Our Public Lands

Spring 1965

Camping the Wild Country
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Our Public Lands

SPRING 1965

Articles



VOL. 14, NO. 4

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DEPARTMENT OF THE INTERIOR

Stewart L. Udall, Secretary

BUREAU OF LAND MANAGEMENT Charles H. Stoddard, Director

Created in 1849, the Department of the Interior—a Department of Conservation—is concerned with the management, conservation, and development of the Nation's water, wildlife, mineral, forest, and park and recreational resources. It also has major responsibilities for Indian and Territorial affairs.

As the Nation's principal conservation agency, the Department works to assure that nonrenewable resources are conserved for the future, and that renewable resources make their full contribution to the progress, prosperity, and security of the United States—now and in the future.

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Dan Saults, Information Officer and Assistant to the Director.

Ed. Kerr, Editor.

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News Highlights

Training Center at Tillamook

BLM's Tillamook Camp now in operation with a full staff and its first complement of enrollees, is serving also as the Western Region Training Center for the Job Corps. Operations under Camp Director John Scalise are part of the curriculum for hundreds of Interior and Agriculture Department trainees, including several BLM contingents.

New Commission Named

All members of the Public Land Law Review Commission have been named. By the President: Laurance S. Rockefeller, New York; Gov. Philip Hoff, Vermont; H. Byron Mock, Utah; Mrs. John Glessner Lee, Connecticut; Robert Emmet Clark, New Mexico; and Maurice Goddard, Pennsylvania.

By President pro tempore of Senate: Senators Henry M. Jackson, Washington; Clinton P. Anderson, New Mexico; Alan Bible, Nevada; Thomas H. Kuchel, California; Gordon Allott, Colorado; and Len B. Jordan, Idaho.

By Speaker of the House: Representatives Wayne N. Aspinall, Colorado; Leo W. O'Brien, New York; Compton I. White, Jr., Idaho; John P. Saylor, Pennsylvania; Rogers C. B. Morton, Maryland; and Laurence I. Burton, Utah.

Timber Sales Hit Peak

Products from BLM forests sold for a record \$42.9 million during fiscal year 1964. Sales from O. & C. grant lands in western Oregon accounted for most of the total. These are lands granted to the Oregon & California Railroad Co. in 1866 that reverted to Federal ownership 50 years later.

First Phase of Reorganization

BLM will combine various districts and land offices in six States for more economy and efficiency of operation. Five district and land offices will do the work formerly done by nine. Eleven grazing districts will serve areas now covered by 21. Total savings: \$225,480 in manpower and operating costs and 18 personnel positions.



The bristlecone pine—world's oldest tree species—is one of many oddities given protection in BLM natural areas.

Natural Areas on Public Domain

Secretary Udall has given 16 public domain sites protection as scientific natural areas in Oregon, California, Nevada, Colorado, Idaho, and Arizona. They include a rare forest of Baker cypress, Brewer spruce, Piute cypress, hybrid oaks, and other unusual western areas.

Low Fire Losses in Alaska

Only 3,333 acres of grass and timber land burned in Alaska during 1964, compared to an average loss of nearly a million acres per year for the past 25 years. The year also marked the 25th anniversary of firefighting in the State.

Rampart Powersite

Powersite classification has been given to 9 million acres of public lands in Alaska along the Yukon River at site of the proposed Rampart Canyon project. The project would harness the Yukon River, forming a 10,500-square-mile lake which is slightly larger than Lake Erie. Secretary Udall emphasized that the classification implies no judgment by the Department on the merits of the proposed project, but simply prevents the land from being used for other purposes until congressional decision is reached.

Camping the Wild Country

Tent and trailer campers are finding fresh vistas at 64 BLM-improved recreation areas.



The Steck Recreation Site in Idaho contains 12 combination trailer and camping units. There's good chukar and grouse hunting in those hills.

FOR those who dig the call of the wild, BLM camping areas are made to order.

Altogether, the Bureau now operates 112 recreation sites on the public lands in 8 States: Utah, New Mexico, Nevada, California, Idaho, Oregon, Wyoming, and Alaska. At 64 of these sites, camping and/or trailer facilities are available and all are luxurious—in scenery and wide-open spaces.

All these are known as "improved" sites. No one knows how many unimproved sites exist on the public domain, for virtually all the 460 million acres managed by BLM is open to public use for camping purposes. However, unless the camper is familiar with the area, he'd best stick to established campsites because of uncertain road conditions elsewhere.

Most sites offer outstanding recreation facilities. For example, Gerber Reservoir northeast of Lorella Oreg., is a favorite of campers who also are fishermen. This one has facilities for 50 families plus trailer sites, picnic tables, a good water supply, comfort stations, stoves and fireplaces.

Calf Creek Recreation Site, northeast of Escalante, Utah, goes a step further. There are only nine overnight camp units, but the site is equipped with a volley-ball court, softball field, and other playground equipment besides restrooms and parking spaces. This is a natural for sightseers, for near the site are the Anasazi Indian ruins spread over territory as large as Delaware and Rhode Island combined.

Water skiers like Walker Lake in Nevada where 20 camping units are available and plenty of water for boating, swimming, and fishing. Surrounding mountains add to the breathtaking scenery, including Mount Grant which rises from the edge of the lake to an elevation of 10,300 feet.

Both hunting and fishing are attractions in areas such as Steck Recreation Site in Idaho, on the upper



Many campers like to rough it at Fish Lake in the Steens Mountains, Oreg. This State offers more campsites on public lands than any other.



end of Brownlee Reservoir near the Oregon border. This site has 12 combination trailer and camping units, with 22 picnic units. Hunting includes both ducks and geese on the reservoir and some of the best chukar and grouse shooting in the State along the adjacent hills.

Rockhounds will like the Rio Grande Gorge in northern New Mexico where 47 camping units are situated in the Sangre de Cristo Mountain range. Interesting rocks include staurolite, garnet placer gold, basalt, quartz sandstone, shales, mica, and tremolite.

Of course, those who insist on pure wilderness should try one of the six areas in Alaska. The largest site is Eklutna Basin, snuggled away in an alpine canyon just north of Anchorage. Waterfalls, Dall sheep, and mountain goats add to the interesting—and undisturbed scenery.

Before throwing gear into the station wagon, however, campers bent on trying out the public domain sites should contact State BLM offices for more information. Most State offices have maps available and can pinpoint all approved camping spots. A list of these offices can be found on page 18.

