674316 133041.00.

according to U.S. Department & Interior nerada statistical report for 1984 there are 636 permittus, in grading 674, 316 Cattle, Sheep and domestic houses. The Same report there are 33,041 wild horses and hurros. Since These animals are limited, by law, to the area in which they accured in 1971, this use constitutes approximately 30% of the Jederal lands in nevada Sinen all of the above, I find at meredikle that 33,000 animals the imagination has to be stretched to believe that wild horses are doing all the range damage. These Statistics Show have use at 5%. of the total graging animals.

# NEVADA PROGRESS REPORT 1985

CADA

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1785 1985





### United States Department of the Interior

BUREAU OF LAND MANAGEMENT NEVADA STATE OFFICE 300 Booth Street P.O. Box 12000 Reno, Nevada 89520

The year 1985 was a year of remembrance as we celebrated a significant event in our nation's past, the anniversary of cadastral survey. It was also a year that will go down in the record books for the worst fire season on record, and for the emphasis on implementing wild horse and burro plans.

The entire nation celebrated the 200th anniversary of the Ordinance of 1785 which prescribed rectangular surveying of public lands. The Bureau of Land Management (BLM) today is responsible for official government surveys of the public lands. During the anniversary, the BLM and others noted that the leaders of the nation in the 1700s wanted to avoid the entanglements of metes and bounds surveys and wanted the West settled in an orderly manner. Thus, in Nevada, as in other states, General Land Offices opened.

In Nevada the General Land Office, forerunner of the BLM, opened its doors on June 22, 1861 in Carson City. The first contract was let to Butler Ives to survey the "Carson river guide meridian and the 2, 3 and 4 standard parallels."

Today more than 51 million acres have been surveyed, although many acres are in need of resurvey for various reasons. For example, in some areas little evidence remains of original corner monuments. Today survey and resurvey work is performed by a small group of professional surveyors and temporary employees who are in the field from April to November. Notes and plats are prepared in the winter months.

Making news in 1985 were the 870 plus fires which burned more than 885,000 acres of public land in Nevada. Hardest hit were the Winnemucca, Elko, Carson City and Battle Mountain Districts where interagency crews battled fires simultaneously. BLM firefighters assisted other agencies on 99 fires. Evaluation of the burned land followed, and efforts at rehabilitation is a major concern in 1986.

Congress increased the BLM's national funding for the wild horse and burro program nearly three-fold in fiscal year 1985. Nevada focused increased attention on managing wild horse and burro herds as components of the multiple-use environment. In several areas, gathers helped reach desired herd management area numbers determined through the planning process. Excess animals are being placed through the Adopt-A-Horse (or Burro) program. Nationally BLM found private homes for 9,554 animals, an increase of 70 percent more than the previous year. Volunteer programs were encouraged. The wildlife, recreation and archaeology programs are areas where some of the 713 volunteers contributed 22,298 service hours of work on the public lands. This almost doubled the previous year's efforts.

In minerals, two geothermal plants began generating electricity. The plants are at Beowawe and at Desert Peak. Just as the geothermal program moved from an exploration to a development phase, so did the interest in oil and gas change from one of drilling to one of production. Last year Nevada public lands produced more than three million barrels of oil.

In the Tonopah Resource Area, FMC discovered the seventh largest precious metal deposit found in the last 30 years. Following environmental clearances, the company today is forging ahead with production plans at Paradise Peak.

Other BLM programs had significant challenges and changes in 1985. A summary of the major events of the year follow in this edition of the Progress Report.

aul

Edward F. Spang State Director, Nevada

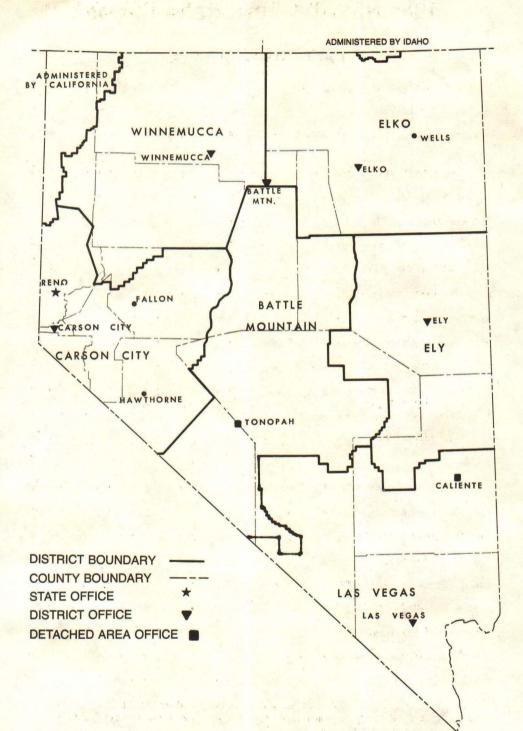
# **1985 NEVADA PROGRESS REPORT**

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This booklet contains information and statistics about the Bureau of Land Management in Nevada. Fiscal Year 1985 covers the 12-month period from October 1, 1984 to September 30, 1985.

Produced by Public Affairs, Nevada State Office. Archaeology photography courtesy of Intermountain Research. Major photography contributors: Joe Ross, Paul Caplinger, Kevin Leary, Vienna Wolder, Maxine Shane, all BLM. Editor, Maxine Shane. Layout, Caroline Norris.



# **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	Lynn Engdahl	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 Secretary Public Affairs Specialist Bob Stewart Dana Jensen Maxine Shane 784-5311

### 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	Daniel Rathbun	784-5455
Lands and Renewable Resources Saval Ranch Project Manager	Peter Lent	784-5572
Secretary	Virginia McClure	104-3312
Chief, Biological Resources	Les Sweeney	784-5455
Range Management	Brad Hines	
Monitoring Specialist	Robert Stager	
Fisheries and Forestry	Osborne Casey	
Hydrologist	Houng Ming Joung	
Soils, Watershed	James McLaughlin	
Wild Horses and Burros	Milt Frei	
Wildlife	Dave Goicoechea	
Chief, Lands and Recreation	James Elliott	784-5748
Archaeology Information	James Elliott	
Lands and Realty	Mike Moran	
Recreation	Steve Smith	
Wilderness	Dave Harmon	
Chief, Planning and Environmental		
Staff	Jack Seley	784-5448
Regional Planning	Mary O'Brien	
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. Also, responsible for policy and program direction in hazardous material/waste management on Federal lands.

