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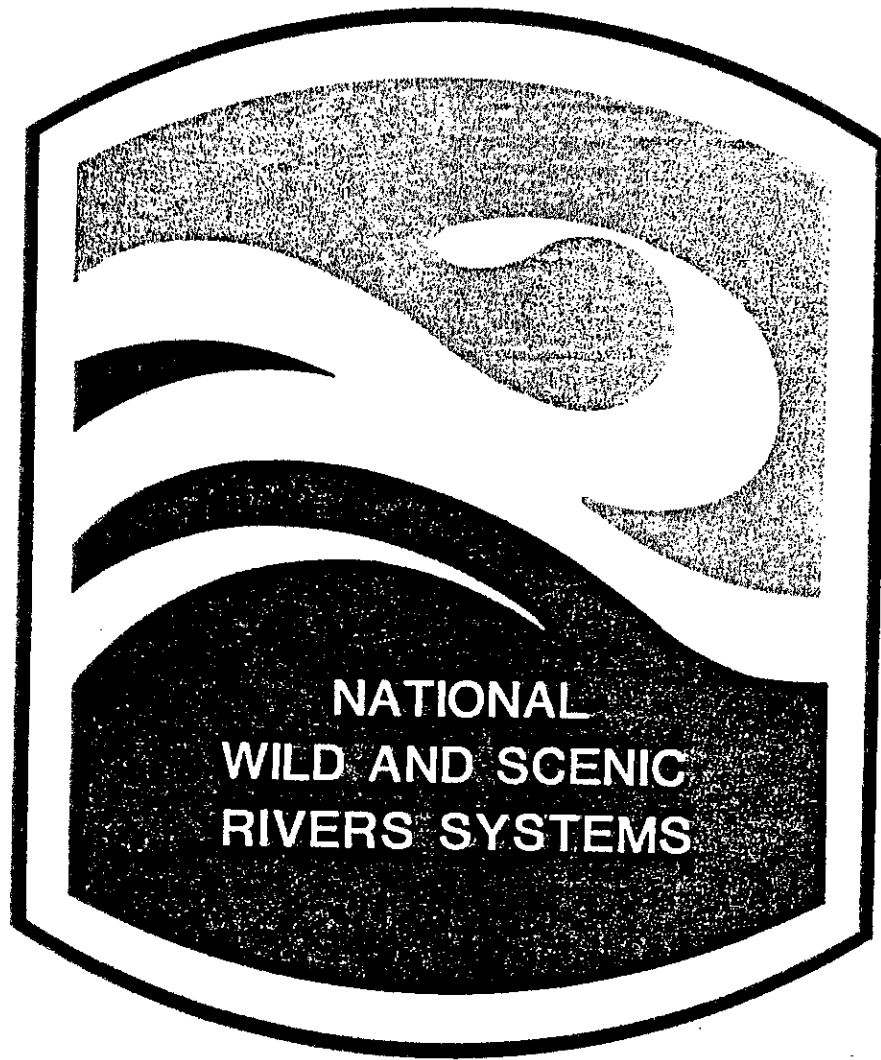
Forest
Service

Mt. Baker-
Snoqualmie
National
Forest



RIVER MANAGEMENT ANALYSIS (FINAL) SKAGIT RIVER

VOLUME I



VOLUME I

River Management Analysis

National Wild and Scenic River Systems

Skagit and Snohomish Counties, Washington
1983

Responsible Agency: USDA Forest Service
Responsible Official: Jeff M. Sirmon
Regional Forester
Pacific Northwest Region

For Further Information Contact: J.D. MacWilliams
Mt. Baker-Snoqualmie
National Forest
1022 First Avenue
Seattle, Washington 98104
(206) 442-5400

Abstract:

The River Management Analysis (Vol. I) displays background information, resource overviews, assumptions, and the Wild and Scenic River boundaries. Management authority, goals, and direction are presented in Volume II, the River Management Plan.

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COORDINATION AND RESPONSIBILITIES OF OTHER ORGANIZATIONS AND AGENCIES

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Introduction

Establishment

Section 5(a) of Public Law 90-542 (10/2/68) designated portions of the Skagit, Cascade, Sauk and Suiattle Rivers as having potential for additions to the National Wild and Scenic River System and required the Secretary of Agriculture to study them to determine if they should be added to the system. This study was to be completed within ten years.

The Study was completed in 1977 and recommended that a total of 157.5 miles of the study Rivers be designated by Congress. This recommendation estimated a total of 34,654 acres be included within the River Corridor.

Section 703 of Public Law 95-625 (11/10/78) amended Section 3(a) of the Wild and Scenic Rivers Act to designate selected segments of the Skagit, Cascade, Suak, and Suiattle Rivers, and to study a small portion of the North Fork Cascade River to determine if it qualified for inclusion in the Wild and Scenic River System and, if so, to treat it as a component of the system upon notification to that effect in the Federal Register. The determination was made that the North Fork Cascade was qualified and a notification to that effect was published in the Federal Register on March 20, 1981, making a total of 158.5 miles within the designated Skagit Wild and Scenic River System.

Public Law 95-625 established the terminal boundaries of the designated rivers, but required the Secretary of Agriculture to establish detailed boundaries for the designated segments, not to exceed an average of more than 320 acres per mile on both side of the river. This detailed boundary determination has resulted in an increase in total acres from 34,654 to 38,939. This increase was due to a number of factors, including:

- addition of the North Fork Cascade River
- locating boundaries on identifiable features
- locating boundaries so they do not cross ownership lines except on aliquot part boundaries
- locating boundaries to include the entire river
- locating boundaries to include major resource inventory features
- use of more accurate maps that were not available at the time of the 1977 study recommendation.

The detailed description of the boundary does not alter the original concept in the study report and Final Environmental Impact Statement of more than 50% of total acreage in public ownership.

The detailed boundary is well below the maximum allowed by Public Law 90-542 of 50,720 acres.

Basic Management Authority

Authorities for management of the river and its designated corridor are found in the following:

Public Law 90-542, October 2, 1968, "Wild & Scenic Rivers Act"

Public Law 93-279, May 10, 1974, "Amendment to the Wild & Scenic Rivers Act"

Public Law 95-625, November 10, 1978, "Amendment to the Wild & Scenic Rivers Act"

Authority for management - surface waters

The Forest Service, through the Department of Agriculture, has the authority to regulate the surface use of waters within the National Wild and Scenic Rivers System. This statutory authority is found in the United States Code (U.S.C.), specifically, 16 U.S.C. 551 and 16 U.S.C. 1281(d). Implementation of this statutory authority through the Code of Federal Regulations (CFR), 36 CFR 261.1(a)(4) and 36 CFR 261.58(Z).

Authority for Management of Lands

Authority for managing National Forest lands within the designated corridor are in the laws and regulations pertaining to National Forest lands and 36 CFR 261. Approximately 44% of the lands within the designated corridor are National Forest. Private lands within the designated corridor can be managed by the Forest Service only when acquisition of specific rights to the private lands has been accomplished. Approximately 50% of the lands within the designated corridor are private.

Management Plan Organization

The management plan is contained in two documents, for clarity and ease of use by river managers.

Volume I contains background information, resource overviews, assumptions and the appendix.

Volume II contains Management Goals, Management Direction and Tasks. (See Appendix G for Tasks and priorities)

All pages in Volume I are color coded to identify the type of information presented.

- White pages - General background information.
- Yellow pages - Information and direction for both Recreation and Scenic Rivers.
- Green pages - Information and direction for Recreation River only.
- Blue pages - Information and direction for Scenic Rivers only.

Management Plan Background

This plan has been prepared within the context of the 1977 Skagit Environmental Statement. Its intent is to implement the decision made in the W&SR legislation and the 1977 Skagit Final Environmental Impact Statement.

This plan is based upon the direction in Section 10 of Public Law 90-542. In addition, this management plan is designed to meet, as far as is practicable, the criteria and specifics outlined in:

February, 1970, Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System under Section 2, Public Law 90-542"

and

National Wild and Scenic Rivers System; September 7, 1982 Guidelines for Eligibility, Classification and Management of River Areas.

Additional management criteria has been developed from the 1977 Forest Service Environmental Statement that documents impacts and recommends inclusion of the Skagit System into the National Wild and Scenic Rivers System.

In this Environmental Statement was the recommendation that the State of Washington fully administer the Skagit Segment with the Forest Service administering the three other rivers on the system. State administration would have been possible through State Legislature actions outlined in Section 4c, Public Law 90-542 and through written cooperative agreements between the Federal Government and State.

State legislation was not enacted and through Public Law 95-625, Congress placed the entire Skagit System under Federal Administration. The option for written cooperative agreements is retained. Administrative and priority changes by the State of Washington has resulted in the State revamping their involvement in management of the Skagit Wild and Scenic River. The State does not currently plan to administer the Skagit Segment independently or purchase easements as recommended in the 1977 Environmental Statement, but wishes the concept to remain a goal. The State wishes to continue exercising its State regulatory authorities.

This Management Plan has been developed by an inter-disciplinary team from the Forest Service, assisted by a designated representative of the Governor of the State of Washington.

Public participation involved the use of responses from two newsletters mailings. Each mailing went to some 1,600 names and addresses that included property owners on record, and five informational open houses. Three meetings with all State agencies concerned with the Skagit area and two meetings with Federal agencies concerned with the area provided additional information. Several meetings were held with both counties and the Swinomish, Upper Skagit and Sauk-Suiattle Native American groups.

All County, State and Federal Agencies reviewed an advance copy of the proposed plan in 1981. Sixteen (16) written comments were incorporated and in November 1982 the Draft Plan was mailed to property owners, Agencies and public libraries. Additional open houses (4) were held mid-way through the review period. One hundred and twenty-seven (127) written comments from the public and agencies were received and used in this plan.

The Public, State, and Federal participation identified issues, concerns and opportunities that are considered in this plan. (See Appendix F)

Implementation of Management Plan

In Public Law 95-625, Congress authorized the appropriation of \$11,734,000 for acquisition of lands or interest in lands and not more than \$332,000 for development. Administration would be accomplished from normal National Forest appropriations using interim management estimates and requirements of this management plan to request necessary administration funding.

As of 1982, no appropriations for acquisition, development or administration have been made to facilitate management of the Skagit System.

Implementation of this management plan is directly dependent upon appropriations for acquisition, development, and administration. The funding made available will determine the administrative organization established to accomplish the tasks. Within Volume II, these tasks have been prioritized to help facilitate the development of an organization to accomplish the most critical items, with funding available. (See Appendix G, Volume II.)

Other Resource Information

A more in-depth discussion of the resources and the river environment can be reviewed in the "Skagit Wild and Scenic River Study Report" and the Skagit Final Environmental Statement dated June 17, 1977. Both of these documents, along with resource reports, are available in the Supervisor's Office, Mt. Baker-Snoqualmie National Forest, Seattle, Washington, 98101.

In addition, maps detailing the location of resources and recreation opportunities discussed in this management plan are on file at the Supervisor's Office, Mt. Baker-Snoqualmie National Forest, Seattle, Washington, and are available for review.

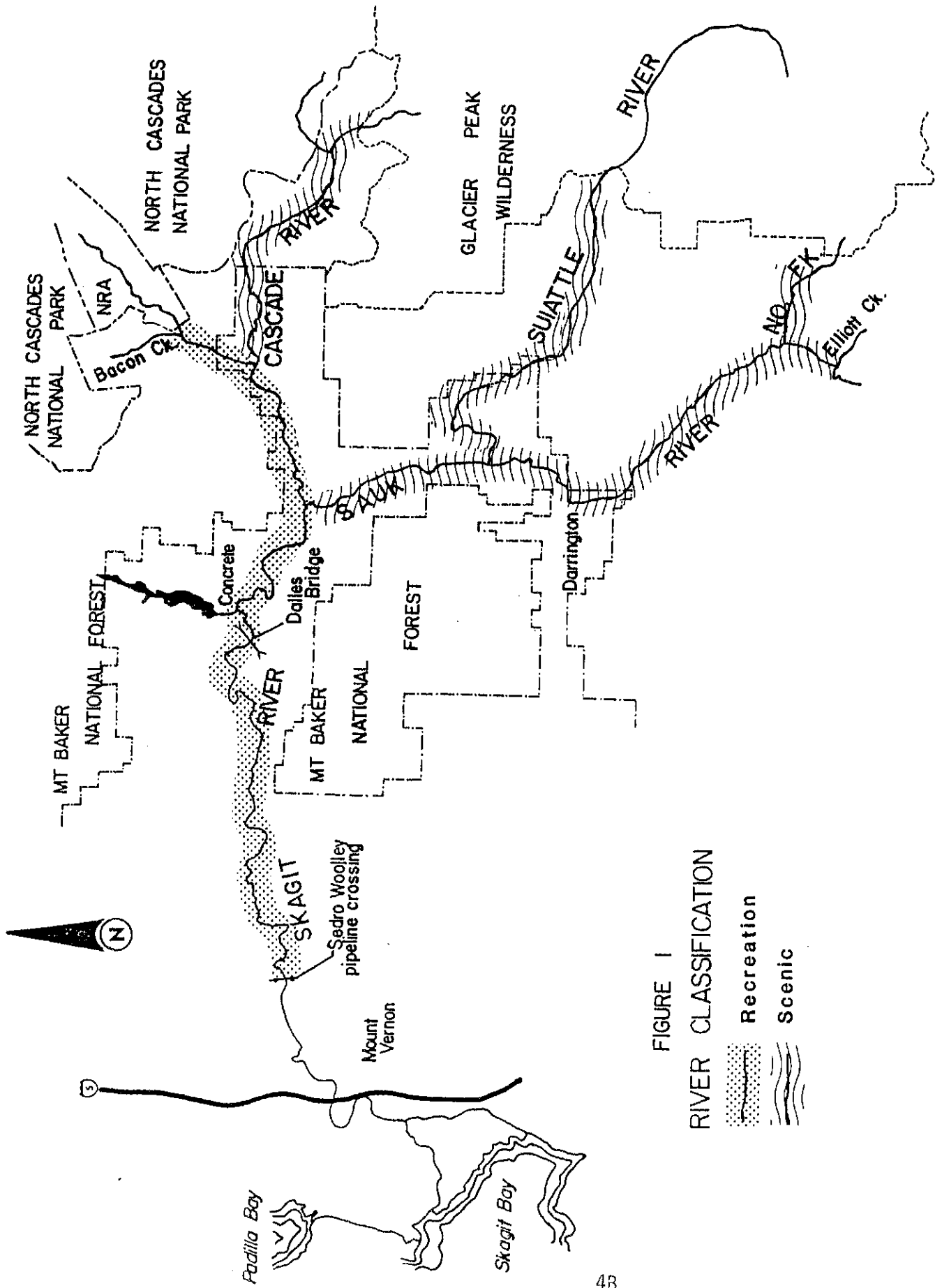




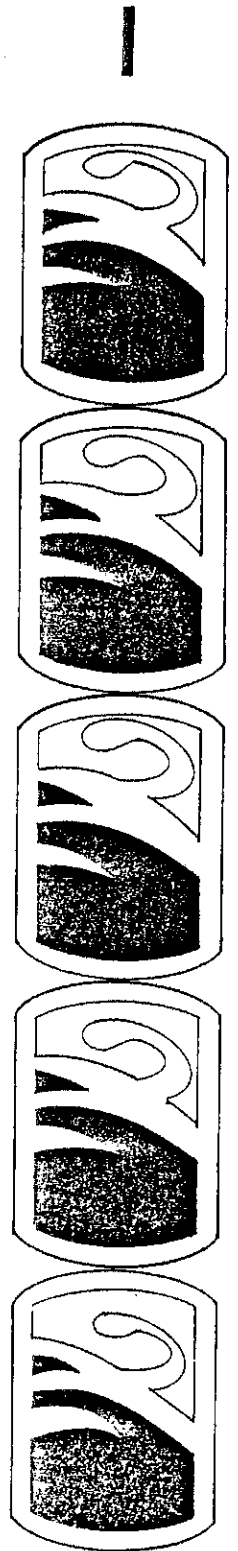
FIGURE 1
RIVER CLASSIFICATION

-  Recreation
-  Scenic

Overview

CHARACTERISTICS OF THE SKAGIT WILD AND SCENIC RIVER

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Characteristics
of the
Skagit River Basin



CHARACTERISTICS OF THE SKAGIT RIVER BASIN

General Overview

There is wide variation among sections of the Skagit Wild and Scenic River (Skagit W&SR) with regard to existing development, access, and resource potential. For this reason, the classified portions of the Skagit river have been divided into two of the categories provided for in the 1968 Wild and Scenic Rivers Act (1968 W&SR Act): Recreation River and Scenic River. Classification was based on the historical and current land use along the river, and on the potential quality and type of recreational opportunity offered to the public.

Scenic River classification emphasizes naturalness and opportunities for semi-private recreation, with attention to free-flowing unpolluted waters, limited road access, a shoreline and river corridor with limited development, free-ranging wildlife, and outstanding scenery.

