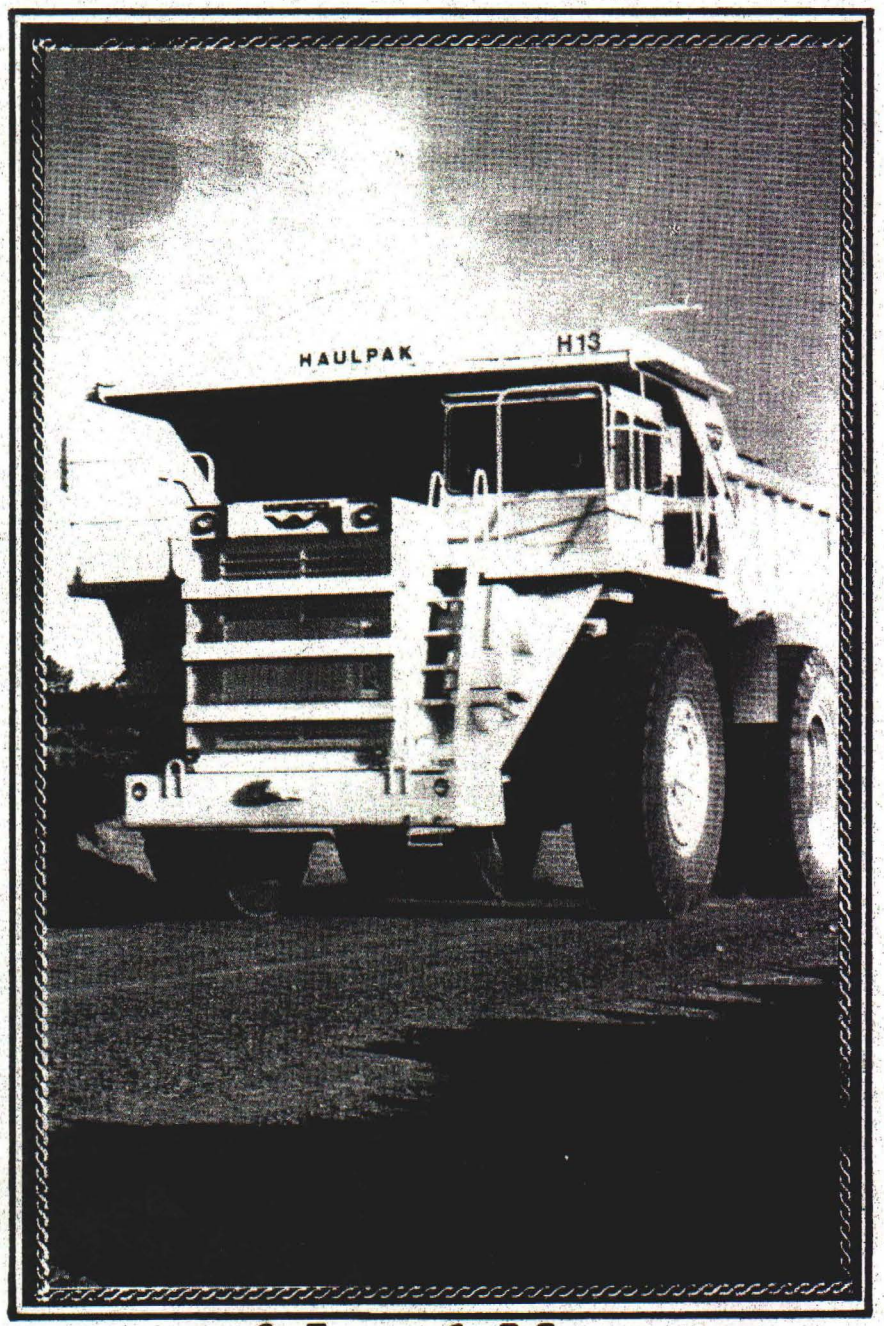
NEVADA
PROGRESS REPORT
1983

83



Bureau of Land Management

United States Department of the Interior

BUREAU OF LAND MANAGEMENT

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

Minerals have always played a major role in the Silver State. Gold and the Comstock Lode bring images of the lone prospector and of the Virginia City miner. Today, minerals continue to be vital in Nevada's economy, but the definition of "minerals" has changed.

New technology and demands for different types of minerals have largely replaced the solitary prospector. Energy demands have shifted interest to oil and gas development and the potential of geothermal resources. However, the headlines in Nevada still read "Big gold, silver deposit discovered."

The Bureau of Land Management (BLM) is charged with assuring that Federal lands are developed in a manner that will not unduly hinder mining activities, but will see that activities are conducted so as to prevent unnecessary or undue degradation.

To meet these responsibilities, in fiscal year 1983 the BLM effected an internal reorganization to offer onestop leasing, permitting and information. The streamlining of mineral leases and lease administration also eliminated duplication of efforts performed by the Minerals Management Service. With Nevada being first in the Nation in the production of gold, barite, magnesite and mercury, with the production of oil at six sites, and with a renewed interest in geothermal, BLM can look forward to even more mining involvement in future years.

As exciting as the changes in BLM's minerals program have been, it is only one facet of the Bureau. For example, in the lands and realty program, 12 Nevada counties received lands for community expansion or associated services. Most Nevada BLM districts also offered lands for sale in fiscal year 1983.

In southwest Nevada, a change was made to better serve the public and to enhance administrative responsibility. That was the transfer of the Esmeralda planning unit from the Las Vegas District to the Tonopah Resource Area of the Battle Mountain District.

Cultural resources personnel concluded a joint study of the Cortez Mining District with the University of Nevada. Four major proposals for mining or power lead to broad regional archaeological surveys and assessments.

Recreational cooperative agreements with the State of Nevada were signed for Red Rock Canyon Recreation Lands near Las Vegas and the Wildhorse area near Elko. Another activity which is an avocation for many Nevadans, pine nut gathering, saw twice the commercial sales of the previous year.

Through habitat management and identification, BLM cooperated with the Nevada Division of Wildlife in reintroducing bighorn sheep in two mountain ranges and supplementing their numbers in other areas.

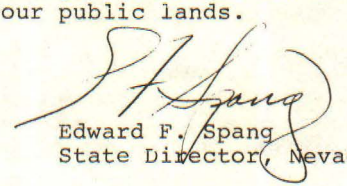
The rangeland management program saw advancements in 1983 in on-the-ground installation of range improvements and in the advancement of plans which look at future grazing actions. Planning documents were completed, proposed in draft, or initiated in 13 areas. These plans usually include wilderness proposals, and wilderness technical reports were issued concurrently with documents.

Wilderness studies are now underway in all Nevada districts. Some recommendations with public comments are being forwarded to the Secretary of the Interior. The President and Congress will now be involved in possible wilderness designation.

Fire fighting was a major concern for BLM in 1983. The number of fires increased from 375 in 1982 to 435 in 1983. Acreage burned rose from 12,600 to 73,325. A wet spring resulted in grass and sagebrush fuel.

With this diversity of activity in Nevada, BLM continues to seek public awareness and involvement in administration of the public lands. Review of plans, projects and regulations is encouraged, and the participation of citizens on local advisory councils, Grazing Advisory Boards or Coordinated Resource Management and Planning groups is appreciated.

This publication can familiarize you with activities on your public lands. You are encouraged to become involved with and follow the management of your public lands.

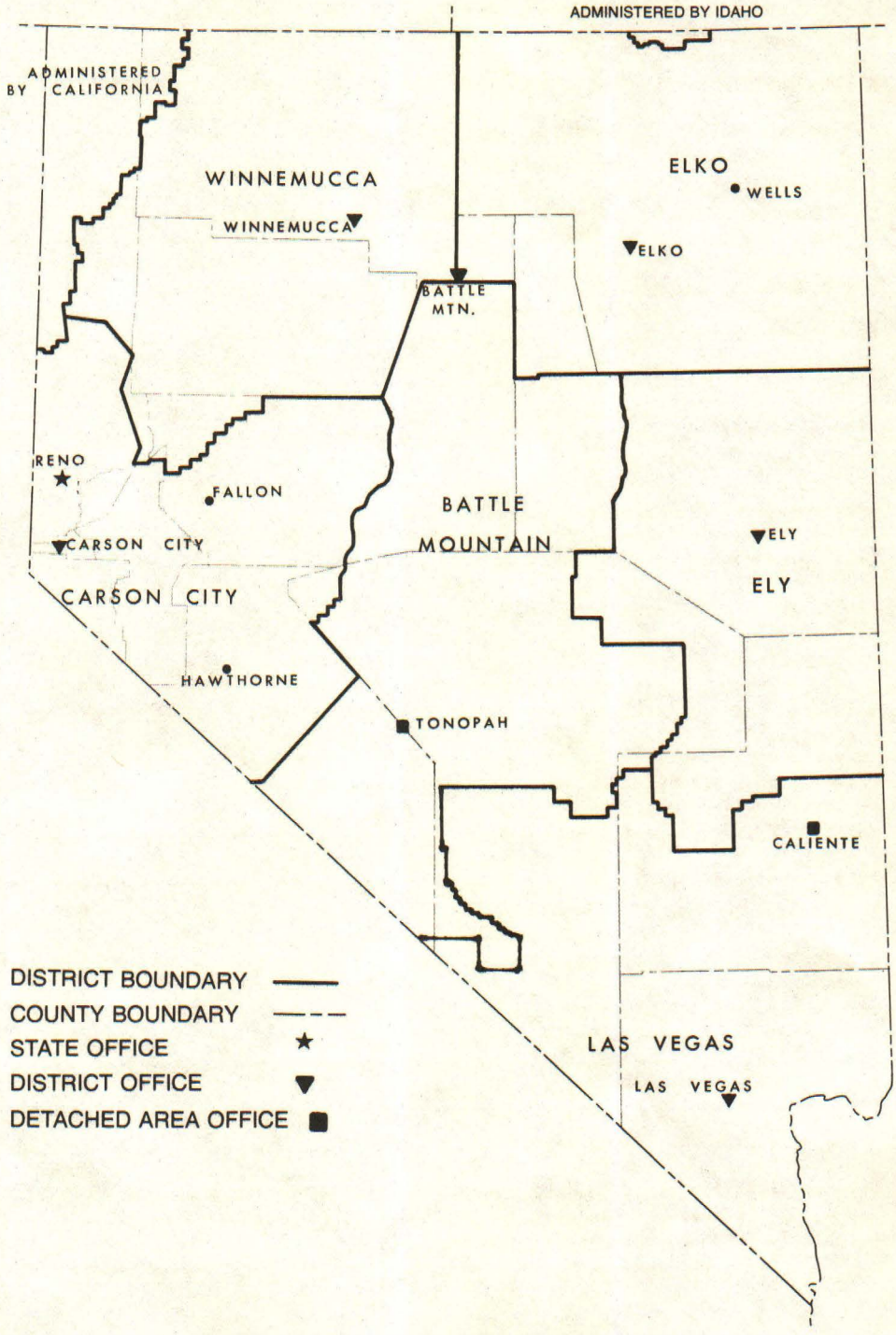


Edward F. Spang
State Director, Nevada

Table of Contents

This booklet contains information and statistics about the Bureau of Land Management in Nevada. Fiscal Year 1983 covers the 12-month period from October 1, 1982 to September 30, 1983.