Deputy State Director and Chief, Division of Mineral Resources Secretary Petroleum Engineer Geologists

Physical Scientist Mining Engineer Hazardous Material Specialist Minerals Assistant Petroleum Engineering Technician, Ely Tom Leshendok Nina East Ellis Hammett Neal Brecheisen Jack Crowley Larry Steward Richard Hoops Galo Silva Kevin Leary Cheryl Jacobs

John Stout

784-5676

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	Robert Steele	784-5281
Secretary	Kathy Wiegard	784-5282
Chief, Appraisal	Charles Hancock	784-5474
Chief, Cadastral Survey	Lacel Bland	784-5484
Chief, Engineering	Harold Payne	784-5275
Chief, Lands & Minerals	Marla Bohl	784-5703
Lands Transactions	Ken Stowers	784-5703
Minerals Transactions	Jody Woodin	784-5703
Accounts	Bob Matthews	784-5432
Mining Claims Information	Ken Stowers	784-5751
Dockets	Atanda Clinger	784-5445
Public Contact	Pam Reynolds	784-5496
Titles, Records Information	Ken Stowers	784-5976
Chief Law Referencest	Ten Class	70/ 5600
Chief, Law Enforcement	Len Sims	784-5683
Chief, Mapping	Steve Rasmussen	784-5731
Chief, Fire and Aviation	Alan Dunton	784-5100

### DIVISION OF ADMINISTRATION

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

Deputy State Director, Administration	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 Information	Ronald Banegas	784-5881
Classification	Iluminado Gentolizo	784-5881
Training	John Chappell	784-5881
Employee Relations	Ronald Banegas	784-5881

#### BLM DISTRICT OFFICES

Elko District Office P.O. Box 831, 3900 E. Idaho Street Elko, Nevada 89801

District Manager Elko Resource Area Manager Wells Resource Area Manager Chief, Division of Resource Management Chief, Division of Operations Chief, Division of Administration

Winnemucca District Office 705 East 4th Street Winnemucca, Nevada 89445

District Manager Paradise-Denio Resource Area Manager

Sonoma-Gerlach Resource Area Manager Chief, Division of Resource Management Planning and Environmental Contact Chief, Division of Operations Chief, Division of Administration Rod Harris Tim Hartzell John Phillips

Merle Good Jesse Dingman Michele Good

623-3676

738-4071

Frank Shields

David Griggs

Gerald Brandvold

Bob Neary Gerald Moritz Les Boni Ted Angle Carson City District Office 1535 Hot Springs Rd., Suite 300 Carson City, Nevada 89701

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

Tom Owen Mike Phillips John Matthiessen

Fred Wyatt

Norm Murray Kelly Madigan John Lukasko

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

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

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

Stateline Resource Area 301 E. Stewart P.O. Box 7384 Las Vegas, Nevada 89125

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

Ben Collins District Manager Associate District Manager, Acting Bill Civish Stateline Resource Area Manager Bill Civish

Caliente Resource	e	
Area Manager,	Acting	Bob Taylor
Chief, Division	of Resource	
Management		Joe Ross
Chief, Division	of Operations	Tom Combs
Chief, Division	of Administration	John Crew

289-4865

Ken Walker Howard Hedrick Dave Redmond

Wayne Lowman

Jake Rajala Hal Bybee Sue Perkins

388-6403

388-6627

726-3141

882-1631

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

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

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 Terry Plummer

Neil Talbot Les Monroe Mike Mitchel

Calvin McKinlay P. John Keenan Thomas Jury



Red Rock Canyon Visitor Center in the Las Vegas District is operated by the BLM with support from a large number of volunteers, many organized into a group called the Friends of Red Rock Canyon. 635-5181

# FEDERALLY ADMINISTERED LANDS IN NEVADA BY AGENCY AS OF THE 1983 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 732 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. PERCENTAGE OF

		PERC	ENTAGE OF
AGENCY	ACRES	STATE A	DMINISTERED
Department of Agriculture			
Forest Service	5,149,684.0		
Soil Conservation Service	.2		1
Department Subtotal	5,149,684.2		7.32
Department of Energy			
Energy Research and Development			
Administration	819,681.8		
Western Area Power Admin.	4,407.2		
Department Subtotal	824,089.0		1.17
Department of Interior			
Fish & Wildlife Service	2,202,316.5		
Geological Survey	70.8		
Bureau of Indian Affairs	6,243.6		
Bureau of Land Management	48,065,097.0		
Bureau of Mines	4.5		
National Park Service	264,137.9		
Bureau of Reclamation	443,057.2		
Department Subtotal	50,980,927.5		72.55
Description of Management and an			
Department of Transportation	1 0(2 (		
Federal Aviation Administration	1,863.6		
Department of Defense			
Air Force	2,903,513.0		
Army	155,258.0		
Navy	39,855.3		
Corps of Engineers	671.0		
Department Subtotal	3,099,297.3		4.44
			State & Sta
Other Federal Agencies			
General Services Administration	13.2		*
Coast Guard	.2		*
Health Services Administration	.2		*
United States Postal Service	30.2		*
Veterans Administration	12.5		*
Other Agencies Subtotal	56.3		
TOTALS	60,055,915.9		85.5

\*Less than one percent.

NOTE: Data from the General Services Administration. Current BLM figures are shown on the opposite page.

# PUBLIC LANDS IN NEVADA BY COUNTY AS OF SEPTEMBER 30, 1985

			PERCENTAGE OF
	PUBLIC LANDS	TOTAL ACREAGE	TOTAL ACRES
COUNTY	MANAGED BY BLM*	IN COUNTY	MANAGED BY BLM
Carson City	42,387	97,920	43.3
Churchill	2,294,744	3,144,320	73.0
Clark	3,185,159	5,173,760	61.6
Douglas	179,021	480,640	37.2
Elko	6,785,946	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	3,011,598	3,597,440	83.7
Lincoln	5,749,793	6,816,000	84.3
Lyon	711,091	1,295,360	54.9
Mineral	1,693,028	2,455,680	68.9
Nye	6,699,729	11,560,960	58.0
Pershing	2,910,404	3,859,840	75.4
Storey	12,528	167,680	7.5
Washoe	2,642,493	4,229,120	62.5
White Pine	4,363,937	5,699,200	76.6
TOTALS	48,834,496	70,745,600	69.0

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

# **BY BLM DISTRICT**

DISTRICT

Elko Winnemucca Carson City Ely Las Vegas Battle Mountain Susanville Boise TOTAL ACRES MANAGED BY BLM

7,385.	883
8,252	352
5,321	576*
8,007	,300
7,289,	816
11,107,	928
1,452,	138**
58,	,082***

TOTAL 48,875,075

\*Includes 40,579 acres in California managed by Carson City District.
\*\*Land in Washoe and Humboldt Counties administered by Susanville, California BLM District.
\*\*Land in Elko County administered by Boise, Idaho BLM District.