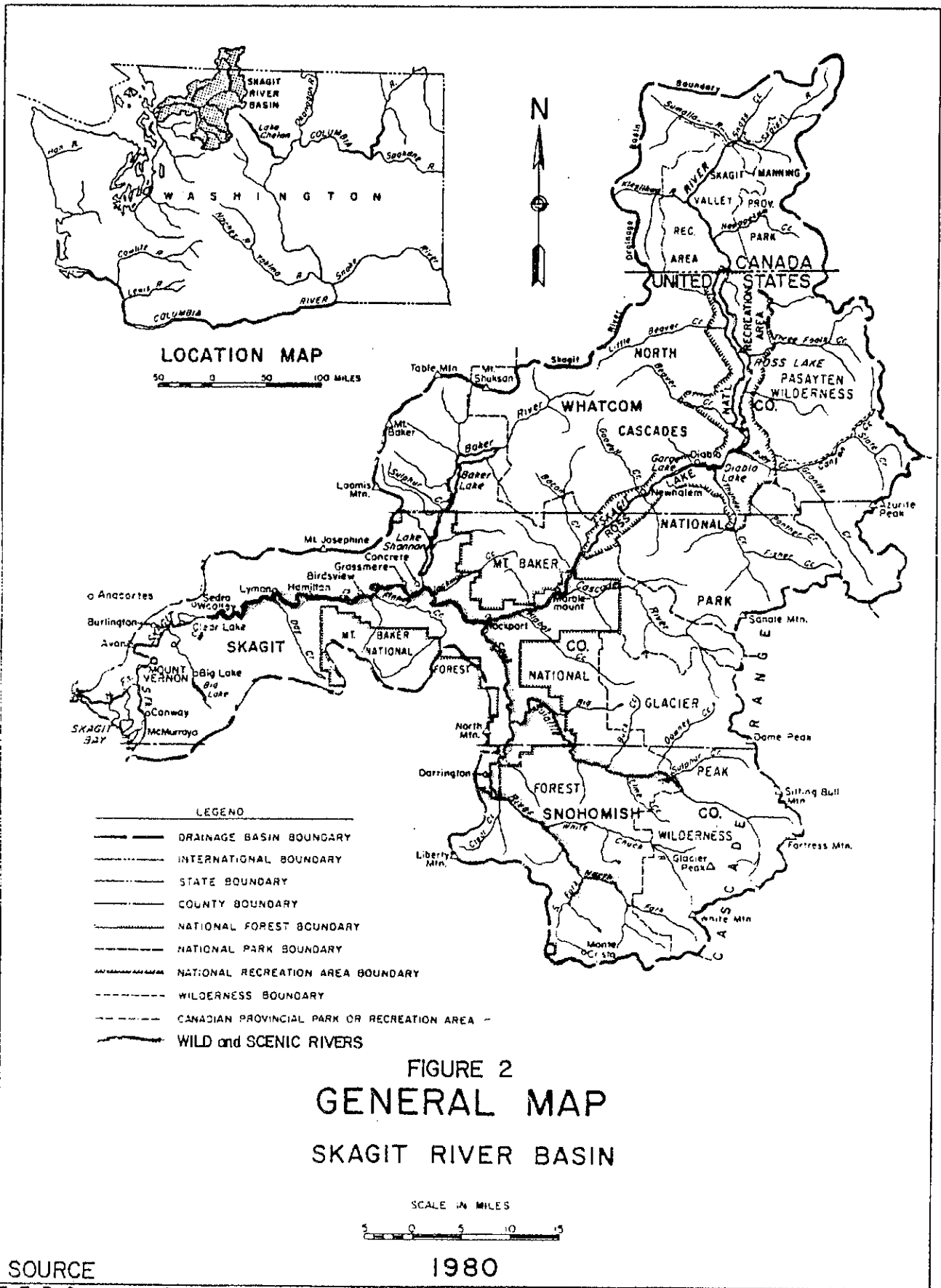
Recreational River classification emphasizes diversity of river qualities and recreational opportunities including, basically, free-flowing and unpolluted waters, ready public recreational access, potential for accomodating large numbers of recreationists with a wide variety of recreational experiences provided, and high scenic values.

The Skagit Wild & Scenic River System constitutes only 4% of the Skagit Basin. (See Figure 2.) Any discussions of the characteristics of the Wild and Scenic River System must relate to the entire Skagit Basin. It is the Basin that influences environmental, economic and social factors that impact and affect the Skagit Wild and Scenic River System.

A wide variety of economic activities are pursued in the Skagit River basin. Lumbering has been one of the leading industries since the earliest settlements. Agricultural enterprises are centered on the Skagit River bottomlands and alluvial plain, where dairying far exceeds in acreage all other types of agricultural activities. Peas, strawberries, and hay are leading crops. Frozen-food processing, canning, and chemical manufacturing along with Native American treaty commercial fishing have become important industries. Recreational activities in the basin include camping, fishing, swimming, boating, hunting, hiking, mountain climbing, and tourism.

Forests cover about 82 percent of the entire Skagit River basin. Grazing areas and rangeland account for about 13 percent; approximately two percent is used for farmland and one percent is either developed areas or rural non-agricultural land. The remaining two percent are covered by lakes and streams.

The Cascade and Suiattle River floodplains and drainages, and the Sauk River drainage above Darrington are almost totally forested, although many areas have been and are being harvested for timber production. Occasional home sites are located along these rivers. The Sauk River floodplain below Darrington contains some areas which are farmed, and some home sites, as well as large areas which are timbered. The floodplain of the Skagit itself is primarily farmland. With the exception of Darrington, all existing town sites are on the Skagit River floodplain. Town sites and individual homesites increase in size and number in the downstream direction.



Physiography

The Skagit River basin encompasses a wide range of mountainous topography. Western (seaward) elevations range from sea level to over 8,000 feet. Characteristically, the mountains in the basin are steep and timber covered. East of Mount Vernon the relief and elevation increase, and the terrain becomes extremely rugged. The crest of the Cascades forms the eastern boundary of the basin, and elevations there range to over 8,000 feet. Timber is concentrated on the lower slopes. On higher slopes, the timber is frequently interspersed with rock outcrops and talus. Extending upward, at and above the timberline is a world dominated by rock, meadows, talus and perpetual snow. This portion of the basin is renowned for its alpine beauty.

The Skagit River basin, which drains into Skagit Bay, extends a maximum of about 100 miles from the northernmost point in British Columbia to its southernmost point in Snohomish County, and varies considerably in width.

The upper reaches of the Skagit River have essentially no floodplain. From a few miles north of Marblemount to Sedro Woolley, the floodplain is 1 to 2 miles wide, and from Sedro Woolley downstream it widens rapidly to form the extensive and agriculturally productive delta area.

The Skagit has a 90,000 acre floodplain, beginning near the town of Concrete and extending downstream in a narrow belt to Sedro Woolley, where the valley floor widens to encompass the broad river delta. Upriver dams on the Skagit and Baker Rivers mitigate flooding to some extent, but urban areas within the floodplain are presently secure only against floods of a once-in-14 years magnitude or less.

Development of the lower floodplain is creating a growing call for increased flood protection.

Geology and Soil

The bedrock of the basin is at or near the surface everywhere, except in the floors of the major valleys where considerable alluvial and glacial deposits are found. Metamorphic and granitic rocks are the most common types of bedrock, but sedimentary and volcanic rocks also are present. The wide variety of rock types have been intricately faulted and folded. The glaciers of the Pleistocene "ice age" are largely responsible for the present rugged landforms of the basin, although the glaciation was preceded by mountain building through uplift, folding, and volcanic action. The sharp peaks, ridges, and deep valleys of the mountainous areas are products of deep cutting by local alpine glaciers, with some rounding by the continental ice sheet that entered the area from what is now Canada. The lower slopes and valley bottoms of the mountaineous areas become the sites of deposition of sediment carried by glacial streams.

The two main types of soils in the basin are (1) alluvial or bottomland soils and (2) upland soils. The bottomland soils are generally fertile and highly productive, whereas the upland soils are much thinner and less fertile. The bottomland soils are located in the delta area and on the main floodplain of the Skagit River. These soils are derived primarily from fine-grained alluvial materials and are often poorly drained. The upland soils are usually composed of glacial materials. These soils are generally thin and, on steep slopes, are usually unsuited for agricultural purposes. However, where underlain by a well-cemented hardpan which aids in conserving moisture during dry periods, the upland soils are of some local agricultural use.

Climate

Air masses reaching the Skagit basin originate over the Pacific Ocean, giving the area a mid-latitude, West Coast marine climate. The maritime air moderates both winter and summer seasons, producing a definite rainy season during the winter and a short, dry summer. The Cascade and Rocky Mountains shield the basin from cold air masses, while the Olympics and the Coast Range offer protection from the intense winter storms which buffet the coast. Rainfall averages 46 inches at Sedro Woolley (see Table 1), while the average high temperature is 60 degrees F and the average annual low is 41 degrees. The mean length of the growing season is 193 days.

Table 1
Average Monthly and Annual Precipitation
At Representative Climatological Stations ^{1/}
Skagit River Basin

<u>Station</u>	<u>Anacortes</u>	<u>Sedro Woolley</u>	<u>Concrete</u>	<u>Newhalem</u>	<u>Diablo Dam</u>
Years of Record	86	82	61	55	47
Elevation in feet above ms.l.	30	60	195	525	891
<u>Month</u>			<u>Inches</u>		
January	3.20	5.49	9.33	11.33	10.82
February	2.50	4.50	7.36	9.13	8.78
March	2.09	4.05	6.41	6.73	6.28
April	1.75	3.50	4.59	5.14	4.79
May	1.36	2.62	3.04	2.88	2.45
June	1.34	2.43	2.51	2.63	2.00
July	.82	1.38	1.30	1.50	1.30
August	.97	1.86	1.89	2.21	1.62
September	1.48	3.17	3.80	4.46	4.02
October	2.85	5.10	7.51	9.09	8.47
November	3.29	5.73	9.26	11.12	10.87
December	3.62	6.09	10.21	12.65	12.33
Annual	25.27	45.92	67.21	78.87	73.73

^{1/} Annual Summary 1978, Climatological Data, U.S. Department of Commerce, National Oceanic and Atmospheric Administration.

Water Quality

The water quality of the Skagit River is excellent and suitable for most uses. The maximum recorded stream temperature was taken in the Skagit near Mount Vernon and measured 64° Fahrenheit. The mean high is 48.9° Fahrenheit. Dissolved oxygen concentrations are near saturation. The system transports about 10 million tons of sediment annually, mostly of glacial origin. The concentration of dissolved solids is low; with the exception of iron concentrations, chemical water quality in all sections meets U.S. Public Health Service drinking water standards. Bacteriological quality is variable, with the count of coliform organisms increasing downstream from Marblemount, due to effluents from towns residential tracts and agriculture. Toxic or deleterious material concentrations are low. The biological quality of the study rivers is high, as evidenced by the high species diversity and their productivity of both resident and anadromous fish.

On the Environmental Protection Agency's rating scale, the Skagit is rated Class A from Burlington downstream. Above Burlington, and on all the tributaries, the rivers are rated Class AA, Extraordinary (Federal Water Pollution Control Act (PL 84-660) of 1956).

Minerals

The basin has "potential future sources" of minerals. The Bureau of Mines estimates deposits of 4.8 million ounces of gold, 149 million ounces of silver, 609,000 tons of copper, 1.1 million tons of lead, 320,000 tons of zinc, 9,000 tons of cobalt, 460 million tons of coal, 70,000 tons of molybdenum, 510,200 tons of nickel, 190,000 tons of iron and 5.8 million tons of arsenic. Most of these metallic reserves are widely dispersed, inaccessible, and of such low concentrations as to be unprofitable for commercial extraction. Non-metallic reserves include over 1 billion tons of limestone. In addition, vast quantities of sand, gravel and stone are found. With the exception of sand and gravel, none of these materials are presently mined within the study area. A study is underway by private corporations to renew limestone quarrying near Concrete. Lone Star has proposed the construction of a new plant. Gravel operations presently occur near Mount Vernon, near the Skagit River channel, but outside the streambed.

Fishery

The Skagit, along with its Baker, Cascade, Sauk and Suiattle tributaries, comprises the largest drainage basin in Puget Sound. These waters provide habitat for a vigorous, diverse fishery of national significance. Five species of Salmon, three species of sea-going trout and a wide range of resident fish live and reproduce in these waters. The Skagit has national renown for its sport steelhead fishery. Its role as a spawning ground for salmon is important to the state economy, since it provides an estimated 30% of the young anadromous fish entering Puget Sound. This fishery has an estimated commercial value of \$17 million during odd-numbered years when the pink salmon migrate upstream, and \$6 million during even-numbered years. It is an important fishery to those Indian tribes and groups granted fishing rights under the Point Elliott Treaty of January 22, 1855.

Wildlife

Stable populations of big game animals occur throughout the study area, but the concentration of animals occurs upriver from Concrete, coincidental with the presence of undeveloped forest lands reaching down to the river. Along these forested upriver reaches, blacktailed deer are a common sight, particularly in late spring and early summer when the best forage is available in the river bottoms.

Black bear are fairly common. Although these man-avoiding creatures are rarely seen near a road, they are occasionally visible from the river. The sight of a bear foraging along a sand bar for spawning salmon is a rare bonus to those quietly drifting the upriver reaches.

Mountain goats, mountain sheep and cougar are all established in the basin, but are seldom seen except by hikers in the remote high country.

Small game, waterfowl and upland game birds are abundant. These animals are more tolerant of the presence of man than are the larger animals; consequently, they are frequently encountered within the study area, to the delight of visitors.

The Skagit River basin is home to three rarely-seen species: the trumpeter swan, the whistling swan, and the bald eagle.

During the fall and winter, the bald eagle is most evident along the middle floodplain, in stretches of undeveloped timber land. Both adults and juveniles are frequently seen perched in trees along the river bank. A small number of these magnificent birds are permanent residents of the basin. Many additional eagles visit the basin during the height of the annual anadromous fish migration. A large eagle sanctuary has been established by The Nature Conservancy on the south bank of the Skagit, upstream from Rockport.

The Northern bald eagle has been officially classified as threatened since 1978. Also, the endangered Peregrine Falcon has been observed in the vicinity of the western boundary of the classified river. One other endangered species, which inhabits the basin but is not a resident of the study area is the grizzly bear located in southern British Columbia.

The trumpeters are concentrated in the freshwater marshes on Nookachamps Creek, a tributary of the Skagit.

Recreation

Land in the basin is extensively used for public recreation. The Skagit basin has been highly regarded for its mountains, wilderness streams, lakes, islands, shorelands, and saltwater. The Skagit River is well-known for its natural beauty and outstanding salmon and steelhead runs. Skagit River water quality is nearly pristine with cool water temperatures, high dissolved oxygen concentrations, and low bacterial and nutrient levels. About 70 percent of the land is Federally owned, and another 5 percent is State owned. A total of 1,487,234 acres is open to the public. On this land 542 campsites, 250 picnic

units, 1,621 parking spaces, 25 boat launches, and 7 acres of swimming beaches are provided. There are 350,000 acres of national forest wilderness, 438,000 acres of national park, 107,000 acres of national recreation area, and 34,650 acres in the National Wild and Scenic Rivers System in the basin. In total, about 974,650 acres, nearly 55 percent of the basin land, are available for some form of recreational use.

Forestry

The basin is abundantly endowed with forests. About 82% of the total land area is forested. There are 834,730 acres of forest land capable of producing forest products on a continuing basis in the basin. These lands have a current inventory of 23.6 billion board feet. The basin supports 12 sawmills, 2 plywood plants and a paper mill. In addition, additional material is exported to processors outside the basin. Current predictions are that 17% of the commercial forest land within the basin will be converted to other uses in the next 50 years.

Agriculture

Agriculture is the leading economic activity in the area, and forage production in support of a dairy industry is the largest type of farming. The rich delta area of the Skagit River accounts for 90 percent of the Nation's beet seed, as well as significant amounts of turnip and rutabaga seed. The climate is mild in the western portion of the basin, and the land is fertile and highly productive. The bottomlands of the Skagit River floodplain require ditching and diking due to their close proximity to saltwater. Farther up the Skagit river the land becomes less fertile and the variety of agricultural products grown is limited. Most of the farms are in the fertile Skagit River delta. The number of farms in the Skagit basin have been decreasing while the average farm size has been increasing. The total percentage of land in use for farms has been decreasing. Although the amount of lands being farmed has decreased, the market value of all agriculture products sold has increased. Over half of the total market value was from livestock, poultry and their products, followed in importance by crops. Vegetable farming has been increasing, due to pressures for greater and more intensive utilization of land, and there has been a decrease in the numbers of animal stock.

History and Archaeology

The basin was originally inhabited by eleven sub-tribes of the Skagit River Indians. These early inhabitants lived in small, permanent villages of cedar-plank houses, and lived off the bounty of the land--fish, wild meat, berries and other natural foods. At their peak, the Indians boasted a population of about 2,000 people.

White settlement of the basin began in 1855 with the signing of the Point Elliott Treaty. Early settlement was confined to the fertile Skagit Delta, where phenomenal crops of grain were raised. The 1879 gold rush triggered upriver

settlement and, although gold fever subsided in 1880, farmers and loggers had been introduced to the rich upriver area. Railroads reached the basin in 1889, and by 1901 had moved upriver to Rockport. In 1918, the first hydropower structure was started on the Skagit, and the last of three major hydroelectric facilities was completed in 1949. Road construction caused by the dams aided the construction of the North Cascades Highway, completed in 1972. This highway makes east-west travel across the North Cascades a reality after nearly a hundred years of planning.

