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# NEVADA PROGRESS REPORT

## 1980

BUREAU OF  
LAND MANAGEMENT







# United States Department of the Interior

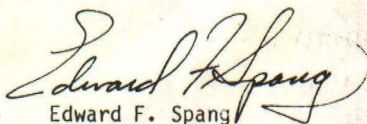
## BUREAU OF LAND MANAGEMENT

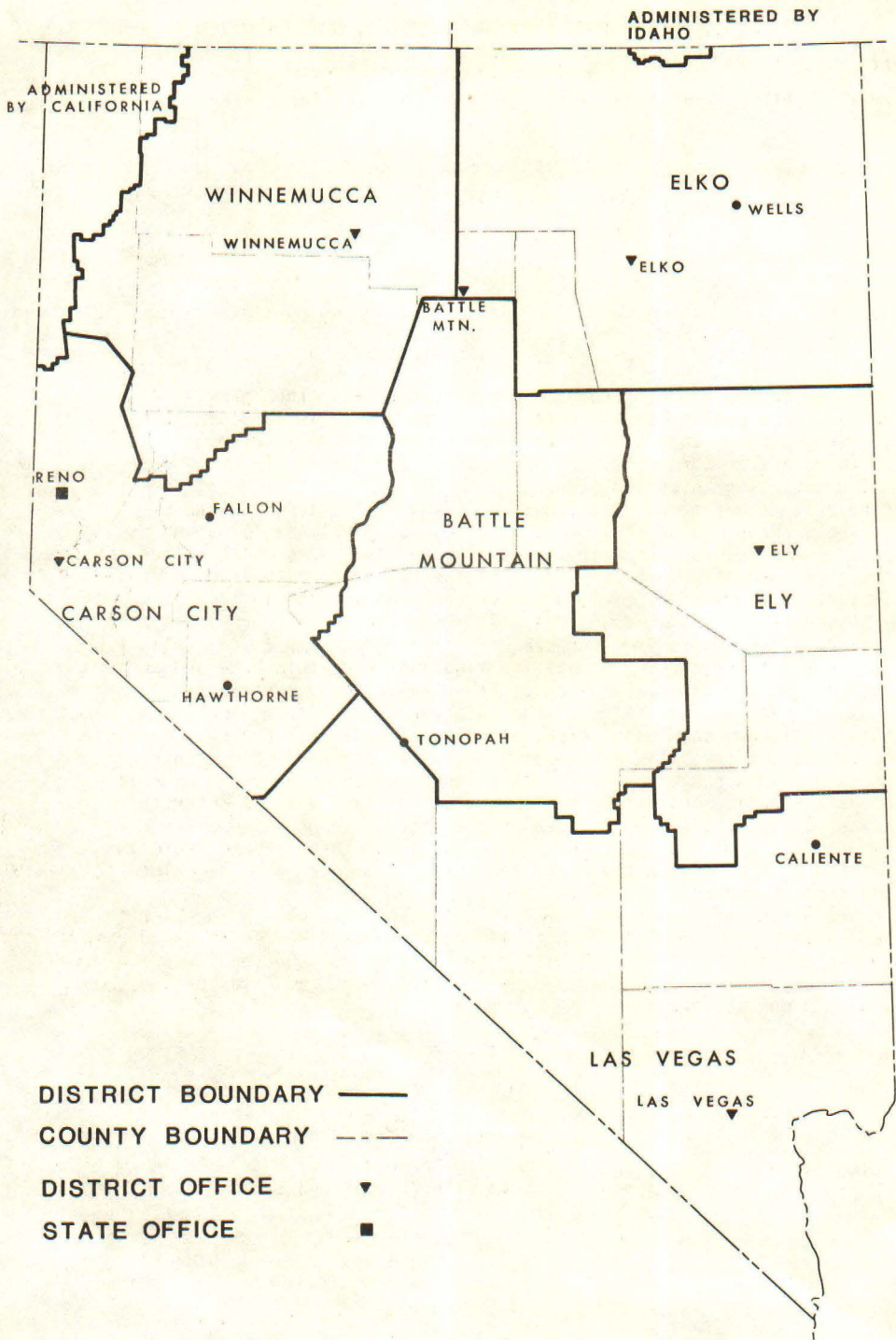
Maps of Nevada pinpoint towns and roads, but leave the impression most of Nevada is unused public land. In fact, however, there is land use activity in almost every part of this huge state. The 49 million acres of public land administered by the Bureau of Land Management (BLM) are daily host to an expanding variety of uses and users.

These lands are owned by the United States of America. Congress establishes, through laws, the broad policies for land management and use. The BLM acts as manager for the American people, and the pages which follow outline the major management programs. They give the reader some indication of the multi-faceted nature of overseeing use of the public lands in today's society.

For several decades, Nevada has been among the fastest growing states in population. This continuing increase has had a direct impact on public lands. Today they are criss-crossed by utility rights-of-way--telephone and power wires and natural gas pipelines; by highways and roads, and by landing strips and gravel pits. Recreationists enjoy the solitude of vast areas where time seems to stand still, and they hike, camp, and otherwise use all the public lands. Mining claims dot the hillsides, cattle, wildlife and wild horses share the forage, and towns look toward the public lands for room to grow. As this has happened, the public has become more aware of the land and its potential. Public awareness has been heightened by the discussion of using a large area for deployment of the MX missile. The public has asked for a greater role in determining what occurs on the land, and we have welcomed them as valued friends and advisors in making land use decisions.

Coordination of management for differing uses will be a high priority for the BLM in years to come. Through public participation and coordinated resource management and planning, the BLM will seek to carry out the legal mandate given by the nation, in concert with Nevadans who live, work, and play on the public lands within our state.

  
Edward F. Spang  
State Director, Nevada





**UNITED STATES DEPARTMENT OF THE INTERIOR  
Bureau of Land Management  
Nevada State Office**

**1980 NEVADA PROGRESS REPORT**

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This booklet contains information and statistics about the Bureau of Land Management in Nevada. Fiscal Year 1980 covers the 12-month period from October 1, 1979 to September 30, 1980. For reference purposes, some sections contain figures from previous fiscal years.

Since the conversion to the metric system is just now beginning and most people are still unfamiliar with the new measurements, this book, for the sake of brevity, does not include metric conversions side by side with traditional U.S. measurements. However, for those wishing to make this conversion, the following are the metric equivalents to the measurements used in this book:

1 acre = .4047 hectares                      1 ton = .9072 metric tons  
1 cubic yard = .7646 cubic meters        1 mile = 1.609 kilometers

Produced by Public Affairs, Nevada State Office.



# Nevada BLM Organization

Nevada State Office  
300 Booth Street, P.O. Box 12000  
Reno, Nevada 89520

The Bureau of Land Management is responsible for the management, conservation, protection, use, and disposal of the public lands in Nevada, as well as the grazing, recreation, mineral, and other resources found on these lands throughout Nevada.

## OFFICE OF THE STATE DIRECTOR

State Director	Ed Spang	784-5451
Associate State Director	Roger McCormack	784-5451
Secretary	Carol Hadley	784-5452
Equal Employment Opportunity Specialist	Marciano Briones	784-5773

## PUBLIC AFFAIRS STAFF

Provides information in response to public and press inquiries and performs information and education activities as necessary for public understanding of the Bureau's land and resource management programs.

Public Affairs Officer	Bob Stewart	784-5311
Secretary	Marie Bresch	
Public Information Specialist	Bob Goodman	
Public Information Specialist	Jan Bedrosian	

## DIVISION OF PLANNING AND ENVIRONMENTAL COORDINATION

Provides guidance for operations of BLM's planning system; coordinates development of long and short range multi-year programs; ensures overview consideration of environmental protection and enhancement of all activities; cooperates with all other agencies and public programming and planning groups; and evaluates all program activities in regard to goals, policies, and objectives.

Planning and Environmental Coordination Chief	Stu Gearhart	784-5448
Secretary	Lois Miller	
Writer-Editor	Maxine Shane	
Chief, Branch of Planning	Bill Calkins	
Regional Planner	Jack Seley	
Regional Economist	Paul Myers	
Program Analyst	Fred Ramstad	
Sociologist	Bert Bresch	
Chief, Branch of Environmental Coordination	Bob Foster	784-5602
EIS Coordinator	Ed Tilzey	
EIS Coordinator	Mike Jackson	
EIS Coordinator (COAL)	John Matthiessen	
EA Coordinator	Frank Maxwell	
MX Coordinator	Dick Morrison	



## DIVISION OF RESOURCES

Develops and executes forestry, wildlife, range, watershed, recreation, wild horse, land, and mineral programs and provides integration of these programs to ensure optimum multiple-use land management with full consideration for ecological protection requirements.

Resource Management Chief	Ed Evatz	784-5455
Secretary	Barbara Bounds	
Chief, Biological Resources	Les Sweeney	
Allotment Management Plans	Mike Phillips	
Fisheries and Forestry	Osborne Casey	
Hydrologist	Dick Jewell	
Range Management	Geren Long	
Soils	Jerry Harman	
Watershed	Loren Brazell	
Wild Horses and Burros	Milt Frei	
Wildlife	Dave Goicoechea	
Chief, Lands, Minerals, and Recreation	John Gregg	784-5651
Archaeology	Richard Hanes	
Geothermal, Oil and Gas Lands	Norm Melvin	
Landscape Architect	Mike Moran	
Minerals	Rich Hagan	
Recreation	Larry Steward	
Wilderness	Steve Smith	
	Dave Harmon	

## DIVISION OF TECHNICAL SERVICES

Provides technical support as well as developing and advising programs in engineering design and construction, cartography; cadastral survey; safety; electronic communications; fire control; trespass; improvement maintenance; access, land and mineral appraisal; lands and minerals operations; and mineral examination activities.

