As the Nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The Department assesses our energy and mineral resources and works to assure that their development is in the best interests of all our people. The Department also has a major responsibility for American Indian reservation communities and for people who live in Island Territories under U. S. administration.

U. S. DEPARTMENT OF THE INTERIOR
Thomas S. Kleppe, Secretary

Bureau of Outdoor Recreation
John Crutcher, Director
BRUNEAU WILD AND SCENIC RIVER

STUDY REPORT

DEPARTMENT OF THE INTERIOR

BUREAU OF OUTDOOR RECREATION

AUGUST 1976
Middle Bruneau from the rim
LOCATION OF BRUNEAU RIVER SYSTEM
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I. INTRODUCTION

This report was prepared pursuant to Public Law 90-542, the Wild and Scenic Rivers Act, which was enacted by Congress and signed into law by the President on October 2, 1968.

Section 5(a) of the Act lists the Bruneau River in Idaho as one of 27 rivers for consideration as potential additions to the National Wild and Scenic Rivers System. Section 5(b) directs that a study of the Bruneau be conducted and a report submitted to the President and to the Congress. The study has been carried out by the Bureau of Outdoor Recreation as a cooperative effort with the State of Idaho.

Field evaluation of the Bruneau was carried out by a seven-member Federal-State study team made up of representatives from the Idaho Governor's Office, Idaho Department of Fish and Game, Idaho Department of Water Resources, Idaho Department of Parks and Recreation, Bureau of Land Management, U. S. Forest Service, and Bureau of Outdoor Recreation (lead agency). Most of the field work was accomplished in 1973. Public information meetings were held in Boise and Bruneau, Idaho, in March 1974.

The information contained in this report came from field reconnaissance of the study area and data provided by the following cooperating agencies and offices:

- Idaho Department of Fish and Game
- Idaho Department of Water Resources
- Idaho Department of Parks and Recreation
- Idaho Bureau of Mines and Geology
- Idaho Department of Highways
- Idaho Department of Environmental and Community Services
- Idaho Department of Public Land
- Idaho State Historical Society
- Owyhee County, Idaho
- Idaho Mining Association
- Nevada Bureau of Environmental Health
- Elko County, Nevada
- Bureau of Land Management
- U. S. Forest Service
- Bureau of Reclamation
- Corps of Engineers
- Federal Power Commission
- U. S. Fish and Wildlife Service
- Federal Highway Administration
- National Park Service
- Bureau of Mines
- U. S. Geological Survey
- Bureau of Indian Affairs
- Pacific Northwest River Basins Commission
- Mountain Home Air Force Base
The study area encompassed the entire Bruneau River Basin in Nevada and Idaho. However, in accordance with the Act, only those sections of the river system in Idaho received consideration for possible inclusion in the National Wild and Scenic Rivers System. The Act named the "entire main stem" in Idaho for study. However, the study was enlarged to include major tributaries in Idaho after a field reconnaissance revealed their outstanding qualities.
INCLUSION OF 121 MILES
IN NATIONAL SYSTEM

MAP 2.
Based on a joint Federal-State study of the river, 121 miles of the Bruneau River and tributaries have been found to meet the criteria for inclusion in the National Wild and Scenic Rivers System (See Map 2). These river segments are the:

Bruneau - downstream from Blackrock Crossing 71 miles to Hot Creek (immediately downstream from where the river emerges from the canyon).

Jarbidge - downstream from the junction of its East and West Fork tributaries 29 miles to its confluence with the Bruneau.

Sheep Creek - downstream from Mary's Creek 21 miles to its confluence with the Bruneau.

Based on the study findings and the results of meetings in Idaho held to solicit public comment on the various options for managing and protecting the outstanding scenic and recreational qualities of the area, the following recommendations are made:

1. The 121 miles described above should be added to the National Wild and Scenic Rivers System by Act of Congress.

2. Lateral boundaries should extend generally to the canyon rim, drawn along legal subdivisions. That would encompass some 57,000 acres of which about 95 percent is in public ownership.

3. All of the recommended segments except the upper 11 miles of the Bruneau should be classified as "wild" and managed to maintain the existing primitive qualities.

4. The upper 11 miles of the Bruneau, from Blackrock Crossing downstream through the old Triguero homestead, should be classified as "scenic."

5. The Bureau of Land Management should be designated to administer the river area as a component of the National System. The Bureau should develop a comprehensive management plan for the area within 2 years following establishment of the wild and scenic river.

6. Present use of lands for grazing should continue as this use is compatible with protecting the area's scenic and recreational qualities.

7. Funds should be provided as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Land Acquisition</td>
<td>$350,000</td>
</tr>
<tr>
<td>Development (estimated)</td>
<td>$440,000</td>
</tr>
<tr>
<td>Total</td>
<td>$790,000</td>
</tr>
</tbody>
</table>

The annual cost of administration and maintenance initially would be about $85,000.
The Bruneau River during low water
III. REGIONAL SETTING

Physical Features

The region in which the Bruneau River system is located involves Owyhee County in southwest Idaho and Elko County in northcentral Nevada. The river system rises in Nevada's Jarbidge Mountains and flows in a northerly direction to the Snake River in Idaho. The rugged and picturesque Jarbidge Mountains contain summits almost 11,000 feet above sea level. Scattered stands of aspen, alpine fir, and limber pine occur below peaks of barren rock. The predominant vegetation is mountain shrubs and grass. North of the mountains in Idaho, the region is characterized by a broad, gently sloping plain dissected deeply by the Bruneau River and its several tributaries. The arid foothills are covered with mixed juniper and sagebrush. Those give way to broad sage-covered flats and irrigated areas along the bluffs overlooking the Snake River, at an elevation of about 3,000 feet. Considerable acreage of sagebrush at intermediate elevations has been cleared and seeded to crested wheat and other grasses to increase productivity for livestock grazing.

The principal water sources for agricultural purposes are ground water and water pumped out of the Snake River and C. J. Strike Reservoir. Numerous small reservoirs on intermittent feeder streams are used locally for irrigation and stock watering.

Climate

The climate is moderate. In Owyhee County, the temperature normally ranges from 32 degrees in January to 80 degrees in July. However, temperatures of below zero and over 100 degrees are not uncommon.

The mean annual precipitation approximates 35 inches in the Jarbidge Mountains of Nevada, averages 19 inches over the intermediate plains in Idaho, and drops to 8 inches along the Snake River. The heaviest precipitation months are May and June. The lowest are July and August.

The relative humidity is low and there are frequent moderate winds and an abundance of sunshine. The growing season ranges from 100 days at the upper elevation to 140 days along the Snake River.

Economy and Population

The Federal Government administers 4,040,214 acres or 83 percent of Owyhee County's 4,880,960 acres. Another 7 percent is owned by the State and 10 percent is in private ownership. A similar ownership ratio exists in northern Elko County, Nevada.

Agriculture, chiefly irrigated crops and livestock production, is the mainstay of the region's economy. In Owyhee County, farming and livestock production contributed 51 percent of the personal income in 1965. Most of the irrigated cropland is located along the Snake River. Alfalfa, potatoes, sugar beets, corn, and small grains are the predominant crops. The principal use of the
Jarbidge Mountains, foothills, and sage-covered plain is livestock production, although mining and recreation also are significant.

Economic expansion likely will center along the Snake River as more land is irrigated. Livestock use of the open range should continue at present levels. An increase in feed lots and higher production of areas planted to crested wheat and other grasses may allow greater livestock production.

Mining operations are limited. The increased price of gold and other minerals may stimulate new mining activity.

Few public or private recreation facilities exist. The region, however, offers hunting, fishing, and other outdoor recreation pursuits and overall recreation use should steadily increase.

Property taxes are the principal source of revenue to local governments. The assessed valuation in Owyhee County as reported in an April 1972 report of the Idaho Water Resource Board entitled Comprehensive Rural Water and Sewage Study, Owyhee County, increased from $9.4 million in 1960 to $13.9 million in 1970, a gain of 47 percent. Personal income in the county increased from $9 million in 1958 to $12.5 million in 1965, a gain of 38.4 percent. However, Owyhee ranked only 30th among Idaho counties in 1965 in per capita personal income with an average of $1,975, compared to $2,401 for the entire state.

The population of the region is virtually static with little growth in northern Elko County, Nevada, and a gain of only 47 people (0.8 percent) in Owyhee County, Idaho, during the 1960's. Owyhee County's 1970 population was 6,422 residents for 7,639 square miles, or a density of 0.84 persons per square mile. Most of the population resides in the northern portions of the county near the Snake River. The long-range forecast is for the population of Owyhee County to continue to increase slightly through 1980 and then level off; however, increased farm development in the 1980's may change this forecast.

The 15 counties in which one-half or more of their area lies within a 100-mile radius of the Bruneau River contained a total population of 337,600 in 1970. That figure is expected to increase to 514,500 by the year 2000, a growth of 52 percent.

Transportation Facilities

The region's transportation facilities are limited, especially in the Bruneau River area. As shown on Map 3, Interstate I-80N connects Boise and Twin Falls north of the Snake River. Primary State 45, terminating at the town of Bruneau, connects Murphy, the Owyhee County seat, and Grand View with Nampa to the north. Primary State 51 extends in a north-south direction 10 to 20 miles west of the Bruneau River, connecting Mountain Home, Bruneau, and Grasmere, Idaho, with Elko, Nevada. County roads serve the smaller communities in the region. Most are unpaved and many are infrequently maintained.
Scheduled airline service is available at Boise and Twin Falls, Idaho, and Elko, Nevada. There is no scheduled air service to Owyhee County or northern Elko County. Charter and private planes can land at a number of unpaved airports near the Bruneau River.

Local bus service is available in the county.

There are no known plans at present to expand road, air, or rail services in the general area of the Bruneau River.

Recreation Resources

Abundant outdoor recreation opportunities exist in northcentral Nevada and southwest Idaho. Among the most popular recreation activities in the region are upland game and deer hunting. The sagebrush flats harbor sage grouse, gray partridge, and quail. The Jarbidge Mountains and draws leading north provide habitat for mule deer and chukar partridge. The cultivated fields along the Snake River offer prime pheasant hunting and the river provides duck and goose hunting.

Fishing is available although much of the region is arid and without a dependable supply of water. Small headwater streams flowing north from the Jarbidge Mountains provide good trout fishing, as do portions of the Jarbidge and Bruneau Rivers. The Snake River offers trout, channel catfish, small and large mouth bass, and other game fishing. C. J. Strike Reservoir, Cedar Creek, and Salmon Falls Creek Reservoirs, the latter two located some 50 miles east of the Bruneau, are popular sport fishing spots. West about 50 miles, Mountain View and Sheep Creek Reservoirs also provide fishing. Public boat access and camping facilities are available at these reservoirs.

There are two major Federally administered recreation areas within a 100-mile radius of the Bruneau River. These are the Jarbidge Wilderness Area immediately south in Nevada, in which the headwaters of the Bruneau form, and the Sawtooth National Recreation Area, about 100 miles north in Idaho, both administered by the U. S. Forest Service.

