

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
REGION FOUR  
San Francisco 5, California

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File: NPS-Inactive  
Proposed  
ETIC

UPPER AND MIDDLE SNAKE RIVER BASIN

OREGON, IDAHO, UTAH,  
NEVADA AND WYOMING

RECONNAISSANCE REPORT  
on  
RECREATION POTENTIALITIES  
IN RELATION TO PLANS FOR DEVELOPMENT OF WATER RESOURCES  
INVESTIGATED BY  
BUREAU OF RECLAMATION  
REGION 1  
and  
U. S. ARMY CORPS OF ENGINEERS DISTRICT  
WALLA WALLA, WASHINGTON

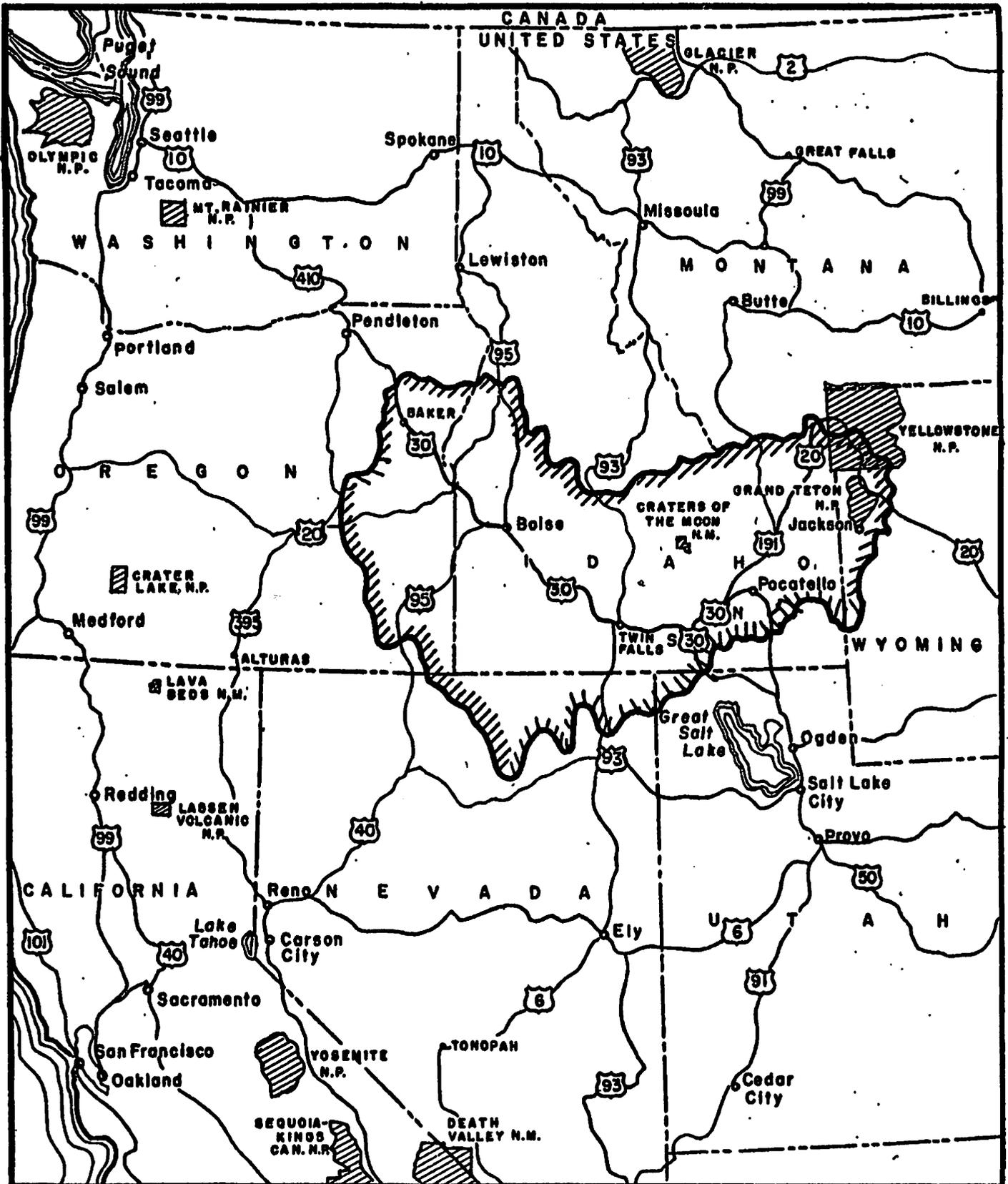
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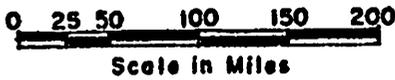
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UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 NATIONAL PARK SERVICE  
 DIVISION OF  
 RECREATION RESOURCE PLANNING  
 REGION FOUR, SAN FRANCISCO-CALIFORNIA

**VICINITY MAP  
 UPPER & MIDDLE  
 SNAKE RIVER BASIN  
 OREGON, IDAHO, NEVADA, WYOMING**

N.P.S. REGION FOUR FOR S.O.P.R.
DATE DEC. 1959
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DRAWING NUMBER <b>RS</b>
<b>SRB-7100</b>

## SUMMARY

The analysis of the recreation aspects of the 52 project considerations covered in this report is based upon indefinite or purely tentative operational and engineering data. The analysis therefore is limited in scope, and is subject to change as further project planning develops.

The Blackfoot Reservoir Enlargement was not investigated, as it was agreed during preliminary meetings between representatives of the Corps of Engineers, Bureau of Reclamation and the National Park Service that the National Park Service report would not include those projects in which the Bureau of Indian Affairs is involved.

### Findings

The Upper and Middle Snake River Basin includes principally the Snake River Plain in southern Idaho and the side drainages of its enclosing mountains. Included also are several non-tributary streams to the north which disappear into the ground upon reaching the Snake River Plain. The Basin limits, as thus defined and as considered in this analysis, extend from the origin of the Snake River in the Wyoming portion of Yellowstone National Park, downstream to a point just below the mouth of the Powder River in eastern Oregon. Tributaries extend into northeastern Nevada, northwestern Utah, and western Wyoming. The greater part of the Basin, however, lies in southern Idaho.

The summer climate within the Basin varies from semi-desert in the lowlands to moist and cool in the mountains. High elevation winter temperatures in the eastern portion reach to well below zero and remain there for extended periods of time. In contrast, the temperatures along the Middle Snake River usually stay well above the zero mark.

The 1950 census indicated that approximately 425,000 people lived in the Basin at that time. It is predicted that this figure will nearly double by the year 2000.

There is a considerable amount of Federal land within the Basin that either has been set aside for its inherent scenic, scientific, historical, or recreation resources, or that is of potential value for varied forms of non-urban, outdoor recreation. The National Park Service administers the Grand Teton National Park and the Craters of the Moon National Monument. Also, a portion of Yellowstone National Park falls within the Basin boundary. The U. S. Forest Service administers 13 national forests which lie within, or partly within, the Basin. In addition, the Bureau of Sport Fisheries and Wildlife administers five areas within the exterior boundaries of the Basin. Sixteen existing reservoirs, that have been impounded by dams

constructed by either the Bureau of Reclamation or the Corps of Engineers, are available for public recreation purposes.

Recreation is fast becoming a major industry in the Basin. Here, as well as in other parts of the country, there has been a phenomenal increase in recent years in the number of persons seeking outdoor recreation.

Overcrowding of recreation areas is as yet only localized. This is mainly due, however, to the spacious character of much of the Basin and the rather sparsely distributed resident population.

Fourteen of the reservoir sites within the Basin are situated wholly within the exterior boundaries of national forests.

### Conclusions

The following projects would adversely affect areas administered by the National Park Service, wilderness areas, or other areas of high scenic, scientific, or historical values:

The major construction features of the Jackson Hole Irrigation Project would be situated almost completely within the boundaries of Grand Teton National Park, and would thereby directly affect the park itself. The project would constitute a major intruding scar and would not only conflict with the preservation of the natural values of the park, but would also detract from the highly scenic Jackson Hole country in the immediate vicinity of the park.

Other projects would affect Grand Teton indirectly. They are the Alpine, Cottonwood, Granite Creek, Elbow, and Blackrock Dam and reservoir sites. In addition, the Blackrock Dam and Reservoir would directly affect the Teton Wilderness Area by backing water a mile or more into the designated wilderness.

The proposed Lower Jackson Hole Channel Project would be located some distance downstream from Grand Teton National Park. Although the project works as presently proposed would not encroach upon the resources inherent to the Park, it is emphasized that any future proposal involving extension of the channel control works upstream into the Park, would detract seriously from Park values and would not be in the public interest from the recreation standpoint. Since the proposal involves only channel improvements, it is not included in the analyses at the back of this report.

The construction of the Mesa Falls Project, near Ashton, Idaho, would adversely affect recreation and scenic resources in the vicinity. Specifically, the project would reduce substantially, or deplete, the present stream flows over both the Upper and Lower Mesa Falls. The former waterfall is 106 feet in height and the latter, 45 feet. The high esthetic values of the falls not only would be essentially destroyed during the recreation season by project operation but the recreation opportunities now afforded by adjacent existing recreation developments also would be greatly reduced.

None of the 52 projects covered herein would affect, either directly or indirectly, any existing State parks.

To avoid any future overuse, such as is being experienced in the Eastern States, the development of recreation facilities in the Upper and Middle Snake River Basin must keep pace with trends of exploding population, increased buying power, and more leisure time. The development of recreation facilities at many of the reservoirs included in this report would greatly relieve future recreation pressures by helping to meet existing and future needs and demands. They would offer the States and local governments opportunity to acquire fine water-associated recreation areas that would be highly beneficial to State or local population groups. The several projects contemplated in southwest Idaho would be especially important to recreation, for this part of the State greatly lacks opportunities for water recreation. Many of the reservoirs under consideration in this section of the Basin would have little value for overnight camping unless good fishing develops. If that development materializes, however, these reservoirs will experience a high visitation for such recreation activities.

Lack of operational data did not permit the Bureau of Sport Fisheries and Wildlife to evaluate fishing potentiality at most of the reservoir sites. Further study by that Bureau will determine whether the respective projects will be detrimental to fishery values, or whether they will improve fish habitat. This factor will have an important bearing on anticipated attendance at the projects, and will indicate whether they will be especially popular, or, conversely, whether they will receive but little recreation use by sport fishermen and others. A second principal factor that would greatly affect the recreation potentiality of the reservoirs, and consequently the estimated cost of recreation development and monetary benefit figures as included in this report, is the relocation of existing roads and highways. When these two factors become more definite, more accurate cost and benefit figures can be developed.

