MANAGEMENT OF PUBLIC LAND RESOURCES

By far the largest landholder in the United States is the Federal Government. Most of its more than 400,000,000 acres are rich in natural resources, chiefly forests and grass. This land includes 89,000,000 of the 461,000,000 acres of commercial forest land in the United States, and contains more than one-third of the nation's supply of standing commercial timber. Another 250,000,000 acres of federal land is range, where one-fifth of the cattle and more than half the sheep raised in this country spend a part of their lives.

The Federal Government has undertaken to retain publicly owned land, and to conserve its resources. Two agencies, the Interior Department's
Bureau of Land Management and the Forest Service of the Department of Agriculture, administer 93 per cent of all public land valuable for grazing and lumbering. The BLM, primarily responsible for the federal range, manages a substantial portion of Government forests as well; and the Forest Service, chief custodian of the Government forests, handles a large segment of the federal range. Thus successful conservation depends on uniformly intelligent and vigorous resource management by two separate agencies. Their comparative records, however, reveal that the BLM, as contrasted with the Forest Service, has been a weak and ineffective guardian of our natural range and timber wealth. Moreover, the policies and activities of the two agencies have occasionally been in conflict.

**Essentials of a Sound Conservation Program**

A statement of basic conservation principles will emphasize the waste of past and current practices. The first principle is regulated use: grazing and lumbering must be restricted. The second is land improvement, i.e., reseeding of areas where grass is depleted; tree-planting; and construction of drainage ditches, terraces, and retention dams to prevent rapid run off of rain water. The third technique is protection of trees and grass from fire, disease and insects.

likely that the issue will be renewed in the near future. See De Voto, *Sacred Cows and Public Lands*, Harpers, July, 1948, p. 47. This does not mean that stockmen have abandoned all hope of acquiring public land. Rather they seem content to await a more propitious occasion. De Voto, *The Easy Chair*, Harpers, March, 1951, p. 48, col. 2.

7. Because of conflicting statistics, the exact percentage is uncertain. The 93 per cent computation is based on the following statistics: Total public land suitable for lumbering is 89,000,000 acres. Seventy-three million acres are in national forests, *United States Forest Service, Gaging the Timber Resources of the United States* 53 (1946), and about 9,000,000 acres are land under the Bureau of Land Management, *Boeker, Behold Our Green Mansions* 12 (1945), for a total of 82,000,000 acres or 91 per cent. Of the 250,000,000 acres of public range, the Forest Service manages 65,000,000, *Task Force Report on Natural Resources* 41 (1949), and the BLM 169,000,000, *ibid.*, for a total of 234,000,000, or 95 per cent.

8. See *infra* pages 461, 463.


10. For general discussions of the waste of our natural resources, see *Frank and Net-Boy, Water, Land and People* (1950); *Mezerik, The Pursuit of Plenty* (1950); *Osburn, Our Plundered Planet* (1948); *Vogt, The Road to Survival* (1948).


12. For the policy of the Forest Service with respect to land improvement, see *Report of the Chief of the Forest Service* 8, 42 (1948). The Bureau of Land Management's emphasis on land improvement is described in *Annual Report of the Secretary of the Interior* 240, 242 (1949).

13. Bureau of Land Management activities in combatting fire are described in *id.* at
These techniques, when coordinated, serve to fulfill essential conservation objectives. They assure a steady, perhaps increasing supply of livestock and timber. Moreover, they retard erosion and siltation; for soil is largely held in place by a thick covering of grass and brush. Without this protection, the earth is readily washed away by rain and deposited as sediment in rivers and reservoirs. Finally, maintenance of a vegetative cover plays a large part in flood control: it holds the rain where it falls and enables it to soak into the ground.

244, and those of the Forest Service in Report of the Chief of the Forest Service 52 (1949). Id. at 1–37 discusses the research activities of the Forest Service. For BLM research, see Annual Report of the Secretary of the Interior 250 (1949).

14. Stock that graze on depleted lands are invariably thinner and in poorer health than those raised on fertile range. Barnes, The Story of the Range 22 (1926). Losses are almost twice as great. Gustafson, Conservation in the United States 283 (1944). It seems only reasonable to expect then, that as the quality of range improves, the animals raised will be larger and healthier. The heavier stock and lower mortality rate more than compensate for reductions in the number of animals grazing the range. Chapline, Range Research Contributions in Proceedings of the Inter-American Conference on Conservation of Renewable Natural Resources 391, 393 (1948).

The techniques of regulated use, land improvement, and resource protection are fully as effective in assuring a steady supply of timber in the future. See American Forestry Association, A Program for American Forests (undated); Rauschenbush, Our Conservation Job 29 (1949).

15. United States National Resources Planning Board—Land Planning Committee, Certain Aspects of Land Problems and Government Land Policies 76 (1934); Report of the Committee on the Conservation and Administration of the Public Domain 32 (1931). Experiments indicate that depleted land may lose nearly 100 times more soil annually than land protected by a vegetative cover. Coffman, Grass for Conservation in Grass, Yearbook of Agriculture 410 (U.S. Dep’t Agric. 1948). See also Sampson, Range and Pasture Management 171 (1923); Williams, Group Action for Range Control in the Northern Great Plains, 13 Rocky Mt. L. Rev. 199, 204 (1941). Contrast the testimony of Charles M. O’Donel, president of the American National Livestock Association: “Erosion is a law of Nature... a thing that you cannot stop at all... there is no use getting panicky about a little washing here and there...” Hearings before Committee on Public Lands and Surveys on S. 2584, 69th Cong. 1st Sess. 475 (1926). See also Hearings before Committee on Public Lands on H.R. 6462, 73d Cong. 2d Sess. 114, 162 (1934).


17. Report of the Chief of the Forest Service, Forests and the Nation’s Water Resources (1947); Bennett, The Tools of Flood Control in Grass, Yearbook of Agriculture 66 (U.S. Dep’t Agric. 1948); Phillips & Frank, To Help Control Floods in Conservation of Natural Resources (Smith ed. 1930). See also President Truman’s address to Congress, April 13, 1949: “... [A] great deal needs to be done to bring the land, forest and mineral activities of the Federal Government into step with the water development program. It is a questionable economy to spend millions of dollars for dams as part of a flood control scheme, unless at the same time we are doing all we can in the way of forest and soil conservation and rehabilitation, so that floods will be minimized rather than aggravated.” 95 Cong. Rec. 4470 (1949).
Emphasis on conservation of public land resources is comparatively recent. Before the last quarter of the nineteenth century, the Federal Government made few efforts to protect its land, and displayed no awareness of modern conservation techniques. Rather the Government's policy was to transfer public land to private ownership as rapidly as possible. This policy was motivated by the interrelated objectives of encouraging settlement of the frontier, stimulating railroad construction and granting bonuses to

18. No statutory restrictions were made upon the public use of the federal range, and courts held that without restrictive legislation the range might be used freely by all. Buford v. Houtz, 133 U.S. 320 (1890); Big Butte Horse and Cattle Ass'n v. Anderson, 133 Ore. 171, 289 Pac. 503 (1930).

On the other hand, timber cutting upon federal forest land was unconditionally prohibited. 4 Stat. 472 (1831), United States v. Briggs, 9 How. 351 (U.S. 1850). The government had extreme difficulty preventing illegal cutting, however, principally because no appropriation was made for the law's enforcement before 1872. U.S. United States Forest Policy 25 (1920).

19. See Hibbard, A History of the Public Land Policies 547–70 (1924); Hill, The Public Domain and Democracy 235 (1910). For evidence that there still are many who believe that all public land should be sold, see note 6 supra, and the statement of Senator Butler of Nebraska: "The policy should be to get that land into private ownership whether it is profitable or not. The private individual is the one to be the judge of that..." Hearings before Committee on Interior and Insular Affairs on Natural Resources Policy, 81st Cong., 1st Sess. 303 (1949).