The Bureau of Land Management recently established the Snake River Birds of Prey Natural Area along a 33-mile stretch of the river beginning 5 miles west of the town of Grand View, Idaho, and extending downstream (see Map 2). Thirty miles separate that area from the Bruneau.

The State of Idaho has major park facilities in Bruneau Dunes State Park, located 6 miles east of the town of Bruneau, and Three Island Crossing State Park on the Snake River at the town of Glenns Ferry.

Neither Idaho's Owyhee County nor Nevada's Elko County operates any parks within the region. There is a county historical museum at Murphy.

Commercially operated recreational facilities exist at Murphy Hot Springs, C. J. Strike Reservoir, and Cedar Creek Reservoir.
The nearest units of the National Wild and Scenic Rivers System are the Rapid River, a portion of the Snake River, the Middle Fork Salmon River, Middle Fork Clearwater River in Idaho, and the Rogue River in Oregon. In Idaho, the Salmon, St. Joe, Moyie, and Priest Rivers are being studied by the U.S. Forest Service as candidates for inclusion in the National System. In Idaho, the Bureau of Outdoor Recreation will study an additional portion of the Snake for possible inclusion in the National System. Currently, the Bureau of Outdoor Recreation is studying 171 miles of the Owyhee in Idaho and Oregon for possible inclusion in the system. Of the states surrounding the region, only Oregon has a State Scenic Rivers System. One of the rivers in that system is a 70-mile segment of the Owyhee River. The Owyhee River, 70 miles to the west, is similar in character to the Bruneau.

Public Law 94-199, which was signed into law on December 31, 1975, established the Hells Canyon National Recreation Area.
Mouth of Sheep Creek
IV. DESCRIPTION AND EVALUATION OF STUDY AREA

Riverscape

The Bruneau River Basin occupies an area of about 3,300 square miles, including 2,300 in Idaho and 1,000 in Nevada. Most of the basin in Nevada is above the 6,000-foot elevation. Those highlands contribute about two-thirds of the Bruneau River's total surface runoff. Some 26 tributary drainages cross into Idaho from Nevada. The drainages converge near the Idaho-Nevada border to form the Bruneau and its three major tributaries, the Jarbidge River, Sheep Creek, and the East Fork Bruneau. The Bruneau, upstream from its confluence with the Jarbidge River, is also known as the West Fork.

The drainages in Nevada typically are steep mountain valleys containing small, rapidly flowing creeks. In Idaho, the mountains give way to a broad sagebrush plain in which the major tributaries are entrenched in canyons ranging from 700 to 1,200 feet in depth. The canyons are isolated from the plain and form a sheltered environment.

Along the middle portion of the Bruneau, and the lower portions of the Jarbidge, Sheep Creek, and the East Fork, cliffs rise almost vertically out of the streams.

Upstream, the canyons are broader, especially the Bruneau upstream from the Triguero homestead where the canyon is one-half mile or more wide. Sixteen miles upstream from C. J. Strike Reservoir, near where Hot Creek joins the Bruneau from the west, the river emerges from the deep canyon and meanders through a broad, fertile valley occupied by farms, ranches, and the town of Bruneau.

In Idaho, the study rivers have a moderately steep gradient. This produces a flow which, at other than flood stage, is characterized by a succession of pools, riffles, and rapids.

Although precipitation is infrequent along the rivers in Idaho, the inaccessible nature of the area has resulted in a thriving vegetative cover on the canyon sides and bottoms where soil has formed. Except where the cliffs rise directly from the streams, the banks are lined by trees, shrubs, and grass.

The isolated canyons harbor a wide variety of animal life.

The combination of sparkling streams, multi-colored cliffs, and an interesting association of plants and animals make the canyon area one of superior natural beauty and recreational appeal.

Geology and Soils

Rocks of the Bruneau River area are primarily of volcanic origin and range in age from Miocene to Recent. They include a complex of rhyolite flows, overlain by a series of interbedded sediments and basalt flows, overlain by basaltic lavas.
The upper canyons' rock walls vary in color, but are mainly buff or reddish-colored rhyolite. The walls of the lower Bruneau canyon are much darker basalt.

The soils inside the canyon walls are well drained on steep slopes. Where the canyons widen, alluvial soils occur.

Flora

The dominant range type on the upland plain surrounding the upper canyons is sagebrush with sage in the upper story and blue bunch wheatgrass and cheat grass in the lower story. This gives way to a salt-desert shrub community above the lower canyons with white sage, shadscale, nuttall saltbrush, greasewood, budsage, and rabbit brush.

Beneath the canyon walls, lush grasses, and scouring rush blanket the stream banks. On broken slopes, sagebrush, bitterbrush, currant, poison ivy, rabbit brush, and grasses grow. Many sections of the stream are lined with juniper. Pockets of cottonwood also occur.

Artemisia papposa is a plant whose occurrence in the study area is highly probable. It is endemic to Idaho and is known to occur in only four counties. The species is recommended by the Smithsonian Report as a Candidate for the Interior List of Threatened Flora.

Fauna

The sheltered canyons are inhabited by a large variety of wildlife. Mule deer live throughout the canyons. The upper canyons serve as winter range for deer migrating down from the Jarbidge Mountains in Nevada. The upper Bruneau in the vicinity of Blackrock Crossing is a critical wintering area. A few pronghorn antelope are found.

Three large predators, the mountain lion, bobcat, and coyote, occur in the canyons. Other animals found in the area are the beaver, muskrat, otter, mink, and weasel. Badgers are common along the lower Bruneau.

Some 150 species of song birds are found, as well as numerous species of waterfowl and upland game birds. Canada geese and mallard ducks nest in the area. Sage grouse are found along with chukar and gray partridge and quail.

Birds of prey living in the canyons include the golden eagle; the prairie falcon; the red-tailed, Swainson's, rough-legged, and sparrow hawks; and the great horned, short-eared, and burrowing owls. The American peregrine falcon, which may occur in the canyons, is classified by the Secretary of the Interior as an endangered species.

Snakes and lizards are well represented. Rattlesnakes are abundant.

Trout and whitefish are found where water levels and temperatures permit. The Jarbidge and upper Bruneau support good populations of those fish. Sucker, squawfish, shiner, and chiselmouth chub live in the river below Indian Hot
Otter
Springs. Salmon, and probably steelhead, migrated up the Bruneau to spawn prior to the construction of Swan Falls Dam on the Snake River in 1901.

Reintroduction of the California bighorn sheep is being considered by the Bureau of Land Management and the Idaho Department of Fish and Game. Bighorn sheep were present until the early 1900's.

River Dimensions

The Bruneau and its main tributaries in Idaho include approximately 230 miles of stream. The channel of the Bruneau has an average gradient of 32 feet per mile, while the gradient of the Jarbidge is 50 feet per mile, Sheep Creek 50 feet per mile, and the East Fork 30 feet per mile.

Flows are usually low during the summer, fall, and winter, and increase substantially in the spring. The average monthly discharge in cubic feet per second (cfs) at the gauging station on the Bruneau near Hot Springs (river mile 20.2) for the years 1909 to 1915 and 1943 to the present are:

<table>
<thead>
<tr>
<th>Month</th>
<th>Discharge (cfs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>142</td>
</tr>
<tr>
<td>February</td>
<td>180</td>
</tr>
<tr>
<td>March</td>
<td>345</td>
</tr>
<tr>
<td>April</td>
<td>788</td>
</tr>
<tr>
<td>May</td>
<td>1,104</td>
</tr>
<tr>
<td>June</td>
<td>983</td>
</tr>
<tr>
<td>July</td>
<td>276</td>
</tr>
<tr>
<td>August</td>
<td>101</td>
</tr>
<tr>
<td>September</td>
<td>80</td>
</tr>
<tr>
<td>October</td>
<td>98</td>
</tr>
<tr>
<td>November</td>
<td>117</td>
</tr>
<tr>
<td>December</td>
<td>127</td>
</tr>
</tbody>
</table>

The annual runoff of the Bruneau River at Hot Springs averages 281,100 acre feet.

The peak flood flow recorded was 6,500 cfs on March 1, 1910, and the minimum daily flow was 25 cfs on December 18, 1964.

Although width and depth vary widely throughout, with alternating pools and riffles or rapids, the Bruneau characteristically is about 20 feet wide and 2 feet deep in its upper reaches. Below the confluence with its major tributary, the Jarbidge, the width increases to approximately 40 feet and the depth to 3 feet. The volume is further increased by seepage and springs, and by Sheep Creek and the East Fork Bruneau. Its dimensions at Hot Creek average 60 feet wide and 4 feet deep.

Water Quality

The Bruneau River system generally is of sufficiently high water quality to support those forms of life which normally would be adapted to the habitat. These are generally cold water species and are listed under fauna. Hot springs
A common inhabitant
occur along the streams, especially Indian Hot Springs which has a year-round flow of 1,790 gallons per minute and a temperature of 156 degrees Fahrenheit.

Man's activities along the stream are limited, and according to reports of the Idaho Department of Environmental and Community Services and Nevada Department of Health, Welfare and Rehabilitation, have not resulted in pollution problems. In Nevada, most of the lands bordering the streams are administered by the U. S. Forest Service and the Bureau of Land Management. The Nevada Department of Health, Welfare and Rehabilitation reports that there are about 38 permanent residents along the streams. There is moderate use by hunters and fishermen, and some livestock grazing and agricultural use. There are no direct upstream discharges of industrial or municipal waste into the system and no intensive agricultural uses.

The Nevada Department of Human Resources, which regularly checks the water in the West Fork Jarbidge below where it flows through the town of Jarbidge, reports no significant degradation of water quality. Sewage disposal has been by septic tanks and leach fields. Data indicates little degradation of water quality below the town. New establishments, however, are required to install holding tanks, with disposal outside the canyon.

The Idaho Department of Environmental and Community Services has monitoring stations at the mouth of the Bruneau and at Hot Springs. The data from the Hot Springs station indicates that the water is of a consistently high quality. Downstream, below the canyon, however, it deteriorates progressively because of silt, fertilizer, and other contaminants contained in water returns.

At Murphy Hot Springs on the East Fork of the Jarbidge in Idaho, 800 private acres have been subdivided into about 400 vacation homesites. Most have been sold. The Idaho Department of Environmental and Community Services is aware of the possibility of pollution and is working with the private owners. In August 1973, there were approximately 10 septic tanks and drain fields at Murphy Hot Springs. All new waste disposal systems must include holding tanks and are subject to State regulation and approval.

Present livestock use along the streams within the study area appears to pose no special pollution problems.

State quality standards are in effect in Idaho and Nevada. Accordingly, all of the study segments and their tributaries must continue to be able to support the propagation of those forms of life which normally would be adapted to the habitat of the streams. They must also continue to be safe for swimming.