During the field reconnaissance, it was concluded that none of the reservoirs investigated would be of national significance.

Estimated cost of recommended recreation development and net monetary benefit figures are included for 42 of the 52 project sites evaluated in this report. Cost and benefit figures for 7 of the remaining sites are not included because it is felt that the development of these projects would not be in the public interest so far as recreation is concerned. Three projects have non-Federal sponsorship. Totals for the 42 project sites included are as follows:

1. Total Estimated Cost of Minimum Basic Recreation Facilities (Federal Costs)	\$2,581,930
2. Estimated Cost of Replacement of Existing Recreation Facilities which Would be Inundated by Reservoir Impoundment (Federal Cost)	\$ 356,220

3. Estimated Cost of Additional Recreation Facilities (Non-Federal Costs)	\$ 271,737
Total Estimated Cost of Recreation Development	\$3,209,887
4. Total Estimated Annual Attendance with Project Development (Visitor Days)	733,400
5. Total Estimated Annual Attendance without Project Development (Visitor Days)	146,600
6. Total Estimated Net Annual Recreation Benefits	938,880
7. Total Estimated Annual Operation and Maintenance Cost	\$ 150,406
8. Total Estimated Annual Cost of Interim Replace- ment of Non-durable Recreation Facilities	\$ 53,573

The foregoing estimates are based on reconnaissance studies and therefore are necessarily broad estimates only. As such, cost estimates for certain of the recommended facilities are based upon previous estimates or similar development at existing reservoirs. All estimates are necessarily conjectural, as they deal with many intangibles that are difficult to evaluate and involve an attempt to foresee conditions that may or may not materialize. They therefore are subject to such modification as may be required in the course of further studies.

## RECOMMENDATIONS

It is recommended that:

1. Further studies and planning for public recreation use for each reservoir be closely coordinated and carried out cooperatively with other appropriate Federal, State and local agencies and with the agency or agencies best suited to administer the recreation resources.

2. Where applicable, cooperative agreements for administration, operation and maintenance of public use facilities be initiated by the National Park Service. Such agreements should be consummated before impoundment of reservoir waters or construction of public use facilities.

3. The National Park Service be advised of any changes in present plans that would affect the location, construction, or operation of the projects, as well as of decisions as to additional projects or appurtenant structures. Such changes may have a direct bearing on future studies.

4. Interested Federal and State agencies make a survey of the historical values of the proposed reservoir areas to determine which values, if any, should be recorded or salvaged through Historic American Buildings Survey measured drawings, or removal of structures and objects to proper locations or repositories, or by other suitable means. The funds required for this survey probably would not exceed \$5,000. The cost of salvage operations cannot be estimated until preliminary surveys have been completed.

5. Provisions be made for an archeological survey of each reservoir area and for the excavation of a representative number of the most important sites prior to construction of the dams, as determined by representatives of a qualified scientific institution, such as Idaho State College.

6. Minimum reservoir pools be retained at as high elevations as possible to facilitate public recreation use and to realize maximum public benefits.

7. Where not inconsistent with primary reservoir purposes, early acquisition or setting aside of adequate lands to insure adequate recreation development and unrestricted public access to all points of the reservoir shorelines.

8. When clearing vegetation, care be given to preserving all timber and other vegetative growth above the conservation pool elevation, particularly in areas that would be advantageous to future public use development. However, all reservoir sites should be cleared of vegetative growth from the conservation pool elevation to such depth below minimum surface elevation as is considered safe for boating and aquatic sports.

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if project is constructed . . . . .	6,500
Annual monetary recreation benefits . . . . .	\$10,400

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . . . .	\$ 950
Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . .	\$ 205

Remarks

The recreation value of the reservoir will be in direct proportion to the fishing potentiality, with the addition of other limited recreation activities.

Burns Creek Dam and Reservoir

Palisades Project

Project Data

The Burns Creek Dam would be constructed on the Snake River in Sections 10 and 15, T. 3 N., R. 42 E., Bonneville County, Idaho. The reservoir capacity would be 234,000 acre-feet with an active capacity of 117,000 acre-feet and a hydraulic height of 172 feet. Functions would be primarily those of irrigation and power. The dam would regulate releases from Palisades Dam to a uniform flow and thus permit the use of the Palisades Power-plant for unrestricted peaking during that part of the year when releases are not adequate to operate the plant at full capacity.

Description of the Area

The reservoir for the most part will be confined to the narrow canyon of the Snake River Gorge. Upstream from Pine Creek, however, the Snake River Valley widens first into Conant Valley and then into much larger Swan Valley. The upper end of the reservoir would be near the mouth of Rainey Creek at the lower end of Swan Valley, and as a result, Conant Valley would be flooded. Along the northeastern edge of the canyon, the Big Hole Mountains of the Targhee National Forest rise abruptly from the river. The river bottom lands in the reservoir area are characterized by cottonwood-covered flats and islands, but the lower hillsides have a sprinkling of juniper

and aspen mingled with sagebrush and bitterbrush. The higher elevations in the Targhee National Forest are covered with conifers, chiefly lodgepole pine and Douglas fir.

Present Recreation Values

At the present time, the only public recreation facilities available in the area are those provided by the Forest Service. However, there are several areas along the road below the dam site which show evidence of being used for camping and picnicking though no facilities are provided. Two Forest Service camps of considerable size and one small one in addition to an existing Forest Service Ranger Station, would have to be re-located if the reservoir were impounded. A well maintained privately-owned lodge and picnic area located on the east side of the river also would be inundated. This portion of the Snake River Gorge is presently very popular with fishermen, hunters and campers.

Recreation Potentialities of the Project

Construction of this project would result in a net gain as far as recreation is concerned. This would be due to the increase of recreation in boating, fishing, camping and picnicking that could be expected in the vicinity of the dam as well as along the now largely inaccessible main section of the proposed reservoir. However, large fluctuations at certain times of the year would detract from some of the potential recreation values.

Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in June, 1958. Eleven Indian sites were located and recorded. Of these 5 are considered of sufficient importance to merit two summers' archeological work on them at an estimated cost of \$20,000 to \$24,000.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal) . . . . .	\$ 41,760
Estimated cost of replacing (relocating) existing recreation facilities . . . . .	\$ 85,970
Estimated cost of ultimate development (Non-Federal) . . . . .	<u>\$131,737</u>
Total estimated cost of recreation development . . . . .	\$259,467

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if project is constructed. . . . .	80,000
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Estimated present annual attendance . . . . .	5,500
Estimated net annual monetary recreation benefits (80,000 - 5,500 x \$1.60 per visitor day)	\$119,200

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . .	\$ 9,252
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Annual cost of interim replacement of non- durable recreation facilities (25 year sinking fund replacement factor of .0293) . . . . .	\$ 1,025
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Remarks

This reservoir would offer the State of Idaho an excellent opportunity to establish a State park. Since the reservoir would not be of national significance, the State of Idaho would be the logical administrative agency.

Mesa Falls Project

Project Data

This Bureau of Reclamation power project would be located on the Henrys Fork in Section 13, T.10N., R.43E., Fremont County, Idaho, approximately 15 miles north of Ashton. The project is composed of a diversion dam, penstock and powerplant.

Description of the Area

The project would be located in a deep scenic canyon within the Targhee National Forest. The canyon has nearly vertical sides that are covered with thick growths of forest and occasional rock outcropping. The main feature in the canyon is two fine waterfalls which are approximately one mile apart. The Upper Mesa Falls is 106 feet high. The water drops into a deep gorge that has lush growths of lichen and ferns clinging to the rock sides.

The 45-foot Lower Mesa Falls, located on a bend in the river, also drops into a deep gorge. These two falls are very spectacular because of the considerable amount of water that flows over them during most of the year.

Present Recreation Values

The primary recreation value at present is the two scenic falls and canyon. Adjacent to the canyon is a flat area presently being developed into a Forest Service campground and picnic area. Also, an overlook has been constructed adjacent to the highway for viewing the lower falls.

## Recreation Potentialities of the Project

The construction of the project would have an adverse effect on existing scenic and recreation resources in the area.

### Remarks

Natural scenic and recreation resources of this outstanding quality should be preserved for the enjoyment of all the people.

## Warm River Dam and Reservoir

### Project Data

This project includes a dam and reservoir to serve flood control, power and irrigation purposes. The site is located on Henrys Fork of the Snake River (Section 14, T. 9 N., R. 43 E.), Fremont County, Idaho, approximately 10 miles north of Ashton, and immediately upstream from the town of Warm River. The reservoir would have a capacity of 140,000 acre-feet (75,000 acre-feet active capacity) and a hydraulic height of 220 feet.

### Description of the Area

This dam and reservoir, located within the Targhee National Forest, would be situated in a scenic, deep, narrow canyon formed by the Warm River, Fish Creek, and Robinson Creek. The Western slopes are covered with grass, sage, and stands of poplar. The eastern slopes also are steep but covered with thick stands of pine and spruce. This section of the Warm River is 150-200 feet wide, with a gentle current.

### Present Recreation Values

The area has many fine recreation values which include a spectacular scenic canyon and the Warm River with its excellent fishing. Also, the Forest Service presently has an excellent developed campground and picnic area within the reservoir site. Facilities include, in addition to those for camping and picnicking, such facilities as parking adjacent to the river for fishermen and an elaborate recently constructed shelter.

## Recreation Potentialities of the Project

The reservoir created behind the dam would be quite scenic, with its narrow body of water in the deep wooden canyon and arm extending up Fish Creek. The bordering shoreline would be primarily abrupt, rocky cliffs and forested slopes. The present recreation uses in this area consist mainly of hunting, fishing, picnicking and camping. These pursuits will continue if the dam is constructed, and to them would be added swimming and boating on a much larger scale than at present.

## Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) ..... \$65,000

Estimated cost of relocating existing 31-unit Forest Service campground ..... \$40,000

## Monetary Recreation Benefits

Estimated annual attendance (visitor days) if project is constructed ..... 9,000

Estimated present annual attendance ..... 5,000

Estimated net annual monetary recreation benefits (9,000 - 5,000 x \$1.60 per visitor day) .. \$ 6,400

## Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) ..... \$ 2,850

Annual cost of interim replacement of the non-durable recreation facilities (25 year sinking fund replacement factor of .0293) ..... \$ 1,238

## Remarks

The reservoir would make an excellent recreation lake, particularly since the pool formed would be relatively constant. However, a fine scenic canyon and existing recreation facilities would be flooded out. Construction of the dam would require relocation of a highway, Forest Service roads, campgrounds, and the Union Pacific Railroad through the area. There also would be a possible adverse effect on the Lower Mesa Falls.

