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**PUBLIC LAND**

**STATISTICS**

**1989**

**U. S. DEPARTMENT OF THE INTERIOR**  
**BUREAU OF LAND MANAGEMENT**

**U.S. Department of the Interior, Bureau of Land Management.**

The Bureau of Land Management is responsible for the balanced management of the public lands and resources and their various values so that they are considered in a combination that will best serve the needs of the American people. Management is based upon the principles of multiple use and sustained yield; a combination of uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources. These resources include recreation, range, timber, minerals, watershed, fish and wildlife, wilderness, and natural, scenic, scientific, and cultural values.

U.S. Department of the Interior  
Bureau of Land Management  
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# **PUBLIC LAND STATISTICS 1989**

**Volume 174**

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Note.—Unless otherwise specified, tables present data for the 1989 fiscal year period (Oct. 1, 1988—Sept. 30, 1989).



## CHANGES IN 1989 EDITION

One new table has been added to this year's edition of *Public Land Statistics*; no tables have been dropped. The energy and mineral resources tables have been rearranged to better present their data. Significant changes are described below. Table numbers refer to the 1989 edition unless otherwise noted.

### **Table added:**

Table 45.—*Approved coal logical mining units (LMU)*: This table portrays a segment of information which has not been represented in past editions.

### **Other changes:**

Table 26.—*Fish and wildlife habitat improvements completed during fiscal year 1989*: The title was revised to more accurately reflect data presented in the table.

Table 38.—*Bureau of Land Management lands designated as wilderness by Congress as of September 30, 1989*: The title was revised to show that Congress, not BLM, designates lands as wilderness.



## Part I

### LANDS ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT

The total area of the 50 States is 2.3 billion acres. The Federal Government has, at various times in U.S. history, held title to about 80 percent of the Nation's total area. Today, Federal civil and defense agencies administer 688 million acres, or 30 percent of the total area (Table 4).

The Bureau of Land Management has exclusive jurisdiction for about 39 percent, or 270 million acres, of the federally owned lands (Table 5). Approximately one-third of this area is in the State of Alaska. Other major land-holding agencies in the Department of the Interior include the National Park Service, Fish and Wildlife Service, and Bureau of Reclamation.

Up to the present, title to approximately 1.1 billion acres has been transferred to individual citizens, businesses, and non-Federal governmental organizations under Federal legal authority generally referred to as the "land laws." Substantial portions, amounting to over 287 million acres, have been removed from Federal ownership under the authority of the Homestead Laws. Another 328 million acres have been granted to States to help support public schools, develop transportation systems, and promote general economic development (Table 2).

In Western Oregon, an area of 2.6 million acres comprise the Oregon and California (O&C) revested lands (Table 6). Originally public domain, this acreage was reconveyed and revested to the United States from grants made to private concerns to construct the Oregon and California Railroad and the Coos Bay Military Wagon Road.

TABLE 1.—*Acquisition of the public domain, 1781 to 1867*

Acquisition	Area				Cost <sup>a</sup>
	Land	Water	Total	Percent of total U.S. land	
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>		
State cessions (1781-1802) . . .	233,415,680	3,409,920	236,825,600	10.2	<sup>b</sup> \$6,200,000
Louisiana Purchase (1803) <sup>c</sup> . . .	523,446,400	6,465,280	529,911,680	22.9	23,213,568
Red River Basin (1782-1817) . . .	29,066,880	535,040	29,601,920	1.3	.....
Cession from Spain (1819) . . .	43,342,720	2,801,920	46,144,640	2.0	6,674,057
Oregon Compromise (1846) . . .	180,644,480	2,741,760	183,386,240	7.9	.....
Mexican Cession (1848) . . . . .	334,479,360	4,201,600	338,680,960	14.6	16,295,149
Purchase from Texas (1850) . . .	78,842,880	83,840	78,926,720	3.4	15,496,448
Gadsden Purchase (1853) . . . . .	18,961,920	26,880	18,988,800	0.8	10,000,000
Alaska Purchase (1867) . . . . .	365,333,120	12,909,440	378,242,560	16.3	7,200,000
Total public domain . . . . .	1,807,533,440	33,175,680	1,840,709,120	79.4	85,079,222

<sup>a</sup>Cost data for all except "State Cessions" obtained from Geological Survey, *Boundaries, Area, Geographic Centers* (Washington, U.S. Government Printing Office, 1939), pp. 249-251.

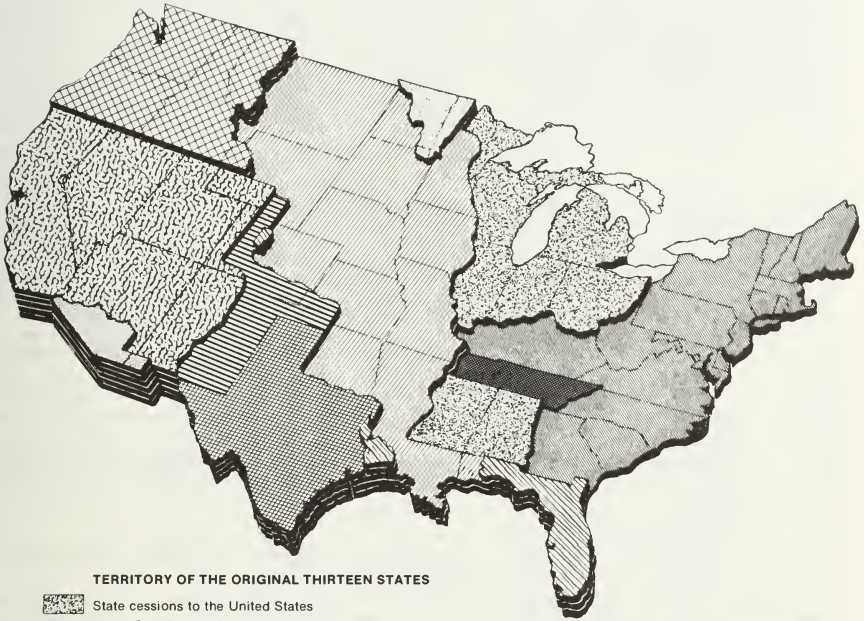
<sup>b</sup>Georgia Cession, 1802 (56,689,920 acres). See Donaldson, Thomas, *The Public Domain, Its History, with Statistics* (Washington, U.S. Government Printing Office, 1884), p. 11.

<sup>c</sup>Excludes areas eliminated by treaty of 1819 with Spain.





Note.—Alaska has been adjusted for the recomputation of the areas of the United States that was made for the 1980 decennial census.

Source: U.S. Department of the Interior, Office of the Secretary, *Areas of Acquisitions to the Territory of the United States...* (Washington, U.S. Government Printing Office, 1922). Acreages therein are based on findings adopted February 2, 1912, by the Secretary of the Interior.



ACQUISITIONS









**TERRITORY OF THE ORIGINAL THIRTEEN STATES**

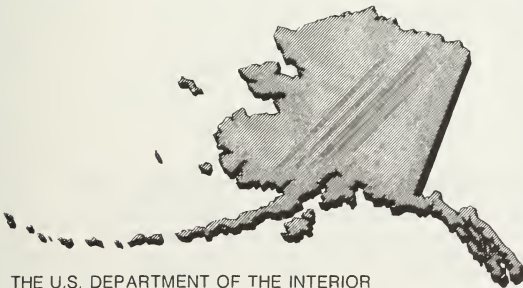
-  State cessions to the United States
-  North Carolina cession to the United States, 1790
-  United States cession to Tennessee, 1806 and 1846
-  The Original Thirteen States (present area) plus the District of Columbia

**TERRITORY OF THE REPUBLIC OF TEXAS**  
(Annexation of Texas, 1845)

-  United States purchase from Texas, 1850
-  State of Texas (present area)

**OTHER ACQUISITIONS OF THE UNITED STATES**

-  Louisiana Purchase from France, 1803
-  Treaties with Great Britain, 1783 and 1817
-  Treaty with Spain (cession of Florida and adjustment of claims), 1819
-  Oregon Compromise with Great Britain, 1846
-  Cession from Mexico, 1848
-  Gadsden Purchase from Mexico, 1853



**ALASKA**  
Purchased from Russia, March 30, 1867

## PUBLIC LAND STATISTICS

TABLE 2.—Disposition of public lands, 1781 to 1989

Type of Disposition	Acres
Disposition by methods not elsewhere classified <sup>a</sup> .....	303,500,000
Granted or sold to homesteaders <sup>b</sup> .....	287,500,000
Total unclassified and homestead dispositions .....	591,000,000
Granted to States for:	
Support of common schools .....	77,630,000
Reclamation of swampland .....	64,920,000
Construction of railroads .....	37,130,000
Support of miscellaneous institutions <sup>c</sup> .....	21,700,000
Purposes not elsewhere classified <sup>d</sup> .....	117,600,000
Canals and rivers .....	6,100,000
Construction of wagon roads .....	3,400,000
Total granted to States .....	328,480,000
Granted to railroad corporations .....	94,400,000
Granted to veterans as military bounties .....	61,000,000
Confirmed as private land claims <sup>e</sup> .....	34,000,000
Sold under timber and stone law <sup>f</sup> .....	13,900,000
Granted or sold under timber culture law <sup>g</sup> .....	10,900,000
Sold under desert land law <sup>h</sup> .....	10,700,000
Total miscellaneous dispositions .....	224,900,000
Grand Total .....	1,144,380,000

<sup>a</sup>Chiefly public, private, and preemption sales, but includes mineral entries, scrip locations, and sales of townsites and townlots.

<sup>b</sup>The homestead laws generally provide for the granting of lands to homesteaders who settle upon and improve vacant agricultural public lands. Payment for the land is sometimes permitted, or required, under certain conditions.

<sup>c</sup>Universities, hospitals, asylums, etc.

<sup>d</sup>For construction of various public improvements (individual items not specified in the granting acts), reclamation of desert lands, construction of water reservoirs, etc.

<sup>e</sup>The Government has confirmed title to lands claimed under valid grants made by foreign governments prior to the acquisition of the public domain by the United States.

<sup>f</sup>The timber and stone laws provided for the sale of lands valuable for timber or stone and unfit for cultivation.

<sup>g</sup>The timber culture laws provided for the granting of public lands to settlers on condition that they plant and cultivate trees on the lands granted. Payments for the lands were permitted under certain conditions.

<sup>h</sup>The desert land laws provide for sale of arid agricultural public lands to settlers who irrigate them and bring them under cultivation.

Note.—Data are estimated from available records.

TABLE 3.—Grant lands confirmed to States, fiscal year 1989

Geographic State	Number of grants	Total acres
Alaska <sup>a</sup> .....	21	287,942
Utah .....	1	7,354
Total .....	22	295,296

<sup>a</sup>Does not include 26 confirming patents, 805,758 acres (title previously transferred by tentative approval (TA)).

TABLE 4.—*Comparison of federally owned land with total acreage of States, fiscal year 1988*

State	Acreage owned by the Federal Government			Acreage not owned by Federal Government	Total acreage of State	Percent owned by Government <sup>a</sup>
	Public Domain	Acquired by other methods	Federal total			
Alabama .....	3,302.2	546,344.6	549,646.8	32,128,753.2	32,678,400	1.682
Alaska .....	295,435,853.6	801,084.9	296,236,938.5	69,244,661.5	365,481,600	81.054
Arizona .....	30,692,423.1	1,667,095.4	32,359,518.5	40,328,481.5	72,688,000	44.518
Arkansas .....	785,749.2	1,599,856.0	2,385,605.2	31,213,754.8	33,599,360	7.100
California .....	41,223,074.2	3,336,679.8	44,559,754.0	55,646,966.0	100,206,720	44.468
Colorado .....	18,637,361.4	1,143,845.8	19,781,207.2	46,704,552.8	66,485,760	29.753
Connecticut .....	.....	13,926.8	13,926.8	3,121,433.2	3,135,360	0.444
Delaware .....	.....	30,355.7	30,355.7	1,235,564.3	1,265,920	2.398
District of Columbia .....	8.6	11,092.6	11,101.2	27,938.8	39,040	28.436
Florida .....	212,385.6	3,049,300.2	3,261,685.8	31,459,594.2	34,721,280	9.394
Georgia .....	.....	1,492,636.0	1,492,636.0	35,802,724.0	37,295,360	4.002
Hawaii .....	2,016.4	282,703.1	284,719.5	3,820,880.5	4,105,600	6.935
Idaho .....	31,267,453.0	826,709.1	32,094,162.1	20,838,957.9	52,933,120	60.632
Illinois .....	409.2	494,646.7	495,055.9	35,300,144.1	35,795,200	1.383
Indiana .....	432.0	468,749.2	469,181.2	22,689,218.8	23,158,400	2.026
Iowa .....	340.7	158,892.7	159,233.4	35,701,246.6	35,860,480	0.444
Kansas .....	1,747.8	687,714.9	689,462.7	51,821,257.3	52,510,720	1.313
Kentucky .....	.....	1,392,065.4	1,392,065.4	24,120,254.6	25,512,320	5.456
Louisiana .....	21,933.3	6,515,713.6	6,537,646.9	22,330,193.1	28,867,840	22.647
Maine .....	58.5	152,561.0	152,619.5	19,695,060.5	19,847,680	0.769
Maryland .....	.....	196,901.2	196,901.2	6,122,458.8	6,319,360	3.116
Massachusetts .....	.....	82,691.9	82,691.9	4,952,188.1	5,034,880	1.642
Michigan .....	295,218.1	3,275,227.4	3,570,445.5	32,921,714.5	36,492,160	9.784
Minnesota .....	1,182,798.9	1,221,538.1	2,404,337.0	48,801,423.0	51,205,760	4.695
Mississippi .....	2,377.1	1,662,370.8	1,664,747.9	28,557,972.1	30,222,720	5.508
Missouri .....	2,849.3	2,028,819.9	2,031,669.2	42,216,650.8	44,248,320	4.592
Montana .....	25,025,906.8	2,419,529.6	27,445,436.4	65,825,603.6	93,271,040	29.426
Nebraska .....	54,227.6	469,286.8	523,514.4	48,508,165.6	49,031,680	1.068
Nevada .....	55,055,780.9	353,599.9	55,409,380.8	14,854,939.2	70,264,320	78.859
New Hampshire .....	3.8	749,029.1	749,032.9	5,019,927.1	5,768,960	12.984
New Jersey .....	103.1	162,708.3	162,811.4	4,650,628.6	4,813,440	3.382
New Mexico .....	21,962,436.3	3,783,339.4	25,745,775.7	52,020,624.3	77,766,400	33.107
New York .....	65.9	239,562.3	239,628.2	30,441,331.8	30,680,960	0.781
North Carolina .....	.....	2,239,064.1	2,239,064.1	29,163,815.9	31,402,880	7.130
North Dakota .....	246,407.6	1,711,876.4	1,958,284.0	42,494,196.0	44,452,480	4.405
Ohio .....	134.4	330,338.7	330,473.1	25,891,606.9	26,222,080	1.260
Oklahoma .....	91,111.8	784,181.7	875,293.5	43,212,386.5	44,087,680	1.985
Oregon .....	30,013,312.0	2,197,907.0	32,211,219.0	29,387,501.0	61,598,720	52.292
Pennsylvania .....	16.6	661,592.7	661,609.3	28,142,870.7	28,804,480	2.297
Rhode Island .....	.....	4,535.4	4,535.4	672,584.6	677,120	0.670
South Carolina .....	.....	1,181,211.8	1,181,211.8	18,192,868.2	19,374,080	6.097
South Dakota .....	1,519,619.7	1,156,419.3	2,676,039.0	46,205,881.0	48,881,920	5.475
Tennessee .....	.....	1,355,365.5	1,355,365.5	25,372,314.5	26,727,680	5.071
Texas .....	315.7	2,704,631.3	2,704,947.0	165,512,653.0	168,217,600	1.608
Utah .....	30,196,084.5	1,440,048.5	31,636,133.0	21,060,827.0	52,696,960	60.034
Vermont .....	.....	353,899.2	353,899.2	5,582,740.8	5,936,640	5.961
Virginia .....	42.0	1,910,150.6	1,910,192.6	23,586,127.4	25,496,320	7.492
Washington .....	10,590,797.4	2,063,528.4	12,654,325.8	30,039,434.2	42,693,760	29.640
West Virginia .....	.....	1,408,569.8	1,408,569.8	14,001,990.2	15,410,560	9.140
Wisconsin .....	10,802.8	1,892,762.8	1,903,565.6	33,107,634.4	35,011,200	5.437
Wyoming .....	28,673,015.7	332,707.8	29,005,723.5	33,337,316.5	62,343,040	46.526
Total .....	623,207,976.8	65,045,369.2	688,253,346.0	1,583,090,014.0	2,271,343,360	30.302

<sup>a</sup>Excludes trust properties.

Note.—This table represents the most current data available from the General Services Administration. Data does not include inland water.

Source: General Services Administration, except "Acreage of State": Bureau of the Census, U. S. Department of Commerce, from the 1980 decennial census.

TABLE 5.—Public lands under exclusive jurisdiction of the Bureau of Land Management, fiscal year 1989

State	Vacant public lands <sup>a</sup>			Reserved lands			Grand Total Acres
	Outside grazing districts Acres	Within grazing districts Acres	Total Acres	LLU <sup>b</sup> Acres	Other Acres		
Alabama	2,844	2,844	2,844	.....	107,846	110,690	
Alaska	c92,740,505	.....	c92,740,505	.....	.....	c92,740,505	
Arizona	1,418,035	10,101,481	11,519,516	32,321	876,747	12,428,584	
Arkansas	1,650	.....	1,650	.....	289,107	290,757	
California	12,916,375	2,479,671	15,396,046	d37,201	1,808,643	17,204,689	
Colorado	476,864	6,790,659	7,267,523	.....	972,166	8,276,890	
Florida	1,666	.....	1,666	.....	23,765	25,431	
Idaho	427,185	10,739,002	11,166,187	72,276	629,310	11,867,773	
Illinois	3	3	3	.....	5,000	5,003	
Indiana	40	.....	40	.....	240	280	
Iowa	.....	.....	.....	.....	1,400	1,400	
Kansas	985	.....	985	.....	.....	985	
Louisiana	3,961	.....	3,961	.....	305,260	309,221	
Michigan	979	.....	979	.....	74,807	75,786	
Minnesota	41,345	.....	41,345	.....	145,211	186,556	
Mississippi	1,801	.....	1,801	.....	55,971	57,772	
Missouri	600	.....	600	.....	2,175	2,775	
Montana	1,150,721	4,939,857	6,090,578	e1,809,702	170,378	8,070,658	
Nebraska	7,660	.....	7,660	.....	.....	7,660	
Nevada	3,141,270	44,616,668	47,757,938	3,127	201,571	47,962,636	
New Mexico	1,369,491	11,139,813	12,509,304	9,229,500	131,109	12,869,913	
North Dakota	66,849	.....	66,849	.....	181	67,030	
Ohio	40	.....	40	.....	.....	40	
Oklahoma	2,816	.....	2,816	.....	.....	2,816	
Oregon	559,238	12,454,699	13,013,937	80,101	h2,597,636	15,691,674	
South Dakota	272,596	.....	272,596	.....	6,999	279,595	
Utah	.....	20,410,900	20,410,900	45,033	1,685,975	22,141,908	
Washington	310,005	.....	310,005	.....	2,577	312,582	
Wisconsin	609	.....	609	.....	157,631	158,240	
Wyoming	3,928,364	11,276,232	15,204,596	110,434	3,189,004	18,404,034	
Total	118,844,497	134,948,982	253,793,479	2,319,695	13,440,709	269,553,883	



<sup>a</sup>The following types of surveyed and unsurveyed public and ceded Indian lands are included: Areas withdrawn under the Executive Orders of November 26, 1934, and February 5, 1935 (43 CFR 2400.0-3 et seq.); areas embraced in mineral withdrawals and classifications; areas withdrawn for resurvey, and areas restored to entry within national forests (Act of June 11, 1906, 34 Stat. 233; 16 U.S.C. 506-509), within reclamation projects (Act of June 17, 1902, 32 Stat. 388), and within power site reserves (Act of June 10, 1920, 41 Stat. 1063; 16 U.S.C. 791). These lands are not covered by any non-Federal right or claim other than permits, leases, rights-of-way, and unreported mining claims.

<sup>b</sup>"Land Utilization Project" lands, purchased by Federal government under Title III of the Bankhead-Jones Farm Tenant Act and subsequently transferred by various Executive Orders between 1941 and 1958 from jurisdiction of the U.S. Department of Agriculture to the U.S. Department of the Interior, now administered by the Bureau of Land Management. Acreages are within grazing districts unless otherwise noted.

<sup>c</sup>This is an estimated acreage based upon a percentage of the total Federal acreage conveyed in fiscal year 1989. Figures have not been maintained in the past as to particular agency jurisdiction over conveyed land. Beginning in fiscal year 1990, these figures will be tracked.

<sup>d</sup>36,721 acres within grazing district lands and 480 acres outside grazing district lands.

<sup>e</sup>1,804,287 acres within grazing district lands and 5,415 acres outside grazing district lands.

<sup>f</sup>An audit and review resulted in figures being increased 1,130 acres.

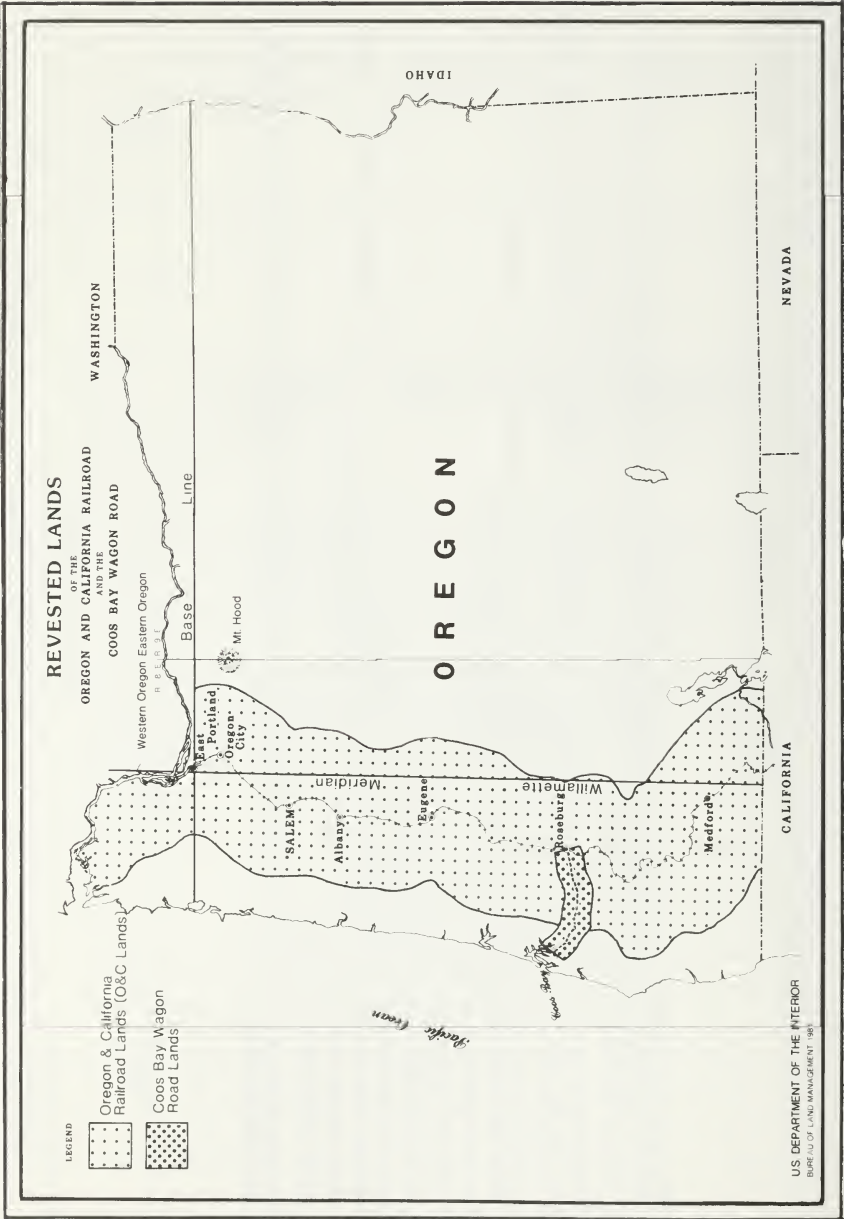
<sup>g</sup>229,460 acres within grazing district lands and 40 acres outside grazing district lands.

<sup>h</sup>Includes 2,076,561 acres of recovered Oregon and California Railroad Company lands and 74,547 acres of Coos Bay Wagon Road Lands (See Table 6).

<sup>i</sup>Acreage was erroneously reported in the 1988 edition of *Public Land Statistics* as being outside grazing districts.

<sup>j</sup>Total acreage is outside grazing district lands.

Note.—Lands under BLM's exclusive jurisdiction are those lands (and resources) managed solely by BLM. Table includes all unperfected entries except for those involving reclamation and forest homesteads.



**TABLE 6.—Area of Oregon and California (O&C) revested lands, fiscal year 1989**

Oregon County	O&C lands <sup>a</sup>	Controverted O&C lands <sup>b</sup>	Special act O&C lands <sup>c</sup>	Coos Bay lands <sup>d</sup>	Total
	Acres	Acres	Acres	Acres	Acres
Benton .....	51,439	.....	1,720	.....	53,159
Clackamas .....	<sup>e</sup> 50,041	35,949	5,688	.....	91,678
Columbia .....	11,080	.....	.....	.....	11,080
Coos .....	98,982	23,002	.....	59,914	181,898
Curry .....	36,681	56,735	.....	.....	93,416
Douglas .....	611,599	95,641	.....	14,633	721,873
Jackson .....	<sup>e</sup> 389,468	25,332	20,971	.....	435,771
Josephine .....	258,763	109,244	182	.....	368,189
Klamath .....	46,202	20,962	.....	.....	67,164
Lane .....	279,144	95,293	.....	.....	374,437
Lincoln .....	8,773	.....	.....	.....	8,773
Linn .....	85,578	520	.....	.....	86,098
Marion .....	20,747	.....	.....	.....	20,747
Multnomah .....	4,247	.....	.....	.....	4,247
Polk .....	41,026	.....	1,160	.....	42,186
Tillamook .....	38,286	.....	.....	.....	38,286
Washington .....	11,691	.....	.....	.....	11,691
Yamhill .....	32,814	.....	.....	.....	32,814
<b>Total .....</b>	<b>2,076,561</b>	<b>462,678</b>	<b>29,721</b>	<b>74,547</b>	<b>2,643,507</b>

<sup>a</sup>These lands are administered by the Bureau of Land Management. They include O&C timber on non-Federal land on 322 acres in Columbia County and 243 acres in Yamhill County.

<sup>b</sup>Under the provisions of Public Law 426, approved by the 83rd Congress on June 24, 1954, these lands were declared to be revested O&C railroad grant lands. They have been placed under the jurisdiction of the Secretary of Agriculture to be administered with National Forest lands, with all revenues derived from such lands to be handled in accordance with the provisions of Title II of the O&C Act of August 28, 1937 (50 Stat. 874) as amended by Public Law 426.

<sup>c</sup>Certain O&C areas have been set aside by various Acts of Congress to be administered by the Forest Service without losing their O&C identity. The lands in Benton, Clackamas, Jackson, and Polk counties are watershed lands, while the land in Josephine County is an administrative site.

<sup>d</sup>Administered by the Bureau of Land Management; excludes Coos Bay Wagon Road timber on 87 acres of non-Federal land in Coos County.

<sup>e</sup>Acreage change is the result of a land sale.

## Part II

### BUREAU OF LAND MANAGEMENT PROGRAMS

#### Land Disposition and Use

Under the public land laws, the Bureau of Land Management administers 270 million acres of federally owned lands (Table 5). The Bureau issued 1,771 patents during fiscal year 1989, transferring 780,128 acres of public lands from Federal ownership. Patents or certificates issued in conjunction with public land sales totaled 162 and covered 8,212 acres. Purchase monies collected during the fiscal year for all types of land transactions totaled \$16,983,673.98 (Table 7).

A total of 231,008 acres of Federal lands were exchanged for 285,638 acres of State or private land (Table 8). These exchanges generated \$3,021,077.00 (Table 7).

At the close of fiscal year 1989, there were 67,998,512 acres of patented lands on which minerals have been reserved to the United States. A total of 708,707 acres were patented with minerals reserved during the year (Table 9).

A total of 43,769 acres were withdrawn from all forms of entry. Withdrawals were revoked on 62,844 acres (Table 10).

There were 931 nonspecific land use authorizations in effect under 43 CFR 2920 covering 141,111 acres at the close of the fiscal year. Revenue collected totaled \$601,712.31 (Table 11).

A total of 917 Recreation and Public Purposes (R&PP) leases covering 120,489 acres were in effect at the end of the fiscal year. Airport leases totaled 96 and covered 19,329 acres. Leases, permits, and other miscellaneous authorizations generated a grand total of \$93,134.03 (Table 12).

BUREAU OF LAND MANAGEMENT PROGRAMS  
Land Disposition and Use

TABLE 7.—*Applications, entries, selections, and patents, fiscal year 1989*

Type by State	Applications, entries, and selections				Patents Issued		Purchase money
	Allowed		Approved		Number	Acres	
	Number	Acres	Number	Acres			
<b>Desert land</b>							
Idaho .....	1	132	.....	.....	4	276	.....
Nevada .....	.....	.....	2	640	5	1,305	\$1,306.00
Utah .....	1	38	.....	.....	2	400	400.00
Wyoming .....	3	335	.....	.....	.....	.....	83.79
Total desert land .....	5	505	2	640	11	1,981	1,789.79
<b>Land sales (FLPMA)</b>							
Arizona .....	.....	.....	.....	.....	2	6	.....
California .....	.....	.....	.....	.....	28	2,892	1,044,361.10
Colorado .....	.....	.....	.....	.....	5	175	71,992.63
Idaho .....	.....	.....	.....	.....	10	567	30,952.00
Minnesota .....	.....	.....	.....	.....	3	39	12,840.00
Montana .....	.....	.....	.....	.....	2	1	700.00
Nebraska .....	.....	.....	.....	.....	1	40	1,400.00
Nevada .....	.....	.....	.....	.....	12	1,556	6,082,169.20
New Mexico .....	.....	.....	.....	.....	37	93	90,876.99
Oregon .....	.....	.....	.....	.....	10	964	65,009.00
South Dakota .....	.....	.....	.....	.....	2	120	9,922.50
Utah .....	.....	.....	.....	.....	30	964	161,825.00
Washington .....	.....	.....	.....	.....	3	8	8,334.00
Wyoming .....	.....	.....	.....	.....	17	787	96,500.60
Total land sales .....	.....	.....	.....	.....	162	8,212	7,676,883.02
<b>Mineral</b>							
Alaska .....	.....	.....	4	1,271	1	80	3,437.50
Arizona .....	.....	.....	6	2,303	.....	.....	5,945.00
California .....	.....	.....	.....	.....	5	294	.....
Colorado .....	.....	.....	1	3,204	2	9	625.00
Idaho .....	.....	.....	.....	.....	3	30	.....
Montana .....	.....	.....	5	2,646	5	2,646	11,685.00
Nevada .....	.....	.....	7	1,404	4	11,829	29,985.00
New Mexico .....	.....	.....	.....	.....	1	20	50.00
Oregon .....	.....	.....	3	886	2	106	1,950.00
Utah .....	.....	.....	.....	.....	1	83	210.00
Wyoming .....	.....	.....	7	917	8	4,248	10,625.00
Total mineral .....	.....	.....	33	12,631	32	19,345	64,512.50
<b>Indian new trust</b>							
Arizona .....	.....	.....	1	25	1	25	.....
Wyoming .....	.....	.....	.....	.....	8	285	.....
Total Indian new trust .....	.....	.....	1	25	9	310	.....
<b>Indian fee and reissue trust</b>							
California .....	.....	.....	.....	.....	8	80	.....
Idaho .....	.....	.....	.....	.....	25	2,305	.....
Kansas .....	.....	.....	.....	.....	24	498	.....
Montana .....	.....	.....	239	42,414	239	42,414	.....
North Dakota .....	.....	.....	21	2,354	21	2,354	.....
Oklahoma .....	.....	.....	.....	.....	68	5,588	.....
Oregon .....	.....	.....	.....	.....	2	80	.....
South Dakota .....	.....	.....	53	9,467	53	9,467	.....
Washington .....	.....	.....	.....	.....	5	125	.....
Total Indian fee and reissue trust .....	.....	.....	313	54,235	445	62,911	.....
<b>Miscellaneous cash sales</b>							
<b>Color-of-title</b>							
Alabama .....	.....	.....	.....	.....	1	160	200.00
Idaho .....	.....	.....	.....	.....	2	37	36,600.00
Louisiana .....	.....	.....	.....	.....	1	3	823.43
Minnesota .....	.....	.....	.....	.....	1	40	1,920.00
New Mexico .....	.....	.....	.....	.....	43	149	218.75
North Dakota .....	.....	.....	1	40	1	40	280.00

**TABLE 7.—Applications, entries, selections, and patents,  
fiscal year 1989—continued**

Type by State	Applications, entries, and selections				Patents Issued		Purchase money
	Allowed		Approved		Number	Acres	
	Number	Acres	Number	Acres			
Oklahoma .....	.....	.....	.....	.....	9	2	11.25
Oregon .....	.....	.....	1	39	1	39	49.00
Utah .....	.....	.....	.....	.....	1	8	1,670.00
Wisconsin .....	.....	.....	.....	.....	2	70	657.00
Total color-of-title .....	.....	.....	2	79	62	548	42,429.43
<b>Recreation and public purposes</b>							
Alaska .....	.....	.....	.....	.....	2	657	.....
Arizona .....	.....	.....	3	334	3	108	288.00
California .....	.....	.....	.....	.....	7	4,795	.....
Colorado .....	.....	.....	.....	.....	1	39	100.00
Idaho .....	.....	.....	.....	.....	2	169	.....
Minnesota .....	.....	.....	.....	.....	2	44	.....
Montana .....	.....	.....	1	1	1	1	135.00
Nevada .....	.....	.....	.....	.....	4	231	15,200.00
Oklahoma .....	.....	.....	.....	.....	2	11	1,050.00
Utah .....	.....	.....	3	75	3	145	6,250.00
Wyoming .....	.....	.....	.....	.....	2	72	250.00
Total recreation and public purposes .....	.....	.....	7	410	29	6,272	23,273.00
<b>Other</b>							
Alaska .....	.....	.....	.....	.....	a <sup>21</sup>	105	262.50
Idaho .....	.....	.....	.....	.....	b <sup>1</sup>	140	.....
Nevada .....	.....	.....	.....	.....	c <sup>9</sup>	79	3,723,119.00
Oregon .....	.....	.....	.....	.....	d <sup>1</sup>	49	6,468.00
Wyoming .....	e <sup>6</sup>	693	6	693	6	693	35,823.33
Total other .....	6	693	6	693	38	1,066	3,765,672.83
<b>Total Miscellaneous</b>							
Cash Sales .....	6	693	15	1,182	129	7,886	3,831,375.26
<b>Conveyance of federally owned mineral estates</b>							
Arizona .....	.....	.....	.....	.....	6	1,958	10,276.00
California .....	.....	.....	.....	.....	11	1,450	31,097.13
Colorado .....	.....	.....	.....	.....	1	80	50.00
Florida .....	.....	.....	.....	.....	4	60	62.50
Georgia .....	.....	.....	.....	.....	1	140	.....
Michigan .....	.....	.....	.....	.....	1	61	.....
Minnesota .....	.....	.....	.....	.....	2	5	.....
Nebraska .....	.....	.....	.....	.....	1	80	.....
Nevada .....	.....	.....	.....	.....	3	3,932	1,800.00
New York .....	.....	.....	.....	.....	1	6	778.32
Tennessee .....	.....	.....	.....	.....	4	71	1,456.12
Wyoming .....	.....	.....	.....	.....	8	413	.....
Total conveyance of federally owned mineral estates .....	.....	.....	.....	.....	43	8,256	45,520.07
<b>Exchanges<sup>e</sup></b>							
Alaska .....	.....	.....	.....	.....	2	10,474	.....
Arizona .....	.....	.....	.....	.....	20	36,701	45,073.00
Arkansas .....	.....	.....	.....	.....	1	80	.....
California .....	.....	.....	.....	.....	27	22,987	.....
Colorado .....	.....	.....	.....	.....	8	2,345	148,000.00
Idaho .....	.....	.....	.....	.....	21	58,974	.....
Michigan .....	.....	.....	.....	.....	3	225	23,450.00
Minnesota .....	.....	.....	.....	.....	1	80	2,000.00
Montana .....	.....	.....	.....	.....	64	20,079	.....
Nevada .....	.....	.....	.....	.....	3	5,562	.....
New Mexico .....	.....	.....	.....	.....	7	6,213	125,699.00
Oregon .....	.....	.....	.....	.....	13	13,731	42,055.00
South Dakota .....	.....	.....	.....	.....	4	616	.....