Population

Virtually all of the basin's population and economic activities are situated within Skagit County. In 1980, the population of Skagit County totalled 64,000.

During the 1950-1960 decade, Skagit County's total population increased by 8,077 (18.7%). This substantial gain was the result of both natural population gains (5,808 more births than deaths) and the net in-migration of 2,269 persons. A substantial portion of the county's population influx was caused by construction of the Texaco and Shell oil refineries at Anacortes.

Following completion of the two refineries in the early 1960's, many construction workers and their dependents left the county. Moreover, during the late 1960's, the phasing out of Northern State Hospital resulted in that facility losing approximately 625 patients. Consequently, the county's population growth for that decade was 1,031 (2.0%).

Since the early 1970's, Skagit County has experienced a major population influx. Despite the closing of Northern State Hospital in the early 1970's and the resultant loss of an additional 1,400 inmates, Skagit County's total population expanded by 11,619, during the 1970-1980 period. This growth resulted primarily from the county's emergence as an important community and retirement area. Many of the county's new residents commute to Boeing Corporation's 747 assembly plant, which opened in 1974, or to other major employment centers located in Everett and Bellingham. Table 2 summarizes population statistics for Skagit and Snohomish counties.

Skagit County's favorable location, accessibility and climate, outstanding outdoor recreational opportunities, and relatively low housing costs are expected to generate continued in-migration and population growth.

Table 2

Summary of Population Growth Statistics for Skagit and Snohomish Counties.

County	1960	1970	Percent Change, 1960-1970	1980	Percent Change, 1970-1980
Skagit	51,350	52,381	2.0	64,000	22.2
Snohomish	172,199	265,236	54.0	321,800	21.3
<u>Washington State</u>	2,853,214	3,413,250	19.6	4,040,100	18.4

Source: Office of Financial Management, Forecasting and Support Division. State of Washington Population Trends, 1980. Olympia, Washington, September, 1980.

Employment and Personal Income

In 1976, 25,203 persons were employed in Skagit County. These workers earned a total of \$272,781,000. Four major industry groups - manufacturing, State and local government, construction, and retail trade - generated \$182,454,000, or about two-thirds of the County's total labor and proprietors income. These industries also experienced the largest absolute income gains during the 1969-76 period.

Skagit County's manufacturing sector generated approximately 4,000 jobs in 1976, about the same number as in 1969. Lumber and wood products, logging machinery, fruit and vegetable processing, oil refining, paper, and boat building are the County's most important manufacturing industries.

Skagit County's emergence as a major bedroom community and retirement area caused its construction and retail trade sectors to expand significantly. An increased number of housing units constructed yearly plus the opening of two major shopping centers in Mt. Vernon account for most of the County's additional construction and retail trade employment.

Electric Utility Service

Electric power requirements of the basin are supplied by Puget Sound Power & Light Co. (PSPL) and Snohomish County Public Utility District No. 1 (SNCP). Most of the electric loads are located in the western portion of the basin in PSPL service territory. SNCP serves all portions of the basin located in Snohomish County.

There are 778.2 megawatts of installed nameplate generating capacity in hydroelectric projects operating in the basin. All of the projects are under Commission license. PSPL owns 94.4 megawatts in its Upper and 64.0 megawatts in its Lower Baker River projects. The City of Seattle, Department of Lighting, owns the remainder. Two 115-kilovolt transmission lines deliver the Baker projects' output to PSPL's Sedro Woolley switching station and then to the system transmission grid to help serve PSPL loads in western Washington. Four 230-kilovolt transmission circuits deliver the output of the City of Seattle's Skagit River projects to the system's Bothell switching station near Seattle. The average annual generation by the basin's hydroelectric plants is estimated at 3,061 kilowatt-hours.

There are no hydroelectric generating facilities within the Wild and Scenic River area. Six operating facilities are located on rivers outside the study area; three on the Skagit River, two on the Baker River, and one on Newhalem Creek. A plan for raising Ross Dam on the upper Skagit is being considered to create a larger reservoir capable of generating additional electricity. On National Forest lands within the basin and outside the Wild and Scenic River area, over 100 small hydropower proposals have been identified.

Transportation

The Skagit River basin is served by all major forms of transportation. One railroad, the Burlington Northern Inc., provides access to the area. Interstate Highway 5, the major north-south highway on the West Coast, borders the basin on the west; State Highway 20, locally referred to as the North Cascades Highway, traverses from Anacortes on the west up the Skagit River Valley across the Cascades and into Eastern Washington. Due to heavy snows and light winter traffic, the highway is closed during winter months. An interlocking network of State, county, and Forest Service roads provides vehicular access within the river basin. Deep sea shipping terminal facilities serve the petroleum refineries at Anacortes, and ferry service from Anacortes is a major transportation link to the San Juan Islands and Vancouver Island, British Columbia. There are no major scheduled commercial airlines serving the area, but local fields are operated for charter and regional airline service.

Section I Overview

REVIEW, UPDATE AND RELATIONSHIP
TO MT. BAKER-SNOQUALMIE N.F. FOREST PLAN

I



Review, Update
and Relationship
to Mt. Baker -
Snoqualmie
National Forest
Forest Plan

REVIEW, UPDATING AND RELATIONSHIP TO FOREST PLAN FOR
MT. BAKER-SNOQUALMIE NATIONAL FOREST

The Skagit Wild and Scenic River System is administered by the Mt. Baker-Snoqualmie National Forest. As such, it constitutes a portion of the total land base to be managed by the Forest under the National Forest Management Act of 1976. Under this Act, each Forest is to prepare a National Forest Land and Resource Management Plan for its entire land base and all resources.

As a result of the Skagit river's designation by separate legislation, however, as well as the specific inter-agency resource management criteria for the lands allocated to Wild and Scenic River Corridor management, the management plan for the Skagit System has been prepared separately but in coordination with the National Forest Management Plan.

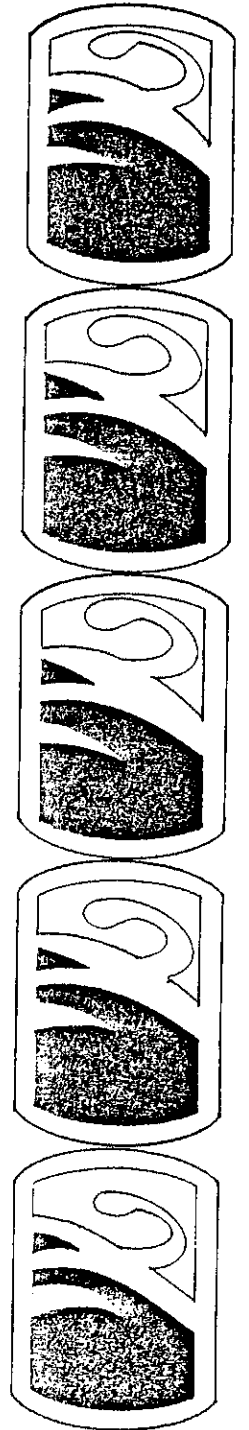
During future Forest planning periods, the Skagit Plan will be reviewed and incorporated into the Forest Plan.

Review and Revision

The implementation of this plan must be accompanied with a very close monitoring and critique program. By the very nature of the landownership patterns and complexity of inter-agency and inter-governmental involvement in the Skagit river management areas, protection of the values of the four rivers in the system will become challenging. The state-of-the-art knowledge with regard to disturbance of eagles, disturbance to salmon spawning beds by recreation activities, the role of social values, and of American Indian treaty rights is limited at this time. New information may result in the need for revisions of the plan.

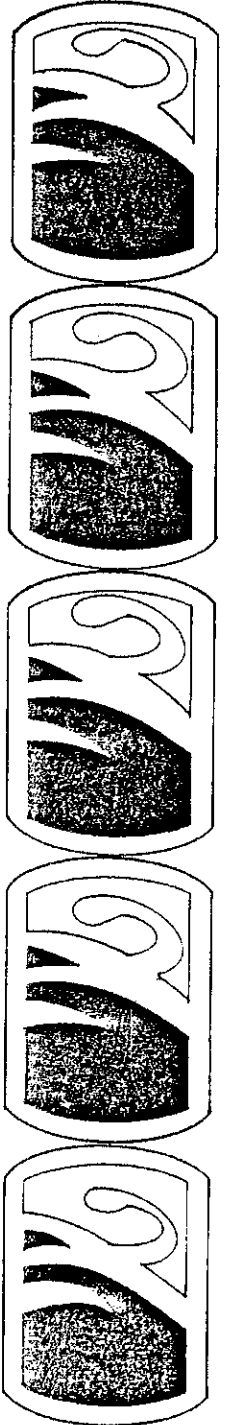
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Management Goals

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See
Volume II

Section III
Current Situation, Assumptions,
and
Management Direction



Administrative
Organization
and
Responsibilities

(NOTE: Section III is color coded as follows:

- Yellow - Information pertaining to Recreation and Scenic Rivers
- Green - Information pertaining to Recreation Rivers
- Blue - Information pertaining to Scenic Rivers)

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ADMINISTRATIVE ORGANIZATION

AND RESPONSIBILITIES: RECREATION AND SCENIC RIVERS

Current Situation

The 1977 Skagit E.S. outlined a proposal for joint administration of the rivers by the Forest Service and the State of Washington. The State of Washington, Interagency Committee for Outdoor Recreation on February 27, 1974, in a letter to the Forest Service, outlined the concept of joint administration for the Skagit River System that was followed in preparing the 1977 Skagit E.S.

Under the joint administration concept, the State of Washington would lead protection and development activities along the Skagit River Segment (58.5 miles of the Skagit W&SR System -- the Skagit Segment); the Federal government would fulfill the same responsibilities along the Cascade, Sauk and Suiattle Rivers (99.0 miles of the Skagit W&SR System). Detailed plans would be prepared jointly after State and Federal legislation is enacted. County and municipal governments would participate in the preparation of all management plans.

As of 1978, State legislation had not been enacted and on November 10, 1978, through Public Law 95-625 (1978 Amendment to the 1968 W&SR Act), the Skagit W&SR was added to the National Wild and Scenic Rivers System (NW&SRS). The law directed "...all segments to be administered by the Secretary of Agriculture".

Without State Legislation, changes in administration and fiscal priority by the State of Washington has resulted in revision of their involvement in the management of the Skagit W&SR. The State has been involved in the preparation of the management plan and would prefer to continue to exercise state regulatory authority along the river system. Due to present financial considerations, however, the State does not plan to administer the Skagit Segment independently or purchase any of the easements as originally anticipated.

Governor Spellman stated in his March 16, 1981, letter to the Mt. Baker-Snoqualmie Forest Supervisor that "Joint State-Federal management should remain a goal of the program and is the preferable way to administer the river." He is hopeful that financial conditions would improve and allow for full state participation sometime in the future.

Assumptions

1. Under total Federal administration, as outlined in the 1977 FES, the acquisition and administration of conservation easements and private property could require the appropriation of over \$60 million of Federal funds.
2. Many Federal, State and County agencies will continue to have varied and significant management responsibilities for the river and its resources.

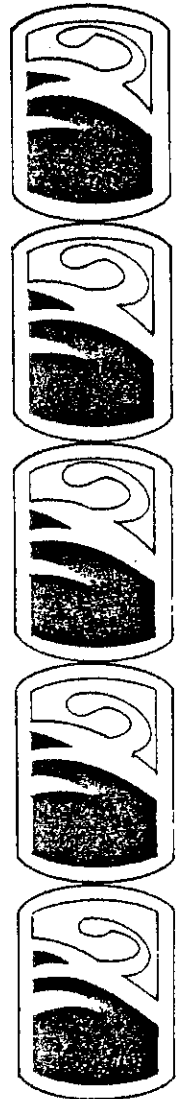
3. Joint State-Federal management will remain a goal of the State.
4. The administrative arrangement which best satisfies the future management needs of the Skagit W&SR, as directed by the 1968 W&SR Act, is joint administration.
5. The present Mt. Baker-Snoqualmie National Forest organization is not designed to administer the entire Skagit W&SR.
6. Congress directed, in the 1978 Amendment to the 1968 W.S.R. Act, that the Secretary of Agriculture have responsibility for administration and management of the river system, but a cooperative agreement with the State is viable.
7. Monitoring programs will be needed to assess the adequacy of this management plan and its effects on current activities.
8. To maintain the free-flowing character of the Skagit and Sauk Rivers, as required by statute, will require boundary adjustments that could result in the addition of significant acres of private land.

Section III Current Situation and Assumptions

NATIVE AMERICAN TREATY RIGHTS:

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III



**Native American
Treaty Rights**

NATIVE AMERICAN TREATY RIGHTS:
RECREATION AND SCENIC
RIVERS

Current Situation

The Skagit Wild and Scenic River lies within lands and territories once occupied by several Native American groups and tribes. Within the area, the Upper Skagit and Sauk-Suiattle groups once occupied and used these lands and rivers year around. In addition, the Swinomish claim the area was used by their people for food-gathering purposes.

These groups still use the rivers for fishing purposes and selected land areas for religious and ceremonial activities as well as source areas for certain ceremonial materials.

All indications are that other Native American groups, due to loss of necessary land areas traditionally used by them, may use areas such as the Skagit for their religious and ceremonial purposes.

The Point Elliott Treaty of 1855, in Article 5, guaranteed the Native American groups identified in Article 1 of the Treaty the right of taking fish in common with all citizens of the Washington Territory. This right to taking fish has been upheld in Federal court: Native American groups named in Article 1 are entitled to fifty percent of the fish harvest. This court decision is locally referred to as the Boldt Decision.

A second phase of this Court decision (rendered by Judge Orrick, 9-24-80), declared the Native Americans have a right to consultation on all activities on lands that may effect their principal fisheries. This second phase is currently under appeal by the State of Washington. A decision of this appeal is anticipated before the end of calendar year 1982.

To assist in monitoring rights provided in the Point Elliott Treaty, the Swinomish, Skagit, and Sauk-Suiattle have formed the Skagit System Cooperative. The Skagit System Cooperative provides fish management and enforcement, and fish propagation facilities for the Skagit Tribes. Spawning channels are used for spawning, incubation and rearing. The primary advantage is controlled flow.

Presently, the Skagit Segment is the portion of the Skagit W&SR most heavily used by the tribes for Point Elliot Treaty fishing.

On August 11, 1978, the Joint Resolution on American Native American Religious Freedom was signed in law (public law 93-341). It is the intent of the Congressional resolution that the same inherent right of religious freedom guaranteed to the American public under the First Amendment of the United States Consitution would be extended without abridgement to the Native Americans, "including but not limited to, access to sites, use and possession of sacred objects and the freedom to worship through ceremonials and traditional rites".

The Mt. Baker-Snoqualmie National Forest issued a contract to the Institute of Cooperative Research (ICR) for the purpose of contacting all Native American groups that may have or now do use the National Forest Lands for religious and ceremonial activities or materials. Some twenty-three groups were identified as having once used the Forest. The information gathered from these groups indicates that numerous areas within the management corridor (both inside and outside the National Forest boundary) are in use by various Native American groups. Their use varies from casual material gathering to utilization of very special areas that are critical to religious beliefs and needs.

ASSUMPTIONS

1. The Forest Service has no enforcement authority concerning treaty rights of the Native American groups; however, the Forest Service does have a trust responsibility to uphold treaty rights.
2. The Skagit River Segment will continue to be a principle location for exercise of Point Elliot Treaty fishing rights.
3. The Skagit System Cooperative will explore locations to increase natural spawning of anadromous fish.
4. The Forest Service has no authority to secure rights to private lands for the purpose of Native American religious and ceremonial purposes.
5. The management of the Skagit W&SR must respect and honor the treaty rights of the Native American groups.
6. Management of the W&SR corridor lands within the National Forest boundary should consider the intent of the 1978 Joint Resolution on American Indian Religious Freedom.

Section III Current Situation and Assumptions

III

LANDOWNERSHIP:

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Landownership

LANDOWNERSHIP
RECREATION AND SCENIC RIVERS

Current Situation

The Skagit W&SR contains 158.5 miles of rivers. Of this, some 58.5 miles are designated Recreational River while 100 miles have been designated Scenic River. Within the management corridor of 158.5 miles are found some 19,521 acres of public lands, mostly administered by the Forest Service, and some 19,418 acres of privately owned lands. The largest percentage of these private lands are located along the Skagit Segment. A general breakdown of the landownership pattern expressed in percent, is presented in Table 3.

Table 3

Landownership by Percent

By river it is distributed:

	Private	State & County	Federal
Skagit	26%	4.0%	0%
Sauk	13%	0.6%	18%
Suiattle	9%	0.7%	17%
Cascade	2%	0.7%	9%
TOTALS	50%	6.0%	44%

Generally, the private lands are in small to medium sized parcels (one to 500 acres). County and state parcels are usually small and most often provide the only existing public access between public roads and the river. Table 4 presents an inventory of the landownership pattern expressed in acres.