## Ashton Reservoir Enlargement

### Project Data

The existing Ashton Reservoir is located in Section 28, T. 9 N., R. 42 E., Fremont County, Idaho. The development would raise the height of the existing Ashton Dam and increase the reservoir capacity to 48,700 acre-feet (40,000 acre-feet active). The hydraulic height would be 87 feet. The primary functions of the enlargement would be flood control and power.

### Description of the Area

The existing reservoir is a long narrow body of water formed in a deep canyon. The terrain above the rim of this

canyon is gently sloping to level, devoted to irrigated pastures and other cattle-feeding crops. The exposed canyon slopes above the present water level are rocky and steep, with few trees and shrubs.

### Present Recreation Values

The existing reservoir is popular for fishing and boating. There is good access where U. S. Highways 20 and 191 pass over the upper end of the reservoir. These highways are the main routes to West Yellowstone and Yellowstone Park from the west and southwest. There presently is an existing boat ramp and rental near the highway bridge.

### Recreation Potentialities of the Project

Raising the height of the existing dam would not increase the water surface to any appreciable degree, nor would it enhance recreation very greatly. It would, however, make the water surface more readily accessible during times of high reservoir content.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) ..... \$15,000

### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if project is constructed ..... 8,500

Estimate of present annual attendance ..... 4,000

Estimated net annual monetary recreation benefits (8,500 - 4,000 x \$1.60 per visitor day) .. \$ 7,200

### Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) ..... \$ 1,300

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293) ..... \$ 374

### Remarks

With the improved access to the reservoir, this body of water would become increasingly popular for fishing and other water activities.

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) ..... \$ 610

Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) ..... \$ 264

Remarks

If fishing proves to be good this reservoir would have a much higher visitation potential. However, the extensive draw-down as proposed would expose extensive mudflats, deteriorate fishing potential, and detract from the recreation value in general. Also, the 15 miles of unimproved reclamation roads leading to the reservoir would tend to discourage the average traveler.

Driggs Dam and Reservoir

Upper Teton Project

Project Data

The Driggs dam site is located on the Teton River (Section 24, T. 5 N., R. 44 E.) approximately 5 miles west of Driggs, Teton County, Idaho. The reservoir capacity would be 50,000 acre-feet (35,000 acre-feet active capacity) and would have a hydraulic height of 30 feet. Primary functions would be flood control and irrigation.

Description of Area

This dam and reservoir site is located in a relatively flat section of the Teton Valley. The area that would be inundated by the reservoir is mostly marshlands, presently used for the grazing of cattle. Willows and other shrubs grow along the river banks and are scattered throughout the area. The west side of the reservoir site is formed by a low ridge while the east side is flat marshlands. Few trees grow in the area. Few ranch buildings will be inundated.

Present Recreation Values

The only recreation pursuits in the area at the present time consist of very minor hunting and fishing. There are no existing recreation facilities in the reservoir area at the present time.

### Description of the Area

The reservoir would be located in a deep, scenic canyon on the western slopes of the Teton Mountains. This canyon is very steep sided and heavily forested, with considerable rock outcropping. The level bottom land is also heavily forested with stands of mixed conifers and aspen.

### Present Recreation Values

The canyon is presently a very popular fishing and camping spot. A Boy Scout camp, now under special permit from the Forest Service, and a forest camp of 53 units would require relocation if the project were constructed.

### Recreation Potentialities of the Project

This reservoir would have a fine alpine setting. Access to the water, however, would be difficult because of steep side slopes. Also, the provision of adequate space adjacent to the water for camping and picnicking would be a problem. There are, however, many suitable sites immediately downstream from the dam site.

### Remarks

This project, located in Targhee National Forest, would be small in size but would have a high recreation potential. However, much of this potential could be lost by the proposed large drawdown and lack of a dead storage pool.

## Fremont Dam and Reservoir

### Project Data

The Fremont Dam and Reservoir would be located on the Teton River (Section 30, T. 7 N., R. 42 E.) in Fremont and Madison Counties, Idaho, three miles east of Newdale, and two miles north of State Highway 33. The reservoir capacity would be 315,000 acre-feet (active capacity 200,000 acre-feet), and would have a hydraulic height of 295 feet. Functions of the project would be irrigation, flood control, and power.

### Description of the Area

The dam and subsequent reservoir would be located in the narrow, deep canyon through which the Teton River meanders to converge with the Henrys Fork of the Snake River. The canyon sides are very precipitous with considerable rock outcropping, while the river flood plain is covered with a thick, lush growth of willow, poplar and other deciduous trees and shrubs. Terrain

above the canyon rim is flat benchlands primarily used for dry farming. Many of the side canyons are covered with growths of trees and shrubs; however, these ravines too are steep and precipitous.

### Present Recreation Values

The river banks and flood plain is presently used for fishing and hunting. However, access into the canyon is quite limited. There are no camping or picnicking facilities available at the present time.

### Recreation Potentialities of the Project

Due to lack of vegetation on surrounding lands, camping and picnicking would be very limited. Boating and fishing would be the primary recreation uses. However, due to the precipitous nature of the canyon, access to the water would be difficult, particularly during the summer drawdown season. Access to the area is good.

### Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in June, 1958. Three Indian sites were located and recorded. These were considered of sufficient importance to merit one summer's archeological work on them at an estimated cost of \$6,300.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) ..... \$24,000

### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed ..... 4,500

Estimated present annual attendance ..... 500

Estimated net annual monetary recreation benefits (4,500 - 500 x \$1.60 per visitor day) ..... \$ 6,400

### Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) ..... \$ 1,170

Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) ..... \$ 422

## Remarks

Generally, the reservoir is of local significance only. However, good access from State Highway 33 will undoubtedly be a factor in increasing the visitation to a reservoir of this type.

## Cassia Creek Dam and Reservoir

### Cassia Creek Project

#### Project Data

This non-Federal sponsored dam and reservoir would be located approximately six miles west of Malta, Cassia County, Idaho (Section 24, T.13S., R.25E.) on Cassia Creek. The reservoir capacity would total 6,000 acre feet with no dead storage. Functions would serve both irrigation and flood control.

#### Description of the Area

The reservoir and dam site would be located in a wide valley surrounded by low sagebrush-covered mountains. Most of the valley floor is used for dry land farming or is covered with sagebrush. There are, however, willow and other low shrubs growing along the creek bed. A hard-surfaced highway south of Rupert is routed through the reservoir site and will have to be relocated if the dam is constructed.

#### Present Recreation Values

There are no recreation facilities in the area and present recreation use of the site is of no significance.

#### Recreation Potentialities of the Project

The recreation potentiality is greatly limited due to relatively level terrain. Considerable mudflats would be exposed during periods of drawdown. With no dead storage at times of maximum drawdown, fishing probably would prove to be poor.

#### Remarks

Recreation visitation would be limited to minor local day use due to the characteristics of the reservoir.

## Green Mountain Dam and Reservoir

### Cassia Creek Project

#### Project Data

This non-Federal sponsored dam and reservoir site is located two miles west of Elba, Cassia County, Idaho (Section 1, T.14S., R.24E.) on Cassia Creek, a tributary of the Raft River. Reservoir capacity would be approximately 1,200 acre feet with no dead storage during periods of maximum drawdown. Functions would be irrigation and flood control.

#### Description of the Area

This reservoir and dam site are located in a ravine formed by steep sided, sagebrush-covered mountains. The upper slopes of the mountains are covered with small evergreen trees. Willows and other shrubs grow in profusion along the creek beds.

#### Present Recreation Values

This is a very sparsely populated area, and little known recreation activity takes place in the project area. There are no developed recreation facilities.

#### Recreation Potentialities of the Project

Steep slopes would limit such recreation use as picnicking and camping, in addition to making parking difficult. Since the reservoir would periodically have little or no water, a fish population could not be maintained.

#### Remarks

This reservoir would receive minor visitation due to the physical characteristics of the area, reservoir operation, and inaccessibility.

## Ririe Dam and Reservoir

#### Project Data

This dam and reservoir, proposed by the Corps of Engineers, would be located on Willow Creek in Section 34, T.3N., R.40E., and Section 3, T.2N., R.40E., in Bonneville County, Idaho, 6 miles south of Ririe. The reservoir capacity would be 135,000 acre feet (125,000 acre feet active capacity) and would have a hydraulic height of 165 feet. Project functions would be irrigation, flood control, and power, with flood control of major importance.

## Description of the Area

The Ririe Dam would be constructed across a canyon 350 feet deep through which Willow Creek meanders and eventually converges with the Snake River some 20 miles downstream near Idaho Falls. The canyon is less than 1,000 feet wide at the dam site. However, a mile upstream it widens out to nearly a half mile. The arm extending up Meadow Creek, though, is very narrow. These canyons are very precipitous, with rock outcrops a predominant feature. Vegetation is limited to grass and sage, with sparse groves of poplar and cedar scattered along the canyon slopes. Bottom lands along the creek banks support dense growths of poplar and other shrubs. Above the canyon rim the terrain is relatively level and is utilized mainly for dry farming.

## Present Recreation Values

Present recreation is virtually non-existent due to the limited accessibility of the site. The canyons are not outstanding scenically. However, they are a geological wonder and are interesting in both scope and depth.

## Recreation Potentialities of the Project

Recreation in the area would generally be limited to fishing and boating, since access to the water would be restricted by the rugged terrain of the canyon. Camping would be limited to the canyon floor above the upper reaches of the reservoir or on the flat terrain above the rim rock.

## Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in October, 1958. Eight Indian sites were located and recorded. It is recommended that these sites be tested during one summer's season at an estimated cost of \$4,100.

## Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$ 35,000
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## Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . .	10,000
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Estimated annual monetary recreation benefits (10,000 x \$1.60 per visitor day). . . . .	\$ .16,000
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Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . .	\$ 2,050
Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293) . . . . .	\$ 513

Remarks

Access to the area from U. S. Highway 26 is good, but access to the water is very limited. Normally a reservoir of this type would be of very minor recreation significance. However, with Idaho Falls only twenty miles away, it undoubtedly would receive considerable visitation from this and other centers of population only a few miles to the west.

