

861

# NEVADA



1984

# PROGRESS REPORT



# United States Department of the Interior

## BUREAU OF LAND MANAGEMENT NEVADA STATE OFFICE

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

Historical retrospect often seems a luxury for those involved in the active fields of land and resource management, but in 1984 we took some time to reflect on the past: To learn more about our ancestors. To evaluate where we've been in public land management. To discuss where we are going.

It was the golden anniversary of the Taylor Grazing Act, and it was the year volunteers flocked to the desert for one of Nevada BLM's largest archaeological excavations at James Creek.

From July to October 1984, BLM archaeologists, contract archaeologists and volunteers excavated lands involved in the Carlin Gold land sale. The excavated rockshelter yielded basket fragments, stone tools and skeletal remains of large butchered animals. While much of the lifestyle of the past residents was being revealed at James Creek, numerous archaeological investigations were ongoing in east central Nevada on Desert Land Entry parcels. An impressive inventory of early period campsites on what are now dry valley bottoms opened our eyes. We learned there were many early users of lakeshore resources such as marsh plants and waterfowl.

In June of 1984 we looked back at the Taylor Grazing Act which resulted in the establishment of grazing districts, setting the jurisdictional pattern for the administration of public lands. The Taylor Grazing Act of June 23, 1934 sought to improve management of the lands. The Grazing Act was followed in later years by the Classification and Multiple Use Act, the National Environmental Policy Act and the Federal Land Policy and Management Act. Today we manage the public lands as a legacy for all Americans.

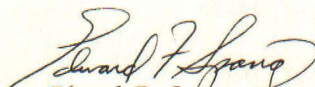
Although the original grazing act did not provide for advisory boards, they were established almost immediately and set another standard for BLM. Today, grazing board members review projects, plans and regulations. Local advisory councils and Coordinated Resource Management and Planning groups participate in advising the BLM on its diverse administrative responsibilities.

The BLM did its part to add to history in 1984. The first acid rain monitoring site in Nevada was installed on BLM-administered land. Three sites will function in 1985 as a part of the National Atmospheric Deposition Program.

In minerals, Nevada public lands became the primary exploration target for precious base metals. There was a marked increase in drilling activity for oil and gas; oil production increased to 8,200 barrels a day.

Geothermal development began with the signing of electrical power contracts totalling 80 megawatts. Production is expected in late 1985. Previously, geothermal resources were in an exploratory mode.

Numerous other programs in BLM's land and resource management responsibilities progressed in 1984. This publication will familiarize you with activities which occurred on your public lands.

  
Edward F. Spang  
State Director, Nevada



*A climber assisted in gathering samples of pack rat middens from this geological feature called the James Creek Shelter. The middens were sampled to determine the composition of the region's past flora.*

*Cover: In June of 1984 the golden anniversary of the Taylor Grazing Act was commemorated. Lands were first administered by the Grazing Division within the Secretary of the Interior's Office. That office was renamed the Grazing Service. It merged with the General Land Office in 1946 to form the Bureau of Land Management.*

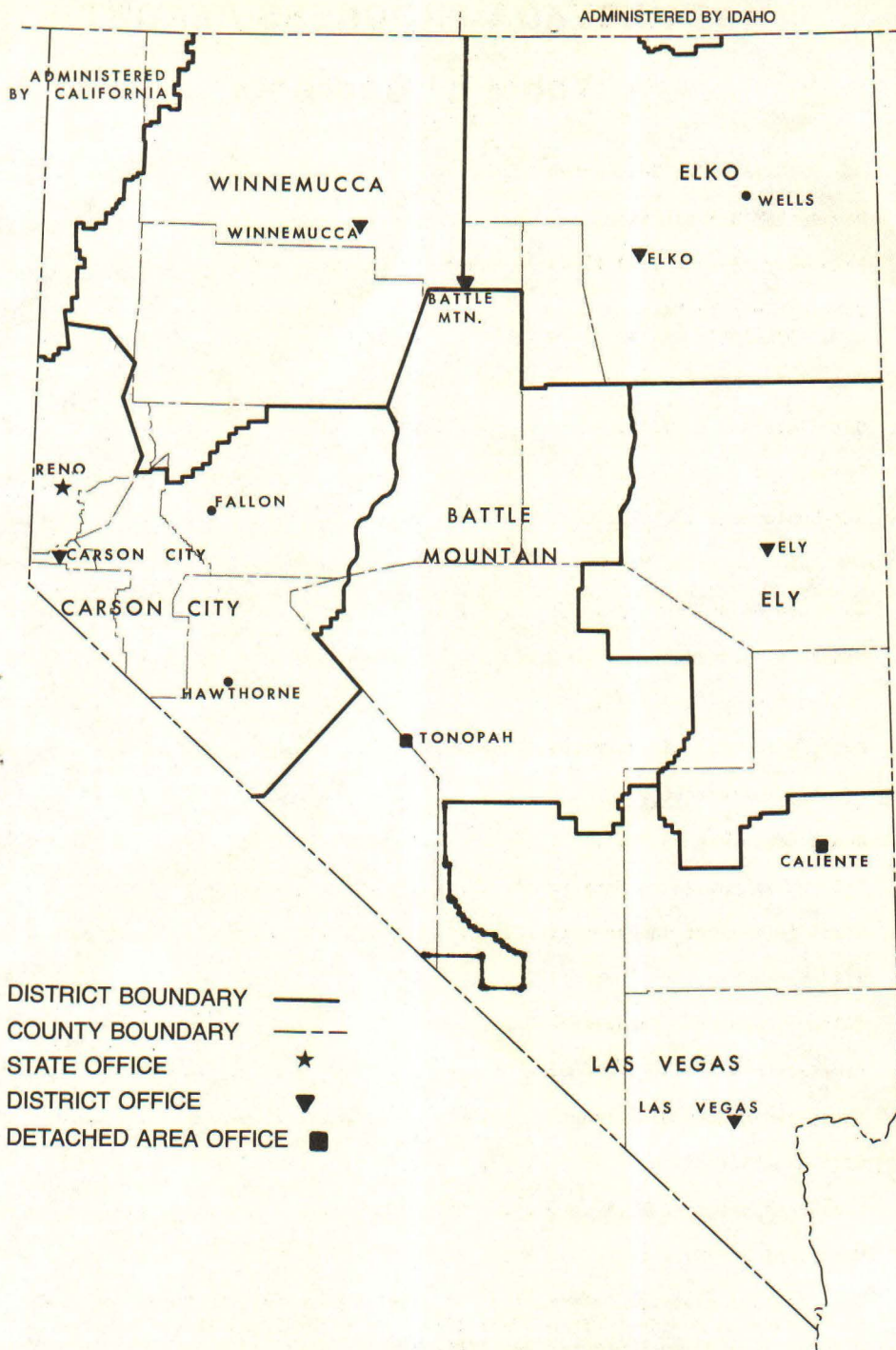
# 1984 NEVADA PROGRESS REPORT

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This booklet contains information and statistics about the Bureau of Land Management in Nevada. Fiscal Year 1984 covers the 12-month period from October 1, 1983 to September 30, 1984.

