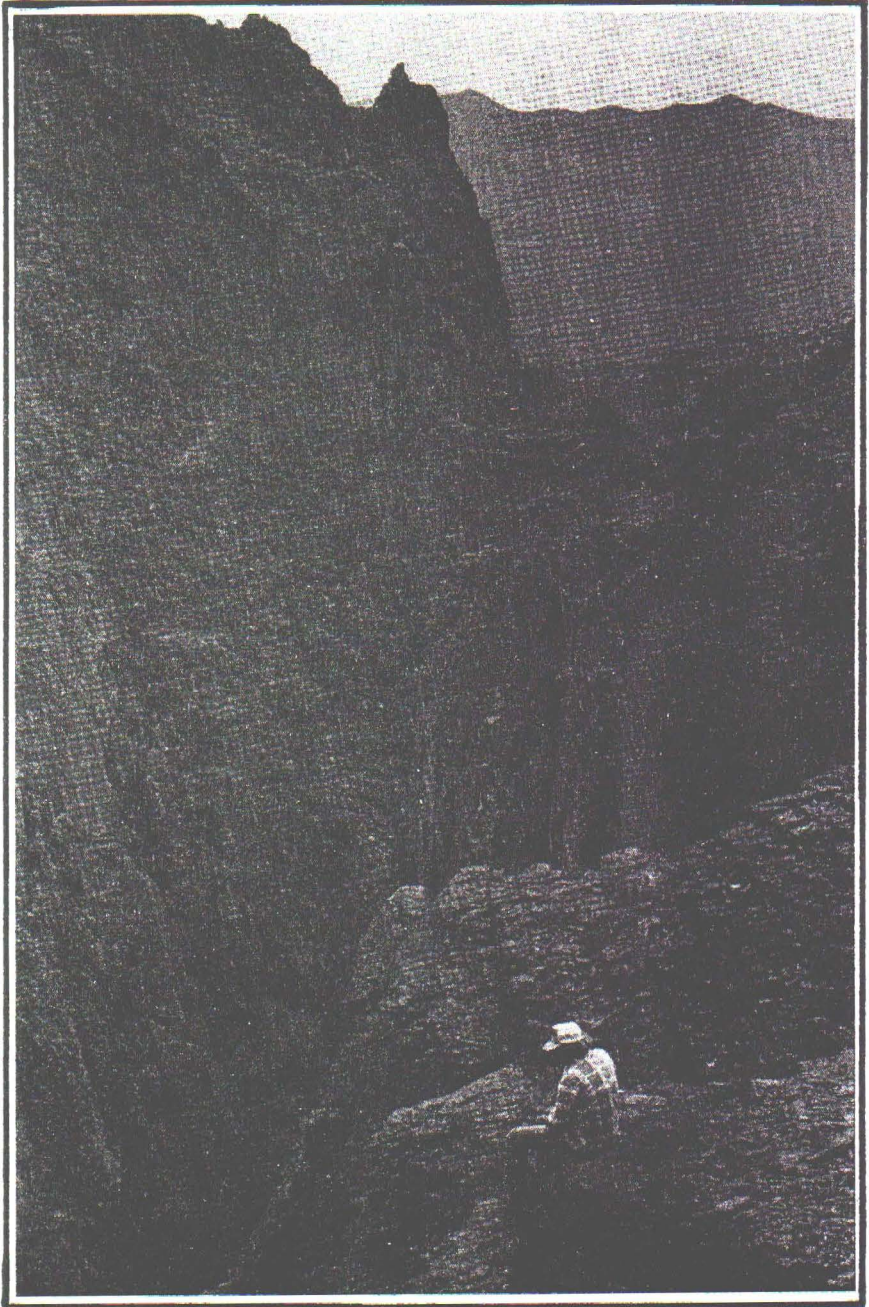


# NEVADA 1982 PROGRESS REPORT

BUREAU OF LAND MANAGEMENT

82







# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT

New highs in mineral leasing receipts and mining claim recordation. The opening of a major Southern Nevada outdoor recreational attraction, the Red Rock Canyon Visitor Center. A thrust into the Eastern States so wild horses are more readily available to those wishing to participate in the Adopt-A-Horse program. An oil pool located in Eureka County. The opening of Hidden Cave Archaeological Interpretive Site in Churchill County.

We who manage the lands for the public have been saying that the responsibility for the public lands in today's society is an exciting challenge. Nothing demonstrates that more clearly than a review of this book, which highlights the accomplishments and activities of the Bureau of Land Management (BLM) in the 1982 fiscal year (October 1981 to October 1982). Virtually every section reveals the awareness of national and local publics to the diversity of treasures found on the 48 million acres of BLM-administered public lands in Nevada.

Several activities of the public and BLM are new or unique to 1982. For example, in 1982 the public lands contributed to Nevada being recognized as the nation's number one producer of gold, barite, magnesite and mercury. Bighorn sheep were reintroduced to two Nevada mountain ranges as the result of cooperation between the BLM and the Nevada Division of Wildlife. There were significant strides in the study of which areas should be proposed to Congress as wilderness.

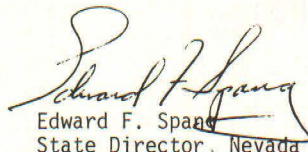
The first draft environmental impact statement on wilderness in Nevada was completed in the Tonopah area. Wilderness Study Areas in Ely, Winnemucca and the Clark County area started to undergo similar scrutiny in environmental impact statements which are part of the land use planning process. Areas with recently completed land use plans--Caliente and Tonopah--saw local and national interest groups and users cooperating in deciding how land use plan decisions should be implemented. Tonopah is unique in that grazing permittees have an opportunity to participate in an experimental stewardship program.