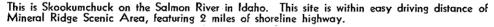
Other tips:

• Help protect antiquities for future generations to enjoy.



Like camping where horizons are high? Try Meadow Valley Campground near Pioche, Nev.

- Obey State hunting and fishing laws. They govern the harvest of wildlife on the public lands.
- Obtain permission before crossing private property. See your map.
- Keep vehicles on the road. Motoring off the road causes erosion, frightens cattle, damages conservation and research projects.







Regina (Jean) McCormick, the only lady advisory board member in BLM history.

Where Ranching Is a Woman's Domain

By Maurice Hurd, Range Conservationist, Vale, Oreg.

Schoolteacher, housewife, stockwoman, and community leader—these only partly describe the busy life of Regina (Jean) McCormick. A member of the Vale District Advisory Board and the Oregon State Advisory Board, she is the only woman adviser in BLM history.

Most of Jean's land is in Oregon, but her home is in McDermitt, Nev., where her forefathers were among the first pioneers after the Civil War. In 1887, her father homesteaded part of the present McCormick ranch, where she has spent most of her life.

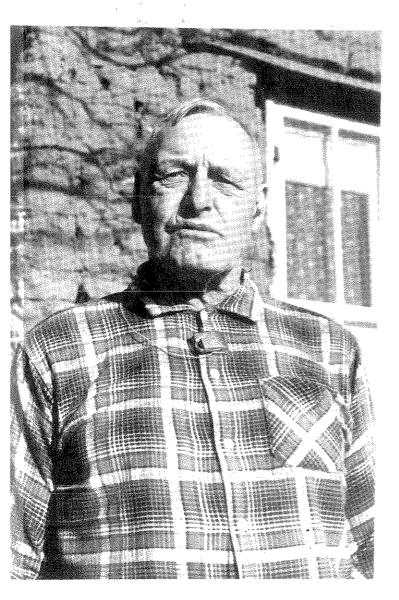
After receiving her education at Nevada State Normal and the College of Notre Dame at San Jose, Jean taught school for 13 years in the Nevada towns of McDermitt, Sparks, and Stillwater. Since 1938, however, she has devoted all of her time to managing the ranch and taking an active interest in community and church

affairs. She has served three terms on the McDermitt School Board.

Married in 1949, Jean and Bob McCormick have operated the McCormick "spread" as a team ever since. The ranch is 2,240 acres of native hay meadow, and pasture and range, where their 1,200 head of cattle are wintered on tons of wild hay. Managing a ranch of this size requires long hours and hard work—hay to mow, bale, and stack in the summer—water troughs to be filled and cattle to feed in the winter—but they love every minute of it.

The responsibility of serving on both the district and State advisory boards for the past 7 years has increased the tempo of an already-busy life for the region's No. 1 ranchwoman. Among many other contributions, she traveled with other board members to Washington, D.C., in 1962 to present the Vale project plan to congressional and BLM leaders. This project has become the model for large-scale public land rehabilitation in the West.

Are You Living on a Mining Claim?



The home of Leonard E. Mitchell of Pinos Altos, N. Mex., is on a mining claim staked in 1898 which hasn't been "proved up."

By Doyle Kline, Resources Utilization Specialist, Santa Fe, N. Mex.

Five hundred or more American families may lose their homes unless they act soon.

They live in the West on mining claims they don't own (but many don't know this).

Fortunately, many of them may buy their homesites from Uncle Sam—on easy terms—if they meet special tests laid down by Congress.

Many of these families have done nothing illegal. They merely took advantage of oldtime mining laws. For one reason or another, they haven't "proved up" on their claims, even though they may have lived on them for years.

Likewise, many of these cases involve misuse of mining laws. In such cases individuals have located "claims" to gain cabin sites in scenic areas with high recreation value.

The problem is found wherever people have used the mining laws. But it is greater—in number of families—in some States than others. California and Oregon, each with hundreds and possibly thousands of such cases, lead the other States.

Claims Are Old

Some of the claims have been used 20 years or longer. Many have elaborate and expensive summer homes, but the typical dwelling is inexpensive.

As the mining laws have worked for many years, the locators of these claims used the lands unmolested until they asked the Government for title. But this freedom is gone. Growing populations have brought new and pressing demands for recreation and other joint uses by the public of the public lands. The national forests, also subject to mining claims, likewise feel the new public pressures. And Congress has directed that

If so, you'd better check if the claim has been "proved up." You might be a trespasser!

unauthorized use of the public lands come to an end.

So closer looks had to be taken at the claims of those who sought through the mining laws to keep public lands for their private use. Thus growing numbers of mining claims are being challenged by the public land managers.

No Limit in Number

The usual claim takes in 20 acres, but there is no limit to the number of such claims a locator may file. There are "lode" claims and "placer" claims, depending on the nature of the land and the mineral deposit—in rock formations for lode claims, and usually in sand and gravel along streambeds for placer claims.

Where valuable mineral has been found and mined, or where a market exists for a new mineral discovery, the claimant normally has little trouble getting title, or a patent, from Uncle Sam. But where he has mined out his mineral, or the market has died, or there is no mineral, he is in jeopardy.

Not all claimants are pleasure seekers. Many claims were located in good faith and many have been patented. But changes in mining conditions sometimes make it almost impossible for the Government to issue deeds to other claims. Meantime the locators may have built "improvements." For some, these are their only homes.

Must Prove Up

The laws that made it possible for these families to live on mining claims also contain provisions that allow Uncle Sam to remove them and their improvements if they cannot "prove up." Removal now would be unjust for some families because they are on the claims through the sanction of the years. So to give them relief, Congress passed a special act in 1962 known as the Mining Claim Occupancy Act.

This act allows certain owners of homes on unpatented mining claims to buy or lease or make other



Maria Jesus Barela lives on a hill west of Silver City, N. Mex. Like many other residents, she has discovered there's no deed on her property, a former mining claim.

arrangements for homesites at reasonable and fair prices.

The law says that until October 23, 1967, persons may buy or lease or acquire life estates on up to 5 acres from their claims containing their improvements if the claims have been their "principal place of residence" since July 23, 1955. If these persons bought their homes after that date from persons who were living on the claims in July 1955, they still may qualify and thus "prove up."