Eagle Rock Dam and Reservoir

Project Data

This Bureau of Reclamation power development to be located on the Snake River would be composed of a dam and powerplant. The dam would be approximately eight miles southwest of American Falls, in Section 21, T.8S., R.30E., Power County, Idaho. The reservoir would have a hydraulic height of 43 feet, and the powerplant would have a 30,000 Kw. capacity.

Description of the Area

The reservoir site is located on the Snake River in a gorge that varies from vertical rocky bluffs to gentle slopes and benches. Vegetation is sparse on these slopes and is mostly limited to scattered small trees. However, in several isolated locations, thick growths of willow and other shrubs are found along the edge of the river. This section of the Snake River averages one-fourth mile wide, except in one or two places where the gorge is quite narrow.

Present Recreation Values

This portion of the Snake River is popular for fishing. In several locations within the reservoir site, good access into the area is available, including suitable places for picnicking and camping. However, no facilities have been provided. Also, there is good access from U. S. Highway 30 N.

Recreation Potentialities of the Project

This eight-mile long reservoir would be excellent for boating, particularly if facilities were provided for transporting boats between the reservoir and the American Falls Reservoir

a short distance upstream. Also, there are several fine locations for access and areas for camping, picnicking and boat launching.

### Archeological Values

This reservoir area was surveyed by two National Park Service archeologists in 1952, and they presented a report entitled "Archeological Survey of Eagle Rock Reservoir," dated December 15, 1952. It was proposed that two of the sites recorded should be excavated at an estimated cost of \$3,000.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) .....	\$46,800
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### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed .....	25,000
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Estimated present annual attendance .....	6,000
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Estimated net annual monetary recreation benefits (25,000 - 6,000 x \$1.60 per visitor day ..	\$30,400
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### Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) .....	\$ 3,904
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Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) .....	\$ 1,028
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### Remarks

The upper end of the Eagle Rock reservoir would be only 26 miles from Pocatello. Because of this fact, and by reason of good access from U. S. Highway 30 N., the reservoir would receive a high visitation. However, American Falls Reservoir will continue to be the center of water recreation pursuits in this vicinity.

## Rockland Dam and Reservoir

### Project Data

The Rockland Dam would be located on State Highway 37 approximately 4-1/2 miles south of Rockland, Idaho, in Section 28, T. 10 S., R. 31 E., Power County. The reservoir would have a capacity of 7,000 acre-feet (6,500 acre-feet

active capacity) and a hydraulic height of 48 feet. The reservoir would have a 27-foot maximum drawdown. The principal function of this project would be irrigation.

### Description of the Area

The project would be composed of a small, low dam and reservoir located in a shallow, wide valley with gently sloping sides. The lands within the valley are mainly used for dry farming. Sagebrush predominates on the upper slopes while a few trees and shrubs grow along Rock Creek. In addition, some trees have been planted around the present ranch sites for shade and wind breaks.

### Present Recreation Values

Present recreation uses in the project area are negligible, and no recreation facilities have been provided.

### Recreation Potentialities of the Project

Recreation potentialities would be primarily fishing, with limited camping, picnicking and general boating. Large fluctuations in water level as proposed would expose extensive mudflats and many shallow portions of the reservoir. This condition would occur during the summer travel season and would not be conducive to recreation.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$ 15,000
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### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if project is constructed. . . . .	4,500
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Estimated annual monetary recreation benefits (4,500 x \$1.60 per visitor day) . . . . .	\$ 7,200
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### Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . .	\$ 900
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Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . .	\$ 308
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### Remarks

Generally, this reservoir would not be attractive for recreation. However, it would receive some local use from nearby centers of population.

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) ..... \$ 1,310

Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) ..... \$ 422

Remarks

This reservoir would receive minor use because of locality, terrain and accessibility problems. However, if fishing proved to be good the area might have a much higher visitation.

Medicine Lodge Creek Dam and Reservoir

Project Data

This dam would be located on Medicine Lodge Creek in Section 12, T. 11 N., R. 33 E., Clark County, Idaho. The reservoir capacity would be 12,120 acre-feet with an active capacity of 12,085 acre-feet and would have a hydraulic height of 109 feet. Functions of the project would be irrigation and flood control.

Description of the Area

Medicine Lodge Creek lies in a small box canyon cut into the basalt of the Snake River Plain. The principal trees in the reservoir area are small, brushy, willow and birch along the stream banks and scattered aspen groves along the lower hills. Sagebrush occurs on the bench lands and hillsides.

Present Recreation Values

There are no existing recreation facilities in the area that would be flooded. The area is fenced and access to the stream is therefore discouraged if not prohibited. There is a limited amount of picnicking, camping, and hunting in the area; however, Medicine Lodge Creek is very popular for fishing.

Recreation Potentialities of the Project

Due to the small size of the proposed reservoir and its isolated location and distance from centers of population, the recreation potential is considered to be low. Heavy summer draw-down would detract further from the reservoir recreation use.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) ..... \$ 4,000

Monetary Recreation Benefit

Estimated annual attendance (visitor days) if the project is constructed . . . . .	4,000
Estimated present annual attendance . . . . .	2,000
Estimated net annual monetary recreation benefits (4,000 - 2,000 x \$1.60 per visitor day) . . . . .	\$ 3,200

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . . . .	\$ 720
Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . .	\$ 82

Remarks

Visitor use would be primarily local and the numbers would be in direct proportion to the quality of the fishing.

Birch Creek Dam and Reservoir

Project Data

The Birch Creek dam site is located in Section 3, T. 10 N., R. 29 E., Lemhi County, Idaho, on State Highway 28 approximately 70 miles northwest of Idaho Falls. The reservoir would serve irrigation purposes and would have a storage capacity of 24,000 acre-feet (active capacity of 22,000 acre-feet). The reservoir pool would have a maximum fluctuation of 43 feet and a hydraulic height of 82 feet.

Description of the Area

Birch Creek meanders through a grass-covered, gently sloping valley surrounded by the sparsely timbered Lemhi and Bitterroot mountains. Birch Creek is a rapidly moving stream from 50-100 feet wide at the dam site. Sparse growths of trees and shrubs occur along the stream banks. State Highway 28 passes through a portion of the project site.

Present Recreation Values

Fishing is the primary use of the project site, with limited facilities for camping. These recreation activities are in the existing Birch Creek Public Use Area provided by the Idaho Department of Fish and Game.

Recreation Potentialities of the Project

The pool formed by the dam would be in a scenic setting due to the surrounding mountains. However, because of the lack of trees and shrubs on the immediate slopes, the reservoir would have a bleak appearance. Gentle slopes in the reservoir would expose extensive mudflats during the summer drawdown season. Boating, picnicking and camping, therefore, would be a secondary use if fishing proved to be good.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) ..... \$24,000

Monetary Recreation Benefits

Estimated annual attendance (visitor day) if the project is constructed ..... 11,000

Estimated present annual attendance ..... 5,000

Estimated net annual monetary recreation benefits (11,000 - 5,000 x \$1.60 per visitor day) \$ 9,600

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) \$ 1,820

Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) ..... \$ 492

Remarks

Fishing would draw those people willing to drive the 70 to 100 miles from centers of population to the reservoir. Local use would be negligible since the reservoir site is located in a sparsely populated area.

Antelope Creek Dam and Reservoir

Big Lost River Project

Project Data

This dam and reservoir would be located on Antelope Creek in Section 29, T 5 N., R. 29 E., Butte and Custer Counties, Idaho, approximately 15 miles north of Arco. The project would have a hydraulic height of 56 feet. The reservoir would have a storage capacity of 7,000 acre-feet and a fluctuation of 39 feet. Reservoir functions would be both irrigation and flood control.

Description of the Area

The dam and reservoir site is located in a narrow, steep-sided, flat-bottomed valley. Side slopes are free of any appreciable vegetation except for low grass and sagebrush. Some willows and other shrubs grow along the creek banks. The northern slopes are portions that are relatively gently sloping. A county road passes directly through the reservoir area.

Present Recreation Values

Little or no recreation use is made of the reservoir site at the present time. There are no established picnic or campgrounds in the reservoir site.

Recreation Potentialities of the Project

Topography, difficulty of access, and small size of the reservoir would limit the recreation potentialities to fishing, with the possibilities of minor camping and picnicking in a scenic canyon downstream from the dam site.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 20,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 4,000

Estimated annual monetary recreation benefits (4,000 x \$1.60 per visitor day) . . . . . \$ 6,400

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 1,000

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 410

Remarks

The reservoir would receive only minor local use because of limited recreation potentialities.

Lower Rock Creek Diversion Dam and Reservoir

Project Data

This dam and reservoir would be located on Rock Creek in Section 1, T. 10 S., R. 16 E., Twin Falls County, Idaho, and four miles west of the city of Twin Falls. The reservoir formed behind a 50-foot dam, would have an 85,000 acre-foot exchange supply. There would be a relatively constant pool with a water surface of 70 acres. However, the pool would be narrow and approximately one and one-half miles long.

Description of the Area

Rock Creek flows through a 100-foot deep narrow, rocky, irregular canyon at the dam site. The canyon bottom is relatively level, with vegetation limited to grass and some low shrubs on the immediate creek banks. There is an existing privately-owned fish hatchery in the inundation area. Flat agricultural lands predominate the surrounding country above the canyon rim.

Present Recreation Values

Rock Creek receives little recreation use at the present time. It has been a popular fishing site in past years. Recently, however, this activity has been greatly reduced due to polluted water.

Recreation Potentialities of the Project

This small reservoir would, in general, have but limited opportunities for recreation in that access to the water would be difficult due to the steep, rugged, canyon walls. Boating would not be extensive because of the small size and narrow irregular shape of the reservoir pool. Fishing would be the primary recreation pursuit. However, its intensity would be determined by the purity of the water.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$40,000
Estimated cost of ultimate development . . .	<u>\$35,000</u>
Total estimated cost of recreation development	\$75,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . . (Only if purity of the water is improved to support a fish population)	15,000
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Estimated annual monetary recreation benefits  
(15,000 x \$1.60 per visitor day) . . . . . \$24,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of  
construction cost plus \$.10 per visitor day) . . . . \$ 2,700

Annual cost of interim replacement of non-  
durable recreation facilities (25-year sinking fund  
replacement factor of .0293) . . . . . \$ 762

Remarks

The location of this reservoir, so near to large centers of population, and with excellent roads leading to the area, would indicate a rather heavy recreation use. However, impurity of the water will have a direct bearing on visitation.