TABLE 7.—*Applications, entries, selections, and patents, fiscal year 1989—continued*

Type by State	Applications, entries, and selections				Patents Issued		Purchase money
	Allowed		Approved		Number	Acres	
	Number	Acres	Number	Acres	Number	Acres	
Utah .....	.....	.....	.....	.....	6	24,062	2,633,200.00
Washington .....	.....	.....	.....	.....	7	17,324	1,600.00
Wyoming .....	.....	.....	.....	.....	2	353	.....
Total exchanges .....	.....	.....	.....	.....	189	219,806	3,021,077.00
<b>State grants</b>							
Alaska .....	.....	.....	<sup>f</sup> 39	478,697	921	287,942	.....
Utah .....	.....	.....	.....	.....	1	7,354	.....
Total State grants .....	.....	.....	39	478,697	22	295,296	.....
<b>Corrections</b>							
Alabama .....	.....	.....	.....	.....	22	3,331	.....
Alaska .....	.....	.....	.....	.....	5	31,833	.....
Arizona .....	.....	.....	.....	.....	1	160	.....
Colorado .....	.....	.....	.....	.....	1	113	.....
Florida .....	.....	.....	.....	.....	1	80	.....
Idaho .....	.....	.....	.....	.....	1	.....	.....
Louisiana .....	.....	.....	.....	.....	1	339	.....
Michigan .....	.....	.....	.....	.....	3	208	.....
Minnesota .....	.....	.....	.....	.....	1	.....	.....
Mississippi .....	.....	.....	.....	.....	2	1,114	.....
Montana .....	.....	.....	.....	.....	2	160	.....
Nevada .....	.....	.....	.....	.....	1	3	3,000.00
Ohio .....	.....	.....	.....	.....	1	163	.....
Oklahoma .....	.....	.....	.....	.....	2	17	1.25
Washington .....	.....	.....	.....	.....	1	2	.....
Wisconsin .....	.....	.....	.....	.....	2	120	.....
Total corrections .....	.....	.....	.....	.....	47	37,643	3,001.25
<b>Other</b>							
Alaska .....	.....	.....	<sup>h</sup> 29	31,379	<sup>i</sup> 674	209,017	.....
Montana .....	.....	.....	<sup>b</sup> 3	400	3	400	.....
Nevada .....	.....	.....	.....	.....	<sup>j</sup> 3	9,132	2,339,515.09
New Mexico .....	.....	.....	.....	.....	<sup>k</sup> 1	480	.....
Oregon .....	.....	.....	<sup>l</sup> 1	7	1	7	.....
Total other .....	.....	.....	33	31,786	682	219,036	2,339,515.09
Grand Total .....	11	1,198	436	579,196	1,771	<sup>m</sup> 780,128	16,983,673.98

<sup>a</sup> 16 homesites, 80 acres, and 5 headquarters sites, 25 acres, all conveyed under the Act of May 14, 1898, 30 Stat. 413, as amended and supplemented.

<sup>b</sup> Reclamation homestead under the Act of June 17, 1902 (32 Stat. 388).

<sup>c</sup> Santini-Burton Act of December 23, 1980.

<sup>d</sup> Bureau of Reclamation sale under the Act of June 17, 1902 (32 Stat. 388).

<sup>e</sup> Includes Federal Land Policy and Management Act (FLPMA) exchanges, National Forest exchanges, and other exchanges. Refer to Table 8, Land Exchanges, for more detailed information.

<sup>f</sup> Tentative approvals that transfer title prior to survey; confirmatory patent will issue following survey.

<sup>g</sup> Original patents only; does not include 26 confirmatory patents on 805,758 acres because title was previously transferred under tentative approvals.

<sup>h</sup> Interim conveyances under the Alaska Native Claims Settlement Act (ANCSA) of December 18, 1971 (43 U.S.C. 1601), and other acts, which transfer title prior to survey; confirmatory patent will issue following survey.

<sup>i</sup> 35 ANCSA patents, 141,742 acres; and 639 Native Allotment Certificates under the Act of May 17, 1906, as amended, and the Alaska National Interest Lands Conservation Act (ANILCA, 43 U.S.C. 1635), 67,275 acres; does not include 36 confirmatory patents on 895,509 acres because title was previously transferred under interim conveyances.

TABLE 7.—*Applications, entries, selections, and patents,  
fiscal year 1989—concluded*

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<sup>i</sup>1 patent issued under the Act of September 27, 1988 (102 Stat. 1802), 80 acres; 1 patent under the Act of April 26, 1963 (77 Stat 14), 9,012 acres; and 1 patent under the Act of November 19, 1988 (102 Stat 4629), 40 acres.

<sup>k</sup>State mineral exchange patent issued under the Exchange Act of October 21, 1976, and Sec. 104 of the San Juan Wilderness Act of October 20, 1984 (16 U.S.C. 1131).

<sup>l</sup>Equitable adjudication patent issued under the Act of September 20, 1922 (43 U.S.C. 1161).

<sup>m</sup>This total does not include 62,911 acres in Indian fee and reissue trust patents and 37,643 acres in correction of patents and other conveyance documents, for a total of 100,554 acres.

Note.—“Purchase money” includes all revenues collected during the reporting fiscal year at allowed and approved stages from all ongoing cases leading to patent; this money is not necessarily identifiable with those lands reported patented during the fiscal year.



TABLE 8.—*Land exchanges, fiscal year 1989*

Type of exchange by State	Number of patents or deeds issued	Area received	Area patented or deeded <sup>a</sup>
		Acres	Acres
<b>National Forest exchanges<sup>b</sup></b>			
Alaska .....	1	64	60
Arizona .....	4	3,457	427
Arkansas .....	1	80	80
California .....	13	4,507	11,122
Colorado .....	4	913	829
Idaho .....	9	16,221	12,710
Michigan .....	3	374	225
Minnesota .....	1	120	80
Montana .....	6	4,161	7,342
Nevada .....	1	200	120
New Mexico .....	2	63	60
Oregon .....	7	8,497	2,425
South Dakota .....	4	.....	616
Washington .....	5	25,491	16,355
Wyoming .....	1	53	31
Total National Forest exchanges .....	62	64,201	52,482
<b>Federal Land Policy and Management Act (FLPMA) exchanges<sup>c</sup></b>			
Arizona .....	16	94,484	36,274
California .....	27	9,392	22,987
Colorado .....	4	1,656	1,516
Idaho .....	12	35,482	46,264
Montana .....	58	9,722	12,737
Nevada .....	2	6,146	5,442
New Mexico .....	5	17,088	6,153
Oregon .....	6	7,339	11,306
Utah .....	6	33,051	24,062
Washington .....	2	1,960	969
Wyoming .....	1	1,667	402
Total FLPMA exchanges .....	139	217,987	168,112
<b>Other exchanges</b>			
Alaska .....	<sup>d</sup> 1	3,450	10,414
Total other exchanges .....	1	3,450	10,414
Grand Total .....	202	285,638	231,008

<sup>a</sup>Public domain lands are patented; acquired lands are deeded by the government.

<sup>b</sup>Act of March 20, 1922 (42 Stat. 465) as amended.

<sup>c</sup>Act of October 21, 1976 (90 Stat. 2756; 43 U.S.C. 1716).

<sup>d</sup>Issued pursuant to the exchange authority of Sec. 1302(h) of the Alaska National Interest Lands Conservation Act of December 2, 1980, 16 U.S.C. 3192(h).

TABLE 9.—Patents issued with minerals reserved to the United States through fiscal year 1989

Geographic State	Type of mineral reservation							Total Acres
	All minerals Acres	Coal Acres	Oil and gas Acres	Phosphate Acres	Oil and gas plus other minerals Acres	Miscellaneous minerals and combinations Acres		
<b>1909* — 1948</b>								
Alaska .....	6,501	10,823	1,095	.....	773	.....	19,192	
Alabama .....	4,412	63,586	9,563	.....	2,889	.....	80,450	
Arizona .....	2,547,517	4,403	27,497	.....	.....	101,880	2,681,297	
Arkansas .....	1,107	1,520	15,043	85	40	.....	17,795	
California .....	2,352,070	3,005	156,783	.....	23	1,864	2,513,745	
Colorado .....	4,271,042	1,348,288	215,423	.....	38,494	.....	5,873,247	
Florida .....	1,154	.....	2,304	.....	520	.....	75,237	
Idaho .....	1,291,163	11,749	4,940	270,036	216,060	.....	1,793,948	
Illinois .....	634	120	.....	.....	.....	754	754	
Iowa .....	359	.....	.....	.....	.....	.....	359	
Kansas .....	54,384	.....	1,421	.....	.....	.....	55,805	
Louisiana .....	1,223	.....	17,105	.....	3,844	.....	22,172	
Michigan .....	1,935	.....	3,261	.....	.....	.....	5,196	
Minnesota .....	235	.....	.....	8	.....	.....	243	
Mississippi .....	974	.....	10,231	.....	.....	.....	11,205	
Missouri .....	166	.....	.....	.....	.....	.....	166	
Montana .....	3,983,640	6,658,554	987,472	11,290	17,788	150	11,668,894	
Nebraska .....	72,964	.....	3,253	.....	.....	.....	76,217	
Nevada .....	242,717	960	1,119	.....	80	40	244,916	
New Mexico .....	6,378,118	614,779	112,995	680	70,673	2,092,091	9,269,336	
North Dakota .....	134,578	4,636,851	11,915	.....	1,164	40	4,784,548	
Ohio .....	38	.....	.....	.....	.....	744	782	
Oklahoma .....	48,781	.....	10,917	.....	.....	.....	59,698	
Oregon .....	1,639,741	5,598	14,369	.....	480	.....	1,660,189	
South Dakota .....	1,565,802	187,722	6,328	.....	.....	.....	1,759,852	
Utah .....	856,083	215,528	98,922	21,576	8,157	1,680	1,201,946	
Washington .....	262,444	14,535	2,518	.....	384	400	280,281	
Wisconsin .....	1,546	.....	.....	.....	.....	.....	1,546	
Wyoming .....	9,541,179	2,297,363	376,906	32,037	17,341	257	12,265,083	
Total through 1948 .....	35,272,508	16,075,384	2,091,380	406,971	378,710	2,199,146	56,424,099	

Fiscal period <sup>b</sup>	363,466	24,868	18,287	1,138	7,662	4,235	419,656
1949-1950 .....	1,258,347	64,204	650,841	5,075	109,323	36,586	2,124,376
1951-1960 .....	2,103,335	44,578	893,114	559	498,973	30,663	3,571,222
1961-1970 .....	2,914,664	9,344	186,689	340	185,764	49,784	3,346,585
1971-1980 .....	38,651	110	7,334	160	13,613	3,239	63,107
1981 .....	34,815	1,683	4,798	.....	7,794	2,747	51,837
1982 .....	37,620	2,365	43,654	.....	14,097	32,856	130,592
1983 .....	326,185	1,203	31,964	123	1,410	17,710	378,595
1984 .....	138,108	198	44,015	67	10,102	25,989	218,479
1985 .....	27,279	1,696	36,810	.....	5,289	7,867	78,941
1986 .....	74,640	6,134	22,169	.....	11,304	3,650	117,897
1987 .....	223,298	442	21,618	34	57,004	62,023	364,419
1988 .....	611,297	1,024	54,496	.....	35,680	6,210	708,707
1989 .....	.....	.....	.....	.....	.....	.....	.....
Total 1949 through 1989 .....	8,151,705	157,849	2,015,789	7,496	958,015	283,559	11,574,413
Grand Total .....	43,424,213	16,233,233	4,107,169	414,467	1,336,725	2,482,705	<sup>c</sup> 67,998,512

<sup>a</sup>Minerals began to be reserved with the Agricultural Coal Lands Act of March 3, 1909; acts expanding on this and covering other minerals were subsequently enacted.

<sup>b</sup>As of June 30 through 1976; thereafter, as of September 30.

<sup>c</sup>Does not include 165,712 stockraising homesteads comprising 70,362,925 acres that reserved all minerals to the United States. Some of these homesteads were entered but not patented.

Note.—Data prior to 1949 was tabulated from incomplete records. Data includes patents issued on both BLM and Forest Service lands.

TABLE 10.—*Withdrawals and revocations, fiscal year 1989*

	Withdrawals	Revocations	Modifications
<b>Alaska</b>			
Bureau of Land Management .....		1,800	99
Federal Aviation Administration .....		66	
National Oceanic and Atmospheric Administration .....			8,500
U.S. Air Force .....	8,237		
U.S. Army .....		143	
Total Alaska .....	8,237	2,009	8,599
<b>Arizona</b>			
Bureau of Reclamation .....			640
Bureau of Prisons .....			86
U.S. Geological Survey .....		173	
U.S. Forest Service .....			6
Total Arizona .....		173	732
<b>California</b>			
Bureau of Land Management .....		69	2,655
Bureau of Reclamation .....		81	
U.S. Fish and Wildlife Service .....			160
U.S. Forest Service .....		165	
Total California .....		315	2,815
<b>Colorado</b>			
Bureau of Land Management .....	7,902		
Department of Energy .....	340		
U.S. Forest Service .....	3,236	2	
Total Colorado .....	11,478	2	
<b>Idaho</b>			
Bureau of Land Management .....		59,029	
Bureau of Reclamation .....		435	
U.S. Forest Service .....		81	
Total Idaho .....		59,545	
<b>Kansas</b>			
U.S. Army .....		76	
Total Kansas .....		76	
<b>Montana</b>			
Bureau of Land Management .....		5	
Bureau of Reclamation .....		20	
U.S. Forest Service .....		99	
Total Montana .....		124	
<b>Nevada</b>			
Bureau of Land Management .....		40	
Federal Aviation Administration .....	399		
Total Nevada .....	399	40	
<b>North Dakota</b>			
Department of Agriculture .....		40	
Total North Dakota .....		40	

BUREAU OF LAND MANAGEMENT PROGRAMS  
Land Disposition and Use

TABLE 10.—*Withdrawals and revocations, fiscal year 1989—concluded*

	Withdrawals	Revocations	Modifications
<b>Oregon</b>			
Bureau of Land Management .....		83	
Corps of Engineers .....		20	
National Park Service .....			1,640
U.S. Air Force .....	2,622		
Total Oregon .....	2,622	103	1,640
<b>South Dakota</b>			
U.S. Forest Service .....	50	100	
Total South Dakota .....	50	100	
<b>Utah</b>			
Bureau of Land Management .....	8,219		
Bureau of Reclamation .....	991		
Total Utah .....	9,210		
<b>Washington</b>			
Bureau of Land Management .....		317	
Total Washington .....		317	
<b>Wyoming</b>			
Bureau of Land Management .....	11,773		
Total Wyoming .....	11,773		
Grand Total .....	43,769	62,844	13,786
<b>Summary by Agency</b>			
Bureau of Land Management .....	27,894	61,343	2,754
Bureau of Prisons .....			86
Bureau of Reclamation .....	991	536	640
Corps of Engineers .....		20	
Department of Agriculture .....		40	
Department of Energy .....	340		
Federal Aviation Administration .....	399	66	
National Oceanic and Atmospheric Administration .....			8,500
National Park Service .....			1,640
U.S. Air Force .....	10,859		
U.S. Army .....		219	
U.S. Fish and Wildlife Service .....			160
U.S. Forest Service .....	3,286	447	6
U.S. Geological Survey .....		173	
Agency Totals .....	43,769	62,844	13,786

Notes: The above figures are a compilation of withdrawals, revocations, and modifications which were administratively made by the Secretary of the Interior.

There were no Engle Act withdrawals during fiscal year 1989.

TABLE 11.—*Nonspecific land use authorizations, fiscal year 1989*

Geographic State	Type	Operations during fiscal year 1989					In effect as of September 30, 1989	
		Authorizations issued		Revenue collected	Authorizations terminated		Total authorizations	
		Number	Acres		Number	Acres	Number	Acres
Alaska	Permits .....	45	7,426	\$5,766.64	26	5,740	65	18,802
	Leases .....	7	1,932	8,326.05	.....	.....	19	2,013
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Arizona	Permits .....	61	9,370	7,225.00	19	8,830	99	10,244
	Leases .....	5	1,015	75,037.00	1	1,000	34	1,300
	Easements .....	.....	.....	.....	.....	.....	.....	.....
California	Permits .....	272	19,536	60,671.00	229	4,884	65	14,792
	Leases .....	7	1,085	282,365.56	2	6	91	1,652
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Colorado	Permits .....	12	13,544	14,886.00	29	16,462	22	342
	Leases .....	1	50	20,350.00	.....	<sup>a</sup> 338	12	668
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Idaho	Permits .....	83	1,854	53,045.28	48	1,615	<sup>b</sup> 168	7,289
	Leases .....	.....	.....	13,570.89	.....	<sup>c</sup> 4	15	<sup>d</sup> 412
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Montana	Permits .....	1	160	5,223.98	1	18	4	159
	Leases .....	.....	.....	1,350.00	.....	.....	12	459
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Nevada	Permits .....	7	80	12,065.00	15	64	25	<sup>b</sup> 5,977
	Leases .....	1	3	1,051.00	3	23	<sup>b</sup> 5	53
	Easements .....	.....	.....	.....	.....	.....	.....	.....
New Mexico	Permits .....	11	574	6,724.41	15	640	24	116
	Leases .....	.....	.....	.....	.....	.....	2	14
	Easements .....	.....	.....	.....	.....	.....	.....	.....
North Dakota	Permits .....	.....	.....	.....	5	.....	8	79
	Leases .....	.....	.....	.....	.....	.....	.....	.....
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Oregon	Permits .....	32	31,556	13,574.00	4	9	83	63,586
	Leases .....	4	7	173.00	1	1	54	825
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Utah	Permits .....	46	246	6,133.50	34	148	42	10,244
	Leases .....	1	140	7,599.00	1	5	12	408
	Easements .....	.....	.....	.....	.....	.....	3	8
Washington	Permits .....	2	8	100.00	.....	.....	9	138
	Leases .....	.....	.....	.....	.....	.....	.....	.....
	Easements .....	.....	.....	.....	.....	.....	.....	.....
Wyoming	Permits .....	27	450	5,020.00	31	3,158	46	1,358
	Leases .....	.....	.....	1,455.00	2	66	7	38
	Easements .....	.....	.....	.....	.....	.....	5	135
Totals	Permits .....	599	84,804	190,434.81	456	41,568	660	133,126
	Leases .....	26	4,232	411,277.50	10	1,443	263	7,842
	Easements .....	.....	.....	.....	.....	.....	8	143
Grand Total .....	.....	625	89,036	601,712.31	466	43,011	931	141,111

<sup>a</sup> Acreage adjustment to correct previous year's change from lease to permit.

<sup>b</sup> Figures have been revised based on recalculations; therefore, totals cannot be compared with last year's.

<sup>c</sup> Acreage was reduced in an existing issued lease.

Note —Authorizations in this table occur under 43 CFR 2920, which authorizes uses not specifically authorized under other laws or regulations and not specifically forbidden by law. Residential, agricultural, industrial, and commercial uses may be authorized.



**TABLE 12.—Miscellaneous land use authorizations, fiscal year 1989—concluded**

Type of lease by geographic State	Operations during fiscal year 1989					In effect as of September 30, 1989	
	Authorizations issued		Revenue collected	Authorizations terminated		Total authorizations	
	Number	Acres		Number	Acres	Number	Acres
<b>Special land use permits</b>							
Alaska .....	1	3,760	.....	.....	.....	1	3,760
Arizona .....	.....	.....	.....	.....	.....	1	( <sup>c</sup> )
California .....	1	3	.....	.....	.....	1	3
Colorado .....	.....	87	.....	.....	.....	2	96
Idaho .....	.....	.....	.....	1	60	3	1,525
Nevada .....	.....	.....	.....	.....	.....	8	14
Utah .....	.....	.....	.....	.....	.....	3	11,043
Wyoming .....	6	1,768	140.00	1	1	13	2,150
Total special land use permits . . .	8	5,618	140.00	2	61	32	18,591
<b>Other authorizations</b>							
Alaska .....	.....	.....	.....	.....	.....	<sup>d</sup> 3	480
Arizona .....	7	854	9,463.00	6	804	<sup>e</sup> 35	25,702
Colorado .....	.....	.....	( <sup>f</sup> )	.....	.....	<sup>g</sup> 1	40
Idaho .....	15	312	22,000.00	7	240	<sup>h</sup> 146	3,625
Oregon .....	.....	.....	.....	.....	.....	<sup>i</sup> 9	16
Utah .....	7	200	.....	4	160	<sup>j</sup> 5	50
Total other authorizations . . . . .	29	1,366	31,463.00	17	1,204	199	29,913
Grand Total .....	107	12,863	93,134.03	81	10,978	1,271	188,616

<sup>a</sup>An audit and review resulted in figures being adjusted; therefore, totals cannot be compared with last year's.

<sup>b</sup>0.01 acre.

<sup>c</sup>0.20 acre.

<sup>d</sup>Hot springs leases.

<sup>e</sup>Cooperative agreements, recreational use permits, and reclamation leases; correction of case types added 24 reclamation leases comprising 24,824 acres.

<sup>f</sup>Lessee not billed; litigation is in progress.

<sup>g</sup>Water well lease under Sec. 40 of the Mineral Leasing Act of February 25, 1920 (41 Stat. 437).

<sup>h</sup>Consist of free-use permits and 44 Salmon River recreation use permits.

<sup>i</sup>8 Mining claim occupancy leases, 15 acres, and 1 communication site lease, 1 acre.

<sup>j</sup>5 permits that were issued to allow brine shrimping along the shores of the Great Salt Lake.



## BUREAU OF LAND MANAGEMENT PROGRAMS

### Range Management

The range management activities of the Bureau of Land Management are carried out under the authority of the Federal Land Policy and Management Act and the principles of multiple use and sustained yield. Rangelands comprise a substantial portion of the public lands in the 11 Western States and Alaska. They provide habitat for domestic livestock, wild horses and burros, and wildlife.

The Bureau administers the public lands within grazing districts under the authority of Section 3 of the Taylor Grazing Act. During fiscal year 1989, grazing permits held by 12,362 operators authorized use of about 11.9 million animal unit months (AUMs) of forage on 143 million acres of public land (Tables 13 and 15).

Public lands which lie outside grazing districts; are administered, for grazing purposes, under the authority of Section 15 of the Taylor Grazing Act. Grazing leases, held by 7,263 operators, authorized use of about 1.5 million AUMs of forage on approximately 16 million acres of public land (Tables 14 and 16) during the fiscal year.

Receipts from Section 3 grazing use returned \$14,720,347 to the U.S. Treasury during the fiscal year. Receipts from Section 15 grazing leases totaled \$2,462,618 (Table 60). The grazing fee for the 1989 grazing year was \$1.86 per AUM, and the fee for the 1990 grazing year is \$1.81 per AUM.

### NOTE ON GRAZING YEAR AND FISCAL YEAR

Grazing administration is based on a grazing year which begins on March 1 and ends on February 28 or 29 of the following year (03/01- Feb 28/29). AUM calculations are made within the grazing year and do not conform to other time periods or years such as fiscal year.

Development of grazing statistics for any time period which does not coincide with the grazing year will include AUM's from time periods outside the grazing year.

The authorized AUM statistics in tables 13 and 14 were obtained by summing the AUM values for all bills that were due during the fiscal year. This method results in the inclusion of AUM's used in parts of three fiscal years as shown below:

Use made prior to 10/01/88 (fiscal year 1988) but billed in fiscal year 1989.

Use made during fiscal year 1989 (begin and end grazing dates within the fiscal year).

Use began, and was paid for, in fiscal year 1989 and ends during fiscal year 1990.

TABLE 13.—*Summary of authorized use of grazing district (Section 3) lands, fiscal year 1989*

Administrative State	Cattle	Horses and Burros	Sheep and goats	Total
<b>Number of operators<sup>a</sup></b>				
Arizona .....	333	77	.....	.....
California .....	243	8	19	.....
Colorado .....	899	54	138	.....
Idaho .....	1,266	121	119	.....
Montana .....	2,386	104	144	.....
Nevada .....	499	77	72	.....
New Mexico .....	1,315	382	133	.....
Oregon .....	779	51	6	.....
Utah .....	1,219	66	271	.....
Wyoming .....	844	154	162	.....
Total number of operators .....	9,783	1,094	1,064	.....
<b>Animal unit months (AUMs) authorized<sup>b</sup></b>				
Arizona .....	366,972	4,461	.....	371,433
California .....	188,377	76	18,223	206,676
Colorado .....	296,333	2,895	90,469	389,697
Idaho .....	876,853	7,057	98,868	982,778
Montana .....	1,205,525	5,672	46,419	1,257,616
Nevada .....	1,649,887	9,474	163,572	1,822,933
New Mexico .....	1,246,579	17,157	143,169	1,406,905
Oregon .....	815,670	3,180	3,602	822,452
Utah .....	671,066	3,161	277,655	951,882
Wyoming .....	1,004,919	13,668	345,075	1,363,662
Total AUMs authorized .....	8,322,181	66,801	1,187,052	9,576,034

<sup>a</sup>Many operators own more than one kind of livestock and thus are listed under two or three table columns. Because of these overlaps, a valid total cannot be obtained and is therefore not shown.

<sup>b</sup>Totals do not include authorized nonuse.

Source: The Grazing Authorization and Billing System and the Range Management Automated System, Bureau of Land Management.

**TABLE 14.—Summary of authorized use of grazing lease (Section 15) lands, fiscal year 1989**

Administrative State	Cattle and Yearlings	Horses and Burros	Sheep and goats	Total
<b>Number of operators<sup>a</sup></b>				
Arizona .....	317	13	2	.....
California .....	456	12	43	.....
Colorado .....	389	21	65	.....
Idaho .....	461	30	35	.....
Montana .....	1,484	38	101	.....
Nevada .....	15	.....	.....	.....
New Mexico .....	771	13	43	.....
Oregon .....	1,059	35	23	.....
Wyoming .....	1,502	73	226	.....
Total number of operators .....	6,454	235	538	.....
<b>Animal unit months (AUMs) authorized<sup>b</sup></b>				
Arizona .....	157,636	860	663	159,159
California .....	135,021	348	12,789	148,158
Colorado .....	29,800	873	13,738	44,411
Idaho .....	27,514	405	5,129	33,048
Montana .....	204,873	974	17,639	223,486
Nevada .....	37,966	.....	.....	37,966
New Mexico .....	171,216	354	63,375	234,945
Oregon .....	91,827	657	1,989	94,473
Wyoming .....	401,229	3,399	86,704	491,332
Total AUMs authorized .....	1,257,082	7,870	202,026	1,466,978

<sup>a</sup>Many operators own more than one kind of livestock and thus are listed under two or three table columns. Because of these overlaps, a valid total cannot be obtained and is therefore not shown.

<sup>b</sup>Totals do not include authorized nonuse.

Source: The Grazing Authorization and Billing System and the Range Management Automated System, Bureau of Land Management.

**TABLE 15.—Grazing permits in force on grazing district (Section 3) lands as of September 30, 1989**

Geographic State	Operators <sup>a</sup>	Acres	AUMs of preference <sup>b</sup>
Arizona .....	434	10,887,244	501,929
California .....	281	3,200,443	233,381
Colorado .....	1,282	7,311,834	671,457
Idaho .....	1,732	12,480,567	1,378,139
Montana .....	2,727	6,787,634	1,157,867
Nevada .....	669	42,572,832	2,420,831
New Mexico .....	1,611	11,288,201	1,679,429
Oregon .....	799	11,904,363	918,967
Utah .....	1,766	22,191,914	1,340,363
Wyoming .....	1,061	14,091,584	1,594,059
<b>Total .....</b>	<b>12,362</b>	<b>142,716,616</b>	<b>11,896,422</b>

<sup>a</sup>The total number of operators with grazing permits on public lands.

<sup>b</sup>Animal unit months (AUMs) of preference held by permittees on public lands; this total differs from the AUM totals shown in Table 13, which reflect only AUMs authorized for use.

Note.—All permits represented in this table were issued pursuant to the authority contained in Sec. 3 of the Taylor Grazing Act—Act of June 28, 1934 (48 Stat. 1269). For information on revenue collected, see Table 60, *Statement of receipts by source*.

Source: The Grazing Authorization and Billing System and the Range Management Automated System, Bureau of Land Management.

**TABLE 16.—Grazing leases in force on grazing lease (Section 15) lands as of September 30, 1989**

Geographic State	Operators <sup>a</sup>	Acres	AUMs of preference <sup>b</sup>
Arizona .....	376	1,365,138	149,762
California .....	515	4,549,519	160,003
Colorado .....	497	410,819	52,255
Idaho .....	543	325,980	36,101
Kansas .....	6	435	138
Montana .....	1,157	1,179,626	164,740
Nebraska .....	25	2,387	790
Nevada .....	18	2,683,587	50,431
New Mexico .....	819	1,151,168	231,697
North Dakota .....	86	52,476	9,489
Oklahoma .....	4	640	124
Oregon .....	764	585,180	84,134
South Dakota .....	445	271,215	73,634
Washington .....	336	215,437	26,151
Wyoming .....	1,672	3,280,214	471,794
<b>Total .....</b>	<b>7,263</b>	<b>16,073,821</b>	<b>1,511,243</b>

<sup>a</sup>The total number of operators with grazing leases on public lands.

<sup>b</sup>Animal unit months (AUMs) of preference held by lessees on public lands; this total differs from the AUM totals shown in Table 14, which reflect only AUMs authorized for use.

Note.—All leases shown in this table were issued pursuant to the authority contained in Sec. 15 of the Taylor Grazing Act—Act of June 28, 1934 (48 Stat. 1269). For information on revenue collected, see Table 60, *Statement of receipts by source*.

Source: The Grazing Authorization and Billing System and the Range Management Automated System, Bureau of Land Management.

**TABLE 17.—Grazing leases under acts other than the Taylor Grazing Act as of September 30, 1989**

Geographic State	Operators	Authorized use		Cattle and horses	Other animals	Revenue collected
		Number	Acres	AUMs <sup>a</sup>	Number	Number
Alaska <sup>b</sup> .....	15	<sup>c</sup> 5,024,880	<sup>c</sup> 47,484	7	<sup>d</sup> 15,800	\$725.00
Oregon O&C Lands <sup>e</sup> .....	119	388,628	3,494	NA	NA	6,490.39
Total .....	134	5,413,508	50,978	7	15,800	7,215.39

<sup>a</sup>Animal unit months.

<sup>b</sup>Issued pursuant to the authority contained in the Act of March 4, 1927 (44 Stat. 1452).

<sup>c</sup>An audit and review resulted in figures being adjusted; therefore, totals cannot be compared with last year's.

<sup>d</sup>Reindeer grazing on BLM-administered lands.

<sup>e</sup>Issued pursuant to the authority contained in the Act of August 28, 1937 (50 Stat. 874). Refer to map accompanying Table 6, Area of Oregon and California (O&C) revested lands.

NA.—Not available.

Note.—Cattle, horses, and other animal numbers are not available from the Grazing Authorization and Billing System (GABS), which is now used to derive the Oregon Data.

**TABLE 18.—Percent of acreage in range condition classes by State, fiscal year 1989**

Geographic State	Percent by range condition class <sup>a</sup>				Unclassified <sup>b</sup>
	Excellent	Good	Fair	Poor	
Arizona .....	3	27	41	20	9
California .....	1	47	38	10	4
Colorado .....	3	15	39	24	19
Idaho .....	1	27	28	30	14
Montana .....	6	57	21	1	15
Nevada <sup>c</sup> .....	3	21	33	20	24
New Mexico .....	2	30	48	18	2
Oregon <sup>c</sup> .....	4	26	48	16	7
Utah .....	4	28	40	13	15
Wyoming .....	5	48	35	6	6
Bureauwide <sup>c</sup> .....	3	30	36	16	14

<sup>a</sup>Expressed in degree of similarity of present vegetation to the potential natural, or climax, plant community: Excellent = 76-100% similarity; Good = 51-75% similarity; Fair = 26-50% similarity; Poor = 0-25% similarity.

<sup>b</sup>This category includes rangelands for which neither data nor estimates are available.

<sup>c</sup>Figures do not add to 100 percent due to rounding.

Note.—This table is based on information from ecological site inventories (49% of the public lands), from estimates based on earlier inventories (30% of the public lands), and from estimates based on professional judgment alone (21% of the public lands). Ecological site inventories are being conducted to fill in data gaps; this table will be updated annually to reflect new information and changes in range condition classes.

## **BUREAU OF LAND MANAGEMENT PROGRAMS**

### **Resource Conservation and Development**

The Bureau of Land Management protects land and water resources on public lands through continued planning and the application of conservation, rehabilitation, and development measures. These measures—brush control, seeding, water projects such as pipelines and reservoirs, and other projects—are authorized by the Taylor Grazing Act, Federal Land Policy and Management Act, and Public Rangelands Improvement Act. Resource conservation and development measures improve the productivity of public lands for livestock, fish, and wildlife.

Water and soil conservation and development involves stabilization of soil, maintenance of water quality, control of siltation and salinity, reduction of surface runoff, and control of flooding as authorized by the National Soil Conservation Act. Private contributions are encouraged under the Taylor Grazing Act, and the Bureau is gradually transferring responsibility for maintaining structural rangeland improvements to individuals directly benefiting from them.