**Land Ownership and Use**

Along the 230 miles of stream studied in Idaho, it was estimated that an average of 320 acres per mile of stream were included in the rim to rim area. Based upon the 320 acres per mile, the following land ownership pattern exists:
### Land Ownership

<table>
<thead>
<tr>
<th>River Miles</th>
<th>Acres</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
<td>184</td>
<td>58,880</td>
</tr>
<tr>
<td>State</td>
<td>12</td>
<td>3,840</td>
</tr>
<tr>
<td>Private</td>
<td>34</td>
<td>10,880</td>
</tr>
<tr>
<td>Total</td>
<td>230</td>
<td>73,600</td>
</tr>
</tbody>
</table>

The percentage of private ownership is higher along the streams (15 percent) than in the county as a whole (10 percent) because the lands bordering the streams are more desirable for agricultural purposes (See Map 4).

The Bureau of Land Management administers most of the Federal lands in Owyhee County. The Boise District Office of the Bureau is preparing management framework plans (MFP) for the various planning units in the District. Those plans will provide a framework to guide the preparation of more detailed plans for the future use of the area.

Three of the District's 12 planning units encompass the Bruneau River area. With the Bruneau River as the boundary, the area west is within the Bruneau Planning Unit, the area east and north of the East Fork Bruneau is within the Saylor Creek Planning Unit, and the area east and south of the East Fork Bruneau is within the Jarbidge Planning Unit. The MFP for the Saylor Creek Planning Unit has been completed and the MFP for the Bruneau Planning Unit will be completed in 1975. A plan for the Jarbidge Planning Unit will not be prepared for several years. The Saylor Creek MFP recommends that the portion of the Bruneau Canyon within the planning unit be retained in a natural condition. It also recommends developing a scenic viewpoint with a protective wall at the Bruneau Overlook and a 20-mile long trail down the East Fork.

All of the Federal area back from the rim of the Bruneau, Jarbidge, and Sheep Creek Canyons is used by livestock (cattle, sheep, and some horses) under permit from the Bureau of Land Management. The season of livestock use varies from area to area depending upon vegetative type.

Some grazing use occurs along the floor of the Bruneau Canyon upstream from Indian Hot Springs. Cattle also graze in Sheep Creek Canyon downstream to its confluence with Louse Creek. Sheep use is mainly confined to the range-land back from the canyon rims, although they cross the canyons at several points enroute to their ranges.

All the State lands are school sections. Most are under grazing lease.

Virtually all of the land along the lowermost 16 miles of the Bruneau, downstream from the canyon's mouth, is in multiple private ownerships. Most is irrigated crop or pasture land.
LAND OWNERSHIP
(Along Study Segments)

Bureau of Land Management
State Lands
Private

LAND OWNERSHIP

MAP 04
Upstream from the canyon's mouth, the private holdings lie along the Bruneau upriver from Indian Hot Springs, and along the upper reaches of Sheep Creek above its Mary's Fork tributary. The largest holding is some 2,080 acres strung out along an 11-mile segment of the upper Bruneau. That holding is used as winter range for about 600 cows and their calves.

Another 800-acre block of private land straddles the East Fork Jarbidge at Murphy Hot Springs, as discussed earlier. In addition to about a dozen summer homes, there is a small store and restaurant, a swimming pool, and rental cabins.

The only year-round habitations are along the lower 16 miles of the Bruneau where about 200 people reside in and around the town of Bruneau, and at Murphy Hot Springs, where only a few live.

Owyhee County presently has no zoning ordinance.

The Bureau of Mines made a detailed study of the Bruneau River and its tributaries in Idaho in 1973 in conjunction with this study. It reports that the area has been widely prospected and that about 200 claims have been filed within four miles of the streams. Annual assessment work is still being performed on some 40 claims. None has been patented. The first claims were located in the 1920's. Initial interest was in gold placers along the Jarbidge River and some interest remains. Groups of claims were also staked in the Indian Hot Springs area in the 1950's after the discovery of jasper, a semi-precious stone used in making jewelry. A mercury claim in Sheep Creek Canyon, staked in 1960, is inactive. Limestone and recently gold claims have been located in the Hot Creek-Bruneau River area. The only present mining activity is at the jasper claims.

Hot springs occur at a number of locations in the study area. These springs may have potential for geothermal power development.

The U. S. Air Force maintains and actively uses the 120,000-acre Saylor Creek Bombing Range, located northeast of the study area (see map 4). The western boundary of the range is about 1 mile east of the canyon. The fenced and restricted target area in the center of the range lies 4 to 5 miles from the river. The range does not restrict surface recreation use of the canyons, but civilian air travel over the affected canyon portions is restricted. The Commanding Officer of Mountain Home Air Force Base reports that the bombing range is in use 5 days each week, including night sorties. The Navy and the Air National Guard also make use of the range. In approaching the range, jet aircraft frequently fly over the canyons at low altitudes.

The nearest Indian reservation is the Duck Valley Indian Reservation on the Idaho-Nevada border about 5 miles west of the extreme upper reaches of Sheep Creek. Its lands do not overlap the study segments.
River Status

The Bruneau and its tributaries are in a substantially free-flowing and undeveloped condition. There are no large dams or other major works affecting the study area. C. J. Strike Reservoir on the Snake River has inundated the lower 6 miles of the Bruneau River above its former confluence with the Snake, but well downstream from the area proposed for inclusion in the National System.

The Bruneau River system has been studied by various Federal and State water development agencies.

The U. S. Army Corps of Engineers reports that it has no projects under construction, authorized, proposed, or under study in the Bruneau River watershed. Based on a preliminary flood damage study of the 10-mile reach of the Bruneau upstream from C. J. Strike Reservoir, the average annual flood damage is estimated to be $47,500 at 1973 price levels. Most of that damage relates to agricultural production or facilities.

The Federal Power Commission reports there are no existing licensed projects on the Bruneau River above the Idaho Power Company's C. J. Strike Reservoir, nor are there any pending applications for license. The Commission's Upper Snake River Basin Planning Status Report, dated 1967, did not identify any potential hydroelectric sites on the Bruneau River. However, a 1972 Commission publication, Hydroelectric Power Resources of the United States, Developed and Undeveloped, lists two potential sites on the Bruneau River. Those are the Forks site at river mile 37 and Sheep Creek site at river mile 44.5. Neither are considered by the Federal Power Commission to be economically feasible for development at the present time.

The Bureau of Reclamation has made some preliminary studies of the possibility of irrigating large tracts of the upland plains surrounding the Bruneau River Canyon. More than a million acres of potentially irrigable land have been identified. However, as noted in the Pacific Northwest River Basins Commission's Columbia-North Pacific Framework Plan report, the Bruneau River is not a likely source of water because of its relatively small available water supply and deep entrenchment. The most promising source of water is the Snake River.

The Idaho Department of Water Resources, the Bureau of Reclamation, and other State and Federal agencies are making preliminary reconnaissance studies of the general area in connection with the current Coordinated Comprehensive Joint Plan studies of the Northwest being coordinated by the Pacific Northwest River Basins Commission. These studies will provide input for the Idaho State Water Plan to be completed in 1977.

Irrigation in the Bruneau River Basin is limited to the small valley areas on some of the tributary streams and along the Bruneau River below the canyon mouth above C. J. Strike Reservoir. The irrigated farms provide winter feed for the cattle and sheep.
Earlier studies of the Snake River-Bruneau River area
Rights to the waters of the Bruneau River and those of its tributaries were adjudicated on February 14, 1925. A total of 419.73 cubic feet per second (cfs) of natural flow rights have been decreed to individuals. Of that total, 16.58 cfs are used in the vicinity of Mary's Creek, Sheep Creek, and Louse Creek, and 304.28 cfs have been appropriated by users on the Bruneau River. The Grand View Canal Company has abandoned 150 cfs in exchange for water from the Snake River. The priority dates of those rights range from 1869 to 1922. There also are some permit rights which have been issued by the State Engineer of Idaho on the East Fork Bruneau with dates of priority from 1942 to 1958.

As already mentioned, the estimated runoff of the Bruneau River near Hot Springs averages 281,100 acre-feet a year. Diversion requirements for lands presently irrigated downstream total 278 cubic feet per second. It is estimated that on an average about 235,000 acre feet of water a year leaves the area unused.

The position of the State of Idaho, as reported by the Commissioner, Department of Public Lands, is that all Idaho streams are navigable until proven otherwise. Therefore, the State claims ownership of the bed of the Bruneau River and tributaries. Under Idaho State law, navigability is defined as a stream that has the capability of floating a log 4 inches in diameter.

Access to River

Access to the Bruneau River system is difficult throughout most of its length with the exception of the lower 16 miles. All-weather roads cross a number of the headwater streams near the Idaho-Nevada border. However, the more than 200 miles of canyon in between are reached at only a few points by primitive road (see Map 3). Those points are at Blackrock Crossing on the upper Bruneau and at Indian Hot Springs, one-half mile below the mouth of the Jarbidge. At each of those crossings, road access exists from both sides of the canyon. A third access point is from the west to the Alzola homestead on the upper Bruneau, about 10 miles downstream from Blackrock Crossing and a short distance upstream from the Triguero homestead. A major access point for boaters is at Rowland, Nevada, approximately 10 miles above Blackrock Crossing.

There is a network of rudimentary roads on the sagebrush flats back from the canyon rim, with spurs leading to the rim in places.

There are no regularly maintained hiking trails into the canyons. However, the streams can be reached by way of draws, especially along the upper Bruneau and the upper reaches of the Jarbidge, Sheep Creek, and East Fork Bruneau. There is a switchback trail from the east rim down to a gauging station located about 10 miles above the mouth of the canyon on the Bruneau. The gauging station is no longer used but the trail, although not maintained, is still passable.

Many miles of canyon are all but inaccessible from the rim because of almost perpendicular cliffs hundreds of feet in height. This is true of most of the
middle 60 miles of the Bruneau above the canyon mouth, the lower 15 miles of the Jarbidge, the lower 20 miles of Sheep Creek, and the lower 10 miles of the East Fork Bruneau.

There are no established trails along the canyon bottoms. However, except during high water, the bottoms can be hiked using game trails or by wading the stream bed.

At a point about 6 miles upstream from the canyon mouth on the Bruneau, the Bureau of Land Management has developed a scenic overlook. It is reached by way of a 3-mile spur road off the Clover Three Creek Road which leads south from the town of Bruneau. That overlook is the point most frequently visited by sightseers. An estimated 3,000 persons visited the overlook in 1973.

At appropriate stages during periods of high water, the major streams are boatable, although only by the most skilled kayakers or rafters.

Archaeological and Historical Values

Archaeological surveys of the canyons, including a survey of the Bruneau contracted for by the Bureau of Land Management with the Idaho State University expressly for this study, provide an indication of early Indian use of the area.

The prehistoric Indians inhabiting the Bruneau River canyons were part of a group known as the White Knife Shoshone. They wintered in the Bruneau and neighboring river canyons while traveling over a wide territory during the summer months. Their dress was simple. Most of their time was spent gathering berries, roots, plants, and insects; hunting animals using bow and arrows; and catching fish with the help of nets, dams, and weirs.

The White Knife Shoshone were the forerunners of the Western Shoshone who now occupy the Duck Valley Indian Reservation along with the Paiutes.

The Indians utilizing the Bruneau River area were not numerous. In 1866, an estimated 400 sought sanctuary in the canyons out of fear of settlers, hostile Paiutes, Bannocks, and renegades from their own group. Indian occupation of the area came to an end in 1868 when the small remaining group moved to the Fort Hall Indian Reservation near the town of Blackfoot, Idaho.