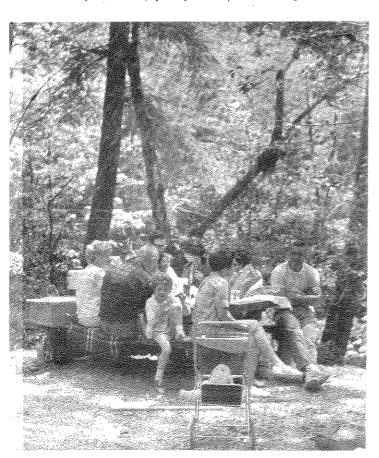
It is probable that some of these families who regularly pay property taxes do not know that their claims are not patented. They may have bought from someone else, taking a quit claim deed in the mistaken belief they were getting title to the land. Or they may live on "mining company land" claimed by an employer.

Only the Bureau of Land Management, or someone who has checked BLM land office records, can give reliable information on whether or not particular mining claims have been patented. These records are kept in the BLM land offices in the public land states.

Project Advertised

Last year in New Mexico, BLM made a special effort to publicize the provisions and possible consequences of the 1962 act. The purpose was to alert residents of

This vacation site formerly was occupied by people holding invalid mining claims. It is now the Sixes River Recreation Site, which is enjoyed by all the public in Oregan.



a mining area known to contain many mining claims and many typical mining claim dwellings. With only 3 years left under the law, action was needed—and still is needed—by deserving occupants if they hope to take advantage of the law.

W. J. Anderson, BLM's New Mexico State Director, said the action was intended also to allow time for processing the applications, for finding substitute sites if desired, and to avert a last-minute deadline rush with all the "hard feelings and accusations that go with it." Such log jams, he said, sometimes produce inquiries as to why BLM did not "let the people know in time."

After the law was publicized, BLM men were sent into the area in southwestern New Mexico to explain the law. Many residents of Silver City and Pinos Altos, where mining has been going on 400 years, came to meet with the BLM men. Homesite applications were filed as a result and further meetings are planned. The community spirit has been of acceptance of the law and cooperation with BLM. About 50 claims are believed to be involved now.

Fair Market Value

The lands are being priced at their fair market value. The minimum is \$5 an acre. Improvements by the applicant, his income, the price he may have paid others for the claim, and other factors can, and often are, taken into account in setting the purchase price. The approach is to help, not harm, the deserving applicant.

Where substitute sites or leases are desired, BLM is trying to work out acceptable arrangements. If any family cannot be given the right to buy its present homesite, unimproved substitute lands may be offered by BLM if such sites can be found. Five years are being allowed for choosing substitute sites after they are offered. Slightly different rules may apply to claims on national forest lands.

Families living on lands originally obtained under the mining laws, if they do not already have such evidence, would be wise to check at once to see if the lands have been patented.

Information on this question may be obtained by mail, or in person, from the Bureau of Land Management State and district offices in the Western States. Requests by mail for information should describe the claims accurately enough for BLM to find them on its records.

Whatever the status of the claim, the time is now to ask Uncle Sam's help in getting possession of mining claim homesites. Those who wait too long may find it hard to answer: "Will you prove up, or move out?"

Decision at Williams Creek

By Walter Jones and Harold C. Elg, Manager and Conservationist, Salmon, Idaho

How to satisfy everyone's needs in a grazing-water-shed-recreation complex is a typical problem facing BLM resource managers in the West. The rancher will suffer if his herd is cut. His neighbors (including the wildlife population) will suffer if the watershed is overgrazed. And everyone will suffer if the land and streams are spoiled for recreation use.

This dilemma was solved recently in the Salmon district of Idaho. Four years ago, a range inventory showed that the range country between Lake and Williams Creeks was being overgrazed. Forage for cattle and wildlife was almost depleted, and telltale erosion cracks signaled the land's revolt against misuse. The natural beauty of the Williams Lake Recreation Area, nestled in the center of the rangelands, was beginning to fade. The situation called for a drastic—and immediate—cut in grazing allotments, plus an all-out rehabilitation program.

A study of the surrounding lands revealed that a great deal of forage lay unused on a nearby grazing unit because no water was available. Cattle are not very good commuters. They refuse to stray very far from their water supply. As a result, the immediate

area is badly trampled and overgrazed, while outlying areas are left untouched.

District personnel computed that if additional springs and seeps were developed in the unused area, this would furnish forage for all the cattle taken off the eroded area.

And that's where the cooperation began. Ed Corbett and his son-in-law and partner, Rex Tolman, agreed to make the transfer. In the spring of 1961, two BLM men helped them develop their first spring. Thereafter, during the summer and the following spring, they found the time to develop four more springs without any further assistance in labor. They also built a mile of fence to control seasonal-use grazing. All in all, Corbett and Tolman contributed two-thirds of the project costs, with BLM paying the remainder.

The two ranchers plan to continue their range improvements with 1½ miles of pipeline and 2 miles of fence, in addition to more spring development. Meanwhile, the remaining ranchers on the eroded unit have cooperated on similar projects.

"We feel that the Williams Lake project is typical of BLM's struggle to rehabilitate Idaho's rangelands," says State Director Joe Fallini. "It shows that, through cooperation, we can assure multiple use of our public lands and increase their contribution to the Nation's economy."

Left: This is what is called "digging out the head" of a drain. Such spring development has made forage in the area available for cattle. Right: BLM range conservationists help Corbett and Tolman construct a trough in a previously unused grazing area.









A National Park

By Jack M. Reed, Resource Utilization Specialist, Utah

ANYONLANDS—the Nation's newest national park to be created from the public domain—is literally carved in the rock of southeastern Utah.

From a vast picturesque area surrounding a 40-mile stretch of the Colorado River and a million acres of land, 257,640 acres were selected as most outstanding and designated by the 88th Congress as Canyonlands National Park.

Fantastic and grotesque formations eroded during eons of time provide spectacular scenery. The Needles, Angel Arch, Druid Arch, Upheavel Dome, Irish Washerwoman, and Devil's Lane are some of the formations within the park. Cleopatra's Chair, Lavender Canyon, Babpipe Butte, Dead Horse Point, the Maze, and the Six-Shooter Peaks are unusual sites near but not included within the park boundaries.

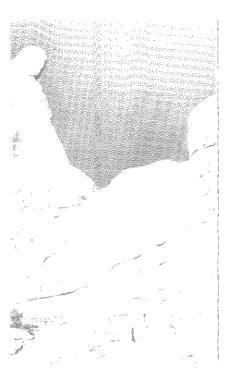
The scenic beauty within the park proper is now reserved by act of Congress strictly for esthetic enjoy-

ment, except for a "phaseout" period during which previous uses (such as grazing and mining) will be allowed. The Bureau of Land Management administers the surrounding area, which, in many respects is equally as colorful and impressive. This will be administered by BLM under multiple-use principles that include not only protection of the scenery but such uses as grazing, mining, and hunting as well.