Table 19 shows the combined results of the Federal soil and watershed conservation program, the Federal range improvement program, and private range improvements constructed on public lands during fiscal year 1989.

TABLE 19.—Resource conservation and improvement accomplishments, fiscal year 1989

Practice	Unit of measurement	Arizona	California	Colorado	Idaho	Montana <sup>a</sup>	Nevada	New Mexico	Oregon <sup>b</sup>	Utah	Wyoming <sup>c</sup>	Total
<b>Soil stabilization and improvements</b>												
Brush Control	Acres	.....	2,941	3,860	17,646	871	.....	20,685	337	685	2,334	49,359
Seeding	Acres	150	.....	1,800	6,666	1,482	2,875	80	6	4,325	.....	17,384
Soil stabilization, other	Acres	.....	120	.....	1	.....	.....	581	1,083	2,900	.....	4,685
<b>Water management</b>												
Detention and diversions	Number	.....	.....	17	.....	37	.....	1	4	73	1	133
Dikes	Cubic yards	.....	.....	5,170	.....	108,028	.....	200	30	2,500	3,542	119,380
Pipelines	Cubic yards	.....	.....	.....	.....	91,827	.....	.....	.....	485	49	92,361
Reservoirs	Number	26	.....	14	6	18	10	22	.....	22	16	134
Springs	Linear feet	181,618	.....	25,920	25,500	59,168	50,968	135,305	.....	137,416	68,520	684,415
Water catchments	Number	.....	8	163	3	18	.....	6	8	50	20	276
Wells	Cubic yards	.....	9,795	119,900	450	54,066	.....	15,930	1,400	6,884	101,520	309,945
Storage/Drinking	Number	.....	2	36	6	5	.....	3	.....	8	6	67
Program facilities	Number	114,000	.....	.....	3	66,000	.....	1	.....	158,100	.....	380,100
Fencing	Gallons	.....	.....	20	.....	2	.....	5	.....	.....	11	40
Trails	Gallons	217,399	.....	14,000	.....	.....	.....	46,283	.....	.....	1,050	278,732
<b>Program facilities</b>												
Cattleguards	Number	16	6	16	3	1	7	6	10	6	.....	71
Fencing	Miles	31	20	27	26	22	60	38	14	31	30	299
Trails	Miles	.....	.....	3	.....	.....	.....	.....	.....	.....	.....	3

<sup>a</sup> Includes North and South Dakota.

<sup>b</sup> Includes Washington.

<sup>c</sup> Includes Nebraska.

Note: This table summarizes accomplishments for three Bureau programs: range, soil and watershed, and fire rehabilitation. It does not include accomplishments for two other programs: wildlife, and wild horses and burros.

## BUREAU OF LAND MANAGEMENT PROGRAMS

### Forest Management

The Bureau of Land Management is responsible for the management, development, and protection of approximately 8 million acres of commercial forest land. Of this total, the Oregon and California (O&C) revested lands in Western Oregon are generally recognized to be one of the Nation's most productive and valuable commercial forest properties. Public domain forested lands throughout the western states produce a variety of products, including sawtimber, firewood, and posts and poles.

The total value of all timber and nontimber forest products sold on lands administered by the Bureau was \$195 million, with Western Oregon accounting for \$189 million of this total (Table 20). Sawtimber made up most of the volume of timber disposed of. By far the highest average price per thousand board feet (MBF) was received by Western Oregon; the overall Bureau average was \$244.75 per MBF (Table 21).

Sales of nontimber forest products and other vegetal materials brought in \$216,557.77 Bureauwide (Table 22). Nontimber products include Christmas trees, pinyon nuts, and wildings.

The Bureau completed numerous reforestation and improvement projects in fiscal year 1989. These projects included reforestation efforts such as seeding, planting, and site preparation, and stand improvement measures such as precommercial and commercial thinning. Table 23 shows the acreages involved for each type of project.



TABLE 20.—*Summary of total timber and nontimber forest product sales, fiscal year 1989*

Administrative State	Timber sales <sup>a</sup>	Nontimber forest product sales <sup>b</sup>	Grand Total
Alaska .....	\$8,494.00	.....	\$8,494.00
Arizona .....	13,846.00	\$3,601.39	17,447.39
California .....	1,380,857.74	925.50	1,381,783.24
Colorado .....	63,358.66	47,313.15	110,671.81
Idaho .....	458,233.98	195.00	458,428.98
Montana .....	109,307.49	1,776.00	111,083.49
Nevada .....	75,760.64	75,088.00	150,848.64
New Mexico .....	33,238.00	13,994.00	47,232.00
Oregon:			
Eastern <sup>c</sup> .....	3,459,495.75	9,134.20	3,468,629.95
Western <sup>d</sup> .....	188,864,865.69	29,265.78	188,894,131.47
Utah .....	58,208.50	29,525.75	87,734.25
Wyoming .....	226,846.46	5,739.00	232,585.46
Total .....	194,752,512.91	216,557.77	194,969,070.68

<sup>a</sup>See the following table, *Timber sales by State*, for a more detailed presentation.

<sup>b</sup>This heading includes "negotiated nontimber forest product sales less than \$1,000," which were reported in this table in a separate column prior to the 1986 edition. See Table 22, *Sales of nontimber forest products and other vegetal materials on public lands*, for a detailed presentation of products and materials sold.

<sup>c</sup>Eastern Oregon comprises public lands that include, and extend eastward from, Range 9 East, Willamette Meridian, and public lands in the State of Washington.

<sup>d</sup>Western Oregon comprises the revested Oregon and California (O&C) lands, the reconveyed Coos Bay Wagon Road lands, and other public lands that include, and extend westward from, Range 8 East, Willamette Meridian.

TABLE 21.—Timber sales by State, fiscal year 1989

Administrative State	Total number of sales	Sawtimber MBF <sup>a</sup>	Cords MBF	Posts MBF	Poles MBF	Other MBF	Total volume MBF	Value of timber products	Average price per MBF
Alaska .....	51	.....	272	.....	.....	.....	298	\$8,494.00	\$0.62
Arizona .....	1,024	.....	1,314	12,425	.....	.....	13,740	13,846.00	1.01
California .....	797	10,762	1,254	4	.....	.....	12,019	1,380,857.74	114.89
Colorado .....	1,446	114	4,219	641	109	.....	5,083	63,358.66	12.47
Idaho .....	406	6,778	619	22	34	.....	7,454	458,233.98	61.48
Montana .....	153	2,303	371	22	28	16	2,739	109,307.49	39.90
Nevada .....	3,380	.....	4,019	71	.....	.....	4,091	75,760.64	18.52
New Mexico .....	2,751	.....	2,648	36	.....	.....	2,731	33,238.00	12.17
Oregon:	68,390	.....	.....	.....	.....	.....	.....	.....	.....
Eastern <sup>b</sup> .....	(c)	24,397	2,457	1	2	1	26,858	3,459,495.75	128.81
Western <sup>d</sup> .....	(c)	691,224	11,145	41	2,137	513	705,061	188,864,865.69	267.87
Utah .....	4,158	.....	6,326	173	1	.....	6,500	58,208.50	8.95
Wyoming .....	877	.....	1,356	.....	37	.....	9,155	226,846.46	24.78
Total .....	23,433	743,387	36,000	13,436	2,349	556	795,729	194,752,512.91	244.75

<sup>a</sup>Thousand board feet.

<sup>b</sup>Eastern Oregon comprises public lands that include, and extend eastward from, Range 9 East, Willamette Meridian, and public lands in the State of Washington.

<sup>c</sup>This is a general total for Oregon because the total number of small sales (board foot products) are not available separately for Eastern and Western Oregon.

<sup>d</sup>Western Oregon comprises the revested Oregon and California (O&C) lands, the reconveyed Coos Bay/Wagon Road lands, and other public lands that include, and extend westward from, Range 8 East, Willamette Meridian.

Note.—Timber products listed as sold were not necessarily removed from BLM lands or paid for during the fiscal year.

TABLE 22.—*Sales of nontimber forest products and other vegetal materials on public lands, fiscal year 1989*

Administrative State	Product	Units	Number of sales <sup>a</sup>	Quantity sold	Total sale price
Arizona	Christmas trees	Each		605	\$1,815.00
	Cactus	Each		341	325.34
	Yucca	Each		261	1,018.05
	Joshua	Each		71	443.00
	State total		141		3,601.39
California	Christmas trees	Each		93	93.00
	Boughs	Pounds		550	25.00
	Manzanita	Tons		7	40.00
	Seed	Pounds		15	767.50
	State total		100		925.50
Colorado	Christmas trees	Each		8,319	32,645.88
	Wildings	Each		2,956	14,022.26
	Boughs	Pounds		43,600	164.01
	Juniper berries	Bushels		150	450.00
	Fern	Bunches		4	25.00
	Greens	Bunches		6	6.00
	State total		4,192		47,313.15
Idaho	Christmas trees	Each		99	141.00
	Wildings	Each		12	24.00
	Boughs	Pounds		200	10.00
	Native desert vegetation	Each		20	20.00
	State total		32		195.00
Montana	Christmas trees	Each		1,326	1,326.00
	Hay	Tons		30	450.00
	State total		466		1,776.00
Nevada	Christmas trees	Each		28,925	70,826.00
	Wildings	Each		204	860.00
	Cactus	Each		136	840.00
	Yucca	Each		32	96.00
	Joshua	Each		204	1,451.00
	Pinyon nuts	Pounds		3,000	600.00
	Cones	Bushels		250	25.00
	Seed	Pounds		1,900	165.00
	Native desert vegetation	Each		549	225.00
	State total		20,019		75,088.00
	New Mexico	Christmas trees	Each		2,504
Wildings		Each		227	1,135.00
Cactus		Each		62	201.00
Yucca		Each		3	3.00
Seed		Pounds		3,000	3,000.00
Native desert vegetation		Each		5	11.00
State total			1,854		13,994.00

**TABLE 22.—Sales of nontimber forest products and other vegetal materials on public lands, fiscal year 1989—concluded**

Administrative State	Product	Units	Number of sales <sup>a</sup>	Quantity sold	Total sale price	
Oregon	Christmas trees	Each		4,243	8,959.00	
	Wildings	Each		12,588	395.20	
	Cascara bark	Pounds		4,000	180.00	
	Moss	Pounds		326,273	439.00	
	Boughs	Pounds		477,921	17,945.14	
	Cones	Bushels		261	35.00	
	Huckleberry brush	Bunches		47,740	1,990.79	
	Fern	Bunches		21,282	938.85	
	Greens	Bunches		47,840	6,033.00	
	Beachgrass	Bunches		29,500	1,470.00	
	Herbs	Pounds		100	4.00	
	Mushrooms	Pounds		20	10.00	
	State total			3,469		38,399.98
	Utah	Christmas trees	Each		9,384	27,218.25
Wildings		Each		5	5.00	
Cactus		Each		158	92.50	
Yucca		Each		22	190.00	
Joshua		Each		185	1,870.00	
Pinyon nuts		Pounds		300	150.00	
Jojoba		Pounds		1		
State total			3,629		29,525.75	
Wyoming	Christmas trees	Each		1,454	5,462.00	
	Wildings	Each		81	277.00	
	State total			314		5,739.00
Grand Total			34,216		216,557.77	

<sup>a</sup>Information on number of sales is available on a Statewide basis only; numbers cannot be given for individual commodities.

Note.—This table includes two categories: "nontimber forest product sales" and "negotiated nontimber forest product sales less than \$1,000." Prior to the 1986 edition, only "nontimber forest product sales" were included.

TABLE 23.—Forest development accomplishments, fiscal year 1989

Administrative State	Reforestation				Stand productivity improvement		Genetic tree improvement		Stand improvement			Stand conversion Acres
	Seeding Acres	Planting Acres	Site preparation Acres	Protection Acres	Fertilization Acres	Seeded Acres	Planted Acres	Release <sup>a</sup> Acres	Precommercial thinning Acres	Commercial thinning Acres		
California	.....	501	293	245	.....	.....	.....	.....	206	.....	.....	.....
Colorado	.....	76	115	10	.....	.....	.....	.....	53	.....	530	.....
Idaho	.....	300	583	133	.....	.....	90	120	.....	.....	.....	.....
Montana	.....	525	1,090	500	.....	.....	.....	.....	20	.....	40	.....
Nevada	.....	21	.....	.....	.....	.....	.....	430	.....	.....	1,039	.....
New Mexico	.....	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eastern <sup>b</sup>	.....	c300	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Western <sup>d</sup>	.....	34,749	13,263	23,720	.....	.....	e2,500	.....	.....	.....	1,000	.....
South Dakota	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15	.....
Utah	.....	5	.....	.....	.....	.....	.....	.....	10	.....	.....	.....
Wyoming	.....	200	577	69	.....	.....	.....	.....	460	.....	313	120
Total	.....	145	36,685	15,921	24,677	.....	.....	550	749	.....	2,937	120

<sup>a</sup> An action that serves to remove competitive vegetation, such as the application of a herbicide.

<sup>b</sup> Eastern Oregon comprises public lands that include, and extend eastward from, Range 9 East, Willamette Meridian, and public lands in the State of Washington.

<sup>c</sup> Estimated figure.

<sup>d</sup> Western Oregon comprises the revested Oregon and California (O&C) lands, the reconveyed Coos Bay Wagon Road lands, and other public lands that include, and extend westward from, Range 8 East, Willamette Meridian.

## BUREAU OF LAND MANAGEMENT PROGRAMS

### Fish and Wildlife Habitat Management

The management of fish and wildlife habitat is one of the primary programs of the Bureau of Land Management. No single Federal or State agency manages more fish and wildlife habitat than the Bureau. The 270 million acres of public lands the Bureau administers sustain an abundance and diversity of fish and wildlife resources that are prized for their recreational, historical, economic, cultural, educational, and aesthetic values.

Bureau-administered permanent or seasonal habitats are home for over 3,000 species of mammals, birds, reptiles, fish, and amphibians. Priority treatment is given to federally listed threatened or endangered plant and animal species (Tables 27 and 28) that depend on the public lands for all or part of their habitat needs.

Cooperation between State and other Federal agencies that have primary responsibility for wildlife and fisheries population management is essential to the success of the Bureau's fish and wildlife habitat management program. Cooperation with livestock operators, farmers, miners, land developers, adjoining landowners, timber contractors, recreational users, and the general public is also very important.

A variety of management practices and related procedures are used in the restoration and management of fish and wildlife, including protection or acquisition of key habitats such as nesting and roosting areas. Other procedures may include cooperation with State wildlife agencies and conservation groups for on-the-ground habitat management projects.

Preserving existing habitat, restoring degraded habitats and participating in recovery planning are high priority responsibilities. Much of the credit for the Bureau's success goes to hunters, anglers, ranchers, resource users, conservation groups, State agencies, and many others who participate actively with the BLM in planning or conducting their activities on the public lands in a manner that helps maintain fish and wildlife habitat.

Since the passage of the Federal Land Policy and Management Act (FLPMA), considerable progress has been made in improving the management of the public lands for their fish and wildlife values. Some species have remained fairly stable, while some others reflect a decline. The decline in numbers for some species, however, stems from more accurate inventories rather than actual declines in populations.

One of the many positive results of FLPMA was the Bureau's mandate to inventory the fish and wildlife resources on the public lands. As a result, BLM has obtained a more accurate understanding of the variety and abundance of both game and nongame species and their habitats. Another federal law, the Public Rangeland Improvement Act (PRIA), has also had a significant impact on improving fish and wildlife habitat. Since the enactment of PRIA, which allows the expenditure of funds derived from grazing fees, fish and wildlife habitat improvement projects have increased significantly.

TABLE 24.—Types of wildlife habitats on public lands, fiscal year 1989

Administrative State	Lakes	Reservoirs	Fishable streams	Riparian land	Wetlands	Big game	Small game	Waterfowl
	Acres	Acres	Miles	Acres	Acres	Acres	Acres	Acres
Alaska	3,874,000	.....	133,000	6,563,000	15,848,000	78,730,000	80,240,000	24,850,000
Arizona <sup>a</sup>	1,164	b 8,105	1,190	b 41,485	12,338	b 14,113,000	b 14,126,000	b 29,895
California	41,000	9,000	b 735	88,000	139,000	7,264,000	14,371,000	129,000
Colorado	252	15,206	b 1,508	51,549	16,301	7,948,339	8,281,487	39,154
Eastern States	1,000	.....	88	13,000	28,000	45,000	53,000	30,000
Idaho	NA	NA	NA	NA	NA	NA	NA	NA
Montana	26,000	21,480	488	73,000	149,703	7,857,751	6,165,350	191,640
Nevada	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	3,000	3,000	176	b 16,600	11,000	10,553,000	12,542,000	15,000
Oregon	59,000	16,500	3,516	106,000	48,000	12,767,000	12,879,000	94,500
Utah	7,950	11,510	b 5,620	b 160,000	b 55,836	18,947,000	20,334,000	b 17,044
Wyoming	6,242	33,669	10,007	92,475	34,526	17,907,540	18,475,634	87,945
Total	4,019,608	118,470	156,328	7,205,109	16,342,704	176,132,630	187,467,471	25,484,178

<sup>a</sup> Includes resource values on the 1.85 million acres of the Barry M. Goldwater Air Force Range.

<sup>b</sup> Improved data has resulted in significant changes over the previous year's data.

NA—Not available.

Note.—Acresages shown for big game, small game, and waterfowl habitats are nonexclusive and are estimates only.

TABLE 25.—Estimated number of big game animals on public lands, fiscal year 1989

Administrative State	Antelope	Barbary sheep	Bear <sup>a</sup>	Bighorn sheep <sup>b</sup>	Buffalo	Caribou	Deer <sup>c</sup>	Elk	Ibex	Javelina wild boar	Moose	Mountain goat	Turkey
Alaska	.....	.....	8,700	3,200	420	320,000	.....	.....	.....	.....	40,000	350	.....
Arizona <sup>d</sup>	1,147	.....	80	3,095	.....	.....	35,140	20	.....	e7,700	.....	.....	375
California	6,210	.....	385	3,205	.....	.....	101,000	920	.....	3,400	.....	.....	1,650
Colorado	12,510	.....	1,243	1,559	.....	.....	199,307	47,009	.....	.....	25	25	2,205
Eastern States	.....	.....	22	.....	.....	.....	708	.....	.....	.....	.....	.....	531
Idaho	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Montana	49,933	.....	650	1,000	.....	.....	127,700	20,000	.....	.....	450	200	2,600
Nevada	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
New Mexico	4,900	500	.....	80	.....	.....	58,000	2,000	550	800	.....	.....	100
Oregon	15,780	200	1,980	1,600	.....	.....	204,300	14,400	.....	.....	10	50	3,750
Utah	12,550	.....	503	f1,065	300	.....	190,000	13,600	.....	.....	142	.....	315
Wyoming	172,852	.....	433	1,214	.....	.....	196,938	28,709	.....	.....	2,160	70	1,090
Total	275,882	700	13,996	16,018	720	320,000	1,113,093	126,658	550	11,900	42,787	695	12,616

<sup>a</sup>Includes black, grizzly, and brown bears.

<sup>b</sup>Includes Rocky Mountain, Dall, California, and Desert bighorn sheep.

<sup>c</sup>Includes whitetail, blacktail, and mule deer.

<sup>d</sup>Includes resource values on the 1.85 million acres of the Barry M. Goldwater Air Force Range.

<sup>e</sup>Improved data has resulted in significant changes over the previous year's data.

<sup>f</sup>One of Utah's major populations of Desert bighorn sheep experienced a major die-off during 1989.

NA—Not available.



TABLE 26.—Fish and wildlife habitat improvements completed during fiscal year 1989

Administrative State	Barrier removal	Den and nest facilities	Fence modifications	Instream structures	New water facilities	Perch and roost structures	Prescribed burns	Ramps/ passes	Water facilities improved
	Number	Number	Number	Number	Number	Number	Number	Number	Number
Alaska	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona	.....	.....	.....	.....	.....	.....	.....	.....	.....
California	.....	.....	.....	.....	.....	.....	.....	.....	.....
Colorado	.....	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	.....	.....	.....	.....	.....	.....	.....	.....	.....
Montana	.....	.....	.....	.....	.....	.....	.....	.....	.....
Nevada	.....	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico	.....	.....	.....	.....	.....	.....	.....	.....	.....
Oregon	.....	.....	.....	.....	.....	.....	.....	.....	.....
Utah	.....	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total	10	284	57	632	86	24	43	78	16

Administrative State	Protective fencing	Spawning bed development	Streambank stabilization	Habitat diking and chaining	Lake improvement	Seeding	Prescribed burning	Wetland improvements
	Miles	Miles	Miles	Acres	Acres	Acres	Acres	Acres
Alaska	.....	.....	.....	.....	.....	.....	.....	.....
Arizona	.....	.....	.....	.....	.....	.....	.....	.....
California	.....	.....	.....	.....	.....	.....	.....	.....
Colorado	.....	.....	.....	.....	.....	.....	.....	.....
Idaho	.....	.....	.....	.....	.....	.....	.....	.....
Montana	.....	.....	.....	.....	.....	.....	.....	.....
Nevada	.....	.....	.....	.....	.....	.....	.....	.....
New Mexico	.....	.....	.....	.....	.....	.....	.....	.....
Oregon	.....	.....	.....	.....	.....	.....	.....	.....
Utah	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	.....	.....	.....	.....	.....	.....	.....	.....
Total	92	16	42	3,122	58	5,207	25,538	1,050

NA—Not available.

Note.—This table provides an overview. It is not an all-inclusive breakdown of habitat improvements, but it does show their general nature and extent.

TABLE 27.—*Federally listed T/E and candidate plant species, fiscal year 1989*

Administrative State	Threatened or endangered (T/E) plants <sup>a</sup>	Candidate plant species <sup>a</sup>	Estimated habitat	Recovery plans <sup>b</sup>
	<i>Number</i>	<i>Number</i>	<i>Acres</i>	<i>Number</i>
Alaska .....	.....	13	100,000	.....
Arizona .....	9	<sup>c</sup> 39	5,000	3
California .....	8	231	368,000	21
Colorado .....	10	51	21,731	6
Eastern States .....	33	297	2,000	2
Idaho .....	NA	NA	NA	NA
Montana .....	.....	19	4,260	.....
Nevada .....	NA	NA	NA	NA
New Mexico .....	11	29	.....	8
Oregon .....	2	89	129,349	1
Utah .....	15	69	2,160,000	7
Wyoming .....	.....	20	1,949	.....
Total .....	.....	.....	2,792,289	48

<sup>a</sup>Total numbers of species cannot be directly obtained by adding the various State totals because many species occur in more than one State.

<sup>b</sup>Recovery plans that have been prepared, approved, and are in the process of being implemented.

<sup>c</sup>Improved data has resulted in significant changes over the previous year's data.

NA—Not available.

TABLE 28.—*Federally listed T/E and candidate animal species, fiscal year 1989*

Administrative State	Federally listed threatened or endangered (T/E) species										Candidate animal species Number	Estimated habitat <sup>a</sup>		Recovery plans <sup>b</sup> Number	
	Mammals	Birds	Fish	Amphibians	Reptiles	Invertebrates	Acres	Miles							
	Number	Number	Number	Number	Number	Number									
Alaska	.....	.....	.....	.....	.....	.....	1,800,000	.....	.....	.....	49	.....	.....	.....	11
Arizona	.....	.....	.....	.....	.....	.....	2,800,000	.....	.....	.....	39	.....	.....	.....	2
California	.....	.....	.....	.....	.....	.....	797,000	.....	.....	.....	1	.....	.....	.....	8
Colorado	.....	.....	.....	.....	.....	.....	718,917	.....	.....	.....	3	.....	.....	.....	2
Eastern States	.....	.....	.....	.....	.....	.....	5,000	.....	.....	.....	130	.....	.....	.....	NA
Idaho	.....	.....	.....	.....	.....	.....	NA	.....	.....	.....	NA	.....	.....	.....	7
Montana	.....	.....	.....	.....	.....	.....	NA	.....	.....	.....	NA	.....	.....	.....	NA
Nevada	.....	.....	.....	.....	.....	.....	161,000	.....	.....	.....	NA	.....	.....	.....	NA
New Mexico	.....	.....	.....	.....	.....	.....	NA	.....	.....	.....	NA	.....	.....	.....	8
Oregon	.....	.....	.....	.....	.....	.....	2,905,600	.....	.....	.....	1	.....	.....	.....	10
Utah	.....	.....	.....	.....	.....	.....	15,000,000	.....	.....	.....	1	.....	.....	.....	7
Wyoming	.....	.....	.....	.....	.....	.....	12,685,000	.....	.....	.....	1	.....	.....	.....	5
Total	.....	.....	.....	.....	.....	.....	36,872,517	.....	.....	.....	.....	.....	.....	.....	60

<sup>a</sup>Terrestrial, wetland, and riparian habitat are measured in acres; aquatic habitat is measured in miles.

<sup>b</sup>Recovery plans that have been prepared, approved, and are in the process of being implemented.

NA—Not available.

Note.—Total numbers of species cannot be directly obtained by adding the various State totals because many species occur in more than one State. On Table 28 in the 1988 edition of *Public Land Statistics*, the figures for the "Invertebrates" and "Candidate animal species" columns were transposed in all states except Eastern States.

## BUREAU OF LAND MANAGEMENT PROGRAMS

### Wild Horse and Burro Management

The Bureau of Land Management (BLM) is responsible for the protection, management, and control of wild free-roaming horses and burros on public lands under its jurisdiction. These animals came under Federal protection in 1971 with the passage of the Wild Free-Roaming Horse and Burro Act (Public Law 92-195). At the end of Fiscal Year (FY) 1989, about 46,500 wild horses and burros roamed public lands managed by the BLM. (See Table 1.)

Excess wild horses and burros must be removed from the range to maintain a thriving natural ecological balance and multiple-use relationship. In FY 1989, BLM removed 3,586 excess wild horses and 876 excess burros. The number of removals was less than planned for the fiscal year because appeals of several removal plans in Nevada delayed gathering operations. In ruling on the appeals, the Interior Board of Land Appeals set a more stringent standard for determining that there are excess wild horses and burros on a particular area before removals can be accomplished.

The smaller number of removals also affected the adoption program; the adoption total of 5,220 (4,325 wild horses and 895 wild burros) was only about 60 percent of the target for the year. These adoptions brought the number of wild horses and burros placed in private care since the program began to more than 96,000. (See Table 2.)

No fee waiver adoptions took place in FY 1989 because the practice of waiving fees for unadoptable animals was abolished in September 1988. Instead, wild horses characterized as unadoptable because of age or other undesirable traits were sent to the wild horse sanctuary in South Dakota. This cooperative effort among BLM, the State of South Dakota, and private organizations completed its first full year of operations in FY 1989. A second sanctuary, located in Oklahoma, was chosen in September 1989. Both sanctuaries will be federally funded for 3 years. During that time, they are to undertake fundraising efforts to become financially independent. Together the two sanctuaries have a capacity to maintain about 4,000 wild horses.

The BLM continued the prison training program where inmates partially gentle wild horses, mostly in the 4- to 6-year-old age range. Corrections departments in four States participate in the program. New Mexico has the largest training program with three facilities. California, Colorado, and Wyoming each have one training site. The prisons can care for as many as 2,100 wild horses in connection with the training programs.

The FY 1989 appropriation for the wild horse and burro program was \$14.56 million.

BUREAU OF LAND MANAGEMENT PROGRAMS  
 Wild Horse and Burro Management

TABLE 29.—*Wild free-roaming horse and burro populations  
 as of September 30, 1989*

Administrative State	Horses	Burros	Total
Arizona .....	225	2,075	2,300
California .....	1,745	1,333	3,078
Colorado .....	605	.....	605
Idaho .....	354	1	355
Montana .....	128	.....	128
Nevada .....	30,798	1,269	32,067
New Mexico .....	29	.....	29
Oregon .....	1,891	6	1,897
Utah .....	1,884	91	1,975
Wyoming .....	4,115	.....	4,115
Total .....	41,774	4,775	46,549

TABLE 30.—*Wild free-roaming horses and burros placed in private maintenance, fiscal years 1972 through 1989*

Geographic State	1972 to 1987		1988		1989		Total		
	Horses	Burros	Horses	Burros	Horses	Burros	Horses	Burros	
Alabama	710	135	141	1	230	12	1,081	148	
Alaska	47	8	6				53	8	
Arizona	944	665	106	32	104	29	1,154	726	
Arkansas	626	89	141	64	104	2	871	155	
California	6,692	2,898	544	168	373	73	7,609	3,139	
Colorado	2,185	322	301		64		2,550	322	
Connecticut	33	22	5		4	4	42	26	
Delaware	8	7	5				13	7	
District of Columbia	2						2		
Florida	897	382	84	36	221	2	1,202	420	
Georgia	728	154	118	6	147	28	993	188	
Idaho	3,100	138	82		78	8	3,260	146	
Illinois	619	155	94	4	138	2	851	161	
Indiana	412	137	80	4	49		541	141	
Iowa	1,563	583	160		24	3	1,747	586	
Kansas	1,188	171	660	3	135	12	1,983	186	
Kentucky	788	261	45	49	42	18	875	328	
Louisiana	966	95	105	2	3		1,074	97	
Maine	34	16	2		42		78	16	
Maryland	205	106	18	4	9	8	232	118	
Massachusetts	78	45	22		15	3	115	48	
Michigan	454	217	13	8	93	6	560	231	
Minnesota	446	140	135	3	82	57	663	200	
Mississippi	1,011	151	144	2	100	60	1,255	213	
Missouri	1,346	232	135		134	6	1,615	238	
Montana	2,787	96	57	15	10	8	2,854	119	
Nebraska	1,742	558	562	2	40	9	2,344	569	
Nevada	1,669	233	175	42	142	41	1,986	316	
New Hampshire	50	18	6		22	2	78	20	
New Jersey	67	54	17	3	5	1	89	58	
New Mexico	774	89	125	2	135	1	1,034	92	
New York	228	251	77	2	44	7	349	260	
North Carolina	647	146	146	14	237	4	1,030	164	
North Dakota	1,329	21	47		16		1,392	21	
Ohio	654	253	85	28	127	16	866	297	
Oklahoma	4,238	193	980	49	324	58	5,542	300	
Oregon	4,307	347	67	2	54	13	4,428	362	
Pennsylvania	1,171	313	223	59	148	14	1,542	386	
Rhode Island	13		2		1		16		
South Carolina	525	76	115		105	3	745	79	
South Dakota	5,451	77	2,484	41	70	99	8,005	217	
Tennessee	1,801	754	110	189	170	153	2,081	1,096	
Texas	7,284	1,325	1,155	57	135	48	8,574	1,430	
Utah	1,889	71	92	2	44	15	2,025	88	
Vermont	25	10	13		37		75	10	
Virginia	352	141	88	12	59	38	499	191	
Washington	1,900	654	61	1	57	23	2,018	678	
West Virginia	143	104	12	2	43	2	198	108	
Wisconsin	460	213	83	53	38	5	581	271	
Wyoming	2,152	70	96	2	71	2	2,319	74	
Total	66,740	13,196	10,024	963	4,325	895	81,089	15,054	
Total Animals Adopted								96,143	

Note.—The table now reflects reassignments, which occur when animals are returned to the Federal Government and then readopted. Annual adoption totals shown for previous years change when an animal adopted in one year is reassigned to a new adopter in subsequent years. In addition, some duplicate entries were deleted from the data base.

## **BUREAU OF LAND MANAGEMENT PROGRAMS**

### **Cultural Resource Management**

The Bureau of Land Management (BLM) serves as steward for the Federal Government's largest, most varied, and scientifically most important body of cultural resources. In order to carry out this stewardship, the Bureau's cultural resource management program is designed to inventory, evaluate, plan for, and manage cultural resources on public lands under its jurisdiction.

The program's objectives are to recognize the scholarly and public uses of cultural resources, to manage the public lands in a way that ensures the appropriate uses of cultural resources, to protect and preserve representative samples of the full array of cultural resources for use by present and future generations, and to ensure that the Bureau avoids inadvertent damage to cultural resources, both Federal and non-Federal. BLM cultural resource specialists also oversee the management and protection of paleontological resources.

Table 31 provides some insight into the magnitude of the Bureau's cultural resource management program.

TABLE 31.—*Cultural resource management activities, fiscal year 1988*

Administrative State	Acres inventoried	Number of properties recorded	Study/management permits issued or in effect <sup>a</sup>
Alaska .....	2,027	63	4
Arizona .....	54,357	435	28
California .....	39,281	768	39
Colorado .....	15,162	739	64
Eastern States .....	273	.....	.....
Idaho .....	23,722	252	19
Montana .....	28,561	210	40
Nevada .....	50,169	1,277	29
New Mexico .....	40,246	789	52
Oregon .....	25,147	198	12
Utah .....	31,630	821	36
Wyoming .....	39,548	1,127	53
Total .....	350,123	6,679	376
Total to Date <sup>b</sup> .....	8,514,010	142,885	

<sup>a</sup>Does not include permits for paleontological collecting. Permits are generally for a one-year period, so total to date is not shown.

<sup>b</sup>The total reported in the fiscal year 1988 edition was incorrect.

Note.—Data not yet available for fiscal year 1989.



## BUREAU OF LAND MANAGEMENT PROGRAMS

### Outdoor Recreation

The Bureau of Land Management manages public land and water resources for their wildlife, scenic, archeological, and historical values. These values, in turn, enhance the quality of wilderness and outdoor recreation opportunities. The Bureau's recreation program contributes to the tourist economies of the Western States and helps satisfy the growing public demand for outdoor recreation by providing opportunities on Bureau-administered lands.

Recreation management is focused on 150 areas comprising approximately 5 percent of Bureau-administered lands. These more intensively used areas require direct supervision of recreational activities and of cooperative commercial and Bureau-regulated recreation operations. High-use areas include 15 national wild and scenic rivers; 20 designated recreational, historic, and scenic trails (1,600 miles); the White Mountains National Recreation Area; designated off-road vehicle areas; and major portions of the California Desert, King Range, and Steese National Conservation Areas.

The Bureau makes recreational opportunities available to the public by issuing permits to private individuals, commercial operators, and concessionaires. Permits aid in resource protection and also provide outfitting services for people who lack equipment and "know how." Outfitters and guides provide an estimated \$50 million to \$60 million in revenue to the 11 Western States annually, a large part of which arises from activities on Bureau-administered lands.

A total of 554 designated recreation sites provided 7,301 family picnic and camping units (Table 32). Land-, water-, snow-, and ice-based recreational activities accounted for approximately 61 million visits to Bureau-administered lands, totaling almost 493 million visitor hours (Table 33). Fiscal year 1989 collections for permit areas, concessions, and fee sites totaled almost \$1.6 million for more than 4.8 million visits and roughly 43 million visitor hours (Table 34).

TABLE 32.—*Developed recreation sites administered by the Bureau of Land Management, fiscal year 1989*

Administrative State	Number of developed sites	Acres	Number of family units		
			Picnic (day use)	Camping	Total units
Alaska .....	26	565	.....	241	241
Arizona .....	22	683	188	383	571
California .....	78	3,465	112	1,933	2,045
Colorado .....	44	163	133	149	282
Idaho .....	91	2,152	175	402	577
Montana <sup>a</sup> .....	26	222	167	241	408
Nevada .....	25	1,020	71	143	214
New Mexico .....	41	339	95	201	296
Oregon <sup>b</sup> .....	97	25,866	542	1,202	1,744
Utah .....	53	1,453	126	460	586
Wyoming .....	51	2,758	140	197	337
Total .....	554	38,686	1,749	5,552	7,301

<sup>a</sup>Includes North and South Dakota.