20. Chief of the measures designed to stimulate settlement were the now famous Homestead Laws. The first and best known of the Homestead Laws allowed any person to acquire a farm of 160 acres free of charge after living on the homestead for five years, 12 Stat. 392 (1862), as amended, 43 U.S.C. § 161 (1946). It was followed by the Enlarged Homestead Act, 35 Stat. 639 (1909), as amended, 43 U.S.C. § 218 (1946) (permitting acquisition of 320 acres); the Three-year Homestead Act, 37 Stat. 123 (1912), as amended, 43 U.S.C. § 164 (1946) (requiring residence on the homestead for a seven-month period per year for three years), and the Stock-raising Homestead Act, 39 Stat. 862 (1916), as amended, 43 U.S.C. § 291 (1946) (permitting homesteading on 640 acres classified as grazing land). Additional statutes designed to transfer public land without cost to western settlers were the Timber Culture Acts, 17 Stat. 605 (1873), and 20 Stat. 113 (1878) (conveying title to any person who would plant and protect ten acres of trees for ten years). More than 280,000,000 acres were transferred to private ownership in this manner. Hibbard, A History of the Public Land Policies (1924).

An even larger acreage was sold, for an average price of $1.25 an acre. The Preemption Act of 1841, 5 Stat. 455 (1841), permitted a man to settle up to 160 acres and later buy it at this price free from competitive bids. This statute was, in effect, repealed by the first Homestead Act, but it was still possible to purchase public land. The Homestead Act allowed settlers to escape the five year residence requirement by paying $1.25 an acre. 12 Stat. 393 (1862), as amended, 43 U.S.C. § 173 (1946). Statutes after 1862 allowing purchase of government land were the Desert Land Acts, 19 Stat. 377 (1877) and 26 Stat. 1096 (1891), as amended, 43 U.S.C. § 321 (1946) (sales to settlers who would irrigate arid land), and the Timber and Stone Act, 20 Stat. 89 (1878), as amended, 43 U.S.C. § 311 (1946) (sale of timber land at a minimum price of $2.50 an acre).

21. Nearly every western railroad profited from these grants. Perhaps the most liberal was that made to the Northern Pacific, 39,000,000 acres, most of it containing valuable
veterans. Between 1780 and 1949, the Government transferred in all more than a billion acres of land to state or private ownership, leaving only about 420,000,000 under federal control.

The Forest Problem

Although the public land disposal laws were designed primarily to promote agriculture, they were also a boon to the lumber industry. Early timbermen knew little about conservation and cared less. Frequently they logged the land and abandoned it. Nearly all employed wasteful practices to maximize production. Timber was cut long before any economic need for it arose, and the lower-grade portions of a tree—the stump, trimmings, and broken timber—were left where they fell.


22. 10 Stat. 701 (1855) (ceding 160 acres to any veteran or his heirs).


25. Of the billion acres conveyed by the Federal Government during the last 170 years, probably about 440,000,000 acres were range, and 550,000,000 were forest. These estimates are derived as follows: The nation's grass land originally covered 850,000,000 acres. Gustafson, Conservation in the United States 277 (1944). All of it was located west of the Mississippi River, and with the exception of 160,000,000 acres ceded directly to the state of Texas following its annexation, was all owned by the Government. Federal range is now 250,000,000 acres; thus about 440,000,000 acres were conveyed to states or individuals. The original forests covered 822,000,000 acres of land. Id. at 219. Perhaps 100,000,000 acres of the original 13 states were forest, thus reducing the original federal forests to 722,000,000 acres. Deducting the 169,000,000 acres of forest land which still are owned by the Government, leaves 553,000,000 acres conveyed to states and individuals. These figures take no account of forest destruction on federal land; nor do they consider the effects of reseeding.

26. Two hundred and fifty million acres of forest land were cleared by settlers. Hearings Before the Committee on Interior and Insular Affairs on National Resources Policy 46 (1949). A substantial percentage of the land transferred to private ownership, however, was wholly unsuited for agriculture. Poor soil, inadequate water, and insufficient transportation combined to make farming a hazardous occupation. Hibbard, A History of the Public Land Policies 539–46 (1924).

27. Some public land laws were used by lumbermen to acquire enormous holdings. The Timber and Stone Act, in particular, was subject to flagrant abuse. It permitted sale of 160 acres of timber land to any individual swearing he would use it for personal use. 20 Stat. 89 (1878). The great lumbering companies promptly dispatched trainloads of employees to file entries upon timber land and transfer it to their principals. Report of the National Conservation Committee, Sen. Doc. No. 676, 60th Cong., 2d Sess. 87 (1909). Other purchasers indulged in fantastically profitable speculation, often selling their land for twenty times its purchase price. Isc, United States Forest Policy 355 (1920). Fraud was almost impossible to prove. See, e.g., United States v. Budd, 144 U.S. 154 (1892); Williamson v. United States, 207 U.S. 425 (1908). For a detailed treatment of one of the more spectacular timber frauds, see Puter, Looters of the Public Domain (1908).

28. Isc, United States Forest Policy 359 (1920). The unsafe equipment and waste-
Alarmed by timber waste, conservationists persuaded Congress in 1891 that the nation could protect its timber land only by retaining it in Federal ownership. The Forest Reserve Act of that year authorized the President to reserve federally owned forests from sale. Subsequent legislation provided machinery and granted appropriations for protection of the new national forests.

Administration of the first forests was entrusted to the Land Office of the Department of the Interior. This seemed logical enough since the Land Office had jurisdiction over the forests before they were reserved. But the Land Office's principal interests in timber land had been to sell it for the highest price obtainable; with no experience in forest management or research, it could do little more than prosecute trespassers. The national forests were therefore transferred in 1905 to the Forest Service of the Department of Agriculture, a bureau with thirty years' experience in the management of forest lands, and possessing the research facilities necessary to combat forest pests and diseases.

Executive orders during the next few years greatly enlarged the acreage of the national forests. By 1949 the Forest Service was administering 152

Wasteful lumbering on private land has not yet been eliminated. See, e.g., United States Forest Service, Wood Waste in the United States 5 (1947).

The leaders of this movement were B.E. Fernow, Chief of the Forestry Division of the Department of the Interior, and E.A. Bowers, an inspector in the Land Office. See Report of the Commissioner of the General Land Office 6 (1874) (the Government's wisest policy with respect to its timber land "is that which will most speedily divest it of title in the same").

This policy of merely guarding the forest reserves, without providing for their proper use . . . was the only policy the Land Office could well follow." See United States Forest Policy 155, 156 (1920). It is significant that both the Land Office and the Secretary of the Interior supported transfer of the reserves to the Forest Service. Id. at 157.

Before the administration of Theodore Roosevelt, only 46,000,000 acres had been placed in forest reserves, 13,000,000 by Harrison, 26,000,000 by Cleveland, and 7,000,000 by McKinley. Roosevelt set aside the stupendous area of 148,000,000 acres. Hibbard, A
forests, with a total area of 230,000,000 acres. Federal land within these forests comprised 180,000,000 acres, the remainder being owned by individuals and state governments.\textsuperscript{56} Seventy-three million acres of the public land in national forests were valuable primarily for commercial timber.\textsuperscript{57}

Not all the public timber, however, is in national forests. In 1916 two western railroads forfeited to the United States more than 2,500,000 acres of forest land for breach of the provisions of their grants.\textsuperscript{58} This land was then placed under the Secretary of the Interior and is now managed by the Bureau of Land Management. Another 24,000,000 acres of timber, 5,000,000 of which have commercial value,\textsuperscript{59} are on public land open to settlement under the public land laws, and pending disposal remain in Interior.\textsuperscript{40}

\textit{The Range}

Although Congress recognized the need for preserving federal forests before 1900, it placed no restrictions at that time upon the use of the range. A vast area of public grass land—more than a quarter of a billion acres—was used by cattle and sheep ranchers without charge or prosecution for trespass.\textsuperscript{41}

The equal privilege of all to use federal land produced serious conflicts between cattle and sheep herders. Ranchers generally believed that the two animals could not graze the same range.\textsuperscript{42} And as long as public grasslands were open to all, no legal relief could be given a cattle man who saw a range

\textsuperscript{56} U.S. Dep’t Agric., National Forest Areas 1 (1949).

\textsuperscript{57} U.S. Dep’t Agric., Gauging the Timber Resource of the United States 53 (1946).

\textsuperscript{58} 39 Stat. 218 (1916). The Supreme Court had previously refused to order forfeiture, and left the matter wholly up to Congress. Ore. & Cal. R.R. Co. v. United States, 238 U.S. 393 (1915).

\textsuperscript{59} Gustafson, Conservation in the United States 230 (1944).