11

# 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 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 either the BLM or the Minerals Management Service (MMS). 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 85**

Total Public Land Receipts Collected by BLM \$8,426,155

Total Mineral Receipts Collected by MMS \$20,405,394 Total Funds Paid out by BLM from the U.S. Treasury Relating to Public Land Management in Nevada

Direct Co	st	Expenditures	\$29,335,300
Payments	to	State of Nevada	1,210,780
Payments	in	Lieu of Taxes	5,654,266

Amount

TOTAL

\$36,200,346

### RECEIPTS

Receipts Source - BLM

Mineral Leases and Permits	
Oil and Gas Pipeline Right-of-Way Rentals	\$ 350,858
Sale of Land and Materials	
Land	3,904,949
Materials	914,633
Timber	80,717
All Others	38,112
Grazing	
Section 3*	2,535,599
Section 15**	34,409
Fees and Commissions	227,981
Rights-of-Way	249,130
Rents of Land	13,492
All Others	76,275
momit	+ 0 /00 155

TOTAL \$ 8,426,155 \*Section 3 refers to grazing within grazing districts. \*Section 15 refers to grazing outside established grazing district.

Receipts Source- MMSAmountRoyalties011\$ 6,844,288Geothermal1Sand and Gravel117,849

Rents	10 ((0 075
011	12,669,075
Geothermal	620,015
Sodium	23,641
Sand and Gravel	195
Bonuses	
011	130,330
TOTAL	\$ 20,405,394
DIRECT COST EXPENDITURES	
CONSTRUCTION AND MAINTENANCE	
Range, Wildlife Habitat, Soil and Water Improvements	
(\$1,226,700 of this amount is directly from grazing fe	es) \$ 1,969,800
Maintenance of Range, Wildlife Habitat, Soil and Water	• 1,101,000
Improvements	104,600
Recreation and Other Facility Construction	67,100
Road Construction and Easement Acquisition	19,500
Maintenance of Roads and Facilities	798,300
RESOURCE PROTECTION	170,500
Fire Prevention	1,465,900
Fire Suppression	7,570,500
MANAGEMENT	1,510,500
Lands and Realty	1,872,100
Energy Minerals	1,072,100
011 and Gas	500,700
Geothermal	405,000
Non-Energy Minerals	1,046,100
Forest Management	190,100
Grazing Management	2,857,300
Wild Horse and Burro Management	4,128,100
Cultural Management	347,300
Wilderness Management	624,000
Recreation and Visual Resource Management	509,300
Soil, Air, and Water Management	2,485,200
Wildlife Habitat Management	836,900
Fire Management	437,300
Planning for Multiple Use	577,200
Law Enforcement	135,200
CONTRIBUTIONS AND REIMBURSABLES	387,800
I	COTAL \$29,335,300

### **PAYMENTS MADE TO THE STATE OF NEVADA FY 85**

BLM				
Land	of materials,	county receive) timber, etc.	\$	832,525 28,191*
	Section 3			323,135*
	Section 15			26,929*
MMS				
Minera	1 Receipts		9	,903,122**
	TOT	AL	\$11	,113,902

These amounts were actually paid out in fiscal year 1985; receipts announced for fiscal year 1985, thus far, are: \$76,447 - sale of materials, etc.; grazing, section 3, \$316,950; grazing, section 15, \$17,205.

\*\* Payments made monthly to the State of Nevada by the Minerals Management Service. Figure is less than 50 percent of the total receipts because of windfall profit tax which is not shared with the state and time lags which exist within the Service between the time monies are actually received and the date on which monthly payments are made.

### PAYMENT IN LIEU OF TAXES

COUNTY	PAYMENT	COUNTY	PAYMENT	COUNTY	PAYMENT
0 01	\$ 36,961	Personalda	E0 (E/		261 062
Carson City Churchill	421,457	Esmeralda Eureka	58,654	Mineral	261,963 403,978
Clark	969,561	Humboldt	363,191	Nye Pershing	178,003
Douglas	184,741	Lander	230,005	Storey	9,170
Elko	516,625	Lincoln	181,644	Washoe	990,856
	,	Lyon	432,248	White Pine	332,116
			TOTAL	\$5,637	.839**

\*\* The total PILT check for Nevada was \$5,654,266 since two Counties received Federal land payments for entitlement lands the preceding fiscal year. Douglas County received \$5,508 and Washoe County, \$10,919.

# **BLM EMPLOYMENT**

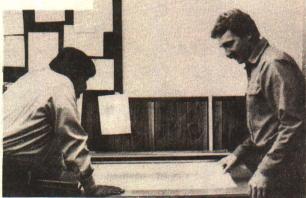
Employment in the BLM in Nevada in fiscal year 1985 showed no significant change in the permanent work force from the fiscal year 1984 figures, as predicted. There were a considerable number of temporary employees on the rolls at the end of fiscal year 1985, but this was because 1985 was one of the heaviest fire seasons ever experienced in Nevada during the summer.

### **BLM NEVADA EMPLOYMENT FY 85**

OFFICE	PERMANENT	WAE*	PART-TIME	TEMPORARY	TOTALS
State Office	148	0	6	24	178
Elko	60	2	0	26	88
Winnemucca	53	0	1	14	68
Carson City	69	2	0	38	109
Ely	52	2	0	14	68
Las Vegas	64	2	0	31	97
Battle Mountain	50	1	0	14	65
TOTALS	496	9	7	161	673

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

Experts from the BLM and the Soil Conservation Service apply professional knowledge in selecting ecological (range) sites, key management areas and species for monitor ing. Monitoring occurs primarily on I (Improve) allotments.



# EQUAL EMPLOYMENT OPPORTUNITY



A Chinese cultural presentation was made by Retired General John Woo, left, to both BLM and state employees. The program was organized by BLM's Houng Ming Joung, right, and Bill Moon, middle.

The BLM's Affirmative Action Program is a special program of renewal and reflection that daily demonstrates its need for a massive infusion of Equal Employment Opportunity (EEO). During the 1985 fiscal year, numerous special emphasis sub-programs were conducted at the Nevada State Office and all District Offices in recognition of the Nation's diversified cultures, and to increase cooperation among various ethnic groups.