<sup>b</sup>Includes Washington.

TABLE 33.—Estimated recreation visitation to public lands under jurisdiction of the Bureau of Land Management, fiscal year 1989

Administrative State	Number of visits (thousands)	Amount and type of recreation use (thousands of visitor hours)										Total	
		Land-based recreation activities					Water-based recreation activities						Snow- and ice-based recreation activities
		Motorized travel		Non-motorized travel	Site-based			Fishing	Boating	Other	Winter sports		
		Off-road vehicle travel	Other motorized travel		Camping	Hunting	Other						
Alaska .....	242	43	263	94	3,718	413	77	339	161	4	58	5,170	
Arizona .....	3,970	1,010	119	237	29,052	2,356	1,262	538	1,598	519	2	36,693	
California .....	30,534	51,263	51,433	26,204	98,708	15,852	34,254	5,048	3,806	3,042	399	290,009	
Colorado .....	3,001	929	2,669	626	3,642	5,974	621	1,538	1,245	26	222	17,482	
Idaho .....	2,328	1,012	1,106	857	4,235	1,781	1,142	2,071	1,338	495	961	14,998	
Montana <sup>a</sup> .....	2,448	1,929	1,756	493	3,234	2,051	289	1,711	438	56	322	12,289	
Nevada .....	2,767	2,943	1,912	1,361	5,600	2,660	830	1,871	234	155	99	17,665	
New Mexico .....	2,981	2,389	822	718	2,979	2,855	1,588	1,176	772	51	2	13,352	
Oregon <sup>b</sup> .....	6,283	794	6,500	1,101	12,137	6,063	2,505	7,287	3,637	948	537	41,509	
Utah .....	4,504	3,151	6,419	4,677	8,450	3,655	1,758	488	4,998	105	182	33,883	
Wyoming .....	1,899	345	1,076	308	1,842	3,090	1,545	1,325	264	24	335	10,154	
Total .....	60,957	65,808	74,075	36,676	173,597	46,760	45,871	23,392	18,491	5,425	3,119	493,214	

<sup>a</sup>Includes North and South Dakota.

<sup>b</sup>Includes Washington.

TABLE 34.—*Recreation use for fee sites, permit areas, and concessions on public lands under jurisdiction of the Bureau of Land Management, fiscal year 1989*

Administrative State	Number of fee sites			Fee sites					Special recreation permits					Recreation concessions/vendors				Total revenue collected
	Number of fee sites	Number of visits	Number of permits issued	Visitor hours	Number of permits issued	Visitor hours	Number of visits	Revenue collected	Number of permits issued	Visitor hours	Revenue collected	Number of permits issued	Number of visits	Visitor hours	Revenue collected	Number of permits issued	Revenue collected	
Alaska .....	8	1,297	285	14,000	10,125	39,340	\$4,275	60	39,340	\$17,491	60	10,125	39,340	18,056,480	26	54,486	\$21,766	
Arizona .....	4	68,676	13,441	507,602	494,061	5,081,921	59,470	5,233	5,081,921	87,662	5,233	494,061	5,081,921	18,056,480	a26	233,951	386,083	
California .....	15	55,134	9,105	916,092	456,487	3,204,350	39,291	1,623	3,204,350	136,293	1,623	456,487	3,204,350	24,000	b33	580	176,164	
Colorado .....	1	2,300	725	72,200	191,914	1,071,264	3,800	310	1,071,264	173,930	310	191,914	1,071,264	180,000	c1	54,486	177,730	
Idaho .....	7	93,318	1,511	456,576	53,291	829,764	4,457	158	829,764	53,129	158	53,291	829,764	1,080,000	c1	54,486	112,072	
Montana <sup>d</sup> .....	1	48,000	3,220	704,000	314,590	227,560	15,400	132	227,560	16,139	132	314,590	227,560	1,080,000	c1	54,486	31,539	
Montana <sup>e</sup> .....	2	16,425	1,084	278,320	234,140	673,367	8,819	130	673,367	27,190	130	234,140	673,367	1,080,000	c1	54,486	36,009	
Nevada .....	12	30,700	1,360	164,953	21,358	112,671	8,183	74	112,671	17,626	74	21,358	112,671	1,080,000	c1	54,486	25,809	
New Mexico .....	27	514,315	25,271	3,801,966	110,523	1,730,196	133,247	402	1,730,196	201,628	402	110,523	1,730,196	1,080,000	c1	54,486	334,875	
Oregon <sup>e</sup> .....	10	64,544	10,327	517,538	144,779	3,144,785	43,066	2,879	3,144,785	215,371	2,879	144,779	3,144,785	1,080,000	c1	54,486	258,437	
Utah .....	7	28,641	5,864	162,455	19,957	448,286	7,033	329	448,286	17,059	329	19,957	448,286	1,080,000	c1	54,486	24,092	
Wyoming .....	94	923,550	72,193	7,595,702	2,051,225	16,563,504	327,041	11,330	16,563,504	963,518	11,330	2,051,225	16,563,504	19,160,480	60	294,017	1,584,576	

<sup>a</sup> 18 concessions and 8 vendors

<sup>b</sup> Vendors only

<sup>c</sup> Concessions only

<sup>d</sup> Includes North and South Dakota

<sup>e</sup> Includes Washington

## **BUREAU OF LAND MANAGEMENT PROGRAMS**

### **Areas of Critical Environmental Concern**

The area of critical environmental concern (ACEC) designation is used by the Bureau of Land Management (BLM) to highlight public land areas where special management attention is needed to protect, and prevent irreparable damage to, important historic, cultural, and scenic values; fish or wildlife resources; or other natural systems or processes. It can also be used to protect life and safety from natural hazards.

BLM identifies, evaluates, and designates ACECs through its resource management planning process. Allowable management practices and uses, mitigation measures, and use limitations, if any, are described in the planning document. Under current guidelines, ACEC procedures are used to designate research natural areas, outstanding natural areas, and other areas requiring special management attention.

The Bureau also cooperates with the National Park Service in implementation of the National Natural Landmark program as it applies to BLM-administered lands. Through the National Natural Landmark program, the Park Service designates significant examples of the Nation's ecological and geological heritage.

As of the end of fiscal year 1989, the Bureau has designated 429 ACECs encompassing more than 6 million acres (Table 35).

**TABLE 35.—Areas of critical environmental concern (ACECs) and related designations on public lands as of September 30, 1989**

Administrative State	Areas of Critical Environmental Concern <sup>a</sup>		Research Natural Areas <sup>b</sup>		Outstanding Natural Areas <sup>c</sup>		National Natural Landmarks <sup>d</sup>	
	Number	Acres	Number	Acres	Number	Acres	Number	Acres
Alaska .....	18	3,681,868	5	15,691	.....	.....	.....	.....
Arizona .....	10	29,351	1	154	1	8,400	2	4,398
California ....	105	919,472	8	45,275	1	1,500	11	169,990
Colorado .....	32	256,723	14	18,742	2	22,178	2	1,540
Idaho .....	58	497,404	2	26,480	1	3,500	7	267,094
Montana .....	4	12,235	.....	.....	1	1,947	3	37,250
Nevada .....	6	23,516	6	1,759	12	75,645	1	400
New Mexico ...	57	254,306	7	12,571	3	89,503	7	65,874
Oregon .....	99	416,862	53	68,458	9	18,543	4	7,775
Utah .....	17	118,950	2	14,040	1	1,375	3	33,720
Wyoming .....	23	412,626	.....	.....	.....	.....	6	44,640
Total .....	429	6,623,313	98	203,170	31	222,591	46	632,681

<sup>a</sup>Areas of Critical Environmental Concern are areas of land where the Bureau of Land Management (BLM) has determined through land use planning that special management attention is required to protect and prevent irreparable damage to an identified value or to protect life and safety from natural hazards. Identified values under the ACEC provisions of the Federal Land Policy and Management Act include important historic, cultural, or scenic values; fish and wildlife resources; and other natural systems or processes.

<sup>b</sup>Research Natural Areas (RNAs) are areas of land managed primarily for research and educational purposes. Since 1986, RNAs have been designated according to ACEC guidelines; these RNAs are shown in the ACEC column of this table.

<sup>c</sup>Outstanding Natural Areas (ONAs) are areas of land managed primarily for scenic and natural values. Since 1986, ONAs have been designated according to ACEC guidelines; these ONAs are shown in the ACEC column of this table.

<sup>d</sup>National Natural Landmarks (NNLs) are areas of land (on BLM or other ownerships, including private) that has been determined to be a nationally significant representative of the nation's natural heritage under the National Park Service's National Natural Landmarks Program, which is designed to identify such areas and encourage their protection. Recommendation by the Bureau is a major factor in identifying NNLs on the public lands.

## BUREAU OF LAND MANAGEMENT PROGRAMS

### Wilderness Resources

The wilderness review program provides for preservation and management through a system of inventories and studies. The results of these studies are reported to Congress.

As of September 30, 1989, there were 876 wilderness study areas covering about 25 million acres in 11 Western States (Table 36). Note that these figures do not include Alaska totals. In Alaska, wilderness studies are not conducted under FLPMA Sec. 202 or 603. Instead, BLM public lands in the Central Arctic Management Area are subject to wilderness review under Sec. 1001 and 1004 of the Alaska National Interest Lands Conservation Act of December 2, 1980.

BLM wilderness study areas contain far more ecosystem diversity in a 10-state region of the West than any other agency's wilderness holdings. BLM wilderness study areas include not only alpine meadows and barrens and forested mountain slopes; they also contain several American deserts, short-grass prairies, coastal areas, lava flows, and considerable low-elevation riparian habitat. In the 10-state region noted above, Bureau wilderness study areas encompass 110 different ecosystems on about 25 million acres.

The President has transmitted recommendations to Congress with respect to 1 "wilderness study area" containing 5,518 acres and 31 "instant study areas" containing 483,845 acres (Table 37). Congress has designated 25 areas containing 468,900 acres as part of the National Wilderness Preservation System (Table 38).

TABLE 36.—*Bureau of Land Management wilderness study area status as of September 30, 1989*

Geographic State	Wilderness study areas				Instant study areas <sup>a</sup>		Total	
	FLPMA Sec. 202		FLPMA Sec. 603					
	<i>Number</i>	<i>Acres</i>	<i>Number</i>	<i>Acres</i>	<i>Number</i>	<i>Acres</i>	<i>Number</i>	<i>Acres</i>
Arizona .....	15	45,098	69	2,095,370	.....	.....	84	2,140,468
California ....	40	84,418	180	7,176,137	5	13,155	225	7,273,710
Colorado .....	19	45,093	40	717,880	1	48,500	60	811,473
Idaho .....	10	21,706	54	1,359,120	3	407,073	67	1,787,899
Montana .....	15	42,224	27	370,532	3	34,896	45	447,652
Nevada .....	3	11,878	99	5,075,875	9	37,419	111	5,125,172
New Mexico ...	<sup>b</sup> 7	27,079	42	889,512	2	4,507	51	921,098
Oregon .....	7	13,614	80	2,832,434	5	10,400	92	2,856,448
Utah .....	15	22,599	75	2,969,352	10	266,215	100	3,258,166
Washington ...	.....	.....	1	5,518	.....	.....	1	5,518
Wyoming .....	6	15,419	33	547,581	1	7,636	40	570,636
Total .....	137	329,128	700	24,039,311	39	829,801	876	25,198,240

<sup>a</sup>Study areas mandated by Congress.

<sup>b</sup>Chain of Craters (18,300 acres) - Public Law 100-225 designated Chain of Craters as a Wilderness study area.

Note.—Wilderness study areas include areas returned to study status as a result of litigation in *Sierra Club v. Watt*. On-the-ground inventories have resulted in recalculations of some acreage figures.



TABLE 37.—*Bureau of Land Management wilderness recommendations pending before Congress as of September 30, 1989*

Geographic State	Wilderness study areas pending	Instant study areas pending	Total area pending	Area recommended to Congress as suitable	Area recommended to Congress as nonsuitable
	<i>Number</i>	<i>Number</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>
California . . . . .	.....	2	2,140	.....	2,140
Colorado . . . . .	.....	5	50,494	43,311	7,183
Idaho . . . . .	.....	3	382,723	322,450	60,273
Montana . . . . .	.....	2	13,118	8,791	4,327
Nevada . . . . .	.....	8	22,542	.....	22,542
New Mexico . . . . .	.....	1	360	.....	360
Oregon . . . . .	.....	4	1,480	.....	1,480
Utah . . . . .	.....	5	3,352	.....	3,352
Washington . . . . .	1	.....	5,518	.....	5,518
Wyoming . . . . .	.....	1	7,636	7,636	.....
Total . . . . .	1	31	489,363	382,188	107,175

TABLE 38.—*Bureau of Land Management lands designated as wilderness by Congress as of September 30, 1989*

Geographic State	Wilderness name	Acres	Public Law number	Year designated	Administering agency <sup>a</sup>
Arizona . . . . .	Aravaipa Canyon . . . . .	6,670	98-406	1984	BLM
	Cottonwood Point . . . . .	6,500	98-406	1984	BLM
	Grand Wash Cliffs . . . . .	36,300	98-406	1984	BLM
	Kanab Creek . . . . .	8,850	98-406	1984	BLM
	Mount Logan . . . . .	14,600	98-406	1984	BLM
	Mount Trumbull . . . . .	7,900	98-406	1984	BLM
	Paiute . . . . .	84,700	98-406	1984	BLM
Arizona/Utah	Paria Canyon-Vermilion Cliffs . . . . .	110,000	98-406	1984	BLM
	Beaver Dam Mountains . . . . .	19,600	98-406	1984	BLM
California . . . . .	Santa Lucia . . . . .	1,733	95-237	1978	FS
	Ishi . . . . .	240	98-425	1984	BLM
	Machnesna Mountain . . . . .	120	98-425	1984	BLM
	Trinity Alps . . . . .	4,623	98-425	1984	BLM
	Yolla Bolly-Middle Eel . . . . .	8,500	98-425	1984	BLM
Idaho . . . . .	River of No Return . . . . .	<sup>b</sup> 760	96-312	1980	FS
Montana . . . . .	Lee Metcalf (Bear Trap Canyon Unit) . . . . .	6,000	98-140	1983	BLM
New Mexico . . . . .	Bisti . . . . .	3,946	98-603	1984	BLM
	De-na-zin . . . . .	22,454	98-603	1984	BLM
	Cebolla . . . . .	<sup>b</sup> 62,800	100-225	1987	BLM
	W. Malpais . . . . .	<sup>b</sup> 39,700	100-225	1987	BLM
Oregon . . . . .	Hells Canyon . . . . .	1,038	98-328	1984	BLM
	Oregon Islands . . . . .	5	95-450	1978	BLM
	Table Rock . . . . .	<sup>b</sup> 5,750	98-328	1984	BLM
	Wild Rogue . . . . .	<sup>b</sup> 8,971	95-237	1978	FS
Washington . . . . .	Juniper Dunes . . . . .	7,140	98-339	1984	BLM
Total . . . . .		468,900			

<sup>a</sup>BLM = Bureau of Land Management; FS = Forest Service.

<sup>b</sup> Acreage figures were recalculated.

Note.—Forest Service is shown as an administering agency because the BLM lands shown here are adjacent to Forest Service lands, and there is a cooperative agreement between BLM and the Forest Service to manage the lands.

## BUREAU OF LAND MANAGEMENT PROGRAMS

### Energy and Mineral Resources

The Bureau of Land Management administers the public mineral resources of the United States and encourages their development in accordance with statutory provisions and conservation principles. The lands subject to surface and subsurface mineral development total approximately 732 million acres. Mineral lands include public lands administered by the Bureau and other agencies (National Park Service, U.S. Forest Service, etc.), acquired lands, and lands that have been patented with some or all minerals reserved to the United States.

Authority for disposition of mineral lands and resources is contained in numerous acts, including the Mineral Leasing Act of 1920, the Materials Disposal Act of 1947, and the General Mining Laws of 1872. Mineral development activities include the competitive and noncompetitive leasing of lands for oil, gas, potash, coal, and other leasable minerals; the sale and free-use disposal of mineral materials such as sand and gravel not subject to the leasing or mining laws; and the location and patenting of mining claims for gold, silver, and other locatable minerals.

The Bureau oversees all on-the-ground inspection and enforcement activities related to oil and gas leasing and administers the issuing of leases. During the fiscal year, 4,067 competitive oil and gas and geothermal leases were issued on 2,848,263 acres of public domain and acquired lands, with bonus bids totaling \$63.2 million (Table 39). For the same period, 4,250 noncompetitive oil and gas and geothermal leases were issued on 5,032,623 acres of public domain and acquired lands (Table 40).

The Bureau approved 1,851 applications for permit to drill for oil and gas, and 1,231 new holes were started (Table 41). There were 1,015 units in effect and 51,472 producible and service holes as of September 30, 1989 (Table 42). As of this same date, producible leases numbered 19,151, with over 12.6 million acres in producing status (Table 43).

One competitive coal lease on 9,905 acres brought in \$16,200,000.00 in bonus bids, and one noncompetitive coal lease on 981 acres brought in \$98,200.00 in bonus bids (Table 44). Approved coal logical mining units are shown in Table 45. No leasing actions for other energy minerals were issued during the fiscal year (Table 46). Nonenergy mineral leasing actions are shown in Table 47.

During the fiscal year, there were 664 non-exclusive sales of mineral material products valued at over \$266,000 and 280 exclusive sales valued at over \$594,000. Mineral materials disposed of through 211 free-use permits to governmental agencies and nonprofit groups were valued at \$6.8 million (Table 48).

The Bureau issued 32 mineral patents during fiscal year 1989 (Table 49). As of September 30, 1989, a total of 2,573,182 mining claims had been accepted for recording, of which 3,938 had been patented (Table 50). A total of 2,181 notices and 503 plans of mining operations were reviewed in fiscal year 1989 (Table 51).

# SOLID MINERAL LEASING

(MINERALS LEASED UNDER 43 CFR GROUP 3500)

December 1984

SPECIAL PROVISIONS	PHOSPHATE	SODIUM	POTASSIUM (POTASH)
PROSPECTING PERMITS: EXTENSIONS	NOT TO EXCEED 4 YRS 30 USC 211 (c) (43 CFR 3511.3-1(a)(2))	NO EXTENSIONS 30 USC 261 (43 CFR 3511.3-1(a)(3))	NOT TO EXCEED 2 YRS 30 USC 287 (43 CFR 3511.3-1(a)(1))
LEASE: ANNUAL RENTAL	NOT LESS THAN 25¢/ACRE 1ST YR, 50¢/ACRE 2, 3RD, LEASE YRS, \$1 00/ACRE EACH AND EVERY YR THEREAFTER 30 USC 212 (43 CFR 3503.3-1(b)(1))	25¢/ACRE 1ST CALENDAR YR OR FRACTION THEREOF, 50¢/ACRE 2, 3, 4, 5TH CALENDAR YRS, \$1 00/ACRE EACH YEAR THEREAFTER 30 USC 262 (43 CFR 3503.3-1(b)(2))	25¢/ACRE 1ST CALENDAR YR OR FRACTION THEREOF, 50¢/ACRE 2, 3, 4, 5TH CALENDAR YRS, \$1 00/ACRE EACH YR THEREAFTER 30 USC 283 (43 CFR 3503.3-1(b)(2))
LEASE READJUSTMENTS (BLM INITIATES ACTION)	EACH 20 YR PERIOD—SUBJECT TO REASONABLE READJUSTMENT OF TERMS AND CONDITIONS 30 USC 212 (43 CFR 3520.2-1(b))	/ / / / /	EACH 20 YR PERIOD—SUBJECT TO REASONABLE READJUSTMENT OF TERMS AND CONDITIONS 30 USC 283 (43 CFR 3520.2-1(b))
LEASE RENEWALS (LESSEE INITIATES ACTION)	/ / / / /	RIGHT TO RENEWAL AFTER INITIAL 20 YR PERIOD AND EACH 10 YR PERIOD THEREAFTER 30 USC 262 (43 CFR 3520.2-1(a)(1))	/ / / / /
PRODUCTION ROYALTY	NOT LESS THAN 5% OF GROSS VALUE OF OUTPUT OF PHOSPHATES OR PHOSPHATE ROCK AND ASSOCIATED OR RELATED MINERALS 30 USC 212 (43 CFR 3503.3-2(a))	NOT LESS THAN 2% OF THE QUANTITY OR GROSS VALUE OF THE OUTPUT OF SODIUM COMPOUNDS AND OTHER RELATED PRODUCTS AT THE POINT OF SHIPMENT TO MARKET 30 USC 262 (43 CFR 3503.3-2(a))	NOT LESS THAN 2% OF THE QUANTITY OR GROSS VALUE OF THE OUTPUT OF POTASSIUM COMPOUNDS AND OTHER RELATED PRODUCTS, EXCEPT SODIUM, AT THE POINT OF SHIPMENT TO MARKET. 30 USC 283 (43 CFR 3503.3-2(a))
ALLOWABLE ACREAGE HOLDINGS	1 NOT MORE THAN 2560 ACRES IN ONE UNIT, PERMIT OR LEASE 2 HOLDINGS IN PERMITS AND/OR LEASES SHALL NOT EXCEED 20,480 ACRES IN THE U.S. 30 USC 184c (43 CFR 3501.1-4(b)(3))	1 AREA IN PERMIT NOT TO EXCEED 2560 ACRES 30 USC 261 2 NO MORE THAN 5120 ACRES IN PERMITS OR LEASES IN ANY ONE STATE. 30 USC 184(b)(1) and (2) (43 CFR 3501.1-4(b)(2))	1. AREA IN PERMIT OR LEASE NOT TO EXCEED 2560 ACRES 2 HOLDINGS SHALL NOT EXCEED 51,200 ACRES IN ANY ONE STATE OF WHICH HOLDINGS IN LEASES MAY NOT EXCEED 25,600 ACRES (43 CFR 3501.1-4(b)(1))
CHIEFLY VALUABLE	/ / / / /	IN ADDITION TO A VALUABLE DISCOVERY OF SODIUM LANDS MUST BE CHIEFLY VALUABLE THEREFOR TO RECEIVE A PREFERENCE RIGHT LEASE. 30 USC 262 (43 CFR 3520.1-1(a))	IN ADDITION TO VALUABLE DISCOVERY OF POTASSIUM LANDS MUST BE CHIEFLY VALUABLE THEREFOR TO RECEIVE A PREFERENCE RIGHT LEASE 30 USC 282 (43 CFR 3520.1-1(a))
USE PERMITS	USE PERMIT GRANTS RIGHT TO USE SURFACE NOT EXCEEDING 80 ACRES OF UNAPPROPRIATED AND UNENTERED PUBLIC LAND, EXCEPT NATIONAL FOREST LAND, FOR PROPER EXTRACTION, TREATMENT OR REMOVAL OF LEASED PRODUCTS. 30 USC 214 (43 CFR 3540.0-1(b))	USE PERMIT GRANTS RIGHT TO USE A TRACT OF UNOCCUPIED, NON-MINERAL LAND, NOT EXCEEDING 40 ACRES FOR PURPOSES CONNECTED WITH AND NECESSARY FOR DEVELOPMENT OF LEASED SODIUM 30 USC 263 (43 CFR 3540.0-1(a))	/ / / / /
USE OF OTHER MINERALS	LESSEE MAY USE DEPOSITS OF SILICA, LIMESTONE OR OTHER ROCK SITUATED ON PUBLIC LANDS IN THE LEASE. 30 USC 213 (43 CFR 3524.2)	/ / / / /	/ / / / /
UNCLAIMED, UNDEVELOPED	PROSPECTING PERMITS MAY BE ISSUED FOR ANY UNCLAIMED, UNDEVELOPED AREA OF OPEN AND AVAILABLE FEDERAL LAND 30 USC 211(b) (43 CFR 3510.1-1(a))	/ / / / /	/ / / / /

\*Hardrock minerals are those locatable minerals for which a mineral patent may be obtained under the Mining Law of 1872 and which are neither leasable minerals (i.e., oil, gas, coal, oil shale, phosphate, sodium, potassium, sulphur, asphalt, or gilsonite) nor saleable mineral materials (e.g., common variety sand and gravel). Hardrock minerals include, but are not limited to, copper, lead, zinc, magnesium, nickel, tungsten, gold, silver, bentonite, barite, feldspar, fluor spar, and uranium.

Hardrock minerals may be leased for certain lands only as provided by specific laws, as follows: (1) under Section 402, Reorganization Plan No. 3 of 1946, lands acquired by the Department of Agriculture under the following statutes: (i) the Act of March 4, 1917 (16 U.S.C. 520); (ii) Title II of the National Industrial Recovery Act of June 16, 1933 (40 U.S.C. 401, 403(a), 408); (iii) the 1935 Emergency Relief Appropriation Act of April 8, 1935 (49 Stat. 115, 188); (iv) Section 55 of Title I of the Act of August 24, 1935 (49 Stat. 750, 781); (v) the Act of July 22, 1937 (50 Stat. 522, 525, 530), as

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SULFUR (LOUISIANA & NEW MEXICO AND ACQUIRED LANDS)	GILSONITE (INCLUDING ALL VEIN-TYPE SOLID HYDROCARBONS)	ASPHALT (IN OKLAHOMA)	* HARDROCK MINERALS
NO EXTENSIONS  30 USC 271 (43 CFR 3511.3-1(a)(3))	NOT TO EXCEED 2 YRS  (43 CFR 3511.3-1(a)(1))		NOT TO EXCEED 4 YRS  (43 CFR 3511.3-1(a)(4))
50¢/ACRE  30 USC 273 (43 CFR 3503.3-1(b)(3))	50¢/ACRE  30 USC 241 (43 CFR 3503.3-1(b)(4))	25¢/ACRE 1 <sup>st</sup> YR 50¢/ACRE 2, 3, 4 5 <sup>th</sup> YRS \$1.00/ACRE EACH YR THEREAFTER  (43 CFR 3562.3-6(b))	\$1.00/ACRE  (43 CFR 3503.3(b)(5))
	EACH 20 YR PERIOD—SUBJECT TO REASONABLE READJUSTMENT OF TERMS AND CONDITIONS  30 USC 241(a) (43 CFR 3520.2-1(b))		
RIGHT TO RENEWAL AFTER INITIAL 20 YR PERIOD AND EACH 10 YR PERIOD THEREAFTER  (43 CFR 3520.2-1(a)(1))		RIGHT TO RENEWAL AFTER INITIAL 20 YR PERIOD AND EACH 10 YR PERIOD THEREAFTER  (43 CFR 3562.6)	RIGHT TO RENEWAL AFTER INITIAL 20 YR PERIOD AND EACH 10 YR PERIOD THEREAFTER  (43 CFR 3520.2-1(a)(2))
5% OF QUANTITY OR GROSS VALUE OF THE OUTPUT OF SULPHUR AT THE POINT OF SHIPMENT TO MARKET  30 USC 272 (43 CFR 3503.3-2(a)(1))	AS DETERMINED BY AUTHORIZED OFFICER ON CASE BY CASE BASIS  (43 CFR 3503.3-2(a))	NOT LESS THAN 25¢/TON OF 2000 POUNDS OF MARKETABLE PRODUCTION  (43 CFR 3562.3-6(a))	AS DETERMINED BY AUTHORIZED OFFICER ON CASE BY CASE BASIS  (43 CFR 3503.3-2(a)(1)(ii))
1 A PERMIT OR LEASE SHALL NOT EXCEED 640 ACRES 2 MAXIMUM OF 3 PERMITS IN ANY ONE STATE PERMITTED AT ANY ONE TIME  30 USC 271-5 (43 CFR 3501.1-4(b)(4))	1. A LEASE MAY NOT INCLUDE MORE THAN 5120 ACRES 2 HOLDINGS OF PERMITS AND LEASES MAY NOT EXCEED 7680 ACRES IN ANY ONE STATE  30 USC 241 (43 CFR 3501.1-4(b)(5))	1 A LEASE MAY NOT INCLUDE MORE THAN 2560 ACRES 2 HOLDINGS MAY NOT EXCEED 7 680 ACRES IN ANY ONE STATE  (43 CFR 3562.2)	1 A PERMIT MAY NOT INCLUDE MORE THAN 2560 ACRES 2 HOLDINGS SHALL NOT EXCEED IN ANY ONE STATE 20 480 ACRES OF WHICH NOT MORE THAN 10 240 MAY BE HELD UNDER LEASE  (43 CFR 3501.2-5(b)(2))
IN ADDITION TO A VALUABLE DISCOVERY OF SULPHUR, LANDS MUST BE CHIEFLY VALUABLE THEREFOR TO RECEIVE A PREFERENCE RIGHT LEASE  30 USC 272 (43 CFR 3520.1-1(a))			

amended July 28, 1942 (7 U.S.C. 1011(c), 1018); and (vi) Section 3 of the Act of June 28, 1952 (66 Stat. 285); (2) under Section 3 of the Act of September 1, 1949 (30 U.S.C. 192c), certain lands added to the Shasta National Forest by the Act of March 19, 1948 (62 Stat. 83); (3) under the Act of June 30, 1950 (16 U.S.C. 508(b)), National Forest lands in Minnesota; and (4) under various acts, lands in the following national recreation areas: (i) Lake Mead National Recreation Area—the Act of October 8, 1964 (16 U.S.C. 460n-3(b)); (ii) Whiskeytown Unit of the Whiskeytown-Shasta-Trinity National Recreation Area—the Act of November 8, 1965 (16 U.S.C. 460q-5); (iii) Ross Lake and Lake Chelan National Recreation Areas—the Act of October 2, 1968 (16 U.S.C. 90c-1(b)); (iv) Glen Canyon National Recreation Area—the Act of October 27, 1972 (16 U.S.C. 460 dd et seq.); (v) Shasta-Trinity Units of the Whiskeytown-Shasta-Trinity National Recreation Area—Section 6 of the Act of November 8, 1965 (16 U.S.C. 460 q-5); and (vii) White Mountain National Recreation Area—Sections 403, 404, and 1312 of the Alaska National Interest Lands Conservation Act (16 U.S.C. 460mm-2 through 460mm-4).

TABLE 39.—*Competitive oil and gas and geothermal leasing, fiscal year 1989*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Oil and gas — Pre-Reform Act</b>					
<b>Public domain</b>					
Alabama	9	525	1	40	
Alaska	<sup>b</sup> 19	398,561			
Arkansas	48	9,145			
California	77	8,562			
Colorado	480	123,294			
Kansas	57	11,004			
Louisiana	49	4,873			
Michigan	5	353			
Mississippi	4	161			
Montana	391	92,660			
Nebraska	6	3,521			
Nevada	29	4,231			
New Mexico	1,608	360,531			
North Dakota	88	15,280			
Oklahoma	296	22,411			
South Dakota	23	3,467			
Utah	443	162,542			
Wyoming	2,565	620,999	2	636	
Total	6,197	1,842,120	3	676	
<b>Acquired lands</b>					
Alabama	3	607			
Arkansas	159	55,025			
California	3	272			
Colorado	15	2,557			
Illinois	2	430			
Kansas	16	2,781			
Kentucky	4	989			
Louisiana	23	10,521			
Michigan	25	3,549			
Mississippi	89	18,682			
Montana	16	2,162			
New Mexico	9	363			
New York	4	2,022			
North Dakota	83	15,387			
Ohio	23	3,690			
Oklahoma	75	16,408			
Pennsylvania	2	477			
Texas	45	9,202			
Utah	1	40			
Virginia	4	1,120			
West Virginia	4	2,279			
Wyoming	51	6,662			
Total	656	155,225			
<b>Public domain and acquired lands</b>					
Alabama	12	1,132	1	40	
Alaska	<sup>b</sup> 19	398,561			
Arkansas	207	64,170			
California	80	8,834			
Colorado	495	125,851			
Illinois	2	430			
Kansas	73	13,785			
Kentucky	4	989			
Louisiana	72	15,394			
Michigan	30	3,902			
Mississippi	93	18,843			
Montana	407	94,822			
Nebraska	6	3,521			
Nevada	29	4,231			
New Mexico	1,617	360,894			
New York	4	2,022			
North Dakota	171	30,667			
Ohio	23	3,690			
Oklahoma	371	38,819			
Pennsylvania	2	477			
South Dakota	23	3,467			

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TABLE 39.—*Competitive oil and gas and geothermal leasing,  
fiscal year 1989—continued*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bid
Texas .....	45	9,202	.....	.....	.....
Utah .....	444	162,582	.....	.....	.....
Virginia .....	4	1,120	.....	.....	.....
West Virginia .....	4	2,279	.....	.....	.....
Wyoming .....	2,616	627,661	2	636	.....
Total pre-Reform Act filings .....	6,853	1,997,345	3	676	.....
<b>Reform Act</b>					
<b>Public domain</b>					
Alabama .....	1	39	1	39	78.00
Arkansas .....	75	50,759	30	11,622	224,390.50
California .....	63	26,959	62	26,639	446,126.00
Colorado .....	564	381,447	445	281,198	2,069,928.00
Florida .....	15	12,999	15	12,999	40,726.50
Kansas .....	9	1,280	.....	.....	.....
Louisiana .....	2	194	.....	.....	.....
Michigan .....	73	38,120	71	37,664	788,908.00
Mississippi .....	1	13	1	13	195.00
Montana .....	213	103,023	97	31,774	90,234.50
Nebraska .....	1	40	.....	.....	.....
Nevada .....	342	528,688	189	250,177	1,618,840.75
New Mexico .....	1,161	716,518	648	381,266	8,546,854.00
North Dakota .....	35	8,953	30	8,109	70,167.50
Oklahoma .....	37	2,802	23	1,583	107,292.00
South Dakota .....	23	16,482	12	6,661	15,331.00
Utah .....	427	474,496	286	298,743	3,352,469.75
Wyoming .....	2,647	2,090,932	1,319	1,078,776	16,760,852.00
Total .....	5,689	4,453,744	3,229	2,427,263	34,132,393.50
<b>Acquired lands</b>					
Alabama .....	36	16,464	36	16,464	251,669.00
Arkansas .....	237	175,634	165	77,124	20,062,925.50
California .....	1	51	1	51	153.00
Colorado .....	34	13,555	15	6,794	14,040.00
Florida .....	34	34,120	33	33,586	200,536.00
Illinois .....	3	844	3	844	228,985.00
Kansas .....	54	12,752	40	12,051	2,977,360.00
Louisiana .....	5	1,531	3	909	24,492.00
Michigan .....	283	118,803	235	100,087	2,959,984.00
Mississippi .....	93	34,338	91	34,177	204,722.00
Montana .....	42	23,108	26	16,342	24,869.00
Nebraska .....	2	820	.....	.....	.....
New Mexico .....	9	2,633	9	2,633	33,318.00
North Dakota .....	16	3,976	16	3,976	5,939.00
Oklahoma .....	58	44,509	39	41,265	815,176.00
South Dakota .....	6	3,545	1	400	9,176.00
Texas .....	64	34,396	55	32,384	490,377.00
Utah .....	6	1,162	3	790	22,042.00
Virginia .....	28	17,000	28	17,000	204,368.00
Wyoming .....	49	13,096	27	7,597	184,495.00
Total .....	1,060	552,337	826	404,474	28,714,626.50
<b>Public domain and acquired lands</b>					
Alabama .....	37	16,503	37	16,503	251,747.00
Arkansas .....	312	226,393	195	88,746	20,287,316.00
California .....	64	27,010	63	26,690	446,279.00
Colorado .....	598	395,002	460	287,992	2,083,968.00
Florida .....	49	47,119	48	46,585	241,262.50
Illinois .....	3	844	3	844	228,985.00
Kansas .....	63	14,032	40	12,051	2,977,360.00
Louisiana .....	7	1,725	3	909	24,492.00
Michigan .....	356	156,923	306	137,751	3,748,892.00
Mississippi .....	94	34,351	92	34,190	204,917.00
Montana .....	255	126,131	123	48,116	115,103.50
Nebraska .....	3	860	.....	.....	.....
Nevada .....	342	528,688	189	250,177	1,618,840.75

TABLE 39.—*Competitive oil and gas and geothermal leasing, fiscal year 1989—concluded*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bid
New Mexico .....	1,170	719,151	657	383,899	8,580,172.00
North Dakota .....	51	12,929	46	12,085	76,106.50
Oklahoma .....	95	47,311	62	42,848	922,468.00
South Dakota .....	29	20,027	13	7,061	24,507.00
Texas .....	64	34,396	55	32,384	490,377.00
Utah .....	433	475,658	289	299,533	3,374,511.75
Virginia .....	28	17,000	28	17,000	204,368.00
Wyoming .....	2,696	2,104,028	1,346	1,086,373	16,945,347.00
Total Reform Act filings .....	6,749	5,006,081	4,055	2,831,737	62,847,020.00
Total oil and gas .....	13,602	7,003,426	4,058	2,832,413	62,847,020.00
<b>Geothermal</b>					
<b>Public domain and acquired lands</b>					
California .....	120	196,649	2	1,676	29,030.30
Idaho .....	2	3,061	.....	.....	.....
New Mexico .....	2	2,781	.....	.....	.....
Oregon .....	8	16,565	.....	.....	.....
Utah .....	17	30,265	.....	.....	.....
Nevada .....	50	87,956	7	14,174	286,742.95
Total geothermal .....	199	337,277	9	15,850	315,773.25
Grand Total .....	13,801	7,340,703	4,067	2,848,263	63,162,793.25

<sup>a</sup>Includes leasing actions during the fiscal year as shown in the three right-hand columns of this table.