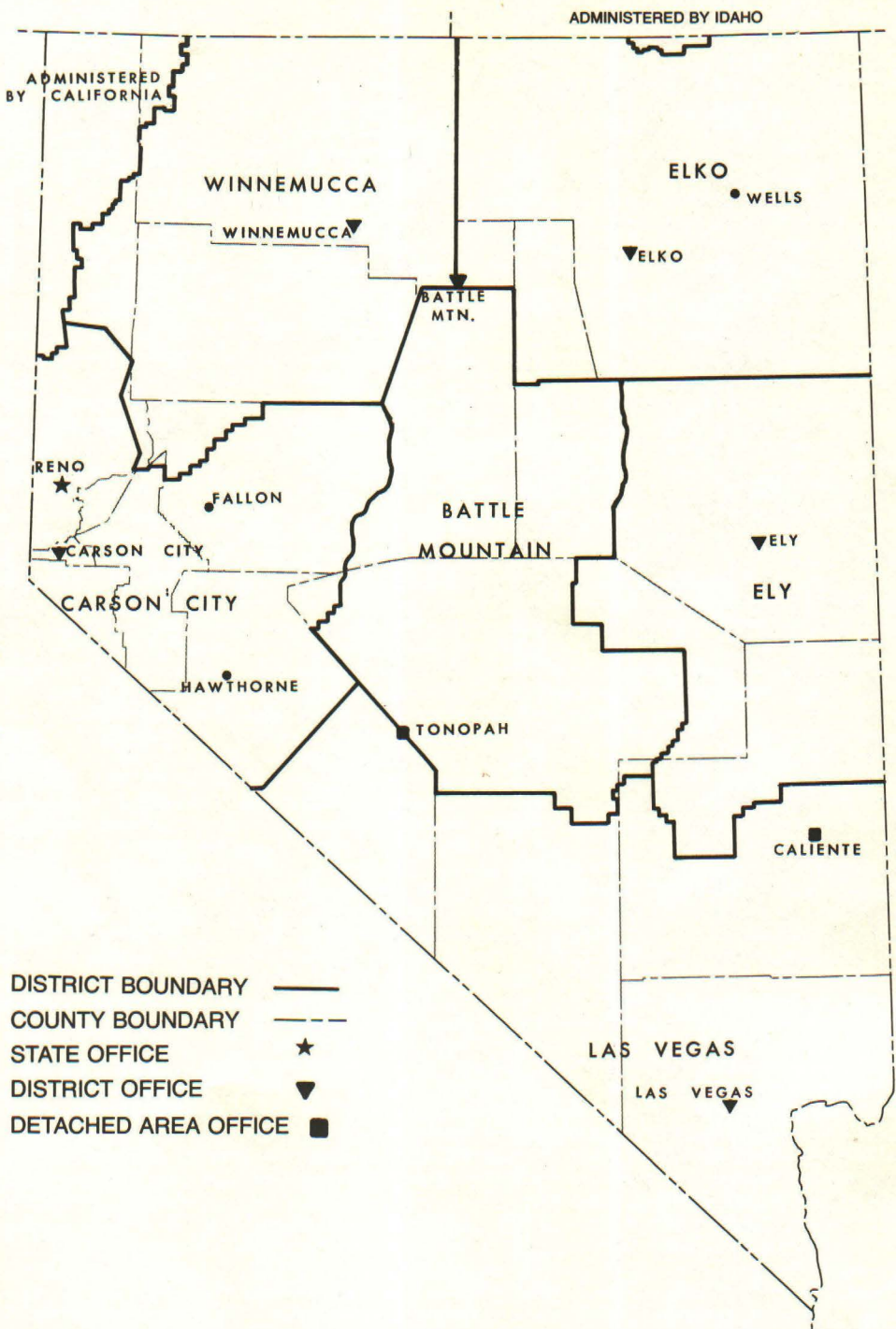
Traditional BLM programs also saw changes in 1982. An era ended with the granting of Nevada's last Homestead Act patent in Douglas County. The lands and realty program has a new look for 1983 following Administration direction to concentrate on asset management: determining if Federal lands are being used to the best advantage. After inventory, tracts with possible commercial value; scattered non-urban tracts which are difficult to manage efficiently; and lands with agricultural, commercial or industrial development value may be offered for sale.

Another of BLM's oldest programs, Cadastral survey, saw change as the authority to approve government survey work was delegated to BLM's state level.

Meanwhile, pinenut harvesting continues to be a family pastime, but there is also interest from commercial harvesters. BLM finds continued demands for fire protection and suppression, road maintenance and some building and construction of bridges and new facilities.

With this diversity on, and interest in, public land management it is imperative that the public have a major role in guiding the BLM. This can be done by participating in plans, projects and regulation reviews as they are announced or by becoming involved in consultation and coordination processes such as the local Coordinated Resource Management and Planning concept. This publication will familiarize you with what has happened the past year, and can give you insight into programs you may wish to become involved with.

  
Edward F. Spang  
State Director, Nevada



DISTRICT BOUNDARY ———  
 COUNTY BOUNDARY - - - -  
 STATE OFFICE ★  
 DISTRICT OFFICE ▼  
 DETACHED AREA OFFICE ■



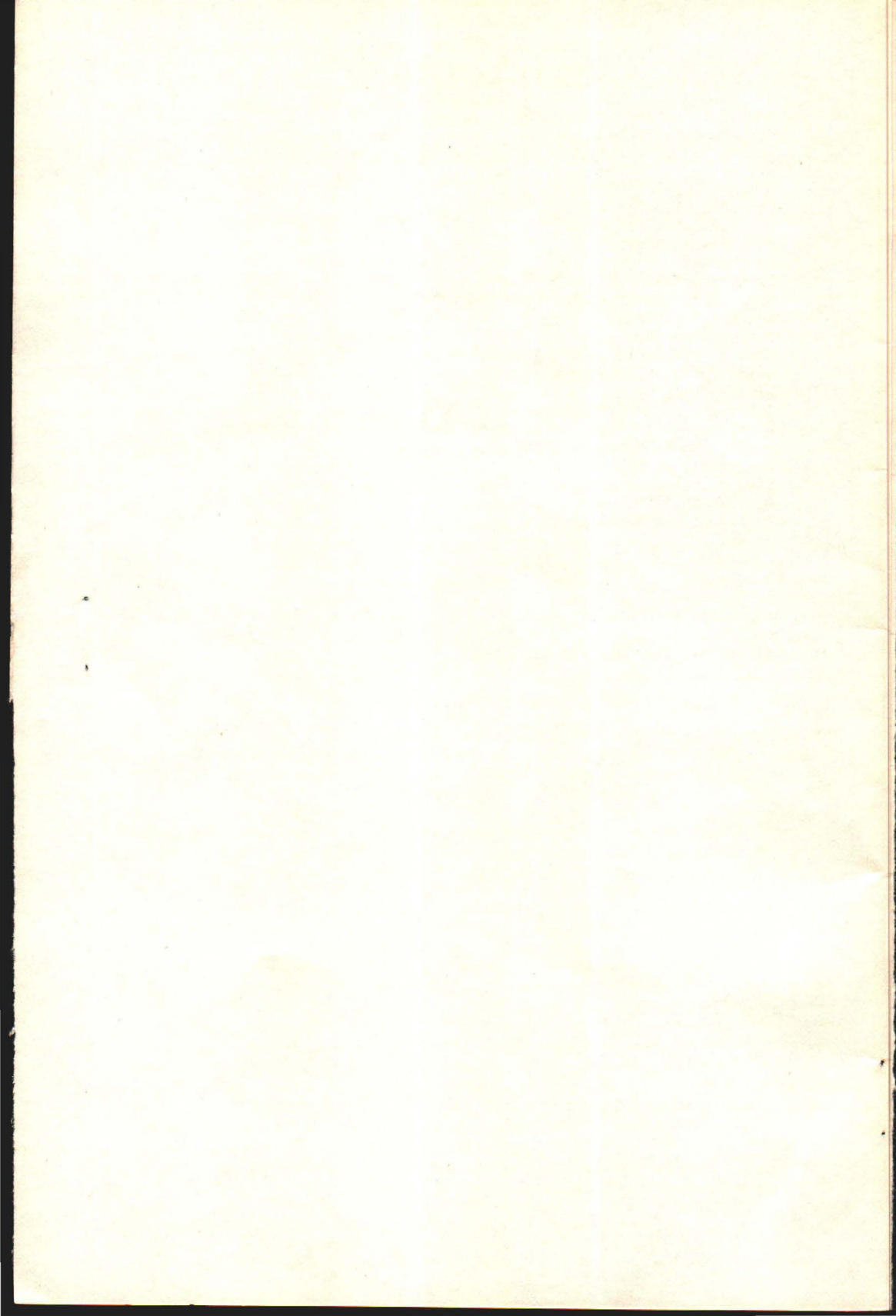
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This booklet contains information and statistics about the Bureau of Land Management in Nevada. Fiscal Year 1982 covers the 12-month period from October 1, 1981 to September 30, 1982.