Table 4

Inventory of the Landownership Pattern in the Skagit
W&SR (expressed in acres)

<u>OUTSIDE NATIONAL FOREST BOUNDARY</u>						
	PRIVATE	STATE	COUNTY	FEDERAL	INDIAN	TOTAL
SKAGIT	9,962	1,262	120	29	8	11,381
CASCADE	665	95	166			926
SAUK	4,665	191	41	26	1	4,924
SUIATTLE	3,233	297	36	123		3,689
SUB TOTAL A	18,525	1,845	363	178	9	20,920
<u>INSIDE NATIONAL FOREST BOUNDARY</u>						
CASCADE	440			4,160		
SAUK	283	160		7,409		
SUIATTLE	161			5,406		
SUB TOTAL B	884	160		16,975		18,019
TOTAL A&B	19,409	2,005	363	17,153	9	38,939
TOTAL PRIVATE *		19,409				
TOTAL FEDERAL STATE AND COUNTY		19,521				
TOTAL INDIAN		9				

The preponderance of private lands along the Skagit Segment limit public use of the river. Access to the water is limited to a few State Game Department access ramps and abandoned ferry crossings or from public rights-of-way under bridges. Many of those existing public access points are not located in the best positions to provide ease of administration or meet current use demands. As a result, in several cases, private lands are being impacted, sometimes with acceptance and approval of the landowner and at other times without landowner approval.

Along the lower Sauk, development of residential or recreational lots is occurring outside the hundred year floodplain. The result of this conversion in land use is that the numbers of landowners are increasing. This may have significance to management of the Skagit Wild & Scenic River (Skagit W&SR). Both the Suiattle and Cascade appear to be experiencing little land use conversions at this time.

* Approximately 190 acres are owned by Native Americans.

Very few public lands outside the National Forest boundary provide access to the rivers along the Scenic Segments.

The use of bridge rights-of-way and private lands is most prevalent along the lower reaches of the Sauk and Suiattle Rivers. Often this use creates traffic congestion and localized zones of vegetation trampling.

Along the Skagit Segment a slow, subtle land use conversion appears to be occurring. This involves two basic types of conversion.

- (1) Above the hundred year floodplains, lands are being platted and conversions from agriculture use to residential development are occurring at an increasing rate.
- (2) Within the hundred year floodplain, conversions from timbered to agricultural, either row crops or pasture can be observed.

Through Article XVII of the Washington State Constitution, the State asserted the ownership to the beds and shores of all navigable bodies of water up to and including the line of ordinary high water mark. The responsibility for its proprietary management of the aquatic landownership has been empowered to the Department of Natural Resources. In the case of a non-navigable river, the riparian owners own the riverbed.

The Corps of Engineers lists the Skagit River as navigable from its mouth to Marblemount--a distance of 78 miles.

DNR considers the Skagit River navigable from its mouth to the international border based on evidence of use by early explorers and miners and tradesmen.

The Sauk has been found by DNR to have been historically navigable to the Bedel Campground, about 40 miles above the mouth of the Suiattle based on the transport of furs and commerce by Indians and early settlers like James Bedel.

The Cascade River is considered navigable by DNR for eight miles above the mouth, based on use of canoes by Indians reported in a military reconnaissance of the Cascade River in 1882.

The Suiattle River, according to DNR, has been navigable to at least Buck Creek based on travel by Indians and hiring of Indians by prospectors, and an 1894 news item indicates the head of navigation on the Suiattle to be close to the claim of John A. Brown.

The State defines "shorelands" as the area of the river waterward from the line of ordinary high water to a line of navigability and the "beds" as the area waterward of the line of navigability.

Prior to 1971, shorelands were sold by the State, but a moratorium on such sales was implemented that year.

The term navigability, as used to determine title to the bed of lakes and streams, is based on the Federal definition which has developed over the years through numerous Federal Court tests. The position of the Forest Service in the management of the beds of lakes and streams within the National Forest System is to administratively determine the navigability of these waters using the Federal test. Based on that determination, the Forest Service would assure jurisdiction under applicable laws, rules, and regulations for the management and protection of the adjacent National Forest System lands, the waters, and interests therein.

This position does not preclude or impair the State's police powers or interests in these waters or their use. The overall intent of the Forest Service policy is cooperative management in areas of common interest, and to seek a joint approach in overlapping situations created by unresolved navigational questions arising from the myriad of State and Federal laws and regulations related to those areas.

Consequently, except for those streams that have been declared by Congress or determined by Federal Courts to be navigable for title purposes in accordance with the Federal rule, the Forest Service will consider all streams upon National Forest System lands to be non-navigable for title purposes.

Assumptions

1. Public desire and demand to utilize water and water-related opportunities will increase.
2. Use and administration of the River will be dependent upon public access.
3. Conflicts between river-oriented activity and private landowners will increase if there is no change in public access opportunity.
4. Public access opportunities will need to be carefully selected to minimize conflicts with adjacent land use and key resource values.
5. The proximity of the Skagit W&SR to the Puget Sound metropolitan population and year-round accessibility of the river to this population will cause increases in public use.
6. A primary goal of Congressional designation of a Wild and Scenic River is to ensure that the river system's natural beauty is protected for future generations to enjoy.
7. Federal acquisitions of lands in fee-title outside the National Forest boundary will be minimal.

8. The intent of the 1978 Amendment to the 1968 Act was not to prevent farming and ranching from continuing as they have historically in the Skagit valley. Mineral related activities, timber harvesting, and development not associated with agricultural activities will, however, require more regulation than exists at present in order to avoid conflict with the land use provisions of the 1968 W.S.R. Act and the 1978 Amendment.
9. Overall existing state laws, regulations and county ordinances meet only in part the provisions of the 1968 W&SR Act and the 1978 Amendment.
10. Decline of the traditional rural community is expected to continue. The changing composition of local populations, coupled with a diverse economic base and centralization of production in regional industrial areas, is likely to further change the occupational patterns of towns like Darrington and Sedro Woolley. Darrington, perhaps the least likely to experience this change in the near future, shows signs of change with the presence of commercial river rafting operators, a new motel, new sporting goods store and real estate offices.
11. At present, there is uncertainty as to whether the population of Skagit and Snohomish counties will continue to increase at the same rate it has followed during the late 1970s.
12. The recent trends which have led to a decline in city populations and an increase in rural populations may not continue at the same rate if energy costs continue to increase. People may choose to live closer to their jobs to reduce commuting costs. Reductions in public expenditures may also reduce services available in remote locations, thus making rural communities less attractive as residential environments.
13. Private property rights can be maintained, but recognition of public responsibilities for protecting environmental quality will also continue. Again, issues concerning fair distribution of costs and benefits will likely emerge as a central area of controversy in land use planning. How such issues will be resolved, however, will likely be addressed on a case-by-case basis.
14. There is a need for additional boat launch and stream access sites. Since these sites are proposed to be developed as public recreation facilities, fee acquisition is desirable.
15. The majority of acquisitions will be partial interest acquisitions wherein certain property rights are conveyed through a conservation easement.

Section III Current Situation and Assumptions

STRUCTURES AND IMPROVEMENTS:

Recreation and Scenic Rivers

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Structures
and
Improvements

STRUCTURES AND IMPROVEMENTS: RECREATIONAL
AND SCENIC RIVERS

Current Situation

Throughout the Skagit W&SR corridor are structures of various vintage and purpose. They range from small buildings and structures within public campgrounds, through metal recreational trailers, mobile homes, large farm barns and outbuildings, to industrial structures, such as sawmills and high tension transmission towers.

Although generously sprinkled throughout the system, and most numerous along the Skagit Segment, structures are not always visible to the river user. Rather, structures appear more in groups or along short stretches with large segments of riverbank appearing undeveloped and wild. Only in a few cases do the existing structures appear out of context or noncompatible.

Assumptions

1. Pressure for land use development along the Skagit and lower Sauk segments will continue, resulting in an increase in structure density.
2. The memories of the 1979 and 1980 floods may discourage development and establishment of residential land use immediately adjacent to the river for a period of time. Most property owners are likely to attempt to retain a screen of vegetation along the riverbanks to absorb the power of floodwaters.
3. Over the long term, the low construction costs associated with flat lands adjacent to the rivers, and appeal of riverbank living and recreation will place a strong continuing pressure upon local administrators to allow platting and structures development within the corridor of the Skagit W&SR.
4. Floodplain and floodway constraints in accordance with the Federal Flood Insurance Program will reduce the pressure upon local administrators to allow platting and development within the corridor of the Skagit W&SR.

Section III Current Situation and Assumptions

VISUAL RESOURCE:

Recreation and Scenic Rivers

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Visual
Resource

VISUAL RESOURCE: RECREATIONAL AND
SCENIC RIVERS

Recreation and Scenic Rivers

This river system lies within the Northwestern Cascades physiographic section as identified by the 1931 Physiography of the Western United States ^{1/}. However, the lower terminus of the Skagit River segment is almost on the border of the Northwestern Cascades and Puget Sound Basin physiographic sections. As a result, this section of the river contains landscape characteristics of both physiographic sections.

The upper portions of the Skagit W&SR system (Cascade, Suiattle, Sauk and that portion of the Skagit between Bacon Creek and Lyman) are cupped within deep, steeply sloped valleys having moderate to deep accumulations of glacial debris. Below Lyman, the Skagit river valley widens rapidly. This valley landscape has low relief. It is surrounded by rounded, but steep valley sidewalls.

Within this context, the river landscape essentially consists of two parts: that landscape existing from valley wall to valley wall, and that landscape immediately adjacent to the rivers and within the confines of the management corridor.

The first landscape, from valley wall to valley wall, was recognized and inventoried during the initial study of the rivers.^{2/} This inventory of the landscape (visual resources) is summarized in Appendix C of the 1977 Skagit W&SR Study Report (USDA Forest Service). It identified five (5) basic landscape environments that combine to make the total landscape pattern of the valleys of the Skagit River System:

- | | | |
|-----------|---|---|
| Urban | - | Characteristic of a city. |
| Rural | - | Open country, largely stripped of the forest cover, used for intensive farming and also containing some recreational housing development. |
| Pastoral | - | Mixed forest and farmland. |
| Primitive | - | Land with little or no development, where the forest cover predominates. |
| Wild | - | Sparsely inhabited lands, still largely in a natural state. |

It is possible to translate between these Forest Service classifications and county Shoreline Master Programs. Table 5 presents this translation.

^{1/} Fenneman, Nevin M. 1931 Physiography of the Western United States. New York & London: McGraw-Hill Book Company.

^{2/} The Skagit - Wild and Scenic River Study Report - USDA Forest Service, 1977.

Table 5

Translation between Forest Service Skagit W&SR Landscape Inventory classifications and county Shoreline Master Program Inventory Classifications.

<u>Skagit River System Landscape character</u>	<u>Shoreline's Master Program Context</u>	
	<u>Skagit County</u>	<u>Snohomish County</u>
Rural	Rural Residential and Rural	Suburban and Rural
Pastoral ^{1/} Primitive	Conservancy Conservancy and Natural	Conservancy Conservancy and natural

^{1/} Note that pastoral as used here differs from pastoral as used in the Skagit County Shoreline's Master Program, which describes the pastoral zone as an area normally upstream from the estuarine zone.

The landscape visible from within the Skagit W&SR corridor must be considered in terms of the seen area. Although often presenting only distant views (therefore being of reduced significance), the broad, valley landscapes do interact with the more detailed river landscapes dominant in the foreground. These foreground views are primarily Primitive in nature. From the low vantage point of the river itself, vision is confined by channel vegetation to such a degree that much landscape modification is completely obscured and views are primarily Wild or Primitive.

The following is a brief description of the visual resource present along the Skagit W&SR corridor:

Cascade River - Between the junction with Skagit boundary and the upper termini, the corridor landscape as seen from the river appears natural or near natural, dominated by wooded and forested banks (Primitive).

Sauk - With a few localized exceptions, the total corridor, as viewed from the river, appears natural or near natural (primitive) dominated by forest environment. Glimpses of modifications - roads, structures, cleared fields - appear infrequently.

The exceptions to the appearance of a near natural (primitive) environment occur just below the community of Darrington, at and upstream from the confluence of the Sauk with the Suiattle. Here the strong visibility of structures, roads, and cleared fields give the appearance of a modified natural environment (Pastoral).

Suiattle - This river, from the management corridor upper termini to the junction of the Suiattle with the Sauk is natural to natural appearing - dominated by timbered banks (Primitive).

Skagit

- The landscape pattern within the management corridor is a patchwork. It is the result of land use, length of land use development, and physical characteristics - both topographic and river alignment.

From the lower termini, just above Sedro Woolley to above Hamilton near O'Toole Creek, the northern bank is dominated by cleared fields, structures, fence rows, wooded water ways, and roads. This modification and density of structures reflects a rural landscape character. Although within a dominately rural environment, the areas of Skiyou Island and Slough, and Minkler have lesser structure density and denser wood or timber which create a pastoral landscape enclave.

All islands appear natural with forest dominate (Primitive).

Along the southern bank, the landscape is primarily heavily wooded and timbered with limited modification by structures, clearings and roads (Primitive). Exceptions are the Day Creek area - an enclave of rural landscape is present below the creek junction for approximately two miles, and an enclave of pastoral landscape is present above the creek junction for approximately one mile.

Above O'Toole Creek, the urban landscape blends through a mile of Primitive landscape. The northern banks of the river in this stretch appear pastoral. This pastoral landscape with its limited modifications from cleared fields, structures, and roads extends to an area approximately two miles below the community of Rockport.

The southern banks present interspersed rural and primitive landscapes to the Rockport bridge.

Above Rockport, the visual character of both banks is dominated by forest landscapes. This is broken periodically by short stretches of narrow bands of pastoral landscapes that become enclaves within a primitive, forest environment.

Assumptions: Recreation and Scenic Rivers

1. The view from the river or its opposite bank will be considered the critical or primary viewpoint when evaluating impacts.
2. The visual characteristics of the corridor will be a key factor in management of the river system.
3. The visual characteristics (i.e., rural, pastoral, and primitive), can be cross referenced to the Shoreline's Master Program Context as administered by Skagit and Snohomish counties.

4. Although the entire Skagit system possesses very high scenic values, the areas of key visual value are those defined as:
 - a. Views downstream and upstream to a bend of the river as seen from within the middle length of a straight river reach (a focal view of 1200).
 - b. Views into and across the river from public roadways paralleling the river.
 - c. Views from the river bank across the river. (A focal view enclosure of 1200).
5. The sights of human development or modification to the landscape are to be expected within the corridor of the Recreation River segments of the Skagit W&SR.
6. The sights of human development or modifications to the landscape are to be obscure and seldom noticed or recognizable by the casual river user within the corridor of the Scenic River segments of the Skagit W&SR.

Section III Current Situation and Assumptions

FLOODPLAINS:

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III



Floodplains

FLOODPLAINS: RECREATION RIVER

Current Situation

The Skagit flows southwesterly from its source in Canada for 163 miles to Skagit Bay. It falls 1,600 feet in this distance; 1,570 feet from its source to Marblemount. The remaining 300 feet of fall are distributed over 92 miles in the lower basin. Above Marblemount, water fluctuations are controlled by Seattle City Light dams. Below Marblemount, the influence of the free-flowing Cascade and Suak Rivers allow for natural fluctuations in the water level of the Skagit.

Although the valley floor begins to lose its narrow, incised profile at Bacon Creek (the upper limit of the Skagit W&SR), the flattening of the valley floor is gradual. The potential for flood damage begins at Marblemount and continues downstream. The main valley, which supports most of the basin's agricultural activity as well as a large portion of Skagit County's population, industry and transportation routes, is highly susceptible to flooding.

The potential for loss of life and monetary damage arising from a major flood, has risen in past years due to commercial and residential development in the floodplain. Existing flood control measures and structures mitigate potential flood damage somewhat, but maximum protection is only achieved for floods occurring at a frequency of once every 14 years.

When the river overflows its banks, a sheet of water quickly spreads across the floodplain. As the flow increases toward the peak of the flood, water extends to the outer limits of the floodplain. The normal river banks may disappear from sight, submerged beneath a mile-wide expanse of water.

The Skagit River is subject to two distinct types of floods: winter floods and spring high water. In the past, most of the exceptional winter floods have occurred in November or December; the spring high water in May or June.

Large winter floods in the Skagit River basin are caused by water released through the action of strong, prolonged winds which bear warm, moisture-laden air from the Pacific Ocean to the Cascade Range; this action causes precipitation and snowmelt. These winds are known locally as "chinook" winds.

The crests of spring floods are caused mainly by warm spring sun and rains which cause melting of glaciers and snowfields in the high, sparsely timbered or open areas. The crests of the spring floods are probably swelled to a minor degree by snowmelt from heavily timbered regions, which lie just below the glaciers and adjacent snowfields.

Evidence of riprap and levee work can be seen along the entire length of the Recreation River portion of the Skagit W&SR. However, the major concentrations of levee and riprap construction along the classified river are located in the segment between Sedro Woolley and Hamilton.

The peak stages of the highest spring floods are considerably lower than those for the highest winter floods. The spring floods, however, are of much longer duration and are greater in volume than the winter floods. Agricultural crops are growing at the time of spring floods and, if the dikes break, the great damage done is accentuated by the long duration and great volume of the floods. The duration and volume of the floods also prevents immediate repair of the dikes.

