

MIDDLE FORK SALMON WILD AND
SCENIC RIVERClassification, Boundaries, and
Development Plan

Pursuant to authority delegated to the Chief, Forest Service, by the Secretary of Agriculture dated November 29, 1934 (29 U.S.C. 16210), the classification, boundaries, and development plan for the Middle Fork of the Salmon Wild and Scenic River Area in the Boise, Challis, Payette, and Salmon National Forests, Idaho, are established as hereinafter set forth. The material which follows is all contained in the River Plan for the Middle Fork of the Salmon River, copies of which were furnished the President of the Senate and the Speaker of the House of Representatives on October 1, 1969, in accordance with subsection 3(b) of the Wild and Scenic Rivers Act (82 Stat. 908).

EDWARD P. CLIFF,
Chief, Forest Service.

A WILD AND SCENIC RIVER

The Middle Fork of the Salmon River and adjacent land are classified as a "Wild River" area, except for the Digger Falls roadhead area, which is classified as a "Scenic River" area, under the provisions of the Wild and Scenic Rivers Act.

Wild River areas are defined in the act as "Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America."

For a Wild River area, the term "generally inaccessible" is interpreted to mean free of roads, airstrips, and other provisions for motorized overland access. The term "essentially primitive" is interpreted to mean free of habitation and other substantial evidence of man's intrusion. Exceptions to these interpretations are that an occasional habitation, low-standard road, airstrip, or other kind of improvement—at infrequent intervals and already established—will not preclude "wild" classification, provided the effects are limited to the immediate vicinity of the exceptions; that the river otherwise meets the criteria for "wild;" and to the users along the river it appears "wild" for the rest of its length.

The short Scenic River section extends from Digger Creek to approximately one-half mile below Digger Falls. Scenic River areas are defined in the act as "Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads."

The boundary of the Wild and Scenic River area is described in detail in the appendix. Approximately 32,000 acres are within the boundary.

The Middle Fork Salmon River in central Idaho flows through one of the deepest gorges in North America. The river is born at the confluence of Marsh and Bear Valley Creeks, some 20 miles northwest of Stanley, and plunges northeasterly 104 miles to join the Main Salmon River.

For its lower 80 miles, the Middle Fork flows through the Idaho Primitive area. This 1¼-million-acre area was established in 1931 to preserve and perpetuate natural conditions. The Primitive Area is being reviewed as to its suitability or unsuitability for preservation as Wilderness in accordance with the Wilderness Act of 1964. That portion of the Wild River within the Idaho Primitive

Area is subject to the provisions of both the Wild and Scenic River Act and the law and regulations governing primitive areas. In case of conflict, the more restrictive provisions apply.

The Middle Fork is to be administered by the Forest Service in a manner that protects and enhances the values which caused it to be included in the National Wild and Scenic Rivers System. To accomplish this, the river area will be managed to:

- Maintain the natural free-flowing condition of the river.
- Protect water quality.
- Protect scenic, recreational, geologic, fish and wildlife, historic, archeologic, and other similar values.
- Maintain the essential primitive conditions of the shorelines.
- Provide recreation opportunities in harmony with the wild and scenic nature of the river.

NATURE'S HANDIWORK

IMPASSABLE CANYON

The variable white, pink, and grey granites of the Idaho Batholith dominate the upper reaches of the river. Near the junction with the Main Salmon, gneiss, porphyry, and schists appear in the bedrock mix. Through this the river has carved the steep-walled "Impassable Canyon" thousands of feet deep. Natural geologic erosion continues on many of these steep slopes. Alluvial fans at the mouths of canyons and narrow terraces along the edge of the river provide limited flats within the canyon.

WHITE WATER

Bear Valley and Marsh Creeks join to form the Middle Fork of the Salmon River. Water from Sulphur, Pistol, Indian, Loon, Camas, and Big Creeks, and Rapid River, along with numerous other side streams, add to the river as it flows some 104 miles to the Main Salmon River. The natural character and water purity of the Middle Fork are dependent upon maintaining the continuing purity of all the tributaries.

Free flowing—the river is characterized by stretches of comparatively smooth water abruptly and invariably followed by one or more swift and rocky rapids. Seasonal fluctuations are normal. High water every spring rearranges some of the sandbars that provide camp spots during the low water of midsummer and fall.

VEGETATION AND CLIMATE

The climate and vegetation change with elevation. Near the headwaters, at 8,400 feet elevation, Douglas-fir, lodgepole pine, and Engelmann spruce form a forest canopy which is broken by lush meadows and open south-facing slopes. Cool summer temperatures and heavy winter snows also favor lupine, penstemon, wild geranium, and bunch grasses in this higher country.