Clear Lakes Dam and Reservoir

Bruneau Project

Project Data

The Clear Lakes reservoir would be located on the Snake River approximately five miles north of Buhl, Idaho, in Section 6, T. 9 S., R. 15 E., in Gooding and Twin Falls Counties. The reservoir would have a total storage capacity of 1,070,000 acre-feet and an active capacity of 186,000 acre-feet. The project would have a hydraulic height of 315 feet. The principal function would be that of irrigation.

Description of the Area

The Snake River canyon varies in width from  $1\frac{1}{4}$  to 1 mile at the reservoir site. The canyon has a flat bottom with nearly vertical sides. The level flood plain, through which the Snake River meanders, is used mainly for the propagation of trout, for fruit orchards and grazing lands. Natural springs flow profusely out of the canyon wall in many places along this section of the Snake River. The most famous and largest of these are Niagara, Crystal and Ellison Springs. Trees in the river bottom are limited to the planted orchards, Lombardi poplar, willow and Russian olive which grow profusely in certain places.

Present Recreation Values

Fishing here is at its very best. Some upland game is hunted along the river bottom. There are no existing recreation facilities in the area; however, there is good access to this section of the Snake River.

## Recreation Potentialities of the Project

The nearly vertical sides of the canyon would make access to the water for boat launching and other recreation activities difficult; recreation development would be quite costly. In addition, side canyons such as Rock Creek and Cedar Creek also have very steep sides. At the present time, the area has a limited number of roads leading from the rim rock to the bottom of the canyon. However, if these roads were eventually used for public access, there would be little available space for parking of cars and boat trailers.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$170,000
Estimated cost of ultimate development (Non-Federal) cost . . . . .	<u>\$ 65,000</u>
Total estimated cost of recreation development	\$235,000

### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . .	150,000
Estimated present annual attendance . . . . .	30,000
Estimated net annual monetary recreation benefits (150,000 - 30,000 x \$1.60 per visitor day)	\$192,000

### Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . .	\$ 20,100
Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . .	\$ 2,740

### Remarks

This long narrow reservoir is in close proximity to a large population and could conceivably be very popular for fishing and boating. However, access to the water would be a major drawback.

Grindstone Butte Dam and Reservoir

Bruneau Project

Project Data

This offstream storage project would be located on Deadman Creek in Section 36, T. 7 S., R. 10 E., in Elmore County, Idaho. The storage capacity would be 113,000 acre-feet with an active capacity of 102,000 acre-feet. The hydraulic height would be 105 feet, and the reservoir would have a maximum drawdown of 60 feet. The principal function of the project would be irrigation.

Description of the Area

This storage reservoir would be located in a level to gently sloping valley with sides covered with grass and sagebrush. Access to the site is by dirt road through Glens Ferry, 15 miles to the north.

Present Recreation Values

No significant recreation use is made of the area, and there are no existing developed facilities.

Recreation Potentialities of the Project

Access to the water would be easy because of gentle side slopes. There would be adequate sites for camping and picnicking, although camping would not generally draw visitors to the reservoir due to the lack of shade and scenic attractiveness. The large summer drawdown anticipated would discourage boating activities.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$32,000
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Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . . (Assuming that fishing in the reservoir will be fair to good and that the public will have access)	14,000
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Estimated annual monetary recreation benefits (14,000 x \$1.60 per visitor day) . . . . .	\$22,400
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Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . . . .	\$ 2,360
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Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . . \$ 609

Remarks

Most of the recreation potentiality of this reservoir is dependent upon fishing, for if it proves to be good the reservoir will undoubtedly receive heavy use. However, if it proves to be poor, the reservoir will receive but very minor use. Also, the potentiality of the reservoir is dependent upon restrictions placed upon public use by the military, for the entire reservoir is within an Air Force aerial gunnery and bombing range.

Thousand Springs Dam and Reservoir

Project Data

This 200-foot dam would form a 750,000 acre-foot reservoir. It would be located on the Snake River in Section 8, T. 8 S., R. 14 E., in Gooding and Twin Falls Counties, Idaho. The reservoir would have an active capacity of 400,000 acre-feet. Proposed functions of the project are flood control and power.

Description of the Area

The Snake River flows to the north at the dam site. However, within the reservoir area the river flows generally from the east because of several large bends. The width of the Snake River canyon here varies from one-half to two miles and is well over 200 feet deep. In general, the north side of the canyon is very steep and in several places vertical, while the south side, too, is steep in many places. The canyon here is very attractive and interesting with many springs, islands, rapids and thick growths of vegetation. Considerable development exists in the canyon bottom, examples being fruit orchards, three private fish hatcheries, a natatorium, golf course, country club and many private residences. The surrounding country above the canyon is relatively level agricultural land.

Present Recreation Values

Fishing and boating are popular activities on the Snake River in this area, particularly in the Clear Lakes vicinity, at the upper end of the impoundment site. Also, near Clear Lakes, is a golf course and country club. A portion of this development might be inundated by the reservoir.

Recreation Potentialities of the Project

This reservoir would have a high recreation potential because of its large size and constant pool, making it attractive

for boating. Gentle slopes on the south side of the reservoir site would permit good access to the water and suitable sites for picnicking and camping.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$130,000
Estimated cost of ultimate development (Non-Federal cost) . . . . .	<u>\$ 40,000</u>
Total estimated cost of recreation development	\$170,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . .	80,000
Estimated present annual attendance . . . . .	25,000
Estimated net annual monetary recreation benefits (80,000 - 25,000 x \$1.60 per visitor day) .	\$ 88,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . .	\$ 11,900
Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . .	\$ 2,285

Remarks

Access to the reservoir area is excellent and the site has good physical characteristics for recreation. In addition, it is centrally located in relation to a large population segment.

Boulder Flats Dam and Reservoir

Project Data

This project would be located on the Big Wood River in Section 5, T. 5 N., R. 17 E., in Blaine County, Idaho. It includes a dam and reservoir which would impound 101,500 acre-feet (100,000 acre-feet active capacity) and would have a hydraulic height of 220 feet. The maximum fluctuation would be 190 feet. Flood control would be the primary function of this project.

Description of the Area

The project site is located in a scenic valley within the Sawtooth National Forest. The valley bottom is a level meadow surrounded by rugged mountains, steep slopes and precipitous ravines. The southern slopes are covered with a heavy growth of coniferous trees, while the northern slopes are generally grass covered with intermittent stands of hardwoods which occur mostly on level benches. Rock outcrops are numerous.

Present Recreation Values

The present recreation facilities included in this fine scenic valley and meadow are three Forest Service camps, a church campground, a resort development, and several summer homes. Fishing is a popular activity along this section of the Big Wood River.

Recreation Potentialities of the Project

Access into the reservoir would depend upon the relocation of U. S. Highway 93 which presently runs through the valley. Access from the south would be difficult. However, if the highway were relocated along the northern side of the reservoir sufficient public access could be provided to meet the anticipated demand. At only a few places above the high water line are the slopes gentle enough to be suitable for picnic areas or campgrounds.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$175,000
Estimated cost of relocating three existing Forest Service camps (Federal cost) . . . . .	<u>\$150,000</u>
Total estimated cost of recreation facilities . . . . .	\$325,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . .	60,000
Estimated present annual attendance . . . . .	20,000
Estimated net annual monetary recreation benefits (60,000 - 20,000 x \$1.60 per visitor day)	\$ 64,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . . . .	\$ 11,250
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Annual cost of interim replacement of the non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . . \$ 3,077

Remarks

This reservoir site is located but 10 - 15 miles from Sun Valley, Idaho, and would undoubtedly receive considerable use from those people visiting the famous resort and vacation area.

Bennett Creek Dam and Reservoir

Bennett Creek Project

Project Data

This project would be located on Bennett Creek approximately 15 miles north of Mountain Home, Elmore County, Idaho, in Section 9, T. 2 S., R. 8 E. The small reservoir would have a capacity of 2,600 acre-feet with an active capacity of 2,300 acre-feet, and would have a hydraulic height of 67 feet. Principal function of the project would be for irrigation.

Description of the Area

The reservoir site is located in an irregularly shaped valley bordered by grass and sagebrush-covered rolling hills. There are no trees on the side slopes, although a few willows grow along the creek. The bottom lands are utilized for dry land farming.

Present Recreation Values

The only recreation pursuit at present is occasional hunting. There are no established recreation facilities in the reservoir site at the present time.

Recreation Potentialities of the Project

Boating activities would be limited due to the small size and irregular shape of the reservoir. The reservoir would undoubtedly be utilized for activities such as camping, picnicking, and fishing, due to the direct access offered by U. S. Highway 68, which is adjacent to the north end of the reservoir.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$22,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . .	5,000
Estimated annual monetary recreation benefits (5,000 x \$1.60 per visitor day) . . . . .	\$ 8,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . .	\$ 1,160
Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293) . . . . .	\$ 451

Remarks

Although small in size, the reservoir would receive considerable visitation due to the direct access via paved State Highway 68 from Mountain Home. However, it also would receive considerable recreation competition from other reservoirs in the vicinity.

Guffey Dam and Reservoir

Mountain Home Division

Project Data

The Guffey dam site is located on the Snake River in southwestern Idaho, T.1S., R.2W., three miles upstream from the Walters Butte Bridge and six miles north of the town of Murphy. The dam would be an earth fill structure with a height of about 160 feet above the stream bed and a crest length of some 3,000 feet. The reservoir formed by the dam would lie within Owyhee, Canyon, Ada, and Elmore Counties. The reservoir would back water up the Snake River for about 40 miles to the small town of Grandview and would be up to three-quarters of a mile wide. In its upper reaches the reservoir would be little wider than the present river channel. The reservoir, at a maximum pool elevation of 2,354 feet, would have a surface area of 9,400 acres and a capacity of 330,000 acre feet. Functions of the project would be irrigation and power.

Description of the Area

The Guffey reservoir area is, for the most part, confined to a deep relatively narrow canyon. It is bordered by level plateau country on the north, while the south bank is characterized by series of buttes. Near Grandview and extending down-

stream, the reservoir would be located in a wide, flat, river bottom land which is devoted to irrigated crops. The dam site lies across a wide valley bordered on the north by a high butte and on the south by rolling hills. The surrounding country is semi-desert and primarily used for grazing. Sagebrush, greasewood, shadscale, and winter-fat are the principal shrubs found. Scattered small hardwoods grow along the banks of the river and the tributary streams.