<sup>b</sup>Includes 18 National Petroleum Reserve — Alaska (NPRA) leases (DOI Appropriations Act, fiscal year 1981) on 398,161 acres.



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TABLE 40.—*Noncompetitive oil and gas and geothermal leasing, fiscal year 1989*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year	
	Number	Acres	Number	Acres
<b>Oil and gas</b>				
<b>Over-the-counter filings</b>				
<b>Pre-Reform Act</b>				
<b>Public domain</b>				
Alabama .....	33	4,914		
Alaska .....	5,694	1,911,727	147	406,766
Arizona .....	158	437,651	4	4,640
Arkansas .....	102	90,741	5	6,024
California .....	319	447,390	3	6,368
Colorado .....	1,467	2,267,975	26	41,241
Florida .....	17	11,486	5	7,051
Idaho .....	89	176,468		
Kansas .....	33	9,804		
Louisiana .....	60	7,878		
Michigan .....	49	11,796	8	1,210
Mississippi .....	35	3,741		
Missouri .....	1	1,325	1	1,325
Montana .....	1,812	2,628,192		
Nebraska .....	5	593		
Nevada .....	801	2,435,283	40	213,394
New Mexico .....	4,061	4,206,673	3	160
North Dakota .....	61	25,459		
Ohio .....	1	60		
Oklahoma .....	222	52,873		
Oregon .....	89	150,297		
South Dakota .....	39	37,554		
Utah .....	1,153	1,057,917		
Washington .....	182	185,641		
Wisconsin .....	4	1,024		
Wyoming .....	2,929	1,847,131	1	640
<b>Total .....</b>	<b>19,416</b>	<b>18,011,593</b>	<b>243</b>	<b>688,819</b>
<b>Acquired lands</b>				
Alabama .....	78	68,046	11	16,505
Arizona .....	9	22,643		
Arkansas .....	198	210,278	4	4,440
California .....	41	62,718	1	788
Colorado .....	68	25,537		
Florida .....	47	60,325	34	37,350
Georgia .....	3	4,476		
Illinois .....	4	320		
Iowa .....	1	160		
Kansas .....	17	7,041		
Kentucky .....	32	21,594		
Louisiana .....	60	28,387		
Maryland .....	8	9,840		
Michigan .....	424	249,207	43	24,897
Minnesota .....	5	1,679		
Mississippi .....	173	58,472	1	484
Montana .....	165	102,777	1	80
Nebraska .....	6	1,586		
Nevada .....	2	1,033		
New Mexico .....	40	65,175	19	41,611
New York .....	4	7,289		
North Carolina .....	5	6,251		
North Dakota .....	92	39,158		
Ohio .....	49	14,921	1	38
Oklahoma .....	274	104,647	1	1,080
Oregon .....	6	6,143		
Pennsylvania .....	6	2,527		
South Carolina .....	11	19,855		
South Dakota .....	14	12,037		
Tennessee .....	23	48,458		
Texas .....	134	97,331	6	2,367
Utah .....	25	7,379		
Virginia .....	76	149,917	8	6,633
Washington .....	138	232,206	4	2,272
West Virginia .....	108	110,546	1	333

TABLE 40.—*Noncompetitive oil and gas and geothermal leasing, fiscal year 1989—continued*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year	
	Number	Acres	Number	Acres
Wisconsin .....	25	84,360	7	38,480
Wyoming .....	67	11,102	.....	.....
Total .....	2,438	1,955,421	142	177,358
<b>Public domain and acquired lands</b>				
Alabama .....	111	72,960	11	16,505
Alaska .....	5,694	1,911,727	147	406,766
Arizona .....	167	460,294	4	4,640
Arkansas .....	300	301,019	9	10,464
California .....	360	510,108	4	7,156
Colorado .....	1,535	2,293,512	26	41,241
Florida .....	64	71,811	39	44,401
Georgia .....	3	4,476	.....	.....
Idaho .....	89	176,468	.....	.....
Illinois .....	4	320	.....	.....
Iowa .....	1	160	.....	.....
Kansas .....	50	16,845	.....	.....
Kentucky .....	32	21,594	.....	.....
Louisiana .....	120	36,265	.....	.....
Maryland .....	8	9,840	.....	.....
Michigan .....	473	261,003	51	26,107
Minnesota .....	5	1,679	.....	.....
Mississippi .....	208	62,213	1	484
Missouri .....	1	1,325	1	1,325
Montana .....	1,977	2,730,969	1	80
Nebraska .....	11	2,179	.....	.....
Nevada .....	803	2,436,316	40	213,394
New Mexico .....	4,101	4,271,848	22	41,771
New York .....	4	7,289	.....	.....
North Carolina .....	5	6,251	.....	.....
North Dakota .....	153	64,617	.....	.....
Ohio .....	50	14,981	1	38
Oklahoma .....	496	157,520	1	1,080
Oregon .....	95	156,440	.....	.....
Pennsylvania .....	6	2,527	.....	.....
South Carolina .....	11	19,855	.....	.....
South Dakota .....	53	49,591	.....	.....
Tennessee .....	23	48,458	.....	.....
Texas .....	134	97,331	6	2,367
Utah .....	1,178	1,065,296	.....	.....
Virginia .....	76	149,917	8	6,633
Washington .....	320	417,847	4	2,272
West Virginia .....	108	110,546	1	333
Wisconsin .....	29	85,384	7	38,480
Wyoming .....	2,996	1,858,233	1	640
Total over-the-counter filings .....	21,854	19,967,014	385	866,177
<b>Simultaneous filings</b>				
<b>Public domain</b>				
Alabama .....	122	17,764	.....	.....
Arizona .....	46	52,213	1	2,549
Arkansas .....	44	24,917	.....	.....
California .....	762	372,701	53	29,124
Colorado .....	4,833	4,678,551	17	25,587
Florida .....	26	3,143	.....	.....
Idaho .....	66	202,375	.....	.....
Kansas .....	48	9,095	.....	.....
Louisiana .....	145	13,545	.....	.....
Michigan .....	52	40,273	.....	.....
Mississippi .....	108	12,963	.....	.....
Montana .....	2,750	2,567,021	4	5,320
Nebraska .....	62	14,155	.....	.....
Nevada .....	1,392	3,693,402	5	12,887
New Mexico .....	4,764	3,424,373	30	20,597
North Dakota .....	424	183,454	.....	.....
Oklahoma .....	315	45,886	1	82
Oregon .....	88	234,369	7	43,143
South Dakota .....	283	434,671	.....	.....
Utah .....	3,542	4,362,401	17	43,196
Washington .....	37	65,605	1	763
Wyoming .....	17,315	11,394,139	70	68,713
Total .....	37,224	31,847,016	206	251,961

TABLE 40.—*Noncompetitive oil and gas and geothermal leasing, fiscal year 1989—continued*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year	
	Number	Acres	Number	Acres
<b>Acquired lands</b>				
Alabama .....	60	70,383	.....	.....
Arizona .....	5	2,781	.....	.....
Arkansas .....	102	64,844	1	4,325
California .....	7	574	1	29
Colorado .....	365	226,624	1	1,844
Florida .....	94	190,717	1	1,560
Idaho .....	4	2,502	.....	.....
Kansas .....	13	10,045	.....	.....
Kentucky .....	38	31,355	1	471
Louisiana .....	212	130,489	2	1,053
Maryland .....	1	198	.....	.....
Michigan .....	225	120,105	3	623
Mississippi .....	847	561,060	5	3,405
Montana .....	516	508,855	.....	.....
Nebraska .....	22	18,218	.....	.....
New Mexico .....	71	30,719	4	4,542
North Dakota .....	636	521,696	.....	.....
Ohio .....	9	4,635	.....	.....
Oklahoma .....	203	136,022	6	4,495
Oregon .....	3	5,158	1	1,280
Pennsylvania .....	1	153	.....	.....
South Dakota .....	50	50,513	.....	.....
Tennessee .....	2	401	.....	.....
Texas .....	198	136,973	9	7,036
Utah .....	26	15,763	.....	.....
Virginia .....	47	73,976	2	2,178
Washington .....	5	10,835	.....	.....
West Virginia .....	85	146,311	2	4,377
Wyoming .....	288	90,664	1	80
Total .....	4,135	3,162,569	40	37,298
<b>Public domain and acquired lands</b>				
Alabama .....	182	88,147	.....	.....
Arizona .....	51	54,994	1	2,549
Arkansas .....	146	89,761	1	4,325
California .....	769	373,275	54	29,153
Colorado .....	5,198	4,905,175	18	27,431
Florida .....	120	193,860	1	1,560
Idaho .....	70	204,877	.....	.....
Kansas .....	61	19,140	.....	.....
Kentucky .....	38	31,355	1	471
Louisiana .....	357	144,034	2	1,053
Maryland .....	1	198	.....	.....
Michigan .....	277	160,378	3	623
Mississippi .....	955	574,023	5	3,405
Montana .....	3,266	3,075,876	4	5,320
Nebraska .....	84	32,373	.....	.....
Nevada .....	1,392	3,693,402	5	12,887
New Mexico .....	4,835	3,455,092	34	25,139
North Dakota .....	1,060	705,150	.....	.....
Ohio .....	9	4,635	.....	.....
Oklahoma .....	518	181,908	7	4,577
Oregon .....	91	239,527	8	44,423
Pennsylvania .....	1	153	.....	.....
South Dakota .....	333	485,184	.....	.....
Tennessee .....	2	401	.....	.....
Texas .....	198	136,973	9	7,036
Utah .....	3,568	4,378,164	17	43,196
Virginia .....	47	73,976	2	2,178
Washington .....	42	76,440	1	763
West Virginia .....	85	146,311	2	4,377
Wyoming .....	17,603	11,484,803	71	68,793
Total simultaneous filings .....	41,359	35,009,585	246	289,259
Total pre-Reform Act filings .....	63,213	54,976,599	631	1,155,436
<b>Reform Act</b>				
<b>Public domain</b>				
Alabama .....	1	40	.....	.....
Arizona .....	24	37,743	24	37,743
Arkansas .....	75	97,862	31	24,444

TABLE 40.—*Noncompetitive oil and gas and geothermal leasing, fiscal year 1989—continued*

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year	
	Number	Acres	Number	Acres
California .....	92	51,740	91	51,437
Colorado .....	410	360,090	376	338,466
Kansas .....	4	1,099	4	1,099
Michigan .....	29	14,460	29	14,460
Mississippi .....	1	644	1	644
Montana .....	335	334,279	257	268,733
Nebraska .....	8	958	5	2,275
Nevada .....	406	682,371	252	408,087
New Mexico .....	241	310,219	172	220,766
North Dakota .....	25	5,143	24	3,297
Oklahoma .....	7	1,964	4	961
Oregon .....	6	5,696	6	5,696
South Dakota .....	13	17,610	7	4,300
Utah .....	546	739,710	361	414,435
Washington .....	2	233	2	233
Wyoming .....	2,342	2,602,316	1,602	1,794,478
<b>Total .....</b>	<b>4,567</b>	<b>5,264,177</b>	<b>3,248</b>	<b>3,591,554</b>
<b>Acquired lands</b>				
Alabama .....	71	35,505	69	35,185
Arkansas .....	96	137,875	63	63,977
California .....	7	1,915	7	1,915
Colorado .....	23	15,841	21	14,015
Louisiana .....	39	19,380	2	788
Michigan .....	133	43,912	133	43,912
Mississippi .....	51	24,397	37	17,553
Montana .....	49	43,479	35	30,251
Nebraska .....	2	3,597	1	2,000
New Mexico .....	1	1,280	1	1,280
North Dakota .....	10	1,756	10	1,756
Oklahoma .....	5	1,661	3	543
South Dakota .....	2	1,075	2	1,075
Texas .....	3	1,732	2	1,629
Utah .....	2	759	2	759
Washington .....	2	70	2	70
Wyoming .....	42	16,729	25	10,342
<b>Total .....</b>	<b>538</b>	<b>350,963</b>	<b>415</b>	<b>227,050</b>
<b>Public domain and acquired lands</b>				
Alabama .....	72	35,545	69	35,185
Arizona .....	24	37,743	24	37,743
Arkansas .....	171	235,737	94	88,421
California .....	99	53,655	98	53,352
Colorado .....	433	375,931	397	352,481
Kansas .....	4	1,099	4	1,099
Louisiana .....	39	19,380	2	788
Michigan .....	162	58,372	162	58,372
Mississippi .....	52	25,041	38	18,197
Montana .....	384	377,758	292	298,984
Nebraska .....	10	4,555	6	4,275
Nevada .....	406	682,371	252	408,087
New Mexico .....	242	311,499	173	222,046
North Dakota .....	35	6,899	34	5,053
Oklahoma .....	12	3,625	7	1,504
Oregon .....	6	5,696	6	5,696
South Dakota .....	15	18,685	9	5,375
Texas .....	3	1,732	2	1,629
Utah .....	548	740,469	363	415,194
Washington .....	4	303	4	303
Wyoming .....	2,384	2,619,045	1,627	1,804,820
<b>Total Reform Act filings .....</b>	<b>5,105</b>	<b>5,615,140</b>	<b>3,663</b>	<b>3,818,604</b>
<b>Total oil and gas .....</b>	<b>68,318</b>	<b>60,591,739</b>	<b>4,294</b>	<b>4,974,040</b>

**TABLE 40.—Noncompetitive oil and gas and geothermal leasing,  
 fiscal year 1989—concluded**

Geographic State	Leases in effect as of September 30, 1989 <sup>a</sup>		Leases issued during fiscal year	
	Number	Acres	Number	Acres
<b>Geothermal</b>				
Arizona .....	11	18,146	10	17,363
California .....	107	154,415	9	8,330
Colorado .....	3	2,751	.....	.....
Idaho .....	1	678	.....	.....
New Mexico .....	10	14,790	.....	.....
Nevada .....	149	253,786	18	33,767
Oregon .....	160	236,059	23	35,617
Utah .....	10	20,272	.....	.....
Total geothermal .....	451	700,897	60	95,077
Grand Total .....	68,769	61,292,636	4,354	5,069,117

<sup>a</sup>Includes leasing actions during the fiscal year as shown in the two right-hand columns of this table.

TABLE 41.—*Oil and gas drilling activities on Federal land, fiscal year 1989*

Geographic State	APDs approved <sup>a</sup>	New holes started	Producible completions	Plugged and abandoned
Alabama .....	.....	5	3	1
Alaska .....	2	2	.....	.....
Arizona .....	1	.....	.....	.....
Arkansas .....	.....	7	13	.....
California .....	227	105	106	6
Colorado .....	140	98	83	16
Florida .....	.....	1	.....	1
Idaho .....	.....	.....	.....	1
Kansas .....	.....	7	7	2
Kentucky .....	.....	6	3	.....
Louisiana .....	.....	7	9	2
Michigan .....	.....	2	5	.....
Mississippi .....	.....	15	5	9
Montana .....	90	77	40	10
Nebraska .....	.....	2	.....	3
Nevada .....	32	23	9	10
New Mexico .....	805	441	447	27
New York .....	.....	.....	.....	1
North Dakota .....	.....	6	7	5
Ohio .....	.....	.....	2	.....
Oklahoma .....	.....	13	10	3
Pennsylvania .....	.....	.....	1	.....
South Dakota .....	.....	4	2	2
Texas .....	.....	7	3	.....
Utah .....	59	55	35	16
Washington .....	.....	1	.....	2
West Virginia .....	.....	.....	47	.....
Wyoming .....	458	347	169	116
Eastern States .....	37	.....	.....	.....
Total .....	1,851	1,231	1,006	233

<sup>a</sup>Applications for permit to drill (APDs) are handled by administrative offices (e.g., the Eastern States Office), while the starts, completions, and abandonments shown in the three columns following are portrayed by geographic State (e.g., Arkansas, Florida, Kansas, etc.).

**TABLE 42.—Continuing oil and gas activities on Federal lands  
as of September 30, 1989**

Geographic State	Number of units in effect	Number of producible and service holes	Number of producible and service completions
Alabama .....	2	7	8
Alaska .....	9	133	169
Arkansas .....	2	110	151
California .....		6,188	6,188
Colorado .....	130	3,303	3,303
Florida .....		3	3
Illinois .....		2	2
Kansas .....	7	150	218
Kentucky .....		1	1
Louisiana .....	21	344	381
Maryland .....		9	9
Michigan .....	1	57	57
Mississippi .....	3	220	223
Montana .....	50	2,974	3,293
Nebraska .....		30	31
Nevada .....	10	66	66
New Mexico .....	249	20,524	21,995
New York .....		1	1
North Dakota .....	24	659	667
Ohio .....		103	103
Oklahoma .....	12	276	296
Pennsylvania .....		87	87
South Dakota .....	5	174	179
Texas .....	10	84	91
Utah .....	13	2,959	2,973
West Virginia .....		201	201
Wyoming .....	467	12,807	13,896
<b>Total .....</b>	<b>1,015</b>	<b>51,472</b>	<b>54,592</b>

TABLE 43.—*Oil and gas leases on Federal lands in producing status as of September 30, 1989*

Geographic State	Number of producible leases <sup>a</sup>	Number of acres in producing status
Alabama .....	12	1,781
Alaska .....	34	62,763
Arkansas .....	163	88,944
California .....	316	76,452
Colorado .....	3,609	2,585,049
Florida .....	2	4,497
Illinois .....	1	350
Kansas .....	681	104,127
Kentucky .....	43	20,114
Louisiana .....	122	62,336
Maryland .....	3	2,105
Michigan .....	30	18,210
Mississippi .....	113	52,726
Missouri .....	1	1,329
Montana .....	1,294	707,407
Nebraska .....	21	6,347
Nevada .....	39	15,380
New Mexico .....	5,300	4,809,786
North Dakota .....	458	394,160
Ohio .....	51	10,040
Oklahoma .....	55	34,232
Pennsylvania .....	70	6,677
South Dakota .....	70	55,622
Texas .....	9	4,652
Utah .....	1,051	783,361
Virginia .....	1	2,165
West Virginia .....	227	103,803
Wyoming .....	5,375	2,631,946
Total .....	19,151	12,646,361

<sup>a</sup>Includes both producing and producible leases with either actual and allocated production.



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TABLE 44.—Coal leases, licenses, permits, and applications, fiscal year 1989

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Competitive leases</b>					
<b>Public domain</b>					
Alabama .....	15	12,946			
Colorado .....	62	56,927			
Kentucky .....	2	1,921			
Montana .....	22	36,043			
New Mexico .....	9	16,396			
North Dakota .....	14	12,007			
Oklahoma .....	12	11,625			
Utah .....	106	117,622	1	9,905	\$16,200,000.00
Washington .....	1	241			
Wyoming .....	59	137,654			
Total .....	302	403,382	1	9,905	\$16,200,000.00
<b>Acquired</b>					
Alabama .....	3	1,320			
Kentucky .....	2	1,627			
New Mexico .....	1	120			
Pennsylvania .....	2	81			
Total .....	8	3,148			
<b>Public domain and acquired</b>					
Alabama .....	18	14,266			
Colorado .....	62	56,927			
Kentucky .....	4	3,548			
Montana .....	22	36,043			
New Mexico .....	10	16,516			
North Dakota .....	14	12,007			
Oklahoma .....	12	11,625			
Pennsylvania .....	2	81			
Utah .....	106	117,622	1	9,905	\$16,200,000.00
Washington .....	1	241			
Wyoming .....	59	137,654			
Total .....	310	406,530	1	9,905	\$16,200,000.00
<b>Noncompetitive leases</b>					
<b>Public domain</b>					
Alabama .....	1	200			
Montana .....	3	3,496	1	981	\$98,200.00
Oklahoma .....	5	4,703			
Wyoming .....	3	442			
Total .....	12	8,841	1	981	\$98,200.00
<b>Acquired</b>					
Kentucky .....	2	100			
Oklahoma .....	5	613			
Total .....	7	713			
<b>Public domain and acquired</b>					
Alabama .....	1	200			
Kentucky .....	2	100			
Montana .....	3	3,496	1	981	\$98,200.00
Oklahoma .....	10	5,316			
Wyoming .....	3	442			
Total .....	19	9,554	1	981	\$98,200.00

TABLE 44.—*Coal leases, licenses, permits, and applications, fiscal year 1989—continued*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Preference right leases</b>					
<b>Public domain</b>					
Alaska .....	2	3,160	.....	.....	.....
California .....	1	80	.....	.....	.....
Colorado .....	41	72,634	.....	.....	.....
Montana .....	1	80	.....	.....	.....
New Mexico .....	17	24,262	.....	.....	.....
Oklahoma .....	21	43,244	.....	.....	.....
Oregon .....	2	4,874	.....	.....	.....
Utah .....	91	165,618	.....	.....	.....
Washington .....	1	280	.....	.....	.....
Wyoming .....	23	47,338	.....	.....	.....
Total .....	200	361,570	.....	.....	.....
<b>Acquired</b>					
Kentucky .....	1	1,282	.....	.....	.....
Oregon .....	1	538	.....	.....	.....
Total .....	2	1,820	.....	.....	.....
<b>Public domain and acquired</b>					
Alaska .....	2	3,160	.....	.....	.....
California .....	1	80	.....	.....	.....
Colorado .....	41	72,634	.....	.....	.....
Kentucky .....	1	1,282	.....	.....	.....
Montana .....	1	80	.....	.....	.....
New Mexico .....	17	24,262	.....	.....	.....
Oklahoma .....	21	43,244	.....	.....	.....
Oregon .....	3	5,412	.....	.....	.....
Utah .....	91	165,618	.....	.....	.....
Washington .....	1	280	.....	.....	.....
Wyoming .....	23	47,338	.....	.....	.....
Total .....	202	363,390	.....	.....	.....
<b>Exchange leases</b>					
<b>Public domain</b>					
Montana .....	1	9,445	.....	.....	.....
Wyoming .....	5	4,695	.....	.....	.....
Total .....	6	14,140	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Public domain</b>					
Alaska .....	2	5,120	.....	.....	.....
Colorado .....	7	16,713	.....	.....	.....
Montana .....	2	7,230	.....	.....	.....
New Mexico .....	26	75,510	.....	.....	.....
Utah .....	11	38,909	.....	.....	.....
Wyoming .....	31	64,721	.....	.....	.....
Total .....	79	208,203	.....	.....	.....
<b>Acquired</b>					
Montana .....	1	4,757	.....	.....	.....
Total .....	1	4,757	.....	.....	.....

TABLE 44.—*Coal leases, licenses, permits, and applications, fiscal year 1989—concluded*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Public domain and acquired</b>					
Alaska .....	2	5,120	.....	.....	.....
Colorado .....	7	16,713	.....	.....	.....
Montana .....	3	11,987	.....	.....	.....
New Mexico .....	26	75,510	.....	.....	.....
Utah .....	11	38,909	.....	.....	.....
Wyoming .....	31	64,721	.....	.....	.....
Total .....	80	212,960	.....	.....	.....
<b>Exploration licenses</b>					
<b>Public domain</b>					
Alabama .....	1	80	1	80	.....
Montana .....	3	9,872	1	7,672	.....
Utah .....	1	2,731	.....	.....	.....
Total .....	5	12,683	2	7,752	.....
<b>Licenses to mine</b>					
<b>Public domain</b>					
Montana .....	1	20	.....	.....	.....
New Mexico .....	3	6	.....	.....	.....
Total .....	4	26	.....	.....	.....
<b>Acquired</b>					
North Dakota .....	1	10	.....	.....	.....
Total .....	1	10	.....	.....	.....
<b>Public domain and acquired</b>					
Montana .....	1	20	.....	.....	.....
New Mexico .....	3	6	.....	.....	.....
North Dakota .....	1	10	.....	.....	.....
Total .....	5	36	.....	.....	.....
<b>Rights-of-way and temporary use permits</b>					
<b>Public domain</b>					
Utah .....	1	640	.....	.....	.....
Total .....	1	640	.....	.....	.....

<sup>a</sup>Includes leasing actions during the fiscal year as shown in the three right-hand columns of this table.

Source: Solid Leasable Minerals System (SLMS) data base.

TABLE 45.—*Approved coal logical mining units (LMU), fiscal year 1989*

State	Total in effect as of September 30, 1989			
	Number LMUs	Number leases	LMU acreage	Federal acreage
Colorado .....	4	13	14,717	8,537
Montana .....	1	5	6,081	5,401
New Mexico .....	2	7	30,310	30,310
North Dakota .....	1	3	11,061	2,958
Oklahoma .....	1	5	9,076	9,076
Utah .....	3	25	34,262	26,553
Wyoming .....	8	24	54,285	40,783
Total .....	20	82	159,792	123,618

Note.—Logical Mining Unit (LMU) refers to an area of land on which the recoverable coal reserves can be developed in an efficient, economical, and orderly manner as a unit with due regard to conservation of coal reserves and other resources. An LMU may consist of one or more Federal coal leases and may include intervening or adjacent lands in which the United States does not own the coal. All lands in an LMU are under the control of one operator or lessee, can be developed as a single operation, and are contiguous. Formation of LMUs was authorized by the Federal Coal Leasing Amendments Act of 1976, which amended the Mineral Leasing Act (30 U.S.C. 181 *et seq.*).

TABLE 46.—*Other energy mineral leasing actions, fiscal year 1989*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year	
	Number	Acres	Number	Acres
<b>OIL SHALE</b>				
<b>Competitive leases</b>				
<b>Public domain</b>				
Colorado .....	2	10,184	.....	.....
Total .....	2	10,184	.....	.....
<b>COMBINED HYDROCARBON</b>				
<b>Combined hydrocarbon leases</b>				
<b>Public domain</b>				
Utah .....	19	35,780	.....	.....
Total .....	19	35,780	.....	.....
<b>GILSONITE</b>				
<b>Competitive leases</b>				
<b>Public domain</b>				
Utah .....	12	3,210	.....	.....
Total .....	12	3,210	.....	.....
<b>URANIUM</b>				
<b>Noncompetitive leases</b>				
<b>Acquired lands</b>				
Wyoming .....	1	2,560	.....	.....
Total .....	1	2,560	.....	.....
<b>Preference right lease applications</b>				
<b>Acquired lands</b>				
Colorado .....	9	4,974	.....	.....
Total .....	9	4,974	.....	.....
<b>Prospecting permits</b>				
<b>Acquired lands</b>				
Nebraska .....	1	1,319	.....	.....
Total .....	1	1,319	.....	.....

<sup>a</sup>Includes leasing actions during the fiscal year as shown in the two right-hand columns of this table.

Note.—No leasing actions occurred during fiscal year 1989.

Source: Solid Leasable Minerals System (SLMS) data base.

TABLE 47.—*Nonenergy mineral leasing actions, fiscal year 1989*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>PHOSPHATE</b>					
<b>Competitive leases</b>					
<b>Public domain</b>					
Florida .....	6	963	.....	.....	.....
Idaho .....	48	28,013	.....	.....	.....
Montana .....	12	10,846	.....	.....	.....
Utah .....	2	3,614	.....	.....	.....
Wyoming .....	1	189	.....	.....	.....
Total .....	69	43,625	.....	.....	.....
<b>Acquired lands</b>					
Florida .....	3	200	.....	.....	.....
Total .....	3	200	.....	.....	.....
<b>Public domain and acquired lands</b>					
Florida .....	9	1,163	.....	.....	.....
Idaho .....	48	28,013	.....	.....	.....
Montana .....	12	10,846	.....	.....	.....
Utah .....	2	3,614	.....	.....	.....
Wyoming .....	1	189	.....	.....	.....
Total .....	72	43,825	.....	.....	.....
<b>Noncompetitive leases</b>					
<b>Public domain</b>					
Idaho .....	10	7,967	1	160	\$124,132.00
Montana .....	6	3,153	.....	.....	.....
Utah .....	5	5,053	.....	.....	.....
Total .....	21	16,173	1	160	\$124,132.00
<b>Preference right leases</b>					
<b>Public domain</b>					
California .....	1	1,608	.....	.....	.....
Idaho .....	30	10,122	.....	.....	.....
Montana .....	7	4,400	.....	.....	.....
Utah .....	3	7,472	.....	.....	.....
Wyoming .....	1	2,008	.....	.....	.....
Total .....	42	25,610	.....	.....	.....
<b>Acquired lands</b>					
Florida .....	1	225	.....	.....	.....
Total .....	1	225	.....	.....	.....
<b>Public domain and acquired lands</b>					
California .....	1	1,608	.....	.....	.....
Florida .....	1	225	.....	.....	.....
Idaho .....	30	10,122	.....	.....	.....
Montana .....	7	4,400	.....	.....	.....
Utah .....	3	7,472	.....	.....	.....
Wyoming .....	1	2,008	.....	.....	.....
Total .....	43	25,835	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Public domain</b>					
California .....	1	2,434	.....	.....	.....
Idaho .....	2	1,195	.....	.....	.....
Total .....	3	3,629	.....	.....	.....

TABLE 47.—*Nonenergy mineral leasing actions, fiscal year 1989—continued*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Prospecting permits</b>					
<b>Public domain</b>					
Idaho .....	1	161	.....	.....	.....
Total .....	1	161	.....	.....	.....
<b>Rights-of-way and temporary use permits</b>					
<b>Public domain</b>					
Idaho .....	5	270	.....	.....	.....
Total .....	5	270	.....	.....	.....
<b>POTASSIUM</b>					
<b>Competitive leases</b>					
<b>Public domain</b>					
New Mexico .....	6	8,680	.....	.....	.....
Utah .....	12	26,340	.....	.....	.....
Total .....	18	35,020	.....	.....	.....
<b>Noncompetitive leases</b>					
<b>Public domain</b>					
New Mexico .....	106	133,540	.....	.....	.....
Total .....	106	133,540	.....	.....	.....
<b>Preference right leases</b>					
<b>Public domain</b>					
California .....	7	9,033	.....	.....	.....
New Mexico .....	6	5,606	.....	.....	.....
Utah .....	52	108,563	.....	.....	.....
Total .....	65	123,202	.....	.....	.....
<b>Acquired lands</b>					
Utah .....	17	43,282	.....	.....	.....
Total .....	17	43,282	.....	.....	.....
<b>Public domain and acquired lands</b>					
California .....	7	9,033	.....	.....	.....
New Mexico .....	6	5,606	.....	.....	.....
Utah .....	69	151,845	.....	.....	.....
Total .....	82	166,484	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Public domain</b>					
Arizona .....	4	4,835	.....	.....	.....
Colorado .....	1	1,667	.....	.....	.....
Total .....	5	6,502	.....	.....	.....
<b>SODIUM</b>					
<b>Competitive leases</b>					
<b>Public domain</b>					
California .....	7	3,886	.....	.....	.....
Wyoming .....	37	47,448	.....	.....	.....
Total .....	44	51,334	.....	.....	.....

TABLE 47.—*Nonenergy mineral leasing actions, fiscal year 1989—continued*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Noncompetitive leases</b>					
<b>Public domain</b>					
California .....	1	40	.....	.....	.....
Total .....	1	40	.....	.....	.....
<b>Preference right leases</b>					
<b>Public domain</b>					
California .....	26	23,112	.....	.....	.....
Colorado .....	6	9,663	.....	.....	.....
Nevada .....	3	6,920	.....	.....	.....
New Mexico .....	4	1,242	.....	.....	.....
Wyoming .....	16	28,335	.....	.....	.....
Total .....	55	69,272	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Public domain</b>					
Colorado .....	3	7,152	.....	.....	.....
Nevada .....	6	11,913	.....	.....	.....
Wyoming .....	2	4,706	.....	.....	.....
Total .....	11	23,771	.....	.....	.....
<b>Rights-of-way and temporary use permits</b>					
<b>Public domain</b>					
California .....	3	120	.....	.....	.....
Total .....	3	120	.....	.....	.....
<b>SULFUR</b>					
<b>Prospecting permits</b>					
<b>Public domain</b>					
New Mexico .....	25	15,930	20	12,762	.....
Total .....	25	15,930	20	12,762	.....
<b>LEAD AND ZINC</b>					
<b>Preference right leases</b>					
<b>Acquired lands</b>					
Missouri .....	37	33,863	.....	.....	.....
Total .....	37	33,863	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Acquired lands</b>					
Missouri .....	2	3,743	.....	.....	.....
Total .....	2	3,743	.....	.....	.....
<b>Prospecting permits</b>					
<b>Acquired lands</b>					
Missouri .....	2	3,668	.....	.....	.....
South Carolina .....	3	20,377	.....	.....	.....
Total .....	5	24,045	.....	.....	.....
<b>ALL OTHER NONENERGY MINERALS<sup>b</sup></b>					
<b>Competitive leases</b>					
<b>Public domain</b>					
California .....	1	80	.....	.....	.....
Total .....	1	80	.....	.....	.....