Technical Services Chief	Bill Malencik	784-5281
Secretary	Teena Fredianelli	784-5281
Chief, Appraisal Staff	Charles Hancock	784-5474
Chief, Cadastral Survey	Lacel Bland	784-5278
Chief, Engineering Branch	John Trimmer	784-5275
Civil Engineer	Jack Sorensen	784-5275
Supervisor, Cartography	Dennis Anderson	784-5731
Chief, Lands & Minerals	Roger Jarrell	784-5703
Lands Transactions	Ken Stowers	784-5703
Minerals Transactions	Jody Woodin	784-5703
Chief, Law Enforcement	Len Sims	784-5683
Chief, Protection Staff	Roy Percival	784-5468



DIVISION OF MANAGEMENT SERVICES

Provides administrative and non-technical support for personnel, incentive awards, budget analysis, procurement, property management, organization planning, management systems, records and data management, land status records, training, accounts, office services, and equal opportunity employment.

Administrative Officer	Mel Bunch	784-5491
Chief, Admin. Services	John Chappell	784-5493
Personnel	Faye Anderson	
Procurement	Vacant	784-5494
Program Analyst	Fred Weech	784-5492
Chief, Records & Data Management Branch	Loyd Miller	784-5486
Accounts	Elaine Long	784-5432
Dockets	Vacant	784-5445
Library	Patsy McDuffie	784-5485
Public Contact	Emagene DeWitt	784-5496
Records	Virginia McCold	784-5487
Reproduction	Cal Robinson	784-5746

BLM DISTRICT OFFICES

Elko District Office 783-4071  
 P.O. Box 831, 2002 Idaho Street  
 Elko, Nevada 89801

District Manager	Rod Harris
Elko Resource Area Manager	Jesse Dingman
Wells Resource Area Manager	Vacant
Chief, Division of Resources	Vacant
Chief, Division of Planning and Environmental Coordination	Bob Haburchak
Chief, Division of Operations	Vacant
Chief, Division Of Administration	Don Lemons

Winnemucca District Office 623-3676  
 705 East 4th Street  
 Winnemucca, Nevada 89445

District Manager	Frank Shields
Paradise-Denio Resource Area Manager	Vacant
Sonoma-Gerlach Resource Area Manager	Brad Hines
Chief, Division of Resources	Glenn Stickley
Chief, Division of Planning and Environmental Coordination	Bob Neary
Chief, Division of Operations	Bob Carroll
Chief, Division of Administration	Jeannette Ugaldea



Carson City District Office  
Suite 335, Capitol Plaza  
1050 East William Street  
Carson City, Nevada 89701

882-1631

District Manager  
Assistant District Manager  
Lahontan Resource Area Manager  
Walker Resource Area Manager  
Division of Wild Horse and  
Burro Operations  
Chief, Division of Resources  
Chief, Division of Planning and  
Environmental Coordination  
Chief, Division of Operations  
Chief, Division of Administration

Tom Owen  
Jim Fox  
Ken Walker  
Rudy Reimold

Don Pomi  
Vacant

Kelly Madigan  
Norm Murray  
Jack Robinson

Ely District Office  
Star Route 5, Box 1  
Ely, Nevada 89301

289-4865

District Manager  
Egan Resource Area Manager  
Schell Resource Area Manager  
Chief, Division of Resources  
Chief, Division of Planning and  
Environmental Coordination  
Chief, Division of Operations  
Chief, Division of Administration

Neil McCleery  
Rich Watts  
Wayne Lowman  
George Cropper

Vacant  
Duncan MacDonald  
Ken Schroeder

Las Vegas District Office  
4765 W. Vegas Drive  
P.O. Box 5400  
Las Vegas, Nevada 89102

385-6403

District Manager  
Stateline-Esmeralda Resource  
Area Manager  
Caliente-Virgin Valley  
Resource Area Manager  
Chief, Division of Resources  
Chief, Division of Planning and  
Environmental Coordination  
Chief, Division of Operations  
Chief, Division of Administration

Kemp Conn

Bill Civish

Darwin Anderson  
Frank Bingham

Ed Ciliberti  
Jim Schalnus  
Vacant

Battle Mountain District Office  
2nd and Scott Streets  
P.O. Box 194  
Battle Mountain, Nevada 89820

635-5181

District Manager  
Shoshone-Eureka Resource Area Manager  
Tonopah Resource Area Manager  
Chief, Division of Resources  
Chief, Division of Planning and  
Environmental Coordination  
Chief, Division of Operations  
Chief, Division of Administration

Mike Mitchell (acting)  
Vacant  
Les Monroe  
Mike Mitchell

Neil Talbot  
John Keenan  
Bernice Thomas



## Federally Administered Lands in Nevada, by Agency as of September 30, 1979

Including Alaska and Hawaii, the gross area of the United States is 2.3 billion acres. The Federal government has, at various times in U.S. history, held title to about four-fifths of that area. Today, Federal civil and defense agencies administer about 762 million acres or about one-third of the nation's lands.

Currently, Alaska has the highest percentage of Federally administered lands - 96 percent. Second largest percentage is Nevada with 87 percent. These lands are used for a variety of purposes. In Nevada, these include atomic testing, national forests, wildlife refuges, and public lands, administered primarily for multiple uses. The agencies and their acreage of responsibility are outlined below.

AGENCY	ACRES	PERCENTAGE OF STATE ADMINISTERED
Department of Agriculture		
Forest Service	5,143,891.0	7.27
Soil Conservation Service	.2	*
Department Subtotal	<u>5,143,891.2</u>	
Department of Energy		
Energy Research and Development Administration	819,581.8	1.16
Western Area Power Admin.	4,407.2	*
Department Subtotal	<u>823,989.0</u>	
Department of Interior		
Fish & Wildlife Service	2,202,296.4	
Geological Survey	70.8	
Bureau of Indian Affairs	7,810.8	
Bureau of Land Management	48,844,808.3	
Bureau of Mines	22.6	
National Park Service	264,137.9	
Water & Power Resources Service	915,273.2	
Department Subtotal	<u>52,234,420.0</u>	73.83
Department of Transportation		
Federal Aviation Administration	1,863.6	*
Department of Defense		
Air Force	2,896,757.0	
Army	155,266.0	
Navy	63,653.7	
Corps of Engineers	671.0	
Department Subtotal	<u>3,116,347.7</u>	4.41
Other Federal Agencies		
General Services Administration	13.2	*
Health Services Administration	.2	*
United States Postal Service	24.7	*
Veterans Administration	12.5	*
TOTALS	<u>61,320,562.1</u>	86.68

\*Less than one percent.

\*\*Total of BLM administered lands listed here differs from that on the opposite page because of compilation date differences. These figures are current as of September 30, 1979, the BLM figures on the opposite page September 30, 1980. This difference is due to the time lag in reporting of all Federal agencies.



# Public Lands in Nevada, by County as of September 30, 1980

COUNTY	PUBLIC LANDS MANAGED BY BLM*	TOTAL ACREAGE IN COUNTY	PERCENTAGE OF TOTAL ACRES MANAGED BY BLM
Carson City	42,432	97,920	43.3
Churchill	2,295,045	3,144,320	73.0
Clark	3,336,960	5,173,760	64.5
Douglas	179,116	480,640	37.3
Elko	6,798,180	10,995,840	61.8
Esmeralda	2,210,755	2,284,800	96.8
Eureka	2,021,956	2,676,480	75.5
Humboldt	4,322,071	6,210,560	69.6
Lander	3,013,071	3,597,440	83.8
Lincoln	5,723,635	6,816,000	84.0
Lyon	712,292	1,295,360	55.0
Mineral	1,693,033	2,455,680	68.9
Nye	6,704,961	11,560,960	58.0
Pershing	2,910,424	3,859,840	75.4
Storey	12,528	167,680	7.5
Washoe	2,643,314	4,229,120	62.5
White Pine	4,364,484	5,699,200	76.6
<b>TOTALS</b>	<b>48,984,257</b>	<b>70,745,600</b>	<b>69.2</b>

\*Increases in public land acreage are due to recalculations and better data, not acquisitions. Decreases are due to recalculations and land transfers.

## by BLM District

DISTRICT	TOTAL ACRES MANAGED BY BLM
Elko	7,387,692
Winnemucca	8,252,960
Carson City	5,348,931*
Ely	8,007,952
Las Vegas	10,118,006
Battle Mountain	8,401,328
Susanville	1,452,741**
Boise	55,226***
<b>TOTAL</b>	<b>49,024,836</b>

\*Includes 40,579 acres managed by Carson City District in California.

\*\*Land in Washoe and Humboldt Counties administered by the Susanville, California BLM District.

\*\*\*Land in Elko County administered by the Boise, Idaho BLM District.



## Fiscal Management

Like any other large management operation, the BLM in Nevada is responsible for collecting and paying out sizeable amounts of money. The Bureau collects money from many sources utilizing the public lands and deposits these monies in the U.S Treasury. It also pays out money appropriated by Congress for managing the lands and handles two special types of payments involving these lands.

One special payment, authorized by various federal laws, is to the State of Nevada for its share of certain receipts collected by BLM. The State receives 50 percent of all mineral leasing revenues, 12 1/2 to 50 percent of grazing revenues (the percentage depends upon the category of lands being grazed), and four percent of all revenues from sale of lands and materials.