Temperatures warm and precipitation lessens down-river. Ponderosa pine replaces Douglas-fir, and steep slopes support mountain mahogany, bitterbrush, and other plants and shrubs adapted to the heat and drought. In the deep lower canyon, the summer sun raises temperatures into the 90's. Towering cumulus clouds often appear in mid-afternoon, bringing thundershower activity and lightning storms. Light snowpacks are normal in winter, attracting wildlife from high country to spend the winter.

WILDLIFE

Elk, mule deer, bighorn sheep, mountain goat, cougar, and black bear are the larger wildlife species. A variety of fur bearers and smaller mammals also live near the river. Cougar, coyote, and bobcat fill a key niche in

the natural ecology of the Middle Fork by limiting big game populations.

Blue, ruffed, and Franklin grouse are native game birds. Chukar and Hungarian partridge have been introduced and are seen in the lower canyon. Most common of the many species of small birds are the "bobbling" water ouzel, belted kingfisher, western tanager, and Idaho's State bird, the mountain bluebird.

Rattlesnakes are the most prominent reptile, particularly in the lower elevations.

SALMON AND TROUT

Nearly one-third of the migrating chinook salmon in the Salmon River drainage spawn in the Middle Fork and its tributaries. The steelhead, an ocean-going trout, migrates up the river during fall and winter to spawn each spring. The native cutthroat, Dolly Varden, and rainbow trout are major fishing attractions. Whitefish are present and appear to be increasing in number.

MAN IN THE CANYON

INDIAN TIMES—SHEEPCATCHERS AND PROSPECTORS

In the early 1880's, explorers and trappers found Shoshone Indians living in the Salmon River Mountains. Recent archeological analysis of bonechips, tools, and mussel shells, found in rock shelters, confirms that primitive man probably lived in the rugged canyon 8,000 years ago.

In 1879, the Sheepcutter campaign was launched from Fort Boise to subdue the Indians, who were accused of murdering several settlers and Chinese miners. The so-called Sheepcutter Indians—actually Shoshone Indians—had been joined by Indian refugees of the Blackfoot War. Captain Reuben F. Bernard (later made a general) led the trek through the unexplored canyon of the Middle Fork, which he called the "Impassable Canyon." The troopers suffered hardships and mishaps, including one skirmish with the Indians and the death of one soldier. Some weeks later, two lieutenants succeeded in negotiating the Indians' surrender.

PROSPECTORS AND HOMESTEADERS

Prospectors found little to hold their interest in the isolated Middle Fork Canyon. Ore in the nearby Yellow Jacket and Thunder Mountain districts proved more tempting. Several homesteaders moved into the area in the early 1900's to raise food for the nearby miners. During the same period, the National Forests were created. In 1931 much of the Middle Fork drainage was designated by the Chief of the Forest Service as a part of the Idaho Primitive Area.

During the 1940's, the Idaho Fish and Game Department purchased several of the private ranches to provide more forage for wintering big game.

RECREATIONISTS TODAY

As the airplane came into use, some homesteaders' pastures became crude landing fields. Firefighters used this new mobility for supplies and smokejumper transportation. Today, flights by experienced mountain pilots are routinely made to half a dozen improved airfields along the river to transport boaters, hunters, fishermen, mail, and supplies. The airfields are, however, tricky. Special care and pilot skills are needed to safely use them.

A few remaining rustic ranches have become headquarters for packers and guides, guest ranches, and recreational homesteads.

In 1930, running the rapids below the mouth of Wilson Creek was termed "suicidal." But, with the advent of the rubber boat and white-water kayaks, the adventurous can now regularly run the full length of the Middle Fork. Guided float-boating

parties are a regular service for those who wish to enjoy the wild and scenic river.

The river has been little changed by the activities of man. It remains free flowing with its banks largely in natural condition.

PROTECTION AND DEVELOPMENT

WATER—FREE FLOWING AND HIGH QUALITY

The Middle Fork, fed by many large creeks and smaller streams, has been classified a Wild River, except for a short section of Scenic River near Dagger Falls, because of its high quality water, free-flowing condition, and other values. Watershed conditions are generally good, with much of the area protected by forests, shrubs, and grass. On some areas, due to the steepness of the terrain and unstable soil condition, the rate of natural erosion and sedimentation is quite high.

The clear water in the Middle Fork is produced mostly on high mountain watersheds near the headwaters and tributaries of the river, outside the Wild and Scenic River area. These watersheds receive more than 60 inches of precipitation per year, mostly in the form of snow.