Produced by Public Affairs, Nevada State Office


ADMINISTERED BY IDAHO
ADMINISTERED BY CALIFORNIA
WINNEMUCCA
WINNEMUCCA
ELKO
WELLS
ELKO
BATTLE MTN.
RENO
FALLON
CARSON CITY
CARSON CITY
BATTLE MOUNTAIN
ELY
ELY
HAWTHORNE
TONOPAH
CALIENTE
LAS VEGAS
LAS VEGAS
DISTRICT BOUNDARY
COUNTY BOUNDARY
STATE OFFICE
DISTRICT OFFICE
DETACHED AREA OFFICE

Nevada BLM Organization

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	Edward Spang	784-5451
Associate State Director	Roger McCormack	784-5451
Secretary	Carol Hadley	784-5452
Equal Employment Opportunity Specialist	William Moon	784-5773

PUBLIC AFFAIRS STAFF

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

Chief, Public Affairs Staff	Bob Stewart	784-5311
Secretary	Marie Bresch	
Public Affairs Specialist	Bob Goodman	
Public Affairs Specialist	Maxine Shane	

DIVISION OF RESOURCES

Primarily responsible for program and policy direction in: lands and realty; forestry; range management; wild horse and burros; cultural resources; wilderness; recreation; visual resources; soil, water and air; wildlife habitat programs; land use planning and environmental assessment programs. Fire ecology and inventory coordination matters are also handled within the organization.

Deputy State Director and Chief, Division of Lands and Renewable Resources	Ed Evatz	784-5455
Secretary	Virginia McClure	
Chief, Biological Resources	Les Sweeney	
Range Management	Brad Hines	
Fisheries and Forestry	Osborne Casey	
Hydrologist	Dick Jewell	
Soils, Watershed	Jerry Harman	
Wild Horses and Burros	Milt Frei	
Wildlife	Dave Goicoechea	
Chief, Lands, and Recreation	Bob Foster	784-5748
Archaeology	Richard Hanes	
Lands and Realty	Mike Moran	
Recreation	Steve Smith	
Wilderness	Dave Harmon	
Chief, Planning and Environmental Staff	Stuart Gearhart	784-5448
Policy Analyst	Jack Seley	
Regional Planner	Mike Jackson	
Regional Economist	Paul Myers	
Sociologist	Bert Bresch	
Environmental Coordinator	Ed Tilzey	

DIVISION OF MINERAL RESOURCES

Provides direction for programs in leasable, salable and locatable mineral resources, including non-energy (gold, silver, barite, etc.) and energy (oil, gas, geothermal) minerals. This includes leadership in such areas as exploration and production including environmental and surface protection; inspection and enforcement of mineral leases; mining law administration; mineral material sales; and acquisition of geologic data.

Deputy State Director and Chief, Division of Mineral Resources	Tom Leshendok	784-5676
Secretary	Helen Doeding	
Petroleum Engineer	Ellis Hammett	
Geologists	Jack Crowley	
	Doug Koza	
	Norm Melvin	
	Larry Steward	
Physical Scientist	Richard Hoops	
Mining Engineer	Galo Silva	
Petroleum Engineering Technician, Ely	John Stout	289-4865

DIVISION OF OPERATIONS

Provides technical support as well as develops and advises programs in engineering design and construction; cartography; cadastral survey; fire control; trespass; improvement maintenance; access, land and mineral appraisal; lands and minerals operations.

Deputy State Director and Chief, Division of Operations	Bill Malencik	784-5281
Secretary, Acting	Kathy Wiegard	784-5282
Chief, Appraisal Staff	Charles Hancock	784-5474
Chief, Cadastral Survey	Lacel Bland	784-5484
Chief, Engineering	John Trimmer	784-5275
Civil Engineer	Jack Sorensen	784-5275
Cartography Supervisor, Acting	Steve Rasmussen	784-5731
Chief, Lands & Minerals	Dick Morrison	784-5703
Lands Transactions	Ken Stowers	784-5703
Minerals Transactions	Jody Woodin	784-5703
Accounts	Elaine Long	784-5432
Mining Claims, Acting	Elaine Guenaga	784-5751
Dockets	Atanda Clinger	784-5445
Public Contact	Pam Reynolds	784-5496
Titles and Records	Donita Parker	784-5487
Chief, Law Enforcement	Len Sims	784-5683
Chief, Branch of Protection	Al Dunton	784-5100

DIVISION OF ADMINISTRATION

Provides administrative and non-technical support for personnel, incentive awards, budget analysis, procurement, property management, organizational planning, management systems, training, office services, information services, central records and equal opportunity employment.

Deputy State Director, Administration	Mel Bunch	784-5491
Secretary	Sally Morrin	784-5491
Budget Officer	Fredrick Ramstad	784-5187

Chief, Administrative Services	Castulo Martinez	784-5791
Procurement	Bonnie Johnson	784-5494
Library	Patsy McDuffie	784-5196
Printing, Reproduction	Calvin Robinson	784-5746
Word Processing	Teena Fredianelli	784-5498
Chief, Information Services	Dennis Anderson	784-5493
ADP	Georgia Wells	784-5216
Telecommunications	Lee Hone	784-5218
Chief, Personnel Management	Delbert Estey	784-5881
Personnel Staffing	Faye Anderson	784-5881
Classification	Iluminado Gentolizo	784-5881
Training	John Chappell	784-5881
Employee Relations	Ronald Banegas	784-5881

BLM DISTRICT OFFICES

Elko District Office — 738-4071
P.O. Box 831, 2002 Idaho Street
Elko, Nevada 89801

District Manager	Rod Harris
Elko Resource Area Manager	Tim Hartzell
Wells Resource Area Manager	Charles Boyer
Chief, Division of Resource Management	Merle Good
Planning and Environmental Coordination Contact	Cheryl Jacobs
Chief, Division of Operations	Jesse Dingman
Chief, Division of Administration	Michele Good

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

District Manager	Frank Shields
Paradise-Denio Resource Area Manager	David Griggs
Sonoma-Gerlach Resource Area Manager	Gerald Brandvold
Chief, Division of Resource Management	Bob Neary
Planning and Environmental Contact	Gerald Moritz
Chief, Division of Operations	Les Boni
Chief, Division of Administration	Jeannette Ugaldea

Carson City District Office — 882-1631
Suite 335, Capitol Plaza
1050 East William Street
Carson City, Nevada 89701

District Manager	Tom Owen
Associate District Manager	Jim Elliott
Lahontan Resource Area Manager	Mike Phillips
Walker Resource Area Manager	John Matthiessen
Division of Wild Horse and Burro Operations	Don Pomi
Chief, Division of Resource Management	Norm Murray
Chief, Planning and Environmental Assistance	Rudy Reimold
Chief, Division of Operations	Kelly Madigan
Chief, Division of Administration	John Lukasko

Ely District Office — 289-4865
Star Route 5, Box 1
Ely, Nevada 89301

District Manager	Merrill DeSpain
Egan Resource Area Manager	Howard Hedrick
Schell Resource Area Manager	Wayne Lowman
Chief, Division of Resource Management	George Cropper
Planning and Environmental Coordination Contact	Steve Rynas
Chief, Division of Operations	Duncan MacDonald
Chief, Division of Administration, Acting	Mary Lou Wilcox

Las Vegas District Office — 385-6403
4765 W. Vegas Drive
P.O. Box 26569
Las Vegas, Nevada 89126

Detached Area Office — 726-3141
Caliente Resource Area
P.O. Box 237
Caliente, Nevada 89008

District Manager	Kemp Conn
Associate District Manager	William Calkins
Stateline Resource Area Manager	Bill Civish
Caliente-Virgin Valley Resource Area Manager	Cub Wolfe
Chief, Division of Resource Management, Acting	Dave Pulliam
Planning and Environmental Contact	Frank Maxwell
Chief, Division of Operations	Tom Combs
Chief, Division of Administration	George Graphenreed

Battle Mountain District Office
N. 2nd and Scott Streets
P.O. Box 1420
Battle Mountain, Nevada 89820

635-5181

Detached Area Office
Tonopah Resource Area
P.O. Box 911
Tonopah, Nevada 89049

482-6214

District Manager	H. James Fox
Shoshone-Eureka Resource Area Manager	Neil Talbot
Tonopah Resource Area Manager	Les Monroe
Chief, Division of Resources	Mike Mitchel
Planning and Environmental Coordination Contact	Calvin McKinley
Chief, Division of Operations	P. John Keenan
Chief, Division of Administration	Thomas Jury

Public participation plays an important role in BLM's planning process, and includes meetings with state and local government personnel, interest groups and individuals. Here state agency staff are briefed on wilderness studies in the BLM's Las Vegas District.

Federally Administered Lands In Nevada By Agency As Of The 1980 Fiscal Year

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 719.5 million acres or about one-third of the nation's lands.

Currently, Alaska and Nevada have the highest percentages of Federally administered lands. 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	5,146,034.0	
Soil Conservation Service	.2	
Department Subtotal	5,146,034.2	7.32
Department of Energy		
Energy Research and Development Administration	819,661.8	
Western Area Power Admin.	4,407.2	
Department Subtotal	824,069.0	1.17
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	48,747,165.3	
Bureau of Mines	22.6	
National Park Service	264,137.9	
Bureau of Reclamation	479,992.0	
Department Subtotal	51,701,495.8	73.58
Department of Transportation		
Federal Aviation Administration	1,863.6	*
Department of Defense		
Air Force	2,896,718.0	
Army	155,266.0	
Navy	63,653.7	
Corps of Engineers	671.0	
Department Subtotal	3,116,308.7	4.43
Other Federal Agencies		
General Services Administration	13.8	*
Coast Guard	.2	*
United States Postal Service	24.3	*
Veterans Administration	12.5	*
Other Agencies Subtotal	50.8	
TOTALS	60,789,821.9	86.5

*Less than one percent.

NOTE: These figures represent the most current data available from the General Services Administration. Current BLM figures are shown on the opposite page.