Produced by Public Affairs, Nevada State 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	-----	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	Dana Jensen	
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 for Lands and Renewable Resources	-----	784-5455
Saval Ranch Project Manager	Peter Lent	784-5572
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	James Elliott	784-5748
Archaeology	Richard Hanes	
Lands and Realty	Mike Moran	
Recreation	Steve Smith	
Wilderness	Dave Harmon	
Chief, Planning and Environmental Staff	Jack Seley	784-5448
Regional Planning	-----	
Regional Economy	Paul Myers	
Sociology	Bert Bresch	
Environmental Coordination	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 Secretary Petroleum Engineer Geologists	Tom Leshendok Nina East Ellis Hammett Neal Brecheisen Jack Crowley Norm Melvin Larry Steward Richard Hoops Galo Silva Kevin Leary Cheryl Jacobs	784-5676
Physical Scientist Mining Engineer Hazardous Material Specialist Minerals Assistant 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 Secretary Chief, Branch of Appraisal Chief, Cadastral Survey Chief, Engineering Chief, Lands & Minerals Lands Transactions Minerals Transactions Accounts Mining Claims Dockets Public Contact Titles and Records	----- Kathy Wiegard Charles Hancock Lacel Bland Harold Payne Marla Bohl Ken Stowers Jody Woodin Bob Matthews Elaine Guenaga Atanda Clinger Pam Reynolds -----	784-5281 784-5282 784-5474 784-5484 784-5275 784-5703 784-5703 784-5703 784-5432 784-5751 784-5445 784-5496 784-5976
Chief, Law Enforcement Chief, Branch of Mapping Chief, Branch of Protection	Len Sims Steve Rasmussen Alan Dunton	784-5683 784-5731 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	Melvin R. 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	784-5836
ADP	Georgia Wells	784-5216
Telecommunications	Alan Coombs	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, 3900 E. Idaho Street  
Elko, Nevada 89801

District Manager	Rod Harris
Elko Resource Area Manager	Tim Hartzell
Wells Resource Area Manager	John Phillips
Chief, Division of Resource Management	Merle Good
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-Deno 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	Ted Angle



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

882-1631

District Manager  
Lahontan Resource Area Manager  
Walker Resource Area Manager  
Division of Wild Horse and  
Burro Operations  
Chief, Division of Resource  
Management  
Chief, Planning and Environmental  
Assistance  
Chief, Division of Operations  
Chief, Division of Administration

Tom Owen  
Mike Phillips  
John Matthiessen  
Don Pomi  
Norm Murray  
Rudy Reimold  
Kelly Madigan  
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, Acting  
Planning and Environmental  
Coordination Contact  
Chief, Division of Operations  
Chief, Division of Administration

Merrill DeSpain  
Howard Hedrick  
Wayne Lowman  
Mark Barber  
Jake Rajala  
Hal Bybee  
Sue Perkins

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

388-6403

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

726-3141

District Manager  
Associate District Manager  
Stateline Resource Area Manager

Kemp Conn  
William Calkins  
Bill Civish

Caliente Resource  
Area Manager  
Chief, Division of Resource  
Management  
Chief, Division of Operations  
Chief, Division of Administration

Cub Wolfe  
Joe Ross  
Tom Combs  
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  
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 Mitchell

Calvin McKinley  
P. John Keenan  
Thomas Jury



*Public interest in the BLM's management of the lands and resources is great. Here a Reno newsman prepares to interview a BLM specialist on wild horses and burros.*

# FEDERALLY ADMINISTERED LANDS IN NEVADA BY AGENCY AS OF THE 1982 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 729.8 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	5,149,684.0	
Soil Conservation Service	<u>.2</u>	
Department Subtotal	5,149,684.2	7.32
Department of Energy		
Energy Research and Development Administration	819,581.8	
Western Area Power Admin.	<u>4,407.2</u>	
Department Subtotal	823,989.0	1.17
Department of Interior		
Fish & Wildlife Service	2,202,296.7	
Geological Survey	70.8	
Bureau of Indian Affairs	6,243.6	
Bureau of Land Management	48,281,508.0	
Bureau of Mines	22.6	
National Park Service	264,137.9	
Bureau of Reclamation	<u>429,212.5</u>	
Department Subtotal	51,183,492.1	72.84
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	<u>671.0</u>	
Department Subtotal	3,116,308.7	4.43
Other Federal Agencies		
General Services Administration	13.2	*
Coast Guard	.2	*
Health Services Administration	.2	*
United States Postal Service	32.0	*
Veterans Administration	<u>12.5</u>	*
Other Agencies Subtotal	58.1	
TOTALS	60,273,532.1	85.8

\*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, 1984

COUNTY	PUBLIC LANDS MANAGED BY BLM*	TOTAL ACREAGE IN COUNTY	PERCENTAGE OF TOTAL ACRES MANAGED BY BLM
Carson City	42,387	97,920	43.3
Churchill	2,294,815	3,144,320	73.0
Clark	3,185,314	5,173,760	61.6
Douglas	178,661	480,640	37.2
Elko	6,785,225	10,995,840	61.7
Esmeralda	2,210,738	2,284,800	96.8
Eureka	2,020,197	2,676,480	75.5
Humboldt	4,321,703	6,210,560	69.6
Lander	3,011,804	3,597,440	83.8
Lincoln	5,749,843	6,816,000	84.3
Lyon	711,464	1,295,360	54.9
Mineral	1,693,028	2,455,680	68.9
Nye	6,701,158	11,560,960	58.0
Pershing	2,910,404	3,859,840	75.4
Storey	12,528	167,680	7.5
Washoe	2,642,631	4,229,120	62.5
White Pine	4,364,242	5,699,200	76.6
<b>TOTALS</b>	<b>48,836,142</b>	<b>70,745,600</b>	<b>69.0</b>

\*Changes in public land acreages are because of recalculations, better data, land transfers and exchanges, etc.

## BY BLM DISTRICT

DISTRICT	TOTAL ACRES MANAGED BY BLM
Elko	7,385,162
Winnemucca	8,252,352
Carson City	5,321,798*
Ely	8,007,640
Las Vegas	7,290,301
Battle Mountain	11,109,248**
Susanville	1,452,138***
Boise	58,082****
<b>TOTAL</b>	<b>48,876,721</b>

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

\*\*Boundary adjustment transferred administration of 2,710,738 acres from Las Vegas to Battle Mountain.

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

\*\*\*\*Land in Elko County administered by 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 84

<p>Total Public Land Receipts Collected by BLM        \$10,205,651</p> <p>Total Mineral Receipts Collected by MMS        \$16,968,584</p>	<p>Total Funds Paid out by BLM from the U.S. Treasury Relating to Public Land Management in Nevada</p> <p>Direct Cost Expenditures        \$24,393,000 Payments to State of Nevada     8,862,547 Payments in Lieu of Taxes        <u>5,528,402</u></p> <p style="text-align: right;">TOTAL                                \$38,783,949</p>
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### RECEIPTS

<u>Receipts Source - BLM</u>	<u>Amount</u>
Mineral Leases and Permits	
Oil and Gas Pipeline Right-of-Way Rentals	\$        30
Sale of Land and Materials	
Land	6,395,076
Materials	448,917
Timber	91,514
All Others	35,163
Grazing	
Section 3*	2,585,083
Section 15**	53,858
Fees and Commissions	276,073
Rights-of-Way	207,552
Rents of Land	8,984
All Others	103,401
TOTAL	\$10,205,651

\*Section 3 refers to grazing within grazing districts.

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

<u>Receipts Source - MMS</u>	<u>Amount</u>
Geothermal Rent	\$    863,230
Oil and Gas	
Royalties	2,845,656
Rent	13,180,626
Sand, Gravel Royalties	56,818
Sodium, Tungsten Rent	<u>22,254</u>
TOTAL	\$16,968,584

DIRECT COST EXPENDITURES

CONSTRUCTION AND MAINTENANCE

Range, Wildlife Habitat, Soil and Water Improvements (\$1,153,500 of this amount is directly from grazing fees)	\$ 1,609,500
Maintenance of Range, Wildlife Habitat, Soil and Water Improvements (\$264,000 is directly from grazing fees)	394,500
Recreation and Other Facility Construction	163,500
Road Construction and Easement Acquisition	20,500
Maintenance of Roads and Facilities	1,004,000

RESOURCE PROTECTION

Fire Prevention	1,360,000
Fire Suppression	4,257,500

MANAGEMENT

Lands and Realty	1,527,500
Energy Minerals	
Oil and Gas	511,900
Geothermal	365,000
Other	2,100
Non-Energy Minerals	873,000
Forest Management	206,000
Grazing Management	3,566,500
Wild Horse and Burro Management	1,486,500
Cultural Management	353,000
Wilderness Management	686,500
Recreation and Visual Resource Management	562,500
Soil, Air, and Water Management	2,815,500
Wildlife Habitat Management	835,000
Fire Management	509,500
Planning for Multiple Use	676,000
Law Enforcement	135,000

CONTRIBUTIONS AND REIMBURSABLES

472,000

TOTAL \$24,393,000

PAYMENT TO STATE OF NEVADA

SOURCE	AMOUNT
Mineral Leases, second half FY 1983	\$ 5,928,131*
Mineral Leases, FY 1984	8,484,292
Sale of Lands and Materials	28,191
Grazing	
Section 3	323,135
Section 15	<u>26,929</u>
TOTAL	\$14,790,678

\* Mineral leasing revenues were paid to the State of Nevada by BIM for the last half of fiscal year 1983. At the start of fiscal year 1984, the Minerals Management Service (MMS) assumed this responsibility and now makes monthly payments to the State, rather than twice yearly payments.