A few tributaries, due to mining or other activities outside the area, contribute or have the potential for contributing siltation or pollution to the river.

A few small water diversions have been installed, mostly on tributaries within or near the area. The water diverted from these tributaries is used for irrigation, for operation of small hydroelectric plants, and for domestic purposes on National Forest, State, and private lands. Water is pumped directly out of the Middle Fork for irrigation on the Forest Service landing field at Indian Creek.

Objectives of the Forest Service in administering the water resource in the Wild and Scenic River include maintaining or restoring satisfactory conditions in the watersheds; maintaining riverbanks in essentially primitive conditions; providing exceptional opportunities for river-oriented recreation; and keeping the waters of the Middle Fork in an unpolluted, free-flowing condition, with no new impoundment, diversion, straightening, riprapping, nor other modification.

After midsummer, the waterflow drops off, and it is difficult to float the upper river except with the smallest float boat. In late summer, floating use is almost entirely below Indian Creek. Since this part of the river can be reached only by trail or air, such use is usually by those who are flown or packed in.

The tributaries outside the Wild and Scenic River and outside the Idaho Primitive Area may be investigated for possible opportunities for water storage to permit low flow augmentation. If such opportunities exist, the desirability of development would be evaluated.

RECREATION—AN OPPORTUNITY

The Middle Fork Salmon Wild and Scenic River is well known nationally for outstanding opportunities it offers for white-water float boating, fishing, and general enjoyment of a rugged, back-country river canyon. Outstanding attractions include the deep, emerald-hued pools of the river, alternating with swift currents and white-water rapids; the scenic mountainous background; the abundant wildlife; and the feeling of solitude the visitor can find in this remote area.

Float boating the river during the summer months is very popular. Most boaters float the river with commercial boat outfitters. Others float in private parties. Large rubber rafts are used by most floaters. Boaters spend 5 to 7 days on the river and enjoy fishing, camping, and sightseeing. Boating use is increasing each year and will likely double by

1975. No boat motors of any type are permitted.

Many people are flown into the various landing fields in the area to fish for salmon and steelhead trout or to hunt for mule deer, elk, bighorn sheep, and mountain goats. Big game animals are plentiful in and near the Wild and Scenic River area. Aircraft use is increasing each year.

Visitors can drive to the Middle Fork area via the Dagger Falls road, which enters the Scenic River area approximately 8 miles down river from the origin of the Middle Fork. Two campgrounds and a boat-launching ramp are located within the Scenic River area at the end of this road. Boaters, campers, fishermen, and sightseers are presently using these facilities. Some modification of these facilities is needed to protect Scenic River values in the Dagger Falls area and to alleviate conflicts in uses, principally between single-day and overnight use. Such modification may include removal of overnight camping facilities from the immediate vicinity of Dagger Falls and expansion of such facilities in other nearby sites within or adjacent to the Scenic River area. Improvement or relocation of the boat ramp facilities and enlargement of the parking and boat-unloading areas may be desirable.

Some trail machine users have enjoyed riding the trails from the headwaters of the Wild and Scenic River downstream to the Idaho Primitive Area boundary. With classification of the area as a Wild and Scenic River, trail machine use is permitted only on the main roads in the Dagger Falls area.

Trail use by backpackers attracts many visitors each year. Organized groups of Boy Scouts and others enjoy hiking in the remote Middle Fork area. The trail from Dagger Falls upstream is particularly attractive to small family groups who may enjoy the pristine beauty and solitude of the upper river reaches.

The Forest Service will administer the recreation resource of the Middle Fork Salmon River to provide relatively primitive recreation opportunities in harmony with the nature of the river, and to protect the scenic, fish and wildlife, archeologic, and other outstanding recreation values.

During 1969, approximately 1,600 people floated the Middle Fork. Recent trends indicate that float boating use will likely double by 1975. The most concentrated use of the river is in the vicinity of Dagger Falls. Approximately 4,000 people visit this area annually. These visitors enjoy fishing for salmon and trout, camping, picnicking, hiking, sightseeing, and other recreation activities. An estimated 3,000 people are flown into the various landing fields each year to enjoy fishing and other river activities. Trail riding and hiking have attracted nearly 1,000 visitors annually in recent years. Another 400 people come to the river area to hunt for big game and other wildlife species near the river. By 1975, an estimated 15,000 visitors may seek to enjoy the Wild and Scenic River area annually.

The river area has a limited capacity for accommodating recreation use while retaining those special qualities that qualify it as a Wild and Scenic River. Excessive human use by those attracted to its rugged beauty and everchanging scene can severely damage or otherwise adversely affect the very things they have come to enjoy.