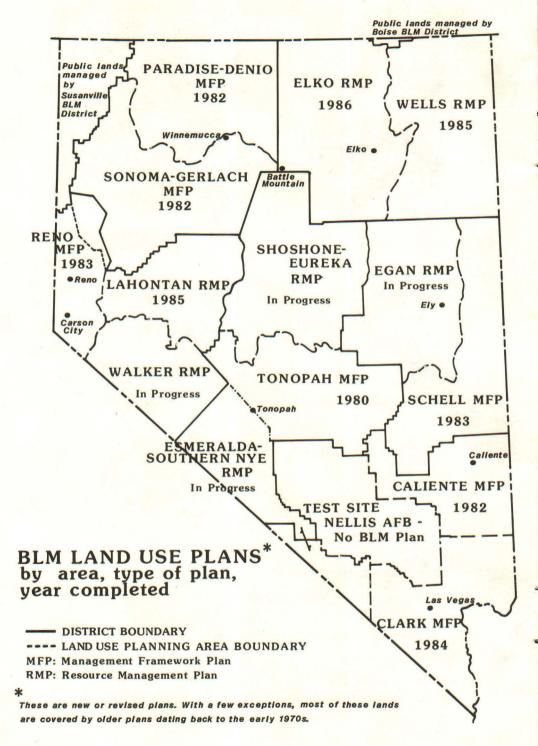
Major activities which contributed toward accomplishing EEO objectives of eliminating underrepresentation in the workforce are:

- --Dr. Carlos Romo, Assistant Director of the Nevada Equal Rights Commission, presented an Hispanic Heritage History Seminar to celebrate "National Hispanic Heritage Week." Retired General John T. Woo, President of the Northern Nevada Chinese Association, made two Chinese cultural presentations for Bureau employees and another one for the general public and employees of the State of Nevada.
- --During Black History Month, a movie -- "The Longest Struggle," which chronicles the NAACP's 75-year march -- was shown. It was open to the public. Several Federal Women's Program activities were conducted, including the development of a Statewide Child's Care Director.

These EEO activities were presented to ensure equal access to employment opportunities for all people without regard to their race, color, religion, national origin, age, sex, or handicap.

### **BLM'S NEVADA WORKFORCE FY 1985**

STATEWIDE TOTAL	-	503		MINORITY GROUPS			
Non-minority Females	-	126	(25%)	Blacks	-	10	(2.0%)
Minorities	-	48	(9.6%)	Hispanics	-	17	(3.4%)
				Asians	-	8	(1.6%)
				Native Americans	-	13	(2.6%)



# LAND USE PLANNING

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

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

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

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

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

### FY 1985 PLANS

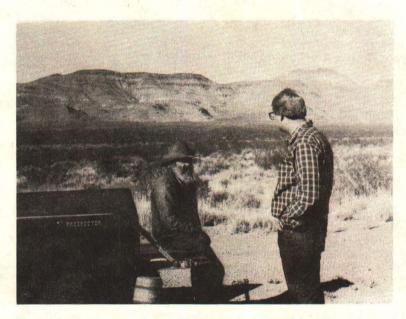
Nevada RMPs and their associated Environmental Impact Statements (EISs) prepared in 1985 encompassed a number of issues which were developed through public involvement. Issues included wilderness, rangeland management, land tenure and utility corridors, recreation and minerals, to name a few. In each instance, the proposed resolution of these issues -- and their accompanying resource conflicts -touch on a number of Bureau programs such as wildlife, wild horses and forestry and cultural resources.

Resource Management Plans were completed in final for the Lahontan Resource Area and Walker Resource Area, Carson City District; Egan Resource Area, Ely District; Esmeralda-Southern Nye Planning Area, Battle Mountain and Las Vegas Districts; and Shoshone-Eureka Resource Area, Battle Mountain District. A Record of Decision was completed and approved for the Lahontan Resource Area. Records of Decision will be completed for the Walker Resource Area, Egan Resource Area, Esmeralda-Southern Nye Planning Area and the Shoshone-Eureka Resource Area in the coming fiscal year.

The Resource Management Plan for the Elko Resource Area will be finalized in fiscal year 1986. The draft was completed in fiscal year 1985.

Wilderness EISs and their associated Wilderness Technical Reports were completed in 1985 as integral parts 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. This accomplishment marked the completion of all scheduled wilderness draft EISs and associated Wilderness Technical Reports for Nevada. As the result of an April 1985 court decision, several areas which were previously dropped from the wilderness study process will be re-inventoried and will be studied in amendments to the planning process in 1987.

Private environmental consulting firms, coordinating closely with the Bureau of Land Management, have completed a Record of Decision for the White Pine Power Project, and a draft EIS for the Mt. Hope Molybdenum Project in Eureka County in the 1985 fiscal year. A final EIS for Mt. Hope is scheduled for completion in fiscal year 1986.



A grazing permittee in the Caliente Resource Area meets with a BLM range conservationist. This allotment was one of 86 in the area reviewed by a Coordinated Resource Management and Planning Committee, an interdisciplinary group voluntarily formed to observe and solve resource problems.

# MINERALS MANAGEMENT

The minerals program in fiscal year 1985 was influenced by three major trends: 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 increase in oil and gas activity; and the expansion of the geothermal program on federal lands in Nevada because of the completion of producing power plants.

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 continued implementing a new 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.

In fiscal year 1985, the mineral receipts from leasable mineral activity in Nevada totaled \$20,405,394. About half of this (\$10,202,697) goes to the State of Nevada, as required by the Mineral Leasing Act. About 95 percent of total receipts were derived from oil and gas lease rentals and royalties.

### LOCATABLES

During 1985, 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. There were an estimated 400 active mining operations in Nevada. A total of 26,884 claims were recorded during the fiscal year which brought the total claims recorded in Nevada under the Federal Land Policy and Management Act to 357,344. Nevada BLM offices received 584 notices and 56 plans under the hardrock mining regulations contained in 43 Code of Federal Regulations 3809. These totaled more than any other state with federal lands.

One important plan which complied with the National Environmental Policy Act (NEPA), as an example, was the Paradise Peak gold and silver mine of FMC near Gabbs. This operation, based on FMC's discovery of the seventh largest precious metal deposits in the last 30 years, was brought from discovery to production by FMC in approximately four years. The plan required by the Mining Law regulations and environmental compliance required by NEPA was prepared, reviewed and approved in less than eight months. The development of the mine, which will probably be one of the Nation's top producers, shows that mineral exploration and development on federal lands is being accomplished quickly, yet in an environmentally sound manner.