PAYMENT IN LIEU OF TAXES

COUNTY	PAYMENT	COUNTY	PAYMENT	COUNTY	PAYMENT
Carson City	\$ 36,472	Esmeralda	57,871	Mineral	260,100
Churchill	415,829	Eureka	65,776	Nye	398,583
Clark	956,545	Humboldt	358,341	Pershing	175,626
Douglas	176,580	Lander	226,934	Storey	9,048
Elko	509,726	Lincoln	179,219	Washoe	948,127
		Lyon	425,944	White Pine	327,681
		TOTAL			\$5,528,402



*The Elko District Office complex was constructed in 1984. This is the front entrance to the office building.*

## **BUILDINGS AND FACILITIES**

The Bureau spent \$540,600 in fiscal year 1984 to perform routine maintenance on buildings and recreational facilities in Nevada. Approximately \$191,500 was spent on building maintenance and \$349,100 on recreational facility operation and maintenance.

A new office complex for the Elko District Office, with approximately 15,000 square feet of office space, was started in fiscal year 1984. The complex, complete with warehouse and wareyard, was completed by Ormond Construction Company in January 1985.

## **ROADS**

The Bureau maintains approximately 9,400 miles of road in Nevada. In fiscal year 1984 about 20 percent of the roads were maintained, at a cost of \$463,600. Runoff from record high snow fall during the winter damaged bridges and culverts, and washed out many crossings. No new roads or bridges were constructed.

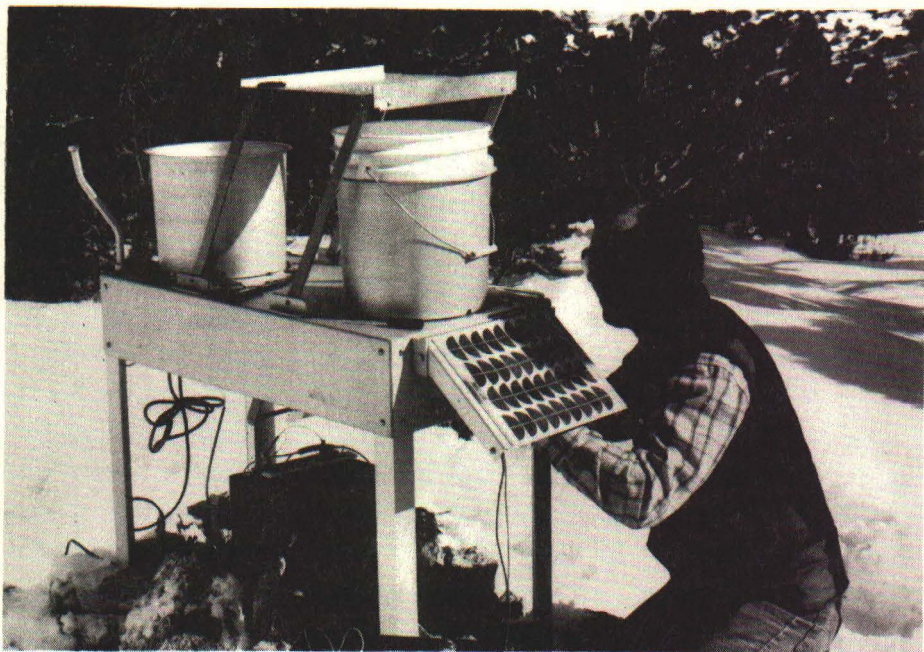
# BLM EMPLOYMENT

Employment in the BLM in Nevada in fiscal year 1984 showed no significant change in the permanent work force from the fiscal year 1983 figures, as predicted. There were a considerable number of temporary employees on the rolls at the end of fiscal year 1984, but this was because of the heavy fire season experienced in Nevada during the summer.

## BLM NEVADA EMPLOYMENT FY 84

OFFICE	PERMANENT	WAE*	PART-TIME	TEMPORARY	TOTALS
State Office	142	0	5	21	168
Elko	65	0	1	29	95
Winnemucca	51	0	1	12	64
Carson City	71	2	0	27	100
Ely	51	2	0	11	64
Las Vegas	70	0	1	29	100
Battle Mountain	<u>48</u>	<u>0</u>	<u>0</u>	<u>9</u>	<u>57</u>
TOTALS	498	4	8	138	648

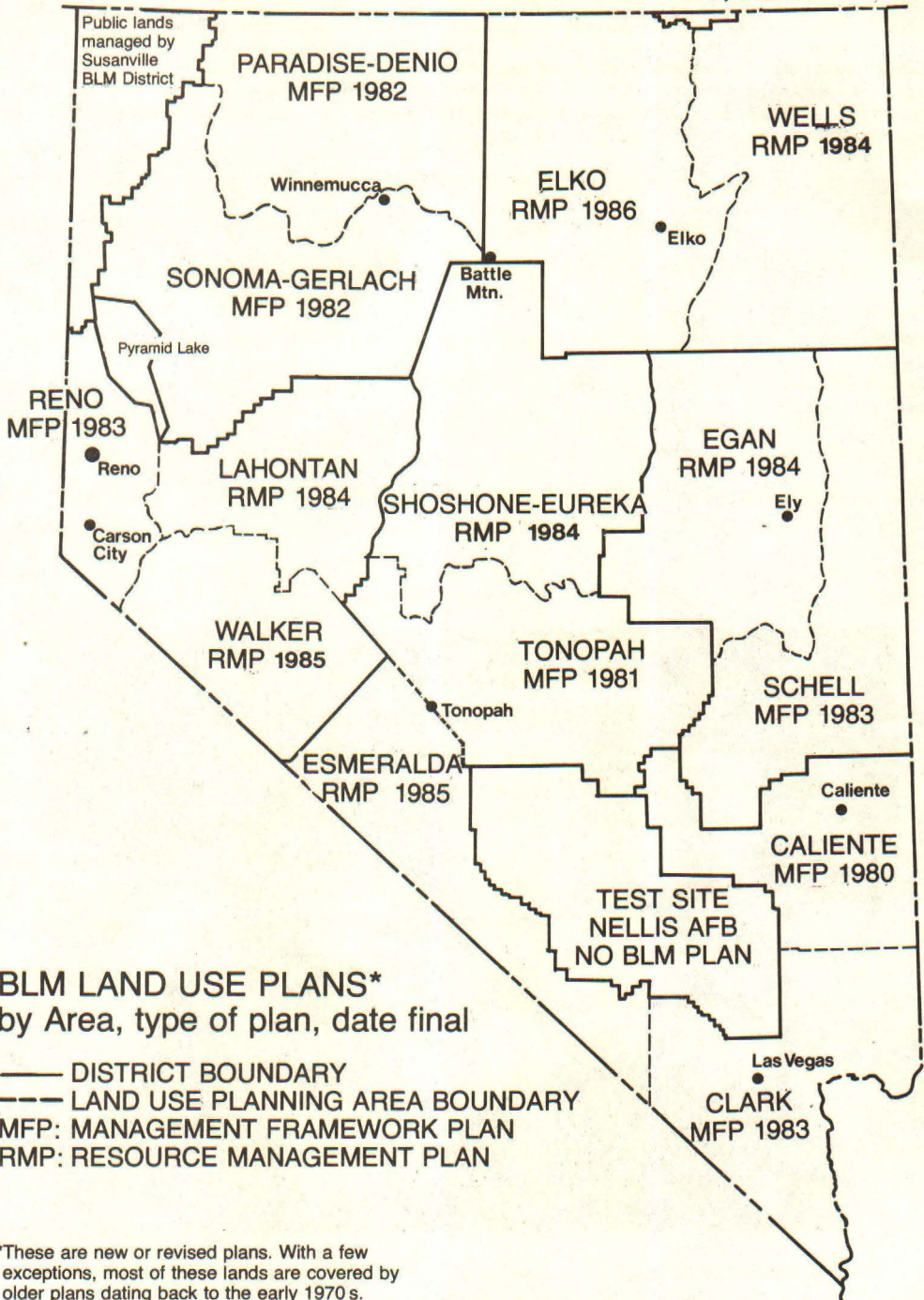
\*When Actually Employed, less than full-time.