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TABLE 47.—*Nonenergy mineral leasing actions, fiscal year 1989—continued*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Acquired lands</b>					
Arkansas .....	1	80	.....	.....	.....
Georgia .....	1	146	.....	.....	.....
Idaho .....	2	107	1	67	\$8,002.00
Wyoming .....	2	560	.....	.....	.....
Total .....	6	893	1	67	\$8,002.00
<b>Public domain and acquired lands</b>					
Arkansas .....	1	80	.....	.....	.....
California .....	1	80	.....	.....	.....
Georgia .....	1	146	.....	.....	.....
Idaho .....	2	107	.....	.....	.....
Wyoming .....	2	560	.....	.....	.....
Total .....	7	973	.....	.....	.....
<b>Noncompetitive leases</b>					
<b>Public domain</b>					
Nevada .....	4	1,580	.....	.....	.....
Oklahoma .....	1	160	.....	.....	.....
Total .....	5	1,740	.....	.....	.....
<b>Preference right leases</b>					
<b>Acquired lands</b>					
Alabama .....	1	40	.....	.....	.....
Arkansas .....	9	722	.....	.....	.....
Georgia .....	1	218	.....	.....	.....
Idaho .....	2	321	.....	.....	.....
Illinois .....	4	2,554	.....	.....	.....
Minnesota .....	5	5,524	.....	.....	.....
North Carolina .....	1	158	.....	.....	.....
Virginia .....	1	355	.....	.....	.....
Total .....	24	9,892	.....	.....	.....
<b>Preference right lease applications</b>					
<b>Acquired lands</b>					
Arkansas .....	1	40	.....	.....	.....
Total .....	1	40	.....	.....	.....
<b>Prospecting permits</b>					
<b>Public domain</b>					
California .....	1	33	.....	.....	.....
Minnesota .....	2	410	2	410	.....
Total .....	3	443	2	410	.....
<b>Acquired lands</b>					
Arkansas .....	8	2,955	1	1,080	.....
California .....	4	2,623	.....	.....	.....
Idaho .....	7	4,760	3	975	.....
Illinois .....	2	653	.....	.....	.....
Michigan .....	2	120	.....	.....	.....
Minnesota .....	6	5,238	2	3,342	.....
Mississippi .....	1	596	1	596	.....
North Carolina .....	2	2,391	1	2,088	.....
Oklahoma .....	6	12,233	6	12,233	.....
South Carolina .....	5	4,575	1	489	.....
Tennessee .....	1	504	1	504	.....
Wisconsin .....	9	2,271	2	576	.....
Total .....	53	38,919	18	21,883	.....

TABLE 47.—*Nonenergy mineral leasing actions, fiscal year 1989—concluded*

Geographic State	Total in effect as of September 30, 1989 <sup>a</sup>		Actions during fiscal year		
	Number	Acres	Number	Acres	Accepted bonus bids
<b>Public domain and acquired lands</b>					
Arkansas .....	8	2,955	1	1,080	.....
California .....	5	2,656	.....	.....	.....
Idaho .....	7	4,760	3	975	.....
Illinois .....	2	653	.....	.....	.....
Michigan .....	2	120	.....	.....	.....
Minnesota .....	8	5,648	4	3,752	.....
Mississippi .....	1	596	1	596	.....
North Carolina .....	2	2,391	1	2,088	.....
Oklahoma .....	6	12,233	6	12,233	.....
South Carolina .....	5	4,575	1	489	.....
Tennessee .....	1	504	1	504	.....
Wisconsin .....	9	2,271	2	576	.....
Total .....	56	39,362	20	22,293	.....

<sup>a</sup>Includes leasing actions during the fiscal year as shown in the three right-hand columns of this table.

<sup>b</sup>Includes amethyst, asphalt, barite, bentonite, clay, copper, feldspar, fluorspar, garnet, gold, hardrock, iron ore, limestone, olivine, quartz, quartz crystals, sand gravel, scoria, silica sand, wavellite and other minerals.

Source: Solid Leasable Minerals System (SLMS) data base.

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TABLE 48.—Disposition of mineral materials, fiscal year 1989

Method by Administrative State	Material <sup>b</sup>	Contract sales/use permits this year		Production this year <sup>d</sup>			
		Number	Quantity <sup>c</sup>	Value	Number	Quantity <sup>c</sup>	Value
Arizona	Gemstone .....	3	.....	\$750.00	3	.....	\$750.00
	Sand and gravel .....	3	96	28.80	16	1,587	666.33
	Stone .....	7	19	48.58	3	19	48.33
	State total .....	13	115	827.38	22	1,606	1,464.66
California	Pumice .....	3	550	231.00	3	550	231.00
	Sand and gravel .....	14	1,535	537.22	14	1,534	537.22
	Stone .....	45	849	13,473.90	45	849	13,473.90
	State total .....	62	2,934	14,242.12	62	2,933	14,242.12
Colorado	Stone .....	7	1,561	446.75	70	761	6,481.00
	State total .....	7	1,561	446.75	70	761	6,481.00
	Pumice .....	2	105	31.50	23	952	1,216.68
Idaho	Sand and gravel .....	15	62	25.01	34	5,686	1,417.62
	Soil - other .....	37	27	5.47	26	26	5.47
	Stone .....	6	2,882	25,050.75	25	123	553.85
	State total .....	60	3,076	25,112.73	119	6,787	3,193.62
	Sand and gravel .....	5	162	650.00	5	162	650.00
Montana <sup>d</sup>	Stone .....	6	167	107.82	6	192	116.57
	State total .....	11	329	757.82	11	354	766.57
	Pumice .....	2	23	5.66	2	23	5.66
Nevada	Sand and gravel .....	43	15,427	5,472.00	43	15,391	5,463.25
	Soil - other .....	19	521	246.81	19	521	246.81
	Stone .....	43	12,204	6,104.50	43	12,304	6,154.50
	State total .....	107	28,175	11,828.97	107	28,239	11,870.22
	Calcium .....	79	63,248	69,506.49	77	63,803	70,851.24
New Mexico <sup>e</sup>	Pumice .....	1	50	100.00	8	137	188.50
	Sand and gravel .....	16	2,923	1,894.40	40	9,831	4,751.76
	Soil - other .....	9	906	271.80	9	906	271.80
	Stone .....	169	3,906	6,648.00	171	3,921	6,675.50
	State total .....	274	71,033	78,420.69	305	78,598	82,738.80
	Stone .....	18	40,133	22,864.83	12	33,949	16,491.50
	State total .....	18	40,133	22,864.83	12	33,949	16,491.50
Utah	Calcium .....	1	11,714	20,400.00	1	2,929	5,100.00
	Clay .....	2	127	314.50	2	127	314.50
	Sand and gravel .....	24	301,676	75,478.35	19	221,396	55,415.70
	Soil - other .....	2	220	22.00	2	220	22.00
	Stone .....	30	87	496.00	47	160	1,002.84
	State total .....	59	313,824	96,710.85	71	224,832	61,855.04
Wyoming <sup>g</sup>	Sand and gravel .....	22	25,721	11,314.62	35	12,676	7,577.53
	Stone .....	31	377	3,849.06	36	331	3,789.06
	State total .....	53	26,098	15,163.68	71	13,007	11,366.59
	Total non-exclusive sales .....	664	487,278	266,375.82	850	391,066	210,470.12

TABLE 48.—Disposition of mineral materials, fiscal year 1989—continued

Method by Administrative State	Material <sup>b</sup>	Contract sales/use permits this year			Production this year <sup>d</sup>		
		Number	Quantity <sup>c</sup>	Value	Number	Quantity <sup>c</sup>	Value
Arizona	Sand and gravel	12	103,402	31,595.75	9	31,646	15,913.62
	Stone	4	11,001	6,350.00	13	135,190	45,964.52
	State total	16	114,403	37,945.75	22	166,836	61,878.14
California	Clay	1	37	25.00			
	Sand and gravel	3	118	6,520.00	1	2,335	569.85
	Stone	4	155	6,545.00	3	44	134.20
Colorado	Clay	1	14,644	6,842.15	4	2,379	704.05
	Pumice				2	15,055	7,034.30
	Sand and gravel	5	23,072	8,501.00	13,740	3,060.00	3,060.00
Idaho	Soil - other	1	57	40.00	31,381	11,399.99	11,399.99
	Stone	3	2,905	1,616.00	57	40.00	40.00
	State total	10	40,678	16,999.15	10,119	5,362.40	5,362.40
Montana <sup>d</sup>	Clay	1	97,473	32,529.88	15	70,352	26,896.69
	Pumice	1	6,000	8,400.00	2	136,575	45,579.88
	Sand and gravel	11	14,162	4,040.50			
Nevada	Soil - other	1	550	110.00	10	8,182	2,545.50
	Stone	2	10,014	2,550.00	1	250	50.00
	State total	16	128,199	47,630.38	20	5,000	5.00
New Mexico <sup>e</sup>	Sand and gravel	1	30	10.50	14	145,027	48,180.38
	State total	1	30	10.50	6	11,052	4,456.76
	Clay	1	5,500	550.00	6	11,052	4,456.76
Oregon <sup>f</sup>	Sand and gravel	19	138,642	29,238.34	12	69,327	15,365.34
	Soil - other	9	202,300	61,355.00	8	169,790	39,776.50
	Stone	7	1,104	637.50	7	943	374.50
Utah	State total	36	347,546	91,780.84	27	240,060	55,516.34
	Calcium	44	51,396	53,343.14	67	64,623	60,603.11
	Clay	1	68,702	22,500.00	1	2,000	400.00
Wyoming <sup>g</sup>	Pumice	39	359,030	146,499.66	51	96,765	33,449.22
	Sand and gravel	18	172,082	51,624.60	208	259,171	238,809.57
	Stone	24	36,469	23,627.80	6	79,634	46,390.20
Wyoming <sup>g</sup>	State total	126	687,679	297,595.20	53	10,066	53,585,308.24
	Sand and gravel	9	675	265.60	386	512,259	53,964,960.34
	Stone	16	7,108	1,982.91	7	445	178.10
Wyoming <sup>g</sup>	State total	25	7,783	2,248.51	11	5,732	1,530.80
	Pumice	1	29,736	7,684.02	18	6,177	1,708.90
	Sand and gravel	5	164	722.41			
Wyoming <sup>g</sup>	State total	21	29,900	8,406.43	4	15,825	4,111.35
	Calcium				4	15,825	4,111.35
	Sand and gravel	18	52,385	24,934.37	5	25,258	10,780.95
Wyoming <sup>g</sup>	Soil - other	1	542,000	54,200.00	26	18,015	8,806.46
	State total	1	542,000	54,200.00			

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	6	9,937	6,302.90	6	19,234	10,176.03
	25	604,322	85,437.27	37	62,507	29,763.44
Total exclusive sales	280	1,960,695	594,599.03	533	1,232,474	54,198,176.39
<b>Free-use permits</b>						
Arizona	1	20,000	6,000.00	18	452,434	192,451.54
Sand and gravel				2		
Soil - other				2	207,776	93,499.20
Stone				22	660,210	285,950.74
State total	1	20,000	6,000.00			
California	1	10,000	2,500.00	15	22,827	7,326.84
Sand and gravel				15	22,827	7,326.84
State total	1	10,000	2,500.00			
Colorado	2	2,125	10,800.00	11	147,614	67,557.20
Sand and gravel				6	5,213	2,435.76
Stone				17	152,827	69,992.96
State total	2	2,125	10,800.00			
Idaho	2	415	212.50	7	36,725	51,046.50
Pumice				7	36,725	51,046.50
Sand and gravel	23	624,240	158,130.00	72	263,555	70,783.61
Stone	4	1,665	820.82	9	47,111	9,833.10
State total	29	626,320	159,163.12	88	347,391	131,663.21
Montana <sup>d</sup>	5	31,600	11,660.00	20	9,300	3,155.00
Sand and gravel						
Soil - other						
Stone	1	1,000	1,000.00			
State total	6	32,600	12,660.00	21	9,300	3,155.00
Nevada	1	400	140.00	1	400	140.00
Clay						
Sand and gravel	15	175,000	46,715.00	11	123,078	35,570.60
Soil - other	13	67,285	25,003.25	13	67,285	25,003.25
Stone	6	52,200	25,146.00	6	52,200	25,146.00
State total	35	294,885	97,004.25	31	242,963	85,859.85
New Mexico <sup>e</sup>	26	179,960	217,254.00	4	8,720	10,528.00
Calcium						
Pumice	2	17,214	14,100.00			
Sand and gravel	22	413,012	5,623,832.20	50	648,516	17,581,968.29
Soil - other						
Stone						
State total	51	628,778	5,873,296.60	19	7,500	6,000.00
Oregon <sup>f</sup>	17	201,450	207,612.50	42	46,446	58,054.75
Sand and gravel						
Stone	5	8,794	14,775.07	5	24,927	15,511.00
State total	22	210,244	222,387.57	47	71,373	73,565.75
Utah	25	715,276	197,013.08	6	1,800	542.65
Sand and gravel						
Soil - other	7	58,250	10,537.47			
Stone	4	69,024	15,550.00	1	48	11.90
State total	36	842,550	223,100.55	7	1,848	554.55
Wyoming <sup>g</sup>	21	530,095	247,463.25	42	61,876	27,559.20
Sand and gravel						
Soil - other	2	60,000	13,000.00	2	110	22.00
Stone	1	30	30.00	5	1,799	1,605.00
State total	24	590,125	260,493.25	49	63,785	29,186.20
Total free-use permits	211	3,282,778	6,868,728.70	371	2,304,760	18,293,251.39
Grand Total	1,155	5,730,751	7,729,705.55	1,754	3,928,300	72,701,897.90

**TABLE 48.—Disposition of mineral materials, fiscal year 1989—concluded**

<sup>a</sup>Values include sale agreements and permits previously issued.

<sup>b</sup>Data has been aggregated into eight standard material groups.

<sup>c</sup>The Quantity columns include sales and permit data originally reported in both tons and cubic yards. For this table, all data has been converted automatically to cubic yards.

<sup>d</sup>Includes North and South Dakota.

<sup>e</sup>Includes Oklahoma, Texas, and Kansas.

<sup>f</sup>Includes Washington.

<sup>g</sup>Includes Nebraska.

Note.—Materials were disposed of under the Act of July 31, 1947 (61 Stat. 681; 30 U.S.C. 601), as amended by the Act of July 23, 1955 (69 Stat. 367). Data was generated from the Bureau of Land Management's Mineral Material Disposal data base, using the Case Recordation system.

TABLE 49.—*Mineral patents issued, fiscal year 1989*

Administrative State	Patents issued		Mining claims patented						Millsite				
	Lode		Placer			FS			BLM		FS		
	BLM	FS	BLM	FS	BLM	FS	BLM	FS	Number	Acres	Number	Acres	
Alaska	1				4	80							
California	2	3	6	74				2	60	28	140	4	20
Colorado	2									3	9		
Idaho		3										6	30
Montana <sup>a</sup>	3	2	13	197	5	620							
Nevada	4		6	124	580	11,582				25	123		
New Mexico <sup>b</sup>	1				1	20		6	106				
Oregon		2						3	83				
Utah		1											
Wyoming <sup>c</sup>		8			224	4,248							
Total	21	11	25	395	814	16,550	11	249	56	272	10	50	

<sup>a</sup>Includes North and South Dakota.

<sup>b</sup>Includes Kansas, Oklahoma, and Texas.

<sup>c</sup>Includes Nebraska.

Note.—BLM = Bureau of Land Management; FS = Forest Service. Compare "Patents issued" with the "Mineral" heading in Table 7, Applications, entries, selections, and patents. A mineral patent may include more than one mining claim.

TABLE 50.—*Recordation of mining claims, Public Law 94-579, from October 21, 1976, through fiscal year 1989*

Administrative State	Claims accepted for recording			Claims administratively closed <sup>a</sup>			Claims patented			Unpatented claims of record	
	Total as of beginning fiscal year	Total during fiscal year	Total as of end of fiscal year	Total as of beginning fiscal year	Total during fiscal year	Total as of end of fiscal year	Total as of beginning fiscal year	Total during fiscal year	Total as of end of fiscal year	Total as of beginning fiscal year	Total as of end of fiscal year
Alaska .....	101,894	3,070	104,964	73,125	3,844	76,969	370	4	374	28,399	27,621
Arizona .....	289,081	9,751	298,832	132,549	18,218	150,767	127	.....	127	156,405	147,938
California .....	212,729	16,708	229,437	59,322	8,779	68,101	93	40	133	153,314	161,203
Colorado .....	230,020	5,155	235,175	147,345	1,331	148,676	571	.....	571	82,104	85,928
Idaho .....	133,891	14,187	148,078	55,970	8,517	64,487	108	4	112	77,813	83,479
Montana .....	156,098	13,350	169,448	69,768	6,424	76,192	486	112	598	85,844	92,658
Nevada .....	494,537	55,732	550,269	107,472	41,610	149,082	441	1	442	386,624	400,745
New Mexico .....	147,743	3,941	151,684	106,361	2,838	109,199	448	.....	448	40,934	42,037
Oregon .....	105,724	14,149	119,873	74,761	7,778	82,539	57	3	60	30,906	37,274
Utah .....	305,568	10,458	316,026	186,300	39,267	225,567	23	.....	23	119,245	90,436
Wyoming .....	237,224	1,381	238,605	199,066	7,530	206,596	850	200	1,050	37,308	30,959
Eastern States .....	10,771	20	10,791	1,507	25	1,532	.....	.....	.....	9,264	9,259
Total .....	2,425,280	147,902	2,573,182	1,213,546	146,161	1,359,707	3,574	364	3,938	1,208,160	1,209,537

<sup>a</sup>Claims that were declared void either by abandonment of claim or operation of law after filing and recording, claims for which a relinquishment was filed, and those claims that were rejected because of a deficiency under 43 CFR 3833.1-2 that was not corrected within the time allowed.

Source: Mining Claim Recordation automated system (except Alaska), Bureau of Land Management.



TABLE 51.—Notices and plans of mining operations filed with the Bureau of Land Management, fiscal years 1985 through 1989

Administrative State	Notices reviewed <sup>a</sup>					Plans of Operations reviewed <sup>b</sup>				
	1985	1986	1987	1988	1989	1985	1986	1987	1988	1989
	Alaska .....	227	210	155	147	163	71	23	50	61
Arizona .....	170	233	259	305	210	52	61	48	51	17
California .....	136	163	184	144	153	171	188	193	180	135
Colorado .....	72	64	75	62	65	5	2	3	7	5
Idaho .....	85	196	33	76	79	10	27	8	9	4
Montana .....	84	59	62	82	75	5	5	5	7	9
Nevada .....	584	594	691	793	994	56	79	126	120	195
New Mexico .....	49	66	73	46	47	9	6	8	3	1
Oregon .....	543	206	150	203	220	13	19	1	4	9
Utah .....	110	126	146	129	127	5	10	3	10	5
Wyoming .....	47	49	32	47	48	1	6	11	17	40
Total .....	2,107	1,966	1,860	2,034	2,181	398	426	456	469	503

<sup>a</sup> Notices submitted to the Bureau of Land Management for operations causing a cumulative surface disturbance of 5 acres or less during any calendar year (43 CFR 3809.1-3).

<sup>b</sup> Plans submitted to the Bureau of Land Management for operations in an area under wilderness review (43 CFR 3802.1-1) or in an area in which disturbance will exceed 5 acres during any calendar year (43 CFR 3809.1-3 and 1-4).



## Part III

### BUREAU OF LAND MANAGEMENT ADMINISTRATION

#### Public Land Surveys

At its maximum extent, the original public domain (excluding inland water areas) consisted of approximately 1.8 billion acres, or about 78 percent of the total land area of the continental United States (Table 1). More than 1.1 billion acres of this have been disposed of through homestead grants or sales, railroad grants, and other means (Table 2).

To properly develop and effectively manage these vast areas of public domain, public land surveys have been required. Surveys establish on-the-ground boundaries for public lands in units that can readily be identified and recorded in official field notes and plats. The Bureau maintains all of the federal survey records.

The rectangular system of surveys has now been extended over 1.4 billion acres of the original 1.8 billion-acre area. Of the 359 million acres of land remaining to be surveyed at the close of the fiscal year, approximately 75 percent are in Alaska (Table 52). The remaining unsurveyed land lies exclusively in 11 Western States; the largest unsurveyed area is located in Nevada, where approximately 19 million acres are unsurveyed.

About 29 percent of the area in the public land States, other than Alaska, is owned by the Federal Government. Many of these Government lands were surveyed over a century ago and were marked by wooden stakes or other nonpermanent materials that have since been obliterated by the elements or man-made developments. There is an urgent need for resurveys of over 50 million acres of land in this category in order to redefine the boundaries of lands administered by the Federal Government. During fiscal year 1989, over 824,000 acres were resurveyed (Table 53).

Numerous field investigations not measurable or reportable on a quantity basis were carried out in fiscal year 1989. These investigations are not shown in the tables but could lead to approved surveys later.

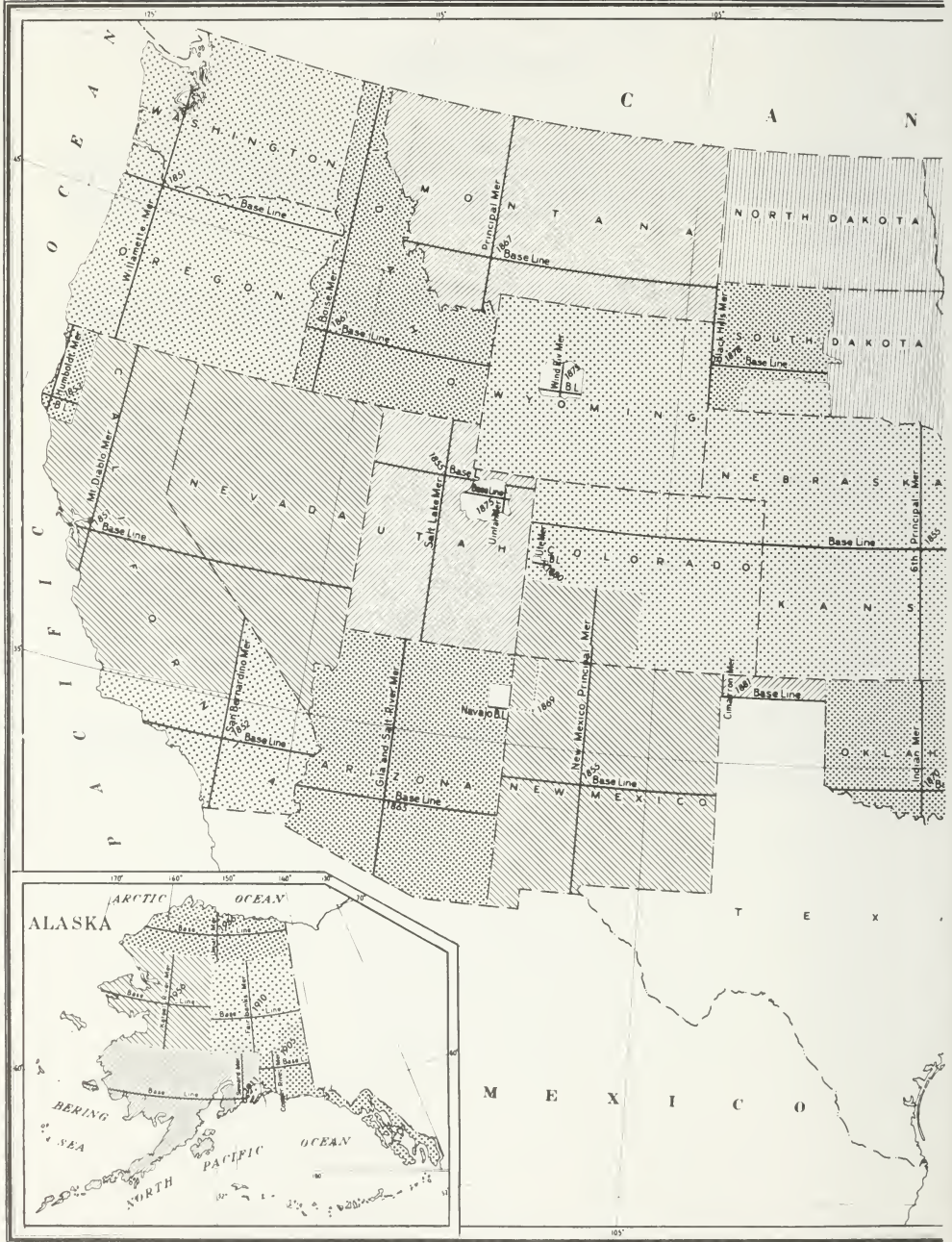




TABLE 52.—*Surveyed and unsurveyed lands in the public land States, fiscal year 1989*

Geographic State	Surveyed	Unsurveyed
	<i>Acres</i>	<i>Acres</i>
Alabama .....	32,544,640	.....
Alaska .....	96,508,909	268,824,211
Arizona .....	61,674,538	11,005,782
Arkansas .....	33,392,000	.....
California .....	91,055,112	9,128,568
Colorado .....	62,741,117	3,687,043
Florida .....	34,649,641	.....
Idaho .....	44,066,794	8,846,486
Illinois .....	35,760,019	.....
Indiana .....	23,160,960	.....
Iowa .....	35,867,520	.....
Kansas .....	52,515,840	.....
Louisiana .....	28,884,130	.....
Michigan .....	36,365,796	.....
Minnesota .....	50,745,288	.....
Mississippi .....	30,309,120	.....
Missouri .....	44,189,441	.....
Montana .....	83,543,396	9,642,524
Nebraska .....	48,974,080	.....
Nevada .....	51,094,024	19,234,936
New Mexico .....	73,570,002	4,070,663
North Dakota .....	44,339,200	.....
Ohio .....	26,251,597	.....
Oklahoma .....	44,151,058	.....
Oregon .....	58,803,676	2,770,084
South Dakota .....	48,611,857	.....
Utah .....	43,975,347	8,566,093
Washington .....	36,416,479	6,247,841
Wisconsin .....	34,860,101	.....
Wyoming .....	55,582,024	6,677,816
Total .....	1,444,603,706	358,702,047

Note.—Acreage data does not include inland water.

BUREAU OF LAND MANAGEMENT ADMINISTRATION  
Public Land Surveys

TABLE 53.—Cadastral survey actions completed, fiscal year 1989

Geographic State	Bureau of Land Management lands				U.S. Forest Service lands			
	Original surveys	Resurveys	Lines surveyed	Monuments set	Original surveys	Resurveys	Lines surveyed	Monuments set
	Acres	Acres	Miles	Number	Acres	Acres	Miles	Number
Alabama	.....	.....	.....	.....	.....	.....	.....	.....
Alaska	2,364,384	.....	4,980	5,193	.....	.....	.....	.....
Arizona	.....	6,944	66	118	.....	3,380	39	100
Arkansas	.....	.....	.....	.....	.....	23,040	160	40
California	.....	28,302	340	255	1,966	42,925	315	191
Colorado	44,132	.....	451	1,288	633	51,358	577	902
Florida	.....	.....	.....	.....	.....	1,920	30	98
Idaho	28	38,087	523	305	.....	4,076	63	90
Illinois	.....	.....	.....	.....	.....	.....	.....	.....
Maine	.....	.....	.....	.....	.....	.....	.....	.....
Michigan	.....	.....	.....	.....	.....	.....	.....	.....
Minnesota	.....	.....	.....	.....	.....	.....	.....	.....
Missouri	.....	.....	.....	.....	.....	.....	.....	71
Montana	.....	14,903	144	468	.....	640	19	142
Nebraska	.....	.....	.....	1	.....	.....	.....	.....
Nevada	.....	121,012	465	781	.....	9,618	39	61
New Mexico	.....	6,214	77	212	.....	921	26	37
North Carolina	.....	.....	.....	.....	.....	.....	.....	.....
North Dakota	.....	.....	.....	.....	.....	.....	.....	157
Oklahoma	.....	3,202	46	50	.....	1,031	13	45
Oregon	.....	69,400	434	350	.....	4,100	26	50
South Dakota	.....	.....	.....	6	.....	.....	.....	39
Utah	5,660	66,840	623	670	.....	.....	.....	65
Washington	.....	8,800	55	70	.....	2,200	14	58
Wisconsin	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	.....	79,980	323	1,963	270	3,240	41	.....
Total	2,370,072	487,732	8,527	11,730	2,869	148,449	1,362	2,146

TABLE 53.—Cadastral survey actions completed, fiscal year 1989—continued

Geographic State	Bureau of Indian Affairs lands				Other lands			
	Original surveys Acres	Resurveys Acres	Lines surveyed Miles	Monuments set Number	Original surveys Acres	Resurveys Acres	Lines surveyed Miles	Monuments set Number
Alabama	.....	.....	.....	.....	.....	.....	.....	.....
Alaska	.....	36	3	.....	.....	.....	.....	.....
Arizona	.....	.....	.....	.....	.....	.....	.....	.....
Arkansas	.....	.....	.....	.....	.....	.....	.....	.....
California	7	439	7	150	.....	.....	.....	.....
Colorado	.....	22,660	509	240	.....	.....	.....	.....
Florida	.....	.....	.....	25	.....	.....	.....	.....
Idaho	.....	9,557	104	135	.....	.....	.....	.....
Illinois	.....	.....	.....	.....	.....	.....	.....	.....
Maine	.....	49,775	157	.....	.....	.....	.....	.....
Michigan	.....	30,080	122	.....	.....	.....	.....	.....
Minnesota	.....	.....	.....	147	.....	.....	.....	.....
Missouri	.....	.....	.....	57	.....	.....	.....	.....
Montana	.....	2,560	25	124	.....	.....	.....	.....
Nebraska	.....	680	11	26	.....	.....	.....	.....
Nevada	.....	37,359	211	126	.....	.....	.....	.....
New Mexico	.....	7,721	43	80	.....	.....	.....	.....
North Carolina	.....	907	4	.....	.....	.....	.....	.....
North Dakota	.....	.....	.....	13	.....	.....	.....	.....
Oklahoma	.....	.....	.....	.....	.....	.....	.....	.....
Oregon	.....	1,900	12	23	.....	.....	.....	.....
South Dakota	.....	.....	.....	46	.....	.....	.....	.....
Utah	.....	.....	.....	101	.....	.....	.....	.....
Washington	.....	6,700	42	119	.....	.....	.....	.....
Wisconsin	.....	527	.....	28	.....	.....	.....	.....
Wyoming	.....	.....	.....	.....	.....	.....	.....	.....
Total	7	170,901	1,250	1,440	3,364	16,922	201	474



BUREAU OF LAND MANAGEMENT ADMINISTRATION  
Public Land Surveys

TABLE 53.—Cadastral survey actions completed, fiscal year 1989—concluded

Geographic State	Grand Totals				Plats accepted				Mineral surveys			
	Original surveys	Resurveys	Lines surveyed	Monuments set	Field surveys	Supple- mental plats	Protraction diagrams approved	Number of surveys <sup>1</sup>	Lode claims	Placer claims	Millsite claims	
	Acres	Acres	Miles	Number	Number	Number	Number					
Alabama	.....	36	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alaska	.....	16	4,980	5,193	1	.....	.....	.....	.....	.....	.....	.....
Arizona	.....	10,644	228	107	618	35	.....	.....	.....	.....	.....	.....
Arkansas	.....	23,040	162	40	2	7	.....	.....	.....	.....	.....	.....
California	.....	74,884	715	610	2	.....	.....	.....	.....	.....	.....	.....
Colorado	.....	118,150	1,554	2,604	74	15	.....	.....	.....	.....	.....	.....
Florida	.....	1,920	30	123	63	6	.....	.....	.....	.....	.....	.....
Idaho	.....	51,720	690	530	1	2	.....	.....	.....	.....	.....	.....
Illinois	.....	125	3	.....	38	.....	.....	.....	.....	.....	.....	.....
Maine	.....	49,775	157	.....	5	.....	.....	.....	.....	.....	.....	.....
Michigan	.....	30,080	122	.....	5	.....	.....	.....	.....	.....	.....	.....
Minnesota	.....	11,520	56	.....	3	.....	.....	.....	.....	.....	.....	.....
Missouri	.....	.....	.....	128	.....	.....	.....	.....	.....	.....	.....	.....
Montana	.....	18,103	188	740	18	5	.....	.....	.....	.....	.....	.....
Nebraska	.....	680	11	27	.....	.....	.....	.....	.....	.....	.....	.....
Nevada	.....	169,728	780	1,039	47	8	.....	.....	.....	.....	.....	.....
New Mexico	.....	14,856	146	329	15	3	.....	.....	.....	.....	.....	.....
North Carolina	.....	907	4	.....	4	.....	.....	.....	.....	.....	.....	.....
North Dakota	.....	.....	.....	315	.....	.....	.....	.....	.....	.....	.....	.....
Oklahoma	.....	4,233	59	95	10	1	.....	.....	.....	.....	.....	.....
Oregon	.....	75,400	472	423	47	1	.....	.....	.....	.....	.....	.....
South Dakota	.....	.....	.....	91	.....	.....	.....	.....	.....	.....	.....	.....
Utah	.....	66,840	623	836	13	6	.....	.....	.....	.....	.....	.....
Washington	.....	17,700	111	247	11	4	.....	.....	.....	.....	.....	.....
Wisconsin	.....	527	.....	28	.....	.....	.....	.....	.....	.....	.....	.....
Wyoming	.....	83,120	367	2,017	18	1	.....	.....	.....	.....	.....	.....
Total	2,376,312	824,004	11,340	15,790	1,006	96	7	32	201	87	24	

<sup>a</sup>National Park Service lands: 320 acres of resurveys, 2 miles of lines surveyed, and 10 monuments set.

<sup>b</sup>Corps of Engineers lands.

<sup>c</sup>National Park Service lands: 3,218 acres of resurveys, and 30 miles of lines surveyed; General Services Administration lands: 6 monuments set; U.S. Postal Service lands: 4 miles of lines surveyed, and 8 monuments set; and U.S. Department of the Navy lands: 19 miles of lines surveyed.

<sup>d</sup>Bureau of Reclamation lands: 170 monuments set; National Park Service lands: 17 miles of lines surveyed, and 4 monuments set.

<sup>e</sup>Joint effort between the Bureau of Indian Affairs and the National Park Service.

<sup>f</sup>National Park Service lands: 3,360 acres of surveys, 1,724 acres of resurveys, 36 miles of lines surveyed; U.S. Department of the Air Force lands: 15 acres of resurveys, 29 miles of lines surveyed, and 71 monuments set.

<sup>g</sup>Bureau of Reclamation lands.

<sup>h</sup>National Park Service lands: 21 monuments set; Bureau of Reclamation lands: 3 miles of lines surveyed, and 33 monuments set.

<sup>i</sup>A survey can include numerous claims.

Note.—Totals do not reflect special surveys done in the states of Wisconsin, 7 acres of special surveys; and Wyoming, 30 acres of special surveys.

## BUREAU OF LAND MANAGEMENT ADMINISTRATION

### Fire Protection

As a part of protecting the resources on public lands, the Bureau of Land Management, along with other Federal, State, and private agencies, provides fire protection. During fiscal year 1989, a total of 230,529 acres of Bureau-administered lands burned. About 42 percent of this total involved forest areas, with approximately 19,000 acres being classified as commercial forest land (Table 54). Damage to timber, watershed values, recreation areas and facilities, range and wildlife forage, and improvements amounted to \$4.4 million for Bureau of Land Management lands. Lightning caused 59 percent of the fires.

