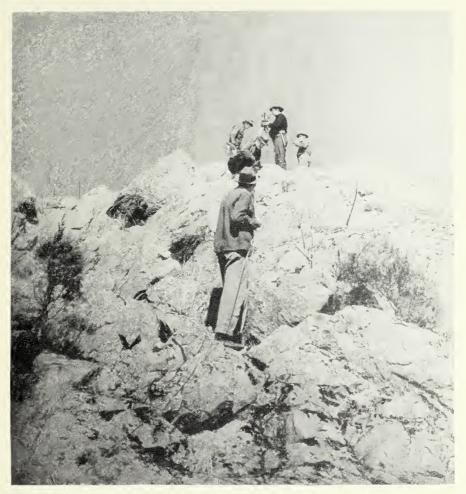
The surveying records as well as the patents or land titles are a further check on private-property lines. The surveying of the lands on the United States has been a continuous process since the days of Surveyor George Washington. In 1785 the Continental Congress directed that identification of land should be undertaken by employing a rectangular system of surveys which consists of a pattern of townships 6 miles square with 36 sections of 640 acres each to the township. That system is still followed today, wherever possible, and the surveying is performed by cadastral engineers of the Bureau of Land Management.

Cadastral engineering is the science of the precise and legal determination of land boundaries and marking them so they may be readily identified. The Bureau of Land Management as the only agency responsible for all public land surveys, offers the best training parties for the Federal phase of applied engineering science. Cadastral survey parties are kept busy following the meanderings of rivers to aid in river basin developments, to straighten out ownership tangles on private and Federal lands, to enable timber to be sold and mineral patents to be speeded up, and to establish their survey grid across the vast unsurveyed areas of Alaska and continental United States.

Lack of money for Federal surveys is in many cases impeding development in the mineral and lumber industries and preventing States from getting revenue from leasing school lands. Many States are anxious to have surveys completed and titles transferred because their income from the lands will be increased. As long as title remains undetermined, under the law the State can receive only a part of the revenue from lands used for oil and gas production or for grazing. The remainder goes to the Federal Government. Once it acquires title, however, the State receives 100 percent of the revenues from land uses-but the lands must be surveyed before the State can acquire title.

GRANTS OF LAND

Lands were granted to the States for the support of public schools by acts of Congress beginning with the act of April 30, 1802, to Ohio, without the issuance of patent or other evidence of title.



Basic to the acquisition or use of any public land is its identification by cadastral surveys. Surveyors since the time of George Washington have established and marked land boundaries, first step in the management and development of public domain resources.

School lands passed to the States generally under the original laws providing for the States' admission to the Union. At first, mineral lands were excluded from the grants, but in 1927 an act enlarged prior grants to include mineral lands.

Traditionally, section 16 in each township was set aside for the benefit of public schools. School grants to States admitted to the Union in later

years were more liberal than the earlier grants, most States having received one-eighteenth of the public lands within their boundaries. A few Western States having vast extent of arid and mountainous land, received as much as one-ninth of the area.

The school grants were made available in pursuance of the Federal Government's policy of granting public lands to the various States to further

education of the people. More than 75 million acres were granted for public schools. A total of 29 States received school grants.

The history of the public lands also reveals major grants made for the development of wagon roads, canals, rivers, and railroads. The policy of land grants in aid of transportation was inaugurated by Congress 128 years ago in the act of February 28, 1823, which awarded land to the State of Ohio for the construction of a wagon road from "the lower rapids of the Miami of Lake Erie to the western boundary of the Connecticut Western Reserve," Calling for the building of a road 120 feet wide, the law granted land for "1 mile on each side" to aid the State in defraying the cost of construction. Altogether, 12 wagon-road land grants were authorized by Congress, the last being made on March 3, 1869.

On March 2, 1827, grants of land to Indiana and Ohio, for the construction of a canal from the Wabash River to Lake Erie, set under way this phase of transportation development. Subsequently, nine other grants were made to various States for the same purpose, the last being awarded on July 3, 1866. Three grants for river improvements also were made, Alabama being awarded land on May 23, 1828, Wisconsin on August 8, 1846, and Iowa

on August 8, 1846, and July 12, 1862.