*A BLM hydrologist assists in setting up the device for monitoring acid deposition. The wet and dry collection buckets are solar powered.*



Public lands managed  
by Boise BLM District



## 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.

*Elko personnel brief a group on the initial stages of the Elko Resource Management Plan which was initiated in 1984.*



## FY 1984 PLANS

Nevada RMPs and their associated Environmental Impact Statements (EISs) prepared in 1984 encompassed a number of issues which were developed through public involvement. Issues included wilderness, rangeland management, land tenure 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 and burros, forestry and cultural resources.

Resource Management Plans were completed in final for the Wells Resource Area, Elko District; the Shoshone-Eureka Resource Area, Battle Mountain District; and the Egan Resource Area, Ely District. A Record of Decision will be prepared for each area in the 1985 fiscal year.

Resource Management Plans for the Lahontan Resource Area and the Walker Resource Area, Carson City District, and the Esmeralda-Southern Nye planning area, Battle Mountain and Las Vegas Districts, will be completed in final during FY 1985.

A Resource Management Plan for the Elko Resource Area, Elko District, was initiated during 1984. A draft RMP for this area will be completed during FY 1985.

A draft Wilderness EIS and Wilderness Technical Report for the Caliente Resource Area, Las Vegas District was completed.

Wilderness EISs and their associated Wilderness Technical Reports will be completed during FY 1985 as an integral part of the RMPs for the Walker Resource Area, Carson City District; the Elko Resource Area, Elko District; and the Esmeralda-Southern Nye planning area, Battle Mountain and Las Vegas Districts.

Fiscal Year 1985 will see completion of all Draft Wilderness EISs and associated Wilderness Technical Reports, and with the exception of the Elko Resource Area, Elko District, all scheduled RMP/final EISs.

Private environmental consulting firms, coordinating closely with the Bureau of Land Management, have completed a final EIS for the White Pine Power Project in White Pine County and will complete a draft and a final EIS for the Mt. Hope Molybdenum project in Eureka County in FY 1985.



*BLM State Director Ed Spang addresses members of the National Public Lands Advisory Council, a national advisory group which met in Reno in July of 1984.*

# MINERALS MANAGEMENT

The minerals program in fiscal year 1984 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 continued sharp increase in oil and gas activity; and continued interest in geothermal development on federal lands in Nevada.

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 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 practice.

## LOCATABLES

During 1984, Nevada continued to be a major producer of nonfuel mineral resources and the primary exploration target for precious base metals. 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 Nevada's nonfuel mineral production during 1984 is estimated at \$700 million. There were an estimated 400 active mining operations in Nevada. A total of 35,592 claims were recorded during the fiscal year which brought the total claims recorded in Nevada under the Federal Land Policy and Management Act to 319,302 (as of September 30, 1984). Nevada BLM offices received 644 notices and 74 plans under the hardrock mining regulations contained in 43 Code of Federal Regulations 3809. These totaled more than any other state with federal lands.

## MINING CLAIM RECORDATION STATUS FY 84

Total claims recorded during fiscal year 1984: 35,592  
Total claims recorded through September 30, 1984: 319,302

## MINING CLAIM PATENTS FY 84

TYPE	NO.	ACREAGE
Lode	65	1,110,173
Placer	0	0
Millsite	<u>32</u>	<u>138,293</u>
TOTALS	97	1,248,466

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

DISTRICT	NO. NOTICES	NO. PLANS
Elko	33	5
Winnemucca	143	9
Carson City	64	16
Ely	57	1
Las Vegas	56	10
Battle Mountain	<u>291</u>	<u>33</u>
TOTALS	644	74

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.

MINERAL MATERIALS, FY 84

TYPE CASE	NO. OF PERMITS	VOLUME	VALUE
Material Sales	545	1,163,753 cubic yards	\$ 267,991
Free Use Permits	<u>122</u>	<u>3,311,165</u> cubic yards	<u>496,091</u>
TOTALS	667	4,474,918	\$ 764,082

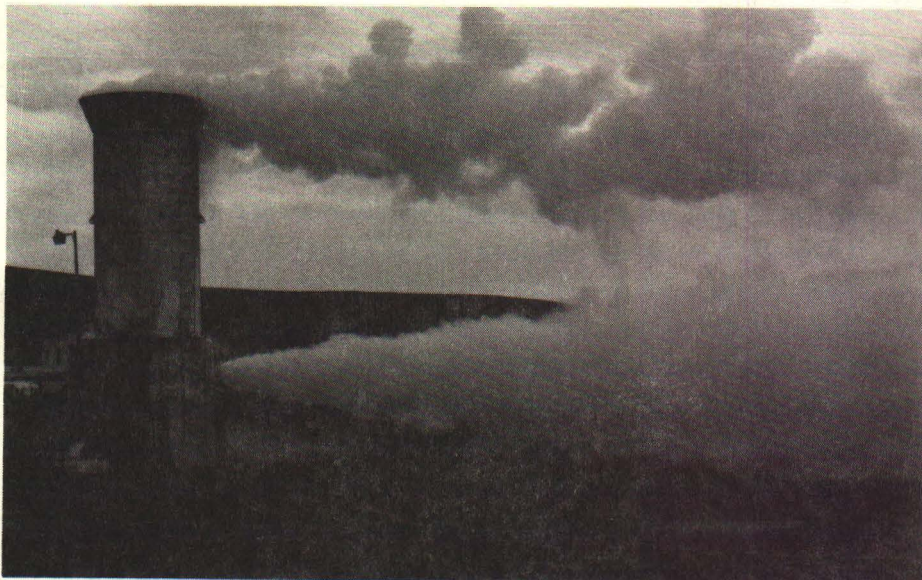
LEASABLES

Solid leasable minerals activity in Nevada is restricted primarily to sodium and potassium from evaporite deposits. The deposits with the highest potential are in west-central Nevada and the Lake Mead region. Low grade oil shale and phosphate deposits exist in northeastern Nevada, but none have been of sufficient grade to grant preference right leases.

Numerous prospecting permits and leases in the Lake Mead National Recreation Area are involved in a suit filed by the Sierra Club, so action is awaiting a court decision.

MINERAL LEASES AND PERMITS IN EFFECT FY 84

TYPE	NO.	ACREAGE
Sodium Leases/Permits	26	61,113
Potassium Leases/Permits	2	2,786
Phosphate Leases/Permits	1	1,841
Other (Silica Sand and Gravel, etc.)	<u>7</u>	<u>2,460</u>
TOTALS	36	68,200



*A flow test was conducted shortly after this Desert Peak well was drilled. Steam pours out of the separator and out of the line.*

#### OIL AND GAS

During the 1984 fiscal year, Nevada experienced a marked increase in drilling activity over the previous fiscal year. A total of 33 wells were drilled, resulting in five successful completions, all in Railroad Valley. The Grant Canyon field now contains three flowing wells with a combined daily production of approximately 5,000 barrels. Also, Trap Spring production (Munson Ranch Unit) has increased to nearly 36,000 barrels/month following the completion of four straight successful wells.

A successful, combined Known Geologic Structure - Known Geothermal Resource Area (KGS/KGRA) sale, held in September, 1984, resulted in the sale of several competitive parcels as shown below:

SALE DATE	NUMBER PARCELS SOLD	TOTAL ACRES SOLD	TOTAL HIGH BIDS	AVERAGE BID/ACRE
9/20/84	13	1,311.28	\$205,447.88	\$156.68

In addition to the 33 wells drilled, a total of 19 unit applications were received in FY 84 as opposed to only 4 unit applications filed in FY 83. Of these unit applications received, 15 were approved and a total of 27 wells drilled on these units. Applications to drill (APDs) totaled 57 applications with 49 approved and 32 actually being drilled. Footage drilled reached 206,357 feet.