### MINING CLAIM RECORDATION STATUS FY 85

Total claims recorded during fiscal year 1985: 26,884 Total claims recorded through September 30, 1985: 357,344

### **MINING CLAIM PATENTS FY 85**

TYPE	NO.	ACREAGE
Lode	6	71.9
Placer	0	0
Millsite	105	520.0
TOTALS	111	591.9

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

DISTRICT	NO. NOTICES	NO. PLANS
Elko	57	7
Winnemucca	137	5
Carson City	82	11
Ely	80	6
Las Vegas	44	9
Battle Mountain	184	18
TOTALS	584	56

### 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.

The BLM maintains 68 community pits in Nevada for the public to use sand and gravel, rip rap, decomposed granite and other salable minerals. For additional information, see the local BLM District Office.

### MINERAL MATERIALS FY 85

TYPE CASE	NO. OF PERMITS	VOLUME
Material Sales	265	1,141,085 cubic yards
Free Use Permits	98	1,538,436 cubic yards
TOTALS	363	2,679,521

### 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.

Several 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. The following chart includes Indian land leases.

### **MINERAL LEASES AND PERMITS IN EFFECT FY 85**

TYPE	NO.	ACREAGE
Sodium Leases/Permits Other (Silica Sand and	26	61,113
Gravel, etc.)	_8	302,460
TOTALS	34	363, 573



A competitive bid sale for geothermal and oil and gas was held in Reno in mid-September. All five oil and gas parcels and 8 of the 51 geothermal parcels received bids. Successful bidders have a lease with a right to develop the resource.

### **OIL AND GAS**

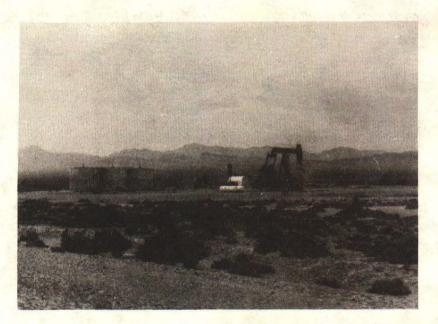
During the 1985 fiscal year, Nevada experienced a marked increase in production activity over the previous fiscal year. A total of 33 wells were drilled, resulting in six successful completions, all in Railroad Valley. Production in Nevada increased to 3,000,000 barrels in the 1985 fiscal year; this was a 600 percent increase over 1983 production.

A successful, combined Known Geologic Structure - Known Geothermal Resource Area (KGS/KGRA) sale, held in September 1985, resulted in the sale of several competitive parcels as shown below:

SALE	NUMBER	TOTAL	TOTAL	AVERAGE
DATE	PARCELS SOLD	ACRES SOLD	HIGH BIDS	BID/ACRE
9/17/85	5	720	\$125,162.80	\$173.84

One lease in the Trap Springs field, which was leased for Nevada's highest bid ever (\$1,238.47 an acre) was followed up by industry with exploration and an Application to Drill. The well was permitted, drilled and brought-in as a producer (e.g., J. N. Federal No. 1) within one-year from the sale date, September 17, 1985.

In addition to the 33 wells drilled, a total of 14 unit applications were approved in fiscal year 1985 as opposed to only 4 unit applications filed in fisal year 1983. Of these unit applications received, 15 were approved and a total of 27 wells drilled on these units. Applications to drill totaled 40 applications with 33 actually being drilled.



Trap Springs, Nye County

### **GEOTHERMAL ENERGY**

The BLM issues two types of leases on public lands for geothermal exploration and development: non-competitive and competitive. Non-competitive leases are issued, subject to any applicable environmental protection stipulations, on a first-come, first-served basis. These leases require a filing fee plus the first year's base rental, which is due upon application. 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 change of three dollars per acre per year.

During the 1985 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.

Electrical generation from two power plants began in 1985. One plant is located at Beowawe and is operated by Chevron Resource Company. The other is located at Desert Peak, operated by Phillips Petroleum Company. It is estimated that up to \$200,000 in production royalties will be generated to federal and state treasuries in 1986.

Construction of the Beowawe plant began in July. It is a double flash plant 16.6 megawatts. Electricity will be sold to Southern California Edison and Sierra Pacific Power Company. Construction of the Desert Peak plant began in April. The plant utilizes a bi-phase turbine capable of generating 10 megawatts and the electricity is sold to Sierra Pacific. Both plants use two production wells and one injection well.

### **GEOTHERMAL DRILLING ACTIVITY IN NEVADA FY 85**

Number of Exploration Wells Drilled: 4 Number of Development Wells Drilled: 2 Number of Development Plans Submitted and Approved: 2

### **GEOTHERMAL WELL SUMMARY FY 85**

Total number of all temperature gradient holes drilled as of September 1985: 410

Total number of all exploratory wells drilled as of September 1985: Producible or usable: 50 Plugged and abandoned: 5

TOTAL 55

As of the end of fiscal year 1985, there were 389 geothermal leases for 672,708 acres; this shows a drop of some 70,000 acres since 1984 as geothermal development in Nevada moves from an exploratory to development stage.

### **GEOTHERMAL DEVELOPMENT PROJECTS**

	LOCATION	SALES CONTRACT	PLAN OF UTILIZATION	PLANT	
OPERATOR	& BLM OFFICE	SIGNED	SUBMITTED	STARTUP	MEGAWATTS
Phillips	Desert Peak Winnemucca DO	March 1984	March 1984	Dec. 1985	9
Chevron	Beowawe Battle Mountain, Elko DOs	Dec. 1984	Sept. 1984	Dec. 1985	16.6
Oxbow Geo. Corp.	Dixie Valley Carson City, Winnemucca DOs	Oct. 1984	March 1986	Mid-1987	65
Chevron	Soda Lake Carson City DO		Mid-1986	Early 1987	3
Munson Geo. Corp.	Brady Hot Springs Winnemucca DO	Nov. 1985	Dec. 1985	June 1986	10
Phillips	Steamboat Hot Springs Carson City DO		Mid-1986	Late 1986	10
Steam Reserve Corp.	Fish Lake Valley Battle Mountain DO	* )	Feb. 1986	Early 1987	15
National Energy Assoc.	Big Smoky Valley Battle Mountain DO	March 1984	1	1 - <del>2</del> 1 20 - 9 - 2	10
Stewart	San Emidio Winnemucca DO	Early 1986	Feb. 1986	Mid-1986	2 & Direct Use
South Central Nevada Holdings, Inc.	Railroad Valley Battle Mountain DO	Early 1986	Feb. 1986	Mid-1986	2 & Direct Use
Third Wave Technology	Wabaska Hot Springs Carson City DO		Mid-1986	Mid-1986	Direct Use



As part of the hazardous waste program, preliminary assessments were performed at several disposal sites in the West, including Nevada. The tests will determine what risk, if any, materials present to the public or to Bureau-managed resources.