The second special payment, authorized by a 1976 federal law, is made directly to Nevada's counties in lieu of property taxes. The purpose of the payments is to compensate the counties for the burden resulting from the tax immunity of the public lands. This "in lieu" payment is based upon a complex formula taking into account the amount of certain federal lands within the county borders, the county population, and certain federal payments made to that county.

### FISCAL OVERVIEW FY 80

Total Public Land Receipts Collected by BLM	\$26,455,081	Total Funds Paid out by BLM from the U.S. Treasury Relating to Public Land Management in Nevada	
		Direct Cost Expenditures	\$21,202,000
		Payments to State of Nevada	8,042,342
		Payments in Lieu of Taxes	5,200,468
		<b>TOTAL</b>	<b>\$34,444,810</b>

### RECEIPTS

Mineral Leases and Permits	
Oil and Gas	13,018,793
Geothermal	1,287,468
All Others	66,710
Sale of Lands and Materials	
Land	1,060,712
All Others	5,556,754
Grazing	
Section 3*	4,313,964
Section 15**	103,826
Fees and Commissions	890,919
Rights-of-Way	127,725
Rents of Land	20,544
All Others	7,666
<b>TOTAL</b>	<b>\$26,455,081</b>

\*Section 3 refers to grazing within grazing districts.

\*\*Section 15 refers to grazing outside established grazing districts.



DIRECT COST EXPENDITURES

CONSTRUCTION AND MAINTENANCE	
Range, Wildlife Habitat, Soil and Water Improvements (\$536,000 of this amount is directly from grazing fees) \$	990,000
Maintenance of Range, Wildlife Habitat, Soil and Water Improvements (\$276,000 is directly from grazing fees)	494,500
Recreation and Other Facility Construction	144,000
Road Construction and Easement Acquisition	452,000
Maintenance of Roads and Facilities	841,000
RESOURCE PROTECTION	
Fire Prevention	1,722,000
Fire Suppression	1,542,000
MANAGEMENT	
Lands and Realty	1,384,500
Energy Minerals	
Oil and Gas	344,500
Geothermal	339,000
Other	25,000
Non-Energy Minerals	462,000
Forest Management	264,500
Grazing Management	3,566,500
Wild Horse and Burro Management	1,318,000
Cultural Management	202,500
Wilderness Management	872,500
Recreation and Visual Resource Management	586,000
Soil, Air, and Water Management	2,539,500
Wildlife Habitat Management	1,209,000
Fire Management	630,000
Planning for Multiple Use	757,000
Law Enforcement	48,000
CONTRIBUTIONS AND REIMBURSABLES	468,000
TOTAL	<u>\$21,202,000</u>

PAYMENT TO STATE OF NEVADA

SOURCE	AMOUNT
Mineral Leases	\$7,186,485
Sale of Lands and Materials	264,699
Grazing	
Section 3	539,245
Section 15	51,913
TOTAL	<u>\$8,042,342</u>

PAYMENT IN LIEU OF TAXES

COUNTY	PAYMENT	COUNTY	PAYMENT	COUNTY	PAYMENT
Carson City	\$ 37,455	Esmeralda	36,100	Mineral	269,866
Churchill	409,760	Eureka	44,768	Nye	303,687
Clark	984,107	Humboldt	323,080	Pershing	143,712
Douglas	179,441	Lander	168,977	Storey	9,301
Elko	443,250	Lincoln	164,150	Washoe	982,206
		Lyon	363,738	White Pine	336,870
		TOTAL			<u>\$5,200,468</u>



## Land Use Planning

Land use planning is the backbone of every resource management program within the BLM. Because the Bureau is responsible for managing a variety of resources on a large acreage in Nevada, a multiple use planning system is critical to provide the proper balance between effective use and necessary protection of these resources.

Developing a multiple use plan takes several years of data gathering, identifying issues or conflicts, weighing alternatives, seeking public advice, and selecting the best course of use for a particular area. Once complete, the plan serves as the basic guidance for every activity taking place on the public lands.

Public laws, national policy, characteristics of the land, capability of the resources, and needs and desires of the public must all be considered in multiple use planning. Public land resource users, businesses, environmental organizations, special interest groups, and other governmental entities like state and local agencies and Indian tribes are all consulted.

The multiple use planning system has several steps to gather information and offer alternatives to the land manager who must make the land use decisions. First, the BLM, with the public's help, identifies management issues or concerns for a planning area. Needed information is gathered on each resource and conflicts are noted. Different mixes of resources and possible uses are proposed and analyzed.

Once the analysis is made and all the public's viewpoints are considered, the manager must make the land use decisions. This land use plan sets out the combination and patterns of multiple uses that are best for the area.

But once the land use plan is complete, the Bureau and interested publics continue to develop and implement activity plans which identify special on-the-ground changes, improvements, and projects. Examples are grazing allotment management plans, wildlife habitat management plans, and recreation management plans. There are also project level plans which are used to design and carry out work like fencing, spring developments, and seeding projects. All through these efforts, the public is involved in developing strategies for implementing the land use plan. This extension of public involvement in activity planning is called coordinated resource management and planning.

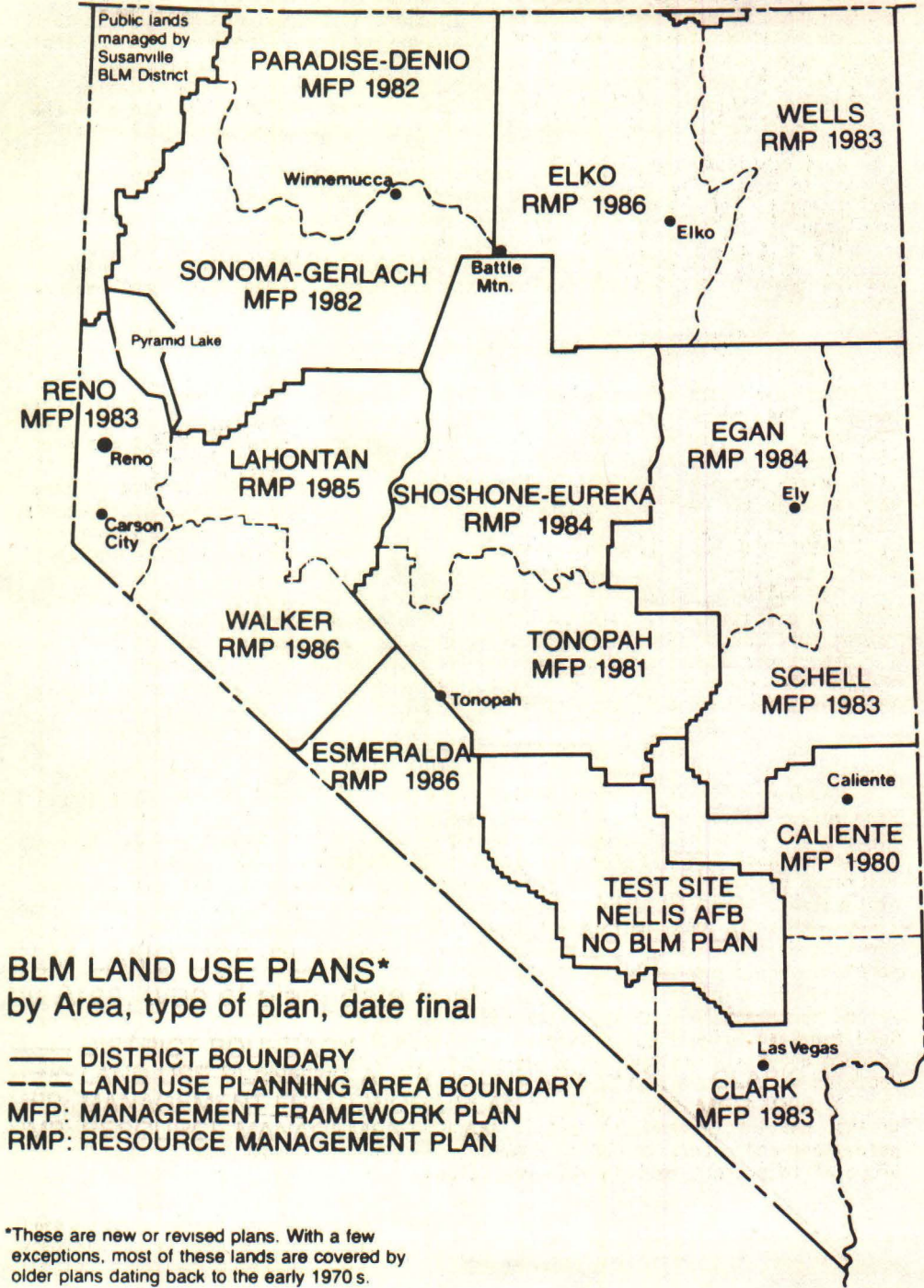
To be effective, land use plans must be updated to reflect changing public needs, resource conditions, or new national laws or policies. The Bureau's land use planning system has evolved over the past decade to reflect these changes.

Most public lands in Nevada are already covered by a land use plan. Many of these plans, however, date back to the early 1970s and changes have occurred which demand revisions. A new generation of plans are now being accomplished in Nevada, beginning with the Caliente land use plan finished in Fiscal Year 1980. Thirteen other plans are scheduled over the next decade. The map on the opposite page shows these planning areas and the key dates.