Public Lands In Nevada By County
As Of September 30, 1983

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	2,294,815	3,144,320	73.0
Clark	3,185,685	5,173,760	61.6
Douglas	178,661	480,640	37.2
Elko	6,785,240	10,995,840	61.7
Esmeralda	2,210,740	2,284,800	96.8
Eureka	2,021,811	2,676,480	75.5
Humboldt	4,321,761	6,210,560	69.6
Lander	3,013,082	3,597,440	83.8
Lincoln	5,749,849	6,816,000	84.3
Lyon	711,488	1,295,360	54.9
Mineral	1,693,033	2,455,680	68.9
Nye	6,702,009	11,560,960	58.0
Pershing	2,910,404	3,859,840	75.4
Storey	12,528	167,680	7.5
Washoe	2,642,954	4,229,120	62.5
White Pine	4,364,289	5,699,200	76.6
TOTALS	48,840,771	70,745,600	69.0

*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	7,386,967
Winnemucca	8,252,730
Carson City	5,321,872*
Ely	8,007,687
Las Vegas	10,001,410
Battle Mountain	8,400,474
Susanville	1,452,138**
Boise	58,082***
TOTAL	48,881,360

*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 83

Total Public Land Receipts Collected by BLM	Total Funds Paid out by BLM from the U.S. Treasury Relating to Public Land Management in Nevada	
$29,108,646	Direct Cost Expenditures	$21,303,000
	Payments to State of Nevada	10,564,849
	Payments in Lieu of Taxes	5,202,784
	TOTAL	$37,070,633

RECEIPTS

Receipts Source	Amount
Mineral Leases and Permits	
Oil and Gas	$19,177,505
Geothermal	1,284,512
All Others	41,656
Sale of Land and Materials	
Land	5,126,444
Materials	87,311
Timber	110,514
All Others	71,082
Grazing	
Section 3*	2,514,570
Section 15**	70,254
Fees and Commissions	239,900
Rights-of-Way	246,222
Rents of Land	69,477
All Others	69,199
TOTAL	$29,108,646

*Section 3 refers to grazing within grazing districts.
**Section 15 refers to grazing outside established grazing district.

DIRECT COST EXPENDITURES

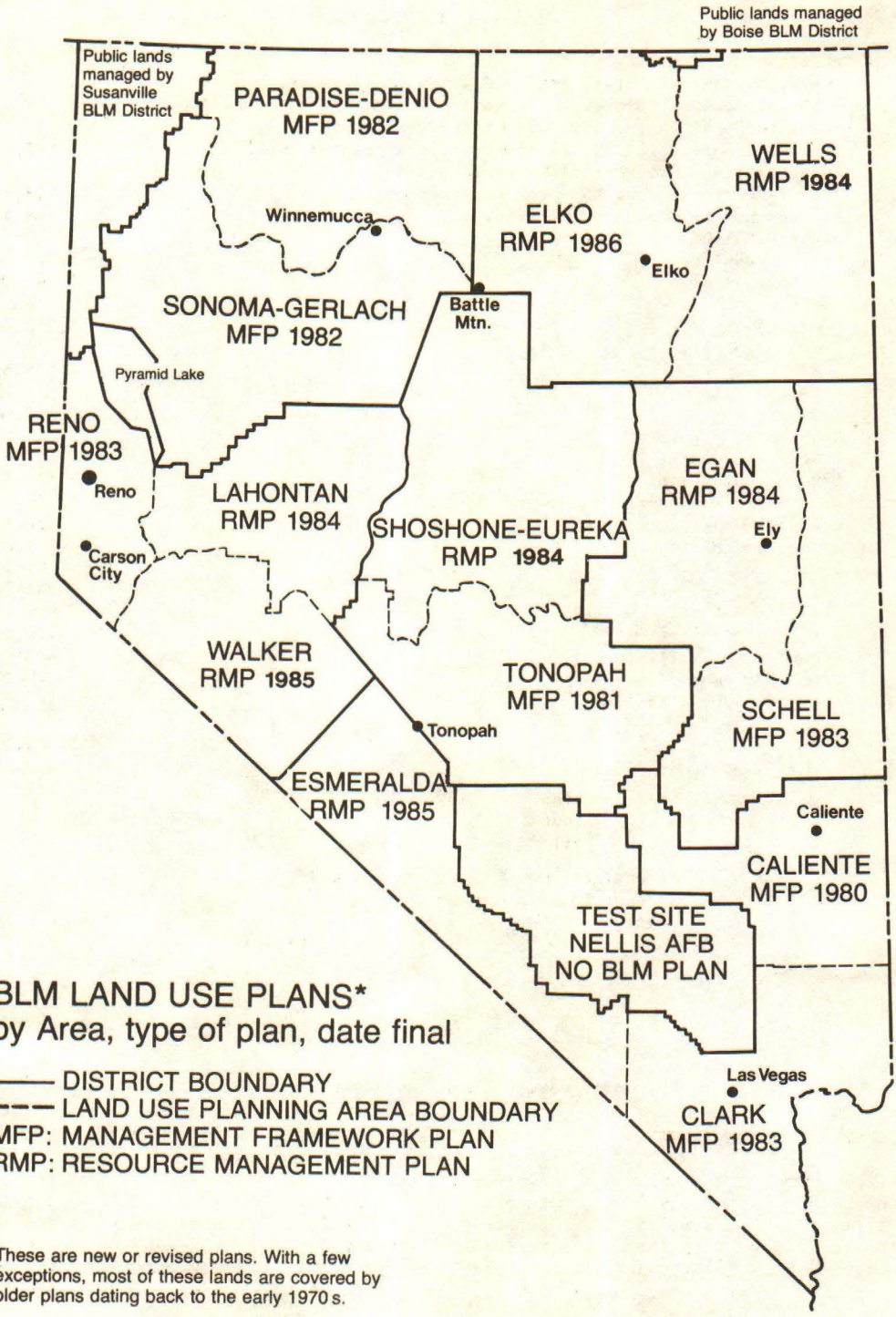
CONSTRUCTION AND MAINTENANCE	
Range, Wildlife Habitat, Soil and Water Improvements ($1,551,000 of this amount is directly from grazing fees)	$ 2,129,000
Maintenance of Range, Wildlife Habitat, Soil and Water Improvements ($261,500 is directly from grazing fees)	363,500
Recreation and Other Facility Construction	0
Road Construction and Easement Acquisition	28,500
Maintenance of Roads and Facilities	798,500
RESOURCE PROTECTION	
Fire Prevention	1,717,500
Fire Suppression	2,343,000
MANAGEMENT	
Lands and Realty	1,312,500
Energy Minerals	
Oil and Gas	561,500
Geothermal	323,500
Other	10,500
Non-Energy Minerals	755,500
Forest Management	174,500
Grazing Management	3,377,000
Wild Horse and Burro Management	1,094,000
Cultural Management	320,500
Wilderness Management	741,000
Recreation and Visual Resource Management	540,500
Soil, Air, and Water Management	2,345,000
Wildlife Habitat Management	903,500
Fire Management	490,000
Planning for Multiple Use	600,000
Law Enforcement	140,000
CONTRIBUTIONS AND REIMBURSABLES	233,500
TOTAL	$21,303,000

PAYMENT TO STATE OF NEVADA

SOURCE	AMOUNT
Mineral Leases	$10,198,126
Sale of Lands and Materials	17,275
Grazing	
Section 3	314,321
Section 15	35,127
TOTAL	$10,564,849

PAYMENT IN LIEU OF TAXES

COUNTY	PAYMENT	COUNTY	PAYMENT	COUNTY	PAYMENT
Carson City	$ 35,878	Esmeralda	36,608	Mineral	256,654
Churchill	408,958	Eureka	56,444	Nye	322,267
Clark	940,788	Humboldt	322,267	Pershing	160,568
Douglas	173,764	Lander	192,041	Storey	8,898
Elko	464,554	Lincoln	175,833	Washoe	934,182
		Lyon	404,006	White Pine	309,074
			TOTAL		$5,202,784



*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.

Land Use Planning

Land use plans are designed to respond to public concerns and BLM program priorities. The multiple-use planning system furnishes the support structure for program managers to analyze issues and conflicts affecting the use of the public lands and resources. Because the Bureau is responsible for managing a variety of resources in a large area of Nevada, the planning system is critical in providing the proper balance between the effective use and necessary protection of these resources. Many activities on BLM lands are not compatible with other uses. Multiple-use is not an activity, nor even a set of compatible activities, but a philosophical approach to managing the land and all its resources. It is a management framework within which all the various relationships among and between natural resources must be considered.

Proposed uses of Nevada public lands are currently examined and evaluated through Resource Management Plans (RMPs) and Management Framework Plans (MFPs). These processes generate alternatives which provide the information needed by Bureau managers to make and implement land use decisions.

Public laws, national policy, land characteristics, resource capabilities, and the needs and desires of the public must all be considered in multiple-use planning. Public land resource users, environmental organizations, special interest groups, businesses, and other governmental entities, state and local agencies, and affected Indian tribes are all consulted at the onset and during development of the plans. Several steps are required during plan development including data gathering, identifying conflicts, and weighing land use alternatives. Differing combinations of resource uses are proposed and analyzed. If applicable, particular facets such as grazing allotment management and wilderness management receive special attention. Once the analysis is complete and all viewpoints are considered, BLM managers must make the land use decisions that set out the combination and patterns of multiple-use best for the area.

Current plans, their boundaries and scheduled completion dates are shown on the Land Use Plans map.

Once the land use plans are finalized, the Bureau and interested publics continue to coordinate in the implementation of the plans.

FY 1983 PLANS

Nevada RMPs and their associated Environmental Impact Statements (EISs) prepared in 1983 encompassed a number of issues which were developed through public involvement. Issues included wilderness, range management, land disposals and utility corridors. In each instance, the proposed resolution of these issues and their accompanying resource conflicts, touched on a number of Bureau programs such as minerals, recreation, wildlife, wild horses, forestry and cultural resources.

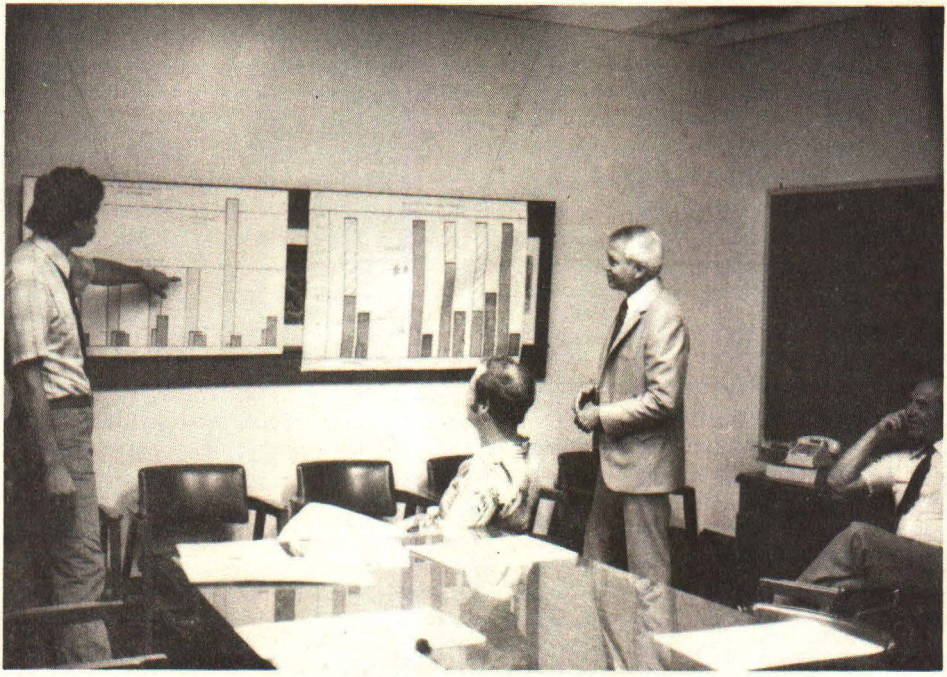
Resource Management Plans were completed in draft for the Wells Resource Area, Elko District; the Shoshone-Eureka Resource Area, Battle Mountain District; the Egan Resource Area, Ely District; and the Lahontan Resource Area, Carson City District. Final RMPs will be completed for each of these areas in 1984.