Production of oil has increased markedly following the completion of three successful wells in the Grant Canyon Field. Average daily production in Nevada, as of the end of September, 1984, totals about 8,200 barrels/day. A breakdown of the oil production, by field, is given below.

OIL AND GAS LEASES IN PRODUCTION, FY 84

FIELD NAME	NO. LEASES	NO. WELLS	NO. ACRES PRODUCING	TOTAL PRODUCTION*	BBL/DAY AVERAGE (e)
Trap Springs	35	22	3,040	482,545	2,130
Eagle Springs	7	11	1,840	72,524	233
Bacon Flat	1	1	2,221	17,981	50
Grant Canyon	1	3	3,520	832,186	5,200
Blackburn	<u>1</u>	<u>2</u>	<u>720</u>	<u>143,091</u>	<u>650</u>
TOTALS	45	39	11,341	1,548,327	8,263

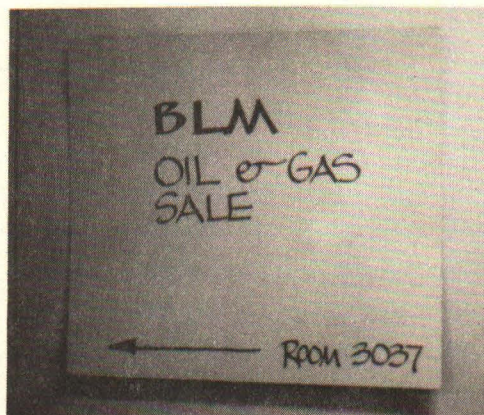
\* Data derived from Nevada State figures - data not available for FY 84 from Minerals Management Service (Denver).  
(e) estimated

RENTALS AND ROYALTIES ALLOCATED TO THE STATE OF NEVADA, FY 1984: \$8,013,141.

OIL AND GAS LEASES BY COUNTY FY 84\*

	OIL NON-COMPETITIVE		OIL, SIMULTANEOUS	
	No. leases	No. acres	No. leases	No. acres
Churchill	201	404,027.78	15	26,602.58
Clark	877	1,502,315.48	28	59,731.72
Elko	1344	3,185,280.38	69	216,639.65
Esmeralda	4	23,540.78	1	640.00
Eureka	610	1,127,508.72	22	74,964.21
Humboldt	129	347,002.04	1	640.00
Lander	225	524,967.27	6	39,879.84
Lincoln	1007	2,337,995.01	29	131,270.14
Mineral	5	8,951.88	0	0
Nye	1588	2,681,957.05	88	125,559.58
Pershing	73	235,976.92	3	25,513.83
Washoe	2	2,230.40	0	0
White Pine	<u>1499</u>	<u>2,827,978.91</u>	<u>144</u>	<u>373,121.71</u>
TOTALS	7,554	15,209,732.62	406	1,074,563.26

\* There were no competitive oil and gas leases in Nevada in the 1984 fiscal year.



## GEOHERMAL 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. The base rental is one dollar per acre per year. Competitive leases may be obtained by competitive sealed bonus bid. The successful bidder pays the required competitive base rental fee of two dollars per acre per year. Geothermal leases have a primary period of ten years. Beginning in the sixth year of either type of lease there is a diligent exploration expenditure obligation to ensure exploration will continue until a commercial well is completed or the lease is terminated. Alternatively, the lessee may pay an additional rental charge of three dollars per acre per year.

During the 1984 fiscal year, activity in Nevada moved from an exploration to a development phase. Electric power sales contracts totalling 80 megawatts have been signed involving federal lands in four different reservoir areas. Actual production is scheduled to begin in three of these areas in late 1985.

One competitive lease sale was held on September 27, 1984. Seven tracts located in three KGRAs were bid on, totalling 13,532.45 acres. The sale resulted in the collection of \$119,373.26 in bonus bids.

### GEOHERMAL DRILLING ACTIVITY IN NEVADA FY 84

Number of Exploration Wells Drilled: 3    Number of Development Wells Drilled: 1

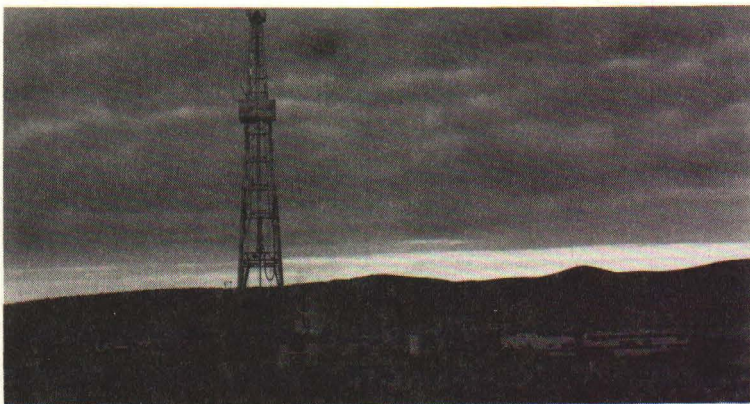
### GEOHERMAL WELL SUMMARY FY 84

Total number of all temperature gradient holes drilled as of September 1984: 404

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

    Producible or usable: 44  
    Plugged and abandoned: 5

TOTAL    49



*This Desert Peak production well is situated in Churchill County. The Desert Peak Federal Geothermal Unit was the first Federally-permitted geothermal power plant site in Nevada.*



GEOHERMAL LEASES IN EFFECT BY COUNTY  
FY 84

	COMPETITIVE		NON-COMPETITIVE		TOTAL	
	No. Leases	No. Acres	No. Leases	No. Acres	No. Leases	No. Acres
Churchill	33	60,999.54	107	184,113.22	140	245,112.76
Clark	0	0	0	0	0	0
Elko	0	0	18	22,507.62	18	22,507.62
Esmeralda	0	0	48	91,367.54	48	91,367.54
Eureka	3	6,766.98	2	2,476.35	5	9,243.33
Humboldt	7	13,511.84	30	56,145.09	37	69,656.93
Lander	2	3,781.36	37	64,288.53	39	68,069.89
Lyon	0	0	3	4,080.00	3	4,080.00
Mineral	0	0	4	7,558.84	4	7,558.84
Nye	3	6,083.18	54	79,267.48	57	85,350.66
Pershing	6	10,752.71	64	106,526.53	70	117,279.24
Washoe	7	10,247.48	7	8,644.35	14	18,891.83
White Pine	0	0	1	1,941.00	1	1,941.00
<b>TOTALS</b>	<b>61</b>	<b>112,143.09</b>	<b>375</b>	<b>628,916.55</b>	<b>436</b>	<b>741,059.64</b>

GEOHERMAL DEVELOPMENT PROJECTS

OPERATOR	LOCATION & BLM OFFICE	SALES CONTRACT SIGNED	PLAN OF UTILIZATION SUBMITTED	PLANT STARTUP	MEGAWATTS*
Phillips	Desert Peak Winnemucca DO	March 1984	March 1984	1985	9
SUNEDCO	Dixie Valley Carson City DO	July 1981	August 1984	1986	10
Trans Pacific Geothermal Inc.	Dixie Valley Carson City DO	October 1984	Expected in 1985	1986	40
Chevron	Beowawe Elko, Battle Mountain DOs	Expected in 1985	February 1985	1985	5-10
Chevron	Soda Lake Carson City DO	-	-	-	2-3
Munson	Brady Hot Springs Winnemucca DO	-	-	-	2
National Energy Associates & Sequoia Thermal Corp.	Big Smoky Valley Battle Mtn. DO	March 1984	-	-	10
Steam Reserve Corp.	Fishlake Battle Mtn. DO	-	-	-	-
Third Wave Technology	Wabuska Carson City DO	-	-	1985	direct use
Scott Construction Co.	Hobo Hot Springs Carson City DO	-	-	1985	direct use

\* Megawatts each plant will produce. Generally, initial production will be on a research and development basis. Two right-of-way applications were submitted during 1984 for transmission lines for Dixie Valley-Carson Sink, Nevada to Bishop, California.

## PUBLIC DOMAIN FORESTRY

The demand for forest products from the pinyon-juniper woodlands decreased slightly in 1984, but total revenue received from all sales was up slightly. Cordwood sales decreased by 2,400 cord, while the harvest of pinenuts increased by over 35,000 lbs. from 1983.