Today, a floodplain site is generally unacceptable to most large scale industries and some commercial ventures because of danger to plant and equipment and the cost of flood protection. However, if economic analysis warrant, construction would be pursued.

The type of development most likely to be impacted by flooding are recreational subdivisions and "riverfront" lot developments generally located upstream from Sedro-Woolley. The growing amount of leisure time and increasing demand for second homes, recreation cabins and permanent homes with waterfront, create development pressures on the Skagit floodplain in Skagit County. It is these developments, adjacent to the river, that are directly affected by its seasonal rise and fall. Requests for additional protection from flooding or high water (by means of riprapping or other protective structures) are most likely to come from the owners of such structures.

Prior to the Zoning Ordinance going into effect in Skagit County (1966), there were several similar developments that were located, or were partially located, in the floodway of the rivers. The development at Cape Horn, for example, has approximately one-half of its lots located within the floodway (15 year frequency flood) and the majority of the remainder is within the floodplain of the Skagit.

Any structure in the County built on the floodplain for residential, commercial or industrial use would require a floodplain management permit from the Skagit County Permit Center. The majority of floodplain management permits are for single family residences, which does reflect a large amount of capital investment in the floodplain. Skagit County residents recently voted down the Skagit Levee and changed improvement project sponsored by Skagit County and the U.S. Army Corps of Engineers.

The potential cost of a major flood in the Skagit Valley would unquestionably go into the millions of dollars. The cost would be spread between those who occupy the floodplain and are directly affected and also those who live out of the floodplain who pay for relief, repair and other clean up work.

Despite large expenditures of monies for flood control projects in past years, the increase in flood damages has led to a new approach for reducing these damage amounts.

This approach is the application of control over the use of land lying adjacent to the river through planned development and management of flood hazard areas. While floodplain areas can probably never be considered flood-free, planning will allow selection of flood risks according to the type of development desired.

Floodplain management is an alternative to flood control projects. It is designed to provide an approach which will permit the use and development of floodplain lands for the optimum benefit of the region's population and economic activities, without the cost of structural measures for protection against flood damages.

In August of 1966, the President of the United States issued an executive order which clearly points out that the executive branches of the Federal Government shall not expend, loan, or issue grants with Federal money in flood hazardous areas until the flood hazard is fully analyzed.

The program was established by the National Flood Insurance Act of 1968 (enacted as part of the Housing and Urban Development Act of 1968), to make specified amounts of flood insurance, previously unavailable from private insurers, available under Federal auspices. In return for the provisions of subsidized insurance to existing properties, the Act requires that State and local governments adopt and enforce land use control measures that will guide development in flood-prone areas in order to avoid or reduce future flood damage. A 1969 amendment to the Act expanded the definition of flood to include mudslides, and mudslide area restrictions can be invoked, where applicable.

Floodplain zoning is the most common and perhaps the easiest way to accommodate local development to the requirements of the National Flood Insurance program. County zoning, including control of floodplain uses, is just as desirable and legally sound. The purpose for such zoning is to reserve the floodplain for those uses which are not only best suited to it, but are also least subject to damage during high water.

Other measures that could be incorporated in floodplain management techniques are: 1) flood forecasting, 2) warning signs and, 3) tax adjustments.

Skagit County adopted its first Comprehensive Plan in 1963, and a subsequent Zoning Ordinance in April of 1966. In December of 1971, Skagit County adopted an amendment to the zoning ordinance that specifically dealt with flood management regulations.

It specified that all lands lying below the 50-year frequency flood level, as established by the U.S. Army Corps of Engineers, shall be classified as floodplain and are subject to certain conditions; among them being that the floor level of structures for residential, commercial or industrial use shall be located above the 50-year frequency flood level. This amendment further stipulated that all construction on land within the floodway (15-year frequency flood level or below) be permitted by conditional use permit only.

In August of 1974, this amendment was further amended to raise the flood level from the 50 to the 100-year frequency flood level in order to: 1) bring the County into compliance with State laws and, 2) enable residents of Skagit County to purchase flood insurance under the National Flood Insurance Program.

Assumptions

1. Despite regular flooding, the pressure to develop farms and residential areas will continue.
2. As more and more developments encroach onto the floodplain, more pressure will be put on government to spend more money for flood protection.
3. If the river is made safer from floods, more development will take place.
4. Large floods, causing damages into the millions of dollars, can be expected in the near future.
5. Floodplain management, as opposed to flood control structures, will be the primary method of dealing with flood problems.
6. Part of the floodplain is likely to be inundated every few years.
7. At present, cost-benefit ratios do not warrant the cost of construction of new flood control devices. As development continues to encroach into the floodplain, however, the cost-benefit ratios become more in favor of construction of flood control structures.

FLOODPLAINS: SCENIC RIVERS

Current Situation

The upper Sauk basin is narrow with steep hillsides; the lower valley is fairly broad where the river course meanders. From Darrington to the confluence of the North and South Fork, the valley floor is broad, averaging 3,000 feet in width.

The Suiattle's upper basin is also quite narrow and becomes somewhat broader where it joins the Sauk north of the town of Darrington. The Cascade River follows the same pattern.

For the most part, the three rivers do not have an officially defined floodplain. However, the Army Corps of Engineers is presently conducting a Flood Insurance Study of Skagit County. This study will provide floodplain and floodway boundaries for portions of the Skagit, Cascade, Suiattle and Sauk rivers. High water is generally held to a narrow corridor. Major flood danger is usually confined to transportation systems located in the valley floor. There are also a number of housing tracts located in the lower portion of the Sauk river, and the townsite of Darrington, which are subject to flood threats. Even though floods are confined to a narrow corridor, the resulting damage can be high. This is due to the steeper gradients providing high energy to water flow. Cutting action on roads and bridge fills can be observed.

Assumptions

1. The use of riprap may be needed to maintain existing roads or protect investments.
2. As flood events widen the existing channel or change its location, damaging roads, the need to encroach upon the new channel to reconstruct roads will be necessary, when the option to move the road away from the channel is not viable.
3. New developments will most likely be constructed well away from the flood channel due to visual constraints. This should also help to reduce the impact of floods on improvements and, in the long run, lessen the need for flood control or bank stabilization.
4. The proposed reconstruction of portions of FH7 will constitute a land use conflict within the Skagit W&SR.

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III



Recreation

RECREATION: RECREATION AND
SCENIC RIVERS

Current Situation

The Skagit W&SR offers tremendous potential for recreation and environmental appreciation. Including stretches of non-classified river at either end, the opportunity exists here to experience the total length of a magnificent river: from glacial headwaters on the Cascade Crest and Glacier Peak to salt water delta, the water flows through wilderness and town. This is a unique resource, presenting virtually limitless possibilities for leisure and play.

Because of this value, management of the Skagit W&SR as an amenity resource provides a singular opportunity to meet an important public need. However, along with this opportunity is the challenge to provide adequate public use while also protecting resource integrity. The Skagit W&SR is intended to provide recreational opportunities for not only current visitors, but also for future generations. The present level of public recreation use is not significantly impacting the esthetic or ecological integrity of this resource. It is essential that a management program adequately maintain resource integrity.

In order to carry out the directives of the 1968 W&SR Act, it is necessary to assess what values are present in the W&SR corridor, and to what extent they may be utilized.

Each recreation experience has a quality dimension, which may be easily impaired. However, it is not easy to define quality; people do not all seek the same experiences in outdoor recreation, even in the same area, participating in the same activities. The degree of recreation quality is highly important however, to visitor satisfaction.

It is necessary to consider how much use of each specific recreation activity can be allowed or accommodated without compromising the quality of other uses and/or activities - contemplative, noncontemplative, passive vs. aggressive, consumptive, nonconsumptive - the wide array of potential uses along the Skagit W&SR is a large factor in the river's attraction for recreationists.

The value of specific natural resources and recreational experiences directly depends on the type and level of intensity of management of an area. Different types of developments and facilities attract different types and numbers of visitors. Man-made installations are necessary for intensively used areas but may greatly reduce the value of areas sought for their natural environment.

Increases in population together with a growing attitude of environmental awareness, place demands on management agencies to design management strategies that will reduce or prevent damage to the area or its facilities, while at the same time maintaining optimum recreational opportunities. Natural resources, such as the Skagit W&SR are a finite commodity--man cannot produce them as he can facilities. Care must be taken not to over-develop and thus destroy the natural environment that has attracted him there in the first place.

Therefore, it is necessary to consider the "carrying capacity" of the area - its sociological (human interactions during recreational activities), environmental (resource capabilities as affected by human impacts), and managed (physical capacity of existing or proposed facilities) ability to withstand given amounts of use. In addition, on-going evaluation of visitor and resource management activities (i.e., visitor information services, campgrounds, regulations, etc.) must occur in order to maintain a quality recreation experience.

Additional capital construction funds will be needed to provide adequate public access to the river. Also, more funding support will be required if the Mt. Baker-Snoqualmie National Forest is to meet its responsibilities as lead agency in administering the Skagit W&SR. An adequate level of administration will require more visitor contact by river managers to monitor visitor's recreational expectations, provide public information and education, and protect resource values and private property rights.

Implementation of effective river recreation management program requires the following:

1. An acquisition program must be completed to provide for an adequate system of public recreation access to the resource as well as to protect its scenic integrity.
2. Facility development must proceed in a timely manner to enable optimum public use and enjoyment of the resource.
3. Base line use and ecological data must be collected and analyzed so that use and impact trends can be accurately assessed through an ongoing monitoring process.
4. Managers must be provided the funding necessary to effect adequate on-the-ground administration.

Note that figure 4 at the end of the Recreation Section locates the put-in/take-out sites, campsites, developed/undeveloped sites, trails, access sites, etc., along the entire Skagit W&SR corridor. Reference to these figures may be helpful when using the Recreation Section.

Assumptions

1. General public recreational use of the river and corridor area will continue to increase over the foreseeable future. Use by local and regional populations of these recreational attractions so near to them, will increase as people try to reduce total vehicular travel to save energy.
2. Recreation demands on the Skagit W&SR will increase as more people become aware of it as a nationally recognized resource. Demands for river floating experiences will increase as recreationists acquire the equipment and skill levels necessary for a safe trip. The need for commercial river outfitters to meet public service needs will continue.

3. It is also anticipated that the number of people floating the river with little or no river running skills and poor equipment will increase.
4. Not only will numbers of people increase but the desired experiences may change from one type of use to another. Solitude does tend to be a key part of kayakers, some canoeists and fishermen experience; whereas the social experience tends to play a bigger role for many rafters and some canoeists. The social desires of the rafters will conflict with users desiring to escape noise and sights of people. The fisherman, kayakers, and canoeists may also have a long term bond on certain sections of the river while customers of the commercial outfitters are often a first time or maybe only time users and thus may tend to treat the tranquility of the river environment with less respect. All of these are factors leading to potential conflict.
5. In order to satisfy a wide range of visitor desires, it is necessary to provide varying degrees of camping and picnicking opportunities. Available recreation sites must range from primitive and undeveloped through highly developed facilities. See Figure 3 and Tables 6 and 7.
6. Concentration of people in urban and suburban centers will tend to reinforce and increase the importance of forest experiences as one element of society's recreation and environmental opportunities. Public goods such as scenery, clean air, clear water, and open space will enjoy increasing support from people who have little direct experience with resource extractive uses and users of forests.
7. More jobs will be available in tourism and recreation industries in the Puget Sound region. Small rural communities are likely to benefit from these jobs.
8. The number and diversity of uses along the W&SR will continue to increase along with technological innovation and diffusion. However, it seems unlikely that change will be as rapid as in the last decade.
9. User expectations, river classification, and the natural and man-made features of the river determine the recreation opportunities and management objectives for each river segment.
10. There will be increased conflict among user groups.
11. There will eventually be a need to provide users with opportunity guides by river stage level.

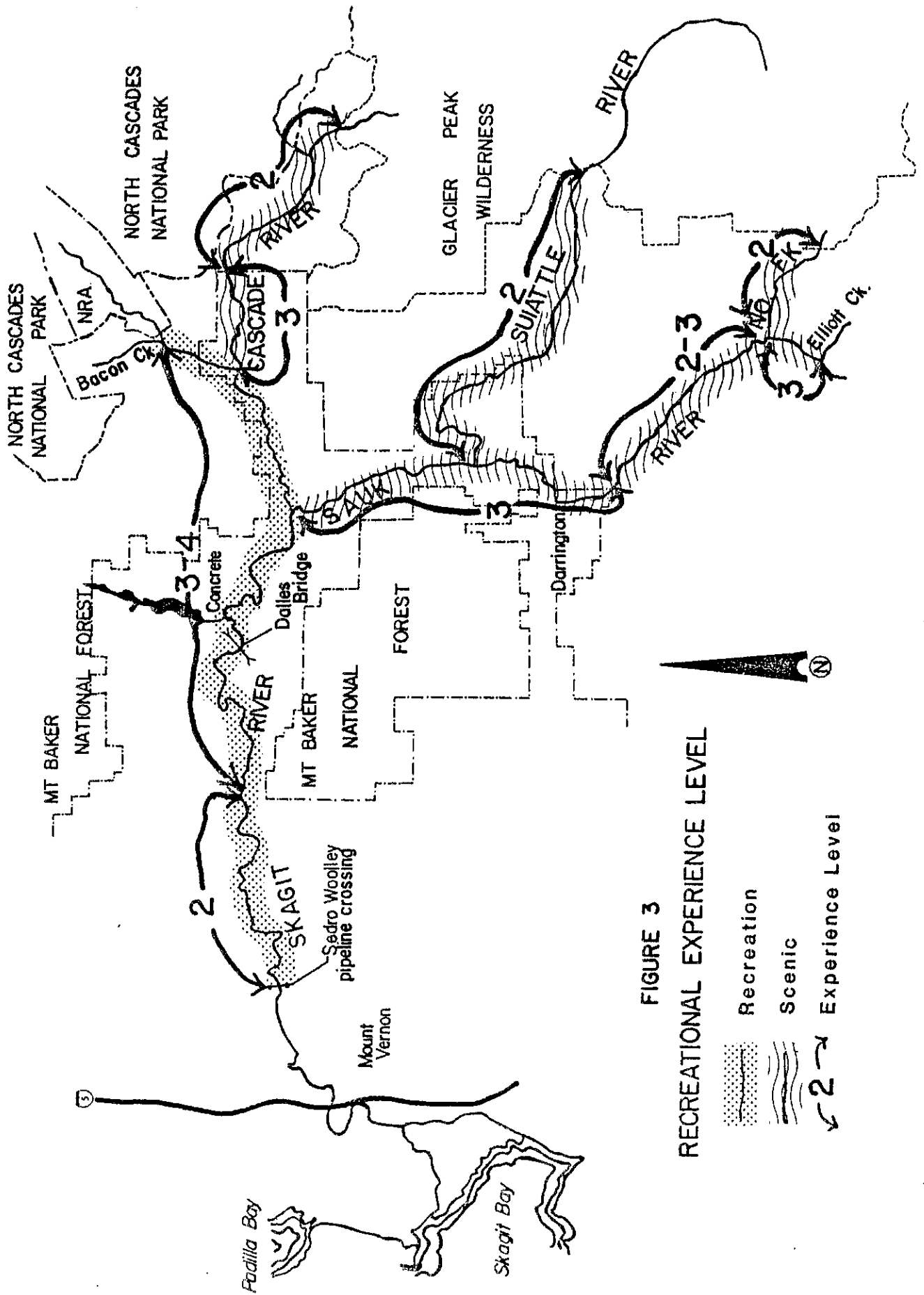


FIGURE 3
RECREATIONAL EXPERIENCE LEVEL


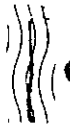
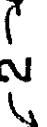
-  Recreation
-  Scenic
-  Experience Level

Table 6.

RECREATION EXPERIENCE LEVELS

LEVEL	DESCRIPTION
PRIMITIVE	Recreation opportunities to satisfy basic-needs to the maximum degree. A maximum degree of outdoor skills required. Unmodified natural environment and an absence of man-made developments and comfort or convenience facilities dominates. Feelings of adventure, challenge, and physical achievement, in the absence of obvious controls, important to the user.
1	Recreation opportunities to satisfy basic-needs to a near maximum degree. High degree of outdoor skills involved. Little modified natural environment is dominant consideration. Modifications for comfort and convenience are minimal. Feeling of physical achievement at reaching opportunities without mechanized access is important to the user. Adventure and challenge afforded through minimum controls.
2	Recreation opportunities to satisfy basic-needs to near maximum degree except as tempered by motorized access. Little modified natural environment is dominate consideration. Modifications for comfort and convenience are few. Some feeling of achievement for reaching the opportunity through challenging motorized access is important. Minimum controls evident to the user.
3	Recreation opportunities to satisfy basic-needs to an intermediate degree. Moderate degrees of outdoor skills are involved. Natural environment dominates but some modifications for comfort and convenience are also important to the user. Controls and regimentation afford sense of security although some taste of adventure is still important to the user.
4	Recreation opportunities to satisfy basic-needs to only a moderate degree. Moderate degree of activity skills suffice. Natural environment important but modifications for comfort and convenience are more important. Sense of security afforded the user. Regimentation and fairly obvious controls important to the user.
5	Recreation opportunities to satisfy basic-needs to a modest degree. Skills required for outdoor activities are minimal. Natural environment is important but dominated by man-made modifications. Feeling of security is very important to the user. Learning or beginning skills suffice when supplemented by administrative controls.