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	Edward 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 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 Engineers	Galo Silva	
	Fred Boyd	
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; electronic communications; 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	Teena Fredianelli	784-5282
Chief, Appraisal Staff	Charles Hancock	784-5474
Chief, Cadastral Survey	Lacel Bland	784-5278
Chief, Engineering	John Trimmer	784-5275
Civil Engineer	Jack Sorenson	784-5275
Supervisor, Cartography, Acting	Diane Colcord	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	Pam Reynolds	784-5751
Dockets	Jody Woodin	784-5445
Public Contact	Virginia McCold	784-5496
Titles and Records	Ken Stowers	784-5487
Chief, Law Enforcement	Len Sims	784-5683
Chief, Branch of Protection, Acting	Phil Range	784-5885

## 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.

Administrative Officer and Deputy State Director for Administration	Mel Bunch	784-5491
Secretary	Sally Morrin	784-5491

Budget Officer	Fred Ramstad	784-5491
Chief, Administrative Services	Cas Martinez	784-5491
Procurement	Bonnie Johnson	784-5494
Library	Patsy McDuffie	784-5485
Printing, Reproduction	Cal Robinson	784-5746
Information Services, Automatic		
Data Processing	Dennis Anderson	784-5216
Chief, Personnel Management	Del Estey	784-5881
Training	John Chappell	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, Acting	Merle Good
Wells Resource Area Manager	Charles Boyer
Chief, Division of Resource Management	Merle Good
Planning and Environmental Coordination Contact	
Chief, Division of Operations	Cheryl Jacobs
Chief, Division of Administration	Jesse Dingman
	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	Glenn Stickley
Chief, Division of Planning and Environmental Coordination	Bob Neary
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  
Star Route 5, Box 1  
Ely, Nevada 89301

289-4865

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

Merrill DeSpain  
Howard Hedrick  
Wayne Lowman

George Cropper

Steve Rynas  
Duncan MacDonald  
J.D. White

Las Vegas District Office  
4765 W. Vegas Drive  
P.O. Box 26569  
Las Vegas, Nevada 89126

385-6403

Detached Area Office  
Caliente Resource Area  
P.O. Box 237  
Caliente, Nevada 89008

726-3141

District Manager  
Associate District Manager  
Stateline-Esmeralda Resource Area  
Manager  
Caliente-Virgin Valley Resource  
Area Manager  
Chief, Division of Resource  
Management  
Chief, Planning and Environmental  
Assistance  
Chief, Division of Operations  
Chief, Division of Administration

Kemp Conn  
William Calkins

Bill Civish

Darwin Anderson

Ed Ciliberti

Frank Maxwell  
Jim Schalnus  
George Graphenreed

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

635-5181

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

482-6214

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

H. James Fox

Neil Talbot  
Les Monroe  
Mike Mitchel

Mike Mitchel  
John Keenan  
Thomas Jury



## BLM EMPLOYMENT



*District office personnel review hundreds of applications for summer employment. BLM hires seasonal help to fight fire and serve as technicians in such fields as range, wildlife, archaeology and survey.*

Employment in the BLM in Nevada decreased 13.7 percent in fiscal year 1982 as compared to fiscal year 1981. This decrease was due primarily to lower funding. Further reductions planned for September 1982 did not materialize because of changes in the Annual Work Plan.

Conversion of most of the When Actually Employed (WAE) positions was proposed to take place the first pay period in October 1982.

### BLM NEVADA EMPLOYMENT FY 82

Office	Permanent	WAE*	Part-Time	Temporary	Totals
State Office	92	51	8	17	168
Elko	28	34	0	8	70
Winnemucca	33	20	1	9	63
Carson City	40	44	0	33	117
Ely	30	24	1	10	65
Las Vegas	42	40	2	27	111
Battle Mountain	<u>28</u>	<u>34</u>	<u>0</u>	<u>14</u>	<u>76</u>
TOTALS	293	247	12	118	670

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



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

Currently, Alaska has the highest percentage of Federally administered lands - 89 percent. Second largest percentage is Nevada with about 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	
Soil Conservation Service	.2	
Department Subtotal	<u>5,143,891.2</u>	7.27
Department of Energy		
Energy Research and Development Administration	819,581.8	
Western Area Power Admin.	4,407.2	
Department Subtotal	<u>823,989.0</u>	1.16
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	
Bureau of Reclamation	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	*
Other Agencies Subtotal	<u>50.6</u>	
TOTALS	61,320,562.1	86.68

\*Less than one percent.

NOTE: These figures are the most recent for all Federal agencies as compiled by the General Services Administration. Current BLM figures are shown on the opposite page.

# PUBLIC LANDS IN NEVADA BY COUNTY AS OF SEPTEMBER 30, 1982

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	2,294,970	3,144,320	73.0
Clark	3,188,076	5,173,760	61.6
Douglas	178,916	480,640	37.2
Elko	6,785,646	10,995,840	61.7
Esmeralda	2,210,740	2,284,800	96.8
Eureka	2,021,846	2,676,480	75.5
Humboldt	4,321,844	6,210,560	69.6
Lander	3,013,082	3,597,440	83.8
Lincoln	5,749,866	6,816,000	84.3
Lyon	711,488	1,295,360	54.9
Mineral	1,693,033	2,455,680	68.9
Nye	6,704,211	11,560,960	58.0
Pershing	2,910,424	3,859,840	75.4
Storey	12,528	167,680	7.5
Washoe	2,643,084	4,229,120	62.5
White Pine	<u>4,364,381</u>	<u>5,699,200</u>	<u>76.6</u>
TOTALS	48,846,567	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 DISTRICTS

DISTRICT	TOTAL ACRES MANAGED BY BLM
Elko	7,387,372
Winnemucca	8,252,833
Carson City	5,322,412*
Ely	8,007,779
Las Vegas	10,006,021
Battle Mountain	8,400,509
Susanville	1,452,138**
Boise	<u>58,082***</u>
TOTAL	48,887,146

\*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 82

Total Public Land Receipts Collected by BLM	\$30,229,869	Total Funds Paid out by BLM from the U.S. Treasury Relating to Public Land Management in Nevada	
		Direct Cost Expenditures	\$21,130,000
		Payments to State of Nevada	13,048,773
		Payments in Lieu of Taxes	<u>5,069,148</u>
		TOTAL	\$39,247,921

## RECEIPTS

Mineral Leases and Permits	
Oil and Gas	23,480,327
Geothermal	1,888,610
All Others	88,650
Sale of Lands and Materials	
Land	569,079
Materials	88,111
Timber	77,417
All Others	35,259
Grazing	
Section 3*	3,252,535
Section 15**	69,606
Fees and Commissions	348,920
Rights-of-Way	181,594
Rents of Land	87,685
All Others	<u>62,076</u>
TOTAL	\$30,229,869

\*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 (\$824,000 of this amount is directly from grazing fees)	\$ 1,537,000
Maintenance of Range, Wildlife Habitat, Soil and Water Improvements (\$304,000 is directly from grazing fees)	398,500
Recreation and Other Facility Construction	47,000
Road Construction and Easement Acquisition	192,500
Maintenance of Roads and Facilities	686,000
RESOURCE PROTECTION	
Fire Prevention	1,889,500
Fire Suppression	1,996,500
MANAGEMENT	
Lands and Realty	1,256,500
Energy Minerals	
Oil and Gas	518,500
Geothermal	285,500
Other	16,000
Non-Energy Minerals	774,500
Forest Management	222,500
Grazing Management	3,582,000
Wild Horse and Burro Management	1,283,500
Cultural Management	330,000
Wilderness Management	547,000
Recreation and Visual Resource Management	564,500
Soil, Air, and Water Management	2,432,500
Wildlife Habitat Management	1,099,000
Fire Management	414,500
Planning for Multiple Use	555,000
Law Enforcement	117,000
CONTRIBUTIONS AND REIMBURSABLES	384,500
TOTAL	\$21,130,000