In fiscal year 1989, the Bureau completed 58 emergency fire rehabilitation projects at a cost of \$2.1 million (Table 55). The Bureau also carried out 859 prescribed fire projects on 78,176 acres to benefit forestry, range, wildlife, hazard reduction, watershed, and other programs (Table 56).

BUREAU OF LAND MANAGEMENT ADMINISTRATION  
Fire Protection

TABLE 54.—Fires on, or threatening, lands administered by the Bureau of Land Management, fiscal year 1989

Protection type by State	Fires suppressed		Causes		Area burned								Net resource value change <sup>a</sup> (in thousands in dollars)				
	BLM	Non-BLM	Lightning	Other	Forest				Nonforest					Total area			
					Commercial		Noncommercial		BLM		Non-BLM			BLM	Non-BLM	Acres	Acres
					BLM	Non-BLM	BLM	Non-BLM	Acres	Acres	Acres	Acres					
<b>Force account protection</b>	<b>Number</b>	<b>Number</b>	<b>Number</b>	<b>Number</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>		
Alaska .....	25	.....	20	5	.....	32,640	128	32,640	128	8	230	32,648	358	.....	.....		
Arizona .....	89	5	38	56	.....	261	25	261	25	10,417	10,911	10,678	10,936	.....	\$2		
California .....	146	29	43	132	.....	217	301	301	301	1,431	373	1,648	674	.....	-74		
Colorado .....	310	11	277	44	2,643	331	6,256	437	8,899	768	2,920	2,160	11,819	2,928	.....	-203	
Idaho .....	195	65	148	112	.....	1,075	541	1,080	541	43,056	27,711	44,136	28,252	.....	-1,690		
Montana <sup>b</sup> .....	29	10	32	7	.....	186	26	197	35	234	463	431	498	.....	-8		
Nevada .....	317	39	206	150	7,677	220	64	3	7,741	223	22,982	5,696	30,723	5,919	.....	76	
New Mexico .....	101	15	79	37	106	1,394	157	500	263	1,894	35,320	21,290	35,583	23,184	.....	-89	
Oregon <sup>c</sup> .....	119	41	116	44	1,943	18,716	869	124	2,812	18,840	4,299	5,944	7,111	24,784	.....	-562	
Utah .....	231	11	182	60	726	200	22,616	2,482	23,342	2,682	5,292	475	28,634	3,157	.....	-169	
Wyoming .....	73	.....	48	25	13	131	165	413	178	544	1,268	413	1,446	957	.....	-43	
<b>Total force account protection</b>	<b>1,635</b>	<b>226</b>	<b>1,189</b>	<b>672</b>	<b>13,124</b>	<b>21,001</b>	<b>64,506</b>	<b>4,980</b>	<b>77,630</b>	<b>25,981</b>	<b>127,227</b>	<b>75,666</b>	<b>204,857</b>	<b>101,647</b>	.....	<b>-2,760</b>	

TABLE 54.—Fires on, or threatening, lands administered by the Bureau of Land Management, fiscal year 1989—concluded

Protection type by State	Fires suppressed		Causes		Area burned								Net resource value change <sup>a</sup> (in thousands in dollars)			
	BLM	Non-BLM	Lightning	Other	Forest				Total		Nonforest			Total area		
					Commercial		Noncommercial		BLM	Non-BLM	BLM	Non-BLM		BLM	Non-BLM	
					BLM	Non-BLM	BLM	Non-BLM								Acres
<b>Contract protection</b>	<b>Number</b>	<b>Number</b>	<b>Number</b>	<b>Number</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	<b>Acres</b>	
Alaska . . . . .	6	72	13	65	3,163	4	5,882	9,045	102	465	6,023	9,510	9,510	9,510	.....	
Arizona . . . . .	23	12	7	28	.....	1	19	1	431	4,017	432	4,036	4,036	4,036	-3	
California . . . . .	63	23	8	78	.....	186	.....	188	7,248	34,274	7,436	34,285	34,285	34,285	-495	
Colorado . . . . .	7	5	4	8	.....	4	1	5	42	.....	43	5	5	5	-1	
Idaho . . . . .	13	38	27	24	.....	5	1	195	1,883	4,088	2,078	5,189	5,189	5,189	-248	
Montana <sup>b</sup> . . . . .	21	49	64	6	.....	13	4,190	18	3,360	887	3,398	5,090	5,090	5,090	-5	
Nevada . . . . .	3	41	23	21	.....	22	291	313	12	2,016	12	2,329	2,329	2,329	-1	
New Mexico . . . . .	27	39	35	31	.....	13	609	70	622	4,767	4,837	12,628	12,628	12,628	-1	
Oregon <sup>c</sup> . . . . .	107	4	53	58	.....	519	2	160	521	928	252	4,899	5,827	5,827	-906	
Utah . . . . .	30	40	48	22	.....	120	7	31	7	151	633	2,966	640	3,117	.....	
Wyoming . . . . .	3	2	2	3	.....	.....	31	.....	.....	.....	.....	.....	.....	.....	.....	
<b>Total</b>																
contract protection	303	325	284	344	6,443	479	12,314	6,922	16,429	18,750	65,620	25,672	82,049	82,049	-1,660	
<b>Grand Total . . . . .</b>	<b>1,938</b>	<b>551</b>	<b>1,473</b>	<b>1,016</b>	<b>19,567</b>	<b>64,985</b>	<b>17,294</b>	<b>84,552</b>	<b>42,410</b>	<b>145,977</b>	<b>141,286</b>	<b>230,529</b>	<b>183,696</b>	<b>183,696</b>	<b>-4,420</b>	

<sup>a</sup>BLM lands only; includes damage to timber, watershed values, recreation areas and facilities, range and wildlife forage, and improvements. A positive value indicates a cost benefit.

<sup>b</sup>Includes South Dakota.

<sup>c</sup>Includes Washington.

Note.—Non-BLM includes other Federal lands and State, privately owned, and other non-Federal lands.

TABLE 55.—*Emergency fire rehabilitation projects, fiscal year 1989*

Administrative State	Number	Funding
Arizona .....	1	\$8,500
California .....	4	84,209
Colorado .....	3	123,520
Idaho .....	29	953,654
Montana .....	2	70,767
Oregon .....	7	569,400
Utah .....	12	361,424
Total .....	58	2,171,474

TABLE 56.—Prescribed fire projects, fiscal year 1989

Administrative State	Number of Projects	Acreage by program								Total
		Forestry	Range	Wildlife	Hazard Reduction	Watershed	Other			
Arizona	2	.....	.....	255	.....	255	.....	.....	510	
California	a20	73	1,535	2,955	.....	900	.....	.....	9,233	
Colorado	37	130	3,405	3,420	3,770	.....	.....	500	7,455	
Idaho	b23	.....	5,747	8,230	.....	.....	.....	270	14,247	
Montana	24	694	205	204	.....	.....	.....	.....	1,103	
Nevada	1	.....	961	.....	.....	.....	.....	.....	961	
New Mexico	7	.....	1,230	904	.....	.....	.....	7,680	9,814	
Oregon	706	16,795	2,446	.....	2,834	203	.....	.....	22,278	
Utah	17	.....	3,050	1,585	.....	75	.....	500	5,210	
Wyoming	22	205	6,275	885	.....	.....	.....	.....	7,365	
Total	859	17,897	24,854	18,438	6,604	1,433	.....	8,950	78,176	

<sup>a</sup>Includes 4 projects conducted by other agencies on BLM lands (300 acres for wildlife, 60 acres for range, 280 acres for hazard reduction, and 65 acres for forestry).

<sup>b</sup>Includes 11 projects conducted by the State of Idaho or U.S. Forest Service (USFS) on BLM lands (67 acres for wildlife, and 270 acres for other programs).

## BUREAU OF LAND MANAGEMENT ADMINISTRATION

### Unauthorized Use

The Bureau of Land Management attempts to prevent or stop the unauthorized use of lands under its jurisdiction. The Bureau's policy is to take prompt and efficient action to discover and report unauthorized use, to investigate suspected incidents aggressively, and to recover full compensation.

During the 1989 fiscal year, unauthorized use collections totaled \$813,563.66 (Table 57). Of this amount, 14 percent resulted from fire, 39 percent from mineral trespass, and 16 percent from timber trespass.

TABLE 57—Unauthorized use collections, fiscal year 1989

Geographic State	Type of unauthorized use											
	Agriculture		Fire		Grazing		Vegetal Material <sup>a</sup>		Mineral		Occupancy	
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount
Alaska .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Arizona .....	7	\$695.00	.....	\$16,497.01	10	\$16,497.01	.....	.....	.....	.....	106	\$1,250.00
California .....	1	120.00	1	3,535.04	18	3,535.04	4	\$689.49	18	\$158,805.94	20	25,848.00
Colorado .....	.....	.....	.....	6,382.74	18	6,382.74	.....	.....	4	15,492.06	4	1,591.00
Idaho .....	86	52,712.15	11	\$30,812.27	40	8,135.37	.....	.....	3	989.00	1	2,023.97
Montana .....	10	2,891.56	.....	1,280.52	9	1,280.52	.....	.....	1	1,715.50	7	.....
Nevada .....	.....	.....	1	46,079.84	45	15,168.06	.....	.....	.....	.....	.....	.....
New Mexico .....	.....	.....	.....	10,409.97	28	10,409.97	1	.....	.....	13,914.34	.....	1,892.67
Oregon:	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Eastern <sup>b</sup> and	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Washington .....	20	20,376.00	3	38,571.88	18	23,631.21	.....	.....	.....	.....	c5	3,100.00
Western <sup>d</sup> .....	.....	.....	.....	1,702.34	3	1,702.34	1	10.00	1	50.00	1	154.00
Utah .....	34	2,085.00	1	1,122.73	114	13,726.59	2	500.00	37	50,648.42	6	100.00
Wyoming .....	8	232.17	.....	1,678.57	4	1,678.57	3	.....	5	73,952.60	2	193.73
Total .....	166	79,111.88	17	116,766.72	307	102,147.42	11	1,199.49	80	315,567.86	156	36,153.37



TABLE 57—Unauthorized use collections, fiscal year 1989—concluded

Geographic State	Type of unauthorized use												
	Rights-of-Way		Timber		Unlawful enclosure		Water		Other		Total		
	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	
Alaska	3	.....	1	\$1,160.00	.....	.....	.....	.....	.....	.....	110	\$2,410.00	
Arizona	4	\$181.01	.....	.....	.....	.....	.....	.....	.....	.....	44	17,373.02	
California	12	2,520.00	4	38,443.85	.....	.....	11	\$7,249.80	.....	.....	73	237,392.12	
Colorado	4	1,177.00	2	559.77	.....	.....	.....	.....	.....	.....	29	25,202.57	
Idaho	27	1,979.53	.....	.....	.....	.....	.....	.....	.....	.....	174	96,652.29	
Montana	.....	.....	3	6,199.22	.....	.....	1	400.00	.....	.....	24	12,486.80	
Nevada	7	4,124.52	3	601.00	.....	.....	25	415.00	.....	.....	81	66,388.42	
New Mexico	11	5,703.27	.....	.....	.....	.....	2	.....	.....	.....	54	31,920.25	
Oregon:													
Eastern <sup>b</sup> and													
Washington	4	1,217.00	2	145.00	.....	.....	.....	.....	.....	.....	52	87,041.09	
Western <sup>c</sup>	3	497.59	60	85,718.44	.....	.....	.....	.....	.....	.....	69	88,132.37	
Utah	34	3,395.00	1	\$50.00	.....	.....	11	812.00	.....	.....	240	72,439.74	
Wyoming	5	67.92	.....	.....	.....	.....	.....	.....	.....	.....	27	76,124.99	
Total	114	20,862.84	75	132,827.28	1	50.00	.....	.....	.....	50	8,876.80	977	813,563.66

<sup>a</sup>Excluding timber and nontimber forest products.

<sup>b</sup>Eastern Oregon comprises public lands that include, and extend eastward from, Range 9 East, Willamette Meridian.

<sup>c</sup>Land from one trespass was sold to occupants. Fee collected represents 20 percent of the down payment.

<sup>d</sup>Western Oregon comprises the reverted Oregon and California (O&C) lands, the reconveyed Coos Bay Wagon road lands, and other public lands that include, and extend westward from, Range 8 East, Willamette Meridian.

Note—Dollar amounts may include revenues collected this fiscal year for trespasses that occurred in prior years. Figures may include, but are not limited to, unauthorized development and unauthorized use.

## BUREAU OF LAND MANAGEMENT ADMINISTRATION

### Finance

During fiscal year 1989, the Bureau of Land Management obligated \$ 754,872,873 appropriated by Congress or transferred to it from other agencies (Table 58).

Gross receipts from the sale and management of public lands and resources during the same period totaled \$312,794,780. The Bureau received \$15,198,708 from the sale of land and materials; \$253,281,601 from the sale of timber; \$2,559,860 from fees and commissions; \$18,071,483 from grazing leases, licenses, and permits; \$4,226,126 from right-of-way leases; and \$13,898,759 in nonoperating revenue (Tables 59 and 60).

Receipts for fiscal year 1989 were allocated as follows: \$116,961,342 to 22 States, of which \$109,911,092 went to 18 Western Oregon O&C counties; \$24,365,762 to the reclamation fund; \$171,459,354 to other funds; and \$8,412 to Indian trust funds (Tables 63 and 64). Payments of \$103,854,065 in lieu of taxes were made to 49 States, three territories (includes the unincorporated territories of Guam and the Virgin Islands, and the Commonwealth of Puerto Rico), and the District of Columbia (Table 66).

TABLE 58.—*Obligations of appropriations received, fiscal year 1989*

Appropriation title	Amount obligated
<b>Appropriations made to the Bureau of Land Management</b>	
Management of lands and resources .....	\$562,138,024
Range improvements .....	9,192,560
Construction and access .....	3,296,937
Oregon and California grant lands .....	62,711,527
Payments in lieu of taxes .....	104,151,988
Land acquisition .....	11,223,596
Total of BLM appropriations obligated .....	752,714,632
<b>Appropriations transferred from other bureaus and agencies to the Bureau of Land Management</b>	
Control of forest pests .....	2,158,241
Total of transferred appropriations obligated .....	2,158,241
Grand Total of Obligations .....	754,872,873

TABLE 59.—Receipts from the disposition of public lands and resources: May 20, 1785, through fiscal year 1989

Fiscal year <sup>a</sup>	Source							Total
	Sales of public land and materials	Sales of timber	Fees and commissions	Mineral leases <sup>b</sup>	Outer Continental Shelf leases	Miscellaneous <sup>c</sup>		
May 20, 1785 - June 30, 1880							\$208,059,657	\$208,059,657
1881-1890	76,923,581		\$13,471,437			8,873,661	8,873,661	99,268,679
1891-1900	21,312,029		9,152,920			3,027,577	3,027,577	33,492,526
1901-1910	64,777,706		16,074,789			13,242,241	13,242,241	94,094,736
1911-1920	27,940,144	\$767,589	14,734,586			23,580,948	23,580,948	67,023,267
1921-1930	6,734,345	7,537,400	7,173,853	\$76,371,588		6,636,922	6,636,922	104,454,108
1931-1940	1,334,320	4,289,226	1,944,753	44,602,550		5,813,130	5,813,130	57,983,979
1941-1950	2,197,428	20,711,054	1,228,873	146,207,799		25,548,418	25,548,418	199,893,572
1951-1960	23,462,798	208,631,073	9,075,890	615,668,922	\$434,731,179	107,926,288	107,926,288	1,399,496,150
1961-1970	28,799,311	478,508,666	36,265,491	1,093,760,046	2,917,726,546	214,394,232	214,394,232	4,769,454,292
1971-1980	56,763,803	1,557,613,025	199,418,739	3,086,894,984	30,444,943,752	509,994,006	509,994,006	35,855,628,309
1981	4,828,873	215,744,185	43,830,722	738,800,247	10,137,982,282	138,238,727	138,238,727	11,279,425,036
1982	3,598,726	87,400,600	4,427,619	1,169,251,513	6,249,619,997	365,581,873	365,581,873	7,879,880,328
1983	11,528,300	106,850,049	2,342,319	886,161,360	NA	181,283,421	181,283,421	1,188,165,449
1984	13,528,678	153,159,328	2,437,897	1,825,533	NA	44,033,338	44,033,338	214,984,774
1985	12,398,143	137,555,621	2,049,287	1,637,369	NA	73,530,139	73,530,139	227,170,559
1986	13,943,268	162,180,962	1,542,095	1,169,419	NA	65,272,399	65,272,399	244,108,143
1987	8,288,142	152,696,148	1,675,817	1,199,185	NA	55,707,584	55,707,584	219,566,876
1988	7,347,508	240,923,262	2,620,654	398,882	NA	45,754,878	45,754,878	297,045,164
1989	15,198,708	253,281,601	2,559,860	2,969,209	NA	38,785,402	38,785,402	312,794,780
Total	400,905,811	3,791,849,789	372,027,601	7,866,918,586	50,185,003,756	2,135,284,841	2,135,284,841	64,751,990,384

<sup>a</sup>As of June 30 through 1976; thereafter, as of September 30.

<sup>b</sup>Act of February 25, 1920 (41 Stat. 437; 20 U.S.C. 181 seq.). Collection and distribution responsibilities for receipts under this act were transferred to the Minerals Management Service as of October 1, 1983. As of fiscal year 1984, includes only oil and gas pipeline right-of-way rentals.

<sup>c</sup>Before 1880, includes all receipts from sale or lease of public lands and resources. After 1880, includes sales of Indian lands, revenues from grazing, rental of land, mineral leasing under special laws, and revenues from other miscellaneous sources.

NA.—Not available. Offshore region transferred from Bureau of Land Management to Minerals Management Service jurisdiction effective May 10, 1982.

Note.—Includes the collections of the Bureau of Land Management and its two predecessor organizations, the General Land Office (1785-1946) and the Grazing Service (1934-1946). For annual data for 1881-1946, see GLO *Statistical Appendix* for 1946. For annual data for 1947-1961, see BLM *Statistical Appendix* for 1961. For annual data for 1962-1970, see *Public Land Statistics* for 1970.

BUREAU OF LAND MANAGEMENT ADMINISTRATION  
Finance

TABLE 60.—Statement of receipts by source, fiscal year 1989

Geographic State	Mineral leases and permits	Sales of timber	Sales of land and materials	Grazing leases, licenses, and permits				All other receipts				Total
				Sec. 3	Sec. 15	Other <sup>a</sup>	Fees and commissions	Rights-of-way	Rent of land	Other sources		
Alaska	\$1,192,663	983	\$86,992	.....	.....	.....	\$17,158	\$76,078	\$56,059	\$42,911	\$1,700,435	
Arizona	19,234	13,105	219,268	\$679,846	.....	.....	6,562	299,747	7,661	349,590	1,595,013	
California	29,796	1,419,246	2,157,839	156,776	260,234	.....	65,700	2,108,375	88,662	498,675	6,785,303	
Colorado	25,534	143,896	155,823	827,846	101,876	.....	259,708	360,714	54,698	224,819	2,154,914	
Dist. of Columbia	.....	.....	.....	.....	.....	.....	.....	.....	.....	36	36	
Florida	.....	.....	1,143	.....	.....	.....	.....	410	.....	.....	1,553	
Idaho	80	310,249	134,266	1,708,683	60,679	.....	39,434	175,808	61,008	177,744	2,667,951	
Illinois	.....	.....	.....	.....	.....	.....	.....	395	.....	.....	395	
Kansas	.....	.....	.....	.....	201	.....	.....	.....	.....	.....	201	
Louisiana	.....	.....	5,260	.....	.....	.....	.....	.....	.....	.....	5,280	
Michigan	.....	.....	.....	.....	.....	.....	.....	105	.....	.....	105	
Minnesota	.....	.....	4,080	.....	.....	.....	.....	.....	.....	.....	4,180	
Missouri	.....	.....	2,119	.....	.....	.....	.....	.....	.....	100	2,119	
Montana	961,072	418,406	24,528	1,147,529	269,562	841,681	97,028	19,486	26,477	48,709	3,854,478	
Nebraska	.....	.....	6,513	.....	1,471	.....	.....	232	.....	.....	8,216	
Nevada	1,151	113,160	10,786,970	2,973,443	65,747	.....	127,786	517,103	25,736	109,868	14,720,964	
New Mexico	538,125	34,014	607,196	2,357,002	386,680	46,790	254,284	143,801	367	101,616	4,469,875	
North Dakota	615	.....	2,900	.....	16,504	47	25,660	150	55	55	45,986	
Oklahoma	13,484	.....	1,111	.....	246	.....	15,125	.....	.....	116	30,082	
Oregon	2,503	.....	114,754	.....	91,142	.....	35,271	32,063	58,800	156,418	252,504,058	
South Dakota	3,166	1,873	6,411	1,514,772	140,077	.....	4,970	1,032	32	445	158,006	
Texas	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3,050	
Utah	19,412	63,319	388,970	1,577,585	.....	.....	263,566	295,939	3,520	282,162	2,894,473	
Virginia	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13	
Washington	.....	82,931	125,111	.....	43,646	.....	171,327	15,652	5,926	62,376	343,021	
Wisconsin	.....	.....	657	.....	.....	.....	.....	.....	.....	.....	659	
Wyoming	162,374	182,084	366,797	1,776,865	796,962	.....	1,165,852	179,016	19,162	125,216	4,774,328	
Total operating revenue	2,969,209	253,281,601	15,198,708	14,720,347	2,462,618	888,518	2,559,860	4,226,126	408,163	2,180,871	298,896,021	
(Percent)	(1.0)	(84.8)	(5.1)	(4.9)	(0.8)	(0.3)	(0.9)	(1.4)	(0.1)	(0.7)	(100.0)	
Nonoperating revenue <sup>c</sup>	13,898,759	.....	.....	.....	.....	.....	.....	.....	.....	.....	13,898,759	
Grand Total	16,867,968	253,281,601	15,198,708	14,720,347	2,462,618	888,518	2,559,860	4,226,126	408,163	2,180,871	312,794,780	

<sup>a</sup>“Land Utilization Project” or LU, lands purchased by the Federal Government under Title III of the Bankhead-Jones Farm Tenant Act and subsequently transferred to the Department of the Interior.

<sup>b</sup>Includes all O&C and Coos Bay Wagon Road land receipts (grazing, timber, mineral, etc.), which total \$234,985,122.

<sup>c</sup>Incidental receipts from fines, taxes, etc., that are unrelated to routine public land administration.

**TABLE 61.—Receipts from oil and gas right-of-way rentals and mineral leases, licenses, and permits on public domain lands, fiscal year 1989**

Geographic State	Oil and gas receipts	All other receipts	Total
Alaska .....	\$1,192,563	.....	\$1,192,563
Arizona .....	2,054	\$17,180	19,234
California .....	6,258	23,338	29,596
Colorado .....	8,820	18,845	27,665
Idaho .....	.....	<sup>a</sup> -2,131	-2,131
Montana .....	952,993	857,389	1,810,382
Nevada .....	.....	1,151	1,151
New Mexico .....	9,415	575,500	584,915
North Dakota .....	131	531	662
Oklahoma .....	.....	25	25
Oregon .....	.....	2,503	2,503
South Dakota .....	3,013	114	3,127
Utah .....	.....	19,412	19,412
Wyoming .....	37,518	127,256	164,774
Total .....	2,212,765	1,641,113	3,853,878

<sup>a</sup>Prior year adjustment.

**TABLE 62.—Receipts from simultaneous oil and gas filing fees on acquired lands, fiscal year 1989**

Geographic State	Receipts
Alaska .....	\$100
California .....	200
Idaho .....	80
Montana .....	96
Virginia .....	<sup>a</sup> -150
Wyoming .....	<sup>a</sup> -2,250
Total .....	-1,924

<sup>a</sup>Refunds

**TABLE 63.—Allocation of receipts to States and local governments by program, fiscal year 1989**

Geographic State	Sales of public lands and materials	Mineral leases and permits	Taylor Grazing Act		Other	Total
			Section 3 permits	Section 15 leases		
Alaska .....	\$3,519	<sup>a</sup> \$596,281	.....	.....	.....	\$599,800
Arizona .....	9,295	9,617	\$84,981	\$113,796	.....	217,689
California .....	143,084	14,798	19,597	130,117	.....	307,596
Colorado .....	11,989	12,768	103,481	50,938	.....	179,176
Florida .....	46	.....	.....	.....	.....	46
Idaho .....	17,781	.....	213,586	30,340	.....	261,707
Kansas .....	.....	.....	.....	100	.....	100
Louisiana .....	211	.....	.....	.....	.....	211
Minnesota .....	164	.....	.....	.....	.....	164
Missouri .....	85	.....	.....	.....	.....	85
Montana .....	19,333	242,305	143,441	134,781	<sup>b</sup> \$210,422	750,282
Nebraska .....	261	.....	.....	735	.....	996
Nevada .....	<sup>c</sup> 628,296	576	371,680	32,873	.....	1,033,425
New Mexico .....	25,640	267,038	294,625	193,340	<sup>b</sup> 11,698	792,341
North Dakota .....	116	307	.....	8,252	.....	8,675
Oklahoma .....	45	5,060	.....	123	.....	5,228
Oregon .....	625,119	1,251	189,347	45,571	<sup>d</sup> 110,891,232	111,752,520
South Dakota .....	332	830	.....	70,039	.....	71,201
Utah .....	18,092	9,706	197,198	.....	.....	224,996
Washington .....	8,322	.....	.....	21,823	.....	30,145
Wisconsin .....	27	.....	.....	.....	.....	27
Wyoming .....	21,956	82,387	222,108	398,481	.....	724,932
<b>Total .....</b>	<b>1,533,713</b>	<b>1,242,924</b>	<b>1,840,044</b>	<b>1,231,309</b>	<b>111,113,352</b>	<b>116,961,342</b>

<sup>a</sup>Includes National Petroleum Reserve lands.

<sup>b</sup>Executive Order 10787, November 6, 1958, from grazing.

<sup>c</sup>Includes Santini-Burton Act of December 23, 1980.

<sup>d</sup>Includes \$109,911,092 from O&C lands and \$980,140 from Coos Bay Wagon Road lands.

Note.—Allocations to States by the Bureau of Land Management are based on total revenues collected and deposited into receipt programs as of the close of each fiscal year (September 30). The allocation amounts shown above will appear as payments to States in future time periods.

**TABLE 64.—Allocation of receipts by source and fund, fiscal year 1989**

Source of receipts	Indian trust funds	Reclamation fund	States and counties <sup>a</sup>	Other funds	Total
Mineral leases and permits .....	\$8,412	\$320,509	\$1,242,924	\$1,397,364	\$2,969,209
Sales of public land .....	.....	10,140,587	801,853	4,256,268	<sup>b</sup> 15,198,708
Sales of public timber and Materials .....	.....	13,904,576	731,860	3,660,043	18,296,479
Fees and Commissions .....	.....	.....	.....	2,559,860	2,559,860
O & C lands .....	.....	.....	109,911,092	109,911,092	219,822,184
Coos Bay Wagon Road lands .....	.....	.....	980,140	14,182,798	15,162,938
Grazing leases .....	.....	.....	1,231,309	1,231,309	2,462,618
Grazing district fees .....	.....	.....	1,840,044	12,880,303	14,720,347
Rights-of-way .....	.....	.....	.....	4,226,126	4,226,126
Miscellaneous leases and permits .....	.....	.....	222,120	1,074,561	1,296,681
Nonoperating revenue .....	.....	.....	.....	13,898,759	13,898,759
Other .....	.....	.....	.....	2,180,871	2,180,871
<b>Total .....</b>	<b>8,412</b>	<b>24,365,672</b>	<b>116,961,342</b>	<b>171,459,354</b>	<b>312,794,780</b>

<sup>a</sup>Compare with Table 63, Allocation of receipts to States and local governments by program.

<sup>b</sup>Includes \$1,747,855 from Santini-Burton Act of December 23, 1980 (Clark County, Nevada).

TABLE 65.—Legal allocation of Bureau of Land Management receipts, fiscal year 1989

Source of receipts	Authority	Disposition of gross receipts				Range improvement Percent
		States and counties Percent	General Fund Percent	Indian trust Percent	Reclamation Fund Percent	
<b>Mineral leases and permits:</b> Public domain (except Alaska) and acquired military lands .....	Mineral Leasing Act of Feb. 25, 1920, 41 Stat. 437, and Potash Mining Act of Feb. 7, 1927, 44 Stat. 1057; 30 U.S.C. 191 (and) Public Law 97-94, relating to leases on acquired military lands, 95 Stat. 1205; 30 U.S.C. 355 .....	50.0	10.0	.....	40.0	.....
Public domain (Alaska) .....	Mineral Leasing Act of Feb. 25, 1920, as amended by Alaska Statehood Act of July 7, 1958, and Alaska Native Claims Settlement Act of Dec. 18, 1971, 72 Stat. 339; 30 U.S.C. 191 .....	90.0	10.0	.....	.....	.....
National Petroleum Reserve (Alaska) .....	Public Law 96-514, relating to exploration leases, 94 Stat. 2964; 43 U.S.C. 1337 .....	50.0	50.0	.....	.....	.....
Oregon and California grant lands .....	Conservation of Timber on O&C Lands Act of Aug. 28, 1937, ch. 876, Title II, 50 Stat. 874; 43 U.S.C. 1181f .....	a75.0	25.0	.....	.....	.....
Coos Bay Wagon Road grant lands .....	Act of May 24, 1939, ch. 144, relating to distribution of funds derived from the Coos Bay Wagon Road grant lands, 53 Stat. 753; 43 U.S.C. 1181f-1 et seq .....	b75.0	25.0	.....	.....	.....
Choctaw-Chickasaw lands, Oklahoma .....	Act of June 28, 1944, ch. 298, relating to purchase of lands and establishment of trust fund on deposit to credit of both tribes, 58 Stat. 484-5; 16 U.S.C. 151 .....	.....	.....	100.0	.....	.....
LU lands (Section 3) .....	Executive Orders 10046, 10234, 10322; Comptroller General's Decision 102563 .....	12.5	37.5	.....	.....	50.0
LU lands (Section 15) .....	Executive Orders 10046, 10234, 10322; Comptroller General's Decision 102563 .....	50.0	.....	.....	.....	50.0
LU lands (Section 3) .....	Executive Orders 10787, 10890, Solicitor's Opinion Mar. 11, 1971 .....	25.0	25.0	.....	.....	50.0
LU lands (Section 15) .....	Executive Orders 10787, 10890, Solicitor's Opinion Mar. 11, 1971 .....	25.0	25.0	.....	.....	50.0
Shoshone-Arapahoe Tribes, Wyoming .....	Act of May 19, 1947, ch. 80, authorizing the division of trust fund on deposit to joint credit of both tribes, 61 Stat. 102; 25 U.S.C. 611 .....	.....	.....	100.0	.....	.....



Acquired lands other than military lands	100.0				
State selected lands (except Alaska)					
South half of Red River, Oklahoma					
<b>Land and materials (including timber):</b>					
Oregon and California grant lands		100.0			
Coos Bay Wagon Road grant lands			25.0		
Public domain and acquired lands in "Reclamation States" <sup>d</sup>				76.0	
Public domain and acquired lands outside "Reclamation States" <sup>d</sup>			25.0		
LU lands					96.0
Reclamation lands (within reclamation project)					9100.0
Townsites on reclamation projects					995.0
Naval petroleum and oil shale reserves					100.0

and Oil Shale Reserves Act of June 4, 1920, ch. 228; 41 Stat. 813; 30 U.S.C. 191 (ref. 10 U.S.C. 7432)

Mineral Leasing Act for Acquired Lands of Aug. 7, 1947, 61 Stat. 913; 30 U.S.C. 355

Act of Sept. 14, 1960, relating to State selection of public lands subject to an outstanding lease or permit, 74 Stat. 1024; 43 U.S.C. 852

Act of June 12, 1926, ch. 572, authorizing establishment of trust fund from oil royalties, 44 Stat. 740; 25 U.S.C. 161

Act of Aug. 28, 1937, relating to distribution of monies from O&C Land Grant Fund, 50 Stat. 875; 43 U.S.C. 1181f

Act of May 24, 1939, ch. 144, relating to distribution of funds derived from the Coos Bay Wagon Road grant lands, 53 Stat. 753; 43 U.S.C. 1181f-1 et seq

Reclamation Act of June 17, 1902, 32 Stat. 388; 43 U.S.C. 391 (and) Materials Act of July 31, 1947, ch. 406, 61 Stat. 681; 30 U.S.C. 601

Acts of Mar. 6, 1820, 3 Stat. 547; June 23, 1836, 5 Stat. 60; Mar. 3, 1845, 5 Stat. 788, 790; Aug. 6, 1846, 9 Stat. 58, 179; Feb. 26, 1857, 11 Stat. 167; Feb. 14, 1859, 11 Stat. 384; Feb. 28, 1859, 11 Stat. 388; and Mar. 21, 1864, 13 Stat. 32, 31 U.S.C. 711(17)

Executive Orders 10046, 10234, 10322; Comptroller General's Decision 102563; Executive Orders 10787, 10890; Solicitor's Opinion Mar. 11, 1971

Act of July 19, 1919, ch. 24, relating to proceeds from leases and sale of products, 41 Stat. 202; 43 U.S.C. 394 (and) Cooperative Agreement Mar. 8, 1972

Act of Apr. 16, 1906, ch. 1631, relating to withdrawal of lands on irrigation projects, 34 Stat. 116; 43 U.S.C. 561, 562

Act of Aug. 10, 1956, ch. 1041, 70A Stat. 460; Oct. 11, 1962, 76 Stat. 905; and Apr. 5, 1976, 90 Stat. 311; 10 U.S.C. 7431

100.0

(c)

100.0

25.0

76.0

25.0

96.0

9100.0

995.0

100.0

a75.0

b75.0

e4.0

e4.0

(f)

5.0

TABLE 65.—Legal allocation of Bureau of Land Management receipts, fiscal year 1989—concluded

Source of receipts	Authority	Disposition of gross receipts				
		States and counties	General Fund	Indian trust	Reclamation Fund	Range improvement
		Percent	Percent	Percent	Percent	Percent
<b>Grazing (Section 3):</b>						
Public domain lands (grazing fee only) . . . . .	Taylor Grazing Act of June 28, 1934, as amended, 48 Stat. 1269; 43 U.S.C. 315i . . . . .	12.5	37.5	.....	.....	50.0
LU lands (grazing fee only) . . . . .	Executive Orders 10046, 10234, 10322; Comptroller General's Decision 102563 . . . . .	12.5	37.5	.....	.....	50.0
LU lands (grazing fee only) . . . . .	Executive Orders 10787, 10890; Solicitor's Opinion Mar. 11, 1971 . . . . .	25.0	25.0	.....	.....	50.0
Public domain and LU lands (range improvement fee) . . . . .	(Same as public domain and LU lands above) . . . . .	.....	.....	.....	.....	100.0
Public domain (Alaska) . . . . .	Act of Mar. 4, 1927, ch. 513, relating to grazing districts in Alaska, 44 Stat. 1452; 43 U.S.C. 316h . . . . .	(i)	.....	.....	.....	.....
Reclamation lands (within reclamation project) . . . . .	Act of July 19, 1919, ch. 24, relating to proceeds from leases and sale of products, 41 Stat. 202; 43 U.S.C. 394 (and) Cooperative Agreement Mar. 8, 1972 . . . . .	.....	.....	.....	100.0	.....
Leased lands . . . . .	Act of June 23, 1938, ch. 603, commonly called the Pierce Act, relating to lease of lands to conserve resources within a grazing district, 52 Stat. 1033; 43 U.S.C. 315 m-4 . . . . .	.....	k100.00	.....	.....	.....
<b>Grazing (Section 15):</b>						
Public domain lands (total receipts) <sup>d</sup> . . . . .	Taylor Grazing Act of June 28, 1934, as amended, 48 Stat. 1269; 43 U.S.C. 315i . . . . .	50.0	.....	.....	.....	50.0
LU lands (total receipts) . . . . .	Executive Orders 10046, 10234, 10322; Comptroller General's Decision 102563 . . . . .	50.0	.....	.....	.....	50.0
LU lands (total grazing receipts) . . . . .	Executive Orders 10787, 1890; Solicitor's Opinion Mar. 11, 1971 . . . . .	125.0	125.0	.....	.....	50.0
O&C and Coos Bay Wagon Road grant lands . . . . .	Act of Aug. 28, 1937, ch. 876, relating to distribution of monies from O&C Land Grant Fund, 50 Stat. 875; 43 U.S.C. 1181d . . . . .	75.0	25.0	.....	.....	.....