Although many of the spectacular formations and views may be seen only by going into the park (even in certain cases by traveling in four-wheel-drive vehicles, on horseback or afoot), thrilling vistas of the vast canyonlands may be seen by persons driving to overlooks developed by BLM on surrounding canyon rims.

Establishment of the park has affected BLM in yet another and entirely different way.

The State of Utah either already owned or was entitled to 32,500 acres within the park boundaries. Congress decreed in the act creating Canyonlands National Park that an exchange of land for 18,500 acres owned by the State within the park was to be completed within 120 days (which would be by January 12, 1965). Working with BLM, the State has selected comparable acreage from BLM-administered public domain elsewhere in Utah and an exchange was made so the State





Far left: One of the unusual rock formations in Recapture Packet just outside the park boundaries on the public domain.

Left: Angel Arch is now a part of the new Canyonlands National Park, which covers a quarter-million acres of natural wonders.

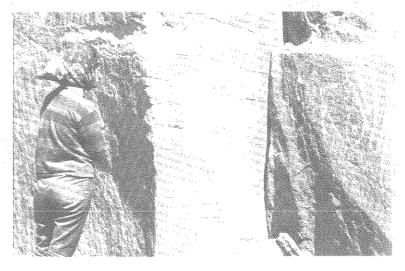
s Born

would not lose any acreage by establishment of the park.

Meanwhile there is no deadline for selection by Utah of lands elsewhere in the State in exchange for the other 14,000 acres within the new park which normally would have been given Utah under provisions of the Statehood Enabling Act. Land cannot be transferred until it has been surveyed, and these 14,000 acres were withdrawn for another specific use before they could be surveyed and transferred. Utah now may make "in lieu" selections.

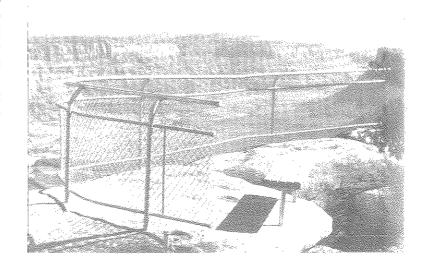
With development of the park, BLM will serve in additional roles. As the number of tourists increases, there will be greater need for development and protection in the surrounding area. Picnic and camp sites will be needed to protect the natural resources and provide adequate sanitation. Some of the present truck trails and roads will have to be improved and other access roads constructed. Fences and cattleguards must be built to protect and control livestock and wildlife.

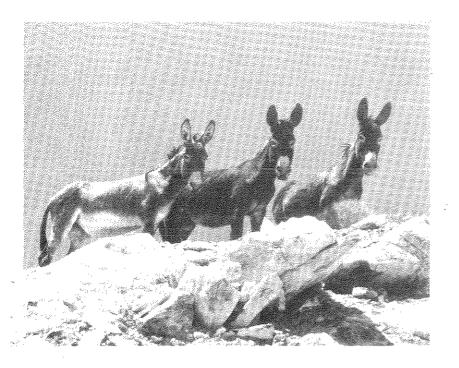
Even though creation of Canyonlands National Park has transferred management responsibility for a quarter of a million acres of the public domain, responsibilities of BLM in the area likely will be increased rather than reduced.



Petroglyphs in Pappy's Pasture near the park are part of the attractions not included in the park area. These are protected by BLM.

BLM has developed scenic vistas on the canyon rim for the convenience of park visitors. This is anticline Overlook on the east rim.





Bakersfield's Boom in Burros

By Derrel S. Fulwider, Range Manager, Bakersfield, Calif.

The wild burro, man's best friend during early prospecting days, has enjoyed a vigorous retirement since going out to pasture. One of the hardiest of creatures with no predator except the mountain lion, the California burro is having a population explosion.

In the Bakersfield district alone, some 3,000 now roam the countryside, not counting the ones in Death Valley National Monument.

The burgeoning burro is causing many problems. He's a very hardy and adaptable animal and, like a goat, will eat almost any vegetation before he will starve to death. As a result, key areas around springs and water holes are being stripped of vegetation in ever-widening circles. The ravaged desert vegetation, which recovers very slowly, cannot return to its natural condition within our lifetime.

Another concern is the effect on wildlife. A band of wild burros is more powerful and aggressive than any other form of desert wildlife and consumes much more food and water than native species. In seasons of low forage production, this can mean severe competition with native wildlife, chiefly the bighorn sheep. In the Panamint range, for instance there are now six times as many wild burros as in all the other mountain ranges of the State, while the bighorn sheep population has declined 90 percent. Other wildlife is threatened as well.

Livestock Affected

In the Hunter Mountain area, burros are encroaching on forage needed for domestic livestock. Even

if all domestic stock were taken off this area, the range would still be overpopulated by burros, not to mention the muledeer and mountain sheep. The burros have worked and reworked every foot of available range in this area until the topsoil is now churned like butter.

Actually, such population problems were inevitable. The fact that burros can survive on the rawest of desert country is the reason for his being in America in the first place and that was long before the days of prospecting. He accompanied the first sheepherders into California from Mexico.

The burro is much more surefooted than either a mule or horse because he is smaller and lighter. His hoofs are also much smaller, enabling him to maintain his balance even on rounded rocks. He also is expert in judging distances, avoiding any objects which would throw him off balance.

When prospectors entered the California desert in the later 1800's, their natural choice for pack animals were the burros, who could live on sparse desert vegetation and little water.

In fact, such close friendships blossomed between burro and man in those days that every prospector bragged about his beast of burden like he would his own child. William Caruthers has written about Shorty Harris of Death Valley, for example, who owned a burro named "Katy." This prospector, according to Caruthers, swore that Katy led him to a waterhole when he was dying of thirst. The spot is where the head-quarters of the National Park Service in Death Valley Monument now stands. ("Burros I Have Known," Westways, vol. 36, No. 1, January 1944.)

A new type of population explosion in California threatens to push out the desert bighorn sheep

Demand Was High

With prospectors vying with sheepherders for the animals, the burro market was brisk. But since 1930, the animals have been replaced gradually by the motor vehicle. (There is only a limited demand for his services by packers in the High Sierras and for children's pets and other miscellaneous uses.) No longer salable, they have been abandoned to fend for themselves in the desert country.