PAYMENT TO STATE OF NEVADA

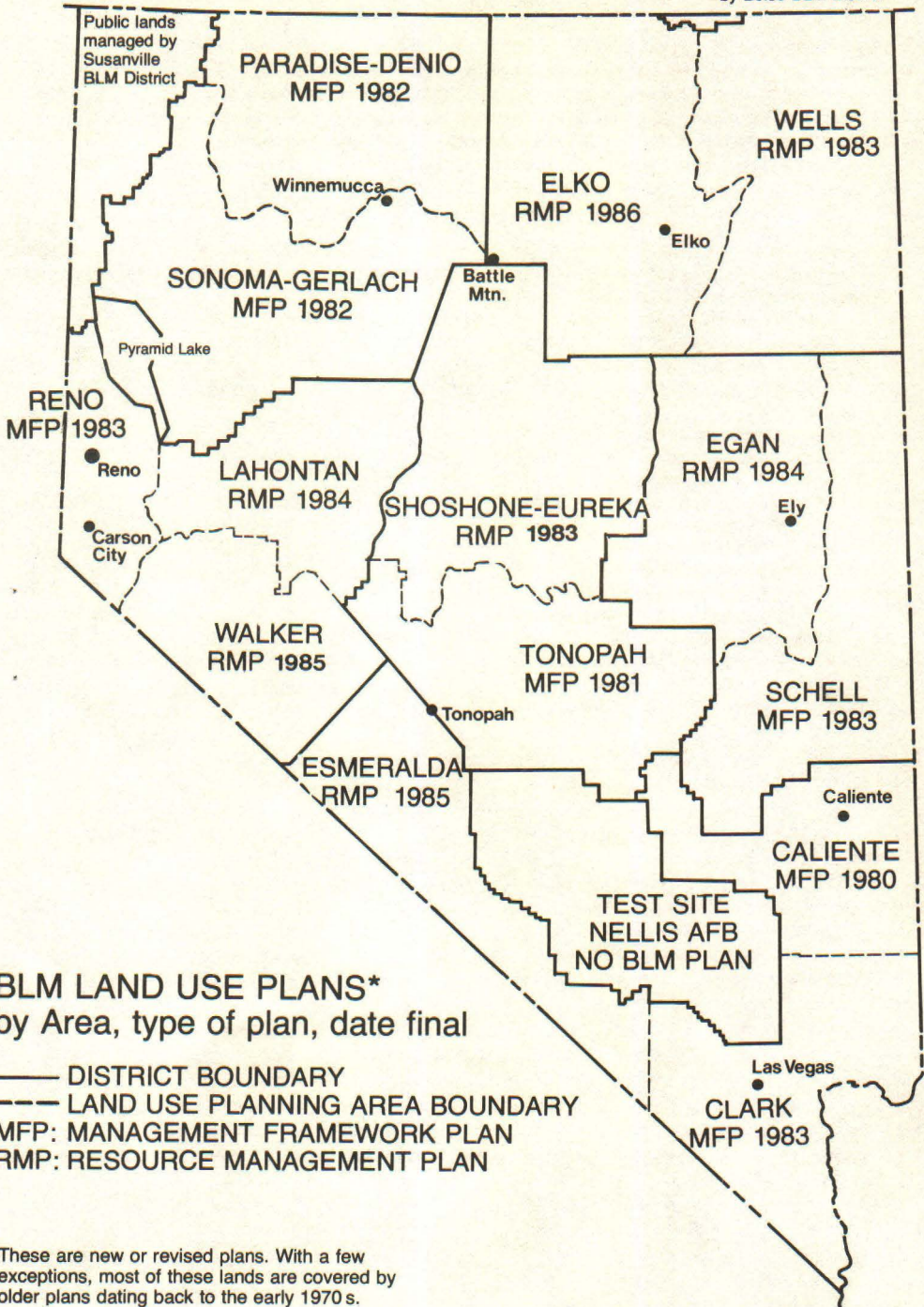
SOURCE	AMOUNT
Mineral Leases	\$12,595,501
Sale of Lands and Materials	11,902
Grazing	
Section 3	406,567
Section 15	34,803
TOTAL	\$13,048,773

PAYMENT IN LIEU OF TAXES

COUNTY	PAYMENT	COUNTY	PAYMENT	COUNTY	PAYMENT
Carson City	\$ 34,951	Esmeralda	35,703	Mineral	248,216
Churchill	398,846	Eureka	55,048	Nye	314,390
Clark	917,274	Humboldt	314,298	Pershing	156,598
Douglas	168,988	Lander	187,292	Storey	8,678
Elko	453,067	Lincoln	171,485	Washoe	909,666
		Lyon	393,216	White Pine	301,432
		TOTAL			\$5,069,148



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.



## 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, 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. The Paradise-Denio and Sonoma-Gerlach Resource Areas MFPs were completed in 1982. Plans for the Reno, Schell and Clark Resource Areas are scheduled for completion by mid-year 1983. The Wells and Shoshone-Eureka RMPs are due for completion in the fall of 1983.

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



## 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.

### ENVIRONMENTAL IMPACT STATEMENTS (EISs)

Nevada EISs in 1982 encompassed BLM programs such as rangeland management and wilderness and non-BLM projects such as coal-fired power plants. Grazing EISs were completed for Clark (Las Vegas), Reno (Carson City), and Schell (Ely). Resource Management Plan (RMP) EISs initiated are Wells (Elko) and Shoshone-Eureka (Battle Mountain), scheduled for completion in 1983; and Egan (Ely) and Lahontan (Carson City) scheduled for completion in 1984. These include consideration of rangeland management.

The Tonopah Wilderness EIS was completed in draft in 1982, with the final EIS scheduled for completion in 1983. (Approval by the Secretary of the Interior is required before a final EIS is published.)

Wilderness EISs initiated include Schell (Ely), Paradise-Denio and Sonoma-Gerlach (Winnemucca), and Clark (Las Vegas). All will be completed in draft during 1983, with the final EISs due for completion in 1984.

Public lands are being considered by White Pine County for a possible coal-fired power plant and by Exxon Corporation for a molybdenum mine. Thus, the EIS process is underway for the White Pine Power Project in White Pine County and the Mt. Hope molybdenum project in Eureka County. Private environmental firms, coordinating closely with BLM, have been obtained to prepare the necessary environmental reports.

### ENVIRONMENTAL ASSESSMENTS (EAs)

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 1982 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, Valley of Fire Oil and Gas EA, and Wild Horse Gathering Assessments.



# 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, 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.

In 1982 there were approximately 375 active mining operations in Nevada. There are 60 underground, 228 open pit, 148 mill and 36 heap leach operations. (Some operations include both mine and mill.) About 28 mineral commodities are produced in the State. The value of the nonfuel mineral production in 1982 was more than \$467 million.

During 1982, Nevada was first in the nation in the production of gold, barite, magnesite and mercury. It was second in the production of diatomite, gemstones and lithium. Nevada ranked fourteenth nationally in the value of its nonfuel minerals production.

Oil and gas operations on public land in Nevada resulted in a fifth location of an oil pool, this time in Pine Valley (Eureka County), south of Carlin. This discovery is significant in that this oil pool is the first commercially-producible oil outside Railroad Valley. Although a second deep test was drilled in the overthrust northeast of Las Vegas (Grace Petroleum Arrow Canyon Unit No. 1) to a depth of 17,110 feet, no commercial oil or gas zones were found. Also, several wells drilled near the discovery well in Pine Valley (Blackburn No. 3) were also dry holes. Exploration and drilling activity diminished steadily throughout the year with only one oil rig active on Federal land at the end of the year.