An objective of the Forest Service is to develop criteria and establish guidelines as to the optimum use capacity of the area consistent with Wild and Scenic River values. Management efforts will be focused on proper distribution and use of the area. When it becomes necessary, a limitation on the amount of use will be needed.

Seventeen camp spots have been minimally developed along the river to provide boaters and other visitors with essential sanitation facilities. Toilet facilities are planned for 19 additional camp spots by 1975. Camp spot development within the Wild River area will conform to Forest Service Wilderness standards. Although many visitors who camp along the river prefer to use the minimally developed camp spots, they are not required to do so.

A BETTER UNDERSTANDING

Many natural features and archeological and historical sites are of interest to the Middle Fork visitor. A limited amount of information on these is available in Forest Service maps and brochures of the area. Additional information can be obtained from Forest Service personnel at headquarters, along the river, and from commercial boaters.

Interpretation of Wild and Scenic River features will be done primarily through expanded use of brochures, maps, other printed material, and signing. New signing within the Wild River area will conform to Wilderness signing standards. The goal is to provide a better understanding of the Middle Fork for visitors, but accomplish this in a manner that does not detract from Wild and Scenic River values. The feasibility of constructing an appropriate and safe observation site at Dagger Falls will be studied.

TRAVEL TO AND THROUGH

Visitors can drive directly to the Middle Fork over the Dagger Falls road which enters from Bear Valley. Major road access to the vicinity is provided by State and Federal highways.

Eight landing fields within the Wild River area provide access to visitors who wish to be flown into the area. Several of these landing fields are generally considered usable for emergency use only. All landings require special techniques and mountain pilot skill. Small aircraft charter service is available in several nearby towns.

Any landing field found to be nonessential or undesirable for meeting administrative or visitor needs in the Wild River area may eventually need to be phased out. Access for big game harvest, fire control, and other needs will be carefully analyzed before any closure is implemented.

Many trails originating at roadheads well outside the Wild River area provide access to it. A foot and horse trail closely parallels the Middle Fork, from its origin to Big Creek, on one side of the river, and in some segments on both sides. Several trail bridges span the river.

Water transportation for recreational purposes is of national significance. Float boating is the only practical means of transportation through the deep narrow canyons of the lower river area.

The Forest Service will maintain or develop needed facilities for appropriate access to and within the Wild and Scenic River area.

Trail machine use has been fairly popular on the trail within the upstream portion of the Wild and Scenic River area outside the Idaho Primitive Area. Such use generally is not in harmony with other uses in this Wild and Scenic River area and will be terminated. Trail machine use will be permitted only on the main Dagger Falls road.

WILDLIFE AND FISH

Maintaining a balance between the big game and its limited winter range is a major challenge of both game and land managers. Idaho Department of Fish and Game biologists and Forest Service officers work together to maintain and improve big game habitat. Population control, a key to big game management in this remote area, is dependent

upon hunters and the natural activities of cougar, coyote, and other carnivores.

The needs of all species of wildlife, from the chipmunk to the mighty elk, receive management consideration. Special management attention is given to the small population of bald eagles, a rare species.

Chukar and Hungarian partridge are introduced species thriving along the river. Wild turkeys were planted along the Main Salmon River and may eventually spread to favorable habitat along the Middle Fork. No new exotic species will be introduced into the Wild and Scenic River area.

The clean gravel bottoms of the Middle Fork and its tributaries are prime spawning beds for chinook salmon and steelhead trout. Native cutthroat, rainbow, and Dolly Varden trout are popular sports fish for the float boaters. Fishing pressures on these trout and the increasing population of whitefish present a challenging management problem for fishery biologists. Minimizing pollution, as well as maintaining a normal waterflow for tributaries, will assure a quality aquatic habitat in the Middle Fork. Specific control measures may eventually be needed to prevent an overpopulation of rough fish.

Hunting and fishing licenses are required by State law for visitors wishing to pursue these activities.

FOREST AND RANGE LANDS

The variety of grasses, flowers, shrubs, and trees found along the Middle Fork of the Salmon River is typical of many parts of central Idaho. Flowers change with the seasons.

Some trees have been cut within the Wild and Scenic River area to provide construction materials for homesteads and for a limited amount of mineral prospecting. A small sawmill has operated for several years on private land at the Pistol Creek Ranch. Commercial timber harvesting is considered to be inconsistent with the management of this Wild and Scenic River.

Some forest stands have been damaged by localized, heavy, recreational uses. Reducing the forest resource impacts from increased recreation use is an important task.