The first seven of these plans, including Caliente, are being done under a format called Management Framework Plans. The last seven will be done somewhat differently, to comply with the 1976 Federal Land Policy and Management Act which called for land use planning stressing interdisciplinary team development and more effective public involvement. These plans, called Resource Management Plans, will concentrate on issues raised by the public. Before a decision is made, these plans will be carefully analyzed through an environmental impact statement to make sure all environmental implications are recognized and considered.



Public lands managed  
by Boise BLM District



### BLM LAND USE PLANS\* by Area, type of plan, date final

- DISTRICT BOUNDARY
- LAND USE PLANNING AREA BOUNDARY
- MFP: MANAGEMENT FRAMEWORK PLAN
- RMP: RESOURCE MANAGEMENT PLAN

\*These are new or revised plans. With a few exceptions, most of these lands are covered by older plans dating back to the early 1970 s.



## Environmental Coordination

Environmental impact statements (EISs) and environmental assessments (EAs) are prepared by BLM when an activity or project is proposed on the public lands that could affect the quality of the human environment. Possible impacts that could result from allowing the activity are identified and analyzed and measures to lessen or mitigate the adverse impacts are considered. Public involvement stretches from the initial determination of what the scope of the study should be to comment on the document and its conclusions before final publication.

Once complete, the EIS or EA serves as an important guide to the land manager in making the final decision on the action or project. The environmental process ensures that informed decisions are made with full knowledge of the implications and management options available.

The difference between EISs and EAs is basically one of degree. Major actions require an EIS while actions less far-reaching and significant require an EA.

### ENVIRONMENTAL IMPACT STATEMENTS COMPLETED IN FY 80

Two major EISs were completed during fiscal year 1980 by the BLM in Nevada. The Tonopah grazing EIS, the second of 14 such statements planned, was completed in September, 1980. A decision on the grazing alternatives analyzed will be part of the final Tonopah land use plan issued about June, 1981. That plan, which considers the EIS, will be used to implement on-the-ground grazing actions over the next several years. The first grazing statement completed, covering the Caliente area, was done last year and the plan completed in fiscal year 1980. On-the-ground projects are already being started to implement that plan.

The Anaconda Nevada Moly Project EIS was written on a proposed molybdenum mine and associated transmission line for the Anaconda Copper Co. A decision making full use of the environmental process has been made on that project and a right-of-way across public lands has been granted. The BLM is continuing to monitor the construction phase of the transmission line to assure environmental safeguards identified in the EIS are satisfied.

### ENVIRONMENTAL ASSESSMENTS COMPLETED IN FY 80

The Bureau's six district offices prepared a total of 432 EAs this fiscal year on a wide variety of activities ranging from small projects such as fencing and water developments, to larger proposals such as oil and gas leasing in the Red Rock Canyon Recreation Lands near Las Vegas. That project, initiated by an application to lease portions of the area for oil and gas exploration, sparked a great deal of public debate. The Bureau did an in-depth assessment which included a great amount of public comment and concluded that portions of the area could be leased under certain conditions and that other portions should not be leased to protect scenic and recreational qualities.

Another major EA in fiscal year 1980 was done on a request by the State of Nevada to obtain land north of the Las Vegas to build a medium security prison. Need for such a facility, possible environmental impacts, and some public concern about its location were all addressed in the assessment and a suitable decision was reached that was satisfactory to all concerned.

Also this year the Department of Agriculture requested approval to control grasshopper infestations in certain areas of northern Nevada. Following the assessment and extensive public comment, modifications were made to the proposal to protect certain resource values.



# BLM Employment

The total workforce for BLM in Nevada increased by about six percent over that of fiscal year 1979. Most of this increase was in the temporary workforce, a slight increase occurred in the work-as-employed (WAE) or less than full-time workforce; the permanent full-time workforce remained stable.

A total of 14 new positions were added to the BLM's roster during fiscal year 1980. Three new range conservationists and three new park technicians topped the list in number of positions added. The range conservationists were needed to write allotment or grazing management plans and to plan and design range improvements needed on the public lands. The park technicians were needed to carry out the Bureau's increased responsibilities at the Red Rock Canyon Recreation Lands where visitor interest is expanding due to its proximity to downtown Las Vegas and the construction of a visitor center. Also added during fiscal year 1980 were positions responsible for coordinating the wild horse and burro program and BLM's response to the proposed MX missile project, both very controversial in Nevada. Other positions added involved contracting, surveying, civil engineering, water rights, and others.

## BLM NEVADA EMPLOYMENT FY 80

Office	Permanent	WAE*	Part-Time	Temporary	Totals
State Office	93	63	13	15	184
Elko	27	45	0	19	91
Winnemucca	33	20	1	9	63
Carson City	34	42	0	9	85
Ely	28	18	1	3	50
Las Vegas	36	30	0	8	74
Battle Mtn.	<u>32</u>	<u>47</u>	<u>0</u>	<u>1</u>	<u>80</u>
TOTALS	283	265	15	64	627

\*When Actually Employed, less than full-time.





## Lands and Realty Management

The lands and realty program involves three major activities: land transfers, land leases, and rights-of-way. The backbone of this effort is a sophisticated records system for keeping track of these activities on millions of acres of public lands in Nevada.

There are various federal laws which allow the transfer of public land into private ownership. Some lands are transferred for specific purposes, such as mineral development, desert land farming, and Indian allotments. Some are given free to local governments for recreation or other public purposes. Other lands are traded or exchanged for private land. Each year public lands also are sold to the highest bidder at auction. Selection of most of these lands is made through the Bureau's land use planning system. With the public's help, decisions are made about which lands can best benefit the public by staying in public ownership and which lands are more suitable for private use and development.

Highlights of land transfers in fiscal year 1980 included the direct sale of a number of unpatented mining claims and the townsite of Weed Heights, all on public lands, to the Anaconda Copper Co. The company had entered into an agreement with Lyon County to develop a low-cost housing project on the site. Land was also sold to Mineral County to allow urban expansion and to reroute traffic from downtown. Sierra Pacific Power Co. bought a 960-acre parcel at Valmy for its power generating station. Several public auctions were also held to allow private citizens to buy public land that was not needed for multiple use purposes.

Another active disposal program is made possible by the Recreation and Public Purposes Act. Through this law, local governments are able to obtain by lease or purchase public land free for uses such as schools and community projects. In fiscal year 1980, land was provided for a new state prison at Indian Springs, new and expanded sanitation facilities at Wells, additional school land for White Pine County, and a maintenance station for the Nevada Department of Transportation, to cite a few examples.

Leases are also authorized by various federal laws. These allow use of the public land for a certain period of time and sometimes include an option to buy the property through the disposal laws.

Rights-of-way involve both energy-related and non-energy related projects. Energy right-of-way typically issued in Nevada include power transmission lines such as for the Anaconda molybdenum project near Tonopah that was issued in fiscal year 1980. Other 1980 projects were the Valmy to Mira Loma powerline right-of-way for Sierra Pacific Power, and a wind generator built on public land by the Wells Rural Electric Assn.

Non-energy rights-of-way include grants to developers to build new access roads across public lands and to expand streets in urban areas. Water pipelines, communication sites, and gravel pits are other examples.

### LAND PATENTS ISSUED

KIND	NO.	FY 80	ACRES
Mineral	7		813
Desert Land	3		1,280
Unintentional Trespass	25		1,663
Public Sale	83		1,683
Recreation and Public Purposes	4		766
Exchange	3		260
Indian Allotment	6		1,287
Other	1		145
TOTALS	132		7,897



LAND LEASES IN EFFECT SEPTEMBER 30, 1980

KIND	NO.	ACRES
Recreation and Public Purposes	79	7,503
Mining Claim Occupancy	1	3
Airport	33	14,017
Small Tract	3	15
	<u>116</u>	<u>21,538</u>

RIGHTS-OF-WAY IN EFFECT SEPTEMBER 30, 1980

KIND	NO.
Communication Sites	276
Electrical Transmission	654
Federal Highway	97
Highway, Tram, Access Road	137
Material Site	347
Pipeline - Oil and Gas	37
Pipeline - Water	184
Railroad	70
Telephone - Telegraph	331
Water Reservoir or Ditch	16
	<u>2,149</u>





# Minerals Management

Mineral production on public land in Nevada involves three distinct systems: location, leasing, and material sale. Location involves minerals like gold and silver. Miners locate claims to acquire mineral rights. When a valuable deposit is found, the mining claim may be patented and title obtained to both the mineral and the surface land. Oil and gas, geothermal, coal, and other similar minerals are available through mineral leasing. Leases on tracts are issued for specific periods of time and the lessee pays a rental fee and royalties on the energy produced. Common sand, gravel, and other construction materials are available through material sales or through free use permits by governmental agencies and nonprofit organizations.

During fiscal year 1980, the deepest exploration well in Nevada's history was drilled on public land. The Mobil Oil Corp. drilled on Mormon Mesa in Clark County to test for the presence of the overthrust belt (a geologic formation favorable for oil deposits) in Nevada. The well confirmed the existence of the thrust plate, but was a dry hole at 19,564 feet. However, a possible oil discovery by Wexpro Co. near Jiggs brightened the energy picture in Nevada, but more drilling will have to be done to determine if the find is economically productive.