## MINING CLAIM RECORDATION STATUS FY 82

Total claims recorded during fiscal year 1982: 34,382  
Total claims recorded through September 30, 1982: 252,015

## MINERAL LEASES AND PERMITS IN EFFECT FY 82

TYPE	NO.	ACREAGE
Oil and Gas Leases	11,135*	23,512,533**
Geothermal Leases	820*	1,352,937**
Sodium Leases/Permits	42	97,268
Potassium Leases/Permits	19	26,006
Other (Silica Sand and Gravel)	<u>6</u>	<u>1,594</u>
TOTALS	12,023	24,992,178

\*Includes competitive leases.

\*\*Includes competitive acreage.



OIL AND GAS LEASES IN PRODUCTION FY 82

	NO. LEASES	NO. WELLS	PRODUCTION ACRES	TOTAL PRODUCTION (bbls)
Trap Springs	31	18*	2,560	506,546
Eagle Springs	4	12	3,122	47,406
Bacon Flat	1	1	2,560	46,082
Blackburn**	<u>1</u>	<u>1</u>	<u>2,457</u>	<u>11,097</u>
TOTALS	37	32	10,699	611,131

\*Includes one shut-in well.

\*\*Only production not in Railroad Valley.

Royalties, oil and gas production: Paid to Federal Government, \$1,391,192  
Paid to State of Nevada, \$695,596

OIL AND GAS LEASES BY COUNTY FY 82

COUNTY	NUMBER OF LEASES			LEASED ACREAGE		
	Competitive	Non-Competitive	SIM*	Competitive	Non-Competitive	SIM
Churchill		460	4		976,109	6,378
Clark		1,472	2		2,781,326	7,989
Elko		1,849	10		4,822,687	21,986
Esmeralda		7	2		8,263	1,160
Eureka		688	13		1,338,098	57,835
Humboldt		295	0		1,299,211	0
Lander		305	0		695,803	0
Lincoln		1,661	1		3,991,842	1,281
Lyon		7	0		12,353	0
Mineral		12	1		14,991	1,400
Nye	2	2,138	14	400	2,891,671	22,648
Pershing		155	0		458,024	0
Washoe		95	0		586,765	0
White Pine	—	<u>1,989</u>	<u>19</u>	—	<u>363,499</u>	<u>60,862</u>
TOTALS	2	11,133	66	400	20,240,642	181,539

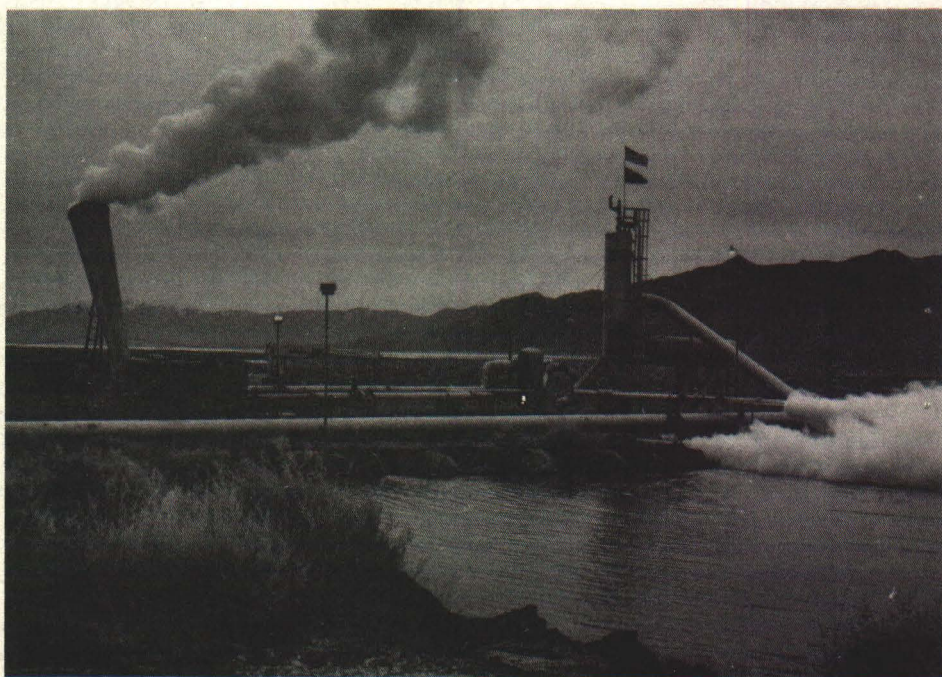
\*Simultaneous drawing leases.

FREE USE MATERIAL TO STATE AND LOCAL GOVERNMENTS

MINERAL	NO. OF PERMITS	AMOUNT OF MATERIAL
Sand and Gravel	50	2,250,990 cubic yards
Common Borrow	15	123,795 cubic yards
Decomposed Granite	16	605,000 cubic yards
Top Soil	1	10,000 cubic yards
Common Clay	1	100 cubic yards
Rip Rap	3	49,000 tons

MINERAL MATERIAL SALES FY 82

MINERAL	AMOUNT SOLD	VALUE
Sand and Gravel	845,302 cubic yards	\$46,921
Common Clay	30,040 cubic yards	2,406
Decomposed Granite	43,435 cubic yards	16,391
Top Soil	3,940 cubic yards	1,709
Native (Common) Borrow	374 cubic yards	148
Traprock	57,500 tons	5,500
Building Stone	108 tons	193
Shale	3 tons	8
TOTAL VALUE		\$73,276



*Steam rises from a Sunedco well at Dixie Valley where there was an injection test of a monoblock turbine plus a steam-water separator.*



# GEOTHERMAL ENERGY

Although the geothermal resource potential of Nevada remains high, the reduced level of economic activity in the country as a whole was reflected in a marked reduction of exploration activity in the State in fiscal year 1982. One competitive bid sale was held in fiscal year 1982 with no competitive bids received. This is the first time since competitive bid lease sales were initiated in Nevada in 1974 that no bids were received for any of the parcels being offered.

Plans for a power plant demonstration project at Desert Peak are being delayed because of the economic condition, as are all exploration projects. However, a space-heating project, on private land, has been put into operational status in Elko.

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 until production is initiated and royalty fees thereafter.