Resource Management Plans were initiated for the Walker Resource Area, Carson City District; the Elko Resource Area, Elko District; and the Esmeralda planning unit, Battle Mountain District. Shortly after the end of the 1983 fiscal year (November 14, 1983), the Esmeralda planning unit was transferred from the administrative control of the Las Vegas District to the Tonopah Resource Area, Battle Mountain District. However, the Las Vegas District, in close coordination with the Tonopah Resource Area, will retain responsibility for completing the Esmeralda RMP.

This year also saw the last of the MFPs being either initiated or completed under the old planning system. Management Framework Plans and their associated Draft Wilderness EISs and Wilderness Technical Reports were completed for the Schell Resource Area, Ely District; Clark Planning Area, Las Vegas District; Paradise-Denio and Sonoma-Gerlach Resource Areas, Winnemucca District; and the Tonopah Resource Area, Battle Mountain District. A MFP and Wilderness EIS effort was initiated for the Caliente planning area, Las Vegas District.

Wilderness EISs and their associated Wilderness Technical Reports were also completed as part of the draft RMPs for the Egan Resource Area, Ely District; Lahontan Resource Area, Carson City District; Shoshone-Eureka Resource Area, Battle Mountain District; and the Wells Resource Area, Elko District. Wilderness EISs and their associated Wilderness Technical Reports will be completed as an integral part of the RMPs for the Walker Resource Area, Carson City District; Esmeralda planning area, Battle Mountain District; and the Elko Resource Area, Elko District.

Private environmental consulting firms, coordinating closely with the Bureau of Land Management, have completed a draft EIS for the White Pine Power Project in White Pine County and will complete a draft for the Mt. Hope molybdenum project in Eureka County in early 1984. Both of these documents are scheduled for completion in 1984.



Alternative approaches to three issues (range management, realty actions, wilderness study areas) are graphically displayed to aid in a discussion of the Ely District's Egan Resource Management Plan.

Environmental Coordination

Environmental impact statements (EISs) and environmental assessments (EAs) are prepared by the 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 the scope of the project to that of commenting 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.

Much of the BLM's environmental program revolves around EAs. In order to meet increasing responsibilities, the BLM in Nevada has adopted the use of categorical exclusions approved by the Department of the Interior, as well as other innovations to expedite actions while retaining the integrity of the environmental program. Categorical exclusions refer to certain categories of actions which do not normally cause significant impacts and, thus, are excluded from detailed environmental analyses.

In addition, the BLM in Nevada has been more responsive in processing many different types of actions by employing abbreviated EAs that utilize mitigating measures as part of the proposed action. The abbreviated EAs have less detailed analysis, yet contribute to informed decision making. This has resulted in greatly increased efficiency. Other efforts at increasing efficiency are aimed at utilizing "tiering", that is, building upon existing documents which already adequately analyze environmental effects.

Most of the EAs prepared during fiscal year 1983 centered around routine actions such as range improvements, minor rights-of-way, material sales, etc. More significant actions assessed this past year include control programs of insect infestations, Black Rock time trials, Frontier Off-Road Vehicle 500, and Wild Horse Gathering Assessments.

Minerals Management

The minerals program in fiscal year 1983 was influenced by four major events: the continued management of the hardrock surface management program under the 1872 Mining Law, with Nevada BLM having the largest state management program; the merger of the onshore regulatory program for leasable minerals, effected by the merger of the Minerals Management Service into the BLM; the sharp increase in oil and gas activity; and continued interest in geothermal development on federal lands in Nevada. BLM was also delegated certain minerals management responsibilities on Indian lands.

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, sodium, 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 mineral produced. Common sand, gravel, and other construction materials are available through material sales or through free use permits by governmental agencies and nonprofit organizations.

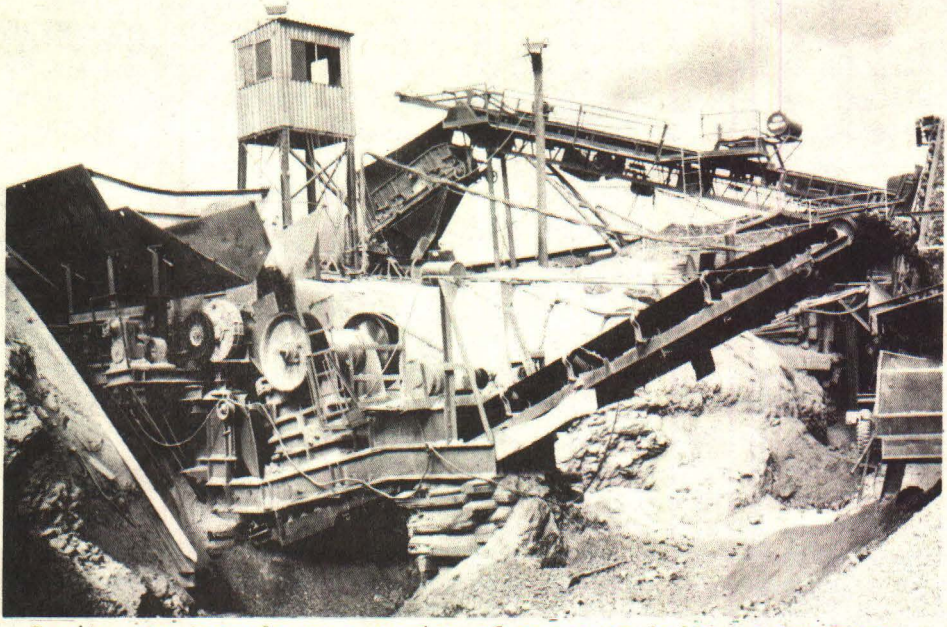
Mineral production on Indian lands involves primarily a leasing or contract system. All minerals, including gold and silver, are leasable on Indian lands.

The Bureau also began implementing a newly drafted minerals resource policy reflecting the mandates of the Executive and Legislative branches. Generally, this policy recognizes that public lands are an important source of the Nation's mineral and energy resources and that public lands should be available for orderly and efficient development of these resources under principles of balanced multiple use management and economically and environmentally sound practices.

LOCATABLES

During 1983, Nevada was first in the nation in the production of gold, barite, magnesite and mercury. It was a major producer of lithium, gemstones and diatomite. The value of non-fuel production was more than $502 million. There were an estimated 400 active mining operations in Nevada. A total of 31,695 claims were recorded during the fiscal year which brought the total claims recorded in Nevada under the Federal Land Policy and Management Act to 283,710 (as of September 30, 1983). Nevada BLM offices received 581 notices and 84 plans under the hardrock mining regulations contained in 43 Code of Federal Regulations 3809. These totaled more than any other state with federal lands.

A drill rig and other equipment seems miniature in this Duval open pit copper mine near Battle Mountain.



Barite ore travels on a series of conveyor belts to crushers. Next it will enter a "jig" where barite will be separated from lighter, waste ore. This machinery is at the Clipper Mine, northern Carico Lake Valley, Lander County.

MINING CLAIM RECORDATION STATUS FY 83

Total claims recorded during fiscal year 1983: 31,695
Total claims recorded through September 30, 1983: 283,710

MINING CLAIM PATENTS FY 83

TYPE	NO.	ACREAGE
Lode	3	56
Placer	110	2,513
Millsite	1	5
TOTALS	114	2,574

NOTICES AND PLANS OF OPERATIONS FILED UNDER THE HARDROCK SURFACE MANAGEMENT REGULATIONS

DISTRICT	NO. NOTICES	NO. PLANS
Elko	79	11
Winnemucca	134	10
Carson City	79	17
Ely	70	9
Las Vegas	91	15
Battle Mountain	128	22
TOTALS	581	84

SALABLES

Common sand, gravel and other construction materials on federal lands are disposed of through material sales or through free use permits for governmental agencies and nonprofit organizations. Other materials include top soil, clay, rip rap, common borrow, etc.

FREE USE MATERIAL TO STATE AND LOCAL GOVERNMENTS FY 83

MINERAL	NO. OF PERMITS	AMOUNT	VALUE
Sand and gravel	46	12,788,370 cubic yards	$1,919,266
Other materials	20	--	35,364
TOTALS	66		$1,954,630

MINERAL MATERIAL SALES FY 83

MINERAL	AMOUNT SOLD	VALUE
Sand and Gravel	253,627 cubic yards	$44,553
Other materials	129,441 cubic yards	18,642
	2,410 tons	
	383,068 cubic yards	$63,195
	2,410 tons	

LEASABLES

MINERAL LEASES AND PERMITS IN EFFECT FY 83

TYPE	NO.	ACREAGE
Oil and Gas Leases	8,651	17,449,781
Geothermal Leases	581	954,733
Sodium Leases/Permits	21	51,325
Potassium Leases/Permits	5	7,567
Phosphate Leases/Permits	1	1,841
Other (Silica Sand and Gravel, etc.)	9	3,038
TOTALS	9,268	18,468,285

OIL AND GAS

In fiscal year 1983, oil and gas exploration on public lands in Nevada resulted in the discovery of a sixth site of production. The Grant Canyon No. 1 well in Railroad Valley is a significant source of production for Nevada, producing approximately 1,500 barrels of pipeline quality oil per day by natural flow from a relatively shallow reservoir.

As of November 30, 1983 (the 1983 fiscal year ended September 30, 1983), three of the last four wells drilled in Nevada were discovered in commercial quantities. During 1983, drilling occurred or was proposed for five of the six districts and the sixth had applications for an oil and gas unit agreement. Numerous applications (e.g., four applications for Permit-to-Drill and nine unit agreements in November), as well as recent successes indicate that industry interest in wildcat drilling in Nevada is at an all-time high and that Nevada's production should top 1,000,000 barrels in 1984.

OIL AND GAS LEASES IN PRODUCTION FY 83

FIELD-LEASE NAME	NO. LEASES	NO. WELLS	PRODUCTION ACRES	TOTAL PRODUCTION* (bbls)
Currant	1	1	1,360	4
Trap Springs	31	18	2,560	503,496
Eagle Springs	4	12	3,122	67,515
Bacon Flat	1	1	2,221	16,474
Grant Canyon	1	1	3,520	24,899
Blackburn	1	2	28,700	42,316
TOTALS	39	35	41,483	654,704

*Figures are for gross production (not sales) reported to the State of Nevada. The Minerals Management Service reported 525,100 barrels for fiscal year 1982.