### HAZARDOUS MATERIALS

The BLM has developed a new program emphasis to address the issue of hazardous materials or wastes associated with federal lands. Although the primary responsibility lies with the State of Nevada or the Environmental Protection Agency, BLM as land manager, has initiated several program efforts in reporting, safety awareness, inventory, education and potential site assessment on federal lands. Each District Office has a hazardous material coordinator. The Nevada BLM State Office hazardous waste coordinator operates within the Minerals Division.

The primary objectives of the Hazardous Materials Program, in Nevada, are to identify and locate hazardous material sites, assess land status, and develop a strong safety, employee information and reporting program.

Current activities include assessment of potential hazards from active and inactive mines; monitoring of Recreation and Public Purpose lease sites for potential adverse environments/health impacts and the maintenance of the list of inventory sites on or affecting public lands. All efforts are coordinated with both the Nevada Department of Environmental Protection and the Federal EPA, Region IX.

Nevada is one of the few states in the United States that has no superfund sites.

# 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. 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 table) 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 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.

### NEVADA BLM WATERSHED MONITORING 1962 to PRESENT

			AF	EA
DISTRICT	WATERSHED		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
A State of the second sec	Mathews Canyon		36	23,040
Battle Mountain	Coils Creek	and the second	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, 1985, more than 45 million acres of soil inventories have been completed. Following is a list of BLM District accomplishments for fiscal year 1985 and cumulative totals.

### SOIL INVENTORIES

	DCT. 85
DISTRICT FY 85 CUMULATIVE TO OCT. 1, 1985	OCT. 85
E1ko 775,000 7,766,595 2,	700,000
Winnemucca 1,000,000 5,872,239 1,	900,000
Carson City 0 6,233,802 4,	100,000
Ely 525,000 5,235,434	200,000
Las Vegas 350,000 7,640,301	400,000
Battle Mountain 550,000 11,057,187 1,	400,000
Susanville 0 1,813,226	0
TOTALS 3,200,000 45,618,784** 10	,700,000

\* 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 in fiscal year 1984.

\*\* 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 in Nevada, 13 have been completed. The Elko Final Environmental Impact Statement/Resource Management Plan is scheduled for completion in the 1986 fiscal year. (For location of this and other 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 march - 1 to Feb 29-1986 85 **FEE YEAR 1984 \***

85

DISTRICT	NUMBER OF OPERATORS	ANIMAL UNIT** MONTHS***	NUMBER OF CATTLE	NUMBER OF HORSES	NUMBER OF SHEEP
Elko	176	596,563	215,096	828	58,063
Winnemucca	104	295,032	47,413	173	16,472
Carson City	81	144,095	21,205	35	32,558
Ely	116	305,408	40,376	35	132,667
Las Vegas	115	120,889	14,177	124	8,000
Battle Mtn.	89	410,996	53,714	139	43,213
TOTALS	681 639	1,872,983 1,806,239	391,981	1,334	290,973

\*Grazing fee year 1984 ran from March 1, 1984, to February 1, 1985. \*\*Active use plus trailing use.

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

# **RANGELAND 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, direct Congressional appropriations, or from contributions received from non-Bureau sources.

Consistent with the Bureau's Rangeland Improvement Policy, range betterment funds were spent to support both the terrestrial and aquatic wildlife habitat improvement programs as shown below.

### **RANGELAND IMPROVEMENTS COMPLETED IN FY 85\***

TYPE OF IMPROVEMENT

NEW CONSTRUCTION (RANGE) 25 each 2500

160 miles

23 units

NEW CONSTRUCTION (WILDLIFE)

10 miles

5 units

Cattleguards/Management Facilities

Fences

Water Facilities

\* Range betterment fund and partially contributed funds only.



A number of citizens attended a briefing in Reno on the draft Evaluation Report on Grazing Fees for Public Rangelands. The report evaluated the grazing fee formula established by the Public Rangelands Improvement Act of 1978, as well as a variety of alternative fee formulas.

### 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 44,280 wild horses and 8,015 wild burros inhabit these lands. The bulk (42,756 horses and 7,665 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 85

DISTRICT		HORSES	BURROS	
Elko		1,304		AML
Winnemucca		7,336	251	18,603 H.
Carson City		6,495	130	
Ely		2,475	-	821B
Las Vegas		4,522	736	
Battle Mountain		7,301	351	
10 HMA- Amhs Notest.	TOTALS	29,433	1,468	
IU HMA- HIMUS INCICSI	FUSS	26.764	147	3

### 3-1- 2-29-86

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.

186

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 1985 is noted below.

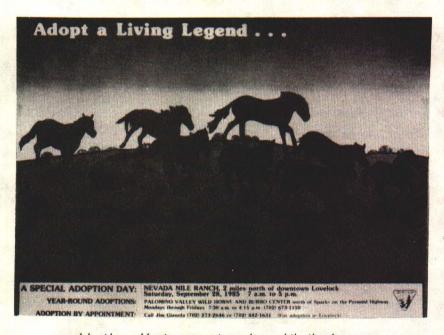
### **ROUND UPS COMPLETED - FY 1985**

DISTRICT		HORSES GATHERE	D
Winnemucca		4,705	
Carson City		2,369	
Ely		185	
Las Vegas		1,718	
Battle Mountain		1,464	
	TOTAL	10,441	

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. Three contracted adoption centers were opened in May and June of 1985 to maintain captured animals. They are in Nevada, Nebraska and Texas.

### **DISPOSITION OF EXCESS ANIMALS - FY 85**

NO. ADOPTED/LOCATION OF ADOPTION AND FEEDING CENTER	NUMBER AT PALOMINO VALLEY START OF FY 85	BRANDED/ PRIVATE	DIED OR HUMANELY DESTROYED	BALANCE REMAINING AT PALOMINO VALLEY END OF FY 85
3,320 Nevada 3,061 Texas	1,166	49	1,393	1,271
396 California				
158 Oklahoma				
100 Pennsylvania				
100 Arizona				
99 Florida				
54 Kansas				
52 Tennessee				
52 Virginia				
7,392 Total				



Adoption efforts were stepped up with the increase in wild horse and burro gathers. A special event in Nevada was an adoption day at the contracted, long-term holding facility in Lovelock where about 3,000 animals await new homes.