Archaeological evidence in the canyons has been partially preserved due to the dry climate and the inaccessibility of the sites. Although "pot hunters" have been active, many of the sites are still intact. The most common locations are caves and open sites along the streams. Additional archaeological study is needed to provide a more complete picture.

The first white man to discover the Bruneau River was Ramsey Crooks in 1811. He and a party of fur hunters crossed the Bruneau on their way down the south
Remnants of a still dating back to the prohibition era
side of the Snake River. The Bruneau received its name from Baptisto Bruneau, a French Canadian trapper who visited the river between 1818 and 1820. In 1826, Peter Skene Ogden of the Hudson Bay Company explored the lower reaches of the Bruneau in search of beaver. His journal contained the account that "...I verily believe a more wretched country Christian - Indian or Brute ever travell'd over or probably ever will."

Gold and silver discoveries brought miners beginning in 1862, followed by ranchers, farmers, and merchants. A major gold discovery in 1909 on the West Fork of the Jarbidge led to one of the West's last gold rushes and to establishment of the town of Jarbidge, Nevada. Production at the mines gradually declined during the depression years because of lack of reserves and Jarbidge became almost a ghost town.

The plain that surrounds the Bruneau River system has supported use by cattle, sheep, horses, and burros since the late 1800's. Cattle ranching on the plain and irrigated farming along the lower Bruneau River are the basis of the present economy.

Outdoor Recreation Resources and Opportunities

Outstanding recreational opportunities await the visitor who has some knowledge of the area and the necessary skills and equipment. Boating, hiking, photography, nature study, rock-hounding, fishing, and hunting are all available.

The canyons have a national reputation among kayakers for offering some of the most challenging white water, with stretches of class 5 and 6 difficulty. High water during April, May, and June are best for that activity. At other times of the year, only the Bruneau downstream from Indian Hot Springs has sufficient water to make boating worthwhile, and then shallows require frequent portaging or dragging. Boating use of the streams is light with only 10 to 20 parties a year. Although no count is made, use is increasing.

Decisions to boat the Bruneau should not be taken lightly. Once committed, a boater must either make it through or hike up and out a distance of many miles. Along some stretches, the latter is impossible because of cliffs. Numerous boats have been battered or lost in the canyons.

One could spend weeks exploring the canyons on foot. A few pursue this as a hobby. Again, present use is light because access is limited and the terrain steep and rough.

The Jarbidge and the upper reaches of the Bruneau (above Indian Hot Springs) provide fine trout and whitefish angling. The fish are plentiful, but not large. High water temperatures along the lower Bruneau, lower Sheep Creek, and the East Fork Bruneau during the summer months rule out trout and whitefish. There, sucker, chiselmouth chub, and other non-game fish are found.
The challenge of spring runoff
A resident population of mule deer reside in the canyons, spending the hot summer months along the shaded bottoms, while ranging along the sides and rim at other times.

Chukar partridge and a few quail occur where the habitat is suitable. Sage grouse and gray partridge live on the sage flats above the canyons.

Mountain lion and otter offer interesting opportunities for study.

Hunting and fishing pressure is moderate where access permits, but only light throughout most of the canyons. The potential for other types of recreation (hiking, rock-hounding, photography, boating, and nature study) is largely unrealized.
A popular sport—chukar hunting
V. POTENTIAL USES OF RIVER AREA

There are a number of feasible uses of the Bruneau River area. The Bureau of Land Management, in its management framework plans for the three planning units involving the river canyons, is considering various management uses including primitive area designation for the entire canyon area. Under such designation, the area would be administered in a manner similar to a wilderness area, although without the statutory protection of wilderness.

As discussed previously, utilization of the river's waters for irrigating the sagebrush plains above the canyons presently does not appear economically feasible because of the low summer flow, the deeply entrenched condition of the streams, and the consequent need for storage and high lift pumping. However, increased need for and value of croplands in the future could make such developments feasible.

Another possibility is the diversion of Bruneau River system waters to other river drainages. A diversion application is pending before the Water Rights Division of the Nevada Department of Conservation and Natural Resources. Under that application, 169,000 acre feet of water would be stored and a portion diverted from the Jarbidge River in Nevada to the Salmon Falls Project located about 50 miles east of the Bruneau River area in Idaho. The effects on wild and scenic river values of such a diversion are unknown.

There are about 10,000 acres of privately owned lands adjoining the 230 miles comprising the Bruneau River and its major tributaries in Idaho. These private lands are used almost exclusively as livestock range. Present plans are to continue that use. However, some tracts offer opportunities for the location of vacation homesites.

As discussed, the Saylor Creek Bombing Range, located immediately east of the Bruneau and Jarbidge Rivers, is used by the Air Force, Navy aircrews, and Air National Guard as a bombing and missile range. Plans call for the continuation of that use. While such utilization does not preclude recreation use of the river areas, the frequent low level flight of jets directly over the canyons results in undesirably high noise levels.

Recreation use of the Bruneau River System is not intensive at present. It is increasing, however. Although no use statistics are kept, an estimated 10 to 20 groups of boaters utilize the area annually, mostly during the high-water runoff period of spring (April, May, and June). During the summer and fall, fishermen and hunters use the area, especially near access points. Backpacking also is gaining in popularity. Boating use, especially, is increasing since knowledge of the challenging water found in the canyons already is widespread.

The Bureau of Mines has stated that there appear to be few significant mineral values along the study segments. Jasper mining in the vicinity of Indian Hot Springs is only a minor commercial venture. Much of the jasper that is taken is made available to rockhounds by mail order. Mining of jasper is expected to continue, although the most accessible deposits, in the form of
rock outcroppings, already have been utilized. Gold deposits along the Jarbidge River exist in the form of placer material. Commercial development presently is not considered economically feasible. The principal value in the future may be for recreational panning. Mercury occurs in the area but does not appear to have a developable potential.

There are extensive limestone deposits in the vicinity of Hot Creek and the lower Bruneau River. While those deposits are not being mined at present, that use may someday occur.

Geothermal power development offers many possibilities. Lands near the lower portion of the Bruneau River have been leased for geothermal exploration.

There are no timber values of any consequence in the area.
VI. FINDINGS

Eligibility Criteria

The initial objectives of this study were to become familiar with the river system, to compile and analyze available resource data, and to determine whether segments meet the eligibility criteria contained in the Wild and Scenic Rivers Act and in "guidelines" adopted by the Secretaries of the Interior and Agriculture. To qualify for inclusion, a river must meet each of the following eligibility criteria:

1. Possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values.

2. Be in a substantially free-flowing condition.

3. Be long enough to provide a meaningful recreational experience.

4. Contain a sufficient volume of water during the recreation season to provide full enjoyment of water-related outdoor recreation.

5. Contain high quality water, or be restorable to that condition.

Segments That Qualify

Based on a first-hand knowledge of the study area gained from a preliminary reconnaissance in July 1973, a more intensive 10-day reconnaissance in October 1973, and a personal familiarity with the area by individual study team members, the following 121 miles of the Bruneau River system have been found to meet the eligibility criteria (See Map 2):

- **Bruneau** - downstream from Blackrock Crossing 71 miles to Hot Creek immediately downstream from where the river emerges from the deep canyon.

- **Jarbidge** - downstream from the junction of its East and West Fork tributaries 29 miles to its confluence with the Bruneau.

- **Sheep Creek** - downstream from Mary's Creek 21 miles to its confluence with the Bruneau.

All of those qualifying segments lie in canyons 700 to 1,200 feet deep. The canyons contain statuesque rock formations and vertical cliffs that extend upwards hundreds of feet in places. The environment of the canyons supports an interesting association of plants and animals. Animal life includes deer, mountain lion, otter, coyote, bobcat, and raccoon. Bighorn sheep may be reintroduced by the Idaho Department of Fish and Game and Bureau of Land Management. The golden eagle is commonly seen and chukar are abundant. Trout and whitefish live in the Jarbidge and the Bruneau upstream from Indian Hot Springs. Because few roads exist, all of the canyons are in a virtually unspoiled wilderness condition.
Old Triguero homestead--Upper Bruneau River
The canyons afford a variety of outstanding recreational opportunities. Recreational use, however, is minimal because of the difficult access and rugged terrain. A number of parties annually boat the river, especially during spring runoff when it provides one of the Nation's most challenging floats. The canyons provide deer and bird hunting as well as sport fishing.

The area possesses archaeological interest. The spectacular scenery offers unlimited photographic opportunities, and there are significant geological values.

Most of the lands bordering the segments which meet the criteria are administered by the Bureau of Land Management, with relatively small State and private holdings. Of 121 miles of river in those segments, 106 miles are bordered by lands administered by the Bureau of Land Management, 6.5 miles by State lands, and 8.5 miles by privately owned lands. In most instances, the ownerships straddle the river. The main commercial use is for grazing, but this is limited in most places by inaccessibility. No buildings presently are occupied full time along the segments that meet the criteria. There are a number of unpatented mining claims, mainly along the Jarbidge and in the vicinity of Indian Hot Springs on the Bruneau.

Segments That Do Not Qualify

The Bruneau upstream from Blackrock Crossing, Sheep Creek upstream from Mary's Creek, the East Fork Bruneau, and the East and West Forks Jarbidge fail to meet the eligibility criteria. They lack sufficient scenic and recreational interest and there is an insufficient volume of water to permit the full enjoyment of water-related recreational activities during most of the recreation season.

The lower 16-mile portion of the Bruneau, from where it emerges from the deep canyon near Hot Creek to where it empties into the C. J. Strike Reservoir below the town of Bruneau, fails to qualify because of shoreline developments which impair the stream's scenic and recreational values. It is bordered by buildings and cultivated fields, diverted for irrigation, and crossed by bridges and livestock fences.

Classification

In addition to the eligibility requirements, the Wild and Scenic Rivers Act provides that each river or portion thereof which is added to the National System must be classified and administered as one of the following:

1. Recreational River Areas - Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

2. Scenic River Areas - Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.
3. **Wild River Areas** - Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

All of the segments which meet the eligibility criteria, except the upper 11 miles of the Bruneau, qualify for "wild" status and for administration and continued protection as "wild river areas" as defined above and as discussed in "guidelines" adopted by the Secretaries of the Interior and Agriculture. The upper Bruneau, from Blackrock Crossing downstream 11 river miles through the old Triguero homestead, qualifies for "scenic" classification. That segment is accessible by road; there are a number of abandoned dwellings, fields along the river have been cultivated, and drift fences are in use in conjunction with current winter livestock use along that stretch of canyon.

**Lateral Boundary**

Conceptually, the boundary should extend laterally at least to the uppermost rim of the canyon on each side of the river. The canyons are deep, in most places very narrow, and contain an ecosystem that is almost independent of the sagebrush flats which extend for miles back from the rims.
VII. MANAGEMENT OBJECTIVES

The following objectives should serve as guides in the future management and use of the canyons:

1. Special efforts should be made to protect the natural environment of the canyons and the unusual geologic and wildlife values which exist there. Threatened and endangered wildlife and vegetative types will be protected in accord with the Endangered Species Act of 1973.