It is reasonable to expect that a normal loss of trees will occur due to activities of bark beetles, other insects, and diseases. If damage to Wild and Scenic River values reaches intolerable levels, carefully planned control may be necessary.

Cattle and sheep once used parts of the area; but due to its remoteness and the generally unsuitable terrain, grazing by these animals ended some years ago. The major demand for forage in the area is for big game, primarily during the winter months, and for commercial, recreation, and administrative pack and saddle stock during summer and fall. It is anticipated that the demand for forage for pack and saddle stock will soon exceed the existing supply, particularly in heavily used areas. Packing in feed for use of commercial and recreational stock, at least in such areas, will become necessary. Many campsites will need to be protected from trampling and sanitation damage by pack and saddle stock. Concentrations of pack and saddle stock near open streams will be avoided to protect water quality.

On these rangelands, insect-control measures are seldom needed. However, key winter ranges essential for big game survival may need to be treated if insect infestations are seriously and persistently damaging browse plants.

PROSPECTING AND MINING

Little mining activity is present in the Wild and Scenic River area. Only 13 claims show evidence of past use. The Wild and Scenic Rivers Act withdraws from further mineral entry the bed of the Wild River, its banks,

and the land within one-quarter mile on each side of the river. The Scenic River area is not withdrawn by the act but will be withdrawn administratively.

Owners of existing claims will be encouraged to remove improvements and return their claims to near-natural conditions, when no longer needed for mining purposes. Protecting water quality is a major goal in working with mining claimants, both within and outside the Wild and Scenic River area.

Mining activities outside the boundary can also affect the character of the Wild and Scenic River area. Dredging in Bear Valley and mining in Loon, Camas, and Pistol Creeks have contributed to sedimentation and pollution in these tributaries and the Middle Fork. The Forest Service will work with mining interests and State and local agencies to minimize effects of such operations.

FIRE

The potential for large destructive fires exists in the Middle Fork area. Extreme burning conditions develop during the summer and early fall months. Most fires are lightning caused, but man-caused fires are an increasing threat. The steep slopes, rocky canyon walls, and limited access make fire suppression activities difficult. Smokejumpers, aerial retardants, and helitack crews are the main line of initial fire attack. Followup suppression activities often depend on the use of some airfields in the area.

An increasingly effective fire prevention program will be aimed at limiting the number of man-caused fires. In addition, fast airborne initial attacks will continue to be an essential part of fire protection along the river.

ADMINISTRATION

Administering the Wild and Scenic River requires Forest Service personnel with responsibilities for protection and management of the resources and activities in the area. They maintain trails and other Wild and Scenic River improvements, help to protect the area from fire, and provide needed facilities for the visitor. They work to keep Forest Service landing fields safe for skilled pilots to use in flying visitors to and from the area. They also assist visitors through contacts and by providing emergency help when needed.

One of the popular aspects of recreation on the Middle Fork is the near absence of controls on use. This must change somewhat, as increased recreation use necessitates some additional regulation of use to protect the Wild and Scenic River environment, the outstanding water quality of the Middle Fork, and other features. Such regulation should be minimal, so as not to detract significantly from the visitor's river experience. Except in the developed sites around Dagger Falls, packing out of unburnable refuse to specified collection locations is a requirement of all river users. Federal and State laws and regulations concerning littering, use of fire, and other activities applicable to the Middle Fork will be enforced by river administrators. As recreation demands increase, the following user requirements will eventually need to be implemented:

- Limits on size and number of boat parties.
- Assignment of camp spots.
- Use of a permit system for entry into the area.

It is the goal of Forest Service administrators to protect the environment and to manage the recreation and related resources of the Middle Fork of the Salmon River for the benefit and enjoyment of present and future generations.

Most river employees live in cabins located at Forest Service guard stations within the Wild River area. Some live in tents. Most

live and work in the area during a 7-month work season. The Middle Fork boat patrol and other river patrolmen work within the Wild and Scenic River area, but have their headquarters outside it.

Some guard stations and other administrative facilities have some improvements that are not harmonious with the Wild River environment. Removal or altering of some facilities and equipment will enhance the environmental qualities of certain sites. Some facilities are old and inadequate, and a few are no longer needed. Some new facilities may be needed.

The Forest Service will continue to provide administrative personnel to protect and maintain the Wild and Scenic River environment and to help the public. Needed facilities will be designed, constructed, and maintained to be harmonious with it.

RANCHES AND HOMESITES

Eight parcels of privately owned land, comprising 769 acres, are within the Wild River area. Some landowners provide commercial services and facilities for visitors. Others have developed their land for summer home residences. Not all private lands are developed.