The effect of gleaming lines of rail-roads, constructed through grants of public land, upon economic and sociological conditions in the United States constitutes an interesting chapter in the westward development of the Nation. Not only did the far-flung transcontinental routes play their part in the advancement of civilization to the Far West, but the network of landgrant construction around the Great Lakes proved an important factor in the development of the Middle West, particularly, in Illinois, Michigan, Wisconsin, and Minnesota.

Development of railroads through grants of public domain was begun on September 20, 1850, when the Illinois Central, in Illinois, the Mobile and Ohio in Mississippi, and in Alabama were granted tracts of land for construction purposes. The usual practice was to grant the railroads alternate sections of varying amounts on both sides of the right-of-way. Approximate amount still owned by western railroads is 15 million acres or so.

Extending through March 3, 1871, this period of transportation development activities resulted in the issuance of 89 such grants, 15 of which later were declared forfeit by Congress for failure to carry on the construction work.

MINERAL LEASING AND MINING OPERATIONS

The use and disposition of the public domain extended beyond making land available for homesteading, for schools, and as aids to transportation development.

The valuable mineral resources of the public lands have also been of inestimable value in the development of the Nation, and provisions for making these minerals available to the public have been made—the emphasis in later years turning toward putting into effect prudent conservation policies to prevent waste, on one hand, and to bring about an adequate return to the Government of its share of the production, on the other.

The regulations under the mineral leasing and mining laws are quite extensive and are covered in circulars which may be obtained from any office of the Bureau of Land Management. Basically, the *mining laws* permit acquisition of most mineral lands after valid discovery and development, while the *mineral-leasing laws* permit exploitation of specified minerals upon payment of rentals and royalties. Oil, gas, coal, phosphate, potash, sodium, and sulphur are leasable minerals, while gold, uranium, and most other minerals can be acquired by a mineral patent.

ORGANIZED MANAGEMENT AREAS

Production and use of range forage and marketable timber are two of the most important phases of management on public lands today. Of the unreserved public rangelands, 141 million acres are located within established grazing districts, and an additional 29 million acres outside districts are leased or subject to lease to ranchers under section 15 of the Taylor Grazing Act. Management of these lands includes proper stocking during the proper season or seasons of use, and soil and moisture conservation work to restore forage production—to protect the watershed for water development, and to improve forage use.

Foremost in importance among the land resources of the public domain are the forests. Two and a half million acres of first quality Douglas-fir forests in Oregon are also managed on a sustained-yield basis, and about 30 million acres of additional forests and woodlands have been placed under an extensive form of forest management to produce important quantities of lumber, railroad ties, mine supports, fence posts, and fuel wood. In Alaska, the Bureau also has special timber management problems-principally fire prevention and controlon 125 million acres of forested public lands.

The Federal Range

The Federal range is an integral part of many ranch operations, even

though the large part of these public lands is generally of relatively low productivity. Federal grazing areas contribute an important share of the Nation's meat, wool, and leather production. Nearly 10 million head of livestock utilize the forage and water resources on the public lands—some through seasonal use and others in year-round grazing. Approximately 30,000 grazing permits and leases are in force, with a return to the Government of about \$2,000,000 annually.

The Federal range includes those arid and semiarid lands remaining from the days of homesteading and other forms of land disposition. These lands must now be managed in an organized manner to preserve their productivity and to safeguard local communities. These facts were recognized in the passage of the Taylor



The Bureau of Land Management practices "multiple use" where opportunities for range and forest utilization, watershed protection, soil and moisture conservation, mining and mineral operations, and wildlife and recreation needs exist in the same area of public land.

Grazing Act of 1934, which gives as its aim: "To stop injury to the public grazing lands by preventing overgrazing and soil deterioration, to provide for their orderly use, improvement, and development, to stabilize the livestock industry dependent upon the public range, and for other purposes."