## MINING CLAIM RECORDATION STATUS FY 80

Total claims recorded during fiscal year 1980: 68,856  
 Total claims recorded through September 30, 1980: 157,740

## MINERAL PATENTS ISSUED DURING FY 80

Number: 7 Coverage: 13 lodes and 117 millsites Acreage: 811.523

## MINERAL LEASES AND PERMITS IN EFFECT FY 80

TYPE	NO.	ACREAGE	YEARLY RENTAL RATE
Oil and Gas Leases	8,292	13,970,742	\$12,397,809
Geothermal Leases	640	1,149,304	1,561,579
Sodium Leases/Permits	15	9,398	2,350
Potassium Leases/Permits	18	25,316	14,065
Other (silica sand and gravel)	6	2,728	100
<b>TOTALS</b>	<b>8,971</b>	<b>15,157,488</b>	<b>\$13,975,903</b>

## OIL AND GAS LEASES IN PRODUCTION FY 80

Number: 17 Location: 14 wells in Trap Springs, Nye County  
 9 wells in Eagle Springs, Nye County

Acreage: 5,722 Barrels Produced: 996,633 Royalties: \$1,856,825

## FREE USE MATERIAL TO STATE AND LOCAL GOVERNMENTS

MINERAL	NO. OF PERMITS	AMOUNT OF MATERIAL
Sand and Gravel	9	30,360 cubic yards
Common Borrow	14	313,225 cubic yards
Decomposed Granite	14	71,125 cubic yards



MINERAL MATERIAL SALES FY 80

MINERAL	AMOUNT SOLD	VALUE
Sand and Gravel	77,052 cubic yards	\$11,580
Decomposed Granite	24,839 cubic yards	8,378
Common Borrow	4,692 cubic yards	554
Top Soil	3,411 cubic yards	1,032
Road Base	561 cubic yards	115
Building Stone	4 tons	7
Special Sands	1 ton	2
TOTAL VALUE		<u>\$21,668</u>

OIL AND GAS LEASES BY COUNTY FY 80

COUNTY	OIL AND GAS LEASES	OIL AND GAS ACREAGE
Churchill	213	348,069
Clark	1,067	2,000,812
Elko	1,286	2,422,385
Esmeralda	8	6,906
Eureka	561	1,040,969
Humboldt	44	79,063
Lander	238	442,803
Lincoln	1,077	2,277,207
Lyon	5	8,384
Mineral	11	13,207
Nye	1,966	2,246,284
Pershing	58	107,735
Washoe	1	1,155
White Pine	1,757	2,975,763
TOTALS	<u>8,292</u>	<u>13,970,742</u>



## Geothermal Energy

After almost a decade of exploration, the first commercial uses of geothermal energy in Nevada are showing great promise. A dehydration plant at Brady Hot Springs and a pilot alcohol production unit at Wabuska (both on privately owned land) are encouraging commercial applications. Other alcohol production proposals are being developed for Brady Hot Springs and Crescent Valley areas. Sierra Pacific Power Co. and its partners have ordered a 10-megawatt test unit to evaluate the potential of the Steamboat Springs, Dixie Valley, and the Beowawe Known Geothermal Resource Areas for electricity generation. A target date of 1982 or 1983 has been set for engineering tests on the project.

Geothermal leasing and exploration remained brisk on Nevada's public lands in fiscal year 1980 and Nevada BLM continued to lead all other western states in number of leases issued, amounting to 45 percent of the national total.

The BLM issues two types of leases on public lands for geothermal exploration and development: non-competitive and competitive. Non-competitive leases are issued on a first-come, first-served basis for a yearly rental fee and royalties on any energy produced. Competitive leases are issued in promising areas, called Known Geothermal Resource Areas. These leases are issued by competitive auction through bonus bids. The successful lessee pays rental fees and royalties.

### GEOHERMAL LEASES ISSUED FY 80

TYPE	NUMBER OF LEASES	ACREAGE
Non-competitive	197	337,175
Competitive	10	20,419
TOTALS	<u>207</u>	<u>357,594</u>

### GEOHERMAL DRILLING ACTIVITY IN NEVADA FY 80 (on both public and private land)

Number of Holes Drilled: 9    Cumulative Footage: 55,012 feet

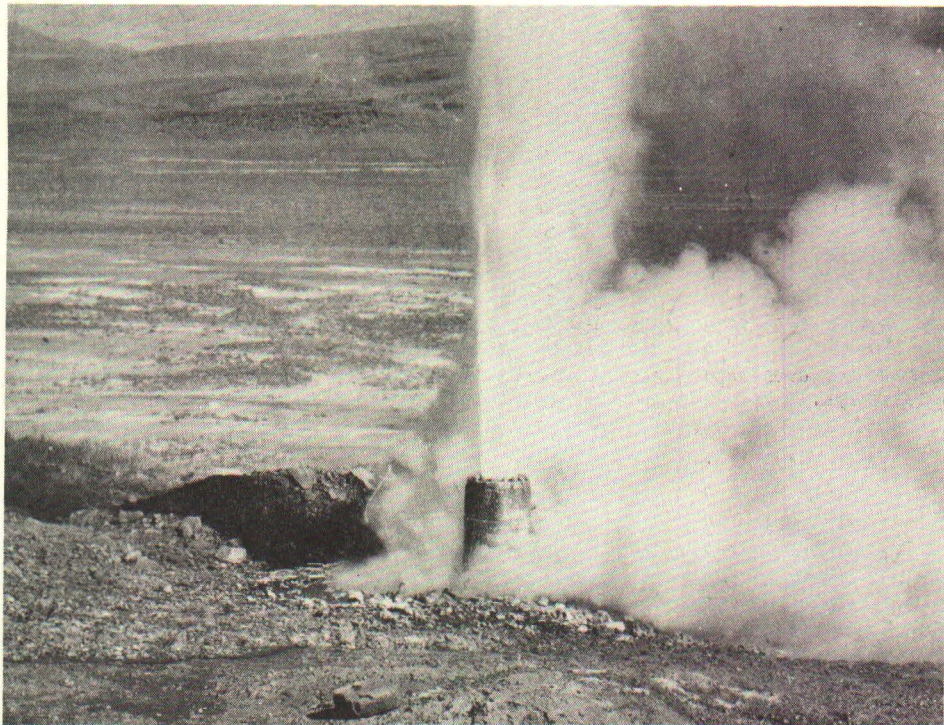
### COMPETITIVE GEOHERMAL LEASE SALES FY 80

KNOWN GEOHERMAL RESOURCE AREA SALES	NO. OF LEASES	ACREAGE LEASED	AMOUNT OF BONUS BID
Dixie Valley (Reoffer)	4	9,572	\$37,043
Darrough (Reoffer)	3	6,083	33,402
Gerlach (Reoffer)	1	2,535	22,500
San Emidio Desert (Reoffer)	1	1,980	10,435
Steamboat Springs	1	249	16,124
Elko		No bids received	
Fly Ranch, NE		No bids received	
TOTALS	<u>10</u>	<u>20,419</u>	<u>\$119,504</u>



GEOTHERMAL LEASES IN EFFECT BY COUNTY  
FY 80

COUNTY	NUMBER OF LEASES		NUMBER OF ACRES	
	Non-competitive	Competitive	Non-competitive	Competitive
Churchill	154	37	278,232	67,640
Douglas	2	-	2,192	-
Elko	18	2	28,509	3,823
Esmeralda	16	1	35,069	2,547
Eureka	12	3	11,554	6,767
Humboldt	70	7	114,033	13,512
Lander	35	4	50,330	6,359
Lincoln	4	-	6,723	-
Lyon	7	3	5,850	3,631
Mineral	11	-	20,897	-
Nye	23	4	43,368	7,395
Pershing	139	14	248,690	29,897
Storey	1	-	640	-
Washoe	20	11	21,235	17,712
White Pine	42	-	97,304	-
<b>TOTALS</b>	<b>554</b>	<b>86</b>	<b>994,626</b>	<b>159,283</b>





# Soil and Watershed Management

The long-range objectives of the watershed program are to stabilize watersheds, to protect the soils from further deterioration, and to develop or improve watershed conditions to meet specific resource needs. Typical needs include greater water quality or quantity, reduction of flood damage, and reduction of sediment. The needs will be determined by the soil, water, and vegetation inventory and analysis.

The short-range goals are accomplished through resource development and conservation programs which apply land treatments such as grass seeding, brush control, or fencing that will control or prevent soil erosion. By restoring soil productivity, other resource use values such as fish and wildlife development, livestock forage, timber production, outdoor recreation, and aesthetic values on watershed areas are enhanced. These treatments result in better water quality, renewal of ground water supplies, control of flood and sediment, protection of public health, and stabilization of local economies.

## RESOURCE DEVELOPMENT AND CONSERVATION WORK FY 80

DISTRICT	SOIL SURVEYS FY 80 (ACRES)
Elko	1,012,040
Winnemucca	448,920
Carson City	2,422,350
Ely	229,970
Las Vegas	200,000
Battle Mountain	1,513,720
TOTAL	5,827,000

## TOTAL RESOURCE DEVELOPMENT AND CONSERVATION WORK 1936 THROUGH SEPTEMBER 30, 1980

DISTRICT	BRUSH CONTROL (ACRES)	GRASS SEEDING (ACRES)	FENCING (MILES)	WATER STRUCTURE NUMBER	SOIL SURVEYS (ACRES)
Elko	70,731	182,787	2,054	565	2,814,660
Winnemucca	76,315	78,758	1,855	942	2,028,179
Carson City	25,365	21,380	1,557	929	4,457,064
Ely	16,440	22,581	1,618	352	2,462,992
Las Vegas	23,780	27,518	1,028	245	7,381,697
Battle Mtn.	19,755	109,630	921	242	4,184,810
Susanville	14,430	11,487	524	282	1,813,226
TOTALS	246,816	454,141	9,557	3,557	25,142,628*

\*Acreage includes approximately nine million acres of low intensity (Order 4) soil surveys.