## GEOTHERMAL LEASES ISSUED FY 82

TYPE	NUMBER OF LEASES	ACREAGE
Non-competitive	54	128,634
Competitive	<u>2</u>	<u>15,304</u>
TOTALS	62	143,938

## GEOTHERMAL DRILLING ACTIVITY IN NEVADA FY 82 (on both public and private land)

Number of Holes Drilled: 4 Cumulative Footage: 20,271 feet

## COMPETITIVE GEOTHERMAL LEASE SALES FY 82

Gerlach, Northeast	4	No bids received.
Trego	<u>4</u>	
TOTALS	8	

## GEOTHERMAL WELL SUMMARY FY 82

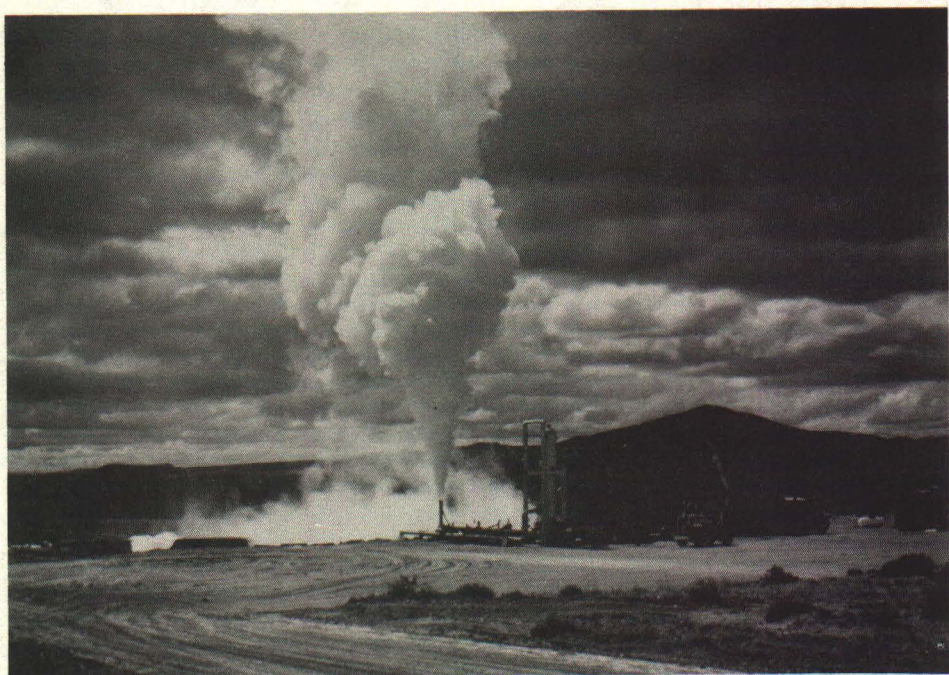
Total number of all temperature gradient holes drilled as of November 1982: 311

Total number of all exploratory wells drilled as of November 1982:

Producible or usable: 37  
Plugged and abandoned: 5

TOTAL 42





*A 30-day flow test of a steam-water separator was conducted at this Phillips well at Desert Peak in Churchill County.*

GEOTHERMAL LEASES IN EFFECT BY COUNTY  
FY 82

COUNTY	NUMBER OF LEASES		NUMBER OF ACRES	
	NON-COMPETITIVE	COMPETITIVE	NON-COMPETITIVE	COMPETITIVE
Churchill	175	37	278,191	66,521
Elko	26	4	38,032	5,143
Esmeralda	41	1	76,907	2,547
Eureka	11	3	8,850	6,689
Humboldt	98	7	175,897	13,512
Lander	64	4	88,389	4,499
Lyon	7	4	5,287	4,462
Mineral	21	-	36,289	-
Nye	52	4	76,513	7,395
Pershing	174	15	296,123	30,127
Storey	1	-	591	-
Washoe	18	11	16,947	16,738
White Pine	42	-	97,309	-
TOTALS	730	90	1,195,325	157,633



# 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 lands transfers in fiscal year 1982 include issuance of the last 1862 Homestead Act patent in Nevada. Patent was issued pursuant to the Desert Land Act. This was the first issuance of patent under this authority since the State was reopened to filings in 1979.

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 public land free or at discounted prices for uses such as schools and community projects. In fiscal year 1982, land was provided to two different church groups for use in conjunction with church facilities.

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 FY 82

KIND	NO.	ACRES
Desert Land Entry	1	320
Homestead	1	160
Public Sales	7	208.855
Color of Title	1	40
Exchange	1	65
Conveyance of Federally-Owned Minerals	1	32.5
Recreation and Public Purposes	<u>2</u>	<u>15</u>
TOTALS	14	841.355

## LAND LEASES IN EFFECT SEPTEMBER 30, 1982

KIND	NO.	ACRES
Recreation and Public Purposes	127	9,601.76
Mining Claim Occupancy	1	3
Airport	39	14,670
Small Tract	<u>3</u>	<u>15</u>
TOTALS	170	24,289.76



RIGHTS-OF-WAY IN EFFECT SEPTEMBER 30, 1982

KIND	NO.
Communication Sites	294
Electrical Transmission	702
Federal Highway	97
Highway, Tram, Access Road	162
Material Site	361
Pipeline - Oil and Gas	39
Pipeline - Water	196
Railroad	70
Telephone - Telegraph	355
Water Reservoir or Ditch	<u>27</u>
TOTAL	2,303



*BLM State Director Ed Spang, right, presents a deed to 160 acres in Carson Valley to Paul Unruh. The May 1982 patent may be the last issued in the contiguous 48 states under the 1862 Homestead Act.*



## 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; 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 in all BLM-administered land in Nevada by 1988. As of October 1, 1982, more than 35 million acres of soil inventories have been completed. Following is a list of BLM District accomplishments by fiscal year 1982 and cumulative totals.

#### SOIL INVENTORIES

DISTRICT	SOIL SURVEY ACCOMPLISHMENTS (ACRES)*	
	FY 82	CUMULATIVE TO OCT. 1, 1982
Elko	1,181,780	5,249,440
Winnemucca	709,683	3,394,046
Carson City	360,950	5,268,014
Ely	627,000	3,604,885
Las Vegas	1,100,000	9,732,537
Battle Mountain	1,442,300	6,680,610
Susanville	-----	<u>1,813,226</u>
TOTAL	5,421,713	35,742,758**

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

\*\* Acreage includes approximately 7,500,000 acres of low intensity (Order 4) soil surveys that will be converted to Order 3.



*Soil scientists examining soil profile near Reno.*



# GRAZING MANAGEMENT

1981

1982

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

- 1983 - Wells and Shoshone-Eureka
- 1984 - Egan and Lahontan
- 1985 - Elko, Esmeralda, and Walker

For locations of these resource areas, please refer to the Land Use 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 1981\*

DISTRICT	NUMBER OF OPERATORS	ANIMAL UNIT MONTHS**	NUMBER OF CATTLE	NUMBER OF HORSES	NUMBER OF SHEEP
Elko	177	504,154	121,031	652	30,201
Winnemucca	105	293,922	47,862	162	12,293
Carson City	87	136,933	19,026	45	36,574
Ely	<u>115</u>	<u>220,985</u>	<u>30,014</u>	<u>33</u>	<u>84,202</u>
Las Vegas	146	130,448	15,296	147	9,870
Battle Mtn.	<u>85</u>	<u>365,494</u>	<u>51,145</u>	<u>177</u>	<u>18,640</u>
TOTALS	715	1,651,936	284,374	1,216	191,780

\*Grazing fee year 1981 ran from March 1, 1981, to February 1, 1982.