Present Recreation Values

Present use of the proposed reservoir area is limited, due to difficult access and the lack of developed facilities. Hunting and fishing are the major activities. The road to Swan Falls Powerplant, located in the reservoir area, provides access to that portion of the river where a few recreation facilities are available.

Recreation Potentialities of the Project

Construction of the Guffey Dam would increase the recreation opportunities of this area. Though the reservoir would be narrow, its scenic location would provide an interesting setting for boat cruises. Of particular value would be the opportunity for camping areas accessible only by boat.

Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in June and July of 1958. Seventy-four Indian sites were located and recorded. This reservoir should be considered the major archeological project in the Snake River Basin at the present time. It will take at least three summer field seasons to perform the necessary archeological salvage at a total estimated cost of \$50,000.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$172,500
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Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . .	30,000
Estimated present annual attendance. . . . .	2,000
Estimated net annual monetary recreation benefits (30,000 - 2,000 x \$1.60 per visitor day) . . . . .	\$ 44,800

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day) . . . . \$ 8,175

Annual cost of interim replacement of non-durable recreation facilities (25-year sinking fund replacement factor of .0293) . . . . . \$ 4,422

Remarks

Impoundment of this proposed reservoir would create a body of water in a semi-arid country where lakes of this nature for aquatic recreation activities are greatly lacking.

Long Tom Diversion Dam

Mountain Home Division

Project Data

This diversion dam would be located in a canyon portion of the South Fork of the Boise River in Section 7, T. 1 S., R. 8 E., in Elmore County, Idaho. The town of Mountain Home, Idaho, is approximately 30 miles southwest from the dam site via State Highway 68 and county roads. The Long Tom Diversion Dam would be an earth-fill structure with a crest elevation of 3,838 feet and a maximum height of 62 feet. The reservoir formed by the dam would be approximately two miles long and up to 1,000 feet wide, with a shoreline of five miles. Maximum and normal water surface elevation would be at 3,830 feet and would be a constant-level pool.

Description of the Area

The reservoir site lies in a rather deep narrow canyon of the South Fork of the Boise River. The river here, about five miles downstream from the existing Anderson Ranch Dam, is clear and cold. The bordering hills are steep, with basaltic outcroppings. The vegetative cover is predominantly sagebrush and grass. A few ponderosa pine occur on the cooler upland slopes. The level lands along the river support fairly good stands of cottonwood. The proposed Long Tom Diversion is located within the exterior boundaries of the Boise National Forest; however, a considerable portion of the land surrounding the shoreline is in private ownership.

Present Recreation Values

There are at the present time no developed recreation facilities within the proposed reservoir. However, there is a small Forest Service camp approximately three-fourths of a mile downstream from the dam site.

Recreation Potentialities of the Project

This proposed reservoir, with its stable water surface, ready accessibility, and attractive setting would offer excellent recreation opportunities for the increasing population in this section of the State. It would furnish a picnicking area for visitors to the Anderson Ranch Dam, where suitable land for public use development is limited. While the area is small, the stable water surface would add greatly to the recreation values of the project.

Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in June, 1958. This land was unsuited for aboriginal occupation and therefore further archeological work in the reservoir is not recommended.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 47,200

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 10,000

Estimated present annual attendance. . . . . 1,000

Estimated net annual monetary recreation benefits (10,000 - 1,000 x \$1.60 per visitor day) . \$ 14,400

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 2,416

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 1,220

Remarks

The development of this proposal would create a small, stable reservoir with an attractive shoreline. It would be popular with fishermen but, because of its size, it is recommended that no motors on boats be permitted.

## Twin Springs Dam and Reservoir

### Project Data

This reservoir would be located on the Boise River in Sections 7 and 18, T. 4 N., R. 7 E., in Elmore and Boise Counties, Idaho. The reservoir capacity would be 410,000 acre-feet, with an active capacity of 280,000 acre-feet and would have a hydraulic height of 405 feet. The reservoir, located entirely within the Boise National Forest, would serve primarily for flood control for the Boise Valley, with power as an additional function.

### Description of the Area

This reservoir would be located in the steep-sided valley through which the Boise River meanders before coming out on the Snake River Plain. The northern slopes of this valley are covered with sagebrush and grass, with a few scattered coniferous trees. However, the south slopes are very heavily timbered. There is very little level terrain on the flood plain or valley floor.

### Present Recreation Values

The reservoir site at the present time is used primarily for fishing and limited hunting. If the reservoir were constructed, a Forest Service Guard Station and camping facilities would be inundated.

### Recreation Potentialities of the Project

The reservoir would have a very scenic setting in this rugged mountain portion of Idaho. Boating and fishing would be the primary recreation pursuits, with limited sites for camping and picnicking.

### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$60,500
Estimated cost of relocating existing Forest Service camps (Federal cost) . . . . .	<u>\$15,600</u>
Total estimated cost of recreation development	\$76,100

### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed . . . . .	7,000
Estimated present annual attendance . . . . .	3,500

Estimated net annual monetary recreation  
benefits (7,000 - 3,500 x \$1.60 per visitor day) . . . \$ 5,600

Estimate of Annual Costs

Annual operation and maintenance charge (3% of  
construction cost plus \$.10 per visitor day) . . . . \$ 2,515

Annual cost of interim replacement of non-  
durable recreation facilities (25-year sinking fund  
replacement factor of .0293) . . . . . \$ 878

Remarks

The close proximity of this reservoir to the centers of population of Boise, Caldwell, Nampa, and vicinity, would normally draw a large visitation. However, the location of Lucky Peak and Arrowrock Reservoirs immediately downstream, and the difficulty of access to this site, would decrease the recreation potentialities it otherwise would possess.

Gold Fork Dam and Reservoir

Project Data

This project is to be located on Gold Fork Creek, a tributary of the existing Cascade Reservoir, in Section 32, T. 16 N., R. 4 E., Valley County, Idaho. Reservoir capacity is 80,000 acre-feet with an active capacity of 78,000 acre-feet. It would have a hydraulic height of 96 feet and a drawdown of 64 feet. The principal function of the project would be that of irrigation.

Description of the Area

The reservoir would be located in Little Valley, approximately 5 miles east of Cascade Reservoir. The scenic Little Valley is nestled among high forested mountains and ridges. Approximately 50 percent of the valley is open, while 50 percent is forested. Flat Creek, Gold Fork, Sloans, and Kennally Creeks all converge in the valley to form the Gold Fork River. The open areas are a combination of meadow land and marsh. Heavy growths of spruce and pine occur on the lower elevations and continue up into the surrounding mountains. The project would be located from 1 to 2 miles from the Boise National Forest.

Present Recreation Values

The area is a popular fishing spot with some associated camping. There are no existing recreation facilities in the area at the present time.

Recreation Potentialities of the Project

Due to the scenic qualities and relatively level terrain immediately above the high water line, this reservoir would be suited to the development of cabin sites and fishing. Also, many suitable sites for campgrounds and picnic areas would be available along its shore. Boating in general would be relatively limited, because of the much larger Cascade Reservoir, located a few miles to the west, which is much more suitable for this activity.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 65,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 5,500

Estimated present annual attendance. . . . . 1,000

Estimated net annual monetary recreation benefit (5,500 - 1,000 x \$1.60 per visitor day) . . \$ 7,200

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 2,500

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 1,238

Remarks

The reservoir would normally have a relatively large recreation visitation. However, nearby Cascade Reservoir will continue to receive the majority of visitation in this vicinity.

Garden Valley, Scriver Creek and Smiths Ferry Dams and Reservoirs

Project Data

The Garden Valley dam site is located in T.9N., R.3E., Boise County, Idaho, approximately 45 miles north of the City of Boise, on the South Fork of Payette River about 3.2 miles above its confluence with the North Fork and 3.8 miles below the mouth of the Middle Fork.

The Scriver Creek reregulating dam would be located on Scriver Creek, a tributary of the Middle Fork, about 7.5 miles north of the Garden Valley dam site in T.10N., R.4E. The Smiths Ferry Dam would be built on the North Fork, Payette River, 3 miles below the town of Smiths Ferry. These units will have a

combined capacity of 2,406,700 acre feet. Functions of this project are irrigation, flood control and power.

### Description of the Area

The Garden Valley reservoir site is situated in a beautiful, elongated mountain valley which is cleared and under cultivation for the production of hay, grain, and pasture. The site is surrounded by timber-clad hills and mountains that rise from 2,000 to 4,000 feet above the valley floor.

The Scriver Creek reservoir site is a mountain meadow situated in a narrow ravine from which heavily forested mountain slopes rise steeply, giving the area a feeling of remoteness and seclusion.

The Smiths Ferry Reservoir would be located in a narrow valley surrounded by relatively steep, forest-covered slopes.

### Present Recreation Values

The Garden Valley area is noted for its rich recreation resources, but public use facilities in the vicinity are very limited. The U. S. Forest Service administers four developed public use areas totaling 17 family units in the Garden Valley site. There are no developments at Scriver Creek. Present use of the area includes an important stream fishery which would be destroyed in the section of the stream inundated by the reservoirs. Very heavy use is made of the region for fishing, hunting, camping, picnicking and other outdoor recreation activities.

### Recreation Potentialities of the Project

The proposed reservoirs, with their many bays and inlets, would offer excellent opportunities for boating, fishing, camping, picnicking, hunting, swimming, and other allied outdoor activities. There will probably be a demand for resort sites, summer home tracts, and areas which could be developed for use by organized groups.

### Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in July, 1958. This included the four dams and reservoirs comprising the project. It was found that Garden Valley Reregulating Reservoir was archeologically sterile. In the Garden Valley Reservoir they located 11 Indian sites, all of which should be tested. In Scriver Creek Reservoir no sites were located and no further archeological work is recommended for Smiths Ferry. It is felt that the total project would merit one summer's archeological work at an estimated cost of \$8,000.