# Woodland Management

The BLM is making an all-out effort to complete an extensive inventory of the forest lands it administers by 1982. This will greatly help in the management of this valuable resource. To date, about 4.2 million acres have been inventoried.

Firewood cutting on public land in fiscal year 1980 increased 64 percent over 1979. The public demand for firewood has been increasing every year since 1974 when the cost of home heating started to rise. Christmas tree cutting is also on the rise. Carson City District has sold more than 52,000 Christmas trees over the last four years. This increase has resulted in some popular areas close to cities being harvested to their full potential. New cutting areas are being established, but yuletide harvesters may have to venture further from home to reach them.

Picking pine nuts is another popular activity on the public lands. No permit is required, and a family may collect up to 20 pounds a year free. Some commercial pine nut sales are made, but first consideration on many large areas goes to Nevada's Indian tribes. For generations, pine nuts have been a major source of food for some tribes as well as a traditional part of their culture.

## SALE OF FOREST PRODUCTS

PRODUCT	FY 79		FY 80	
	NUMBER	VALUE	NUMBER	VALUE
Christmas Trees (each)				
Elko	6,096	\$ 6,096.00	7,560	\$ 7,560.00
Winnemucca	691	691.00	-	-
Carson City	16,894	16,894.00	16,428	16,428.00
Ely	6,070	6,070.00	316	316.00
Las Vegas	9,877	9,877.00	11,017	11,017.00
Battle Mountain	630	604.00	1,115	1,115.00
TOTALS	40,258	\$40,232.00	36,436	\$36,436.00
Fuelwood (cords)				
Elko	377	\$ 754.00	635	1,466.00
Winnemucca	107	214.00	203	406.00
Carson City	3,044	9,132.00	5,261	15,783.00
Ely	608	1,218.00	590	1,180.00
Las Vegas	3,312	8,169.00	5,408	14,005.00
Battle Mountain	189	378.00	430	860.00
TOTALS	7,637	\$19,865.00	12,527	\$33,700.00
Fence Posts (each)				
Elko	3,332	\$ 696.10	4,860	999.00
Winnemucca	150	30.00	758	151.60
Carson City	1,166	277.10	1,409	308.50
Ely	2,975	595.00	1,720	344.00
Las Vegas	5,741	1,213.10	8,136	1,678.80
Battle Mountain	2,471	500.20	6,516	1,443.20
TOTALS	15,835	\$ 3,311.50	23,399	4,925.10
Pinyon Nuts (pounds)				
Statewide Total	500 lb.	50.00	7,150 lb.	715.00
Other Vegetative Products				
Statewide Total		-		-
Total Value		\$63,458.50		\$75,776.10



## Wilderness

Inventorying the public lands for wilderness characteristics was a massive two-year effort by the BLM in Nevada and was mostly done by the end of fiscal year 1980. Directed by Congress to review all the public lands for wilderness consideration, the Bureau embarked on a three-phase review effort, consisting of inventory, study, and eventual reporting to Congress of the Bureau's recommendations. Congress reserved to itself the final decision on which lands will and will not become wilderness.

The first job was to inventory all the public lands to determine which lands did and did not meet the criteria Congress identified: roadless areas of 5,000 acres or more, generally in an undeveloped state having outstanding opportunities for solitude or primitive recreation. Areas with these characteristics were designated wilderness study areas; areas without these characteristics were dropped from consideration. The effort included careful field examinations and extensive public direction and involvement. The final decisions on all areas were made by the end of 1980. To give the public every opportunity to comment before the decisions were implemented, a period for protests and appeals was set. Work on areas protested and appealed will continue into fiscal year 1981. All other areas are subject to the study or land use planning phase which will be the basis for the Bureau's recommendations to Congress.

### STATUS OF THE WILDERNESS INVENTORY BY END OF FY 1980\*

Acres designated wilderness study areas	1,326,780 ( 31 units)
Acres eliminated from consideration	39,897,524 (1,539 units)
Acres under protest	6,859,456 ( 97 units)
Acres under appeal	103,285 ( 6 units)

\*Acreage does not include public lands in Nevada managed by the California or Idaho BLM offices, but does include land in California managed by Nevada BLM.





## Wildlife Habitat Management

Wildlife habitat management provides for maintenance and improvement of the components of the environment necessary for wild animals to reproduce and survive. In this effort, the BLM works closely with the Nevada Department of Wildlife and the U.S. Fish and Wildlife Service, cooperating on programs such as rating habitat conditions, sponsoring research, disseminating information to the public and other agencies, and developing habitat management plans (HMPs) which describe present conditions and identify ways to maintain or improve habitat.

So far, 45 HMPs have been completed on public lands in Nevada. Implementation work is progressing on all these plans as funding and manpower permits. The ultimate goal of the program is to have HMPs developed and implemented on all public lands in Nevada considering all species of wildlife: game and non-game, terrestrial and aquatic. The first priority for HMP development will be endangered or threatened species. There are 10 such species in Nevada: two birds and eight fish.

A major accomplishment in fiscal year 1980 was the completion of the Alkali Lake Dike in cooperation with the Nevada Department of Wildlife. This project has created about 1,700 acres of quality wetland habitat for numerous species of waterfowl, shorebirds, and non-game wildlife.

### WILDLIFE PROJECT WORK COMPLETED IN FY 80

WORK	NUMBER
Preparation of Habitat Management Plans	4
Development of water facilities (guzzlers and springs)	42
Construction of meadow protection fencing (miles)	4
Establishment of habitat monitoring studies	320
Maintenance of habitat protection fencing (miles)	4
Inventory of wildlife habitat (acres)	6,700,000





# Grazing Management

1979

The top priority of the grazing management program is to gather and provide data necessary to develop land use plans and to prepare a series of environmental impact statements on public land livestock grazing. Out of 14 statements that must be done to analyze the possible environmental impacts of this activity, two have been completed and 12 are scheduled for completion over the next eight years. The schedule for these statements follows: 1979, Caliente; 1980, Tonopah; 1981, Paradise-Denio and Sonoma-Gerlach; 1982, Clark, Schell, and Reno; 1983, Wells; 1984, Egan and Shoshone-Eureka; 1985, Lahontan; 1986, Elko and Esmeralda; and 1988, Walker. For locations of these resource areas, please refer to the planning section map.

Second priority is to issue decisions for implementation of the grazing management program following completion of the environmental impact statement and land use plan. Before official decisions to either increase or decrease livestock grazing use are issued, the BLM consults with all affected parties through the coordinated resource management and planning (CRMP) process. This is an approach for bringing various interests together such as livestock users, government agencies, wildlife and wild horse groups, environmental groups, and others to develop action plans for achieving multiple use objectives within the land use decisions, laws, and regulations. If successful, the result is a consensus and commitment of all those affected to specific courses of actions for each resource in a given area.

Third priority is to provide administration and management of this program through studies, issuance of grazing authorizations, compliance checks, and trespass action when necessary.

Another important aspect of the grazing management program is the experimental stewardship program created by Congress in 1978. The idea is to develop a program which provides incentives for livestock users to apply innovative approaches to improve range condition. The Tonopah Resource Area was chosen as Nevada's pilot area. Implementation of the stewardship effort through the CRMP process is scheduled for fiscal year 1981.

FORAGE PROVIDED AND NUMBER OF LIVESTOCK AUTHORIZED TO GRAZE ON PUBLIC LANDS  
FEE YEAR 1979\*

	NUMBER OF PERMITS LEASES	ANIMAL UNIT MONTHS**	NUMBER OF CATTLE	NUMBER OF HORSES	NUMBER SHEEP
<i>ELKO</i>	179	586,738	123,209	705	35,658
<i>W</i>	109	293,664	51,929	208	14,985
<i>C</i>	91	209,657	24,282	35	46,984
<i>E</i>	115	233,433	30,240	73	67,081
	119	150,357	18,152	158	8,545
	80	367,067	56,358	193	21,190
	693	1,840,916	304,170	1,372	194,443

\*Grazing fee year 1979 ran from March 1, 1979, to February 1, 1980.

\*\*Animal unit month is a measure of the forage needed to feed one cow or five sheep for one month.



## Range Improvements

The public rangelands in Nevada are currently producing vegetation at less than their full potential. The objective of the range improvement program is to achieve improved rangeland conditions, within the framework of multiple use management. To accomplish this objective, the timely and efficient completion of structures, development, and land treatments such as vegetative conversions are incorporated with proper grazing management to improve rangeland vegetation, condition, and forage production, as well as fish and wildlife habitat, watershed protection, livestock production, and other public land resources.

The majority of funding for this program originates from the grazing fees paid by livestock operators holding grazing leases and licenses. However, this source may be supplemented by funds appropriated under the Public Rangelands Improvement Act of 1978 or from contributions received from the livestock operators themselves.

### RANGE IMPROVEMENTS COMPLETED IN FY 80

TYPE OF IMPROVEMENT	NEW CONSTRUCTION	MAINTENANCE
Cattleguards	-	73 units
Fences	103 miles	127 units
Land Treatment	-	1,200 acres
Water Facilities	14 units	89 units





## Wild Horse and Burro Management

This program was created with passage of the Wild, Free-roaming Horse and Burro Act on December 15, 1971. This federal law provides for the protection, management, and control of all wild horses and burros on lands administered by the BLM and the U.S. Forest Service.