Briefly, the Taylor Grazing Act provides for improved management of the Federal range through the establishment of grazing districts. A rancher in order to qualify as a preference applicant in such a district must have base or ranch property which was used in connection with livestock operations on the public lands during a priority period preceding the establishment of the district, and he must be engaged in livestock operations that are recognized as established and continuing, and which normally involve a substantial use of the public lands in a regular, continuing manner each year. The amount of the grazing privileges, within the safe and proper stocking of

the Federal range, allowable to each preference applicant, is generally measured or limited by two factors. First, the production from the base properties that is used by the permitted livestock, and second, the numbers of livestock which were grazed on the public range during the priority period. Whichever of these two factors is the lesser is generally the limiting factor on the extent of the grazing privileges which may be authorized. In those areas where the first preference qualifications do not require all of the available public forage for their satisfaction, second preferences may be recognized. A stockman to qualify under this preference must have control of properties which are used in his livestock operations but which during the priority period were not used in connection with operations on the public range. Livestockmen pay both a grazing fee and a range improvement fee.

Each grazing district has an advisory board of local stockmen, elected by the range users themselves. trict boards advise and make recommendations on the carrying capacity and seasons of use, applications for grazing licenses, permits, allotments of range by classes of livestock, applications for construction of range improvements, construction and maintenance of range improvement and soil and moisture conservation projects, and other management problems. These recommendations are then considered by the Bureau in its administration of the lands.

In addition, the act provides (in section 15) that rangelands outside of grazing districts may be leased in a similar manner and upon payment of specified rentals. Preference in the issuance of grazing leases is given to the owners of adjacent lands who need the public lands for the economic operation of their ranch properties. Detailed explanations of requirements and methods of application for grazing permits and leases may be obtained at district offices of the Bureau.

The Taylor Grazing Act also provides for management of wildlife on the public lands. Over 700,000 biggame animals make use of forage on grazing district lands, and the Bureau's range managers are required to reserve forage for wildlife in allocating use of the Federal range. The act provides for a wildlife representative on the District Advisory Board, and authorization is given for cooperative agreements with State and other wildlife agencies. Freedom of entry on grazing lands for hunting and fishing is specifically guaranteed. Improvement work on the range includes construction of truck trails, corrals, fences, and water facilities.

Soil and Moisture Conservation

The prevention and control of soil erosion and the conservation of limited moisture supplies are essential to restoring and maintaining the forage productivity of Bureau lands. lands make up important watershed areas of the major river basins of the West. Restoring a complete vegetative cover on them is one of the main objectives in protecting the watershed and retarding soil losses and destructive downstream siltation. To accomplish this objective often requires the employment of all the proven practices of conservation treatment of land. Small dams are constructed to retard runoff, prevent sedimentation, and divert water from destructive gullies to spreading areas where it is utilized in the production of more forage and in building up the supply of soil moisture. Where feasible, contour furrows are used to intercept the runoff and open up the soil to greater moisture penetration. Undesirable brush affording little protection to the soil is removed and the land is reseeded to hardy, palatable range grasses. Fences are constructed to protect deteriorated areas and new seedlings and to later enclose highly productive range pastures. These are some of the major proven conservation practices which restore the range and increase the production of animal products so essential to the national welfare.

Forest and Woodland Management

The policies and techniques employed by the Bureau of Land Man-

agement in managing timber on a sustained-yield basis have been largely developed in the two-and-a-half million acre "laboratory" of the revested Oregon and California Railroad grant lands in western Oregon. Originally granted to the Oregon and California Railroad Company, these lands were reconveyed to the Federal Government as a result of failure by the railroad to comply with the terms of the original grant. Owing to the nature of the original grant, the public lands in this area are largely alternate sections interspersed with privately owned forests and national forest lands.