RENTALS AND ROYALTIES ALLOCATED TO THE STATE OF NEVADA, FY 1983: $10,198,126.

OIL AND GAS LEASES BY COUNTY FY 83

COUNTY	NUMBER OF LEASES			LEASED ACREAGE		
	Competitive	Non-Competitive	SIM*	Competitive	Non-Competitive	SIM*
Churchill	0	247	12	0	498,508	25,433
Clark	0	1,089	25	0	1,893,281	58,231
Elko	0	1,453	53	0	3,354,410	142,413
Esmeralda	0	6	1	0	22,828	2,560
Eureka	0	632	9	0	1,143,792	42,555
Humboldt	0	191	1	0	606,449	640
Lander	0	234	7	0	503,857	23,078
Lincoln	0	1,162	23	0	2,692,688	115,123
Mineral	0	6	0	0	6,020	0
Nye	2	1,630	48	400	2,648,280	60,204
Pershing	0	107	6	0	290,896	39,899
Washoe	0	9	0	0	63,760	0
White Pine	0	1,597	101	0	2,956,951	257,925
TOTALS	2	8,363	286	400	16,681,720	768,061

*Simultaneous drawing leases.

Geothermal Energy

The BLM issues two types of leases on public lands for geothermal exploration and development: non-competitive and competitive. Non-competitive leases are issued, subject to any applicable environmental protection stipulations, on a first-come, first-served basis. These leases require a filing fee plus the first year's base rental, which is due upon application. Thereafter, there is an additional rental charge or a diligent exploration expenditure to ensure development until a commercial well is completed or the lease is terminated. Competitive leases may be obtained by competitive sealed bonus bid. The successful bidder pays the required competitive base rental fee and additional rental or diligent exploration expenditure. Once the geothermal resources are produced on either type of lease, the lessee is responsible for the required royalty payments.

Geothermal activity generally remained low throughout the fiscal year with very little drilling outside of temperature gradient holes. At year's end, however, there were signs of renewed interest in Nevada's geothermal potential, especially in Dixie Valley where favorable geothermal potential seems to be developing.

No competitive lease sales were held, but relinquished acreage (non-competitive only) was re-offered and industry responded by showing considerable interest in northern Dixie Valley.

By November 1983--shortly after the end of the fiscal year--Sierra Pacific Power Co. approved the power contracts which included one development project on federal lands in the Desert Peak area. This was the first step taken to develop power from Nevada's geothermal resources. Development on other federal lands or leases is pending finalization of specific development plans or economic viability.

GEOTHERMAL LEASES IN EFFECT BY COUNTY
FY 83

COUNTY	NUMBER OF LEASES		NUMBER OF ACRES	
	NON-COMPETITIVE	COMPETITIVE	NON-COMPETITIVE	COMPETITIVE
Churchill	137	33	214,126	57,116
Elko	22	0	26,314	0
Esmeralda	40	0	73,259	0
Eureka	2	3	1,840	6,689
Humboldt	56	7	105,872	13,512
Lander	57	3	73,195	3,859
Lyon	2	3	2,720	3,168
Mineral	5	0	8,239	0
Nye	52	3	85,742	6,083
Pershing	117	9	203,852	15,480
Washoe	9	7	10,023	11,527
White Pine	14	0	32,117	0
TOTALS	513	68	837,299	117,434

GEOTHERMAL LEASES ISSUED FY 83

TYPE	NUMBER OF LEASES	ACREAGE
Non-competitive	41	67,083
Competitive	0	0
TOTALS	41	67,083

GEOTHERMAL DRILLING ACTIVITY IN NEVADA FY 83

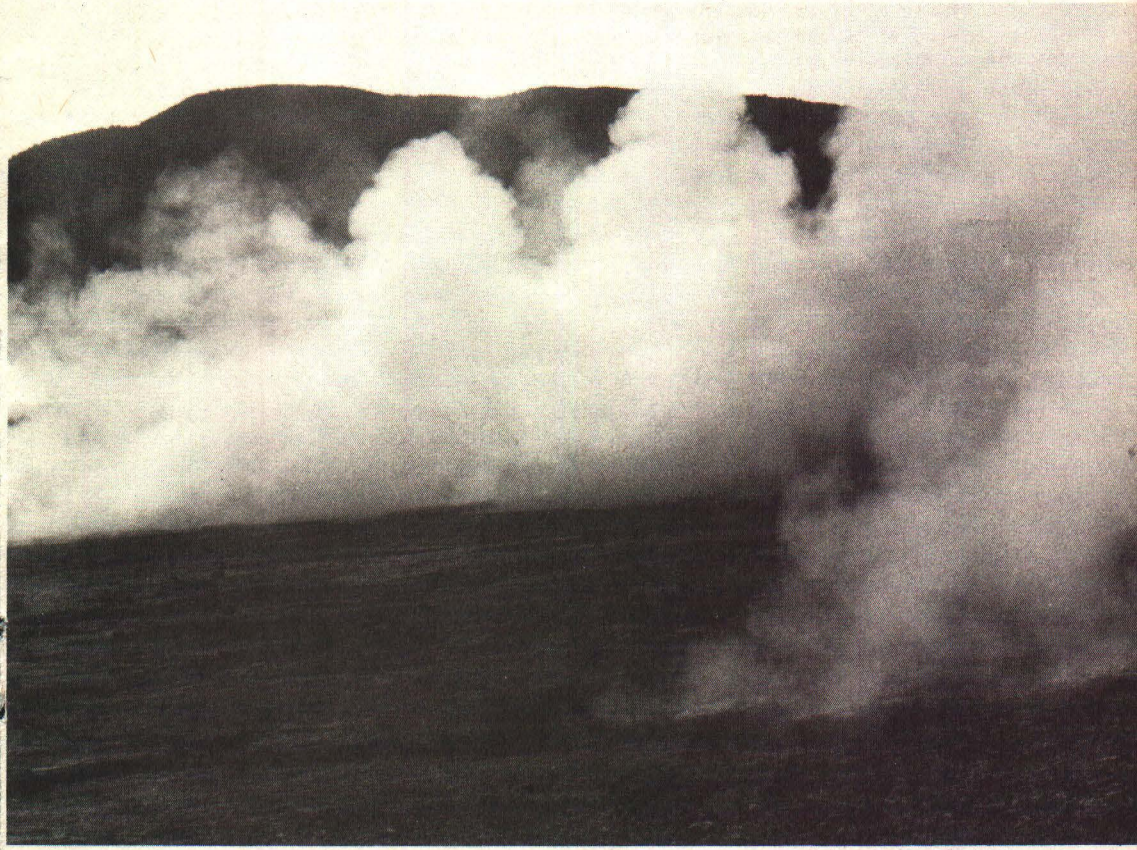
Number of Holes Drilled: 3 Cumulative Footage: 14,461 feet

GEOTHERMAL WELL SUMMARY
FY 83

Total number of all temperature gradient holes drilled as of September 1983: 362

Total number of all exploratory wells drilled as of September 1983:

Producible or usable:	40
Plugged and abandoned:	5
TOTAL	45



Steam rises from the geothermal geyser field at Steamboat Springs south of Reno. The area was first described by the French Scientist LeConte when he traveled to the Virginia City mines in 1859.

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. 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.

Another active disposal program is made possible by the Recreation and Public Purposes Act. Through this law, local governments and nonprofit organizations are able to obtain pubic land free or at discounted prices for uses such as schools and community projects.

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 rights-of-way typically issued in Nevada include power transmission lines. 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, communications sites, and material site rights-of-way are other examples.

LAND PATENTS ISSUED IN FY 83

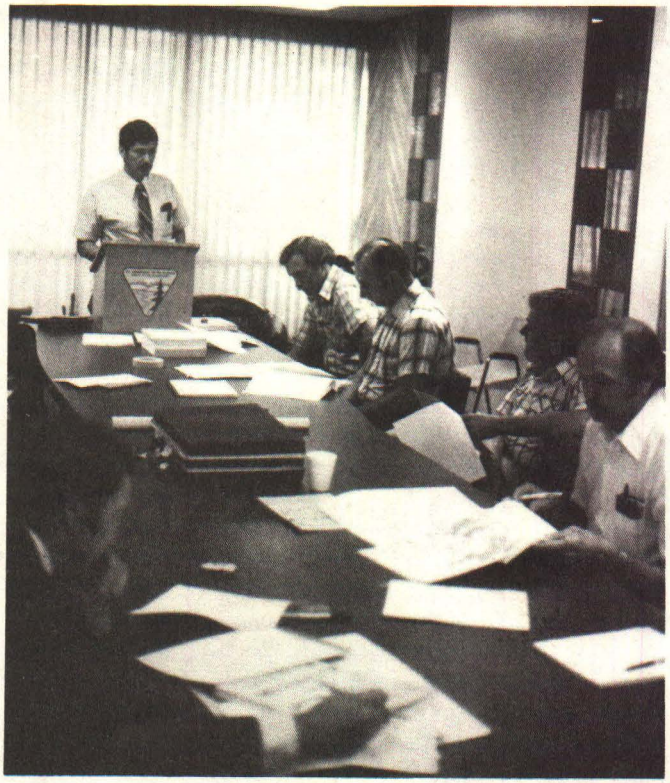
KIND	NO.	ACRES
Desert Land Entry	1	115.00
Reclamation Homestead	1	40.00
Small Tract	2	5.00
Indian Fee	2	1,010.00
Sales	25	558.47
Color of Title	1	10.00
Exchange	4	1,425.82
Conveyance of Federally-Owned Minerals	4	3,186.87
Recreation and Public Purposes	15	956.90
TOTALS	55	7,308.06

LAND LEASES IN EFFECT SEPTEMBER 30, 1983

KIND	NO.	ACRES
Recreation and Public Purposes	147	10,921.06
Mining Claim Occupancy	1	2.75
Airport	39	13,889.50
Small Tract	3	15.00
TOTALS	190	24,828.31

RIGHTS-OF-WAY IN EFFECT SEPTEMBER 30, 1983

KIND	NO.
Communication Sites	291
Electrical Transmission	749
Federal Highway	99
Highway, Tram, Access Road	181
Material Site	337
Pipeline - Oil and Gas	42
Pipeline - Water	204
Railroad	67
Telephone - Telegraph	383
Water Reservoir or Ditch	16
TOTAL	2,369



Land tenure adjustments, such as land disposal in areas suitable for agriculture, and utility corridor designation were two of the issues analyzed in planning for the BLM Battle Mountain District's Shoshone Eureka Resource Management Plan.

Soil, Water, And Air Resource Management

The long-range objectives of this program are to stabilize watersheds, to protect the soil, water, and air resources from further deterioration, and to develop or improve watershed conditions to meet specific resource needs. Typical needs include greater water quality and/or quantity, reduction of flood damage, reduction of sediment, and minimization of airborne materials. The needs are determined by soil, water, and air resource 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 help prevent soil erosion and water and air resource degradation. By reducing erosion and 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 air and water quality, renewal of ground water supplies, control of flood and sediment, protection of public health, and stabilization of local economies.