\textsuperscript{60} More than 10,000,000 acres of forest land is under the jurisdiction of other Government agencies, the National Park Service, the Fish and Wild Life Service, the Department of Defense, the Soil Conservation Service and the Tennessee Valley Authority. Less than one-fifth of this acreage is open to commercial lumbering. Grover, Other Federal Forests in Trees, Yearbook of Agriculture 381, 385–90 (U.S. Dep’t Agric. 1949).

\textsuperscript{41} See Buford v. Houtz, 133 U.S. 320, 326 (1890) (recognizing an implied license that public grazing lands are free to all who wish to use them).

\textsuperscript{42} See Omaechvarria v. Idaho, 246 U.S. 343, 344 (1918): “Experience has demonstrated . . . that in arid and semi-arid regions cattle will not graze, nor can they thrive on ranges where sheep are allowed to graze extensively. . . .”; Bacon v. Walker, 204 U.S. 311, 319 (1907). More recent studies indicate, however, that cattle and sheep can graze in common. Chapline, Grazing on Range Lands in Grass, Yearbook of Agriculture 212 (U.S. Dep’t Agric. 1948).
he had used for years overrun by sheep. Force or fraud alone enabled one rancher to graze public range land to the exclusion of others.43

Range warfare between sheep and cattle ranchers was widespread enough to furnish material for hundreds of "westerns." But a more serious consequence of the free use system was overgrazing. Ranchers knew that if their stock did not consume the grass, the herds of other stockmen would.44 Cattle and sheep growers pastured all their animals on public land for as many months of the year as possible.45

The first step toward curtailing overuse of public grass land came with the establishment of the national forests.46 Many acres of land valuable pri-

43. The battle between cattle and sheep interests for control of the western range is a familiar episode of American history. See, e.g., REPORT OF PUBLIC LAND COMMISSION, SEN. DOC. NO. 189, 58th Cong., 3d Sess. xxi (1904); THE WESTERN RANGE 125-7 (1936). Nor is range warfare wholly a thing of the past. See N.Y. Times, Nov. 28, 1930, p. 12, c. 2 (clash between Navaho Indian sheep herders and white cattlemen).


In some instances ranchers, by fencing their own land, could effectively keep others from reaching public range. See Wilkinson Livestock Co. v. McIlquam, 14 Wyo. 209, 83 Pac. 364 (1905). A jury's finding that the fence's purpose was to exclude the public from the federal land rendered the construction unlawful. Camfield v. United States, 167 U.S. 518 (1897); Potts v. United States, 114 Fed. 52 (9th Cir. 1902).


45. On the extent of overgrazing on public range land, consult GUSTAFSON, CONSERVATION IN THE UNITED STATES 278-80 (1944); ROBBINS, OUR LANDED HERITAGE 361 (1942); SAMPSO, RANGE AND PASTURE MANAGEMENT 10-12 (1923); STODDARD, RANGE LAND OF AMERICA 7 (1945); UNITED STATES NATIONAL RESOURCES BOARD—LAND PLANNING COMMITTEE, CERTAIN ASPECTS OF LAND PROBLEMS AND GOVERNMENT LAND POLICIES 1-11 (1935); UNITED STATES NATIONAL RESOURCES BOARD, REPORT 203 (1934); THE WESTERN RANGE 153 (1936). Id. at 164 states that federal range land outside the national forests was overstocked 76.5 percent.


Some have felt that livestock damaged young trees, and that it was a mistake to allow
Forage land outside the national forests remained free to all until 1934. Persistent overgrazing on this land had by then reduced its fertility by half, and poisonous weeds were increasingly replacing the weakened grasses. Congress, recognizing the serious condition of federal grass land, passed the Taylor Grazing Act in 1934, reserving 140,000,000 acres of land, and authorizing the Government to regulate its use. Taylor Act lands remained in Interior, and are now under the jurisdiction of the Bureau of Land Management. This bureau controls, in addition, about 35,000,000 acres of range which are not reserved for regulation by the Taylor Act.

any grazing in the forests. This view has never prevailed. For conflicting views on the merits of permitting grazing in national forests, see, e.g., SAMPSON, RANGE AND PASTURE MANAGEMENT 23, 197 (1923) and Hearings before Committee on Public Lands and Surveys on S. 2584, 69th Cong., 1st Sess. 144–51 (1926).

47. Id. at 190, 250. See Light v. United States, supra note 46.

48. TASK FORCE REPORT ON NATURAL RESOURCES 41 (1949).

49. The definitive study of depletion of the public range is THE WESTERN RANGE. This report’s conclusion was that “. . . failure to regulate the use of range lands . . . has been so general . . . that in contrast examples of good management are decidedly conspicuous. The result is severe and practically universal range and soil depletion, which already has gone far toward the creation of a permanent desert over enormous areas.” Id. at iv. See also, Shantz, Renewable Resources are Being Depleted, in PROCEEDINGS OF THE INTER-AMERICAN CONFERENCE ON CONSERVATION OF RENEWABLE NATURAL RESOURCES 149 (1948); Hanson & Whitman, Grass Resources in CONSERVATION OF NATURAL RESOURCES 129 (Smith ed. 1950). See also works cited in note 45 supra. Contrast with these authorities the statement of Congressman Mondell of Wyoming, Hearings before Committee on Public Lands and Surveys on S. 2584, 69th Cong., 1st Sess. 96 (1926) (public range now produces more grass than when first used by domestic grazing animals). For a graphic description of the “sea of grass” which confronted a traveller in the Southwest in the mid-1850’s, see BARTLETT, PERSONAL NARRATIVE OF EXPLORATIONS AND INCIDENTS IN TEXAS, NEW MEXICO, CALIFORNIA, SONORA, AND CHIHUAHUA 15 (1854).


51. The reasons advanced for retaining jurisdiction over public grazing land in Interior were: (1) all transactions pertaining to public land passed through Interior; (2) the Department had prior experience in the administration of grazing lands; (3) it had amassed a wealth of statistics and data on the public land. Hearings before Committee on Public Lands on H.R. 6462, 73d Cong., 2d Sess. 66 (1934). The validity of these reasons has been seriously questioned by conservationists. The Interior Department’s experience in the administration of grazing lands had been limited to their sale. The WESTERN RANGE 471 (1936). Perhaps Congress was influenced by the contention of Interior that it could manage Taylor Act land more cheaply than could the Forest Service. Chapman, The Case of the Public Range, American Forests, March, 1948, p. 118, c. 1.

The Forest Service and the BLM: A Study in Contrasts

Forest Service

Timber Policy. The keystones of the Forest Service's timber policy are the prevention of wood waste and the maintenance of a relation between the volume of timber cut and the amount of new growth which will assure a constant or increasing supply of timber. Because of an abundant supply and the relatively good growing conditions in national forests, Forest Service officials are not so much concerned with reducing the volume of lumbering, as with requiring lumbermen to cut only mature trees and to utilize all they cut.

Forest Service timber selling practice is geared to these policies. The Service designates the location of the timber which may be cut, and marks each tree suitable for cutting. After the timber to be sold is selected and the conditions of sale are published, prospective purchasers are invited to submit bids. The Forest Service normally awards the contract of sale to the highest bidder, but reserves the right to reject his offer if acceptance would lead to monopoly, or if the high bidder has a reputation for bad timber practices. All bids may be rejected if the Forest Service wishes.

Purchasers of public timber must observe exemplary lumbering practices. They must agree to leave cut-over areas in a condition suitable for future growth. In most national forests, moreover, sustained-yield management by purchasers is required. This means that the volume of timber cut must be roughly commensurate with the capacity of the land for new growth.