### WILDLIFE HABITAT MANAGEMENT



Wildlife habitat for desert tortoise is one of the BLM's concerns in southern Nevada.

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 63 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 through development of new projects or maintenance of existing developments was undertaken within 20 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 1986. Dollars expended in these accomplishments exceeded \$200,000 of direct Bureau expenditures, and contributions of an additional \$175,000 in money and donated labor by private interests and the Nevada Department of Wildlife. Volunteer time and contributions totalling \$75,000 were expended on Desert Bighorn Sheep habitat improvement.

### WILDLIFE PROJECT WORK COMPLETED IN FY 85

Developed water facilities (guzzlers, spring developments) Maintenance and development of aquatic riparianassociated projects

16 18 miles of fence involving about 200 acres.

# 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. During the study phase, wilderness is incorporated into the Bureau's land use planning system where the wilderness resource is 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. Public comment opportunities will be held on mineral survey reports on WSAs written by the Geological Survey and the Bureau of Mines.

Recent litigation has resulted in the addition of 13 new WSAs in Nevada, totalling 171,352 acres. The lands will undergo a future wilderness study.

### STATUS OF THE WILDERNESS REVIEW AT THE END OF FISCAL YEAR 1985 \*

Acres designated WSAs	5,082,824	( 101 units)
Acres eliminated from consideration	44,193,577	(1,618 units)
WSA acres undergoing wilderness study	5,082,824	( 101 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.



Wilderness technical reports for most areas being studied in Nevada have been issued in conjunction with draft environmental impact statements which analyze major issues in a resource or planning area.

# 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 1985 was placed on managing 26 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 26 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 15,402,115 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 2,675 recreation-related permits were issued in fiscal year 1985. Of these, 2,534 were fee site (camping) permits; 76 were authorized for competitive recreational events; and 65 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 1985 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 1985 included continuation of an agreement for the provision of law enforcement services at the Red Rock Canyon Recreation Lands near Las Vegas and continuation 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.



The Frontier 500 Off Road Vehicle race in Clark County is an example of a competitive recreational event which occurs annually on BLMadministered public lands.

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

### **BLM DEVELOPED RECREATION SITES**

	a second and the second	NUMBER OF	101.1734	VERNI GHT
DISTRICT	NAME OF SITE	UNITS		FEE
Elko	*Ruby Marsh	35		\$4.00
	*North Wildhorse	19		\$3.00
	*Wilson Reservoir	15		
Carson City	Sportsman's Beach	17		a (14 <b>–</b> 17 17 17
	*Indian Creek (California)	30	tent site vehicle site	\$4.00
Las Vegas	Willow Creek	7		
The second second	Cold Creek	4		
	Willow Spring (Day use on	ly) 19		
Battle Mountain	Hickison Petroglyph	21		

\*Water suitable for drinking

# 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.

Surface surveys of Desert Land Entry parcels in eastern Nevada in fiscal year 1985 continued to yield an impressive inventory of early period sites dating from 8,000-10,000 BP.

Excavation at one such site, in Independence Valley, confirmed the antiquity of the artifactual remains. The sites are normally located in the sparse, greasewood vegetated valley floors associated with ancient lakeshore features; however, one significant discovery in the Ely area indicates habitation of ridgetop locations as well.

Volunteer contributions to the BLM archaeology program have been on the upswing in the last year. The Ely Archaeology Club volunteered for the Swallow Site mitigation excavation and the One Shot Photo Club conducted an emergency photo session in conjunction with the BLM to record the rapidly deteriorating Mt. Irish Petroglyph Site. Similarly, the Carson City District undertook a cultural resources inventory of a large rock art/hunting complex near Yerington. Utilizing volunteer crews, over 1,000 acres were inventoried at no cost to the government.

As mitigation for a recreation and public purpose application, the University of Nevada, Las Vegas, completed the analysis of artifacts collected from the surface of Bovine Bluff, a tenth century pueblo in Clark County. Test excavations indicate that adobe structures occur on the site which were radiocarbon dated AD 920 and 950. The field work was completed by students who enrolled in a field school held in the fall of 1983 and 1984. A report of the results of this has been recently distributed in the Nevada BLM publication series.

Efforts were stepped up in the 1985 fiscal year to curb vandalism of archaeological sites. These efforts included both law enforcement activities as well as evaluating such impacts on specific sites. One such example of the latter involved excavation at Upper Shelter near Elko, which had been greatly disturbed by vandals during the winter of 1984-85. Excavations revealed an occupational record extending back over 7,000 years with many interesting perishable artifacts dating to within the last 2,000 years, including twig figurines, fishing nets, ceremonial feather bundles, and rabbit skin robe fragments. The impacts of vandalism, particularly in Northern Nevada, have been extensive, leading to a significant loss in unretrievable information concerning Nevada's heritage.

Two publications were issued in limited numbers in fiscal year 1985; both are on file in major Nevada libraries and the University of Nevada libraries, plus BLM offices. Cultural resource series publications include: "Cultural Resources Overview of the Las Vegas Valley" and "The Lake Range Quarry, Washoe County, Nevada". One of the major informational services on cultural resources available to the public is the Hidden Cave Interpretive Facility near Fallon. Integrated with the Grimes Point Petroglyph Interpretive Site, tours of Hidden Cave are jointly conducted by the BLM and the Churchill County Museum.

### CULTURAL RESOURCE INVENTORY

	WORK DONE IN FY 85	TOTAL THROUGH FY 85
Class 3 (Intensively Assessed Acres)	50,870	549,494
Class 2 (Extensively Assessed Acres)	10,620	446,140

### PROTECTION, STABILIZATION, AND INTERPRETATION PROJECTS

ACTIVITY	FY 85	TOTAL THROUGH FY 85
Positive Protection Signing	2	29
Research Excavations	1	16
Interpretive Schemes	4	9
Fencing	3	28
Stabilization	0	3
Irregular Patrol and Maintenance	18	80
Regular Patrol and Maintenance	10	26
Protective Withdrawals	0	4
Cultural Resource Publications	2	21



A volunteer rock climber collects pack rat midden samples from a geologic feature known as the James Creek Shelter. Studies of the midden determine the composition of the region's past flora.