Nationally, 55,400 wild horses and 12,400 wild burros inhabit these lands. The bulk (52,400 horses and 12,200 burros) live on public lands administered by the BLM in 10 western states. Nevada's share, which includes most of the wild horses, is outlined below.

### WILD FREE-ROAMING HORSES AND BURROS IN NEVADA - FY 80

DISTRICT	HORSES	BURROS
Elko	1,164	-
Winnemucca	9,949	241
Carson City	5,290	250
Ely	1,697	-
Las Vegas	8,200	1,250
Battle Mountain	<u>6,033</u>	<u>-</u>
TOTALS	32,333	1,741

The BLM's goal is to provide uniform and effective direction for the management of these animals on public lands and to establish a natural ecological balance to benefit wild horses and burros and all other users of these lands. To accomplish this goal, BLM is required to determine the optimum number of wild horses and burros to be managed and to reserve sufficient forage to satisfy the biological requirements of the animals. In fiscal year 1980, optimum numbers of wild horses and burros were determined in the Caliente Resource Area of the Las Vegas District, the first of 14 plans to be completed statewide (see schedule on planning section map).

The BLM is authorized by law to round up and remove wild horses and burros when their numbers exceed the optimum grazing capacity. The total removed in fiscal year 1980 is noted below.

### ROUND UPS COMPLETED - FY 80

DISTRICT	GATHERING AREA	HORSES GATHERED
Elko/Ely	Antelope Valley/	
	Ferber Flats	711
Winnemucca	Buffalo Hills	39
	Soldier Meadows	1,034
	Fox Range	312
	East Range	371
	West Humboldt	239
Carson City	Pine Nuts	56
Ely	Buck/Bald Mountain	489
Las Vegas	Caliente	242
Battle Mountain	Fish Creek	688
	Reveille	95
	Total	<u>4,276</u>





After a round up, excess wild horses are transported to a Bureau placement center for handling. There, the animals are carefully checked, given necessary veterinary care, inoculated, and branded with a permanent identification code. Sometimes, a few animals are turned back onto the range because of age or temperament; some are found to be branded and privately owned and are turned over to the State of Nevada for handling; and some either die from natural causes or are humanely destroyed as ordered by a veterinarian because of certain illnesses or infirmities. The large majority are adopted under the Bureau's Adopt-a-Horse program, either from the Nevada facility at Palomino Valley near Sparks or from one of the Bureau's adoption centers in other states.

#### DISPOSITION OF EXCESS ANIMALS - FY 80

<u>No. Adopted/Location of Adoption Center</u>	<u>Turned Back to Range</u>	<u>Branded/Private</u>	<u>Died or Humanely Destroyed</u>	<u>Balance Remaining at Palomino Valley End of Fiscal Year</u>
1,296 Nevada	36	80	229	382
687 Texas				
580 Tennessee				
489 Utah				
223 Washington				
125 Oregon				
101 California				
48 Colorado				
<u>3,549 Total</u>				



## Cultural Resources Management

The objectives of the cultural resources program are to discover and preserve prehistoric, historic, and Indian sites for scientific, cultural, and religious use by present and future generations. The Bureau's cultural resource management program includes inventory, protection or stabilization, and interpretation of these pieces of the past.

Inventory and protection activities are implemented through performance of professional level clearances on all Bureau actions or authorized actions that may have a potentially adverse effect on known or previously undiscovered cultural resources. Through various interpretive and public awareness activities such as signing, construction of interpretive trails, and publications, the BLM is taking a positive step toward increasing public appreciation of the remains of our western heritage.

Through the project clearance surveys outlined below and general inventory work, a number of interesting finds were made on public lands in fiscal year 1980: a hunting blind associated with petroglyph (Indian rock art) panels in the Winnemucca area; the remains of five Indian wickiups in the central part of the state; and a cache of numerous partially manufactured stone artifacts south of Carson City.

Field studies performed in fiscal year 1980 included test excavations at the Bird Springs site south of Las Vegas and the Summit Twin Springs site in northwestern Nevada, both large prehistoric campsites. The studies were undertaken to determine the scientific and educational values still present so that adequate protective measures could be planned. A regional inventory for cultural resources was also conducted northeast of Las Vegas to identify the types and locations of sites that may be found in a potentially valuable oil and gas producing part of the state.

In the protection and stabilization area, the Carson City District completed a collaborative project at Hidden Cave in western Nevada during fiscal year 1980. The field work and analysis of the valuable site were undertaken by the American Museum of Natural History (AMNH) which contributed funding for the effort. The Nevada State Historic Preservation Office also contributed funds. The AMNH is currently analyzing the findings and plans to publish a report for the general public in the near future. A permanent display in the Churchill County Museum in Fallon about Hidden Cave is also planned.

In the interpretive part of the program, four publications were produced during fiscal year 1980 describing BLM's cultural resources work: Artifact Assemblages from the Pahrnanagat, Lincoln County; Test Excavations at Painted Cave, Pershing County; Emigrant Trails in the Black Rock Desert; and the Pony Express in Central Nevada.

### CULTURAL RESOURCE INVENTORY

	WORK DONE IN FY 80	TOTAL THROUGH FY 80
Class 3 (Intensively Assessed Acres)	61,788	250,254
Class 2* (Extensively Assessed Acres)	120,082	621,271

\*Class 3 acres are also included in Class 2 figures.



PROTECTION, STABILIZATION, AND INTERPRETATION PROJECTS

ACTIVITY	FY 80	TOTAL THROUGH FY 80
Positive Protection Signing	3	22
Research Excavations	1	9
Interpretive Schemes	1	3
Fencing	2	24
Stabilization	0	3
Irregular Patrol and Maintenance	4*	58
Regular Patrol and Maintenance	0	12
Protective Withdrawals	0	4
Technical Publications	4	7

\*Number of additions





## Recreation Management

The highlight of fiscal year 1980 in the BLM's recreation program was the beginning of work on the Red Rock Canyon Recreation Lands Visitor Center near Las Vegas. As one part of an overall management plan for this highly popular recreation area, the visitor center will contain interpretive displays to help visitors understand and appreciate the beautiful and fragile desert environment that exists there. Construction is expected to be complete and interpretive materials installed in time for a summer 1981 opening. That opening will culminate almost 14 years of close cooperation by the BLM, the Nevada Division of State Parks, and the public in the management and development of this unique site.

Other interagency cooperative efforts in fiscal year 1980 included the BLM's assistance to the Heritage Conservation and Recreation Service on inventories directed by the Wild and Scenic Rivers Act and the National Trail Systems Act. BLM also cooperated in the Nevada Division of State Parks' update of its Statewide Comprehensive Outdoor Recreation Plan.

Designation of public lands for off-road vehicle (ORV) use and inventory of recreation potential for consideration in the BLM's land use planning system were also major recreation efforts during the fiscal year. ORV designations are a long-term effort to comply with two Presidential orders to protect areas of the public lands, promote safety, and minimize conflicts between users relating to ORV use. Fiscal year 1980 was the first year public lands in Nevada were designated as either open, closed, or limited to ORV use. All public lands in Nevada will be designated by 1989. The designation will be developed through the land use planning system which encourages public participation in making these important choices.

Recreation inventories are also part of the land use planning system. Recreation opportunities are identified on the public lands and evaluated for the particular area under study. These opportunities are then considered in the multiple use context of the area and public input is sought to determine the best combination of uses possible. Where a highly desirable recreation opportunity is identified, the land involved may be designated a recreation management area and special management consideration is given to its recreation potential. The Bureau currently has 37 such areas in Nevada, covering about 1.2 million acres. The importance of these areas is demonstrated by the fact that more than 550,000 visitor/days were spent enjoying these areas during fiscal year 1980. Some of the most popular areas were Red Rock Canyon and the Las Vegas Dunes in the Las Vegas District and Indian Creek and Walker Lake in the Carson City District.

Campgrounds are also popular recreation spots and the Bureau currently maintains nine developed sites in Nevada. Details on these sites follow:

### BLM DEVELOPED RECREATION SITES

DISTRICT	NAME OF SITE	NUMBER OF UNITS	OVERNIGHT FEE
Elko	*Ruby Marsh	35	\$2.00
	*North Wildhorse	12	\$2.00
Carson City	Sportsman's Beach	17	-
	Tamarack Point	20	-
	*Indian Creek (California)	30	tent site \$2.00 vehicle site \$3.00
Las Vegas	Willow Creek	16	-
	Cold Creek	6	-
	Willow Spring (Day use only)	19	-
Battle Mountain	Hickison Petroglyph	21	-

\*Water suitable for drinking



ORV DESIGNATION FY 80

DISTRICT	AREA	ACREAGE OPEN	CLOSED	LIMITED
Battle Mountain	Tonopah Resource Area	3,702,000	0	48,000

RECREATION INVENTORIES FY 80

DISTRICT	AREA	ACREAGE INVENTORIED
Elko	Wells	4,141,000
Carson City	Reno	681,000
Ely	Schell	3,314,000
TOTAL		<u>8,136,000</u>





# Fire Management

The fire management program includes the following activities: fire prevention, presuppression, suppression, and the use of fire as a resource management tool. These activities are integrated with the land use planning process to ensure that fire use and fire control actions are compatible with the involved ecosystems and other management actions.

During fiscal year 1980, fire prevention activities were conducted in all Nevada BLM districts with emphasis on cooperation with the Nevada Division of Forestry and the U.S. Forest Service. Activities included public education through presentations at local schools and distribution of Combined Forest Fire Prevention (Smoky Bear) posters, signs, and educational materials. Contact was made with recreationists, campers, ranchers, and other users of the public lands to explain local burning policies and procedures. During 1979, man-caused fires represented 52 percent of public land fires. During 1980, that figure was reduced to 37 percent as a result of cooperative prevention efforts.