53. National forests are actually capable of supplying an annual cut 50 percent above the present. Report of the Chief of the Forest Service 43 (1949). Undercutting in national forests is a more serious problem than over-lumbering. Not only does it reduce the supply of timber available for public use, but it also retards the growth of young trees. Undercutting is largely due to inaccessibility of the timber. United States Forest Service, The Management Status of Forest Lands in the United States 13 (1946). As more access roads are completed, national forest timber production can be expected to increase. Report of the Chief of the Forest Service 4 (1948).
54. 36 Code Fed. Regs. §§ 221.8(a)(1), 221.15(a) (1949); Smith, The Forest Service 75 (1930).
55. Id. § 221.10 (1949).
56. Id. § 221.2.
57. Seventy-one per cent of national forest cutting is on a sustained-yield basis, and on a large part of the remainder failure to institute sustained-yield management is due to inaccessibility of the timber. United States Forest Service, The Management Status of Forest Lands in the United States 13 (1946).
58. Id. at 12. Optimum sustained-yield contemplates approximate equality of mature trees cut and new trees planted. (Planting will generally exceed cutting by a safety margin made necessary by inevitable loss due to fire, disease, and pests. See page 466 infra.) If, for example, disregarding natural losses, 10 trees with a maturity span of 100 years were planted every year for 100 years with no cutting, and in the following year the 10 trees first planted were cut with new seedlings set out, sustained-yield would be working as it should. See Boerker, Behold Our Green Mansions 282 (1945). In forests where there are large stands of old growth, however, it may be necessary to overcut in order to enable the forest to progress toward an optimum sustained-yield basis. But where cutting is designed to secure a future optimum, it is also called sustained-yield cutting. See Chapman, Forest Management 332-46 (1930).
These requirements are supplemented by prohibition of waste. No longer can lumbermen utilize only the top-grade logs, and allow less valuable timber to rot on the ground.  

*Grazing in the National Forests.* The techniques for conserving range lands in national forests differ from those used for timber areas. Because many national forest ranges are still seriously depleted, the Forest Service is primarily concerned with restricting the volume of grazing on its land. To achieve this reduction, it issues to ranchers permits according to the amount of forage available for grazing. A permit specifies the number of stock and the length of time they may be grazed. The Forest Service retains power to reduce either the number of animals a permittee may graze or the length of time they may occupy the range, if it finds evidence of over-grazing. This power the Service has not hesitated to use.

Although the Forest Service could issue permits to all applicants and at the same time avoid overstocking, such a policy might so limit the number of animals and length of grazing periods as to make forest grazing impractical. First preference in the granting of permits is therefore given to those stockmen who own land in or near the national forest they wish to graze; who cannot feasibly raise livestock without using the forest; and who operate small herds. All these standards must be met for first preference. Ranchers conducting larger operations and those who can operate at a profit without using the national forests, but who used the range before its inclusion in a national forest, are entitled to secondary preference.

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59. SMITH, THE FOREST SERVICE 76 (1930). See also Wright, Logging the Pacific Slopes in TREES, YEARBOOK OF AGRICULTURE 695, 701 (U.S. Dep't Agric. 1949).

60. Despite the regulation of grazing on national forest ranges, they are still 30 per cent depleted. THE WESTERN RANGE 7 (1936). See REPORT OF THE CHIEF OF THE FOREST SERVICE 26 (1948). "The demand for grazing privileges greatly exceeds the amount of national-forest range available. The Forest Service is under constant pressure to let in more stock . . . [but . . . where serious problems of range deterioration exist, decisive action must be taken to save the range."

61. _Id_. at 4.

62. 36 CODE FED. REGS. § 231.3(a) (1949).

63. _Id_. § 231.2(a).

64. _Id_. § 231.4(d). See Osborne v. United States, 145 F.2d 892 (9th Cir. 1944) (permittee not entitled to compensation where national forest is taken for military purposes).


66. REPORT OF THE CHIEF OF THE FOREST SERVICE 7 (1948). The Forest Service favors the "economic livestock unit"—a herd large enough to sustain the rancher, but not so large as to permit monopoly. Such a herd numbers about 300 cattle or 1500 sheep. See also UNITED STATES NATIONAL RESOURCES BOARD—LAND PLANNING COMMITTEE, AGRICULTURAL LAND REQUIREMENTS AND RESOURCES 37-9 (1935).

67. UNITED STATES FOREST SERVICE, QUESTIONS AND ANSWERS ABOUT GRAZING ON NATIONAL FORESTS 3 (1949).
**Forest and Range Protection and Improvement.** Regulation of grass and timber use in national forests is of little avail when these resources are destroyed by fire, pests or disease.\(^8\) To combat these threats, the Forest Service maintains eleven forest and range experimentation stations which have pioneered in the development of fire control equipment, insecticides, and sprays.\(^9\) They have also introduced new strains of grasses, capable of rapid growth on poor soil and resistant to disease.\(^70\) Constant research has produced a wealth of information on proper forest and range management.

Forest Service activities are by no means confined to experimentation and research. Forest personnel maintain a constant watch for fire, and are probably more experienced in combatting forest fires than any other group of men in the United States.\(^71\) National forests are continually inspected for diseases and insects, and the infected trees periodically sprayed.

The Forest Service strives to improve forests and ranges under its jurisdiction. Principally, this involves reseeding national forest range land and setting out young trees.\(^72\) The Service also takes an active part in flood control work, gathering data on watershed conditions, controlling riverbank erosion, and constructing small detention dams.\(^73\)

**Financing Forest Service Activities.** The Forest Service's success is largely attributable to adequate appropriations. Congress has never limited the Service's expenditures to what it receives from selling timber and granting grazing permits. For example, in the fiscal year 1949 total appropriations were about $70,000,000.\(^74\) Slightly less than half of this amount, $30,275,000, was appropriated for the operation, management and protection of national forests— including reforestation and reseeding, fire control, administration of forest and grazing regulations, and prevention of trespass. Of the remainder, $12,000,000 was allocated to construction of forest trails and roads, $1,500,000 to flood control, $9,000,000 to cooperation with states in fire prevention activities.
was paid into the Treasury by users of resources under Forest Service control.\textsuperscript{75}

This favorable treatment is due partly to the Forest Service's willingness and ability to raise substantial sums of money on its own. Public timber is sold at auction to the highest bidder.\textsuperscript{76} Grazing fees are fixed by the Forest Service.\textsuperscript{77} The quality and quantity of grass varies markedly among the various national forests. Hence the fee for each forest range, which is based upon commercial rates for leasing comparable private land,\textsuperscript{78} varies from area to area. Moreover, fees fluctuate each year in accordance with the market price of livestock during the previous year.\textsuperscript{79} When grazing fees reached an all-time high in 1949, they averaged 49 cents per cow and 11 cents per sheep for each month the range was grazed.\textsuperscript{80}

\textit{Appraisal.} On the whole, the Forest Service's achievements are distinguished. Conservationists praise its work,\textsuperscript{81} and critics of the executive branch of the Government point to it as a model for all federal agencies.\textsuperscript{82} While 76 per cent of the nation's grazing land has declined in fertility during the past 30 years, three-fourths of the grass lands in national forests has improved.\textsuperscript{83} Only 23 per cent of the timber cutting throughout the nation and reforestation, and more than $5,000,000 to experimentation and research. \textit{Report of the Chief of the Forest Service} 57-8 (1949).
can be classed as "good," but in national forests the percentage is 80.\footnote{UNITED STATES FOREST SERVICE, THE MANAGEMENT STATUS OF FOREST LANDS IN THE UNITED STATES 4 (1946).} Although less than 40 per cent of the country’s commercial timber is receiving adequate fire protection, 98 per cent of the timber in national forests has such protection.\footnote{Id. at 11.} Moreover, regulated lumbering has not reduced the timber output of national forests;\footnote{Id.} continuation of present practices assures an adequate timber supply in the future.\footnote{Ibid.}

The weakest aspect of the Forest Service’s program is land improvement. Four million acres of national forest land require reforestation, but in 1948 only 44,000 acres were planted.\footnote{Ibid.} On national forest ranges, about 100,000 acres were reseeded, while 4,000,000 need reseeding.\footnote{Ibid.} Failure to restore depleted acreage, however, constitutes the only dark spot in an otherwise excellent record.