For many years, burros were fair game for those who killed and sold them for pet food; and not until 1953 did State legislation grant them temporary protection. In 1957, the State established some 2 million acres of public domain land in Saline, Eureka, Panamint, and Amaragosa Valleys as a burro sanctuary.

But what now? By all means, the burro should be preserved but he must be managed properly. This can be done only through coordination of existing laws and the cooperation of all agencies and local associations involved.

Some progress has been made. With the joint effort of the California Department of Fish and Game, BLM's Bakersfield district has begun to acquaint local associations with the problem, who in turn have contacted such organizations as the Desert Protective Council. The problem has been discussed by the Sportsmen's Council of Central California, and the California Wildlife Federation.

One recommendation which has emerged is to have the University of California or some foundation make a study of all available information from the State fish and game and agriculture departments, the National Park Service, the Forest Service, and BLM. Then, there would be enough facts upon which to base a management plan.

But this much is known now: Unless the wild burro population is balanced with the available range, survival of the vegetation, native wildlife, and burros themselves is doomed.



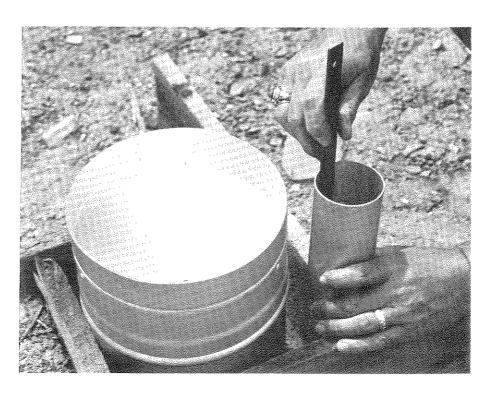
This is an early-day burro trap, one of the most humane methods of animal roundup.

Wringing Water from the Desert

By Robert E. Wilber, Resource Utilization Specialist, Reno, Nev.

HE key to land use and development in Nevada is more water. With it there can be more agriculture, wildlife, cattle, recreation developments, and people on the State's 47 million acres of Federal lands. Without it the State's economy won't grow.

But water can't be manufactured and the prospect is dim for more rain than usual. Nevada's only hope is to save—and use—more of the rain and snow that falls.



Rainfall-measuring instruments play an important role in the Nevada water study.



A section of highway in north-central Nevada was washed out by a flash flood in 1962. The watershed study is the first step in preventing such disasters.



Severe gully erosion like this is typical in watersheds which have lost their capacity to absorb and hold water.

To find out how, BLM initiated a research project in 1961 to answer four basic questions:

- 1. How much water is available?
- 2. How much of this is not being used or could be used more than once?
- 3. What are the best uses for the extra water?
- 4. How to make it available?

Started From Scratch

The study had to start almost from scratch, for very little water research has ever been attempted in Nevada. Until now, with the advent of more cattle and more people, it hasn't been needed. Miners could import the small amount of water they needed. Sheepmen didn't need much water either, at least not in the liquid state. Their flocks licked the thin mantle of snow in the winter. In the summer, sheep retreated to the high mountain country, mostly around the perimeters of the State, where water and green grass is abundant.

Researchers picked 12 watersheds for the study, ranging in size from 17 to 100 square miles and representing the type of lands BLM will develop for intensive multiple-use management. Following the principle that two minds are better than one, they reached out for all the help that was available.

Interior's Geological Survey advised on installation of water-measuring instruments. The Agricultural Experiment Station of the University of Nevada agreed to analyze soil and vegetation of the watershed areas. The U.S. Weather Bureau contributed 50 years of rainfall records. As the data are gathered, the University

of Nevada is punching it into cards which will be fed through a computer. That's where the answers will drop out.

Finding the Best Sites

One of the main projects consists of measuring the peak flow of streams in each watershed, plus the amount of sedimentation in each stream. Then researchers can chart the flow rate and the point in time that a peak flow is reached. This will help range managers locate the best sites for reservoirs, detention dams, livestock watering sites, and other water control and storage structures. It will also help locate the best sites for brush control work, grass seeding, recreation development, wildlife habitat improvement, and other projects.

Engineers will use the data when designing water control and storage structures. Thus, chances of losing such structures in flash floods because of underdesign will be lessened. It also will minimize overdesign—a costly way of insuring against loss when it isn't known how much water to expect.

A side benefit will be the development of new costbenefit ratios for range improvement work. BLM resource managers will be able to predict the effectiveness of grass seedings and other soil erosion projects in a given area.

Information from the study, which will be applicable to many other watersheds, promises a handsome payoff for arid lands of the West. Properly corralled, a little water will go a long way toward providing more beef, crops, wildlife, and recreation for a growing western population.

For your information . . .

A List of BLM Publications Available to the Public

Resource Conservation Areas

"Resource Conservation Areas" are tracts of public land established to show conservation in action. Visitors are invited to observe BLM land management practices firsthand on more than 85 sites throughout the West. Leaflets have been published for the sites listed below; each contains a map and brief description of the work being done on that site. Leaflets for other RCA's are being published. For information on the RCA's in a particular area, contact the BLM State Office in that area.

ARIZONA:

"The Upper Clayhole Resource Conservation Area" (south of Colorado City in northwest Arizona).
CALIFORNIA:

"Adobe Valley RCA" (near California-Nevada border east of San Francisco).

"Calico RCA" (north of Barstow in southern California).

"Honeydew Creek RCA" (Humboldt County in northwest California).

"McCain Valley RCA" (80 miles east of San Diego). "Spanish Springs-Shinn Peaks RCA" (northeast of

Susanville in northeast California).

Colorado:

Bureau of Land Management Resource Conservation Areas in Colorado. 12-page booklet describes work on seven RCA's in western half of Colorado.

IDAHO:

"Berger RCA" (near Twin Falls in southern Idaho).
MONTANA:

"Lone Tree RCA" (south of Glasgow in northeast Montana).

"Maiden Canyon RCA" (near Lewistown in central Montana).

NEVADA:

"Horses and Cattle Camp RCA" (southeast of Ely in east-central Nevada).

UTAH:

"Brush Creek RCA" (near Vernal in northeast Utah).

"Buckskin Bear Valley RCA" (near Parowan in southwest Utah).

"East Onaqui RCA" (near Vernon in northwest Utah).

"Government Creek RCA" (near Vernon in northwest Utah).

"Monroe Co-op Allotment RCA" (south of Monroe City in west central Utah).

"Woodruff Pastures" (near Woodruff, 115 miles northeast of Salt Lake City)

OREGON:

"Soldier Creek RCA" (near Rome in southeast Oregon).