2. The free-flowing condition and high water quality of the rivers should be maintained in accord with State and Federal water quality standards.

3. Recreational use of the area should be in keeping with the capacity of the area to sustain a high quality recreational experience.

4. Access for recreational purposes mostly should be by boat or foot, with only limited motorized travel being permitted, and then only on designated roads.

5. Public use facilities within the canyons should be simple in design and intended only for primitive type recreational use.

6. Special efforts should be taken to assure protection of important archaeological and historical values and to provide for their interpretation. These efforts will be made in the framework of the administering agencies' management plan and in accord with the provisions of applicable historic preservation laws and regulations.

7. Livestock use of the canyons in a manner compatible with the "wild" and "scenic" river values and for sound range management should be continued.

In carrying out the preceding management objectives, the administering agency should go out of its way to involve and cooperate with other public jurisdictions and private interests.
Aerial view of Sheep Creek
VI. ALTERNATIVES

Six alternatives for the future management and use of the canyons have been identified. Two are boundary alternatives, and four are administrative alternatives.

The boundary alternatives are:

1. Inclusion in the National Wild and Scenic Rivers System of the entire 121 miles of river which meet the criteria.

2. Inclusion in the National System of 110 miles - all that meets the criteria except the upper 11 miles of the Bruneau.

The administrative alternatives are:

1. Federal administration as a component of the National System.

2. State administration as a component of the National System.

3. Joint Federal-State administration as a component of the National System.

4. Continue the present status quo by not adding the rivers to the National System.

Description of Alternatives

**Inclusion of 121 Miles in the National System (Boundary Alternative 1)**

**Boundary** - The boundary would encompass the entire 121 miles of river that have been found to meet the criteria. Included are the 71 miles of the Bruneau from Blackrock Crossing downstream to Hot Creek, the 29 miles of the Jarbidge from the junction of its East and West Forks downstream to its confluence with the Bruneau, and the lower 21 miles of Sheep Creek from its Mary's Fork tributary downstream to its confluence with the Bruneau.

Laterally, the boundary would extend to the uppermost rim of the canyon on each side, squared off along legal subdivisions. Along many stretches, the walls of the canyon rise almost vertically from the sides of the river. Along other stretches, especially the upper 11 miles of the Bruneau, the rim lies back from the river as much as one-half mile. The boundary should extend up side canyons far enough to protect their scenic integrity as viewed from the river.

The estimated land and riverfront ownership within the boundaries is as follows:
<table>
<thead>
<tr>
<th></th>
<th>Acres</th>
<th>Percent</th>
<th>Riverfront Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal</td>
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<tr>
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<td>3</td>
<td>6.5</td>
</tr>
<tr>
<td>Private</td>
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<td>8.5</td>
</tr>
<tr>
<td>Total</td>
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<td>100</td>
<td>121.0</td>
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</table>

Extent and Cost of Land Acquisition and Development - Scenic easements should be acquired on those portions of the privately owned lands which adjoin the rivers or which could be developed or utilized in ways that are incompatible with protecting the natural canyon environment.

Use easements should be acquired along the banks of the streams so that the public (boaters, fishermen, hikers, etc.) is assured access to use of those key lands.

A limited amount of privately owned land (approximately 200 acres) may need to be acquired in fee. Privately owned lands along the Bruneau in the vicinity of Hot Creek, its downstream terminus, are needed for campground purposes. Indian Hot Springs, a significant natural phenomenon, and the surrounding lands also should be acquired.

Based on current land uses and values in the canyons, the cost of acquiring the necessary lands or interests in lands is estimated to be approximately $350,000. The basis for this figure is:

- Fee acquisition from willing sellers of 200 acres (estimated) $100,000
- Acquisition of scenic and use easements on 1,100 acres (estimated) 250,000
- Total $350,000

Minimal improvement of existing roads and construction of all-weather roads into two scenic overlooks and to Indian Hot Springs should be undertaken. The proposed scenic overlooks should be carefully sited in order not to disturb mule deer ingress-egress patterns. Close liaison should be maintained between the administering agency and the Idaho Fish and Game Department to assure that proposed facility development does not diminish the opportunity for bighorn sheep transplants into the area.

Small day use areas and/or campgrounds should be provided at a number of sites. Each should be equipped with a safe, reliable source of water and sanitary facilities.

Administrative sites should be provided at two locations, possibly near Murphy Hot Springs and at Indian Hot Springs.
The costs of these developments are estimated as follows:

- Scenic overlooks: $40,000
- Road development and/or improvement: $200,000
- Trail development: $50,000
- Campground development: $100,000
- Administrative sites (2): $50,000
- **Total**: $440,000

The costs of operation and maintenance are estimated to total $85,000 annually, as follows:

- Annual operation cost: $45,000
- Annual maintenance cost: $40,000
- **Total**: $85,000

**Impacts** - The 121 miles of river canyons show few vestiges of man's activities. The environmental quality of the canyons, reportedly, is in better condition today than in years past when livestock and mining use were more intensive. Most of the river is inaccessible from the rim and can be reached only by foot or boat after entry into the canyons at one of the several points of road or trail access.

Existing commercial uses of the canyons are livestock grazing in areas where access and topography permit, and small scale jasper mining in the vicinity of Indian Hot Springs.

Livestock use in amounts compatible with a healthy range, as at present, is an acceptable use of river areas recommended for inclusion in the National System. The only foreseeable impact on livestock use would be its elimination within campgrounds and at points of special natural, historic, or archaeologic interest, as well as the possibility of harassment by recreationists. The latter impact should not be significant since the respective seasons of use are different.

Mining could continue under certain conditions as spelled out in the Wild and Scenic Rivers Act. Subject to valid existing rights, the minerals in Federal lands which are situated within one-quarter mile of a river segment classified as "wild" are withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws. Such withdrawal does not apply along a segment classified as "scenic;" however, mining operations must be consistent with regulations prescribed by the Secretary of the Interior.

Recreational use of the area will be enhanced. Access will be improved and campgrounds and other facilities provided.
Indian Hot Springs
Initially, recreational use can be expected to increase more rapidly than if the area were not included in the National System because of the attention that will be focused as a result of Congressional action and attendant publicity.

The capacity of the area for recreation use is not large. This is true especially of fishing and hunting. The area has the potential to absorb some additional fishing and hunting use, but not a large amount without an adjustment of seasons and limits. A modest increase in such other uses as hiking, photography, and nature study should pose no problems. Eventually, it may be necessary to limit human use once the recreation carrying capacity of the area has been reached.

More intensive recreation use likely will result in increased possibilities of littering, vandalism of archaeological and historical values, range fires, harassment of wildlife, and more wear and tear on roads and bridges. Firewood is abundant at present, but the supply will be depleted in time, especially around campgrounds.

The administering agency should assign personnel to the area for the purpose of managing recreation use and protecting environmental values.

Closer supervision by the administering agency will help to prevent litter and other abuses that reduce the quality of the recreational experience.

The administering agency should assume responsibility for the construction and maintenance of all publicly used roads in the area not in the county road system. During wet weather, the roads become rutty. The wooden bridges deteriorate with use. The private ranchers presently bear the expense of maintaining the roads and bridges, most of which were developed by them but are being used increasingly by the recreating public. The only new roads that should be built are to overlooks along the rim.

The administering agency should make a special effort to protect archaeological and historical sites. Both are being pillaged and vandalized. Additional archaeological surveys and salvage are needed.

Where private lands are acquired in fee or easements are purchased, acquisition should be accomplished so that there will be minimal impact on existing compatible private uses of the area, as for livestock grazing. The Wild and Scenic Rivers Act provides that where 50 percent or more of river area is in public ownership, as with the Bruneau, no lands may be acquired in fee by condemnation. Condemnation may be used only "... when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof."

A scenic easement is defined in the Wild and Scenic Rivers Act, as amended, as the right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the Wild and Scenic Rivers System, for the purpose of protecting the natural qualities of a designated wild, scenic, or recreation river area, but such control shall not
affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement (underlining added). It is a partial interest in land acquired in perpetuity from the owner. Title to the land remains with the private owner, who is compensated for any decrease in land value which may occur as a result of the easement.

The costs of lands or interests in lands acquired would be their fair market value as determined by qualified appraisers at the time of purchase.

Such potential future uses as dam construction and the development of residential subdivisions or other incompatible use of private lands would be prohibited.

Inclusion of the 121 miles of river in the National System would result in no irreversible commitment of resources. The area's environment would be protected and would continue in essentially its present condition. Should Congress later decide that it is in the national interest to assign some other use of the area, this could be accomplished through legislative action.

Inclusion of 110 Miles in the National System (Boundary Alternative 2)

**Boundary** - The boundary would include 110 miles of stream and be identical to the previous alternative with the exception that the upper 11 miles of the Bruneau, from Blackrock Crossing downstream to the lower end of the Triguero homestead, would be excluded (See Map 5). This would eliminate most private lands. The ownership within the boundaries would be as follows:

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<th></th>
<th>Acres</th>
<th>Percent</th>
<th>Riverfront Miles</th>
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<tr>
<td>Total</td>
<td>49,500</td>
<td>100</td>
<td>110</td>
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**Extent and Cost of Land Acquisition and Development** - The amount of lands or interest in lands needing to be acquired would be reduced as compared to the previous alternative. Approximately 200 acres should be acquired in fee (at Indian Hot Springs and at Hot Creek), and easements acquired on 300 acres. The estimated cost:

- Fee acquisition from willing sellers of 200 acres: $100,000
- Acquisition of scenic and use easement on 300 acres: $75,000
- Total: $175,000
INCLUSION OF 110 MILES IN NATIONAL SYSTEM
Developments would be reduced by eliminating one administrative site.

The costs of developments would be:

<table>
<thead>
<tr>
<th>Development</th>
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<tr>
<td>Scenic overlooks</td>
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<td>Road development and/or improvement</td>
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<td>Campground development</td>
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<tr>
<td>Administrative site (1)</td>
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<td><strong>Total</strong></td>
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</tbody>
</table>

Annual costs of operation and maintenance would total $80,000.

**Impacts** - The impact would be identical to that under the previous alternative, except that the 11 miles of Bruneau deleted from designation would lack the protection which would be afforded by its inclusion in the National System. That includes protection from dams, mining, and incompatible use of private lands. In addition, efforts to protect natural, archaeological, and historical values, and to clean up litter along the 11 miles, would be curtailed.

**Federal Administration (Administrative Alternative 1)**

Action to add the Bruneau to the National System under Federal administration would require an Act of Congress. Because well over 90 percent of the lands, whether 121 or 110 miles are included, are administered by the Bureau of Land Management in the Department of the Interior, Congress would likely assign administrative responsibility to the Secretary of the Interior. He, in turn, could be expected to delegate the responsibility to the Bureau of Land Management. The Bureau already administers two of the 12 rivers in the National System, the Rio Grande in New Mexico, and, in conjunction with the U. S. Forest Service, the Rogue in Oregon. Such Federal administration would enhance the Bureau of Land Management's probability of receiving the increased appropriations necessary to adequately protect the river area's special scenic and recreational character and to assist visitors.