### SUMMARY OF FOREST PRODUCTS SALES FOR 1984

	Christmas Trees	Cord- wood	Pinenuts (lbs)	Fence Posts	Total \$ Value
Elko	2,878	1,548	6,000	1,645	17,650
Winnemucca	450	219	-	175	2,065
Carson City	9,132	2,493	-	1,180	44,409
Ely	3,593	1,329	57,700	3,155	29,641
Las Vegas	9,692	1,559	9,780	2,429	46,704
Battle Mountain	4,432	837	41,450	1,650	23,150
<b>TOTALS</b>	<b>30,177</b>	<b>7,985</b>	<b>114,930</b>	<b>10,234</b>	<b>163,619</b>



*Pinyon pine nuts sales were made to 20 buyers in 1984, totalling almost 115,000 pounds. Sales were primarily in Ely and Battle Mountain Districts.*

## SOIL, WATER, AND AIR RESOURCE MANAGEMENT

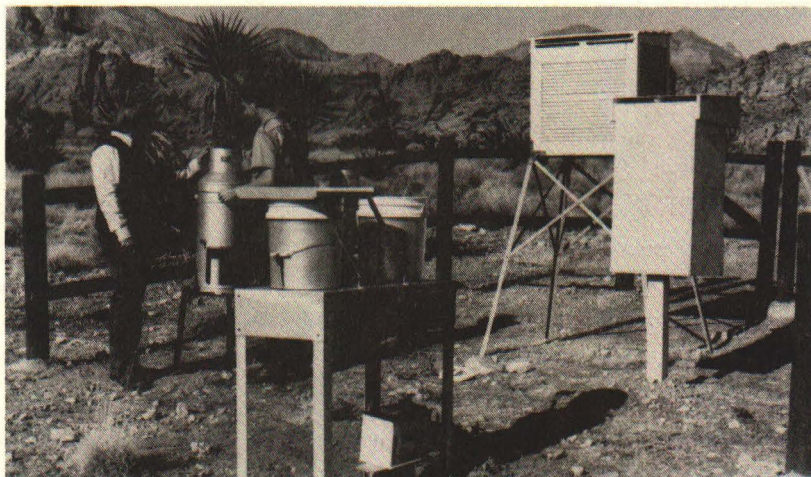
The long-range objectives of this program are to stabilize watersheds, to protect the soil, water, and air resources from further deterioration, and to develop or improve watershed conditions to meet specific resource needs. Typical needs include greater water quality and/or quantity, reduction of flood 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 economics.

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 in 1984-85 established three acid rain monitoring stations at the Saval Ranch near Elko, at Lehman Caves National Monument in White Pine County (in cooperation with the National Park Service), and at the Red Rock Canyon Recreation Lands near Las Vegas. The first site at the Saval Ranch was installed in fiscal year 1984. The three sites are to be part of the National Atmospheric Deposition Program and the National Trends Network. They will measure different levels of acidic substances as they occur in various precipitation forms. The results of the information will be used for comparative purposes and with other monitoring stations to track possible emission sources.



*This acid rain monitoring site is at Las Vegas' Red Rock Canyon. The first site installed was at the Saval Ranch. Another is at White Pine County's Lehman Caves.*

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 1992. As of October 1, 1984, more than 42 million acres of soil inventories have been completed. Following is a list of BLM District accomplishments for fiscal year 1984 and cumulative totals.

SOIL INVENTORIES

DISTRICT	SOIL SURVEY ACCOMPLISHMENTS (ACRES)*		ECOLOGICAL STATUS INVENTORIES
	FY 84	CUMULATIVE TO OCT. 1, 1984	FY 84 UNITS OF ACCOMPLISHMENTS
Elko	743,316	6,991,595	2,955,200
Winnemucca	886,938	4,872,239	478,219
Carson City	464,453	6,233,802	0
Ely	501,414	4,710,434	0
Las Vegas	403,000	7,290,301	281,025
Battle Mountain	587,803	10,507,187	261,760
Susanville	0	1,813,226	0
TOTALS	3,586,924	42,418,784**	3,976,204

\* Includes "checkerboard" railroad lands and scattered parcels of private lands within BLM planning area boundaries. Las Vegas and Battle Mountain acreages changed partially because of boundary realignments.

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

# 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 - draft, Esmeralda - final  
and Walker - final

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 agreements will be completed. These decisions will follow consultation and coordination processes that will implement grazing management with specific resource objectives and the monitoring studies necessary to determine if management is meeting the objectives. The results of the monitoring studies will be the basis for future adjustments in grazing use. Grazing uses that will be monitored are wildlife, livestock, and wild horses.

The Grazing Management program is assigning priorities to management efforts using a selective management approach where allotments are categorized into a MIC 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 1983\*

DISTRICT	NUMBER OF OPERATORS	ANIMAL UNIT MONTHS**	NUMBER OF CATTLE	NUMBER OF HORSES	NUMBER OF SHEEP
Elko	177	533,972	184,351	823	52,742
Winnemucca	98	276,739	50,233	140	12,884
Carson City	82	139,900	19,453	48	29,649
Ely	121	271,402	39,486	33	123,227
Las Vegas	76	69,091	37,231	135	31,725
Battle Mtn.	82	415,215	60,237	194	31,725
TOTALS	636	1,706,319	390,991	1,373	281,952

\*Grazing fee year 1983 ran from March 1, 1983, to February 1, 1984.

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

390,991  
1,373  
281,952  
674,316



*Nevada's Tonopah area has been involved in an experimental stewardship program. The program which was authorized in 1978 will be evaluated in 1985.*

## RANGE IMPROVEMENTS

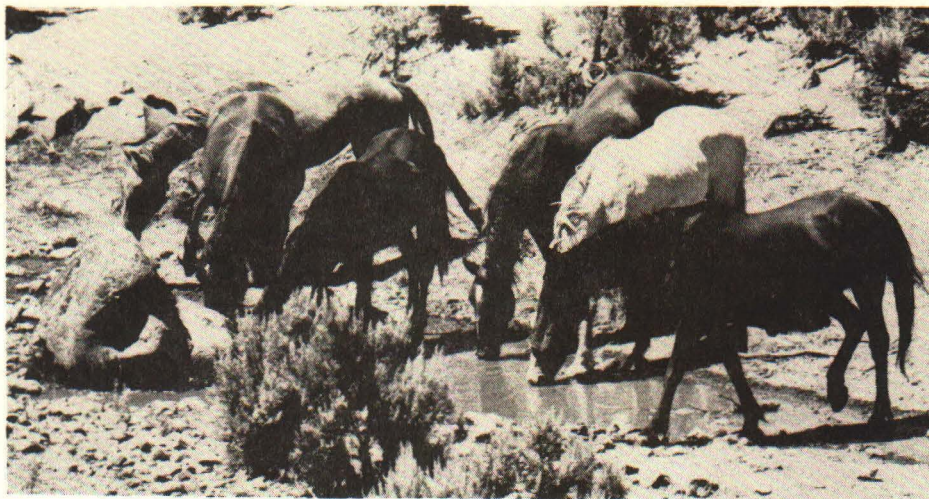
Some of the public rangelands in Nevada are currently producing vegetation at less than their full potential. The objective of the range improvement program is to achieve improved rangeland conditions, within the framework of multiple-use management. To accomplish this objective, the timely and efficient 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 84

TYPE OF IMPROVEMENT	NEW CONSTRUCTION	MAINTENANCE
Cattleguards/Management Facilities	43 each	23 units
Fences	144 miles	146 units
Land Treatment	1,710 acres	5,404 acres
Water Facilities	54 units	42 units

# WILD HORSE AND BURRO MANAGEMENT



*Wild horses gather at a waterhole on Nevada public lands.*

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 84		
DISTRICT	HORSES	BURROS
Elko	1,479	-
Winnemucca	9,382	540
Carson City	5,460	130
Ely	3,099	-
Las Vegas	5,422	839
Battle Mountain	<u>6,454</u>	<u>236</u>
TOTALS	31,296	1,745

31,296  
 + 1,745  
 -----  
 33,041

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 1984 is noted below.