Bureau of Land Management State Offices

MONTANA

State Office

NEVADA

State Office

560 Mill St.

(P.O. Box 1551)

Bureau of Land Management

Bureau of Land Management

Crum-McKinnon Bldg.

Billings, Mont. 59101

1245 North 29th St.

ALASKA Bureau of Land Management State Office 555 Cordova St. Anchorage, Alaska 99501 ARIZONA Bureau of Land Management State Office Federal Bldg. Room 3022 Phoenix, Ariz. 85025 CALIFORNIA Bureau of Land Management State Office Federal Bldg. Room 4016 650 Capitol Mall Sacramento, Calif. 95814 COLORADO Bureau of Land Management State Office 667 Insurance Exchange Bldg.

910 15th St.

State Office

323 Federal Bldg.

Boise, Idaho 83701

(P.O. Box 2237)

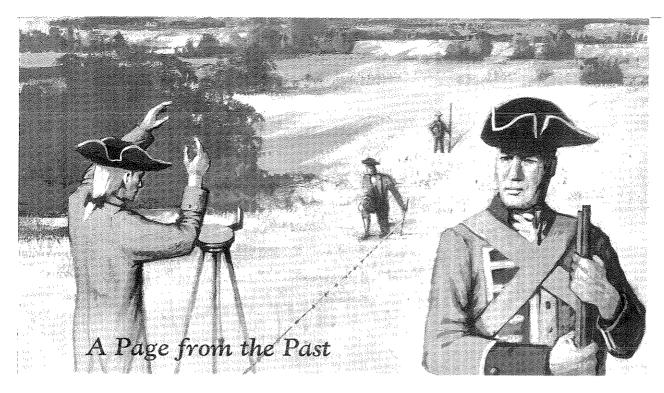
IDAHO

Denver, Colo. 80202

Bureau of Land Management

Reno, Nev. 89505 NEW MEXICO Bureau of Land Management U.S. Post Office and Federal Bldg. State Office South Federal Place Santa Fe, N. Mex. 87501 OREGON Bureau of Land Management State Office 710 N.E. Holladay Portland, Oreg. 97232 UTAH Bureau of Land Management State Office 8217 Federal Bldg. (P.O. Box 11505) Salt Lake City, Utah 84111

WYOMING Bureau of Land Management State Office Federal Recreation Bldg., 2002 Capital Ave. Cheyenne, Wyo. 82001



Beginning of Public Land Surveys

By J. A. O'Callaghan, Chief Office of Legislative and Cooperative Relations

The Oklahoma land run may excite the imagination of historians, students, and novelists, who may not realize that the excitement really began in East Liverpool, Ohio. There, on September 30, 1785, in accordance with the Land Ordinance of that year, Thomas Hutchins set out from the western Pennsylvania boundary with eight other surveyors to lay off townships in the newly acquired public lands. (Thus began the U.S. Public Land Survey which in time would extend westward to the Pacific and northward to the Arctic. From then until now, 1,302,511,168 acres have been surveyed in the public land States, including Alaska; 470,594,962 acres remain to be surveyed.

By 1785, State claims to former Crown Lands of Great Britain had been relinquished to the United States. The manner of surveying the public land then became an item of debate in the Confederation Congress. Many advocated the Southern "Indiscriminate Location" or "Tomahawk Claim" by which a man would stake out his claim with blazes on trees and record descriptions of terrain and natural features.

The many inconveniences of this system are readily apparent. Precise divisions are not always possible,

and landmarks have a tendency to change. Too, this plan left less desirable areas of land unclaimed.

The vastness of the new lands to be divided called for an orderly delineation of property lines. The factor of working in unfamiliar territory emphasized the inadequacies of the Tomahawk Claim and left the men in government the desire for an improved method of land subdivision; so dedicated public minds like Jefferson's perceived the utility of regular land division by the rectangular system.

The rectangular system is a system of north-south and east-west lines dividing the lands into townships six miles square containing 36 sections one mile square.

The work began on the westward line, later known as the Geographer's Line, on September 30. The eight members of the team were Edward Dowse, for New Hampshire; Benjamin Tupper, for Massachusetts; Isaac Sherman, for Connecticut; Absalom Martin, for New Jersey; William W. Morris, for New York; Alexander Parker, for Virginia; James Simpson, for Maryland; and Robert Johnston, for Georgia.

After many setbacks, the surveying of the Seven Ranges was completed in July 1787. The final notes and plats were delivered to the Board of Treasury July 26, 1788.



The Magic RCA

(Reprinted from Times-News, Twin Falls, Idaho)

For the most part, the area between Timmerman hill and Shoshone is dull, nothing but sagebrush, lava rock, and a few scattered streams and farms. During the next 3 years a sizable part of that area is going to be changed considerably.

Already a couple of signs have been erected along the west side of U.S. Highway 93 near Magic Dam denoting a portion of the land as "Magic Resource Conservation Area." Some 6 acres will be transformed during the next 3 years into a beneficial, productive rangeland.

Principal force behind the project is the Bureau of Land Management in cooperation with other Federal agencies and private concerns.

Marvin W. Pearson, assistant district manager, says the area is one of 85 set up in Western States as part of an effort to identify and show just what can be done with millions of acres of public domain. It is a new venture in public identification and participation, although the range improvement practices illustrated are standard BLM practices.

In other words, the area will be a showplace. The BLM is confident it can make some drastic improvement in the area. Thus the signs went up last spring before the project is fully underway.

A fully developed rangeland area would be a pleasant break in the monotonous route north from Shoshone to Wood River Valley. The main intent behind the area is not to beautify, change, or alter the region, but make the area more productive and beneficial.

In 1962 the BLM began fencing the area. In 1963 construction of small reservoirs began. The reservoirs will provide water for livestock and wildlife. Some six small reservoirs have been constructed to date.

Earlier this spring the BLM sprayed several hundred acres of sagebrush to kill the plant.

In some parts where sagebrush kill has been effective, range grasses will flourish and dominate the range again. Later this fall the BLM will begin plowing several hundred acres of rangeland and sagebrush. The plowed area will be seeded to grass, probably crested wheatgrass or some similar variety.

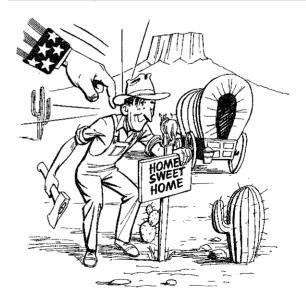
Cooperating agencies in the project include the Idaho Department of Highways, Magic Allotment Cattlemen, Blaine Soil Conservation District, Shoshone District Advisory Board, and the Idaho Department of Fish and Game.