The O and C lands extend through the heart of the greatest remaining reservoir of commercial Douglas-fir timber. This forest—with an estimated 35 billion board feet of lumber—is required by law to be managed on a sustained yield basis, which means that timber harvesting must be accompanied by proper reforestation measures and the volume harvested from year to year carefully kept in balance with the volume of new timber being grown.

To promote better management of the O and C lands, the Secretary of the Interior annually appoints an Advisory Board whose members represent all segments of the economy of the western Oregon area. These include large and small lumber operators, forestry agencies, labor, mining, agriculture, recreation, and other interests, and the public at large. addition, five district advisory boards are appointed to represent more localized interests. These boards advise the Bureau and suggest action planned to stabilize employment and business opportunities, provide for fuller utilization and sustained-vield management of the timber supply, protect watersheds and prevent soil erosion, and develop the recreational values of the land.

Timber on the O and C lands is offered for sale by competitive bidding. Small-scale operators, are given special encouragement and technical assistance. Information pertaining to O and C timber, and methods of submitting bids, may be obtained from the Bureau's regional office in Portland.

The general forest management policies devised for the O and C lands are also being put into practice on the 30 million acres of scattered forest and woodlands on the public domain. The law under which timber from these lands can be sold, known as the Materials Act, was enacted in 1947. While management plans are still in the formulative stage, a great deal of this timber is overmature and its cutting under proper forest practices is desirable.

In order to purchase timber from such tracts an application should be filed in any office of the Bureau of Land Management. The timber will then be examined and if sale is consistent with good forest management, it will be advertised and sold to the highest bidder. Timber valued at less than \$1,000 may be sold without advertising.

Alaskan Timber

Management of the 125 million acres of timber in Alaska under BLM supervision presents unusual problems. A large portion of this timber—40 million acres—represents valuable spruce and birch forest in the Alaskan interior. Unlike the rain



An an O and C timber sale in western Oregon, workmen load timber with a crotch line. Whether in selective cutting or clear cutting, sustained-yield management is the key to wise use of the timber-resources on the vast forests and woodlands under the Bureau of Land Management's special jurisdiction.

forests along the coastal margin of Alaska, this timber is dangerously susceptible to fire, especially after a warm, dry summer and fall.

In preventing and controlling fires in these vast forests—as well as on 100 million acres of brush and tundra lands (also under BLM management)—the Bureau is faced with tremendous problems.

The possibility of developing a furniture industry from the great birch resource, as well as a future lumber and paper industry from spruce, encourages Alaskans in the development of their timber resources. In addition, Alaskans view the wilderness as the "home" of fish and wildlife, which contribute much to the economic welfare of the Territory. The Nation, however, has not yet recognized the potential worth of Alaskan forests sufficiently to provide adequately for their protection and management.

MULTIPLE USE OF THE PUBLIC LANDS

Administration of the public lands today calls for a recognition of the principle of "multiple use." Many of the Nation's most important natural resources—land, water, forests, range, minerals, wildlife, and natural beauty—exist on the same lands. These resources must be wisely used

and carefully managed to prevent the despoiling of many values in the frantic exploitation of one.

Destructive cutting of timber on watersheds, for example, causes extensive erosion and devastating floods. Overgrazing, too, results in the loss of topsoil, sedimentation of costly reservoirs, and reduced productive capacity of the land. Mineral development, all too frequently in the past, has been made at the unnecessary expense of valuable surface resources. Wildlife and other esthetic and recreational resources have quite commonly been neglected during the development of more tangible resources.

Our expanding national economy and increased efforts to assure national security require that the great resources of America's public lands be conserved, intelligently used, and carefully knit into a pattern of national "resource unity." One of the principal agencies in the Department of the Interior entrusted with the administration of these resources is the Bureau of Land Management.

Today the Bureau is giving increased attention to the multiplicity of interest in public lands—range and forest utilization, watershed protection, soil and moisture conservation, mining and mineral operations, and wildlife and recreational needs—in order to assure the highest combined land-use.