In order to assist the State of Nevada and to determine impacts of land management practices, a planned water quality monitoring program has been underway since 1979 on Bureau-administered lands statewide. Approximately 80 monitoring locations have been sampled for several years in each District. These key sample locations are part of a continuing program to provide management information regarding the quality of water and public lands within Nevada. This effort is coordinated with the State of Nevada and other Federal agencies.

Twelve watersheds (see below) throughout Nevada have been monitored since 1962 for water resources, climatological and air resources information. These watersheds represent typical remote watersheds throughout Nevada, and the information collected is used by management for input into decisions where water and air resource information is essential.

NEVADA BLM WATERSHED MONITORING
1962 TO PRESENT

DISTRICT	WATERSHED	AREA SQ. MILES	ACRES
Elko	Rock Springs	77	49,280
	Crain Springs	30	19,200
Winnemucca	Crowley Creek	56	35,840
	Cow Creek	115	73,600
Carson City	Eastgate	213	136,320
	Churchill	73	46,720
Ely	Duckwater	96	61,440
	Steptoe Canyon	45	28,800
Las Vegas	Pine Canyon	32	20,480
	Mathews Canyon	36	23,040
Battle Mountain	Coils Creek	50	32,000
	Mill Creek	23	14,720

Soil surveys are being conducted statewide to provide land managers with information about the soil resource so that soils can be used within their capability and treated according to their needs when making land use decisions. Soil interpretive data provides base line information that will assist in making decisions as it relates to: identification of present and potential ecological plant communities; ecological condition of the plant communities; identification of potential agricultural soils; soil suitability for rangeland seeding; location of structures, highways, utility corridors, recreational facilities, etc.; determination of allowable soil losses and control of erosion; reclamation of mined land, burn areas; integrated and comprehensive assessment of soil resources for land use planning.

The long-range goal is to inventory soils on all BLM-administered land in Nevada by 1989. As of October 1, 1983, more than 39 million acres of soil inventories have been completed. Following is a list of BLM District accomplishments for fiscal year 1983 and cumulative totals.

SOIL INVENTORIES

DISTRICT	SOIL SURVEY ACCOMPLISHMENTS (ACRES)* FY 83	CUMULATIVE TO OCT. 1, 1983
Elko	998,839	6,248,279
Winnemucca	591,255	3,985,301
Carson City	501,335	5,769,349
Ely	604,135	4,209,020
Las Vegas	850,000	10,582,537
Battle Mountain	0	6,660,610
Susanville	0	1,813,226
TOTALS	3,545,564	39,268,322**

* Includes "checkerboard" railroad lands and scattered parcels of private lands within BLM planning area boundaries.

** Acreage includes approximately 6,775,000 acres of low intensity (Order 4) soil surveys that will be converted to Order 3.

A water quality laboratory located in the Carson City District aids BLM in its responsibilities for control of nonpoint source pollution and in water quality planning and permitting activities.

Grazing Management

Out of the 14 statements required to analyze the possible environmental impacts of this activity, 11 have been completed and 3 are scheduled for completion in the next two years. The schedule for future statements which are being incorporated into Resource Management Plans and Environmental Impact Statements is:

1985 - Elko, Esmeralda, and Walker

For locations of these resource areas, please refer to the Land Use Plans Map.

After the completion of an Environmental Impact Statement and land use plan such as a Resource Management Plan, grazing management decisions will be issued. These decisions will follow consultation and coordination processes that will establish initial stocking rates and identify monitoring procedures which will be the basis for future adjustments. Grazing uses that will be monitored are wildlife, livestock, and wild horses.

The Grazing Management program is using a selective management approach where allotments are categorized into a management category. The objectives for these categories are to: (1) maintain current satisfactory condition; (2) improve current unsatisfactory condition; or (3) manage custodially, while protecting existing resource values. Proposed actions for managing allotments within each category will be designed to meet these objectives.

Grazing management program personnel continue to administer and manage the public lands by issuing grazing authorizations, conducting compliance checks, and taking action on trespass, when necessary.

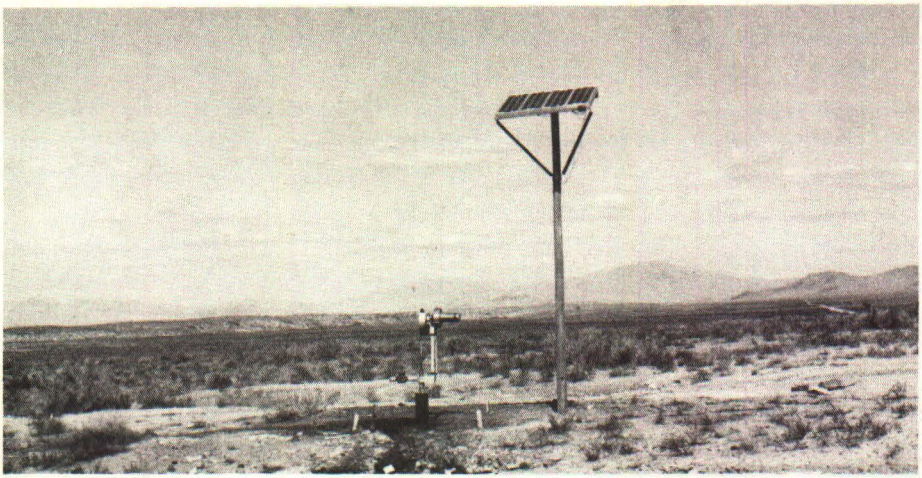
Another important aspect of the grazing management program is the experimental stewardship program created by Congress in 1978. The program provides incentives for livestock users to apply innovative approaches to improve range condition. The Tonopah Resource Area is Nevada's pilot area. Implementation of the stewardship effort through the coordinated resource management and planning process began in fiscal year 1981.

FORAGE PROVIDED AND NUMBER OF LIVESTOCK AUTHORIZED TO GRAZE ON PUBLIC LANDS
FEE YEAR 1982*

DISTRICT	NUMBER OF OPERATORS	ANIMAL UNIT MONTHS**	NUMBER OF CATTLE	NUMBER OF HORSES	NUMBER OF SHEEP
Elko	179	481,623	96,032	705	62,830
Winnemucca	106	261,231	50,049	139	3,194
Carson City	86	147,564	19,534	48	35,856
Ely	118	233,630	27,691	33	179,838
Las Vegas	130	123,010	14,447	139	12,375
Battle Mtn.	86	360,696	51,770	186	20,990
TOTALS	705	1,607,754	259,523	1,250	315,083

*Grazing fee year 1982 ran from March 1, 1982, to February 1, 1983.
**An Animal Unit Month is a measure of the forage needed to feed one cow or five sheep for one month.

Range Improvements



"Sun Mill". This small solar panel powers a pump on the Copper Kettle grazing allotment in Churchill County. The solar pump is the first of its kind for the BLM in Nevada.

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, developments, and land treatments coupled with proper grazing management are key factors supporting management actions necessary to improve rangeland conditions. While the majority of these projects are required to support intensive grazing management, other resource values and objectives are considered in designing the projects to ensure the maximum benefit is realized by all uses. One example where supplemental benefits are realized is where a fence and well are needed to implement a livestock grazing system. The resulting change in grazing use patterns may also reduce grazing competition on an adjacent deer winter range and provide additional water to a resident band of wild horses and burros.

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 83

TYPE OF IMPROVEMENT	NEW CONSTRUCTION	MAINTENANCE
Cattleguards/Management Facilities	57 each	13 units
Fences	251 miles	16 units
Land Treatment	1,952 acres	3,511 acres
Water Facilities	45 units	61 units

Wild Horse And Burro Management 1983

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, about 47,930 wild horses and 12,070 wild burros inhabit these lands. The bulk (44,930 horses and 11,870 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 83

DISTRICT	HORSES	BURROS
Elko	1,030	1
Winnemucca	7,395	222
Carson City	5,419	130
Ely	2,931	-
Las Vegas	6,198	1,157
Battle Mountain	5,804	18
TOTALS	28,777	1,528

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.

The BLM rounds up and removes wild horses and burros for a variety of reasons, such as requests by private landowners or to abide by a coordinated resource management plan. The total removed in fiscal year 1983 is noted below.

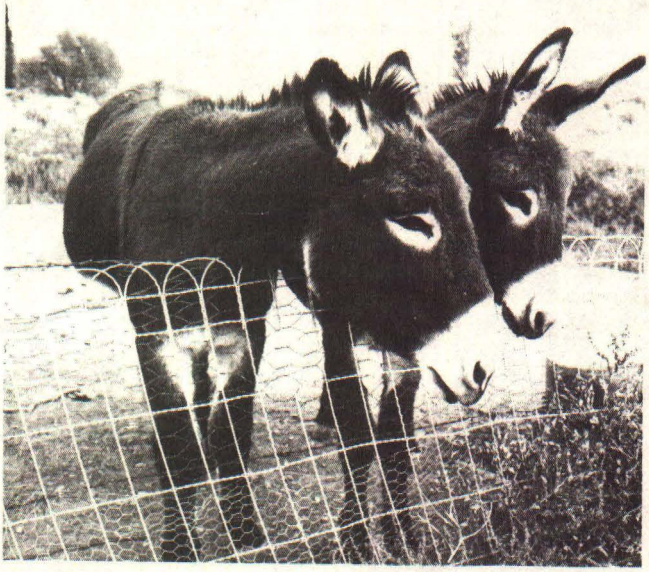
ROUND UPS COMPLETED - FY 83

DISTRICT	GATHERING AREA	HORSES GATHERED
Winnemucca	West Humboldts	145
	Owyhee/Snowstorm	768
	T Quarter Circle Ranch	111
Carson City	Marietta	357
	Pine Nuts	16
Ely	Monte Cristo	43
Battle Mountain	Stone Cabin Valley	1,093
	TOTAL	2,533

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 83

NO. ADOPTED/LOCATION OF ADOPTION CENTER	NUMBER AT PALOMINO VALLEY START OF FY 83	BRANDED/ PRIVATE	DIED OR HUMANELY DESTROYED	BALANCE REMAINING AT PALOMINO VALLEY END OF FY 83
355 Nevada	397	9	233	1,562
337 Texas				
71 Tennessee				
55 California				
50 Arizona				
51 Mississippi				
232 Pennsylvania				
1,151 Total				



Burros are viewed by many as a symbol of the Old West. Many individuals have trained burros or horses to share their work--and fun--through the Adopt-A-Horse program. In 1983 burros from Marietta, Nevada, were available for foster homes.