BLM Director Charles H. Stoddard says the purpose is to show benefits to be derived by all Americans from sound multiple-use management of an American heritage, the vast western regions.

"We hope to acquaint every American, wherever he lives, with the thought that he is part owner of a great national treasure which is becoming more valuable as our population grows," he said.

Where a few scrawny cattle existed on substandard range, the area will be able to produce abundant grass for several times the original number of cattle once the project is completed north of Shoshone.

LAW of the LAND



Farmland in the public domain is so scarce that homesteading is almost a thing of the past. A hopeful homesteader may not move onto the land until it has been classified as farmland.

PUBLIC SALE BULLETIN BOARD

This is a compilation of the most up-to-date information possible on transactions and future sales of public lands by land offices of the Bureau of Land Management. Any details on land descriptions, prices, and other information pertinent to sales must be obtained from the individual land offices. When possible, all sales are scheduled far enough in advance so ample notice can be given in Our Public Lands. Because this is not always possible, interested purchasers should always check with the local land offices.

Compilation of land office reports show that 2,300 tracts of public domain land will go on the auction block during the coming three summer months. Small tracts listed have been screened to assure adequate open space for future public developments. No new openings will be made in a county unless they are consistent with local land-use plans, in accordance with the Public Sale Act of 1964. This means that, once the bulk of residual small tracts are sold, future offerings will be reduced greatly in number.

Remember: adjoining landowners have preference rights to buy "Public Sale" tracts. They can buy one of these tracts by matching the highest bid within 30 days after the auction. "Small tracts" are handled differently—strictly on a bid-auction basis. If you submit the highest bid at auction time, the tract is yours.

The following tracts are scheduled to be offered for sale this summer:

ALASKA

Small tracts

Ten tracts to be offered at Salmon Lake during July. They average 2.5 acres in size, appraised at approximately \$300. Salmon Lake is 40 miles north of Nome via the Nome-Kougaruk road in area of fine fishing and scenery.

ARIZONA

Small tracts

Sixty-six tracts offered on continuing basis in Maricopa County between Buckeye and Gila Bend, approximately 45 miles from Phoenix. All tracts 2½ acres in size. Appraised values from \$435 to \$835.

Twenty-one tracts elsewhere in Maricopa County, about 1 mile northeast of the community of New River, approximately 30 miles north of downtown Phoenix. All tracts 5 acres in size, appraised from \$2,100 to \$3,500. Situated on foothill slopes of New River and Castle Hot Springs Mountains. Soils mostly gravelly, stony, with large areas of rock outcrop.

One hundred and fifty-six tracts in southwestern Cochise County, roughly in center of triangle formed by towns of Bisbee, Sierra Vista, and Tombstone. Most are 5 acres, but some range from 2 to 5 acres in size. Appraised at little over \$200 per acre.

Seventeen tracts in Pinal County of $2\frac{1}{2}$ acres each, appraised at \$2,000 per tract. Area is 5 miles southeast of Apache Junction and one-fourth mile north of U.S. Highway 60. Near Superstition Mountain. No utilities. Desert terrain.

Public sale tracts

Forty-one tracts ranging from 40 to 1,000 acres. Appraised prices from \$1,600 to \$53,000. Open to bidding each Thursday except holidays until sold or until land office manager declares they are closed. Nearest towns: St. Johns, Tombstone, Duncan, Holbrook, Benson, Clanton, Fort Thomas, Portal, Eloy, Cochise, and Winslow, among others.

CALIFORNIA

Small tracts

More than 1500 tracts to be offered for sale mostly in Kern, Inyo, and San Bernardino Counties, but also some in Amador, El Dorado, Nevada, Placer, and Riverside Counties. Tract sizes range from 2½ to 5 acres. Some appraised at \$200 and some go as high as \$9,000 per tract. Most are in desert areas, ranging from 400 to 3,800 feet above sea level, with wide range of temperatures. Located in vicinity of Yucca Valley, Morongo Valley, Joshua Tree Village, Twentynine Palms, Apple Valley, Lucerne Valley, Palm Springs, Indio, and Desert Hot Springs.

Public sale tracts

Twenty-six tracts—one or more in Imperial, Kern, Riverside, San Bernardino, San Diego, Amador, El Dorado, Nevada, Placer, and Shasta Counties. One acre to 320 acres in size, with valuations from \$20 to \$1,000 per acre.



This small tract home on the outskirts of Santa Fe is one of several occupied year round on the Agua Fria Site. Sangre de Cristo Mountains in background offer skiing in winter, fishing and camping in the summer.

COLORADO

Small tracts

Forty-eight tracts are being offered on continuing basis in three areas:

Boulder area—25 tracts from 1 to 7 acres in size. Price range: \$500 to \$6,500. Approximately 3 miles northwest of the city, near small settlement of Crisman.

White River area—17 tracts from $2\frac{1}{2}$ to 5 acres. Appraised values \$700 to \$1,200. Located 3 miles northeast of Buford east of Highway 132. Vegetation consists of conifers, aspen, and associated shrubs. No domestic water, but electricity and telephone service may be developed.

South Fork area—six tracts, all about one-half acre in size, with appraised price of \$600 to \$650 apiece. Located at junction of oil-surfaced State Highway 149 and U.S. Highway 160 at South Fork (formerly Baxterville). Lots are relatively flat, with a few native shrubs, grasses, and weeds. No trees. Post office, service station, and stores immediately east of area. Electricity and telephone service available. Culinary water probably can be developed by drilling wells.

Public sale tracts

Eight tracts located in same general area as Boulder small tracts. Size varies from slightly over 3 acres to about 16 acres, with appraised price of \$1,000 to \$8,000. No domestic water. Electricity and telephone services available. These lands are located in mountain tract areas that are being developed into year-round residential section.

IDAHO

Small tracts

Swan Valley—18 tracts in broad high mountain valley of the South Fork Snake River, each slightly over 1 acre in size. Price per tract: \$100 to \$450. Swan Valley is 45 miles from both Idaho Falls, Idaho and Jackson, Wyo. Located on or within a half mile of U.S. Highway 26.

Irwin—9 or 10 tracts from 2½ to 5 acres, appraised at \$160 to \$645 per tract. Essentially the same type of area as Swan Valley 4 miles away. Irwin is 50 miles from Idaho Falls and about 60 miles from Jackson.