**Bureau of Land Management**

**BLM Forests.** BLM policies adopted for control of commercially valuable timber land under its jurisdiction\footnote{Cheyney & Schantz-Hanson, THIS IS OUR LAND 167 (1946).} closely parallel those of the Forest Service. They call for sustained-yield lumbering, penalization of waste, and protection of young growth.\footnote{Ibid.} They do not appear, however, to be effectively enforced. On federal land outside the national forests, only 44 per cent of the cutting is based on sustained yield, and less than 45 per cent of the lumbering practices can be classed as "good."\footnote{Ibid.}

Inadequate forest conservation under the BLM is attributable to two

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\footnote{43 Code Fed. Regs. §§ 115.59, 115.67, 115.61 (1949).} \footnote{UNITED STATES FOREST SERVICE, THE MANAGEMENT STATUS OF FOREST LANDS IN THE UNITED STATES 4, 13 (1946).} \footnote{REPORT OF THE CHIEF OF THE FOREST SERVICE 4 (1948); TASK FORCE REPORT ON NATURAL RESOURCES 188 (1949).} \footnote{BOERKER, BEHOLD OUR GREEN MANSIONS 12 (1945); GUSTAFSON, CONSERVATION IN THE UNITED STATES 230 (1944).}
factors. Since its commercial forests received no real protection before 1937,\textsuperscript{93} machinery for enforcing BLM forestry regulations is still rudimentary. And since the Bureau has not yet inventoried much of its timber, it cannot accurately determine which stands are best fitted for cutting.\textsuperscript{94}

Range Management. Legal authorization to regulate range land under the Interior Department's jurisdiction came long after the Forest Service had commenced regulating its range land. Only one-third of the federal range was ever incorporated into national forest reserves. Free grazing prevailed on the rest until the Taylor Grazing Act of 1934. Few areas of the country then evidenced such bad physical condition as the unreserved grass lands. Persistent overgrazing for half a century had rendered 46,000,000 acres virtually useless.\textsuperscript{95} Nearly 110,000,000 acres—half the federal range land—were more than 50 per cent depleted.\textsuperscript{96} The Taylor Act was passed to prevent further loss of range land and to restore depleted areas.\textsuperscript{97} The Act explicitly recognized that overgrazing was the principal cause of range deterioration,\textsuperscript{98} and contemplated a radical reduction of stock grazing on public land.

In general, the techniques employed by the BLM to effect such reduction closely resemble those of the Forest Service. Grass land subject to Taylor Act control is divided by administrative regulation among 58 grazing districts,\textsuperscript{99} and the BLM determines the amount of forage available for

\begin{footnotes}
\item[93.] Before 1937, there was no legislative authorization for management of any of this land. Grover, \textit{Other Federal Forests in Trees, Yearbook of Agriculture} 381,382 (U.S. Dep't Agric. 1949). In that year Congress provided for sustained-yield management of the forfeited land in Oregon and California. 50 STAT. 874 (1937). See note 38 \textit{supra}. For an account of the dispute raging between rival lumbermen and the BLM over the administration of this land see N.Y. Times, April 3, 1951, p. 31, col. 7, 8; \textit{id.} April 5, 1951, p. 20, col. 2, 3. In 1947 sale of timber was authorized on the remainder of the public land, and sustained-yield management became possible there for the first time. 61 STAT. 681 (1947); \textit{Annual Report of the Secretary of the Interior} 245 (1949).
\item[94.] \textit{Annual Report of the Secretary of the Interior} 245 (1949). With larger appropriations for the fiscal year 1951, the Bureau of Land Management hopes to accelerate its inventories greatly. See \textit{id.} at 246.
\item[95.] \textit{The Western Range} 114 (1936).
\item[96.] \textit{Ibid.} Unreserved land, moreover, was rapidly deteriorating. In the 25 years before 1936, 95 per cent of these ranges were on the downgrade, while only 2 per cent showed improvement. This was in sharp contrast with national forest ranges, where 77 per cent of the range was improving. \textit{Id.} at 7. See also notes 45 and 49 \textit{supra}.
\item[98.] 48 STAT. 1269 (1934); 43 U.S.C. § 315 (1946).
\item[99.] \textit{Report of the Director of the Bureau of Land Management, Statistical Appendix} 6 (1949). A bill was introduced in 1949 which would remove the statutory limit on Taylor Act land and permit creation of additional districts. H.R. 2914, 81st Cong., 1st Sess. § 1 (1949). It passed the House, but was never considered by the Senate.
\end{footnotes}
grazing in each district.\textsuperscript{100} Permits are then issued to qualified applicants, stating the number of sheep or cattle which permittees may graze and the number of months their animals may pasture the range.\textsuperscript{101} The BLM permit system differs from that adopted by the Forest Service only in detail. Preference is given ranchers who own land in or near the grazing district they use.\textsuperscript{102} Within this group of stockmen, those who actually grazed the range during the five years before the passage of the Taylor Act have priority.\textsuperscript{103} In the determination of national forest priorities, on the other hand, range use before its inclusion in a national forest is a secondary consideration.\textsuperscript{104} The Director of the BLM, like the Chief Forester, has power to reduce the number of animals on the range or the length of time they may graze whenever the range appears overgrazed.\textsuperscript{105} He can even exclude all livestock from a badly depleted area. Or, if a grazing district is particularly well adapted to one type of animal, he can reserve it for that kind exclusively.\textsuperscript{106}

However, the BLM, unlike the Forest Service, does not appear to be enforcing its regulations vigorously. As compared to forest ranges, Taylor Act land is still overgrazed.\textsuperscript{107} And while available statistics show a rather

\textsuperscript{100} 43 Code Fed. Regs. § 161.5(a) (1949).
\textsuperscript{101} Ibid.
\textsuperscript{103} 43 Code Fed. Regs. §§ 161.2(g), 161.4, 161.6(b)(1) (1949). The five-year prior use requirement is extremely important, because on many ranges grass is so depleted that only applicants with highest preference can get permits. The Department of the Interior believed that those operating going concerns when the Taylor Act was passed were most deserving of continued use. The Nature and Extent of the Department's Authority to Issue Grazing Privileges Under the Taylor Grazing Act, 56 Int. Dept. 62, 66 (1937). But because the period immediately preceding the Act's passage was one of extreme hardship for stockmen, Interior decided that a substantial use of the range during two consecutive years in the period 1929–1934 was sufficient. \textit{ Ibid.}; D. Sid Smith, 58 Int. Dept. 183 (1942); Auguste Nicholas, 57 Int. Dept. 110 (1940). See also, \textit{Sen. REP. No. 404, 78th Cong., 2d Sess. 28 (1943)}. This basis for awarding permits has been severely attacked as an uncritical acceptance of the status quo, a perpetuation of monopoly conditions of range use which prevailed when control of the range went to the strongest and wealthiest rancher. The Western Range 33, 290 (1936); Chapman, \textit{The Case of the Public Range}, American Forests, Feb. 1948, p. 60, col. 3. See Clawson, The Administration of Federal Range Lands, 53 Q.J. Econ. 435, 439 (1939).
\textsuperscript{104} See page 465 \textit{supra}.
\textsuperscript{105} 43 Code Fed. Regs. § 161.6(c)(8) (1949). There have been occasional intimations that grazing privileges might harden into legal rights, rendering it impossible for the BLM to reduce grazing permits. \textit{E.g.}, The Western Range 291 (1936). Whenever the question has been squarely presented, however, the Department of the Interior has affirmed its power to reduce or terminate grazing permits. Willis J. Lloyd, Oscar Jones, 58 Int. Dept. 776 (1944); D. Sid Smith, 58 Int. Dept. 183 (1944). \textit{But cf.} Oman v. United States, 179 F.2d 738 (10th Cir. 1949) (Issuance of a grazing permit does create some judicially enforceable rights against Government interference).
\textsuperscript{106} 43 Code Fed. Regs. § 161.5(c) (1949).
\textsuperscript{107} See Rauschenbush, Our Conservation Job 32 (1949); De Voto, \textit{The West Against Itself}, Harpers, January 1947, p. 10; De Voto, \textit{The Easy Chair}, Harpers, June 1947,
similar amount of grazing. Land in grazing districts is in much worse shape than in the national forest. This greater depletion should have impelled more stringent reductions of grazing on Taylor Act land.

Trespass on Taylor Act land renders the problem of overgrazing still more acute. Stockmen without permits frequently pasture the grazing districts, and permittees graze more animals for a longer period of time than authorized by their permits. During 1949, although some 175,000 animals grazed Taylor Act land illegally, the BLM failed to institute proceedings in any but the most flagrant violations.

Thirty-five million acres of unreserved grass land lie outside the Taylor Act grazing districts. Some of this land is leased by the BLM to ranchers under statutory authority. The remainder is still grazed free of charge.

In recent months poisonous weeds have been spreading over a wide area of Federal range. So far as is presently known, the only means of controlling them is by reducing grazing and enabling grass to grow in. Life, January 15, 1951, p. 55.

108. In the year ending June 30, 1949, 2,200,000 cattle and 6,300,000 sheep were authorized to graze the 147,000,000 acres of land included in grazing districts. Report of the Director of the Bureau of Land Management, Statistical Appendix 84 (1949). During the same period, 1,150,000 cattle and 3,300,000 sheep grazed the 80,000,000 acres of range land in natural forests. Report of the Chief of the Forest Service 46 (1949). See also note 110 infra.