Wildlife Habitat Management

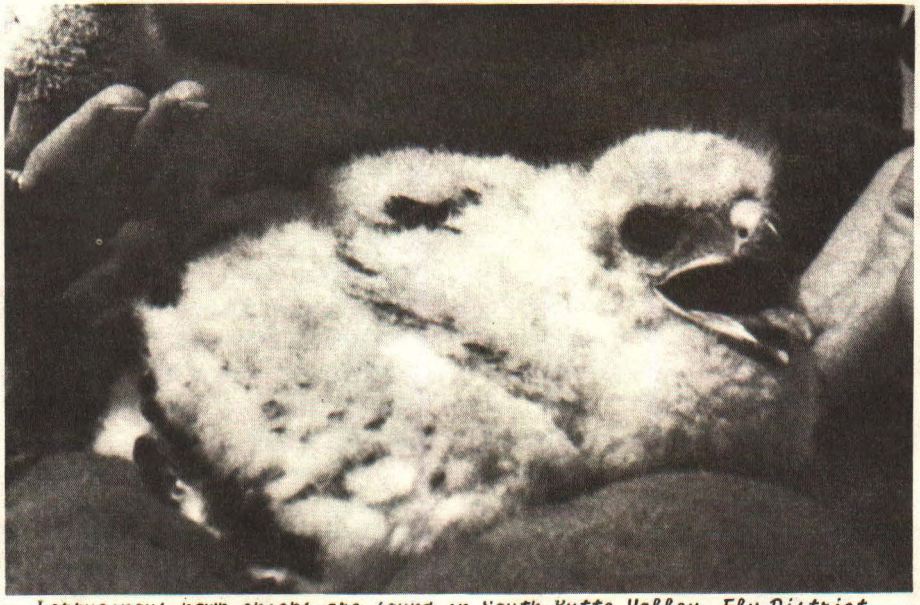
The Nevada wildlife program consists of two primary efforts, direct habitat improvement through projects specifically for wildlife, and indirect benefits realized from other program actions carried out with wildlife needs in mind. These two aspects encompass the singular objective of the wildlife program: maintaining or improving habitat conditions necessary for fish and animals to thrive. The Habitat Management Plan (HMP), of which 50 have been completed in Nevada to date, remains the primary mechanism for direct habitat and wildlife restoration efforts. Implementation work is progressing on all of these plans as funding permits. The ultimate goal 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.

A major aspect of both the direct and indirect program is the coordination of resource management planning with other federal and state wildlife agencies and user interests. Through this coordination, benefits to wildlife are often realized through incorporating wildlife provisions in other subactivity management plans, developing stipulation and mitigative measures for wildlife and providing for habitat rehabilitation following development. In fiscal year 1983, the BLM cooperated with the Nevada Department of Wildlife in reintroduction of Bighorn Sheep into two mountain ranges: the Granite Range and the Pilot Mountains. In addition, the populations of the Hot Creek Range and Stillwater Mountains were supplemented through additional releases.

Actual habitat improvement projects were undertaken within 25 Habitat Management Plan areas across the State. A wide range of improvement projects were completed, varying from placement of bird ladders in stock troughs to placement of steam structures for fisheries improvement, guzzler construction and design of projects for fiscal year 1983. Dollars expended in these accomplishments exceeded $300,000.

WILDLIFE PROJECT WORK COMPLETED IN FY 83

Developed water facilities (guzzlers, spring developments)	18
Aquatic-riparian protection (miles of fencing)	8
Maintenance of fences, exclosures (miles)	32



Ferruginous hawk chicks are found in South Butte Valley, Ely District. Wildlife biologists monitor their activities and assist in counts.

Wilderness

Leviathan Cave entrance. Worthington Mountains Wilderness Study Area, Ely District.

Inventory, the first phase of the Bureau's wilderness review, was brought to a close during fiscal year 1981. Directed by Congress to review all the public lands for wilderness consideration, the BLM embarked on a three-phase review effort, consisting of inventory, study, and eventual reporting to Congress of the BLM's recommendations. Those areas which met the wilderness criteria set forth by Congress--roadless areas of 5,000 acres or more, generally in an undeveloped state having outstanding opportunities for solitude or primitive recreation--were identified as Wilderness Study Areas (WSAs). Congress, however, reserved to itself the final decision on which lands will and will not become protected wilderness areas in the National Wilderness Preservation System.

Protests of the statewide wilderness inventory decisions were resolved and several appeals were filed with the Interior Board of Land Appeals as a result of the protest decisions. All of these appeals have been reviewed by the Board, and decisions on each appeal have been issued. Some areas have been removed from WSA status as a result of appeal decisions.

Studies are underway on all of the WSAs in Nevada. The areas under study are in all districts. During the study phase, wilderness will be incorporated into the Bureau's land use planning system where the wilderness resource will be evaluated along with all the other resources on the public lands. Public involvement is an important step in this process. Recommendations coming out of the planning process will be forwarded to the Secretary of the Interior and then the President, who will in turn forward them to Congress.

STATUS OF THE WILDERNESS REVIEW BY THE END OF FISCAL YEAR 1983*

Acres designated WSAs	4,790,680 (85 units)
Acres eliminated from consideration	44,193,577 (1,618 units)
WSA acres undergoing wilderness study	4,790,680 (85 units)

*Acreage includes public land in Nevada managed by the California and Idaho BLM Offices, but does not include land in California managed by the Nevada BLM.

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 actions allowed by permit 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.

Field studies were ongoing in two areas in fiscal year 1983. In the Mormon Mountains area of southern Nevada, a regional field sample survey was concluded. Results of the project are intended to streamline cultural resources protection measures on future oil and gas activities and other development projects in the immediate region.

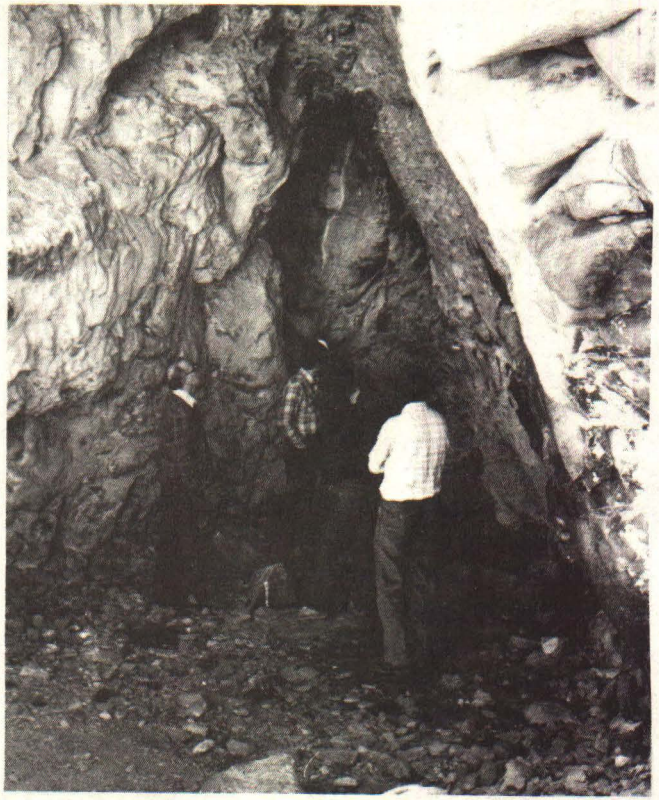
In central Nevada, the third and final year of a joint study between the BLM and the University of Nevada, Reno, was completed in the Cortez Mining District. The project involved mapping, test excavation and stabilization of the remote mining district. Results of the excavations are expected to yield new information concerning the role of ethnic minority cultures in the early Nevada mining days.

Four major development projects in fiscal year 1983 resulted in broad regional archaeological surveys and assessments for cultural values. Considerable acreage was intensively studied through surveys of existing data and on-the-ground work. Projects requiring cultural clearances were: the White Pine Power Project in eastern Nevada, the Intermountain Power Project across southern Nevada, the Carlin gold mine project in northcentral Nevada and the Mount Hope molybdenum mining project in central Nevada.

One of the major informational services on cultural resources made available to the public in fiscal year 1982 continued at the Hidden Cave Interpretive Facility near Fallon. Following recent excavations jointly funded by the BLM; the University of Nevada, Reno; and the American Museum of Natural History; these facilities have been integrated with the Grimes Point Petroglyph Interpretive Site, and tours are jointly conducted by the BLM and the Churchill County Museum.

Five publications were issued in limited numbers in fiscal year 1983; all are on file in major Nevada libraries and the University of Nevada libraries, plus BLM offices. Cultural resource series publications are: "Cultural Resource Overview, Carson City District, West Central Nevada," "Prehistory and History of the Winnemucca District: A Cultural Resources Literature Overview," "Archaeological Studies in the Cortez Mining District, 1981," "The History and Archaeology of Fenelon, a Historic Railroad Camp," and "An Examination of Amateur Collections from the Carson Sink, Nevada."

Burnt Cave. This area was a shelter for Indians whose presence is documented by petroglyphs. Located in Churchill County, the cave is near the Hidden Cave Interpretive Facility.



CULTURAL RESOURCE INVENTORY

	WORK DONE IN FY 83	TOTAL THROUGH FY 83
Class 3 (Intensively Assessed Acres)	64,170	449,274
Class 2 (Extensively Assessed Acres)	2,340	431,717

PROTECTION, STABILIZATION, AND INTERPRETATION PROJECTS

ACTIVITY	FY 83	TOTAL THROUGH FY 83
Positive Protection Signing	1	25
Research Excavations	1	13
Interpretive Schemes	0	5
Fencing	0	24
Stabilization	0	3
Irregular Patrol and Maintenance	3	61
Regular Patrol and Maintenance	2	14
Protective Withdrawals	0	4
Cultural Resource Publications	5	16

Recreation And Visual Resource Management

The primary purpose of the recreation management program in Nevada is to ensure the continued availability of dispersed and resource-dependent outdoor recreation opportunities which the public seeks and which are not readily available from other public entities. Secondary purposes include protecting resources, meeting legal requirements for visitor health and safety, and mitigating resource user conflicts involving recreation.

The visual resource management program serves a dual purpose: to manage the quality of the visual environment and to reduce the visual impact of development activities while maintaining effectiveness in all BLM resource programs. Visual resource management also identifies scenic areas that warrant protection through special management attention.

Considerable emphasis in fiscal year 1983 was placed on managing 25 Recreation Management Areas (RMAs) within the Nevada BLM's jurisdiction. Minimum management needed to correct or mitigate problem situations and basic visitor services and courtesies were provided in each of the 25 RMAs. These services and courtesies were essential to maintain recreational opportunities and experiences in each area. The importance of these RMAs is demonstrated by the 12,645,570 hours recorded by visitors enjoying the areas during the past year. Some of the most popular RMAs were: Red Rock Canyon, Clark County, and the Spring Mountains, both in the Las Vegas District; and Indian Creek, Walker Lake and the East Fork of the Carson River in the Carson City District.

Sand Springs which is near Highway 50 east of Fallon is one of the Pony Express stations scattered across Nevada. BLM and the University of Nevada, Reno, excavated this station which is listed on the National Register of Historic Places.

Some 2,866 recreation-related permits were issued in fiscal year 1983. Of these, 2,726 were fee site (camping) permits; 91 were authorized for competitive recreational events; and 49 were processed for commercial recreation use of the public lands. Permits are issued where it is necessary to protect important natural and cultural resources, to mitigate user conflicts, and to provide for the safety of public land users.