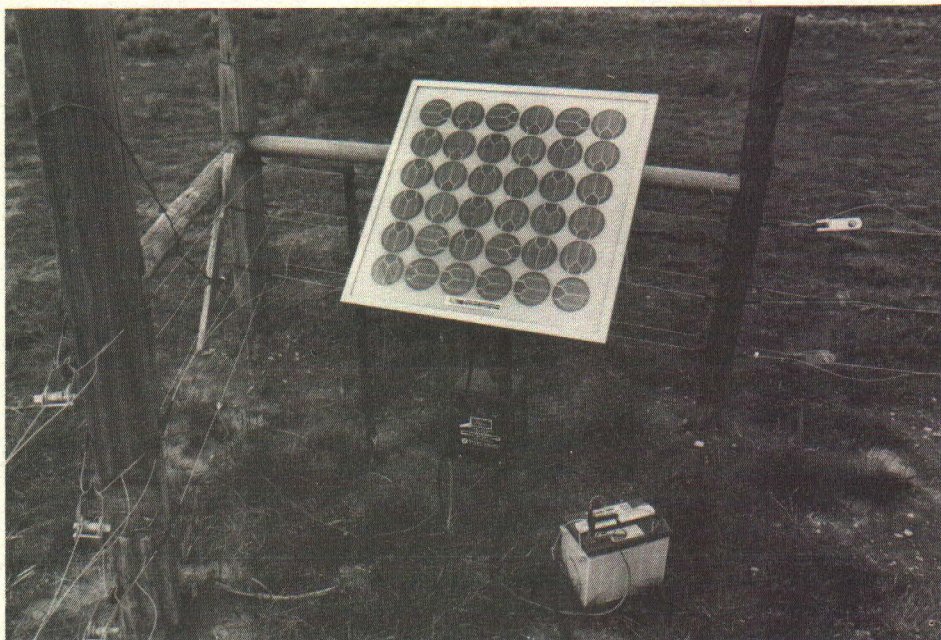
\*\*An Animal Unit Month is a measure of the forage needed to feed one cow or five sheep for one month.

(1979)

1980	(115)	233,433	30,240	73	67,081
1981	(101)	163,424	30,465	33	81,563



## RANGE IMPROVEMENTS



*This solar panel charges a battery which runs an electric fence around a Graslan herbicide plot in the Winnemucca District. The solar-powered battery has proven to have a longer life than conventional batteries.*

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 82

TYPE OF IMPROVEMENT	NEW CONSTRUCTION	MAINTENANCE
Cattleguards	66 each	11 units
Fences	203 miles	127 units
Land Treatment	2,408 acres	-----
Water Facilities	77 units	102 units



1982

# 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, 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 82

DISTRICT	HORSES	BURROS
Elko	1,376	-
Winnemucca	6,696	222
Carson City	4,834	264
Ely	2,598	-
Las Vegas	5,444	1,157
Battle Mountain	6,176	18
TOTALS	27,124	1,661

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 1982 is noted below.

## ROUND UPS COMPLETED - FY 82

DISTRICT	GATHERING AREA	HORSES GATHERED
Winnemucca	Nightengale/Shawave	553
	Owyhee/Snowstorm	751
	Humboldts/West Humboldts	441
	Hot Springs/Osgood Mountains	326
Carson City	Pine Nuts	42
	Clan Alpine	663
	Winnemucca Ranch	41
Battle Mountain	Bald Mountain	92
TOTAL		2,909

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 82

NO. ADOPTED/LOCATION OF ADOPTION CENTER	NUMBER AT PALOMINO VALLEY START OF FY 82	BRANDED/ PRIVATE	DIED OR HUMANELY DESTROYED	BALANCE REMAINING AT PALOMINO VALLEY END OF FY 82
949 Nevada	149	12	437	397
472 Texas				
547 Tennessee				
51 Washington				
26 Oregon				
112 Colorado				
<u>57</u> Pennsylvania				
2,214 Total				



*Two wranglers lead a horse into a trap near Horse Springs during a round-up by the Carson City District Office.*



## WILDLIFE HABITAT MANAGEMENT



*Bighorn sheep were reintroduced into the Hot Creek Range and the Stillwater Mountains in 1982 as a result of a cooperative venture between BLM and the Nevada Division of Wildlife.*

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 48 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 1982, the BLM cooperated with the Nevada Division of Wildlife in reintroduction of Bighorn Sheep into two mountain ranges: the Hot Creek Range and the Stillwater Mountains.

Actual habitat improvement projects were undertaken within 21 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 \$400,000.

### WILDLIFE PROJECT WORK COMPLETED IN FY 82

Developed water facilities (guzzlers, spring developments)	42
Aquatic-riparian protection (miles of fencing)	14
Developed "potholes" with nesting structures for waterfowl habitat improvement	41



## WILDERNESS

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. Most of these appeals have been reviewed by the Board, and decisions on each appeal have been issued. Five areas in northern Elko County remain under appeal.

Studies are underway on roughly two-thirds 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 1982\*

Acres designated WSAs	5,087,356 ( 103 units)
Acres eliminated from consideration	43,896,901 (1,600 units)
Non-WSA acres under appeal	101,932 ( 5 units)
WSA acres undergoing wilderness study	4,241,753 ( 75 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.



*The BLM helped fund a summer field course in archaeological techniques in the Cortez mining district. Student Archaeologists investigated past mining activities which revealed information about ethnic group lifestyles.*



## CULTURAL RESOURCE 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 five areas in fiscal year 1982. In the Mormon Mountains area of southern Nevada, a regional field sample survey was initiated. Results of the project, to be concluded in fiscal year 1983, are intended to streamline cultural resources protection measures on future oil and gas activities and other development projects in the immediate region.

Mitigation reports on the salvage of a major prehistoric campsite in northeastern Nevada and a chert prehistoric quarry north of Pyramid Lake were completed. The campsite was used over at least the last 5,500 years. Production of stone tools from white chert gathered from a nearby geologic source was the primary activity at the site; however, evidence of bison hunting was also noted.

In central Nevada, the second year of a joint three-year 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.

A complete mammoth skeleton was excavated from public lands in the Black Rock Desert region with Bureau approval. Though stone tools have been found in the same vicinity, the direct association of these tools with the mammoth remains was not conclusively established, but the potential still remains in the immediate region of finding direct evidence of prehistoric man hunting large, now-extinct fauna in Nevada.

A study of Southern Paiute concerns was completed as part of the proposed Intermountain Power Project. Not only were contemporary issues explored, but a thorough synthesis of ethnohistoric information concerning the Southern Paiute occupation of Southern Nevada was conducted.

One of the major informational services on cultural resources made available to the public in fiscal year 1982 began with the dedication of 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.

Three publications were issued in limited numbers in fiscal year 1982; all are on file in major Nevada libraries and the University of Nevada libraries, plus BLM offices. Cultural resource series publications are: "Prehistory, Ethnohistory, and History of Eastern Nevada: A Cultural Resources Summary of the Elko and Ely Districts"; and "History of Central Nevada: An Overview of the Battle Mountain District." The technical report is: "An Historic Overview of the BLM Shoshone-Eureka Resource Area, Nevada."



CULTURAL RESOURCE INVENTORY

	WORK DONE IN FY 82	TOTAL THROUGH FY 82
Class 3 (Intensively Assessed Acres)	55,420	385,104
Class 2 (Extensively Assessed Acres)	4,590	429,377

PROTECTION, STABILIZATION, AND INTERPRETATION PROJECTS

ACTIVITY	FY 82	TOTAL THROUGH FY 82
Positive Protection Signing	1	24
Research Excavations	0	12
Interpretive Schemes	1	5
Fencing	0	24
Stabilization	0	3
Irregular Patrol and Maintenance	0	58
Regular Patrol and Maintenance	0	12
Protective Withdrawals	0	4
Cultural Resource Publications	3	11



*A BLM Archaeologist discusses the stratigraphy or chronological record indicated by layered deposits in Hidden Cave, near Fallon. The site was opened in the fall of 1982 for public tours.*



## 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.

The highlight of fiscal year 1982 in the BLM's recreation program was the completion 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 contains interpretive displays to help visitors understand and appreciate the beautiful and fragile desert environment that exists there. Interpretive materials were installed in time for the May 1982 opening. That opening culminated almost 16 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.