TABLE 7

Skagit Wild & Scenic River Criteria for Evaluation of Recreational Facilities by Development Levels

	Development vs. Setting	Sight/Sound of man	Color/Form Line/ Texture	Architectural Style	Materials	Site Modification
LEVEL 1 (No Road Access)	Not Evident	Seldom/ Discouraged	Repeats Native	Not Recognizable	-Native to Site -No Dimensional Material -No Synthetics	Minimum Not Evident
LEVEL 2 (Road - Native Mats)	Subordinate and Harmonious	Occasional	Repeats Natural	Fully Subordinate	-Natural Materials Dominate -Dimensional Material Accepted -No Synthetics	Limited
LEVEL 3 (Road - All Weather)	Co-Dominant	Acceptable	Harmonious	Co-Dominant	-Dimension Material Expected -Synthetics Accepted/ Subordinate	Moderate
LEVEL 4 (Road w/Dust Control)	Co-Dominant	Expected	Co-Dominant	May Dominate	-Dimensional Materials May Dominate -Synthetics Co-Dominate	Heavy
LEVEL 5 (Road - Synthetic)	Dominates/ Compatible	Encouraged	Dominate/ Compatible	Featured (Family of Shapes)	-Dimensional Material Dominate -Synthetics May Dominate	Heavy

RECREATION: RECREATION RIVER

Current Situation

Documentation of recreation use on the Skagit River is sketchy. Probably, the reason for this has been the preponderance of private lands along both sides of the river. Also, use of the river appears to be entering a period of transition. Until recently (less than five years past), the principle recreational activity on the river was fishing. Today, dominance of fishing as a recreational activity is being challenged by guided float trips.

Most of the recreational use of the waters occurs during the winter season, October 1 through March 31. Summer season use is quite light at present. However, the river and its numerous summer season opportunities are and should remain available for use in the future.

The State Game Department monitors fishing activity on the river. However, it is difficult with any degree of accuracy, to separate use that occurs within the classified sections of the river from non-classified sections. Specific forms of fishing activity - bank fishing or boat fishing, for example, are also difficult to sort out.

Other than rafters entering the Skagit W&SR from the Ross Lake National Recreation Area, and recreational use of the banks by the residents scattered along the river, there seems to be only very limited use of the total river during the summer season. The river has yet to be discovered by the general public.

Commercial use on the river has traditionally been by fishing guides. This use still occurs, but in lesser numbers than before. Apparent decline in numbers of steelhead fish caught by sportsfishermen is the major factor in the decrease of guided fishing trips. Guided rafting trips have dramatically increased. This commercial use occurs during the winter season and is concentrated in the stretch of river between Marblemount and Rockport. Summer commercial use seems to be concentrated in the upper reach of the river, above Marblemount. Outfitters starting within the Ross Lake National Recreation Area who float to Bacon Creek for take out constitute most of this upper river use. A few float as far as Marblemount.

Public noncommercial use of the waters seems to be mainly for fishing. As with the commercial fishing, this use consists primarily of motor-driven boats moving to a desired location and then floating downstream. These groups often motor back upstream to float down again. Boat fishing occurs throughout the system. Native Americans, as provided by treaty with their tribes, utilize the river primarily below Concrete for fishing.

The segment of the Skagit within the classified system is deceptively placid. This stretch has a river use class of I to I+ on the International Scale of River Difficulty. However, the water temperature, water volume, and seasonal currents create situations that trap the unwary. As such, the river is considered suitable for running in open canoes. There are isolated locations

where due to bank configuration or presence of log jams, logs or "sweepers", the unwary may be swamped. Notable among these, is the pool on the upstream side of the Dalles Bridge.

Boaters find a lack of public areas available for a rest or lunching stop. This is especially true above Rockport where no public access points have been developed. There are public facilities on the river at the Rockport County Park, as well as two State Game launching sites located below Concrete at Pressentin Creek and Hamilton. Outside of these, no other public facilities on the river have sanitation facilities such as restrooms. This limited availability of public facilities exists throughout the total Skagit W&SR corridor.

The public camping facility within the W&SR corridor is the County Park at Rockport. Nearby is the 455 acre Rockport State Park just off Highway 20 as well as large campgrounds within the Ross Lake National Recreation Area. The site within the Skagit Segment, supplemented by the State Park and by the several large campgrounds within the Ross Lake National Recreation Area, comprise current camping options available to recreationists and are adequate for destination type camping.

Boating access sites along the Skagit are listed on Table 8. Many are public, (few are developed). Private sites are also available (with use by permission, sometimes requiring a fee).

Of these sites, only three of the public sites have sanitation facilities immediately adjacent to the river.

Table 8

Boating Access Sites Along the Skagit River

Steelhead Guides Association	Private	below lower termini (Sedro Woolley)
Steelhead Guides Association	Private	above lower termini (Sedro Woolley)
State Game	Public	Hamilton
Undeveloped	Public	Hamilton ferry crossing site - both sides of river
Undeveloped	Public	Lyman ferry crossing site - both sides of river
State Game	Public	Pressentin Creek
Undeveloped	Private	Mouth of Baker River
Undeveloped	Public	Pressentin Ferry Crossing Site
Developed	Public	Faber Ferry Crossing Site
Undeveloped	Public	Cascade River Road Bridge
Undeveloped	Public/ Private	Mouth of Bacon Creek
Developed	Public	County Park at Rockport
Undeveloped	Unknown	Barr Creek

Fishing access for bank or bar fishing is, of course, available at the public boat launch areas. But it is very limited, as most of these sites are actually old ferry crossing sites with the narrow right-of-way being the existing public access. The State claims jurisdiction over all lands below mean high water. Thus at low water periods, the exposed banks are considered public lands. To reach this strip of land, however, most often necessitates travel across private lands. More bank access to the river for the public is needed.

The 1977 Skagit E.S. directed that a twelve mile trail between Sedro Woolley and Lyman be located and constructed within the management corridor. Also, the Pacific Northwest Trail Study of June, 1980, by the Forest Service and National Park Service identified need of a trail within the Skagit River Valley.

At present, no formal trails exist within the Skagit W&SR corridor. Skagit County has begun development of a trail linking Rockport State Park with the County Park on the river at Rockport.

Although a trail along the corridor would be very popular, construction costs (including three bridges with 30 to 60 foot spans) would be high. There is also a high risk to the investment: in March, 1980, the Mt. Baker-Snoqualmie N.F. conducted an intensive reconnaissance of the corridor between Sedro Woolley and Lyman. This reconnaissance revealed that lands within the corridor were covered with from one to nine feet of water during floods of December, 1979. The floods of December, 1980, were more intense. User safety is also of concern, especially with fast rising waters. High ground is often one-half mile or further from the corridor.

There is currently only limited dispersed recreational use of the Skagit W&SR corridor. With most of the land base private, dispersed recreation activities are discouraged. There are, however, some opportunities for dispersed recreation among islands in the lower stretches of the river. These opportunities are accessible only by water. Public control of the islands would probably be required.

There is no off-road vehicle use in the corridor of any consequence, nor is there significant horse use.

There is no indication at this time of conflicts between users - probably due to the limited use occurring. However, public input in 1979 and 1980 indicates the landowners anticipate conflicts between public use and private property if use is allowed to increase without some type of control.

Assumptions

1. Much of the Skagit W&SR has capacity for greater use than is presently occurring.
2. The stretch of river between Marblemount and Rockport is presently receiving the greatest amount of use and is the stretch with the greatest potential for conflict with eagle management.

3. For use of the Skagit to increase, better developed public access facilities will be necessary.
4. Below Concrete, the islands within the Skagit provide opportunities for dispersed recreation.
5. Bacon Creek day use site (Forest Service) does not presently have the capacity to handle use originating within Ross Lake National Recreation Area and provide future access for launching water craft.
6. Eagle viewing is a major winter attraction on the Skagit River at this time.
7. Additional bank access for fishing and other public use is needed.
8. The State Game Department and Skagit County will continue to maintain public launch facilities.
9. It is not prudent to make large capital investments to develop a trail between Sedro Woolley and Lyman when that trail is subject to periodic, if not yearly, flooding.
10. The season of greatest use on the Skagit presently is October 1 through March 31.
11. There is very little use of the river between April 1 through September 30, at the present time.
12. The river is suitable for use by open canoes, although water temperature, volume, and seasonal currents can trap the inexperienced.
13. There are several areas of the river that are considered difficult to the unwary or inexperienced canoeist.
14. The Skagit will continue to be a principle fishery for the Native Americans under their treaty rights.
15. County and State Governments and agencies should continue to have a large role in administration of the Skagit segment.
16. The Forest Service will have to take the leadership to control use of the surface waters when adverse impacts upon the "key resources" begins to occur.
17. The Skagit W&SR provides opportunities for year-long recreation activity to the large metropolitan Puget Sound population.
18. The Rockport State Park and Campgrounds within the Ross Lake National Recreation Area provide adequate destination type camping facilities. There is little need to provide large overnight camping facilities within the Skagit corridor.

RECREATION: SCENIC RIVERS

Current Situation

Water Use

The Sauk, Suiattle and Cascade rivers are prime rivers for water-related recreational activities. Fishing access for bank or bar fishing is adequate on National Forest lands. However, parking and sanitation facilities are limited. Outside of the forest boundary, access and facilities are both limited.

White water boating has existed on the Sauk River for many years and has experienced a slow but steady growth. Recently, this growth has greatly accelerated.

The Suiattle river and, to a lesser degree, the Cascade river, have also been discovered and are receiving some use. The Cascade river is less suited for float use than the Suiattle or Sauk rivers.

Boating activities can be subdivided into three categories. One group of users, consisting of kayakers and white water canoeists, have used these rivers for many years and are generally seeking a challenging white water experience, solitude, and a natural setting. Many are associated with one or more of the State's canoe or kayak clubs.

A second group includes rafting companies which began commercial trips in 1977 and have high potential for rapid growth. Because of this growth potential (including impacts on National Forest land), commercial rafting is a primary concern of management along the scenic segments of the Skagit W&SR.

Kayakers generally concentrate on the river utilizing various "play-spots" and float through with no or few stops. Rafters, while enjoying the rapids, are generally more leisurely and enjoy lunch, water fights, wading, swimming, and fishing stops.

Commercial rafting use began on the Sauk River in 1977. Extensive press coverage, promotional work by rafting companies and inquiries for permit applications has promoted a dramatic increase in applications for commercial permits and use. Commercial river use trends on other western rivers also indicate a substantial increase will continue on the Sauk and possibly the Suiattle and Cascade rivers.

Commercial operators are playing an important role in providing recreation activities not available to the inexperienced rafter. Many of the public served by existing commercial outfitters would otherwise be precluded from the river experience by constraints of time, knowledge, equipment, ability or money.

A third category would include private rafters and fishermen. Of these two, the numbers of private rafters, at present are relatively small. Number of fishermen is growing in light of the increasing popularity of a catch and release program during March and April.

Currently, the Sauk, Suiattle and portions of the Cascade Rivers provide a unique river recreation opportunity. Several factors contribute:

1. Roads paralleling the rivers are screened visibly and audibly by vegetation and are visible only at a few points.
2. The rivers offer white water and have been rated as Class III to Class V on a scale of VI.
3. An important element in the unique character is the opportunity for solitude while floating the river. Commercial rafting use is still at a low level.
4. The rivers are relatively free of indicators of commercialization. Summer home subdivisions are located on the Sauk at Bedal, the Forgotten Mountain River Tract, and below the National Forest boundary. No summer homes are evident from the Suiattle. There are no billboards or other evidence of commercialization within the river corridors on National Forest lands.

Presently, most boating activity has been on a day use basis. Commercial floaters are interested in overnight trips. Two permits for overnight trips have been issued as of the 1980 season. Also, little is known of private individuals camping along the river systems on overnight trips.

There are no developed launch sites inside the National Forest boundary. Undeveloped sites are present. The use of campgrounds for launch sites has become a problem. Both Clear Creek and Bedal campgrounds have experienced this use. Since there is no parking available, unused camping spurs are often taken for parking by floaters.

There are few developed launch sites on the three rivers. However, several user developed primitive locations do exist. Public access has not been obtained at many of these sites. Table 9 provides an inventory of launch sites.

The Sauk has traditionally been utilized by kayakers, canoeists, and fishermen to whom solitude is a key part of their recreation experience. It is believed that the increased popularity of rafting and kayaking and other water sports will have a substantial impact on solitude values. There is little quantitative data available to support these observations, since total use studies have not been conducted and there is not a registration system from which to obtain use data.

Table 9

Existing, Used Boat Launch Sites.

<u>River</u>	<u>Site</u>	<u>Status for Boat Use</u>
Sauk	Bedal Campground	Undeveloped
"	White Chuck Campground (both sides of Sauk River)	Undeveloped
"	Clear Creek Campground	Undeveloped
"	Bachman Creek	Developed
"	Darrington	Undeveloped
"	Suiattle River	Undeveloped
"	Sauk River Park	Developed
Suiattle	Buck Creek	Undeveloped
"	Conrad Creek	Undeveloped
"	Dearinger State Park	Developed
"	Boundary Bridge	Undeveloped and Private
Cascade	Cascade Island Campground	Developed
"	(No take out sites downstream)	

There has been some site disturbance at the put-in, portage and take-out sites. The impact is considered minor and consists of soil compaction, localized erosion, and some damage to vegetation. There has also been some disturbance in these areas due to congestion caused by vehicles. The amount of congestion varies depending on the size of the group and the length of time it takes them to unload equipment. However, many of the sites are far short of adequate space and proper design. Most sites also lack any sanitation facilities.

The following is a brief overview, by river, of recreational conditions and opportunities.

The Cascade:

On the Cascade River, due to rough terrain and lack of access, only light spring and late summer use occurs (before and after peak run-off). There is potential, however, for floating between Mineral Park and Marble Creek Campground. Additional data is needed regarding this opportunity before any management direction can be formulated. The stretch of river between Marble Creek and Cascade Islands Park is considered to be very dangerous. From Cascade Island Park downstream to the Skagit the Cascade River offers a short float opportunity. At certain times of the year, there is insufficient water depth at many locations on the Cascade to support boating activity. It should be noted that this river is subject to infrequent surges of stored water released unpredictably from glaciers during summer months. There is almost no winter use of the Cascade.

The Suiattle:

Until recently, the Suiattle has experienced low levels of surface water use. The stretch above Boundary Bridge is often impassable because of debris jams. In contrast, the river downstream from the bridge is normally passable and has the added attraction of exciting white water passages. River use on the down river stretch has increased slowly until 1980, when use levels increased explosively, especially commercial use.

This is a glacier-fed, geologically active, young river. The riverbanks are subject to constant water erosion, resulting in numerous trees being toppled into and, in places, completely across the water surface. These trees, called "sweepers", create a very real and continued hazard to rafters and kayakers. Many of these trees, released from their hold on the banks, create numerous, often impassable log jams.

The Suiattle River, because of its origin, is subject to surges of stored water released unpredictably from glaciers during rainless periods of the summer months. These sudden releases have the potential of causing unexpected floods and mud flows; they could do extensive damage to river channels and bridges; and could pose an infrequent hazard to surface recreation use.

Appendix D contains a description of the International Scale of River Difficulty. According to the scale, the Suiattle provides a variety of boating difficulty (see Table 10).

The Sauk:

The Sauk has a number of qualities which make it a unique river for white water boating including easy access, scenic quality, and a variety of rapids and adequate volume almost year round. The Sauk has proven to be a unique northwest outdoor classroom for learning kayaking skills and studying river dynamics for kayaking since its access-related segmentation allows for progressing from easier to more difficult waters.

The variety of difficulty levels along the Sauk is recognized by the ratings given it on the International Scale of River Difficulty (see Table 10).

It has been noted for the Cascade, and in particular for the Suiattle, that these rivers are subject to surges of stored water released from glaciers. Although, like the Cascade, the Sauk is not as subject to such unpredictable releases as is the Suiattle, it should be noted that glacial releases do occur.

Primary use period on the Sauk is during summer. Rafting occurs between Bedal Campground and the Sauk-Suiattle junction. There is a limited amount of winter use on the Sauk to fish and/or view the eagle concentrations below Darrington. To date, there has been 18 applications for commercial permits for use on the Sauk River.

Table 10

International Scale of River Difficulty ratings for the Sauk, Suiattle and Cascade rivers. It should be noted that these are subjective ratings and that water levels and navigation hazards can change rapidly.

Sauk River - Normal Season May 1 to August 15

<u>From</u>	<u>To</u>	<u>Difficulty Scale</u>	<u>Hazards</u>
Bedal	White Chuck R.	II+	Log jams & sweepers
White Chuck R.	Clear Creek	IV	Large boulders
Clear Creek	Darrington	II+	Rocks
Darrington	Suiattle R.	I-II	Log jams & narrow passages
Suiattle R.	Sauk R. Park	I-II+	
Sauk R. Park	Skagit R.	I+	Log jams near Skagit R.