One ranch has been subdivided and several homes have been built on the riverbank. Two ranches are corporate-owned and have been developed with facilities to accommodate guests. Private lands have potential for further development.

Continuation of current uses are subject to the landowners' personal plans and desires. Some potential future uses of private lands may not be compatible with Wild River management objectives.

The Forest Service will work closely with individual landowners to determine how future development and use of private land can be compatible with Wild River values. Some of the general objectives applicable to all private lands in the area are:

- Permit no new habitations nor substantially increased capacity.
- Permit other new structures that are essential for continuance of existing uses, or acceptable new uses, but make such structures inconspicuous and in harmony with the environment.
- Encourage the alteration of existing improvements that do not harmonize with the environment.

Assurance of the compatibility of future uses of private land generally can be provided cooperatively by means of scenic easement acquisition by the Forest Service. The Wild and Scenic Rivers Act provides for such acquisitions.

The Forest Service is interested in acquiring fee title to private land needed to protect or enhance public use or enjoyment within the Wild River area when its owner voluntarily makes it available. In such acquisition, reservations by the landowner for his continued personal occupancy and use for a reasonable period of time can be negotiated.

IDAHO STATE LANDS

Lands within the Wild River area owned by State of Idaho agencies comprise 1,013 acres and include one partial school section and six ranches.

The partial State school section is under lease and used in conjunction with adjacent private property.

The Idaho Fish and Game Department purchased six ranches from private landowners in the early 1930's to reduce competition for forage between domestic livestock and big game. Some of these lands are leased to commercial outfitters for hunting camps and for grazing outfitter pack and saddle stock. Two of these ranches have small blocks of privately owned land within them.

The Forest Service will cooperate with the State to achieve coordination of management consistent with Wild River objectives.

MIDDLE FORK SALMON WILD RIVER AREA

DESCRIPTION OF EXTERIOR BOUNDARY

The exterior boundary of the Middle Fork Salmon Wild River Area is herein described by metes and bounds, with all coordinates, bearings, and distances being referred to the Idaho State-Plane Coordinate System, Central Zone, as established by the U.S. Coast and Geodetic Survey and based on the positions of USC&GS triangulation stations Long Tom Mountain (USFS) 1945: X=352,356.44; Y=1,340,232.63; and Middle 1945: X=343,569.06; Y=1,325,165.79.

Beginning at Angle Point 1 with coordinates X=347,308.050; Y=1,329,961.701; said point bears S. 46°07'04" W., a distance of 1,737.055 feet from USC&GS Station Middle 1945; and bears S. 17°11'16" W., a distance of 17,083.938 feet from USC&GS Station Long Tom Mountain (USFS) 1945; said point is also located near and westerly from the confluence of the Middle Fork Salmon River with that of the Salmon River, Idaho; thence along the courses and distances in the following table:

Angle points		Bearing	Distance (feet)
From	To		
1	2	S. 51°00'13" W.	2,527
2	3	S. 29°49' W.	2,496
3	4	S. 49°34' W.	3,336
4	5	S. 44°44' W.	4,865
5	6	S. 51°03' W.	4,839
6	7	S. 37°41' W.	4,877
7	8	S. 0°53' W.	2,613
8	9	S. 71°08' W.	3,461
9	10	S. 21°08' W.	18,198
10	11	S. 71°23' W.	4,569
11	12	S. 31°45' W.	3,827
12	13	S. 3°15' E.	5,340
13	14	S. 29°33' W.	6,205
14	15	S. 19°07' E.	3,376
15	16	S. 2°00' E.	4,748
16	17	S. 21°46' E.	3,082
17	18	S. 25°30' W.	5,303
18	19	S. 11°17' W.	4,730
19	20	S. 54°28' E.	5,000
20	21	S. 41°43' W.	3,030
21	22	S. 3°39' W.	5,506
22	23	S. 0°35' W.	20,794
23	24	S. 6°40' W.	8,192
24	25	S. 31°03' W.	6,743
25	26	S. 7°34' E.	6,104
26	27	S. 31°17' E.	7,435
27	28	S. 25°23' W.	5,462
28	29	S. 9°24' E.	3,728
29	30	S. 1°45' E.	9,370
30	31	S. 8°12' W.	2,838
31	32	S. 80°40' W.	4,033
32	33	S. 73°00' W.	5,742
33	34	S. 0°07' E.	2,820
34	35	S. 19°54' E.	4,228
35	36	S. 40°00' W.	2,652
36	37	S. 18°35' E.	2,896
37	38	S. 74°59' W.	8,850
38	39	S. 45°17' W.	2,062
39	40	S. 6°25' W.	1,769
40	41	S. 1°55' W.	1,679
41	42	S. 79°00' W.	1,505
42	43	S. 29°10' W.	2,058
43	44	S. 27°12' W.	4,709
44	45	S. 51°24' W.	1,344
45	46	N. 80°56' W.	3,339
46	47	S. 40°22' W.	8,008
47	48	S. 60°51' W.	2,972
48	49	S. 65°54' W.	2,948
49	50	S. 45°13' W.	6,145
50	51	S. 60°17' W.	2,084
51	52	S. 28°10' W.	2,891
52	53	S. 8°42' W.	2,930
53	54	N. 70°34' W.	2,919
54	55	S. 20°05' W.	4,499
55	56	S. 08°10' W.	3,916
56	57	S. 54°33' W.	4,796
57	58	S. 6°21' W.	1,833
58	59	S. 82°33' W.	3,939
59	60	N. 47°40' W.	4,305
60	61	N. 80°15' W.	4,861
61	62	S. 73°39' W.	4,568
62	63	N. 13°32' W.	4,837
63	64	N. 73°15' W.	2,663
64	65	N. 57°47' W.	1,168
65	66	N. 48°41' W.	4,603
66	67	N. 67°26' W.	4,634
67	68	N. 43°10' W.	6,766
68	69	N. 82°59' W.	3,108