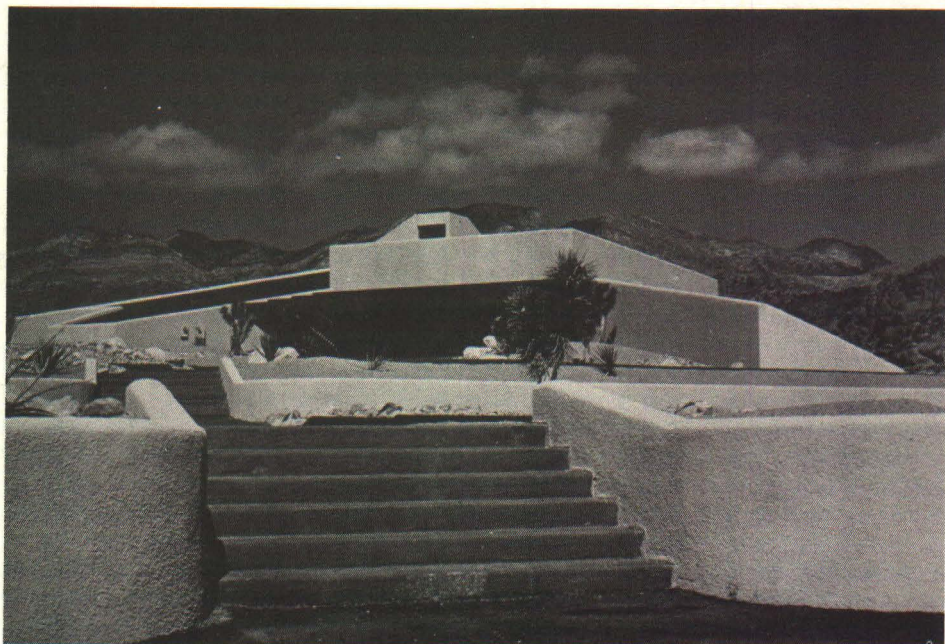
Other cooperative efforts with the Nevada Division of State Parks during fiscal year 1982 included entering into an agreement for the provision of law enforcement services at Red Rock Canyon. Also, BLM cooperated in the State Parks' update of "Recreation in Nevada, a Statewide Comprehensive Outdoor Recreation Plan."

Considerable emphasis in fiscal year 1982 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 10,890,000 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.

Some 3,322 recreation-related permits were issued in fiscal year 1982. Of these, 3,206 were fee site (camping) permits; 78 were authorized for competitive recreational events; and 38 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 1982 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 which encourages public participation in making these important choices.





*The Visitor Center at the Red Rock Canyon Recreation Lands, Las Vegas, received first place in the Elmer H. Anderson Parks Excellence Awards program. The Center's excellence was recognized by the Nevada Recreation and Park Society.*

Campgrounds are 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	9	\$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	4	-
	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 1982. Prices charged for forest products were adjusted to collect fair market value for all material sold. This caused a slight decline in the quantities of cordwood, Christmas trees, and fence posts sold. The pinenut crop was poor in 1982, and less than one-third as many pounds of pinenuts were sold as in 1981.

### SUMMARY OF FOREST PRODUCTS SALES FOR 1982

DISTRICT	CHRISTMAS TREES	CORDWOOD	PINE NUTS (LBS.)	FENCE POSTS	TOTAL \$ VALUE
Elko	3,547	1,321	200	3,380	\$ 9,982
Winnemucca	698	289	0	90	1,603
Carson City	13,770	4,793	2,500	1,000	44,076
Ely	3,980	891	22,000	445	14,927
Las Vegas	10,284	3,243	100	5,044	19,940
Battle Mountain	<u>3,473</u>	<u>626</u>	<u>24,350</u>	<u>3,435</u>	<u>13,240</u>
TOTALS	35,752	11,163	49,150	13,394	\$103,768



*A commercial pine nut gatherer uses a ladder to reach the still unopened cones in a pinyon pine tree. Commercial gatherers (more than 25 pounds) bid to harvest nuts, while recreationists are not required to have a permit.*



## 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 1982, four BLM survey crews field completed surveys of section lines enclosing 175,000 acres of BLM and Forest Service lands. A summary of other survey statistics and surveys approved in fiscal year 1982 is outlined below:

### SURVEY STATUS

ITEM	FY 81	FY 82
Acres surveyed		
Forest Service	1,617	1,145
BLM	52,662	51,390
Acres resurveyed		
Forest Service	26,608	32,102
BLM	186,939	307,702
Acres unsurveyed	19,438,399	19,385,864
Minerals surveyed	10*	11**
Plats accepted	15	49
Acres surveyed to present	50,890,561***	50,943,096***

\*Approved FY 1981, 10 mineral surveys consisting of 41 lode claims, 5 placers and 12 millsites.

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

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

NOTE: "Acres surveyed" and "acres surveyed to present" have been adjusted to correspond to data in the publication, 1981 Public Land Statistics.



## 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 1982, 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 1982

DISTRICT	NUMBER OF FIRE ACTIONS				ACRES BURNED		
	9 ACRES OR LESS	10-99 ACRES	MORE THAN 100 ACRES	TOTALS	BLM	OTHER OWNER- SHIP	TOTALS
Elko	35	1	1	37	827	0	827
Winnemucca	13	5	3	21	4,877	806	5,683
Carson City	46	3	0	49	49	0	49
Ely	38	3	2	43	1,096	0	1,096
Las Vegas	177	4	1	182	4,564	343	4,907
Battle Mtn.	40	3	0	43	85	0	85
TOTALS	349	19	7	375	11,498	1,149	12,647
PERCENTAGE	93	5	2	100	91	9	100



## 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, 1982

DISTRICT	SEEDING (ACRES)	FENCE CONSTRUCTION (MILES)	FENCE MAINTENANCE (MILES)
Elko	204,070	67	57
Winnemucca	7,650	32	-
Carson City	17,543	13	32
Ely	15,003	29	-
Las Vegas	4,100	4	1
Battle Mtn.	400	3	-
TOTALS	248,766	148	90



*Rehabilitation efforts after a fire sometimes includes seeding. A rangeland drill like that shown drops the seed and immediately discs it into the ground.*



## BUILDINGS and FACILITIES



*Elko County's Haystack Bridge is a pre-cast concrete structure completed in the summer of 1982.*

The Bureau spent \$433,000 in fiscal year 1982 to perform routine maintenance on buildings and recreation facilities in Nevada. Of that amount, \$178,000 were spent on building maintenance and \$255,000 on recreational facilities. The latter includes some operational activities other than maintenance.

## ROADS

The Haystack Bridge and related approach road, Elko County, Nevada, was completed in the summer of 1982. The new pre-cast concrete bridge with access roads replaced a deteriorated steel structure.

The design of the Devils Gate Bridge was completed in 1982. Construction of the bridge, located northeast of Elko, is dependent upon future budgeting.

Preliminary design for the new BLM District Office Complex in Elko was completed in late 1982 with construction scheduled for 1983.

The BLM's current inventoried road system in Nevada covers 9,400 miles. During fiscal year 1982 about 1,918 miles were maintained at a cost of \$253,000. No new road construction was planned or completed by BLM in Nevada during the 1982 fiscal year. Road system information, by district, follows:

### EXISTING MILES BY DISTRICT FY 82

### MILES MAINTAINED IN FY 82

Elko	2,400	456
Winnemucca	1,250	341
Carson City	850	418
Ely	1,550	303
Las Vegas	1,400	181
Battle Mountain	<u>1,950</u>	<u>219</u>
TOTALS	9,400	1,918