Public sale tracts

Sixty-eight tracts from 40 to 320 acres in size. Appraised prices range from \$6 to \$100 per acre. Twelve tracts are near the north rim of Snake River Canyon in Canyon County.

MONTANA

Public sale tracts

Five tracts will be sold each month during June, July, and August, consisting of scattered parcels in the north, central, and eastern counties. Tracts vary in size from 40 to 480 acres, with estimated price range of \$9 to \$20 per acre. All are open rolling rangelands primarily suitable for grazing of livestock.

NEVADA

Small tracts

Eighty tracts in three counties. Thirty in White Pine County in area adjoining U.S. Highways 50 and 93 between Ely and McGill. Level land bordered by high

mountains. Each tract of 5 acres valued at \$200 to \$250 per acre. Twenty-five tracts in Washoe County lying within previous small tract subdivision in the Reno-Sparks area. Occupy gentle east-facing slope of the Sierra Nevada Mountains with good view of surrounding countryside. Sizes vary from 1½ acres to 5 acres, with valuation between \$2,000 and \$3,000 per acre. Twenty-five tracts in Ormsby County with view of Sierra Mountain Range, Carson City and Eagle Valley. Sizes range from 1½ to 2½ acres, valued at \$2,000 to \$3,000 per acre.

Public sale tracts

Twenty-six tracts in five counties. Four in Humboldt isolated by private lands, no surface water and only limited chance of acquiring subsurface water permits. Size: 40 to 640 acres. Value: \$10 to \$50 per acre. One sale to be in Lincoln County of rough and mountainous land in dense stand of pinon-juniper. Located in Lake Valley north of Pioche and approximately 8 miles east of U.S. Highway 93. One hundred and sixty acres valued at \$10 per acre.

Fourteen sales will be offered in immediate vicinity of Reno area in Washoe County. Six other sales in county contemplated but these will be isolated tracts. Sizes: 5 to 640 acres. Appraised value: \$10 to \$4,000 per acre.

Four sales planned in vicinity of Carson City and Eagle Valley, two in outlying area of Ormsby County. Sizes vary from 40 to 240 acres and appraised value from \$250 to \$2,000 per acre.

NEW MEXICO

Small tracts

Twenty tracts available and these are being sold on continuing basis. Two located at Loco Hills in eastern Eddy County and 18 at Maljamer in Lea County. All 2½ acres in size, except one of nearly 4 acres. Appraised prices vary from \$200 to \$450.

Public sale tracts

Twenty tracts were scheduled for auction in May in Eddy County. If still available, will range in price from \$10 to \$15 per acre.

OKLAHOMA

Public sale tracts

The State office in New Mexico handles public land activities in Oklahoma. Plans are to offer 61 tracts for sale during the summer: 25 in Woodward County, 34 in Major County, and 2 in Alfalfa County. Sizes range from fraction of an acre to 160 acres, the bulk of them being 40 acres or less. The price will average about \$25 per acre.

UTAH

Public sale tracts

Five tracts to be auctioned in June; two in Uintah County from 40 to 160 acres in size and from \$5 to \$6 per acre; two in Carbon County from 200 to 840 acres appraised at \$4 to \$8; and one in Wayne County of 360 acres at appraised price of \$6 per acre.

Four tracts to be auctioned during July: two in Emery County from 80 to 120 acres, valued at \$4 to \$8 per acre; one in Millard County of 80 acres in size and about \$10 per acre in price; and one in Utah County of 640 acres, appraised at \$12 per acre.

During August, five tracts will be auctioned: two in San Juan County, 80 to 640 acres, appraised at \$5 to \$10 per acre; two in Garfield County, 80 to 1,280 acres, appraised at \$5 to \$12 per acre; and one in Kane County of 40 acres at a price of about \$10 per acre.

WYOMING

Small tracts

Twenty-seven tracts are being offered on continuing basis, 10 of them in the Casper Mountain area about 10 miles from Casper. Those remaining in the Casper offering are 2½ acres and appraised at \$1,200. No domestic water. Electric power available.

The other 17 tracts are 3 miles west of Big Piney at intersection of U.S. Highway 189 and Calpet County road. These are from 2 to 4 acres in size and are appraised at \$800 to \$1,850 per tract.

Bureau of Land Management Land Offices

ALASKA: 555 Cordova Street Anchorage, Alaska 99501 516 Second Ave. Fairbanks, Alaska 99701 ARIZONA: Federal Bldg., Room 3204 Phoenix, Ariz. 85025 CALIFORNIA: Federal Bldg., Room 4017 Sacramento, Calif. 95814 1414 8th St. Riverside, Calif. 92502 COLORADO: 700 Gas & Electric Bldg. Denver, Colo. 80202 IDAHO: 323 Federal Bldg. Boise, Idaho 83701 MONTANA (N. Dak., S. Dak.): 1245 North 29th St. Billings, Mont. 59161

NEVADA: 560 Mill St. Reno, Nev. 89505 NEW MEXICO (Okla.): Federal Bldg. Santa Fe, N. Mex. 87501 OREGON: 710 NE. Holladav Portland, Oreg. 97232 ITTAH Third Floor, Federal Bldg. 125 South State St. P.O. Box 11505 Salt Lake City, Utah 84110 WASHINGTON: 670 Bon Marche Bldg. Spokane, Wash. 99201 WYOMING (Nebr., Kans): 2002 Capitol Ave. Cheyenne, Wyo. ALL OTHER STATES: La Salle Bldg. 1728 L St. NW Washington, D.C.

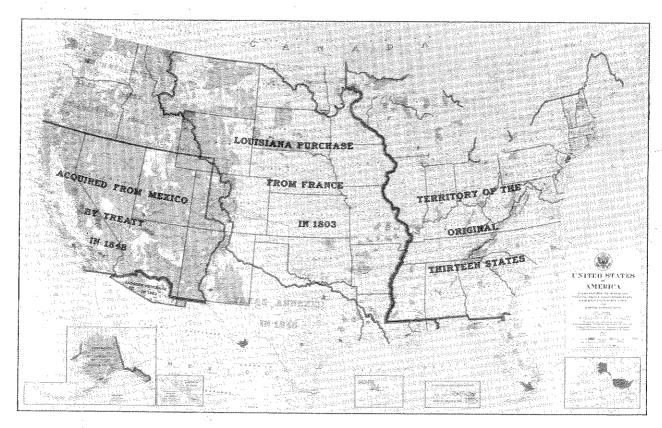
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