109. The 1936 Forest Service study showed that federal range land outside the national forests was in far poorer condition than forest ranges. See notes 118 and 122 infra. More recent data indicate that the situation in the grazing districts has not materially improved. Hanson & Whitman, Grass Resources in Conservation of Natural Resources 129 (Smith ed. 1950); Annual Report of the Secretary of the Interior 275 (1948).

110. This comparison of the two agencies must be considered in the light of the probabilities that 80,000,000 acres of national forest land may be an overestimate (other sources place it as low as 65,000,000 acres. Task Force Report on Natural Resources 41 (1949)), and that a considerable area of national forest range may be heavily enough forested to render impossible grazing by larger numbers of stock.

There is little doubt, however, that Taylor Act land is more depleted than national forest ranges. This fact, taken with the evidence that Taylor Act land is actually overgrazed, supra note 107, justifies the conclusion that the BLM should have restricted grazing more severely. There is some evidence, indeed, that the BLM is not even cognizant of the precise amount of forage available in the grazing districts. See note 126 infra.


112. Annual Report of the Secretary of the Interior 239 (1949); Annual Report of the Secretary of the Interior 287 (1947). See also De Voto, The West Against Itself, Harpers, January, 1947, p. 10 ("... some cattlemen and sheepmen are now grazing the public range just about as they see fit. Violation of the Taylor Act is widespread, flagrant, systematic ... ").

113. Id. at 239. This land is excluded because of the acreage limitation in the Taylor Grazing Act.

and without regulation. The Director of the BLM is authorized by the Secretary of the Interior to police the use of leased land and prevent abusive range practices. But because of insufficient personnel, inspection is virtually nonexistent and overgrazing widespread.

Range Improvement. Rehabilitation of the critically depleted forage on Taylor Act and unreserved grazing land calls for extensive reseeding. During 1949 the BLM reseeded about 130,000 acres, an acreage proportionately smaller than that reseeded by the Forest Service. The BLM’s record is particularly disheartening in view of the considerably greater need for extensive replanting on BLM land.

Publicly-owned range land in watersheds, moreover, remains in perilous condition. Because of severe erosion on these lands, vast quantities of top soil are carried away by rains. While this condition is largely attributable to continued overgrazing and inadequate reseeding, a second cause is the BLM’s failure to adopt a long-range program of retention-dam construction, terracing, and stream-bank protection.

Range and Forest Protection. In contrast to the Forest Service’s ambitious research program, the BLM has undertaken no extensive research; it relies chiefly on the Forest Service’s facilities. Nor has it acquired wide experience in forest fire control. Indeed, the most valuable timber under BLM supervision now receives fire protection from the Forest Service.

Appraisal. The BLM has virtually lost control of the range. Trespass,
depletion, and erosion remain unsolved problems. The BLM has been unable to measure accurately the grazing capacity of many Taylor Act ranges. Its greatest need is personnel—men to inspect grazing land, enforce reduction of stock where depletion is serious, and prosecute trespassers. But the Bureau has too few employees to discharge any of its responsibilities adequately. Fewer than 120 employees were available in 1949 to regulate and protect 140,000,000 acres of range.127

Further evidence of the BLM’s loss of control is the power of stockmen advisory boards. These boards, elected by the users of the grazing districts, are designed to facilitate the work of grazing officials. They recommend allocation or revocation of grazing permits, the carrying capacity of grazing districts, and good range practices. Their proposals are advisory only. But grazing officials, unable to investigate proposals independently, frequently accept them without question. As a consequence, the stockmen themselves largely regulate the land they use.

The Forest Service, on the other hand, has retained control over land within its jurisdiction. Relatively few of its ranges are overgrazed, and Service personnel are able to impose and enforce reductions of stock when-
ever ranges appear to be deteriorating. And while the Forest Service enlists the aid of stockmen advisory boards, final decisions are made independently by grazing officials.

Inadequate Finances. The BLM's loss of control over the public range is due primarily to inadequate funds. In 1949, BLM appropriations were about $7,000,000, less than 10 per cent of Forest Service appropriations for that year. Since a portion of the BLM's funds are not used for conservation, the disparity is even greater.

In making appropriations, Congress has set a different standard for the BLM from that set for the Forest Service. On the one hand, Congress has never intimated that Forest Service expenditures for the management of national forest ranges should be offset by equal payments into the Treasury by range users. The Bureau of Land Management's appropriations for range management, on the other hand, have been limited by Congress in recent years to the amount received from users of Taylor Act land.

Congress' belief that the BLM's range activities should be self-supporting stemmed from a rash statement by Secretary of the Interior Ickes in 1934 that Taylor Act land could be managed and protected at a cost of $150,000 a year, and that this expense could be met entirely by a moderate grazing

131. Communication to the Yale Law Journal from Mr. W. L. Dutton, Chief of the Division of Range Management, United States Forest Service, dated December 8, 1950, in Yale Law Library. In 1947, the Forest Service, after a range survey, decided reductions in grazing permits were necessary. This action was vehemently opposed by the livestock interests. Congressional hearings were conducted in the western states, and the Committee on Public Lands proposed a three year moratorium on reductions. The Secretary of Agriculture categorically rejected the proposal, and instituted the reductions. See Report of the Chief of the Forest Service 26 (1948); De Voto, Sacred Cows and Public Lands, Harpers, July, 1948, p. 44.


133. 62 STAT. 1114 (1948). About $3,500,000 was spent for the management, protection and disposal of land under the BLM's jurisdiction, including Taylor Act land, unreserved public and mineral lands, and territory subject to sale under public land laws; another $1,500,000 was spent for watershed protection; $1,000,000 for salaries and expenses; $500,000 for protection of BLM forests; $300,000 for range improvements; and $85,000 for firefighting. No appropriation was made for research. Report of the Director of the Bureau of Land Management, Statistical Appendix 103 (1949). An additional $1,500,000 was appropriated to the BLM but was earmarked for transfer to the Soil Conservation Service. Ibid.

BLM appropriations were supplemented by cash and labor contributions from stockmen. Annual Report of the Secretary of the Interior 241 (1949). See Interpretation of the Taylor Grazing Act, 56 Int. Dept. 226 (1937) (Legal authority for stockmen's contributions).


fee.\textsuperscript{136} The fee established at that time was 5 cents per cow and 1 cent per sheep for each month the range was grazed.

Almost immediately it became evident that $150,000 was wholly inadequate. By 1944 annual expenditures had mounted to $1,800,000.\textsuperscript{137} That year the Director of the Grazing Service, an agency now incorporated in the Bureau of Land Management, proposed to treble fees.\textsuperscript{133} Stockmen vehemently opposed any increase.\textsuperscript{139} Finding grazing officials unsympathetic, they appealed to the Senate Subcommittee of Public Lands and Surveys, headed by Senator McCarran of Nevada.\textsuperscript{140} Senator McCarran, already deep in an investigation of the Grazing Service, readily agreed to add the fee issue to his agenda. As the McCarran Committee barnstormed the West, the Director of Grazing presented his budget to the House Appropriations Committee. His request was sharply reduced, and the Committee advised the Grazing Service to increase fee payments at once.\textsuperscript{141}

Intense pressure from ranchers and from Congress' livestock bloc induced grazing officials to postpone fee increases.\textsuperscript{142} Forced to admit failure when it next appeared before Congress,\textsuperscript{143} the Grazing Service encountered an irate Appropriations Committee.\textsuperscript{144} The Committee cut appropriations


\textsuperscript{138} Sen. Rep. No. 404 pt. 2, 78th Cong., 2d Sess. 21(1944). This projected increase was based on a three year study of western grazing conditions, considering (a) rents paid on comparable commercial grazing land, (b) tax payments of private range land, (c) record of ranch costs and incomes. Id. at 32-4. See \textit{Annual Report of the Secretary of the Interior} 178 (1944); Sen. Rep. No. 808 pt. 2, 79th Cong., 2d Sess. 5-6 (1946).

\textsuperscript{139} Their argument was based on (a) the uncertain future of the livestock industry, (b) heavy operating losses sustained by sheep ranchers, (c) a fear that fee increases would be used to justify additional administrative expenses. Sen. Rep. No. 808 pt. 2, 79th Cong., 2d Sess. 1 (1946).