TABLE 66.—Payments to States (including local governments) and territories, fiscal year 1989

Geographic State	Payments in lieu of taxes	Mineral Leasing Act	Taylor Grazing Act			Proceeds of sales	Other	Total payments
			Section 3	Section 15	Other			
Alabama	\$118,079					\$57		\$118,136
Alaska	5,532,754					2,562	a\$837,459	6,372,775
Arizona	8,276,434	\$10,097	\$85,432	\$93,554		20,628		8,486,064
Arkansas	1,108,891					71		1,108,962
California	10,924,021	14,728	18,364	115,067		101,388		11,173,568
Colorado	6,820,584	1,556	70,232	22,125		10,032		6,926,283
Connecticut	18,272							18,272
Delaware	4,627							4,627
District of Columbia	5,207							5,207
Florida	1,020,826							1,020,826
Georgia	681,401							681,401
Hawaii	36,263							36,263
Idaho	7,588,136	1,264	175,608	25,860	162	29,563		7,820,793
Illinois	219,611							219,611
Indiana	167,923							167,923
Iowa	127,491							127,491
Kansas	338,195			97				338,292
Kentucky	575,421							575,421
Louisiana	154,384							154,384
Maine	73,909							73,909
Maryland	36,738							36,738
Massachusetts	51,950							51,950
Michigan	1,302,362							1,302,362
Minnesota	882,904					524		883,428
Mississippi	384,912					8		384,920
Missouri	1,119,475					274		1,119,749
Montana	8,175,077	2,598	120,134	106,652		16,710	b\$427,909	8,849,080
Nebraska	356,083			513		1,285		357,881
Nevada	6,103,596		306,373	21,379		88,655	c\$257,329	6,777,908
New Hampshire	211,602	576						211,602
New Jersey	35,024							35,024
New Mexico	10,598,873	159,487	259,471	172,818	334	24,565	b\$11,398	11,226,946
New York	40,393							40,393
North Carolina	1,294,200							1,294,200
North Dakota	552,906	307		7,260		423		560,896



## GLOSSARY

### **ACEC:**

Area of Critical Environmental Concern. ACECs are areas where special management is needed (a) to protect important historical, cultural, scenic, and natural areas or (b) to identify areas hazardous to human life and property.

### **Acquired lands:**

Lands in Federal ownership that were obtained by the Government through purchase, condemnation, or gift; or by exchange. One category of public lands. (See Public lands.)

### **Administrative site:**

A reservation of public lands for use as a site for public buildings, ranger stations, or other administrative facilities.

### **Administrative State:**

Bureau of Land Management State Office having administrative jurisdiction. For example, the Montana State Office has administrative jurisdiction for Montana, North Dakota, and South Dakota.

### **Allocation of receipts:**

Determination of moneys paid, or to be paid, to other funds, counties, or States out of receipts collected during the fiscal year reported, as required and/or specified by law.

### **ANCSA:**

Alaska Native Claims Settlement Act of December 18, 1971 (Public Law 92-203, 85 Stat. 688).

### **Animal unit:**

A standardized unit of measurement for range livestock that is equivalent to one cow, one horse, five sheep, five goats, or four reindeer, all over 6 months of age.

### **Animal unit month (AUM):**

A standardized unit of measurement of the amount of forage necessary for the complete sustenance of one animal unit for a period of 1 month; also, a unit of measurement of grazing privileges that represents the privilege of grazing one animal unit for a period of one month.

### **Application:**

A formal request for rights to use, or obtain eventual title to, public lands or resources.

### **Archaeological and historical site:**

A site that contains either objects of antiquity or cultural values relating to history and/or prehistory that warrant special protection.

### **Big game habitat:**

Habitat areas used by big game animals at some time during their yearly life cycle.

### **Boating:**

Includes both motorized and nonmotorized boats. Motorized boating includes tour boats, power boating, river running (commercial and/or noncommercial), etc. Nonmotorized boating includes sailing, canoeing and kayaking, and river running (commercial and noncommercial), and other nonmotorized boats such as rowboats.

### **Bonus:**

The cash consideration paid to the United States by the successful bidder for a mineral lease, such payment being made in addition to the rent and royalty obligations specified in the lease.

### **Cadastral survey:**

A survey relating to land boundaries and subdivisions made to create units suitable for management or to define the limits of title. The distinguishing features of the cadastral surveys are the establishment of monuments on the ground to define the boundaries of the land and their identification in the records by field notes and plats.

### **Camping:**

Includes auto and trailer camping, along with other camping at developed sites, and backcountry camping.

### **Candidate species:**

Species designated as candidates for listing as threatened or endangered by the Fish and Wildlife Service or National Marine Fisheries Service. (Also see Endangered species and Threatened species.)

### **Carey Acts:**

The acts of August 18, 1894 (28 Stat. 372), and March 15, 1910 (36 Stat. 237, 43 U.S.C. Sec. 643), which provide for grants of desert lands to States for disposition to bona fide settlers.

### **Ceded Indian lands:**

Public lands to which Indian tribal title was relinquished to the United States by the Indians on condition that part of all of the proceeds from their sale or other disposition would be conveyed into the Treasury and held in trust for the Indians.

**Certification:**

The act of final approval of a State selection by the Director; also, the document that passes title to the selected lands to the State; also, a document that attests to the truth or authenticity of papers attached to it.

**CFR:**

Code of Federal Regulations.

**Color-of-Title Act:**

The Act of December 22, 1928 (43 U.S.C. Sec. 1068), as amended. Under the terms and provisions of this Act, a patent may be issued for a parcel of not more than 160 acres of public lands in instances where claim to the lands has been based on a written instrument containing defective evidence of title. The parcel must have been possessed in good faith by a claimant, his ancestors, or grantors for a period of more than 20 years.

**Color-of-title entry:**

A cash entry made by an applicant under the Color-of-Title Act.

**Competitive mineral leasing:**

Refers to leases issued by the United States where there are known minerals or where inference of probable mineralization can be drawn from knowledge of the geology of the land. The lands are offered for lease by competitive bidding after publication of the offer of the lands for leasing. The lease is issued to the highest bidder, who is determined at a sale by public auction. (See also Leasable minerals and Noncompetitive mineral leasing.)

**Contract fire protection:**

Fire protection given lands owned, leased, or controlled by the United States and administered by the Bureau of Land Management on which complete fire protection is extended through the use of fire protection forces and facilities contracted for by the Bureau.

**Crossing permit:**

An authorization issued for trailing livestock across Federal range for proper and lawful purposes.

**Cultural resources:**

Remains of human activity, occupation, or endeavor, reflected in districts, sites, structures, buildings, objects, artifacts, ruins, works of art, architecture, and natural features that were of importance in past human events. These resources consist of (1) physical remains, (2) areas where significant human events occurred, even though evidence of the event no longer remains, and (3) the environment immediately surrounding the actual resource.

**Desert Land Entry:**

An entry of irrigable arid agricultural public lands for the purpose of reclamation, irrigation, and cultivation in part.

**Disposition:**

A transaction which leads to the transfer of title of public lands, and/or resources upon or in these lands, from the Federal Government.

**Eastern States:**

Includes all states bordering on or east of the Mississippi River.

**Endangered species:**

Any animal or plant species in danger of extinction throughout all or a significant portion of its range. (Also see Candidate species and Threatened species.)

**Entry:**

An application to acquire title to public lands.

**Entry, allowed:**

An application to acquire title to public lands that has been approved, either as an original entry or a final entry.

**Entry, cash:**

A final entry where the applicant pays cash or its equivalent.

**Entry, commuted:**

A final entry where the applicant pays the statutory price for the lands in consideration for reduction of residence and improvement requirements.

**Entry, final:**

An allowed entry where the applicant has complied with all the requirements of law and regulations.

**Entry, original:**

An allowed entry where the applicant is permitted to proceed with earning title to the land.

**Entry, unperfected:**

An allowed original entry where the applicant has not met all of the requirements of the law and/or regulations to permit making final entry for patent.

**Exchange:**

A transaction whereby the Federal Government receives land or interests in land in exchange for other land or interests in land.

**Exchange lease (coal):**

An exchange of coal resources when it is in the public interest to shift the impact of mineral operations from leased lands, or portions of leased lands, to currently unleased lands to preserve public resource or social values, and to carry out Congressional directives authorizing coal lease exchanges.

**Family unit:**

An installation with camping, picnicking, or trailer facilities to serve the needs of one family-sized group.

**Federal land:**

All classes of land owned by the Federal Government.

**Field examination:**

An on-the-ground investigation of selected public lands with regard to valuation, land use, application for entry, mineralization, etc.

**Fire suppression:**

Fire control activities concerned with controlling and extinguishing a fire, starting at the time the fire is discovered.

**Fishable stream:**

A stream that currently supports a sport fishery on public lands. These streams are not necessarily accessible to the public.

**Fishing:**

Includes fishing from the shore, and from a boat when the boating is secondary to the fishing activity. Included are warm-water, cold-water, and ice fishing; crabbing; seining; and gigging.

**FLPMA:**

Federal Land Policy and Management Act of October 21, 1976 (Public Law 94-579, 90 Stat. 2743), commonly called the "Organic Act" for the Bureau of Land Management.

**Force account fire protection:**

Fire protection given lands owned, leased, or controlled by the United States and administered by the Bureau of Land Management on which complete fire protection is extended through the use of the protection forces and facilities supervised and operated by the Bureau.

**Free-use permit:**

A permit to a governmental agency or nonprofit group to use mineral materials, such as sand and gravel, or other resources at no charge.

**Grazing district:**

An administrative subdivision of the rangelands under jurisdiction of the Bureau of Land Management established pursuant to Section 3 of the Taylor Grazing Act to facilitate management of rangeland resources.

**Grazing-fee year:**

March 1 of a given calendar year through the last day in February of the following year.

**Grazing lease:**

An authorization that permits the grazing of livestock on public lands outside the grazing districts during a specified period of time (Section 15 of the Taylor Grazing Act).

**Grazing lease lands:**

Lands outside grazing districts that are owned, leased, or otherwise controlled by the United States and administered by the Bureau of Land Management, and that are subject to leasing for grazing purposes under the Alaska Grazing Law of March 4, 1927; Section 15 of the Taylor Grazing Act of June 28, 1934; the Oregon Timber Conservation Act of August 28, 1937; or the Reindeer Act of September 1, 1937.

**Grazing permit:**

An authorization that permits the grazing of a specified number and class of livestock on a designated area of grazing district lands during specified seasons each year (Section 3 of the Taylor Grazing Act).

**Hardrock minerals:**

Locatable minerals that are neither leasable minerals (oil, gas, coal, oil shale, phosphate, sodium, potassium, sulphur, asphalt, or gilsonite) nor saleable mineral materials (e.g., common variety sand and gravel). Hardrock minerals include, but are not limited to, copper, lead, zinc, magnesium, nickel, tungsten, gold, silver, bentonite, barite, feldspar, fluorspar, and uranium.

**Homestead entry, original:**

An original entry under the homestead laws; also, the first homestead entry that was made by an individual; also, a homestead entry that was made pursuant to the first homestead law, the Act of May 20, 1862 (12 Stat. 392) as codified in Sec. 2289 of the Revised Statutes. (Also see Entry, original; Stockraising homestead.)



**Hunting:**

Includes big- and small-game hunting, waterfowl hunting, and trapping.

**Indian allotment:**

An allocation of a parcel of public lands or Indian reservation lands to an Indian for individual use; also, the lands so allocated.

**Inland water area:**

Includes permanent inland water surface, such as lakes, ponds, and reservoirs having 40 acres or more of the area; streams, sloughs, estuaries, and canals 1/8 of a statute mile or more in width; deeply indented embayments and sounds, other coastal waters behind or sheltered by headlands, or islands separated by less than 1 nautical mile of water; and islands having less than 40 acres of area.

**Lake (or pond):**

A *natural* standing body of water.

**Land Area:**

A mining dry land and land temporarily or partially covered by water, such as marshlands, swamps, and river flood plains; streams, sloughs, estuaries, and canals less than 1/8 of a statute mile in width; and lakes, reservoirs, and ponds having less than 40 acres of water-surface area.

**Lease:**

An authorization to possess and use public land for a period of time sufficient to amortize capital investments in the land. (See also Competitive leasing and Noncompetitive leasing).

**Leasable minerals:**

Oil and gas; oil shale; coal; potash; phosphate; sodium; sulfur in Louisiana and New Mexico; gold, silver, and quicksilver in certain private land claims; and silica deposits in certain parts of Nevada.

**License:**

An authority granted by the United States to do a particular act or series of acts upon public lands without the licensee possessing any estate or interest in the land itself.

**Locatable minerals:**

Whatever are recognized as minerals by the standard authorities, whether metallic or other substances, and are found in sufficient quantity and quality to justify their location under the Mining Law of 1872, as amended. (See also Hardrock minerals.)

**Lode claim:**

A mining claim located for "veins or lodes of quartz or other rock in place" (30 U.S.C. 23). Lode claims may extend for 1,500 feet along the strike of the vein or lode and to a maximum of 300 feet on either side of the vein or lode.

**Logical mining unit (LMU):**

An area of land in which the recoverable coal reserves can be developed in an efficient, economical, and orderly manner as a unit with due regard to conservation of coal reserves and other resources. An LMU may consist of one or more Federal coal leases and may include intervening or adjacent lands in which the United States does not own the coal. All lands in an LMU are under the control of one operator or lessee, can be developed as a single operation, and are contiguous. Formation of LMUs was authorized by the Federal Coal Leasing Amendments Act of 1976, which amended the Mineral Leasing Act (30 U.S.C. 181 *et seq.*).

**LU project lands:**

Privately owned submarginal farmlands incapable of producing sufficient income to support the family of a farm owner and purchased under Title III of the Bankhead-Jones Farm Tenant Act of July 22, 1937. These acquired lands became known as "Land Utilization Projects" and were subsequently transferred from jurisdiction of the U.S. Department of Agriculture to the U.S. Department of the Interior. They are now administered by the Bureau of Land Management.

**MBF:**

Thousand board feet. A board foot is a unit of lumber measurement 1 foot long, 1 foot wide, and 1 inch thick, or its equivalent. It is the standard unit of measurement in the logging and lumber industry by which standing timber is measured and sold and manufactured lumber is merchandised.

**Millsite:**

A site located on nonmineral land and used for mining or milling purposes (30 U.S.C. 42). Millsites are limited to 5 acres and may be located either by metes or bounds or by legal subdivision.

**Mineral:**

Organic and inorganic substances occurring naturally, with characteristics and economic uses that bring them within the purview of mineral laws; a substance that may be obtained under applicable laws from public lands by purchase, lease, or preemptive entry.

**Mineral materials:**

Minerals such as common varieties of sand, stone, gravel, pumice, pumicite, and clay that are not obtainable under the mining or leasing law but that can be obtained under the Materials Act of 1947, as amended.

**Mineral permit:**

A permit that authorizes prospecting for certain leasable minerals on public lands described in the permit.

**Mineral reservation:**

Retention of the mineral estate by the grantor of a property; the grantee or patentee owns the land surface but not the minerals.

**Mining claim:**

A mineral entry and appropriation of public land under the Mining Law of 1872, as amended (30 U.S.C. 22 et seq.). There are four types of mining claims: lode claims, placer claims, millsites, and tunnel sites. Only tunnel sites may not be patented. A valid lode or placer claim contains a discovery of a valuable mineral deposit subject to location under the Mining Law of 1872. A valid millsite is one that is being used for the support of a mining or milling operation. A valid tunnel site is one that is being diligently worked and maintained.

**Mining claim location:**

The staking and recordation of a lode or placer claim, millsite, or tunnel site on public land. A valid location is one that is properly located, recorded, and maintained under Section 314 of the Federal Land Policy and Management Act of October 21, 1976, and the mining laws of the State where the claim or site is located.

**MMBF:**

Million board feet. (See MBF.)

**Motorized recreation travel (other than off-road vehicle):**

Includes driving for pleasure (driving or riding in motorized land-based vehicles on roads). Vehicles include cars, vans, campers, mopeds, and motorcycles. The primary purpose of the riding or driving, train or bus touring (riding in buses, trains, and similar vehicles), and other motorized travel activities must be for recreation. This does not include interstate highway traffic, nor does it include sightseeing on major thoroughroads *unless* there is quantitative evidence (activity participation survey) that the public lands are being used for these recreation purposes.

**Multiple use:**

A combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, and wildlife and fish, along with natural scenic, scientific, and historical values.

**Noncompetitive mineral leasing:**

Refers to leases issued to qualified applicants for lands not specifically known or presumed to contain mineral or petroleum deposits in quantity. Such leases can be issued on a first-come, first-served basis or through a random drawing procedure. (See also Competitive mineral leasing and Leasable minerals.)

**Nonexclusive sites:**

Mineral material disposal areas, such as community pits or common use areas, that are designated, maintained, and managed by the Bureau of Land Management and from which many small disposals are authorized under the Materials Act of 1947, as amended.

**Nonmotorized recreation travel:**

Activities that require nonmotorized equipment. Such activities include bicycling, horseback riding, running or jogging, sand sailing, backpacking, hiking, or walking for pleasure.

**Nonoperating revenue:**

Receipts of a miscellaneous nature, such as incidental receipts from taxes, fines, etc., that are not related specifically to, or received in the process of, conducting normal and regular business of the Bureau of Land Management as it pertains to the management of public lands and resources.

**Nonuse:**

An authorization issued to an applicant for nonuse of grazing privileges in whole or part; usually issued for one grazing season.

**O&C lands:**

Public lands in Western Oregon that were granted to the Oregon central railroad companies (later the Oregon & California Railroad Company) to aid in the construction of railroads but that were later forfeited and returned to the Federal Government by revestment of title. The term "O&C" lands, as often used, also refers to the reconveyed Coos Bay Military Wagon Road lands, which are public lands in Western Oregon that were once granted to the State of Oregon to aid in the construction of the Coos Bay Military Wagon Road but that were later forfeited and returned to Federal ownership by reconveyance.

**Obligations:**

Payments, and amounts which the Government is obligated to pay, for goods and services received (or contracted for future delivery) made from appropriations during the fiscal year indicated.

**Off-road vehicle (ORV):**

Any vehicle capable of, or designed for, travel on or immediately over land, water, or other natural terrain, deriving motive power from any source other than muscle. The term excludes (1) any nonamphibious registered motorboat; (2) any fire, emergency, or law enforcement vehicle while being used for official or emergency purposes; and (3) any vehicle whose use is expressly authorized by a permit, lease, license, agreement, or contract issued by the authorized officer or otherwise approved.

**Off-road vehicle (ORV) travel:**

Driving or riding in off-road areas (including trails). The type of vehicle and its capabilities are secondary to where and how the vehicle is used. The primary purpose of the riding or driving must be for recreation. Off-road travel includes off-road motorcycle and scooter driving, snowmobiling, etc.; specialized craft such as all-terrain vehicles, swamp buggies, and four-wheel drives; and conventional vehicles for off-road or trail purposes.

**Operator:**

An individual, group, association, or corporation authorized to conduct livestock grazing on public lands.

**Original survey:**

A cadastral survey that creates land boundaries and establishes them for the first time.

**Paleontology:**

A science dealing with the life of past geological periods as known from fossil remains.

**Patent:**

A Government deed; a document that conveys legal title to public lands to the patentee.

**Permit:**

A revocable authorization to use public land for a specified purpose for up to 3 years.

**Placer claim:**

A mining claim located for "all forms of deposits, excepting veins of quartz or other rock in place" (30 U.S.C. 35). A placer claim must generally be located by legal subdivision in conformance with the public land survey rather than by metes and bounds. A placer claim is limited to 20 acres per individual, although a placer claim may be up to 160 acres for an association of eight or more persons. Corporations are limited to 20-acre claims.

**PLO:**

Public land order. An order affecting, modifying, or canceling a withdrawal or reservation that has been issued by the Secretary of the Interior pursuant to powers of the President delegated to the Secretary by Executive Order 9146 of April 24, 1942, or 9337 of April 24, 1943.

**Protraction diagram:**

A diagram representing the plan of extension of cadastral surveys over unsurveyed public lands based upon computed values for the corner positions.

**Public auction:**

A sale of land through competitive, usually oral, bidding.

**Public domain lands:**

Original public domain lands that have never left Federal ownership; also, lands in Federal ownership that were obtained by the Government in exchange for public domain lands or for timber on public domain lands. One category of public lands.

**Public lands:**

Any land and interest in land owned by the United States that are administered by the Secretary of the Interior through the Bureau of Land Management, without regard to how the United States acquired ownership, except for (1) lands located on the Outer Continental Shelf, and (2) lands held for the benefit of Indians, Aluets, and Eskimos. Includes public domain and acquired lands. (See definitions.)

**Public land States:**

Refers to the 30 states that made up the public domain at its greatest extent. These states are Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Dakota, Ohio, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming.

**R&PP:**

Recreation and Public Purposes Act. (See definition.)

**Receipts:**

All money received and credited to the proper account as required by law. Does not include collections held by the U.S. Treasury pending future determination of disposition by the Bureau of Land Management.

**Reclamation homestead entry:**

An entry initiated under the Act of June 17, 1902 (32 Stat. 338; 43 U.S.C., Sec. 43 et seq.), that provides for the issuance of patents to applicants who settle upon and improve agricultural public land parcels not exceeding 160 acres within reclamation projects.

**Recreation and Public Purposes Act:**

Act of June 14, 1926 (44 Stat. 741), as amended, that provides for the purchase or lease of public lands by (a) Federal, State, or local governmental units for any activity that serves the interest of the general public consistent with public policy or (b) nonprofit organizations if the lands are to be used for recreation purposes in an established or proposed recreation project area.

**Recreation visit**

A visit to Bureau of Land Management lands and waters by an individual for the purpose of engaging in any activities, except those that are part of or incidental to the pursuit of a gainful occupation, whether for a few minutes or a full day.

**Rental:**

The amount paid periodically (usually annually) by the holder of a lease or right-of-way grant for the right to use land or resources for the purposes set out in the lease or grant.

**Reserved lands:**

Federal lands that are dedicated or set aside for a specific public purpose or program and that are, therefore, generally not subject to disposition under the operation of all of the public land laws. (See also Revocation and Withdrawal.)

**Reservoir:**

A man-made, standing body of water whose water levels may be controlled.

**Resurvey:**

A cadastral survey to identify and re-mark the boundaries of lands that were established by a prior survey.

**Revocation:**

Generally, an action that cancels a previous official act; specifically, an action that cancels a withdrawal. Revocation is usually done in conjunction with restoration, which opens the public lands.

**Right-of-way:**

A permit or an easement that authorizes the use of lands for certain specified purposes, such as the construction of forest access roads or a gas pipeline.

**Riparian habitat:**

Areas of land directly influenced by permanent water. Lakeshores and streambanks are typical riparian areas. Excluded are such sites as ephemeral streams or washes that do not exhibit the presence of vegetation dependent upon free water in the soil. Wetland and riparian areas are especially important because they are a critical source of biological diversity.

**Saleable minerals:**

Sand, gravel, stone, soil, and other common-variety mineral materials disposed of through sales at not less than their appraised price or through free-use permits (see definition).

**Sale of materials:**

A competitive or noncompetitive sale by contract at not less than the appraised price of materials (timber and mineral) under the Materials Act of 1947, as amended.

**Santini-Burton Act:**

Act of December 23, 1980 (Public Law 96-586, 94 Stat. 3381), that provides for the orderly disposal of Federal lands in Clark County, Nevada, and also provides for the acquisition of environmentally sensitive lands in the Lake Tahoe Basin.

**Sawtimber:**

Logs of sufficient size and quality to be suitable for conversion into lumber or veneer.

**Section 3:**

(See Grazing permit.)

**Section 15:**

(See Grazing lease.)

**Site-based recreation activities (other than camping, hunting, or nonmotorized travel):**

Includes sightseeing (the viewing of scenery; natural, historic, and archaeological sites; landscapes; or other features), picnicking, nature study and photography, mountain climbing and caving, gathering and collecting activities (mushrooms, rocks, and flowers), interpretation (guided and unguided touring, talks, and programs), and other environmental education events.

**Small game habitat:**

Habitat areas used by small game animals (including upland game species) at some time during their yearly life cycle.

**Small tract lease:**

A parcel of public lands of 5 acres or less that has been found to be chiefly valuable for sale or lease as a home, cabin, camp, recreational, convalescent, or business site under the Act of June 1, 1938.

**Special land use permit:**

A permit that authorizes the use of public land for a purpose not specifically authorized under other regulation or statute.

**State Office:**

The first-level administrative unit of the Bureau of Land Management field organization. It comprises a geographic area consisting of one or more States.

**Stockraising homestead:**

A homestead not exceeding 640 acres initiated under the Stockraising Homestead Act, which provided for the homesteading of lands chiefly valuable for grazing and raising forage crops. Minerals in these lands were reserved to the United States. The provisions for stockraising homesteads were by implication repealed by the Taylor Grazing Act.

**Stream with fishery potential:**

A stream that currently does not support a sport fishery but that could be changed into a fishable stream with management (i.e., stocking, removal of barriers, etc.).

**Sustained yield:**

The achievement and maintenance in perpetuity of a high-level annual, or regular periodic, output of the various renewable resources of the public lands consistent with multiple use.

**Threatened species:**

Any animal or plant species likely to become endangered within the foreseeable future throughout all or a part of its range. (Also see Candidate species and Endangered species.)

**Trespass:**

An unauthorized use of Federal lands and/or resources.

**Tunnel site:**

A site located for the development of a vein or lode or for the anticipated discovery of previously unknown veins or lodes. The locator of a tunnel site is given the right to all veins cut by the tunnel within 3,000 feet of its portal, and to 1,500 feet along the length of each blind vein or lode cut. A tunnel site location lapses if not worked for a period of at least 6 months.

**Unlawful enclosures or occupancy:**

Enclosures of public lands made or maintained by any party, association, or corporation without valid claim.

**U.S.C.:**

United States Code.

**Vacant public land:**

Public land that is not reserved, appropriated, or set aside for a specific or designated purposes. Such land is not covered by any non-Federal right or claim other than permits, leases, rights-of-way, and unreported mining claims.

**Visitor hour:**

A unit used to measure duration of recreation use. A visitor hour involves the presence of a person on a recreation area or site for the purpose of engaging in recreation activities for either continuous, intermittent, or simultaneous periods of time aggregating 60 minutes.

**Water-based recreation activities (other than boating or fishing):**

Includes swimming, general water play, waterskiing, ski jumping, platter riding, and other similar activities that occur outside a boat.

**Waterfowl habitat:**

The total acreage of all wetlands, lakes, ponds, and reservoirs on BLM lands. Uplands used for nesting are not included.

**Wetlands:**

Permanently wet or intermittently flooded areas where the water table (fresh, saline, or brackish) is at, near, or above the soil surface for extended intervals, where hydric wet soil conditions are normally exhibited, and where water depths generally do not exceed 2 meters. Marshes, shallows, swamps, muskegs, lake bogs, and wet meadows are examples of wetlands.

**Wild free-roaming horses and burros:**

All unbranded and unclaimed horses and burros using public lands as all or part of their habitat.

**Wilderness:**

An area of undeveloped Federal land retaining its primeval character and influence, without permanent improvement or human habitation, that is protected and managed so as to preserve its natural conditions and that (1) generally appears to have been affected primarily by the forces of nature, with the imprint of man's work substantially unnoticeable; (2) has outstanding opportunities for solitude or a primitive and unconfined type of recreation; (3) has at least 5,000 acres of land or is of sufficient size as to make practicable its preservation and use in an unimpaired condition; and (4) may also contain ecological, geological, or other features of scientific, education, scenic, or historical value.

**Winter sports:**

Includes ice skating, skiing (downhill and cross-country), snowshoeing, sledging, and tobogganing as well as activities such as snow sculpture and general snow play.

**Withdrawal:**

An action that restricts the disposition of public lands and that holds them for specific public purposes; also, public lands that have been dedicated to public purposes. (See also Reserved lands and Revocation.)

**Woodlands:**

Forest lands usually supporting open-grown, widely scattered trees of marginal merchantability and generally more valuable for watershed or wildlife protection purposes than for the production of timber for commercial purposes.

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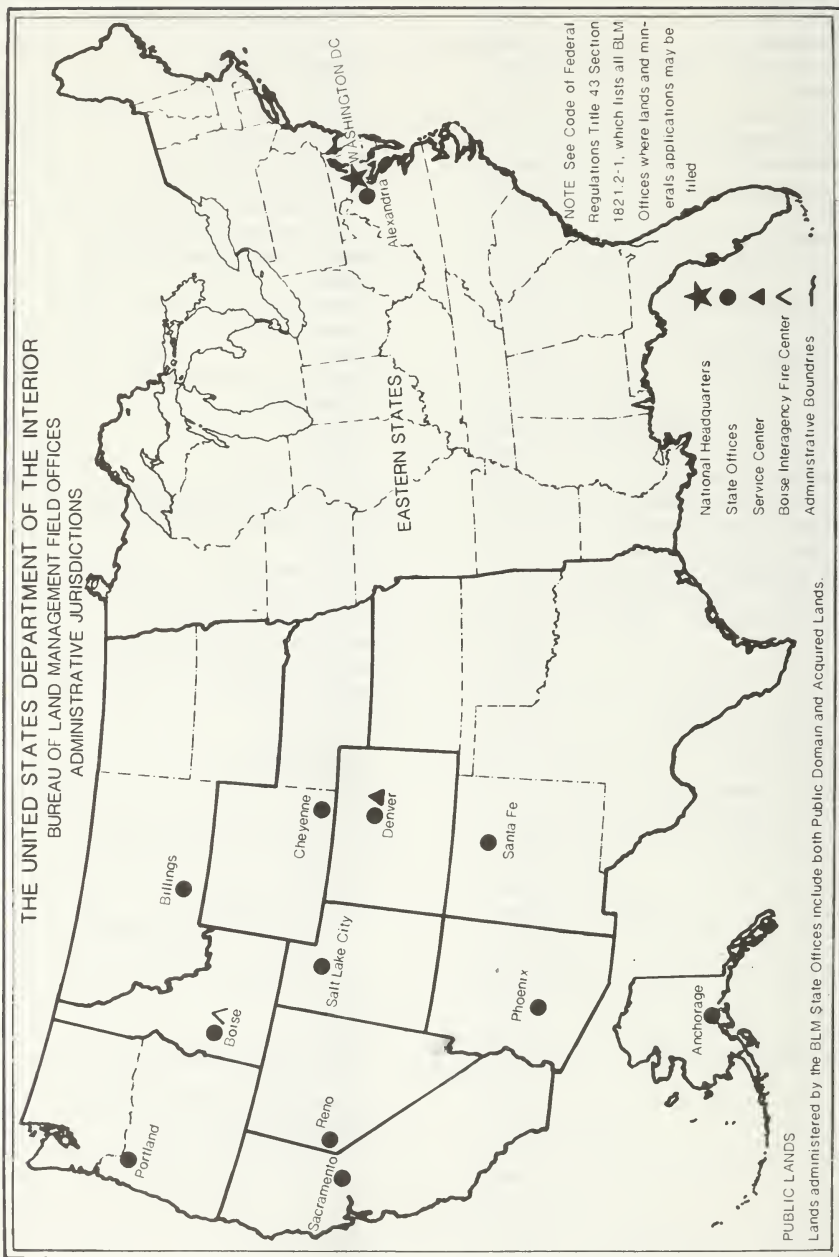
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Note — The tables presented in this annual report provide summary statistics, at the geographic State level in most cases, for all Bureau of Land Management lands. For additional information contact the Office of Public Affairs, Bureau of Land Management at the address or telephone number below.

<b>Office</b>	<b>Area of Responsibility</b>	<b>Address and telephone</b>
Headquarters	National	U.S. Department of the Interior 18th and C Streets, N.W. Washington, D.C. 20240 (202) 343-5717
Alaska State Office	Alaska	222 W. 7th Avenue, No. 13 Anchorage, AK 99513-7599 (907) 271-5555
Arizona State Office	Arizona	3707 North 7th Street P.O. Box 16563 Phoenix, AZ 85011 (602) 640-5504
California State Office	California	Federal Building 2800 Cottage Way, E-2841 Sacramento, CA 95825-1889 (916) 978-4746
Colorado State Office	Colorado	2850 Youngfield Street Lakewood, CO 80215 (303) 236-1700
Idaho State Office	Idaho	3380 Americana Terrace Boise, ID 83706 (208) 334-1406
Montana State Office	Montana, North Dakota, South Dakota	Granite Tower 222 North 32nd Street P.O. Box 36800 Billings, MT 59107 (406) 255-2913
Nevada State Office	Nevada	850 Harvard Way P.O. Box 12000 Reno, NV 89520 (702) 785-6586
New Mexico State Office	New Mexico, Kansas, Oklahoma, Texas	Joseph M. Montoya Federal Building South Federal Place P.O. Box 1449 Santa Fe, NM 87504-1449 (505) 988-6316
Oregon State Office	Oregon, Washington	825 N.E. Multnomah Street P.O. Box 2965 Portland, OR 97208 (503) 231-6274
Utah State Office	Utah	P.O. Box 45155 Salt Lake City, UT 84145-0155 (801) 539-4080
Wyoming State Office	Wyoming, Nebraska	2515 Warren Avenue P.O. Box 1828 Cheyenne, WY 82003 (307) 772-2111
Eastern States Office	All States bordering on and east of the Mississippi River	350 South Pickett Street Alexandria, VA 22304 (703) 461-1369
Boise Interagency Fire Center	National	3905 Vista Avenue Boise, ID 83705 (208) 389-2457