Cost Estimate

	<u>Garden Valley</u>	<u>Scriver Creek</u>	<u>Smiths Ferry</u>
Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$390,000	\$41,200	\$45,720

Monetary Recreation Benefit

Estimated annual attendance (visitor days) if the project is constructed . . . . .	60,000	5,000	7,000
Estimated present annual attendance . . . . .	28,000	500	1,650
Estimated net annual monetary recreation benefits. . . . .			
(60,000 - 28,000 x \$1.60 per visitor day) . . . . .	\$ 51,200		
(5,000 - 500 x \$1.60 per visitor day) . . . . .		\$ 7,200	
(7,000 - 1,650 x \$1.60 per visitor day) . . . . .			\$ 8,640

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . .	\$ 17,700	\$ 1,736	\$ 1,600
Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . .	\$ 9,570	\$ 885	\$ 1,210

Remarks

The Garden Valley, Scriver Creek and Smiths Ferry reservoirs would provide desirable settings for outdoor recreation activities. This is particularly true because of their locations at cool elevations close to large centers of population, together with the high scenic values of the surrounding timbered slopes and spectacular views. No public use facilities are recommended for the Garden Valley Reregulating Reservoir.

Willow Creek Dam and Reservoir

Garden Valley Division

Project Data

The dam would be in Section 2, T.8N., R.2W., in Payette County, Idaho. The reservoir capacity would be 6,500 acre feet, with an active capacity of 6,000 acre feet. The reservoir would have a

hydraulic height of 88 feet and a drawdown of 61 feet. The principal function would be that of irrigation.

Description of the Area

The reservoir would be located in a wide, low-sided, bleak valley. The area in general is made up of rolling hills covered with sagebrush and grass. The valley floor is wide and level, and is used principally for dry farming.

Present Recreation Values

There is very little present recreation use of the reservoir area. There are no existing facilities within the reservoir site.

Recreation Potentialities of the Project

It appears that this reservoir would not receive a large visitation unless it proved to be exceptionally good for fishing. Due to the unattractiveness of the site and the large drawdown, which is anticipated, the area would be relatively undesirable for recreation use. However, the area does have good access.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 32,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 6,500

Estimated annual monetary recreation benefits (6,500 x \$1.60 per visitor day) . . . . . \$ 10,400

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 1,610

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 656

Remarks

Fishing could be a year-round recreation activity here, since the reservoir would be located in the warmer section of Idaho. In general, fishing potentiality is in direct relation to the fish practices proposed for the reservoir. However, this reservoir would receive considerable competition from other

bodies of water in the vicinity, such as Crane, Cascade, Lowell Lake, Black Canyon, and Owyhee Reservoirs.

## Lost Valley Reservoir Enlargement

### Council Project

#### Project Data

Lost Valley Reservoir is located in Section 28, T.19N., R.1W., Adams County, Idaho. Lost Creek is a tributary to the West Fork of the Weiser River. Upon raising the height of the dam, the reservoir would have a total capacity of 50,500 acre feet with an active capacity of 49,200 acre feet and a hydraulic height of 76 feet. The reservoir would serve the dual purposes of irrigation and flood control.

#### Description of the Area

The reservoir site lies just inside the eastern boundary of the western section of Payette National Forest. The site of the reservoir is in a deep valley surrounded by forest-clad mountains, as the name implies. The predominant growth is lodgepole pine, fir and scattered yellow pine. With only a few exceptions luxurious forest growth extends down to the water's edge. Access to the reservoir is by approximately five miles of forest road which leaves U. S. Highway 95 at Pine Ridge, a mile south of Tamarack, Idaho.

#### Present Recreation Values

The excellent hunting and fishing as well as the little-marred beauty of the lakes and forest-covered mountains of west-central Idaho have made the area a nationally-known vacation land which is constantly increasing in popularity. Due to the relatively easy access to the lake, the existing Forest Service campground is quite popular. In addition, many persons have camped indiscriminately along the lake shore. Fishing always has been good at Lost Valley, and the limit of perch can be caught almost at anytime.

#### Recreation Potentialities of the Project

It is not anticipated that increasing the size of the reservoir as proposed will create recreation values or opportunities over those of the present reservoir. Generally, however, a larger body of water will have a more diversified recreation potential than a smaller body of water; this would undoubtedly apply to Lost Valley also.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$125,000
Estimated cost of relocating existing Forest Service campground. . . . .	<u>\$ 30,000</u>
Total estimated cost of recreation development (If it is not necessary to relocate the existing Forest Service campground the estimated total cost of recreation development would be reduced to \$125,000).	\$155,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . .	10,000
Estimated present annual attendance. . . . .	2,000
Estimated net annual monetary recreation benefits (10,000 - 2,000 x \$1.60 per visitor day) .	\$ 12,800

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . .	\$ 4,750
Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . .	\$ 2,930

Remarks

Raising of the water level as proposed would flood out concessioner developments and existing Forest Service campgrounds.

Johnson Park Dam and Reservoir

Hornet Creek Project

Project Data

Johnson Park Damsite is located on Park Creek, a tributary of Johnson Creek approximately 10 miles northwest of Council, Idaho, in Section 36, T.17N., R.3W., Adams County, Idaho. The reservoir would have a capacity of 2,000 acre feet with an active capacity of 1,900 acre feet and a hydraulic height of 31 feet. The principal function would be irrigation. The dam and reservoir would be located entirely within the Payette National Forest.

Description of the Area

The reservoir site would be located in a meadow bordered by a full growth of pine and fir. The open park or meadow is grass-covered and marsh-like in places. A number of small streams flow from the adjoining hillsides and converge in the open area to flow toward Johnson Creek.

Present Recreation Values

There is very little recreation use of the area. There are but a few fishermen and hunters that visit the meadow land each year.

Recreation Potentialities of the Project

This reservoir would be suitable for summer camping, picnicking, fishing and boating. Terrain around the proposed reservoir is such that public camping facilities could be established at one or more places. Recreation use of this reservoir would depend largely upon drawdown during the summer season and fishing potentiality.

Archeological Values

No archeological survey has been made here and none is recommended at the present time.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 14,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 8,000

Estimated annual monetary recreation benefits (8,000 x \$1.60 per visitor day) . . . . . \$ 12,800

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 1,220

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 287

Remarks

If fishing proved to be good, the reservoir might draw a large number of visitors. However, due to remote location and

inaccessibility, as well as the presence of more desirable bodies of water in the vicinity, those visitors seeking water-associated activities other than fishing, would go elsewhere.

## Goodrich Dam and Reservoir

### Main Weiser Project

#### Project Data

This project is located four miles northeast of Cambridge, Idaho, on the Weiser River in Section 20, T.15N., R.2W. Reservoir capacity would be 250,000 acre feet with an active capacity of 200,000 acre feet and a hydraulic height of 153 feet. Maximum drawdown would be 75 feet. Project functions would be both irrigation and flood control.

#### Description of the Area

The dam site is located in a steep-sided, narrow canyon. However, upstream this canyon widens to an average width of one-fourth to one-half mile. Further upstream, where Bacon Creek and Weiser River converge, the valley is well over a mile in width. Bottom lands are generally used for dry farming. Thick growths of willows, cottonwood and shrubs occur intermittently along the river. Uplands are generally steeply sloping, with grass and sagebrush cover. Several farmsteads, the small town of Goodrich, and several miles of railroad track would be inundated if the dam is constructed.

#### Present Recreation Values

Present recreation use of the reservoir site is of little significance, and there are no developed facilities in the area.

#### Recreation Potentialities of the Project

This reservoir possesses good recreation potential because of its large size at both maximum and minimum storage. The large minimum storage pool would provide a relatively good pool of water for boating and other water-associated activities. The reservoir possesses good sites for camping and picnicking, with good access from both sides of the canyon.

#### Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . .	\$110,000
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#### Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . .	25,000
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Estimated annual monetary recreation benefits  
(25,000 x \$1.60 per visitor day). . . . . \$ 40,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of  
construction cost plus \$.10 per visitor day). . . . \$ 5,800

Annual cost of interim replacement of non-  
durable recreation facilities (25 year sinking fund  
replacement factor of .0293) . . . . . \$ 2,095

Remarks

This reservoir would possess a high visitor potentiality because of favorable characteristics. However, the visitation may be decreased due to competitive recreation use at the existing Cascade Reservoir, 25 miles to the east, and Crane Creek Reservoir, 25 miles to the south.

C. Ben Ross Reservoir Enlargement

Little Weiser Irrigation Project

Project Data

Existing C. Ben Ross Reservoir, located about 30 miles northeast of Weiser, Idaho, is an offstream reservoir on the Little Weiser River in Adams County. The plan is to raise the water level 12 feet, thereby increasing the reservoir capacity from 7,800 acre feet to 12,400 acre feet. Under this plan, the enlarged reservoir would have an active capacity of 12,200 acre feet. Maximum draw-down would be 57 feet, with a hydraulic height of 67 feet. Functions of the project are both irrigation and flood control.

Description of the Area

The existing reservoir is located in a small valley on Anderson Gulch, surrounded by rolling hills. The south slopes are rather steep and grass-covered, with spotted growths of sagebrush and other shrubs. The north slopes are much gentler, with scattered trees and shrubs along the high water line.

Present Recreation Values

This reservoir presently is used for boating and fishing. There are no developed recreation facilities at the reservoir.

Recreation Potentialities of the Project

Raising of the water level would have little effect on the recreation usefulness and potentialities of the present reser-

voir. Most of the trees and shrubs along the northern shore would be flooded out. However, they would undoubtedly be replaced in a short time, immediately above the new water line. Recreation would be enhanced to a minor degree by the larger reservoir and would improve fishing and boating opportunities.

Cost Estimate

Estimated cost of minimum recreation facilities (Federal cost) . . . . . \$ 4,800

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 3,000

Estimated present annual attendance. . . . . 1,000

Estimated annual monetary recreation benefits (2,000 x \$1.60 per visitor day) . . . . . \$ 3,200

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . . \$ 444

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 120

Remarks

Raising of the water level in this reservoir would have little effect on future visitation in the area.

Mann Creek Dam and Reservoir

Project Data

This project would be located on Mann Creek in Section 11, T.12N., R.5W., Washington County, Idaho. The reservoir would have a capacity of 13,000 acre feet, with an active capacity of 11,000 acre feet and a hydraulic height of 122 feet. Irrigation would be the principal function of the project.

Description of the Area

The reservoir site lies in a relatively flat flood plain of Mann Creek between rolling sagebrush-covered hills. Terrain in the vicinity of the dam site and the west side of the recommended reservoir is quite steep. There are low trees and shrubs

growing along Mann Creek, while much of the valley floor is grazed by cattle. The remainder is planted to grain and forage crops. The surrounding hillsides are sparsely covered with sagebrush, bitterbrush and mountain mahogany.