Work continued in fiscal year 1983 toward the eventual designation of all public lands in Nevada with regard to off-road vehicle (ORV) use. Off-road vehicle designations are a long-term effort to comply with two Presidential Orders to protect sensitive areas of public land, to promote safety, and to minimize conflicts among users relating to ORV use. Fiscal year 1980 was the first year public lands in Nevada were designated open, closed or limited to ORV use. All public lands will be designated through the land use planning system.

Cooperative efforts with other agencies in fiscal year 1983 included implementation of an agreement for the provision of law enforcement services at the Red Rock Canyon Recreation Lands near Las Vegas and culmination of a memorandum of understanding for general management and maintenance of the North Wildhorse Recreation Area in Elko County. Both ventures were negotiated with the Nevada Division of State Parks.

Campgrounds are popular recreation spots and the Bureau currently maintains eight 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	$4.00
	*North Wildhorse	13	$3.00
Carson City	Sportsman's Beach	17	-
	*Indian Creek (California)	30	tent site $2.00
			vehicle site $4.00
Las Vegas	Willow Creek	7	-
	Cold Creek	6	-
	Willow Spring (Day use only)	19	-
Battle Mountain	Hickison Petroglyph	21	-

*Water suitable for drinking

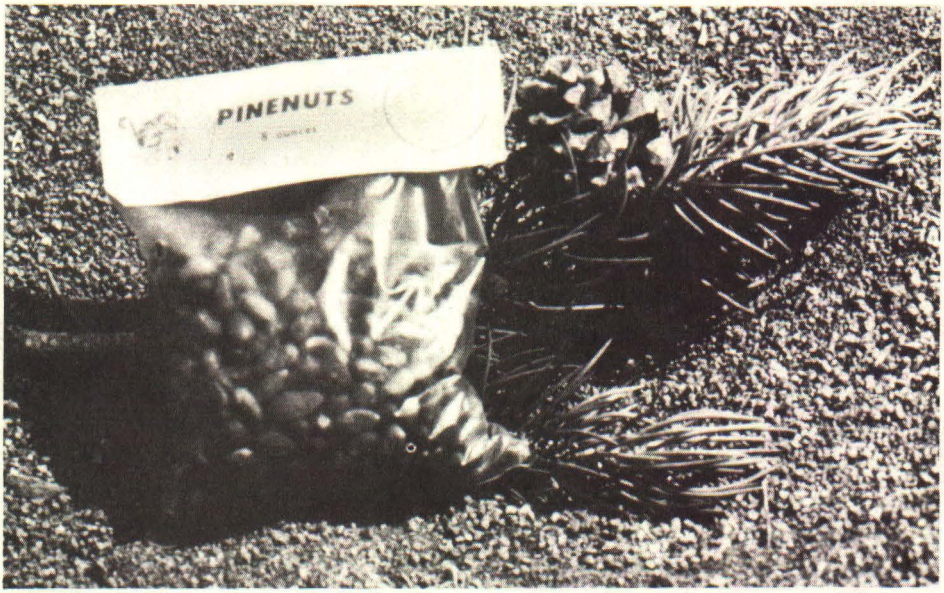
Public Domain Forestry

The demand for minor forest products from the pinyon-juniper woodlands remained high again in 1983. The quantities sold declined slightly for all products except pine nuts, which nearly doubled the 1982 production. The revenue derived from the sale of minor forest products was a record $162,507.

SUMMARY OF FOREST PRODUCTS SALES FOR 1983

DISTRICT	CHRISTMAS TREES	CORDWOOD	PINE NUTS (LBS.)	FENCE POSTS	TOTAL $ VALUE
Elko	3,433	1,398	-0-	2,128	$ 15,846
Winnemucca	541	317	-0-	400	2,827
Carson City	10,420	3,460	-0-	305	51,500
Ely	2,899	1,189	41,465	1,663	22,895
Las Vegas	9,978	2,830	1,000	2,961	44,201
Battle Mountain	4,404	1,228	36,650	2,855	25,238
TOTALS	31,675	10,422	79,115	10,312	$162,507

The pinyon pine tree is popular with the public because of its pleasant pine smell and its drought resistance. Needles do not drop off in a warm inside environment as quickly as many of the other tree varieties used at Christmas.



Pine nut sales to commercial users increased dramatically in 1983. The nuts are popular for gourmet cooking and for snacking.

Buildings And Facilities

The Bureau spent $515,000 in fiscal year 1983 to perform routine maintenance on buildings and recreation facilities in Nevada. Of that amount, $167,000 were spent on building maintenance and $348,000 on recreational facilities. The latter includes some operational activities other than maintenance.

Roads

The BLM's current inventoried road system in Nevada covers 9,400 miles. During fiscal year 1983, 1,944 miles were maintained at a cost of $271,000. No new road construction was planned or completed by BLM in Nevada during the 1983 fiscal year. Road system information, by district, follows:

	EXISTING MILES BY DISTRICT FY 83	MILES MAINTAINED IN FY 83
Elko	2,400	453
Winnemucca	1,250	273
Carson City	850	275
Ely	1,550	579
Las Vegas	1,400	162
Battle Mountain	1,950	202
TOTALS	9,400	1,944

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.

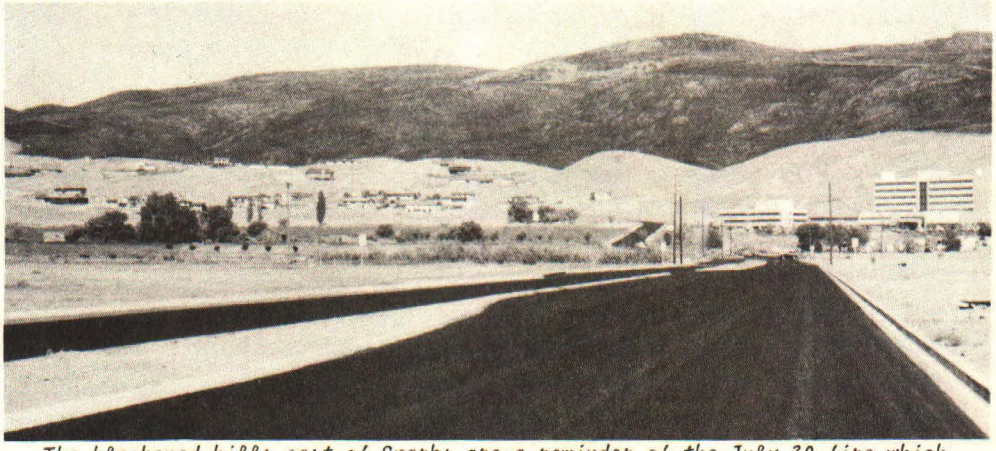
During fiscal year 1983, fire prevention activities were conducted in all Nevada BLM districts with emphasis on cooperation with the Nevada Division of Forestry and the U.S. Forest Service. Activities included public education through presentations at local schools and distribution of Combined Forest Fire Prevention (Smokey Bear) posters, signs, and educational materials. There were discussions with recreationists, campers, ranchers, and other users of the public lands to explain local burning policies and procedures.

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 1983

	NUMBER OF FIRE ACTIONS					ACRES BURNED		
DISTRICT	9 ACRES OR LESS	10-99 ACRES	100 + ACRES	TOTALS	ASSIST FIRES	BLM	OTHER OWNER-SHIP	TOTALS
Elko	38	5	6	49	2	8,834	4,894	13,728
Winnemucca	19	6	9	34	10	4,884	969	5,853
Carson City	97	14	21	132	35	27,275	19,606	46,881
Ely	53	5	8	66	8	2,949	116	3,065
Las Vegas	120	9	5	134	18	2,030	465	2,495
Battle Mtn.	18	1	1	20	3	1,273	30	1,303
TOTALS	345	40	50	435	76	47,245	26,080	73,325
PERCENTAGES	79	9	11	100	*	64	36	100

* The districts assisted other agencies on 76 other fires which burned a total of 19,345 acres.



The blackened hills east of Sparks are a reminder of the July 30 fire which first threatened the Sparks Family Hospital and several homes, then burned spectacularly to the east for several days. A total of 27,000 acres were burned in this fire.

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, 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 unless the State Director defers the time because of a lack of moisture.

TOTAL FIRE REHABILITATION COMPLETED ON PUBLIC LANDS
AS OF SEPTEMBER 30, 1983

DISTRICT	SEEDING (ACRES)	FENCE CONSTRUCTION (MILES)	FENCE MAINTENANCE (MILES)
Elko	204,360	67	57
Winnemucca	7,650	37	-
Carson City	17,543	13	32
Ely	15,003	29	-
Las Vegas	8,550	4	1
Battle Mtn.	400	3	-
TOTALS	253,506	153	90

This range improvement in Orchard Canyon, Buck Mountain allotment, Ely District, provides sage grouse habitat. The vegetation cover allows young birds to feed safely.

Cadastral Surveys

Cadastral surveys, the official government surveys of public lands, 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 1983, four BLM survey crews field completed surveys of section lines enclosing 200,000 acres of BLM and Forest Service lands. A summary of other survey statistics and surveys approved in fiscal year 1983 is outlined below:

SURVEY STATUS

ITEM	FY 82	FY 83
Acres surveyed		
Forest Service	1,145	1,862
BLM	51,390	1,227
Acres resurveyed		
Forest Service	32,102	1,706
BLM	307,702	225,750
Acres unsurveyed	19,385,864	19,382,775
Minerals surveyed	11*	10**
Plats accepted	49	27
Acres surveyed to present	50,943,096***	50,946,185***

*Approved FY 1982, 11 mineral surveys consisting of 45 lode claims and 1 millsite.

**Approved FY 1983, 10 mineral surveys consisting of 32 lode claims, 82 placers, and 161 millsites.

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

The Department of the Interior's Meritorious Service Award was presented to Bill Malencik, left, who is Deputy State Director for Operations. Nevada State Director Ed Spang, right, made the July 1983 presentation.

BLM Employment

Employment in the BLM in Nevada decreased another 7.6 percent in fiscal year 1983 (there was a 13.7 percent decrease in fiscal year 1982). This decrease was because of reduced funding levels. However, preliminary indications are that the downward trend may end in fiscal year 1984 and stabilize at fiscal year 1983 levels.

BLM NEVADA EMPLOYMENT FY 83

OFFICE	PERMANENT	WAE*	PART-TIME	TEMPORARY	TOTALS
State Office	145	0	2	21	168
Elko	62	1	1	18	82
Winnemucca	51	0	0	9	60
Carson City	68	4	0	31	103
Ely	53	0	0	5	58
Las Vegas	70	0	1	15	86
Battle Mountain	53	1	0	8	62
TOTALS	502	6	4	107	619

*When Actually Employed, less than full-time.

Area Manager Bill Civish, right, is congratulated on his recognition as Southern Nevada Federal Executive Association's Employee of the Year by Las Vegas District Manager Kemp Conn, left.