## ROUND UPS COMPLETED - FY 84

DISTRICT	GATHERING AREA	HORSES GATHERED
Carson City	Pine Nuts	248
Winnemucca	Owyhee	684
Winnemucca	T-Quarter Circle	90
Battle Mountain	Railroad Valley	<u>388</u>
	TOTAL	1,410

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 84

NO. ADOPTED/LOCATION OF ADOPTION CENTER	NUMBER AT		DIED OR HUMANELY DESTROYED	BALANCE REMAINING AT PALOMINO VALLEY END OF FY 84
	PALOMINO VALLEY START OF FY 84	BRANDED/ PRIVATE		
345 Nevada	1,562	18	233	1,299
398 Texas				
187 Pennsylvania				
150 Alabama				
148 Tennessee				
138 Louisiana				
52 Arizona				
51 Missouri				
50 Washington				
50 So. Carolina				
40 California				
<u>1,609</u> Total				

*A member of the Echoing Hoofbeats 4-H Club in Pennsylvania gets acquainted with Sir Echo, a year-old wild horse once on public lands in Nevada. The young stallion was the 50,000th animal placed in private maintenance since the adoption program began.*





# WILDLIFE HABITAT MANAGEMENT



*Representatives of numerous interests, including wildlife, participate in a Coordinated Resource Management and Planning field tour in Las Vegas District's Gold Buttes-Virgin Valley areas.*

The Bureau manages wildlife habitat values to assure full consideration in multiple use decisions for public lands. Such habitat values hold a particularly important meaning since virtually 100 percent of Nevada's wildlife -- including such animals as mule deer, antelope, elk, and bighorn sheep -- depend upon habitat of BLM lands in the course of their annual life cycle.

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 53 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.

Actual habitat improvement projects were undertaken within 18 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 1984. Dollars expended in these accomplishments exceeded \$250,000 of direct Bureau expenditures, and contributions of an additional \$192,000 in money and donated labor by private interests and the Nevada Department of Wildlife.

## WILDLIFE PROJECT WORK COMPLETED IN FY 84

Developed water facilities (guzzlers, spring developments)	14
Aquatic-riparian protection (miles of fencing)	4
Maintenance of fences, exclosures (miles)	40

## 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. 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.

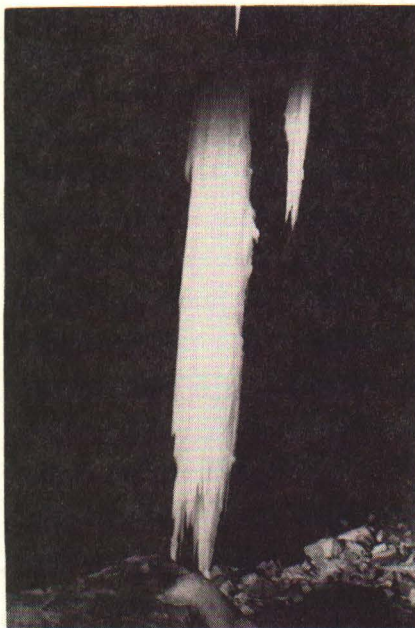
Studies have been completed on most of the WSAs in Nevada and final studies in all of the districts' WSAs will be completed in 1986. During the study phase, wilderness will be incorporated into the Bureau's land use planning system where the wilderness resource will be evaluated along with all the other resources on the public lands. Public involvement is an important step in this process. In the reporting phase, 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 1984\*

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.

*These stalactites are found  
at Leviathan Cave in the  
Worthington Mountains*



## 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.

Proposed large development projects and Desert Land Entry (DLE) Act cases led to a number of interesting findings about the State. Two rockshelters were excavated as part of the Carlin Gold lands sale and the Intermountain Power Project. James Creek Shelter near Carlin, Nevada yielded a broad variety of artifactual material, including many perishable items such as basketry fragments, arrow shaft fragments and skeletal remains of large butchered animals. Use of the site dates back over 3,000 years, and the ongoing analysis of the excavated materials will yield considerable information concerning past technologies and environmental changes that have occurred.

Scouts Shelter, located south of Las Vegas in the McCullough Range, has yielded a similar record for analysis. Environmental change in Southern Nevada is the major issue addressed in this project through study of the deposit's sediments, floral and faunal analysis of the site's contents and a study of local packrat middens.

Surface surveys of DLE land parcels in the east central part of the State has led to an impressive inventory of early period sites in that region. The sites, attributed to a time period of 8,000 to 10,000 B.P. based on artifact types observed, have been found associated with ancient lakeshore features located in the bottom of many of the valleys in Eastern Nevada. The sites, normally located in the sparse greasewood vegetated valley floors, were previously thought to be abundant in only a few valleys. Now their distribution appears much broader. The folks of this period were utilizing lakeshore resources, probably marsh associated plants and waterfowl.

Mitigation of impacts on Exxon's Mt. Hope Mining Project yielded interesting results concerning both historic and prehistoric use of this area in Central Nevada. Study of historic remains focused on charcoal production in the 1870s in support of the early mining activity. Prehistoric sites closely examined include a pinyon roasting pit -- rarely reported in the archaeological literature -- and a large big game hunting related ambush site that exhibited use over a lengthy time period.

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.

Three publications were issued in limited numbers in fiscal year 1984; all are on file in major Nevada libraries and the University of Nevada libraries, plus BLM offices. Cultural resource series publications are: "Nuvagantu: Nevada Indians Comment on the Intermountain Power Project," "An Archaeological Survey in the Mormon Mountains, Lincoln County, Nevada" and "Archaeological Studies in the Cortez Mining District, 1982."



James Creek Shelter finds included the remains of bison butchering, stone butchering tools, projectile points and chopping tools used for bone marrow extraction.



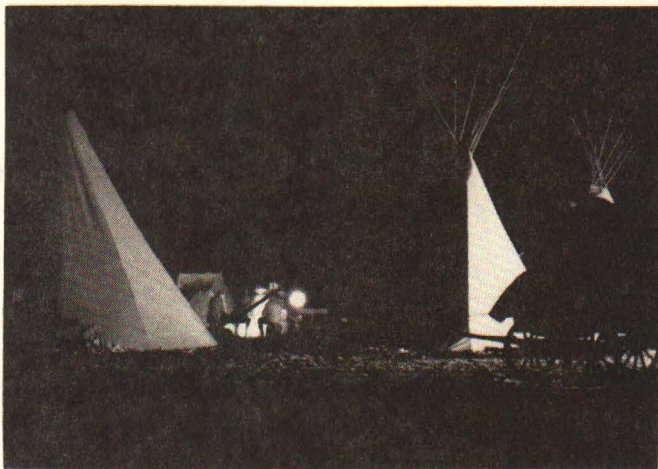
Staff from Intermountain Research, the BLM and the State of Nevada -- as well as 45 volunteers -- excavated the James Creek Shelter. Remnants of a bone bead industry were found at the site.

#### CULTURAL RESOURCE INVENTORY

	WORK DONE IN FY 84	TOTAL THROUGH FY 84
Class 3 (Intensively Assessed Acres)	49,350	498,624
Class 2 (Extensively Assessed Acres)	3,800	435,517

#### PROTECTION, STABILIZATION, AND INTERPRETATION PROJECTS

ACTIVITY	FY 84	TOTAL THROUGH FY 84
Positive Protection Signing	2	27
Research Excavations	2	15
Interpretive Schemes	0	5
Fencing	1	25
Stabilization	0	3
Irregular Patrol and Maintenance	1	62
Regular Patrol and Maintenance	2	16
Protective Withdrawals	0	4
Cultural Resource Publications	3	19



*Vision Quest, a private organization with a unique approach to handling juveniles, crossed the Nevada public lands and camped in the Battle Mountain District. Wild horses provide the "horse power" for the wagon train entourage.*

## 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 1984 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 14,668,681 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 3,666 recreation-related permits were issued in fiscal year 1984. Of these, 3,530 were fee site (camping) permits; 92 were authorized for competitive recreational events; and 44 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 1984 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.