Present Recreation Values

There are no existing recreation facilities in the area that would be flooded by the reservoir. Mann Creek and its tributaries upstream provide trout fishing and recreation primarily for local residents. The surrounding country is used by hunters in pursuit of upland and big game.

Recreation Potentialities of the Project

Depending on drawdown and fish management practices, recreation use of the reservoir is expected to be relatively heavy, especially during the spring and early summer fishing seasons. The principal recreation use of the area would be of day use character, such as fishing, boating, picnicking and some swimming.

Archeological Values

Idaho State College, under contract with the National Park Service, surveyed the reservoir area in July, 1958. Three Indian sites were located and recorded. It is recommended that ten weeks be spent at one site, excavating it completely and testing the others at a total estimated cost of \$4,400.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 19,600

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 3,500

Estimated present annual attendance. . . . . 200

Estimated net annual monetary recreation benefits (3,500 - 200 x \$1.60 per visitor day). . . \$ 5,280

Estimate of Annual Costs

Annual operation and maintenance charge (3% of construction cost plus \$.10 per visitor day). . . \$ 938

Annual cost of interim replacement of non-durable recreation facilities (25 year sinking fund replacement factor of .0293). . . . . \$ 460

Remarks

The proposed drawdown of the reservoir during certain times of the year would detract from its recreation value.

Castle Creek Dam and Reservoir

Project Data

This reservoir would be located on Castle Creek in Section 22, T.6S., R.1W., Owyhee County, Idaho. The reservoir capacity would be 8,700 acre feet, with an active capacity of 7,500 acre feet and a hydraulic height of 148 feet. The function of the project would be irrigation.

Description of the Area

The reservoir would be located in a desolate, steep-sided canyon. The canyon slopes are rocky and covered with sagebrush and grass. The area in general lacks trees; those that are existing are willow and low shrubs that grow along the creek bed.

Present Recreation Values

There are no existing recreation facilities in the reservoir site. Hunting and fishing, the only activities, are nearly negligible because of the poor access to the area over ten miles of dirt road; the last one and one-half mile is in poor condition.

Recreation Potentialities of the Project

This reservoir would be relatively undesirable for recreation use. Access to the water would be difficult except for one small area of 6 to 8 acres which would be suitable for boat launching, parking and picnicking. The remainder of the topography is too steep and rugged for any significant recreation use. In addition, approximately one and one-half miles of road would be necessary to render this small relatively level portion accessible.

Cost Estimate

Estimated cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 30,000

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 2,500

Estimated annual monetary recreation benefit  
(2,500 x \$1.60 per visitor day) . . . . . \$ 4,000

Estimate of Annual Costs

Annual operation and maintenance charge (3% of  
construction cost plus \$.10 per visitor day). . . . \$ 1,150

Annual cost of interim replacement of non-  
durable recreation facilities (25 year sinking fund  
replacement factor of .0293). . . . . \$ 615

Remarks

This reservoir would be relatively undesirable for recreation due to the rugged topography and difficult access. However, southwestern Idaho greatly lacks bodies of water for recreation and, if fishing proved to be good, Castle Creek Reservoir could conceivably have a much higher visitation than is now anticipated.

Sinker Creek Dam and Reservoir

Project Data

The dam and reservoir would be located on Sinker Creek in Section 11, T.4S., R.2W., Owyhee County, Idaho. Reservoir capacity would be 3,000 acre feet, with an active capacity of 2,500 acre feet. It would have a hydraulic height of 60 feet and a drawdown of 37 feet. Irrigation would be the principal function of the project.

Description of the Area

This reservoir would be located in a small valley that in the past had been flooded by an existing reservoir. The dam has recently washed away. The reservoir site is surrounded by gently rolling hills that are covered with grass and sagebrush. The valley floor is relatively level, with thick growths of willows and other shrubs growing along Sinker Creek.

Present Recreation Values

Present recreation use is very minor and there are no existing facilities.

Recreation Potentialities of the Project

Due to the barrenness of the slopes and surrounding hills, the reservoir would be situated in a bleak and unattractive setting. There is a large flat area adjacent to the reservoir which would be suitable for camping, picnicking and boat launch-

Jordan Creek Dam and Reservoir

Upper Owyhee Project

Project Data

This dam and reservoir would be located on Jordan Creek approximately 10 miles southeast of Jordan Valley, Oregon, in Section 28, T.6S., R.5W., Owyhee County, Idaho. The reservoir capacity would be 60,000 acre feet, with an active capacity of 57,000 acre feet and a hydraulic height of 132 feet. The principal function of the project would be irrigation.

Description of the Area

The reservoir site lies in an elongated, many-fingered section of the Jordan Creek drainage. It is largely restricted to a relatively narrow canyon, portions of which are under cultivation. Below the dam site Jordan Creek meanders through cultivated agricultural land. Stream bottom vegetation is limited almost exclusively to willow, while the hillsides are typically sagebrush-covered, with a few scattered juniper trees.

Present Recreation Values

There are no existing recreation facilities in the area that would be flooded by the proposed reservoir. Access to the region is poor, consequently recreation use is low, except for very limited upland and big game hunting. Sport fishery resources in Jordan Creek and tributaries are presumably very low.

Recreation Potentialities of the Project

The construction of Jordan Creek Dam and impoundment of the reservoir would provide a primitive, though attractive, recreation area with numerous bays and inlets extending up the tributaries and valleys. The area would be especially attractive to those recreationists desiring isolation. Fishery resources would be expected to improve with reservoir impoundment, and the upstream region would be accessible for boating, fishing, camping and picnicking.

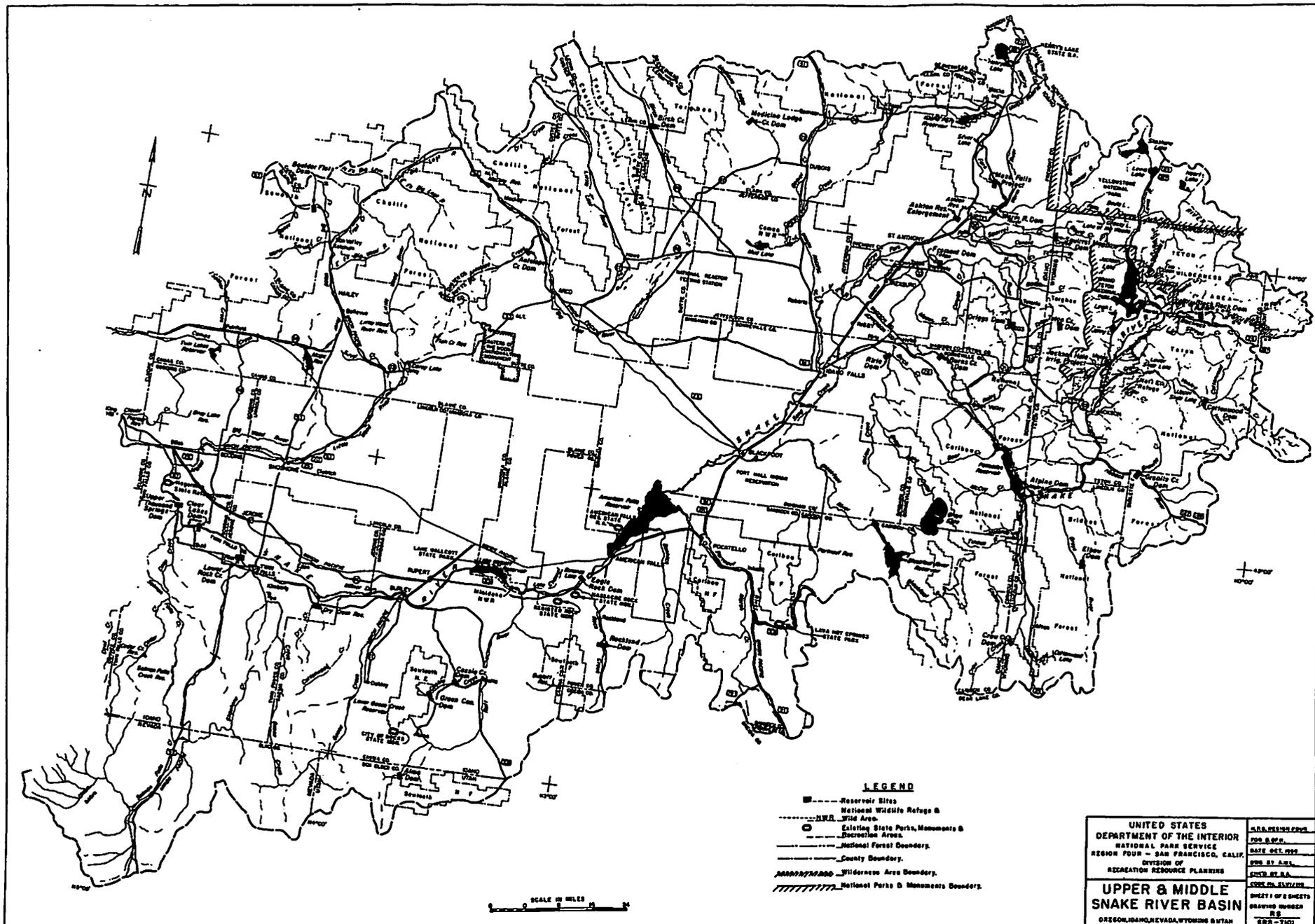
Cost Estimate

Estimates cost of minimum basic recreation facilities (Federal cost) . . . . . \$ 43,200

Monetary Recreation Benefits

Estimated annual attendance (visitor days) if the project is constructed. . . . . 4,500

Estimated annual monetary recreation benefits (4,500 x \$1.60 per visitor day) . . . . . \$ 7,200



**LEGEND**

- Reservoir Sites
- National Wildlife Refuge & NWR Wild Area
- Existing State Parks, Monuments & Recreation Areas
- National Forest Boundaries
- County Boundary
- Wilderness Area Boundary
- National Parks & Monuments Boundaries

UNITED STATES DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE REGION FOUR - SAN FRANCISCO, CALIF. DIVISION OF RECREATION RESOURCE PLANNING		S.A.B. DESIGN 6/69 700 & 670 DATE OCT. 1969 DRAWN BY A.M.L. CHECKED BY A.M.L. SHEET 1 OF 2 SHEETS DRAWING NUMBER RR-7101 GPO 196711
<b>UPPER &amp; MIDDLE          SNAKE RIVER BASIN</b>		
OREGON, IDAHO, NEVADA, WYOMING & UTAH		

**ON MICROFILM**