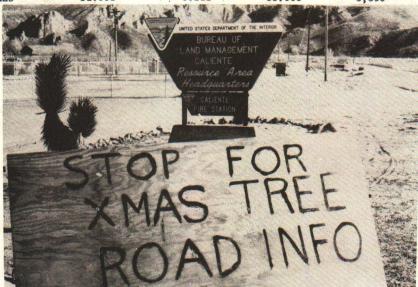
# **PUBLIC DOMAIN FORESTRY**

The demand for forest products from the pinyon-juniper woodlands increased again in 1985. Cordwood and Christmas tree sales improved by 17 and 9 percent, respectively, from 1984. However, 1985 was a poor year for pinenuts with only 63,000 pounds harvested, 73 percent of which were harvested in calendar year 1984, but were sold in fiscal year 1985.

The average price of a Christmas tree was \$2.56 and the average price of cordwood was \$6.11.

	Christmas Trees		Cord- wood		Pinenuts (1bs)		Fence Posts	Tot: Val	al \$ ue
Elko	3,514	1 in	1,876		45,800	-	1,333	27	694
Winnemucca	476		210				50		,794
Carson City	10,663		2,692		7,300		310	46	,838
Ely	4,791		1,313	× .	4,000		3,817	23	,933
Las Vegas	8,958		2,029	*	400	-	1,413	39	,683
Battle Mountain	4,602		1,233		5,500		1,930	18	,225
TOTALS	32,995		9,353		63,000		8,853	158	,166





Cutting one's own Christmas tree is a popular pastime in Nevada. The pinyon pine is popular because of the pleasant pine smell and drought resistance which prevents the needles dropping off quickly in a warm, inside environment.

# **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 1985, four BLM survey crews field completed surveys of section lines enclosing 175,000 acres of BLM lands. A summary of other survey statistics and surveys approved in fiscal year 1985 is outlined below:

### SURVEY STATUS

ITEM	FY 84	FY 85
Acres surveyed	a start a start and a start and	
BLM	89,379	10,761
Acres resurveyed	and the second second	Sec. Sec.
Forest Service	17,990	0
BLM	226,019	176,548
Acres unsurveyed	19,293,396	19,282,635
Minerals surveyed	8**	8*
Plats accepted	33	33
Acres surveyed to present	51,035,564***	51,046,325***

\*Approved FY 1985, 8 mineral surveys consisting of 45 lode claims, and 26 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.



Kawich Range, Las Vegas District

# 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 or desert land farming. 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 85

NO.	ACRES
2	452.99
40	1,707.78
6	183.32
4	38.63
3	11,296,23
7	591,95
62	14,267.90
	2 40 6 4 3 7

### LAND LEASES IN EFFECT SEPTEMBER 30, 1985

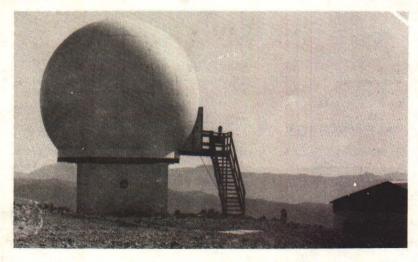
KIND	NO.	ACRES
Recreation and Public Purposes	181	16,050.72
Airport	43	15,754.37
Small Tract	3	15.00
TOTALS	227	31,820.09

### **RIGHTS-OF-WAY IN EFFECT SEPTEMBER 30, 1985**

KIND	NO.
Communication Sites	302
Electrical Transmission	780
Federal Highway and Material Sites	1,614
Tram, Access Roads	205
Pipeline, Oil and Gas	46
Pipeline, Water	213
Railroad	69
Telephone-Telegraph	403
Water Reservoir or Ditch	19
TOTAL	3,651
	3 14/10 Y C



The BLM assists military departments with requests for withdrawals. The photos in this section are of a radar site withdrawal in White Pine County. Such sites are normally accompanied by requests for rights-of-way.



# 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 1985, 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.

The 1985 fire season was the worst since records have been maintained. Over 870 fires burned more than 885,000 acres. An average year is considered 450 fires and 60,000 acres burned.

### FIRE ACTIONS DURING CALENDAR YEAR 1985

NUMBER OF FIRE ACTIONS

ACRES BURNED

	9 ACRES	10-99	100 +		ASSIS		OTHER OWNER-	
DISTRICT	OR LESS	ACRES	ACRES	TOTALS	FIRES	BLM	SHIP	TOTALS
Elko	108	30	66	204	15	160,350	31,985	192,335
Winnemucca	46	22	52	120	8	422,292	81,031	503,323
Carson City	109	21	28	158	25	70,970	34,682	105,652
Ely	116	11	9	136	24	10,960	312	11,272
Las Vegas	174	14	1	189	23	900	3	912
Battle Mtn.	41	14	_17		_4	72,769	2,119	74,888
TOTALS	594	112	173	879	99	738,250	150,132	888,382
PERCENTAGES	68	13	19	100	*	83	17	100

\* The districts assisted other agencies on 99 fires.

### FIRE REHABILITATION



Rangeland drills from BLM's centralized facility at Vale, Oregon, will be used in several fire-scarred areas in Nevada. Specialists first determine if rehabilitation is necessary, is feasible at the site and has a chance of successful germination.

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, 1985

DISTRICT (ACRES) (MILES)	
11 10 101	
Elko 13,505 36	
Winnemucca 0 5	
Carson City 14,700 8	
Ely 2,550 2	
Las Vegas 0 0	
Battle Mtn. 0 0	
TOTALS 30,755 51	

# **BUILDINGS AND FACILITIES**

The Bureau spent \$539,900 in fiscal year 1985 to maintain buildings and recreational facilities in Nevada. Seventy-one buildings, including 15 offices, 16 residences, 1 visitor center/museum, and 39 other structures ranging from warehouses and shops to simple covered storage buildings, and miscellaneous outbuildings had \$186,700 spent on them. Eight fully developed campgrounds containing 154 family units and 50 other sites with various levels of development were operated and maintained for \$353,200.

The shop building at the Winnemucca District Complex, which burned in January of 1984, was replaced with a new 1,280 square foot, steel building. Construction was completed in July of 1985 at a cost of \$70,500.



The new Winnemucca District Office shop building was completed in July of 1985.

# ROADS

The Bureau maintains approximately 9,400 miles of road in Nevada. In fiscal year 1985 about 20 percent of the roads were maintained, at a cost of \$258,400. The winter of 1984-1985 was not as severe as the previous year, consequently, there was a significant decrease in the amount of damage to bridges and culverts. However, some culverts did require replacement.

Fourteen miles of paved road at the Red Rock Visitor Center in Las Vegas District received a new chip seal at a cost of \$180,000. This expenditure was reported in last year's report, but the work was not completed until the spring of 1985.