\textsuperscript{141} H.R. Rep. No. 437, 79th Cong., 1st Sess. 10 (1945). The Committee reduced recommended appropriations from $1,700,000 to $1,100,000.

\textsuperscript{142} Chapman, \textit{The Case of the Public Range}, American Forests, March, 1948, p. 118, col. 3.


\textsuperscript{144} The temper of the Committee was indicated by a statement of Representative Jenson, of Iowa "... And I make the motion, Mr. Chairman, that we stop these hearings right now relative to the Grazing Service, and let them go out and see what they can do between now and the time this committee finishes the hearings and then come back and report to us what they have done in an attempt to get these grazing fees up where they belong." Id. at 148.
from a requested $1,500,000 to $425,000, the exact sum received from graz-
ing fees.\textsuperscript{145} Ironically enough, precisely a week before the House approved the Grazing Service slash, the McCarran Committee reported to the Senate that stockmen could not possibly survive a fee increase.\textsuperscript{146}

The Grazing Service quietly died. Crushed between the House Appropriations Committee's refusal to provide funds without a fee increase, and the livestock lobby's successful opposition to any increase,\textsuperscript{147} the service lost control of the western range. Sixty per cent of grazing employees were laid off, and range activities virtually ceased.\textsuperscript{148}

Shortly thereafter the Grazing Service was merged with the Interior Department's General Land Office into the Bureau of Land Management.\textsuperscript{149} Following the merger, fees of 8 cents per cow and 1 3/5 cents per sheep each month were put into effect.\textsuperscript{150} But no significant additional increase can be expected.\textsuperscript{151} For in 1947, Congress provided that the charge for grazing Taylor Act land should not exceed the cost of administering grazing dis-

\textsuperscript{145} See statement of Representative Johnson of Oklahoma, 92 CONG. REC. 4634 (1946) ("The Committee finally found out what they had raised in fees, and we found that the share of the Federal Government amounted to $425,000. Instead of eliminating all appropriations for the Grazing Service, as we were tempted to do, instead of giving them $150,000 that we promised, we gave them $425,000, the amount that they collected . . . and we said to the Grazing Service: 'Live up to your contract; live within your revenues,' and by the eternals, they are going to do it whether they like it or not."). See also Hearings before Subcommittee of Committee on Appropriations on the Interior Department Appropriations Bill for 1946, 79th Cong., 1st Sess. 463 (1945).

\textsuperscript{146} 92 CONG. REC. 4690-4 (1946).

\textsuperscript{147} Some writers have placed responsibility for the entire debacle upon western Congressman. See e.g., Schantz, \textit{Renewable Resources are being Depleted}, in PROCEEDINGS OF THE INTER-AMERICAN CONFERENCE ON CONSERVATION OF RENEWABLE NATURAL RESOURCES 149 (1948); De Voto, \textit{The Easy Chair}, Harpers, Jan., 1948, p. 31, col. 2. It is true the West was united against any fee increase. But they were not responsible for slashing appropriations, and a number of western Representatives proved to be the Service's staunchest supporters. "[I]f we will only be fair . . . we will find that the Grazing Service is doing a remarkably good job with a relatively small amount of money." 92 CONG. REC. 4835 (Harless of Arizona). See also \textit{id.} at 4839 (Bunker of Nevada); \textit{id.} at 4634 (Granger of Utah). In the Senate westerners were extremely antagonistic. The Subcommittee on Public Lands, composed entirely of western Senators, delivered a blistering attack on the integrity of the Grazing Service. SEN. REP. No. 10, 80th Cong., 1st Sess. 1 (1947).

\textsuperscript{148} \textit{ANNUAL REPORT OF THE SECRETARY OF THE INTERIOR} 283 (1947); American Forest, Feb., 1947, p. 55, col. 2; Velie, \textit{They Kicked Us Off Our Land}, Colliers, July 26, 1947, p. 40, col. 4 (In practice, the Taylor Act was repealed).


\textsuperscript{150} Nicholson, \textit{Reorganization Plan No. 3 as Proposed to J. A. Krug} (1946); SEN. REP. No. 10, 80th Cong., 1st Sess. 12 (1947).

\textsuperscript{151} One of the major livestock associations, however, has indicated that grazing fees might be expected to increase to 10 cents per cow and 2 cents per sheep. Communication to the Yale Law Journal from Mr. J. M. Jones, Executive Secretary-Treasurer, National Wool Growers Association, dated March 7, 1950, in Yale Law Library.
tricts. This legislation makes it impossible for the BLM to increase grazing fees unless Congress first increases appropriations for the administration of Taylor Act land. And Congress has shown an unwillingness to increase appropriations unless the BLM raises its fees.

THE NEED FOR REORGANIZATION

Continued impotence of the BLM not only prevents effective conservation of Taylor Act land, but jeopardizes the independence of the Forest Service as well. Stockmen, finding themselves in a dominant position on BLM land, have in recent years launched a drive to gain similar power in the national forests. Their campaign has taken several forms: to prevent reduction of livestock except where forest range is depleted; to create ranchers' grazing boards with legal power of review over Forest Service decisions; and to remove all grazing land from the national forests and place it under the BLM. So far the stockmen have made little progress.


153. In the Interior Department Appropriations hearings of 1947, after the submission of the Nicholson Report, administrative appropriations were cut from $1,000,000 to $373,000 and the BLM was again sternly warned to raise its fees. H.R. Rep. No. 890, 80th Cong., 1st Sess. (1947).

Receipts from grazing fees in 1949 totalled $1,250,000, and administrative expenditures amounted to about $2,000,000. Report of the Director of the Bureau of Land Management, Statistical Appendix 94, 103 (1949). And in the Interior Department Appropriation Act for 1951, a slightly larger sum is allowed. Pub. L. No. 759, 81st Cong., 2d Sess. c. vii, title I (Sept. 6, 1950). This would seem to indicate that Congress is relenting.

In at least one respect, however, Congress is holding BLM rigidly within its fee receipts. One-fourth of grazing fees are earmarked for range improvement (fences, wells, rodent and pest control and reseeding), and Congress has expressly provided that expenditures for these improvements may not exceed the amount received from range-improvement fees, plus 25 per cent of receipts from leased land outside the grazing districts. Ibid.


156. This project was advanced by the American National Livestock Association. American Forests, Feb., 1947, p. 55, col. 2.

157. None of the measures advocated were adopted by Congress, and the stockmen's
but BLM leniency on Taylor Act land certainly lends color to their contention that Forest Service demands are excessive.\textsuperscript{158}

The possibilities of strengthening the BLM are slim. Increased BLM appropriations are a remote possibility. The appropriations committees appear determined to hold out for higher fees. But even more unlikely is a sharp fee increase. For most Western senators and representatives are firmly committed to the proposition that fees shall not rise above their present level.

Even if the BLM could be strengthened, optimum conservation would not be achieved. Lands administered by the BLM and the Forest Service are geographically intermingled, with large tracts of land managed by one actually situated within areas supervised by the other.\textsuperscript{159} Soil and water conditions are alike, and problems of regulation identical on land managed by the two agencies. But communications between them are poor.\textsuperscript{160} The programs of one, moreover, are frequently in conflict with those of the other.\textsuperscript{161} Coordinated conservation practices appear unlikely as long as the two agencies remain separated.

To make matters worse, jurisdictional rivalry between the BLM and the Forest Service is bitter. They compete against one another for appropriations and personnel,\textsuperscript{162} each praising its own efforts while disparaging the claims of its rival.\textsuperscript{163} Congress, confronted with these conflicting assertions, is unable to allocate appropriations intelligently. An end to this rivalry can be realized only by unifying the two agencies.

**Proposals for Reorganization**

*A Long-Range Program*

While there is general agreement that unified administration of BLM and Forest Service resources is imperative,\textsuperscript{164} there are grave doubts that this alone will suffice. The BLM and the Forest Service are fundamentally

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\textsuperscript{158} *Task Force Report on Natural Resources* 202 (1949).

\textsuperscript{159} *Id.* at 188–93, 197–201; *Brewer, Forestry Activities of the Federal Government* 118 (1946).

\textsuperscript{160} *Task Force Report on Natural Resources* 188–202 (1949).