**State Administration (Administrative Alternative 2)**

State administration of a component of the National Wild and Scenic River System is possible under certain conditions. Those conditions are: (1) that the State legislature has designated the river as wild, scenic, or recreational; and (2) that operation and maintenance will be without expense to the United States.

Once those conditions have been met, the Governor may then apply to the Secretary of the Interior, who, upon finding that the river qualifies and that the
plans of the State to protect the area are adequate, adds it to the National System by publication of a notice in the Federal Register.

In the case of the Bruneau, State administration is not a viable option at this time. The Bruneau has not been designated as a wild, scenic, or recreational river pursuant to an Act of the Idaho Legislature. In addition, most of the lands adjoining the Bruneau are administered by the Bureau of Land Management. There is no authority at this time which would permit the Bureau of Land Management to transfer those lands to the State, except piece meal over a period of years (the Recreation and Public Purposes Act permits the transfer of no more than 6,400 acres a year to a State).

If circumstances should change so that the State was able to administer the Bruneau as a component of the National System, then the State would be governed in carrying out its acquisition and development by the provisions of the State laws and regulations.

Management of the area would be by whichever State agency was designated the administrative responsibility. Money with which to acquire the necessary private lands or interests in private lands and to develop the area could be available to the State from the Land and Water Conservation Fund on a 50-50 matching basis.

**Joint Federal-State Administration (Administrative Alternative 3)**

Joint administration could be accomplished in one of two ways: (1) the Congress could enact Federal legislation adding the river to the National System and assigning administration for a portion of the area to a Federal agency and for the balance of the area to the State. The lower St. Croix unit in the National System is one such example. (2) The Congress could enact Federal legislation assigning the entire area to a Federal agency, and it in turn could enter into a cooperative arrangement with the State in which each would accept certain responsibilities for acquisition, development, operation, and maintenance.

**Status Quo (No Action) (Administrative Alternative 4)**

As discussed in Chapter IV under Land Ownership and Use, the present management policies along the 121 miles of river canyon have, up to the present, protected scenic and recreational values in a generally adequate manner.

The Bureau of Land Management is preparing management framework plans for the three planning units encompassing the lands within the river valley. Those plans, presumably, will continue or improve upon the management policies and may result in the canyons being declared a primitive area.

The major private owners along the 121 miles of stream who hold title to about 90 percent of the privately owned lands adjoining the streams and have grazing allotments on adjoining Federal and State lands utilize those lands only for a 3-month period as winter livestock range. Their management practices are enlightened and their stewardship of the area is evidenced by the excellent condition of the range.
Present use of the other private lands and of the State lands appears consistent with the proper protection of scenic and recreation values.

The future, however, poses a number of imponderables which may influence scenic and recreational values. There is no assurance that the present compatible uses of private lands will be continued, especially along the upper 11 miles of the Bruneau that are already accessible by roads. At any time, those lands could be sold or converted to other uses such as vacation homesite development similar to the development at Murphy Hot Springs. County zoning could help to provide the necessary safeguards. However there is no zoning in effect at present in Owyhee County.

There is no assurance that the construction of dams or other water development projects will not occur, or that additional mining claims will not be staked and developed within the canyons once restrictions imposed by the Wild and Scenic Rivers Act no longer apply.

There is no assurance that the steadily increasing recreation use of the area can be properly managed and regulated for the safety of the recreationists and for the protection of environmental, archaeological, and historical values. Funds and personnel under existing programs may not be adequate for this purpose.

Analysis of Alternatives

The present high quality of the Bruneau River area will not endure unless special measures are taken to protect it. Recreation use is increasing and will continue to increase as the area's unique qualities become better known. Key portions are in private ownership and vulnerable to incompatible uses, although present use is consistent with the protection of scenic and recreational values.

Inclusion of all 121 miles in the National System under Federal administration appears to provide the best assurance that all of the stream segments which meet the criteria will receive adequate protection. Such inclusion will strengthen the hand of the Bureau of Land Management in protecting the area by providing authority to acquire lands or interest in lands, prohibiting water development, and placing limitations on mining. Inclusion also will increase the possibility that the Bureau of Land Management will receive the funds necessary to properly manage the area.

The first alternative is preferable to the second because it includes and protects the upper 11 miles of the Bruneau, the most accessible segment and the segment with the most lands in private ownership. Automobile and foot access into that segment and the more open nature of the canyon make it available to the most concentrated recreation use. Private lands presently are utilized for livestock grazing with use confined to the three winter months. Recreation use generally can be compatible with continued livestock grazing because the main seasons of respective use do not coincide. Some regulation of recreation use may be necessary if conflicts begin to occur.
The private owners have developed and maintain roads into the area and the bridge at Blackrock Crossing. The bridge was destroyed by high water during the spring of 1975. Increased recreation use of the roads is resulting in inconvenience and added expense to the owners. Under the first alternative, costs of improving and maintaining the roads will be borne by the administering agency. That agency will also be responsible for providing camping space and litter clean up, now a burden on the private owners.

State administration would provide essentially the same protection as Federal administration. This alternative is not feasible at present because the State Legislature has not acted to designate the river as wild, scenic, or recreational as required in the Wild and Scenic Rivers Act.

Joint Federal-State administration would depend upon the willingness of the State to assume a portion of the costs of acquisition, development, operation, and maintenance, and the willingness of the Bureau of Land Management to surrender a portion of its jurisdiction in the area to the State.

Status quo is the option preferred by the people residing near the canyons. This was emphasized by the local people who attended the public information meetings. Existing management arrangements have resulted in the area's present high quality. This reflects both on the responsible stewardship of the private owners and management by the Bureau of Land Management. There are serious questions, however, whether the present management arrangements can continue to adequately safeguard the area under the pressures expected in future years, particularly increased recreation use.

The Bureau of Land Management reports that primitive area designation of the canyons is being seriously considered in its management planning. Such designation would achieve some of the objectives of inclusion in the National Wild and Scenic River System. This designation would not be ruled out by the area's inclusion in the National Wild and Scenic Rivers System.

In the final analysis, inclusion of the 121 miles in the National System under Federal administration appears to provide the best guarantee that the area's unique scenic and recreational values will be properly protected, now and in the future.
IX. RECOMMENDATIONS

Designation

In order to guarantee that the superlative scenic and recreational qualities of the area are perpetuated, and that the impact of increased recreation use is properly planned and provided for, designation of the entire 121 miles of river meeting the criteria for inclusion in the National Wild and Scenic Rivers System is recommended.

The 121 miles found to meet the criteria include the following segments:

- **Bruneau** - from Blackrock Crossing downstream to Hot Creek immediately north of where the Bruneau emerges from the canyon - - - - - - - 71 miles
- **Jarbidge** - from the junction of its East Fork and West Forks downstream to its confluence with the Bruneau - - - - - - - - - - - - - - - - - - - - - 29 miles
- **Sheep Creek** - from Mary's Creek downstream to its confluence with the Bruneau - - - - - - - - - - - - - - - - - - - - - - - - - 21 miles

Boundaries

Lateral boundaries should extend at least to the canyon rim on either side of the streams, drawn along legal subdivisions. An estimated 57,000 acres are encompassed within this area, of which 52,500 acres (92 percent) are in Federal ownership, 3,000 acres (5 percent) are in private ownership, and 1,500 acres (3 percent) are in State ownership.

Classification

It is recommended that all but the upper 11 miles of the Bruneau be classified "wild". These 110 miles of canyon are essentially roadless and primitive. The upper 11 miles of the Bruneau qualify for classification as "scenic". That portion is accessible by road in places and portions have been homesteaded.

Administering Agency

The Bureau of Land Management should be designated to administer the area. It already administers 92 percent of the lands adjoining the 121 miles. The Bureau presently has administrative responsibility over two existing components of the National System--Rio Grande, New Mexico, and Rogue, Oregon, in cooperation with the Forest Service.

Acquisition, Development, and Management

Following addition to the National System, the Bureau of Land Management should have two years in which to carry out more detailed studies of the area and to formulate definite boundaries and a comprehensive management plan. The present report should be used as a general guide by the Bureau of Land Management in the location of boundaries and preparation of a comprehensive management plan.
Present Use

The major portion (90 percent) of the private land is in one ownership. That acreage is strung out along approximately 11 miles of the upper Bruneau, downstream from Blackrock Crossing. Those lands are an integral part of a larger livestock ranching operation and serve as the winter range for the operation. The range is being carefully managed and is in excellent condition. Its present use, both as to the season of use and type of use, is compatible with including the river in the National System.
THE STUDY TEAM
Bruneau River Supplemental Analysis

1. Purpose

This supplemental analysis provides a brief summary of various alternatives for including the Bruneau River and two tributaries in the National Wild and Scenic River System. A display is provided which identifies impacts and effects upon various plan components which would result from implementation of two alternative plans. Impacts are also summarized for projected future conditions which would take place if neither alternative is implemented and the Bruneau River is not added to the National system. The quantitative and qualitative expressions of plan impacts are arrayed into four accounts vis. National Economic Development (NED), Environmental Quality (EQ), Social Well Being (SWB) and Regional Development (RD).

2. National Economic Development Objective Plan

Proposals for water resources utilization which would significantly and, for all practical purposes, irreversibly alter the potential uses of water and related land resources of an area, must consider alternatives which range from developing those resources for optimum national economic return to preserving and enhancing the natural environmental conditions. Similarly, the Principles and Standards planning procedures would be applied to proposals for wild, scenic and recreational rivers and national recreation areas when establishment of such areas would foreclose water resource development opportunity emphasizing national economic development.

Proposals to establish wild, scenic and recreation rivers have the objective of enhancing environmental quality and may not involve an irreversible commitment of resources over the long term or a significant conflict in the preferences of society for the utilization of the water and related land resource. In the planning process, efforts were made to identify conflicts which could provide the basis for a viable national economic development alternative which could meet the tests of acceptability, effectiveness, efficiency and completeness. The search for such conflicts included reviews of previous Comprehensive Framework Plans, contact with agencies which conceivably could have plans being formulated and solicitation of public reaction. There are no plans for utilization of water in the Bruneau River that can form the basis for an economic development alternative which would meet the four required tests. It should be noted that two hydroelectric sites were identified in the study area. These sites are treated as potential benefits foregone under the component of "preserve free flowing river" in the NED account. Study of these sites indicates that they are not presently economically feasible but are shown in an effort to give the decision maker as much information as possible.
3. Environmental Quality Objective

In the absence of a viable national economic development alternative, the two planning alternatives for the Bruneau River relate to the environmental quality objective. The recommended plan would designate 71 miles of the mainstream Bruneau River, 29 miles of the Jarbidge River tributary and 21 miles of the Sheep Creek tributary as a component of the National Wild and Scenic Rivers System. All of the river segments would be classified as "wild" except for the uppermost eleven miles of the Bruneau which would be classified as "scenic". The Bureau of Land Management would manage the river and would develop a comprehensive management plan for the river corridor within two years following designation. Primary emphasis would be placed upon protecting the scenic, geological, biological, archeological and historical features of the river corridor and use of the land for grazing would continue to the extent that it is compatible with protecting the qualities for which the area is designated as a wild and scenic river. Recreation facilities would be provided to support the anticipated increase in use of the area.