Angle points		Bearing	Distance (feet)
From	To		
69	70	S. 60°27' W.	9,082
70	71	S. 42°44' W.	6,729
71	72	S. 63°40' W.	5,215
72	73	S. 2°59' W.	2,214
73	74	S. 0°30' E.	4,130
74	75	S. 11°38' E.	2,874
75	76	S. 1°10' W.	5,120
76	77	S. 6°16' W.	3,305
77	78	S. 15°43' W.	14,030
78	79	S. 23°08' E.	1,293
79	80	S. 53°08' W.	4,488
80	81	S. 20°16' W.	3,575
81	82	S. 46°00' W.	4,477
82	83	N. 82°34' W.	4,660
83	84	N. 85°45' W.	3,153
84	85	S. 21°28' W.	3,134
85	86	S. 69°17' W.	5,703
86	87	S. 47°21' W.	3,869
87	88	N. 71°14' W.	2,162
88	89	S. 62°09' W.	1,943
89	90	S. 65°44' W.	2,114
90	91	S. 6°27' W.	4,149
91	92	S. 29°35' W.	8,024
92	93	S. 40°29' W.	1,072
93	94	S. 14°27' E.	1,410
94	95	S. 2°33' E.	2,443
95	96	S. 52°31' W.	3,940
96	97	S. 0°29' W.	8,133
97	98	S. 47°08' E.	2,885
98	99	S. 56°20' E.	3,783
99	100	S. 32°20' E.	6,580
100	101	S. 58°36' E.	8,609
101	102	S. 29°22' E.	3,686
102	103	S. 25°23' W.	2,855
103	104	S. 59°21' E.	2,778
104	105	S. 29°42' E.	4,025
105	106	S. 6°21' E.	2,270
106	107	S. 36°29' W.	4,166
107	108	S. 7°38' E.	5,724
108	109	S. 32°41' E.	2,396
109	110	N. 45°28' E.	1,819
110	111	N. 14°27' E.	3,957
111	112	N. 1°06' W.	6,827
112	113	N. 13°06' W.	3,021
113	114	N. 0°29' W.	1,660
114	115	N. 2°22' W.	5,125
115	116	N. 7°49' E.	2,414
116	117	N. 31°31' W.	1,404
117	118	N. 41°21' W.	4,286
118	119	S. 84°53' W.	7,166
119	120	N. 9°45' W.	2,330
120	121	N. 43°27' W.	3,117
121	122	N. 10°51' W.	4,483
122	123	N. 22°41' W.	3,112
123	124	N. 10°43' W.	5,918
124	125	N. 4°54' W.	4,255
125	126	N. 37°08' E.	3,445
126	127	N. 31°34' E.	5,446
127	128	N. 75°11' E.	5,666
128	129	N. 53°33' E.	4,571
129	130	N. 70°41' E.	3,256
130	131	N. 87°07' E.	2,753
131	132	N. 37°04' E.	2,677
132	133	S. 55°42' E.	5,396
133	134	N. 22°28' E.	3,657
134	135	N. 50°30' E.	8,859
135	136	N. 10°52' E.	7,574
136	137	N. 24°16' E.	4,194
137	138	N. 10°25' E.	3,984
138	139	N. 2°17' E.	2,674
139	140	N. 2°18' W.	2,215
140	141	N. 32°10' E.	4,248
141	142	N. 4°18' E.	3,818
142	143	N. 11°45' E.	6,883
143	144	N. 39°08' E.	4,646
144	145	N. 57°15' E.	5,593
145	146	N. 62°16' E.	3,888
146	147	N. 62°37' E.	2,760
147	148	S. 26°58' E.	1,735
148	149	S. 47°33' E.	5,440
149	150	S. 85°17' E.	2,043
150	151	S. 55°34' E.	4,533
151	152	S. 12°12' E.	5,115
152	153	N. 85°36' E.	3,636
153	154	S. 1°44' E.	6,119
154	155	S. 11°45' W.	1,672
155	156	S. 40°55' E.	1,346
156	157	S. 70°58' E.	801
157	158	N. 70°39' E.	6,305
158	159	N. 11°55' E.	2,632
159	160	N. 49°50' E.	3,261
160	161	S. 48°56' E.	3,520
161	162	S. 68°18' E.	2,559
162	163	N. 50°46' E.	4,994
163	164	N. 9°14' E.	2,464
164	165	N. 68°35' E.	3,128
165	166	N. 33°43' E.	1,798
166	167	N. 50°57' E.	2,713
167	168	N. 26°10' E.	4,578
168	169	N. 53°58' E.	5,715
169	170	N. 23°12' E.	2,916
170	171	N. 62°06' E.	1,699
171	172	N. 42°12' E.	2,892
172	173	N. 67°21' E.	3,841
173	174	S. 84°23' E.	1,888