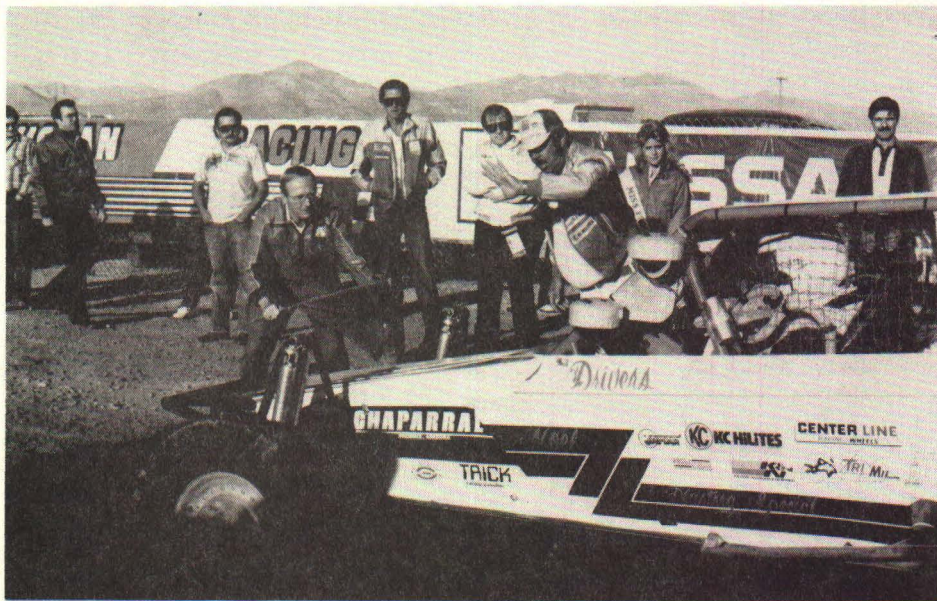
Cooperative efforts with other agencies in fiscal year 1984 included continuation of an agreement for the provision of law enforcement services at the Red Rock Canyon Recreation Lands near Las Vegas and culmination of a cooperative agreement for general management and maintenance of the North Wildhorse 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	19	\$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



Off-road vehicle racing is popular in Nevada's southern district. Here Nevada Governor Richard Bryan starts a racer for the Frontier 500, an event which runs under a special recreation permit from the BLM.

# 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 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 non profit organizations are able to obtain public 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, communication sites, and material site rights-of-way are other examples.

## LAND PATENTS ISSUED IN FY-84

KIND	NO.	ACRES
Desert Land Entry	1	80.00
Sales	43	3,035.16
Conveyance of Federally Owned Minerals	2	405.00
Recreation and Public Purposes	6	262.99
Mining Claim Occupancy	1	2.50
Mineral Entry	<u>11</u>	<u>1,248.47</u>
TOTALS	64	5,034.12

## LAND LEASES IN EFFECT SEPTEMBER 30, 1984

KIND	NO.	ACRES
Recreation and Public Purposes	151	11,219.06
Airport	41	14,293.07
Small Tract	3	15.00
TOTALS	<u>195</u>	<u>25,527.13</u>

RIGHTS-OF-WAY IN EFFECT SEPTEMBER 30, 1984

KIND	NO.
Communication Sites	298
Electrical Transmission	767
Federal Highway	100
Tram, Access Roads	192
Material Sites	333
Pipeline, Oil and Gas	46
Pipeline, Water	207
Railroad	69
Telephone-Telegraph	387
Water Reservoir or Ditch	18
TOTAL	2,417



The BLM participated with other agencies in sponsoring a Cultural Awareness Week in Reno. The May 1984 event involved people of various ethnic backgrounds who shared their cultural heritage via displays, exhibits, speeches, demonstrations and music.



## FIRE REHABILITATION

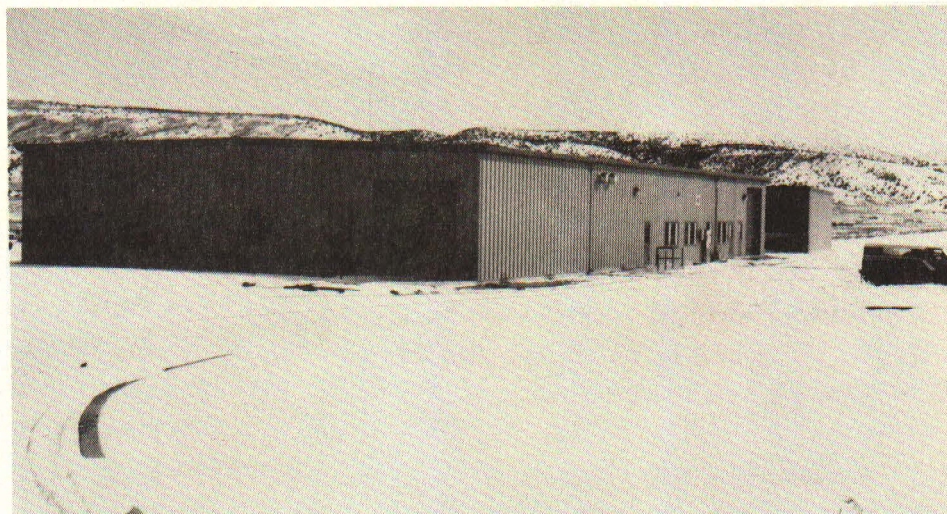
Immediately after a wildfire on the public lands is contained by BLM fire-fighters, other resource specialists begin evaluating the area to see if it has the potential to be rehabilitated and if the rehabilitation is cost-effective or necessary to meet resource objectives. The Bureau considers fire rehabilitation 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, 1984

DISTRICT	SEEDING (ACRES)	FENCE CONSTRUCTION (MILES)
Elko	204,360	78
Winnemucca	7,650	42
Carson City	18,593	13
Ely	15,003	29
Las Vegas	8,550	4
Battle Mtn.	400	3
TOTALS	254,556	169



*This new building in Elko houses the fire dispatch center, as well as the radio technician's facilities. It is the District's warehouse.*

# 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 1984, 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 1984

DISTRICT	NUMBER OF FIRE ACTIONS				ACRES BURNED			
	9 ACRES OR LESS	10-99 ACRES	100 + ACRES	TOTALS	ASSIST FIRES	BLM	OTHER OWNER- SHIP	TOTALS
Elko	57	13	21	91	10	48,916	29,791	78,707
Winnemucca	46	15	21	82	4	68,008	16,871	84,879
Carson City	143	31	29	203	54	46,948	37,355	84,303
Ely	58	4	6	68	13	19,844	700	20,544
Las Vegas	161	7	6	174	29	809	1,710	2,519
Battle Mtn.	31	3	8	42	4	10,803	121	10,924
TOTALS	496	73	91	660	114	195,328	86,548	281,876
PERCENTAGES	75	11	14	100	*	69	31	100

\* The districts assisted other agencies on 114 fires.

*The BLM received a Community Services Award for donations of blood. Periodic blood drives are held at the State and District Offices.*



## 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 1984, 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 1984 is outlined below:

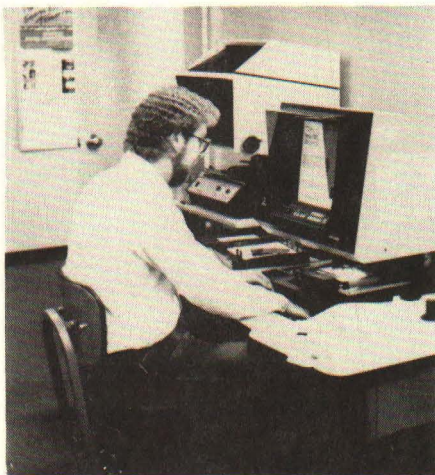
### SURVEY STATUS

ITEM	FY 83	FY 84
Acres surveyed		
Forest Service	1,862	000
BLM	1,227	89,379
Acres resurveyed		
Forest Service	1,706	17,990
BLM	225,750	226,019
Acres unsurveyed	19,382,775	19,293,396
Minerals surveyed	10*	8**
Plats accepted	27	33
Acres surveyed to present	50,946,185***	51,035,564***

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

\*\*Approved FY 1984, 8 mineral surveys consisting of 17 lode claims and 93 millsites.

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



*Records on such matters as mining status, oil and gas leases and rights-of-way are available at NSO's Public Room. Here, a BLM employee searches the microfiche for information requested by a member of the public.*