An alternative for a shorter segment to be designated has also been formulated. This plan is basically similar to the recommendation except that the uppermost eleven mile "scenic" segment of the Bruneau mainstem would not be included in the national system. This alternative was not recommended because it was felt that this eleven mile segment, being accessible by vehicle or on foot, is the most useable from a recreation standpoint.

The report also considered two management alternatives which were rejected because of institutional constraints. Both of the management alternatives would have similar effects to those tabulated under the "recommended plan."
**BRUNEAU RIVER**

**NATIONAL ECONOMIC DEVELOPMENT ACCOUNT**

<table>
<thead>
<tr>
<th>Component</th>
<th>Without Plan</th>
<th>Recommended Plan</th>
<th>Alternative for shorter segment</th>
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</thead>
<tbody>
<tr>
<td>Preserve free flowing river</td>
<td>Two sites have been identified that have hydroelectric potential but are not economically feasible at this time. These sites could be developed for a total of 13,000 kilowatts of capacity if future economic and financial conditions changed in a way to make the projects feasible.</td>
<td>Two potential hydroelectric sites with a development capacity of 13,000 kilowatts would be precluded from any further consideration. Since the projects are not economically feasible at this time, a determination cannot be made of any future dollar benefits forgone if conditions changed to favor their construction at some future date.</td>
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<tr>
<td>Control land use in the river corridor</td>
<td>The present plans of private landowners apparently do not include subdivision of canyonside property for second home development. However, the great natural beauty of the area contrasted with the monotony of the surrounding plateau would make the canyonside property a logical choice for such development if the transportation network were improved and utilities made available.</td>
<td>Subdivision of 3000 acres of canyonside property for second home development would be precluded. The value of this benefit foregone has not been determined since subdivision is not currently planned by private owners. It is not possible to estimate when conditions would be favorable to conversion of land use but it is possible to ascertain that it is a probability.</td>
<td>Effects are similar to the recommended plan except that only 500 acres would be impacted.</td>
</tr>
<tr>
<td>a) alternate use of land use</td>
<td>0</td>
<td>- $420,000</td>
<td>- $210,000</td>
</tr>
<tr>
<td>b) cost of fee simple and scenic easement acquisitions (1975$)</td>
<td>0</td>
<td>- $551,000</td>
<td>- $546,000</td>
</tr>
<tr>
<td>Provide for high quality outdoor recreation opportu­nities</td>
<td>0</td>
<td>- $155,000 per year</td>
<td>- $155,000 per year</td>
</tr>
<tr>
<td>a) development cost</td>
<td>0</td>
<td>- $551,000</td>
<td>- $546,000</td>
</tr>
<tr>
<td>b) operation and maintenance cost</td>
<td>0</td>
<td>- $155,000 per year</td>
<td>- $155,000 per year</td>
</tr>
<tr>
<td>c) recreation unit day benefit</td>
<td>undetermined</td>
<td>undetermined</td>
<td>undetermined</td>
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### BRUNEAU RIVER
REGIONAL DEVELOPMENT ACCOUNT

<table>
<thead>
<tr>
<th>Component</th>
<th>Without Plan</th>
<th>Recommended Plan</th>
<th>Alternative for shorter segment</th>
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</thead>
<tbody>
<tr>
<td>Preserve free flowing river</td>
<td>All effects are tabulated in National Economic Development, Environmental Quality and Social Well Being accounts.</td>
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<tr>
<td>Control land use in the river corridor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) livestock</td>
<td>Continuation of existing land use for livestock</td>
<td>100 acres of public land no longer used for grazing. 200 acres of privately owned range land, if purchased from willing sellers would also be removed from livestock production. Overall effect on regional livestock production would be minimal.</td>
<td></td>
</tr>
<tr>
<td>b) mining</td>
<td>Area will continue to be available for mineral exploration and development.</td>
<td>Valid and existing claims can continue to be worked. One Jasper deposit is currently being mined. No other significant minerals are known in the river corridor. Lands would be withdrawn from further mineral entry along the wild segments.</td>
<td></td>
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<tr>
<td>c) transportation</td>
<td></td>
<td>Increased recreation use will require additional local funds for road maintenance. Three of the existing access roads are presently maintained by private landowners who should not be expected to shoulder the burden of increased road maintenance costs. Additional access roads to the river corridor will be precluded on the segments classified as wild.</td>
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<tr>
<td>Provide for high quality recreation opportunities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a) local commerce</td>
<td></td>
<td>A very modest increase in business is probable since the majority of additional recreationists attracted by national designation will be from outside of the region. Designation will probably increase the average tourist stay in the area as they add the Bruneau River to other attractions in the area (such as Bruneau Dunes, Jarbridge Wilderness, etc.)</td>
<td></td>
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<tr>
<td>b) cost of local government</td>
<td>Costs of local services will rise because of increasing recreationists but at a slower rate than they would with designation of the river as a component of the national system.</td>
<td>Costs of local government will rise faster than under no plan considerations. The primary component of this rise is law enforcement since the County Sheriff's department will be called on more frequently for search and rescue operations. Acquisition of fee title and scenic easements will reduce local property tax revenues by less than $1000 per year.</td>
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<td>Component</td>
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<tr>
<td>Preserve free flowing river</td>
<td>Idaho does not have a State wild and scenic rivers system and there is no legislation pending to establish one. If Idaho were to adopt a State system in the future, it is unlikely that the Bruneau River would be included since the Federal ownership pattern along the river corridor (92%) would not give the State adequate control over the area. There are currently no water resource development proposals which would affect the free flowing character of the river.</td>
<td>121 miles of river protected and preserved in free flowing condition. 110 miles classified as &quot;wild&quot; and 11 miles classified as &quot;scenic&quot;.</td>
<td>110 miles of river protected and preserved in free flowing condition. The entire reach would be classified as &quot;wild&quot;.</td>
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Control land use in the river corridor | The BLM is in the process of preparing Management Framework Plans for the units which include the Bruneau River. It is probable that the canyon area will be recommended for retention in a natural condition. This would be an administrative decision and could be administratively changed in the future. Also it would have no effect on private lands along the river. | A resource management area would be established which would be drawn on legal subdivisions. The area would include all of the canyon area plus plateau lands falling within the legal subdivision lines. A total of 58,000 acres would be controlled. 54,000 acres are already in public ownership, 200 acres would be purchased from willing sellers and scenic or use easements would be acquired on 300 acres. | Effects are similar to the recommended plan except that a total of 49,500 acres would be included in the resource management area of which 49,000 acres are already in public ownership, 200 acres would be purchased from willing sellers and scenic or use easements acquired on 300 acres. |
**BRUNEAU RIVER**

**ENVIRONMENTAL QUALITY ACCOUNT (Continued)**

<table>
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<tr>
<td>Provide for high quality recreation opportunities</td>
<td>Increased recreation use, over the long term, will cause local water pollution, littering and associated problems. It is anticipated that while recreation use will not increase as rapidly as under plans to designate as a wild river, there will be fewer management opportunities to regulate and possibly limit usage to a level commensurate with the capacity of the resource.</td>
<td>Adverse impacts on the environment resulting from increasing recreation use will be mitigated by implementation of management plans. Public education and environmental awareness would be stressed in interpretative exhibits at river access points, campgrounds would be provided with sanitary facilities to retain water quality at its high level.</td>
<td>Increased use will place considerable pressure on fish and wildlife resources of the river area. Regulations probably will be required that are more restrictive than in other parts of Idaho. This problem will be studied during the master-planning stage if the river is designated as a component of the national system.</td>
</tr>
<tr>
<td>Provide for retention of archeological and Fish and Wildlife Resources</td>
<td>Present exploitation of archeological sites by &quot;pot hunters&quot; in violation of the Antiquities Act will continue.</td>
<td>Increased recreation use will have a moderately adverse impact on archeological resources since sites will be vulnerable to potential tampering and souvenir hunting. Addition of staff to enforce the provisions of the Antiquities Act will lessen the impact but sites can not be watched constantly. Solutions to this problem will be addressed during the management planning phase.</td>
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### BRUNEAU RIVER

#### SOCIAL WELL BEING ACCOUNT

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<tbody>
<tr>
<td>Preserve free flowing river</td>
<td>Availability of this high quality river experience is not assured for future generations.</td>
<td>High quality river experience is assured for future generations. Preservation of the Bruneau River in a wild condition assure a balanced mix of recreation opportunities in Southwestern Idaho and Northeastern Nevada. This area also offers flatwater recreation at reservoirs and designated wilderness in the Humboldt National Forest.</td>
<td>Effects are similar to the recommended plan except that fewer landowners would be affected.</td>
</tr>
<tr>
<td>Control land use in the river corridor</td>
<td>Land use decisions on privately owned land will continue to be made by private landowners.</td>
<td>Easements to assure public access may require use of condemnation authority if there are no willing sellers of easements. Some local landowners and the Owyhee county planning and zoning committee have expressed opposition to the proposal since so much land in Owyhee County is already under government control. Fee simple acquisition would not be accomplished through condemnation proceedings.</td>
<td>Effects are similar to the recommended plan except that only one administrative site would be developed.</td>
</tr>
<tr>
<td>Provide for high quality recreation opportunities a) facilities</td>
<td>Recreation facilities probably will not be provided along the Bruneau River.</td>
<td>Develop primitive campgrounds at Indian Hot Springs, Hot Creek and the confluence of East and West Forks Jarbridge River. Each would be equipped with sanitary facilities to maintain water quality in river. Additional development includes trails, scenic overlooks, road improvement and 2 administrative sites.</td>
<td>Effects are similar to the recommended plan except that only one administrative site would be developed.</td>
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**BRUNEAU RIVER**

**SOCIAL WELL BEING ACCOUNT (Continued)**

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<tbody>
<tr>
<td>b) recreation use</td>
<td>Accurate data on existing use of the river is not available. This makes trend analysis and future projection of use nearly impossible. The greatest determinant in use appears to be the weather since a dry year can preclude boating trips. Consequently, future projections have not been attempted. However, past experience on other rivers indicates that use of nearly all rivers by hikers and floaters has been and will continue increasing.</td>
<td>While future projections of recreation use have not been made, past experience with the Wild and Scenic rivers program indicates that designation as a component of the national system promotes more rapid growth in use than non designation. It is likely that this phenomena will occur on the Bruneau. The fragile nature of the resource may necessitate limitations on the number of recreationists permitted to use the area so that in the long term fewer recreation days of use will be permitted under these plans than would be occurring without designation and a river recreation management plan.</td>
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<tr>
<td>c) trespass and vandalism</td>
<td></td>
<td>The increase in recreation use either with or without national designation is likely to be perceived as adverse by local landowners since the possibility of trespass and vandalism may increase with any influx of visitors.</td>
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Appendix B - Comments--Federal Agencies and State
November 7, 1975

Honorable Thomas S. Kleppe
Secretary of the Interior
Washington, DC 20240

Dear Mr. Secretary:

This is in reply to Deputy Under Secretary Lyons' June 5 letter requesting our views on your Department's proposed report on The Bruneau Wild and Scenic River Study.