\textsuperscript{161} Stockmen frequently rely on grazing ranges within both the national forests and grazing districts. To do so they must obtain permits from both the Forest Service and the BLM, and satisfy divergent requirements for obtaining preference. There may, moreover, be periods when neither the national forests nor the grazing districts are open to grazing. *Ibid.* Lumbermen must similarly negotiate contracts with both agencies to cut a stand of timber in an area where they share control.

\textsuperscript{162} *Hearings before Committee on Agriculture on H.R. 6054*, 80th Cong., 2d Sess. 77 (1948).

\textsuperscript{163} *Task Force Report on Natural Resources* 202 (1949). See also Neuberger, *Again a Land Battle in the West*, N.Y. Times Magazine Section, April 2, 1950, p. 74, col. 2.

\textsuperscript{164} This was the unanimous conclusion of the Hoover Commission. *Commission on
concerned with conservation of land resources (forests and grass) only. Rigid segregation of land problems from problems pertaining to the development of water resources has proved unsatisfactory. Optimum programs for flood control, irrigation, water power development, soil erosion control, and reforestation all require coordinated management of water and land resources.\(^6\) Forests and grass restrain run-off of rain water, thereby reducing the threat of floods. Similarly they lessen siltation of rivers, a constant threat to navigation and irrigation projects. Irrigation and flood control, on the other hand, increase the land’s productivity and can greatly aid the growth of forests and grass.

Geographical considerations further illustrate the close relationship between water and public land resource management. Water is scarcest and the need for its conservation most acute in the Rocky Mountain and Pacific Coast states. Here also are located all the public ranges and most of the federally owned forests.\(^6\)

Despite the intimate connection between water and public land resources, their administration today is in separate hands. The Bureau of Reclamation and the Army Corps of Engineers, primarily responsible for conservation and development of water resources, have no authority over watershed land.\(^6\) They frequently ignore the effect of rapid run-off and erosion, and indeed resent any proposals by land management agencies which might require modification of their plans for river development.\(^6\) The waste has been prodigious.\(^6\) Dams and power projects have been constructed without adequate investigation of related watershed conditions.\(^6\) Siltation has reduced the useful life of more than two-thirds of the nation’s reservoirs to less than a hundred years.\(^7\) This waste could have been reduced by greater emphasis on reseeding and reforestation of watersheds.

\(^{165}\) Organization of the Executive Branch of the Government, Department of Agriculture 24–6 (1949) (Majority); \textit{Id.} at 8 (Forrestal dissent); \textit{Commission on Organization of the Executive Branch of the Government, Department of the Interior} 61–5 (1949) (Separate opinion). See also, \textit{Hearings before Committee on Agriculture on H.R. 6054, 80th Cong., 2d Sess.} (1948) \textit{passim}; \textit{United States National Resources Board, Report} 3 (1934).

\(^{166}\) "The public lands and the water resources of the Nation have all been tied together by nature and the march of technology into a multiple-purpose resource development program. Only the Government insists on treating them separately." \textit{Commission on Organization of the Executive Branch of the Government, Department of the Interior} 63 (1949). See also, McDougal & Haber, Property, Wealth, Land 986 (1948); \textit{National Resources Committee, Drainage Basin Problems and Programs} 68 (1937); address of President Truman, \textit{supra} note 17.

\(^{167}\) \textit{Task Force Report on Natural Resources} 11 (1949).


\(^{169}\) \textit{Id.} at 76–9.

\(^{170}\) \textit{Task Force Report on Natural Resources} 3 (1949).

\(^{171}\) \textit{Id.} at 18–20.
Lack of coordination between land and water programs has also resulted in loss of valuable land through unwise location of dams. Hundreds of thousands of acres of fertile farm land have been flooded in attempts to reduce flood damage elsewhere. In many cases, selection of an alternate damsite would have preserved the neighboring land resources without impairing the utility of the water project. Projects now contemplated, moreover, threaten the existence of some of the nation’s finest recreational and wildlife areas.

In the presentation of budgets to Congress, no attempt is made to integrate the requirements of land and water conservation. Agencies concerned with river control compete actively for funds with those charged with watershed protection. In recent years disproportionate appropriations have been awarded to water bureaus.

The recent Hoover Commission on Reorganization of the Executive Branch of the Government divided on the issue of unifying the management of public land and water resources. The majority, rejecting proposals for consolidation, concentrated upon independent improvement in the management of land and water resources. It recommended concentration of control over public land resources in the Department of Agriculture, with a similar concentration of water control in Interior. This decision was based on the belief that administration of land resources, whether publicly or privately owned, was one problem, all aspects of which belonged in Agriculture, the department primarily concerned with land and its produce. The majority’s recommendation was fortified by the fact that research agencies of Agriculture are as concerned with grass and timber as they are with corn and cotton. Stockgrowers and lumbermen, moreover, conduct


173. Frank & Netboy, supra note 171, at 32, col. 3. One recently approved project, for example, the Echo Park dam, will flood much of Dinosaur National Monument. Dinosaur’s Rugged Beauty, American Forests, January 1951, p. 16.


175. Commission on Organization of the Executive Branch of the Government, Department of Agriculture 26 (1949). For similar recommendations, see Robbins, Our Landed Heritage 422 (1942); Hearings before Committee on Agriculture on H.R. 6054, 80th Cong., 2d Sess. 2–3 (1948); The Western Range iv-v, 16–18, 52–3, 377–418, 467–73 (1936); Chapman, The Case of the Public Range, American Forests, March, 1948, p. 139, col. 1.


178. Johnson & Loomis, The Help the Government Offers in Grass, Yearbook of Agriculture 34 (U.S. Dep’t Agric. 1948). Agencies in Agriculture dealing with grasslands
operations on private as well as public land, and no matter where they operate require technical information and advice which Agriculture is best qualified to give.

Commissioners Acheson, Pollock and Rowe, dissenting, recommended creation of a Department of Natural Resources, consolidating all agencies now managing public land and water. The Department of the Interior would cease to exist and its functions, together with those of the Forest Service, would be transferred to the new department. The dissenting commissioners envisioned a rather decentralized department. Natural resources, according to them, require unified treatment at regional levels. The dissenters therefore proposed that responsibility for regional development be placed in the hands of regional administrators, and that conflicts between regions be resolved by the Secretary of the Department.

A Proposal for Immediate Adoption

The case for coordinated management of all resources is a strong one, and the plan advanced by the dissenting commissioners is worthy of serious consideration. But adoption seems at present politically imprac-
tical. The jealousies between Interior and Agriculture are deep-seated: officials of both agencies fear a loss of influence in a new department consolidating their activities. The Army Corps of Engineers would resist any attempt to transfer their functions to a new department. Private groups, which benefit from the present separation of water and land development, would also oppose coordination of these activities.

The majority proposal, on the other hand, would not meet the same resistance. And since unification of the BLM and the Forest Service is certainly a step in the right direction, expediency dictates immediate adoption of the majority plan.

The majority's choice of Agriculture over Interior to house both the BLM and the Forest Service is a good one. First, the Forest Service's research facilities are far more extensive than the BLM's, and the Service receives assistance from other Agriculture research bureaus. Second, the Forest Service has established a better conservation record than the BLM. The generally good and improving condition of national forest range and timber is directly attributable to the success of Forest Service policies. Third, the Forest Service has maintained independence from users of range land, while the BLM has been forced to cede many of its powers to the stockmen whose activities it is supposed to regulate. Finally, Congress apparently lacks confidence in the BLM, and its approval of a consolidation of range and forest administration in that agency seems too much to hope for. The Forest Service, on the other hand, has wide public support for its efficient and impartial practices. Unification of public range and forest activities in Agriculture is both a practical and desirable short-range objective.

NATURAL RESOURCES 203-207 (1949). Complete transfer of these bureaus would ultimately be necessary. See the majority plan, page 480 supra. It would involve, however, all but complete merger of the Department of Agriculture into the Department of Natural Resources, a measure beyond the scope of treatment in this comment.

185. Hearings before Committee on Agriculture on H.R. 6054, 80th Cong., 2d Sess. 533 (1948). See also McDougal & Haber, WEALTH, PROPERTY, LAND 1157 (1948).
186. See Boerker, BEHOLD OUR GREEN MANSIONS 202 (1945).
187. See Cheyne & Schantz-Hanson, THIS IS OUR LAND 190-2 (1946); THE WESTERN RANGE 275 (1936).
188. See McCormick, Unification of Federally-Owned Lands, American Forests, April, 1950, p. 17 et seq.