Suiattle River - Normal Season May 1 to August 31 - Not suitable for canoes or small rafts.

<u>From</u>	<u>To</u>	<u>Difficulty Scale</u>	<u>Hazards</u>
Sulphur Cr.	Buck Cr.	IV	Log Jams
Buck Cr.	Boundary Bridge	III	Log jams
Boundary Br.	Big Creek	III	Log jams & tight corners
Big Creek	Dearinger Park	IV	Overhanging brush
Dearinger Park	Sauk River	III	Log jams & sweepers

Cascade River - Normal season May 1 to June 15.

<u>From</u>	<u>To</u>	<u>Difficulty Scale</u>	<u>Hazards</u>
Mineral Park	Marble Creek	III	Sweepers, Log jams
Marble Creek	Cascade Island Park	V	Sweepers, drops, jams
Cascade Island Park	Skagit River	II-III	Sweepers, jams

Land Use

In addition to their white water attractions, the Scenic Rivers corridors provide a prime area for other forms of outdoor recreation. The areas provide hunting for deer, and upland game, as well as for waterfowl and other game birds. Many hunters use camping sites within the Scenic River corridors for a base camp. All three rivers support numerous species of game fish for sport fishermen. Hiking and backpacking have become very popular activities on trails that start from roads and trailhead sites along the Scenic Rivers.

Trails

Trails are an important recreational resource within the Scenic River segment. Thirteen trails have their trailheads along these rivers. These trails are used by fishermen, hunters, berry pickers, horse users, hikers and backpackers. These are mainly feeder trails from the river bottom to the high country. Trailheads for the most part, are located well away from view of the rivers. The only developed trailhead is at the end of the Suiattle Road. The remaining trailheads are either a part of a campground, a wide spot in the road, or an old logging landing.

Trails exist along the south bank of the Sauk River from a point one mile inside the National Forest boundary above Darrington, and from near the junction of the White Chuck and Sauk Rivers. The first follows a portion of the old mine access route between Darrington and Monte Cristo while the second follows portions of a Sauk Timber Company railroad grade through Beaver Lake. These are the old Sauk and Beaver Lake trails.

Along the Suiattle, a few short stretches of trail exist leading from the corridor to destinations outside the management unit. The most notable is approximately one mile of trail along the river between the road's end and Glacier Peak Wilderness.

Trails in the Cascade drainage presently total 17.6 miles. Two of them, the Lookout Mountain Trail and Hidden Lake Peak Trail, offer the able hiker a steady upward climb to outstanding alpine views. These are heavily used. Three moderately used trails include Irene Ridge, Found Lakes, and Kindy Creek. The South Fork Cascade Trail and Spaulding Trail access the South and Middle Forks of the Cascade River.

Dispersed Camping

Dispersed recreation is one of the fastest growing forms of outdoor recreation in the United States. Many pleasure excursions into the Forest result in pulling off the road or river at appealing locations to set up impromptu campsites. Compared to other recreational opportunities to the public, relatively little information has been generated concerning dispersed recreation. Many resource managers believe that dispersed camping is an activity which can have significant physical and biological impacts on the natural environment when allowed outside of developed areas. Additional social impacts may arise, as well, when camping occurs on small parcels of public land adjacent to private property. Recreationists may unknowingly trespass on adjacent private lands when an intermixed ownership pattern exists. Trespass in this situation often results in an increased fire danger, accumulated litter, and vandalism to private property. To alleviate some of these problems, areas may be designated as "access only" or "day-use only".

Approximately 42 percent of the Scenic River's shoreline is private property. This situation will contribute to the problem of managing dispersed camping opportunities. During the Memorial Day through Labor Day vacation period and during fall hunting season, the use of dispersed sites on the National Forest for camping is a common practice. Little is known about the extent of dispersed camping on private lands or the amount generated by boating use. Both are assumed to be light at the present time.

Many recreationists take advantage of driving the various paved and gravel roads that parallel the three Scenic Rivers. Even though the rivers may only be occasionally visible from the roads, the general river corridor landscape is readily visible. Many travelers derive satisfaction from viewing these landscapes.

Although use figures for pleasure-driving are not available, it is likely that this use comprises a considerable portion of total outdoor recreation for the Scenic Rivers. "Driving for Pleasure" was rated as the third most popular outdoor recreation activity in America, according to the Bureau of Outdoor Recreation's report on national outdoor recreation use and trends.

Sightseeing and/or driving for pleasure which, in terms of land use, is a passive, non-consumptive recreational activity which has little or no adverse impact on other activities. Other activities, if detrimental to the natural environment could, however, have an impact on the satisfactions gained from sightseeing and thus result in a decrease of use.

Providing the road systems do not become overcrowded and barring a severe fuel shortage, this activity has potential for considerable increase in visitor use. Pull-offs and parking are a major limitation for sightseers wishing to leave their autos to view float boaters, fishermen, wildlife, or the enchanting scenery. The existing high price of fuel makes such routes as the Mountain Loop Highway an attractive alternative to making the longer, more gas consumptive, trip over the North Cascade Highway.

Developed Camping Sites

The existing recreational development along the three Scenic Rivers is surprisingly low. There are 16 campgrounds on National Forest lands with a total persons-at-one-time (PAOT) capacity of 1,140. There are also 4 State and County campgrounds with a PAOT capacity of 265 people. For the most part, development of recreation facilities has been an orderly response to demand. There are no commercial, developed campgrounds in the Scenic segments of the classified rivers. Campground capacities and experience level are listed on Table 11.

Table 11

Campground capacities and experience levels for the Scenic River
segments of the Skagit W&SR.

<u>Campground</u>	<u>Number of Units</u>	<u>Capacity PAOT</u>	<u>Approximate Experience Level</u>
Cascade River			
Mineral Park	22	110	3
Marble Creek	28	140	3
Cascade Island			3
camp units	15	75	
picnic units	4	20	
group picnic	<u>4</u>	<u>20</u>	
Subtotals	73	365	
Sauk River			
White Deer	2	10	2
Tyee Pool	2	10	2
Old Trail	1	5	2
Twin Peaks	4	20	2
South Fork	8	40	3
Chockwich	12	60	3
Bedal	18	90	3
Sloan Creek	7	35	2
White Chuck	12	60	2
Clear Creek	14	70	3
Bachman Cr.	6	30	3
Sauk River Park	<u>25</u>	<u>125</u>	3
Subtotals	111	555	
Suiattle River			
Suiattle			
Picnic Area	3	15	-
Sulphur Creek	28	140	2
Downey Creek	12	60	2
Buck Creek	55	275	3
Dearinger			
camp units	12	60	
picnic units	<u>10</u>	<u>50</u>	
Subtotals	120	600	
TOTAL	<u>304</u>	<u>1,520</u>	

These facilities are normally full to overflowing on weekends during the summer season. Use during weekdays is usually light to moderate. Most of the campgrounds serve as destinations and bases from which other activities, such as hiking, berry picking or stream fishing occur. Many of the Forest Service facilities are sub-standard due to heavy use, their age, and insufficient maintenance funding.

The December, 1980, flood changed the character and size of several campgrounds. Many of the river front sites were damaged or completely destroyed. Approximately 12 camp units will never be reconstructed at their previous sites.

Several of the Forest Service campgrounds lack adequate screening from the river. Most of these campgrounds were constructed with units which were sited on the edge of the water with little or no screening.

Luckily, there are still a great number of potential recreation sites along the Scenic Rivers. One site of exceptional value outside of the National Forest boundary is located at the confluence of the Suiattle and Sauk rivers. This site, located on private land, has the potential for a boat launch and take-out site serving both the Sauk and Suiattle rivers. It also has ample room for a major camping and picnic site facility. Additional sites within the National Forest are available for future development as demand increases or for replacement of poorly situated existing sites. (See Figure 4 for location of existing, proposed, and potential sites.)

Assumptions

Water Use

1. There are distinct summer and winter use periods
summer season: April 1 through September 30
winter season: October 1 through March 31
2. Resource conflicts exist on some river segments. These conflicts occur primarily during the summer season. However, there are also some winter conflicts:
 - a. Human impact on eagles (winter)
 - b. Human impact on fish (spring through fall)
 - c. Potential over use (summer)
3. Concern for fish and eagle values will increase.
4. Any curtailing of winter eagle viewing or fishing on the Skagit will encourage more use of the Sauk and Suiattle rivers, thus creating another potential conflict (or spreading an existing conflict into new areas).
5. Almost all the water surface use occurs during the day time.

6. Regardless of references used, water-related recreation, in general, and river recreation, specifically, will see major increases in demand during the next ten years. The Pacific Northwest River Basin's Commission, in looking at uses of water resources for the years 1970-2000, projects a 148 percent increase in boating. While only a portion of the total participation in this activity occurs on rivers, there is no reason to believe that the rate of increased use on rivers will not also be as high.
7. As increase in use occurs from floating and fishing, recreation conflicts will occur between user groups. Also, conflicts between river users and private landowners in the lower segment of the rivers will increase with increased use.

Trails

8. Trail opportunities for day hikes along the Scenic Rivers will be sought by the public. This demand will continue to increase as use increases.
9. Trails are important components of the recreational experience along the Scenic Rivers.
10. Trailhead facilities are inadequate.
11. Trail access to and along Scenic Rivers is inadequate.
12. Funding for trail construction and maintenance will continue to be in short supply.
13. Trails are an excellent way to afford many people the opportunity to enjoy the rivers without actually being on the water.

Dispersed Camping

14. Dispersed camping is a legitimate use of the National Forest.
15. Dispersed use sites are limited along the three Scenic Rivers.
16. Dispersed camping within the National Forest will increase.
17. A system to monitor dispersed use (both day and overnight use) will be needed in order to manage and protect the Scenic River resource.
18. Dispersed recreation use peaks on weekends and holidays.
19. Day use is far more prevalent than overnight use.
20. The majority of dispersed use is repeat use.
21. Weather plays an important role in dispersed use.

22. Dispersed recreationist participate in a wide array of activities including camping, fishing, hunting, boating, rafting, biking, motorbiking, berry picking, and driving for pleasure.
23. Dispersed recreation can be managed to reduce impacts.

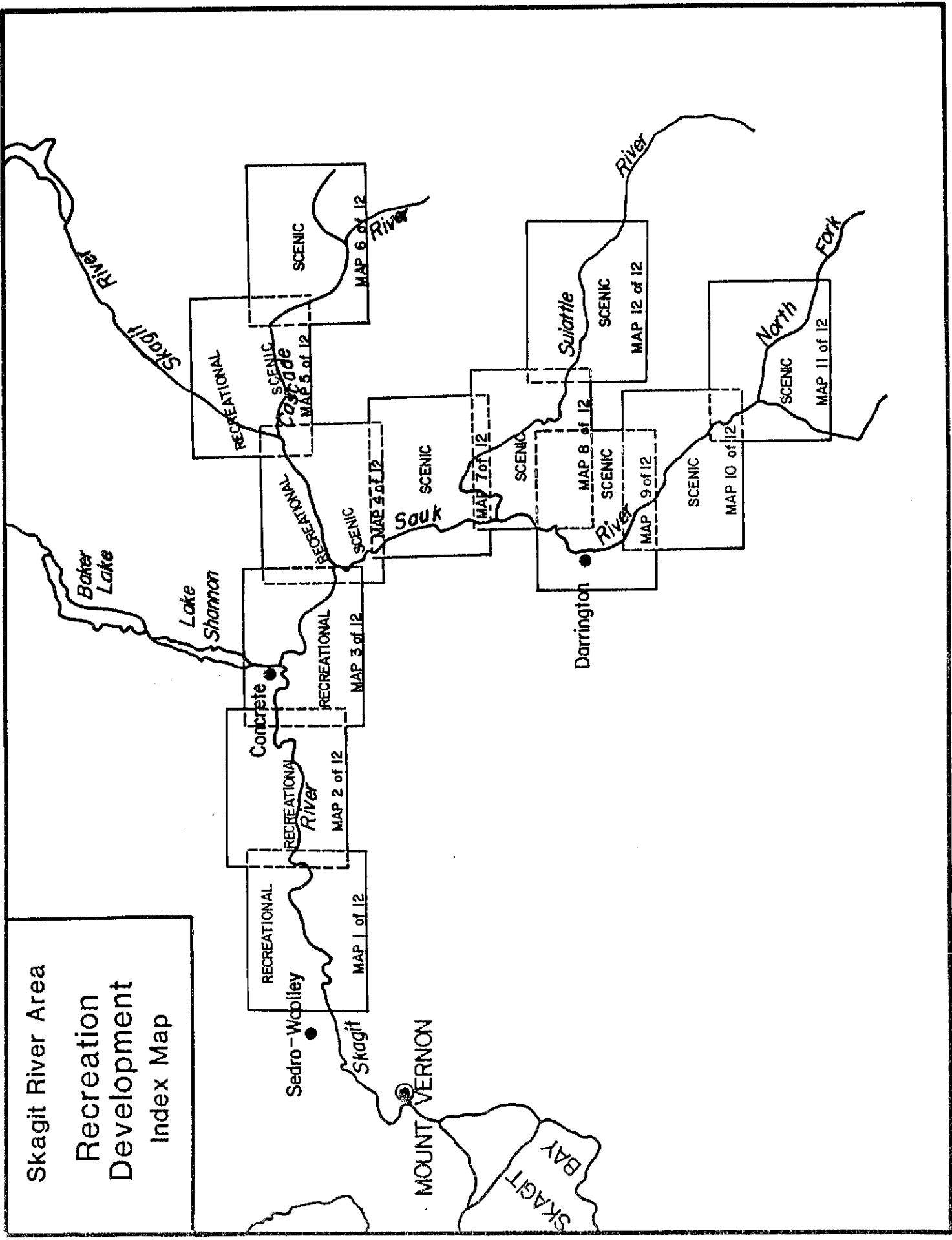
Developed Camping

24. Many of the existing sites fall short of meeting Scenic River criteria for screening and setback from the river.
25. The loss of one unit on the Cascade, two units on the Suiattle and nine units on the Sauk from the 1980 floods will result in a lack of capacity to meet existing demands on peak days. This converts to a loss of 60 PAOT or about 4% percent of the total existing PAOT.
26. A variety of factors, such as: potential reconstruction and paving of the Mountain Loop Highway on the Sauk River, publicity about Wild and Scenic River classification, increase in population and the need to escape the city for short periods, will result in a demand for additional developed sites in the near future.
27. Funds for site development, site reconstruction and maintenance will be in short supply.
28. To comply with the intent of visual management and 1982 Inter-agency guidelines along the Scenic Rivers, many Forest Service campgrounds would need to be either removed or modified. Without relocation or reconstruction, it is estimated that the potential loss of campground units, by river, would be:

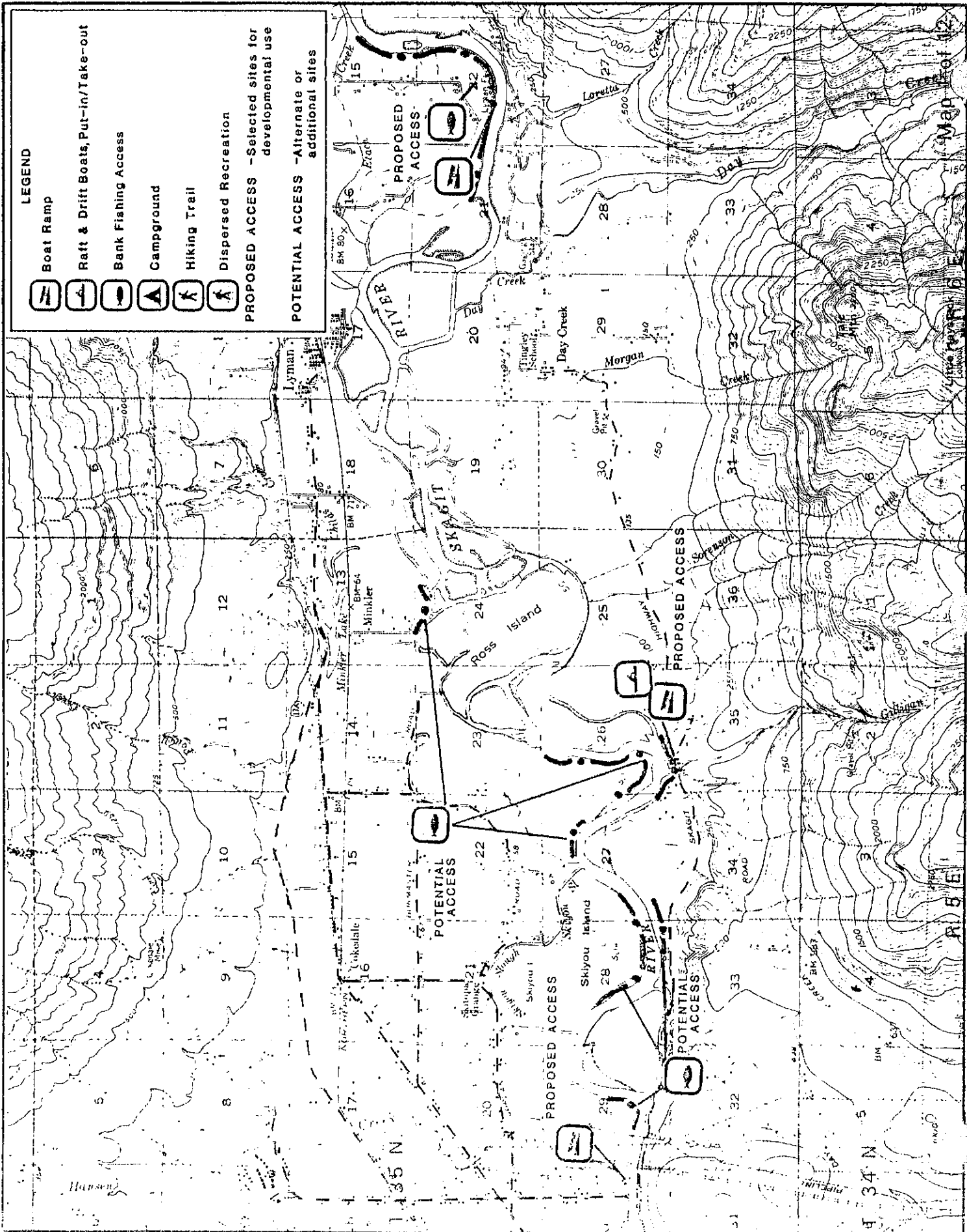
River	Units	PAOT	Percent of Total existing
Cascade	17	85	23
Suiattle	2	10	2
Sauk	37	185	33
Total	56	280	18