Angle points		Bearing	Distance (feet)
From	To		
174	175	N. 47°47' E.	5,953
175	176	N. 14°43' E.	3,402
176	177	N. 84°33' E.	7,680
177	178	N. 2°35' E.	6,166
178	179	N. 29°14' E.	6,390
179	180	N. 65°20' E.	6,114
180	181	N. 39°45' E.	2,225
181	182	N. 9°55' E.	3,729
182	183	N. 13°37' E.	1,293
183	184	N. 0°30' W.	4,812
184	185	N. 61°58' E.	3,691
185	186	N. 82°32' E.	3,663
186	187	N. 36°44' E.	4,333
187	188	N. 37°03' E.	3,403
188	189	N. 23°30' W.	4,644
189	190	N. 11°09' W.	4,260
190	191	N. 8°07' E.	2,130
191	192	N. 24°10' E.	3,034
192	193	N. 6°09' E.	3,000
193	194	N. 8°57' W.	5,412
194	195	N. 5°16' E.	20,577
195	196	N. 1°30' W.	30,540
196	197	N. 67°20' W.	3,812
197	198	N. 13°00' E.	7,279
198	199	N. 23°40' E.	2,713
199	200	N. 35°01' W.	2,909
200	201	N. 11°38' E.	2,348
201	202	N. 7°58' W.	6,424
202	203	N. 23°39' E.	3,173
203	204	N. 5°47' E.	8,392
204	205	N. 60°49' E.	0,771
205	206	N. 25°22' E.	8,900
206	207	N. 11°54' E.	4,830
207	208	N. 34°41' E.	3,799
208	209	N. 60°41' E.	3,581
209	210	N. 8°30' E.	2,683
210	211	N. 28°17' E.	5,189
211	212	N. 51°50' E.	4,524
212	213	N. 51°19' E.	9,386
213	214	N. 30°23' E.	5,000
214	215	N. 14°54' W.	2,070
215	1	N. 53°40'2" W.	387.17

Said Point 1 being the point of beginning.

Area contains 32,038 acres, more or less.

All distances are based on sea level and require adjustment to obtain ground-level distances.

X=East.

Y=North.

[P.R. Dec. 69-11925; Filed, Oct. 6, 1959; 8:45 a.m.]

ATOMIC ENERGY COMMISSION

[Docket No. 50-139]

UNIVERSITY OF WASHINGTON

Notice of Issuance of Amendment to Facility License

The Atomic Energy Commission (the Commission) has issued, effective as of the date of issuance, Amendment No. 8 to Facility License No. R-73 dated April 31, 1961. The license presently authorizes the University of Washington to possess, use and operate the Argonaut-type nuclear reactor on the University's campus at Seattle, Wash., at power levels up to 100 kilowatts (thermal). The amendment extends the expiration date to October 13, 1969.

The Commission has found that the application for the amendment complies with the requirements of the Atomic Energy Act of 1964, as amended (the Act), and the Commission's regulations published in 10 CFR, Chapter I and that the issuance of the amendment will not be inimical to the common defense and security or to the health and safety of the public.