Its foresters, range managers, and other administrators are directing the replanting and reseeding of burnedover or otherwise denuded forest lands. eroded and nonproductive range, and vital areas of the great watersheds of They plan and direct the continuing use of range and forest resources, and regulate the settlement of vacant lands. The Bureau's cadastral engineers survey the boundary lines of townships and Federal reservations. Their engineering plats and maps, plus the patents, are vital land records held in trust by this agency. Through issuance of leases and patents the BLM administrators make possible the development and use of vast mineral deposits-from oil and coal to sulphur, uranium, potash, and phosphates, and granite, gold, and many other items of national wealth.

For 139 years, this agency and its predecessors have been concerned with the public lands and their disposition and use for the welfare of the Nation. With this heritage of serving the American people, the Bureau confidently looks forward to cooperating with present and future generations in the conservation and development of our great public domain—The Land of the Free.

BUREAU OF LAND MANAGEMENT OFFICES

In addition to its office in Washington, D. C., the Bureau of Land Management has seven regional offices located as follows:

REGION I—(Idaho, Oregon, Washington) Swan Island Station, Portland, Oreg.

REGION II—(Nevada, California) 630 Sansome Street, San Francisco, Calif.

REGION III—(Montana, Wyoming, North Dakota, South Dakota, Nebraska, and Kansas) 1245 North 29th Street, Billings, Mont.

REGION IV—(Utah, Colorado) 238 Federal Building, Salt Lake City, Utah.

Region V—(Arizona, New Mexico, Oklahoma, and Texas) 1015 West Tijeras, Albuquerque, N. M.

REGION VI—(Public land States east of the Mississippi: Wisconsin, Michigan, Mississippi, Alabama, Florida, Illinois, Indiana, and Ohio; and the tier of States lying immediately West of the Mississippi: Minnesota, Iowa, Missouri, Arkansas, and Louisiana) Bureau of Land Management, Washington 25, D. C.

REGION VII—(Alaska) Federal Building, P. O. Box 480, Anchorage, Alaska.

The following local land, land and survey, survey, range management and forestry offices help to speed service to the people:

Land Offices

Building 1, Swan Island Station, Portland, Oreg.

1512 P. O. Building, Los Angeles, Calif.352 New Federal Building, Sacramento, Calif.

1245 North 29th Street, Billings, Mont. Box 1740, Anchorage, Alaska Box 110, Fairbanks, Alaska Federal Building, Nome, Alaska

Land and Survey Offices

209 Federal Building, Spokane, Wash.
Box 2237, Boise, Idaho.
322 P. O. Building, Reno, Nev.
Federal Building, Cheyenne, Wyo.
313 Federal Building, Salt Lake City, Utah.
341 New Customhouse Building, Denver,

100 U. S. Courthouse, Phoenix, Ariz. P. O. Building, Santa Fe, N. Mex.

Survey Offices

Building 1, Swan Island Station, Portland,
Oreg.
630 Sansome Street, San Francisco, Calif.

630 Sansome Street, San Francisco, Calif. 1245 North 29th Street, Billings, Mont. Federal Building, Juneau, Alaska.

Range Management or District Grazing Offices

Idaho District No.

- 1 Box 917, Boise, Idaho.
- 2 Box 469, Burley, Idaho.
- 3 Box 1140, Idaho Falls, Idaho.
- 4 Box 385, Salmon, Idaho.
- 5 Box 308, Shoshone, Idaho.

Oregon District No.

- 1 P. O. Box 429, Lakeview, Oreg.
- 2 Box 713, Burns, Oreg.
- 3 Box 306, Vale, Oreg.
- 5 Box 176, Prineville, Oreg.
- 6-7 Box 26, Baker, Oreg.

Nevada District No.

- 1 Box 729, 549 West River Street, Elko, Nev.
- 2 Box 71, East Highway 40, Winnemuca, Nev.
- 3 Post Office Building, Carson City, Nev.
- 4 Box 1289, 647 Aultman Street, Ely, Nev.
- 5 Box 1990, Federal Building, Las Vegas, Nev.
- 6 Battle Mountain, Nev.