We would have no objection to the report recommendation that the river segment studied should be made a component of the national system. We do wish to point out, however, that the report discussion of the economic and social effects of implementing the proposal is rather abbreviated. This is especially so in the area of uses and values foregone under the various management alternatives. Although the report identifies some costs and some economic benefits, the overall net effects of implementing the proposal are not shown.

The information contained in the report about the natural values of the area and the apparently few conflicting uses, favorably supports a wild and scenic designation for the river. Also, development exclusively for recreation and related purposes, as discussed in the alternatives section, may be in the national interest. However, we believe the alternative of optimizing economic development should be displayed in order to provide the decisionmakers a picture of the trade-offs between economic development and the proposal.

We appreciate the opportunity to present our views, and hope that our comments will be helpful in developing your final proposal.

Sincerely,

ROBERT W. LONG
Assistant Secretary
Honorable William Lyons
Deputy Under Secretary of
The Department of the Interior
Washington, D. C. 20240

Dear Mr. Lyons:

Your letter to Secretary Hills of June 5, 1975, requesting review and comment on the proposed report of the Bruneau River, Idaho in accordance with the provisions of the Wild and Scenic Rivers Act, has been referred to our Seattle Regional Office for response.

The Regional Administrator is cognizant of the river study area and the Department's programs and projects relating thereto. If there are substantial concerns in reference to the Department's programs in the area or the findings and recommendations of the study report you will be advised by the Regional Administrator, Mr. James L. Young, 3003 Arcade Plaza Building, 1321 Second Avenue, Seattle, Washington 98101, (telephone: 206 - 442-5414). He will therefore provide the Department's views which are to accompany the report to the President.

We appreciate the opportunity to review and comment on the proposal.

Sincerely,

David O. Meeker, Jr. FAIA, AIP
Assistant Secretary
Mr. William W. Lyons  
Deputy Under Secretary  
of the Interior  
Washington, D.C. 20240

Dear Mr. Lyons:

This is in reply to your letter of June 25, 1975, requesting the Council to review and comment on your Department's proposed Bruneau Wild and Scenic River Study report.

The Council finds that the proposed report does not provide the information required by the Principles and Standards. Information is not presented on the costs of classifying the Bruneau River as a Wild and Scenic River in terms of uses or values foregone, either economic or social, and no information is presented to show that other alternatives were considered and their effects compared. The proposed report fails to identify the extent of coordination with other water resources planning studies in the region. These deficiencies were also noted by the Chairman of the Pacific Northwest River Basins Commission (copy attached).

The Council recommends that an addendum be added to the proposed report to provide a more complete analysis of the impacts associated with a decision to include the Bruneau River in the National Wild and Scenic River System. At a minimum, information should be included in the addendum which describes an abbreviated National Economic Development plan alternative. The beneficial and adverse impacts associated with the NED plan and the recommended plan, and the tradeoffs between the two plans utilizing the system of accounts illus-
trated in the Principles and Standards, should be presented. The Pacific Northwest River Basins Commission may be able to provide assistance in this effort.

The Council appreciates the opportunity to comment on the proposed report.

Sincerely,

[Signature]

Warren D. Fairchild
Director

Enclosure

cc: Donel J. Lane, Chairman
    Pacific Northwest River Basins Commission
Honorable William W. Lyons  
Deputy Under Secretary  
Department of the Interior  
Washington, D. C. 20240

Dear Mr. Lyons:

This is in response to your letter of 5 June 1975 addressed to the Secretary of Transportation concerning the proposed report on the Bruneau River, Owyhee County, Idaho - Wild and Scenic Rivers.

The Department of Transportation has reviewed the material submitted. We have no comments to offer nor do we have any objection to the report.

The opportunity to review this proposed report is appreciated.

Sincerely,

[Signature]

W. R. RIEDEL
Acting Deputy Chief, Office of Marine Environment and Systems
By direction of the Commandant
August 6, 1975

REGION X
Office of Community Planning and Development

Honorahle William Lyons
Deputy Under Secretary of the Department of the Interior
Washington, D. C. 20240

Dear Mr. Lyons:

Subject: Bruneau Wild and Scenic River Study

We have reviewed the report and find no substantial concerns in our program areas based on your findings and recommendations.

As noted in the report, the area is lightly populated and future population projections indicate only a slight increase. Significant housing needs are not anticipated. There are no communities within the Bruneau River Basin identified under our Flood Insurance Program as being in a flood hazard area.

Under potential uses of the River area you note that a diversion application is pending before the Water Rights Division of the Nevada Department of Conservation and Natural Resources. The report states that the effects of such a diversion on the wild and scenic river values of such a diversion are unknown. Does this mean an additional report would be required in the event the diversion is approved of would the wild and scenic rivers designation foreclose the diversion. Perhaps this should be clarified.

Thanks for the opportunity to comment.

Sincerely,

James L. Young
Regional Administrator
Honorable Stanley K. Hathaway  
Secretary of the Interior  
Washington, D.C. 20240  

Reference: 219-Bruneau River  

Dear Mr. Secretary:

This is in response to Deputy Under Secretary Lyons' letter of June 5, 1975, furnishing for the Commission's comments, pursuant to provisions of the Wild and Scenic Rivers Act, your Department's proposed report on the Bruneau River, Idaho.

The proposed report recommends that the following reaches in the Bruneau River Basin be included in the National Wild and Scenic Rivers System: 71 miles of the Bruneau River from Blackrock Crossing downstream to Hot Creek (immediately downstream of where the Bruneau emerges from the canyon); 29 miles of the Jarbidge River from the junction of its East and West Forks downstream to the confluence of the Jarbidge with the Bruneau; and 21 miles of Sheep Creek from Mary's Creek downstream to the confluence of Sheep Creek with the Bruneau.

The Commission staff has reviewed the proposed report of your Department to determine the effects of the recommended actions on matters affecting the Commission's responsibilities. Such responsibilities relate to the development of hydroelectric power and assurance of the reliability and adequacy of electric service under the Federal Power Act, and the construction and operation of natural gas pipelines under the Natural Gas Act.

The Commission staff review shows that there are no existing and no known current plans to construct hydroelectric projects, steam-electric plants, or power transmission lines within the river segments proposed for wild or scenic river designation. As noted in your Department's proposed report, there are two sites with potential for hydroelectric power development in the portion of the Bruneau River proposed for inclusion in the National Wild and Scenic Rivers System. These are The Forks and Sheep Creek sites with the potential for the development of 6,000 and 7,000 kilowatts of capacity, respectively. The sites were identified for possible irrigation and power development in a joint study in 1961 by the Bureau of Reclamation.
and the Corps of Engineers of the Upper Snake River Basin. Neither site is under consideration for development at this time.

The staff review shows also that there are no existing natural gas pipeline facilities and no known plans to construct such facilities in the river reaches proposed for wild or scenic river designation.

Based on its consideration of your Department's proposed report and the studies of its own staff, the Commission advises that it has no objection to the proposed recommendation that the segments of the Bruneau River and certain tributaries thereof be included in the National Wild and Scenic Rivers System.

Sincerely,

John N. Nassikas
Chairman
Honororable William W. Lyons  
Deputy Under Secretary of the Interior  
Washington, DC 20240  

Dear Mr. Lyons:  


From our review of these documents we find that the recreational, scenic, historic, and wilderness values of the two river segments involved have been assessed and evaluated in considerable detail. However, we find that the potential for future energy resource developments in these two areas did not receive similarly detailed treatment, which we believe detracts from the overall value of the reports.  

Although earlier cost benefit studies did not indicate the possibility of economical hydroelectric power potential, recent increases in energy costs may significantly alter those previous conclusions. Accordingly, a detailed economic analysis should be performed which would evaluate the trade-offs should the area under consideration be included in the wild and scenic system. Thus, we must withhold final concurrence pending completion of this analysis.  

We appreciate the opportunity to review these studies.  

Sincerely,  

Frank G. Zarb  
Administrator
Honorable William W. Lyons  
Deputy Under Secretary of the Interior  
Washington, D. C. 20240

Dear Mr. Lyons:

This is in response to your recent letter requesting views of the Department of the Army on the proposed report of the Secretary of the Interior recommending inclusion of the Bruneau River, Idaho in the wild and scenic river system.

Inclusion of the 121 mile reach of the Bruneau River in the wild and scenic river system would not conflict with any studies, plans or authorized projects of the Corps of Engineers.

We appreciate the opportunity afforded us to provide our views on your proposed report.

Sincerely,

MARVIN W. REES  
Colonel, Corps of Engineers  
Executive Director of Civil Works
Mr. Maurice H. Lundy, Regional Director
U. S. Department of the Interior
Bureau of Outdoor Recreation
Room 990
915 Second Avenue
Seattle, WA 98174

Dear Mr. Lundy:

Reference is made to your letter of June 5, 1975 relative to the Bruneau Wild and Scenic River Report. I recommend boundary alternate 1 and administrative alternative 1.

Please review the Idaho Department of Fish and Game recommendation for specific considerations regarding the above alternatives.

The Bruneau River system is a delicate wildlife habitat. The canyon rims will not accommodate large numbers of recreationists without depreciating the wildlife values. Please weigh this in your deliberations for access enhancement.

Sincerely,

[Signature]

CECIL D. ANDRUS
GOVERNOR
Mr. Maurice Lundy  
Bureau of Outdoor Recreation  
915 Second Avenue, Room 990  
Seattle, Washington 98174

Dear Mr. Lundy:

The Idaho Department of Fish and Game submits the following recommendation relative to your Bruneau Wild and Scenic River study report.

The Department recommends boundary alternative 1 and administrative alternative 1 with the following comments:

1. The recommendation for additional scenic overlooks accessible by automobile should be analyzed very carefully. In the event certain areas are selected for bighorn sheep transplants, any developments that attract human activity could be detrimental to the success of the transplants. Mule deer ingress-egress patterns to the canyon could also be affected.

2. The same situation applies to the recommendation for "small day use areas and/or campgrounds should be provided at a number of sites." The potential for proliferating human activity along the canyon rims (particularly mechanized travel) should be reevaluated.

3. We recommend the two administrative sites proposed should be combined with the terminus campgrounds at Black Rock Crossing and Hot Creek. Indian Hot Springs should have campground facilities. This is a launch site for floaters after the Jarbidge and the West Fork of the Bruneau have receded.

In summary, we are aware the designation of the Bruneau River system as a National Wild and Scenic River may well draw additional recreationalists to the area. However, as recreational activity expands in the western United States, it is only a matter of time until most remote free flowing rivers are "discovered." It is our position the designation is needed to protect the river and its immediate environs.
These canyon environments are fragile ecosystems. We earnestly suggest all proposed new developments be kept to an absolute minimum.

Sincerely,

IDAHO DEPARTMENT OF FISH AND GAME

Joseph C. Greenley
Director