Most of Nevada BLM fire control or suppression actions occur between May 15 and October 31. BLM district organizations initiate fire control actions. The districts' fire dispatch offices coordinate, through an extensive communication system, the use of pumper trucks, hand line crews, helicopters, and retardant bombers. Electronic technology such as the magnetic lightning detection system is also employed.

## FIRE ACTIONS DURING CALENDAR YEAR 1980

DISTRICT	NUMBER OF FIRE ACTIONS			TOTALS	ACRES BURNED		
	9 ACRES OR LESS	10-99 ACRES	MORE THAN 100 ACRES		BLM	OTHER OWNER-SHIP	TOTALS
Elko	33	4	4	41	2,375	3,130	5,505
Winnemucca	36	3	2	41	2,567	866	3,433
Carson City	74	1	5	80	64	294	358
Ely	95	3	-	98	63	20	83
Las Vegas	185	14	28	227	63,901	2,455	66,356
Battle Mtn.	19	-	1	20	265	4	269
TOTALS	442	25	40	507	69,235	6,769	76,004
Percentage	87	5	8	100	91	9	100





Use of fire as a resource management tool is called prescribed burning. Under carefully controlled conditions, the BLM initiates fires in some areas to help meet identified resource objectives.

#### PREScribed BURNS DURING CALENDAR YEAR 1980

District	Purpose	Acres Burned
Las Vegas	Wildlife project maintenance	600
	Range project maintenance	1,570
Ely	Rate-of-spread study*	12
Elko	Rate-of-spread study*	3
TOTAL		2,190

\*The rate-of-spread study has two purposes: 1) to obtain field verification of fire behavior prediction models, and 2) to study fire effects on plant species. The project will continue in 1981.

## Fire Rehabilitation

Immediately after a wildfire on the public lands is contained by BLM firefighters, other resource specialists begin evaluating the area to see if it has the potential to be rehabilitated and if the rehabilitation is cost-effective or necessary to meet resource objectives. The Bureau considers fire rehabilitation an emergency measure, second only to suppression of the wildfire and protection of life and property from flood or other natural disasters that can follow wildfires.

The goals of the BLM's fire rehabilitation efforts are to minimize the loss of soil and productivity, loss of water control and deterioration of water quality, and damage to property on or near the burned area.

The decision on whether or not to attempt rehabilitation is based upon a thorough but expeditious environmental assessment of the area. In some cases the assessment may indicate that rehabilitation efforts are not necessary and could be even more damaging to the area than the fire; in other cases the Bureau begins planning the seeding or construction efforts within 30 days after the fire is controlled. Actual rehabilitation work commences no more than 90 days after the fire.

#### TOTAL FIRE REHABILITATION COMPLETED ON PUBLIC LANDS AS OF SEPTEMBER 30, 1980

DISTRICT	SEEDING (ACRES)	FENCE CONSTRUCTION (MILES)	FENCE MAINTENANCE (MILLS)
Elko	203,780	57	53
Winnemucca	6,600	28	-
Carson City	17,543	13	32
Ely	14,350	29	-
Las Vegas	1,150	4	-
Battle Mtn.	400	3	-
TOTALS	243,823	144	85



## Youth Conservation Corps

The Youth Conservation Corps (YCC) is a summer employment program for youths between the ages of 15 and 18 years old. The program was created by Congress in 1970 to help develop and maintain the natural resources of the United States while providing work in the "healthful outdoors atmosphere" of the public, forest, and park lands. An additional goal is to provide our youth with the opportunity to understand and appreciate the nation's natural environment and heritage.

The Bureau in Nevada had two YCC camps in operation in fiscal year 1980. Both were extremely successful in achieving the program goals and accomplishing a wide variety of conservation projects on the public lands.



### YCC PROGRAM ACCOMPLISHMENTS - FY 80

Camp: Carson City No. of Corpsmembers: 16 Total Value of Work: \$23,907

Wildlife habitat improvement	9 projects	\$5,924
Fence construction/maintenance	4,000 feet	5,761
Seedlings planted	4,859 acres	5,564
Trail maintenance	6,000 feet	3,688
Recreation site development	1 project	2,970

Camp: Tonopah No. of Corpsmembers: 7 Total Value of Work: \$16,240

Fence construction/maintenance	20,976 feet	\$3,850
Stream stabilization	11 acres	3,460
Landscaping	5 acres	2,170
Erosion control	7 projects	2,000
Recreation site improvement	8 units	1,950
Wildlife habitat improvement	21 projects	1,900
Trail maintenance	2 feet	660
Community service (graveyard maintenance)	1 project	250



## Young Adult Conservation Corps

Since the inception of the Young Adult Conservation Corps in July, 1977, the Bureau has come to highly appreciate the contributions of these young people in helping to conserve our environment. The main objectives of the program are to help teach young adults between the ages of 16 and 23 years of age work ethics and provide practical work experience that can help them to obtain permanent jobs with industry or government after their year with YACC.

These young employees are helping BLM to meet its work objectives while they carve a future for themselves. Some major examples of their work in fiscal year 1980 were helping to construct recreational facilities, wildlife improvements, and fences on the public lands. A considerable amount of work is being accomplished which directly benefits local communities in Nevada, such as landscaping of city parks and school yards. The four BLM YACC camps completed work valued at more than \$1.1 million this fiscal year.

### YOUNG ADULT CONSERVATION CORPS PROGRAM ACCOMPLISHMENTS FY 80

Camp: Carson City No. of Corpsmembers: 26 Total Value of Work: \$262,478

Fence construction/maintenance	58,838 feet	\$92,055
Wildlife improvements	4 projects	75,621
Camp construction/maintenance	16 projects	32,245
Landscaping	87 acres	22,975
Administrative and other support	--	22,813
Misc. resource work	--	16,769

Camp: Ely No. of Corpsmembers: 38 Total Value of Work: \$207,873

Fence construction/maintenance	691,988 feet	\$59,893
Community improvements	22 projects	18,585
Camp construction/maintenance	16 projects	4,788
Wildlife improvements	2 projects	1,306
Administrative and other support	--	91,201
Misc. resource work	--	32,100

Camp: Las Vegas No. of Corpsmembers: 80 Total Value of Work: \$619,346

Recreation developments (primarily Red Rock Canyon Visitor Center)	4 projects	\$72,288
Community improvements	11 projects	48,641
Camp construction/maintenance	7 projects	20,971
Fence construction/maintenance	134,715 feet	72,697
Wildlife improvements	2 projects	1,511
Administrative and other support	--	231,408
Misc. resource work	--	171,830

Camp: Reno No. of Corpsmembers: 6 Total Value of Work: \$ 51,418

Administrative and other support	--	\$51,418
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## Cadastral Survey

Cadastral surveys are the official government surveys of public lands and are conducted by the cadastral survey branch in each BLM state office. These surveys are fundamental to the proper development and effective administration of the public lands. In Nevada, this program was initiated in 1861.

About 29 million acres surveyed prior to 1910 are in need of resurvey because of little remaining evidence of the original corner monuments placed at that time. About 19 million acres are unsurveyed.

Immediate goals of the program are to accomplish surveys necessary to provide descriptions for land disposals including desert land entries, sales, exchanges, and mineral patents, and to define the boundaries of public lands in areas of intermingled public and private ownership patterns so the public lands can be properly managed.

During fiscal year 1980, four BLM survey crews surveyed section lines enclosing 327,503 acres. A summary of other survey statistics is outlined below:

### SURVEY STATUS

Item	FY 79	FY 80
Acres surveyed	15,295	11,545
Acres resurveyed	242,295	315,959
Acres unsurveyed	18,783,270	18,771,725
Minerals surveyed	1*	3**
Plats accepted	10	52
Acres surveyed to present	51,500,560***	51,512,105***

\*One survey consisting of 38 claims.

\*\*Three surveys consisting of 54 claims.

\*\*\*Total includes all rectangular surveys in Nevada, including public, State, and private lands.





## Buildings and Facilities

### CONSTRUCTION AND MAINTENANCE

During fiscal year 1980, a \$1.1 million contract for construction of the Red Rock Canyon Recreation Lands visitor center was awarded and work started. The visitor center, covering 7,000 square feet, should be completed in the spring of 1981. Site and landscaping work will follow. Public opening of the center is anticipated in the summer of 1981.

A 1,400 square foot modular office/headquarters was completed this fiscal year at the Doyle, California, BLM fire station which is operated by the Carson City District.

The Bureau spent \$512,000 in fiscal year 1980 to perform routine maintenance on buildings and recreation facilities in Nevada. Of that amount, \$202,000 were spent on building maintenance and \$310,000 on recreation facilities.



## Roads

### CONSTRUCTION AND MAINTENANCE

The BLM's current inventoried road system in Nevada covers 9,400 miles. During fiscal year 1980 about 1,620 miles were maintained at a cost of \$230,000. No road construction was planned or completed by BLM in Nevada during this fiscal year. Details on this effort by district are outlined below.

EXISTING MILES BY DISTRICT FY 80		MILES MAINTAINED IN FY 80
Elko	2,400	120
Winnemucca	1,250	420
Carson City	850	400
Ely	1,550	310
Las Vegas	1,400	222
Battle Mountain	1,950	148
TOTALS	<u>9,400</u>	<u>1,620</u>





As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U.S. administration.