Figure 4







**Recreation
Development
Map**



Skagit River Area
 Recreation
 Development
 Index Map



LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites







MAP SHEET 12

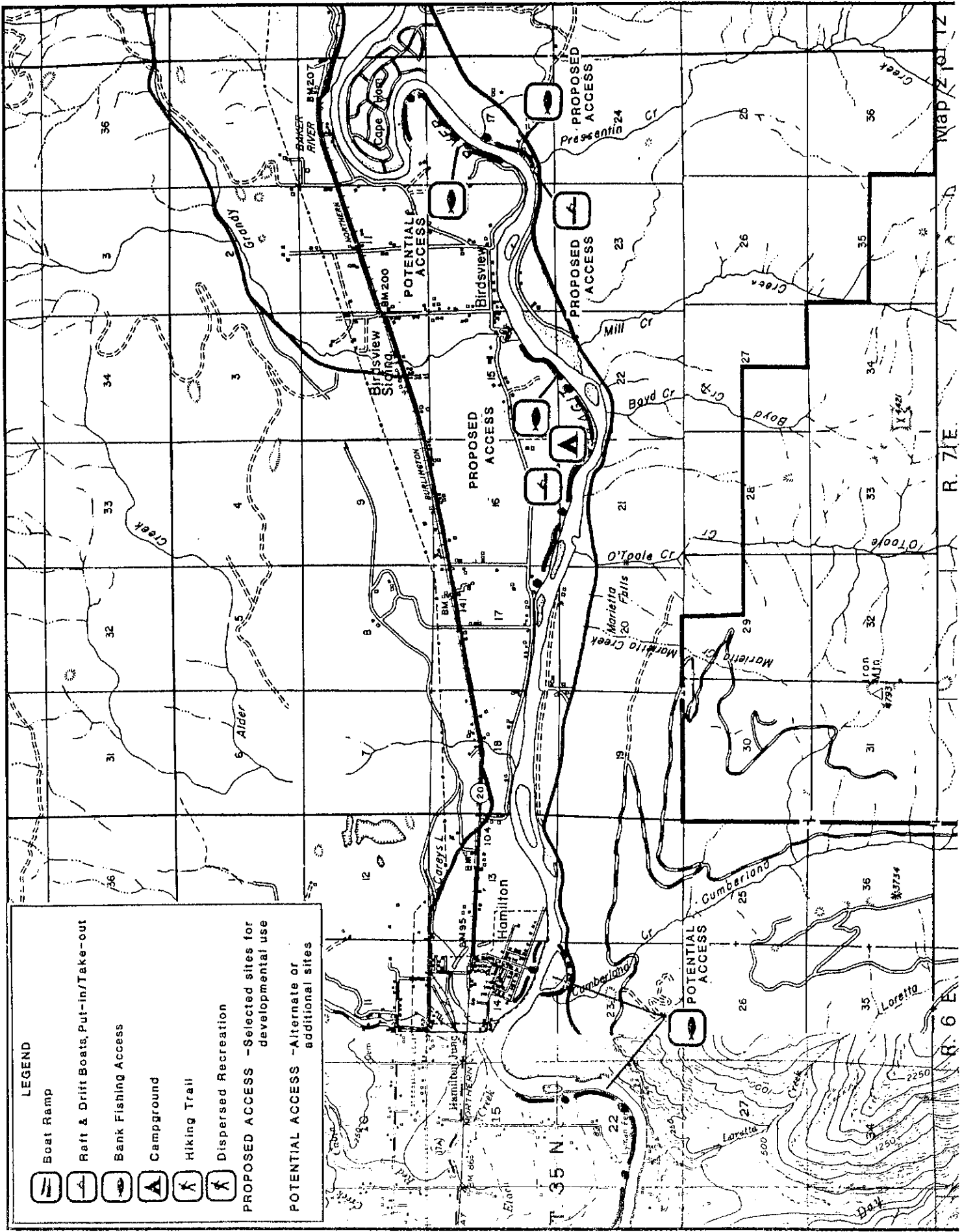
TIME 1:30 P.M.

34 N

35 N

LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites

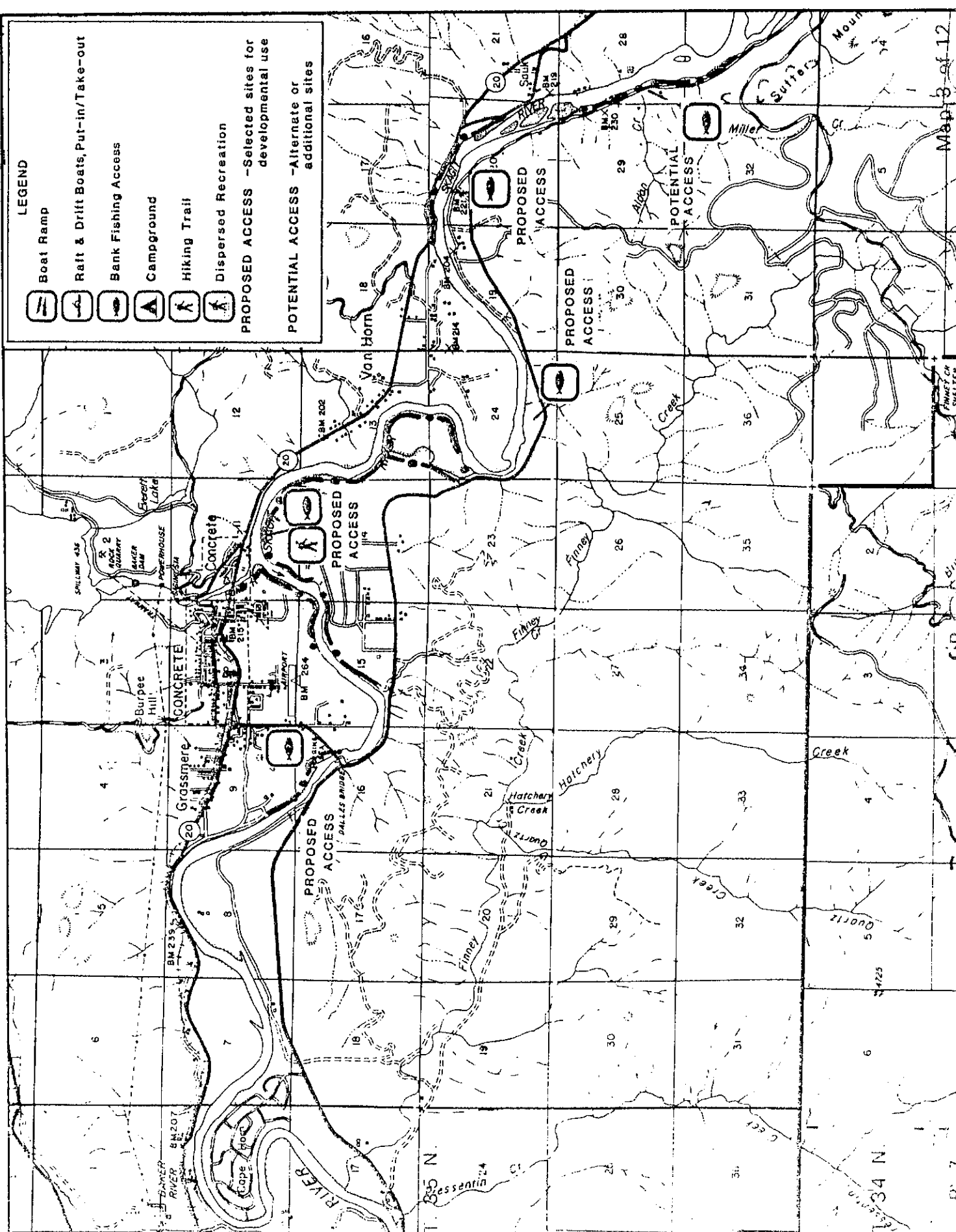


Map 2-1012

R. 7 E.







R. 6 E.

T. 35 N.



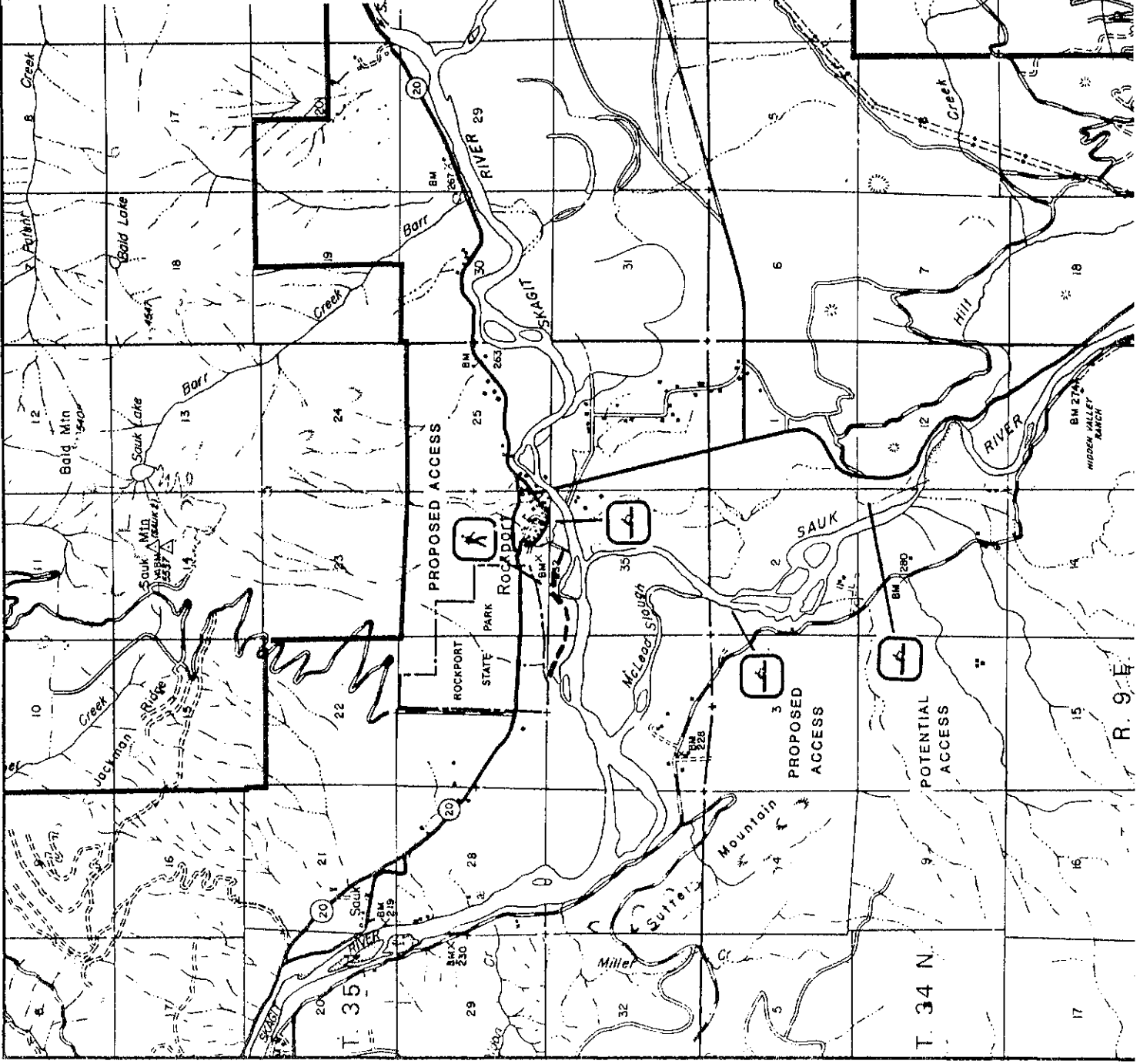
- LEGEND**
- Boat Ramp
 - Raft & Drift Boats, Put-in/Take-out
 - Bank Fishing Access
 - Campground
 - Hiking Trail
 - Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites

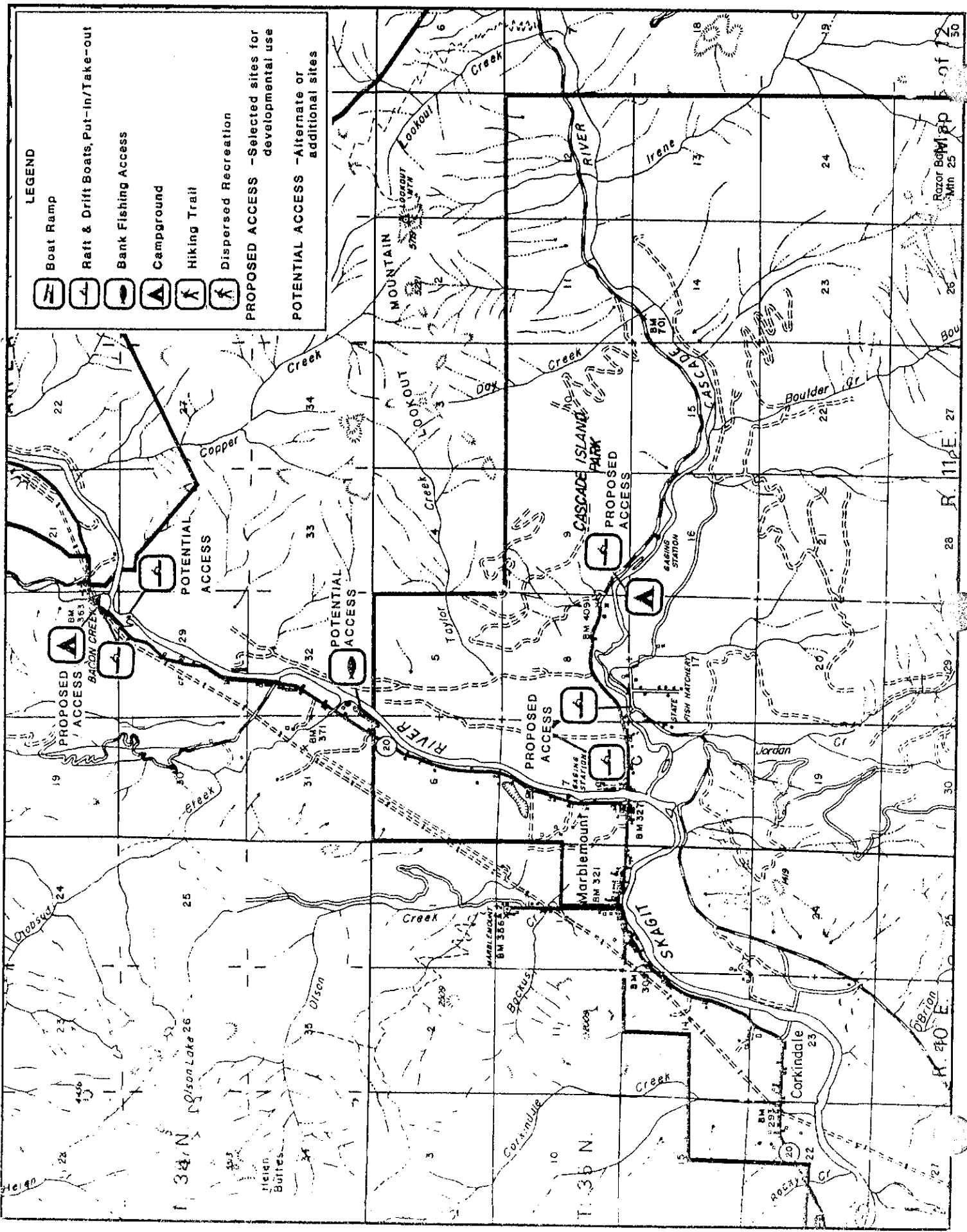
LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

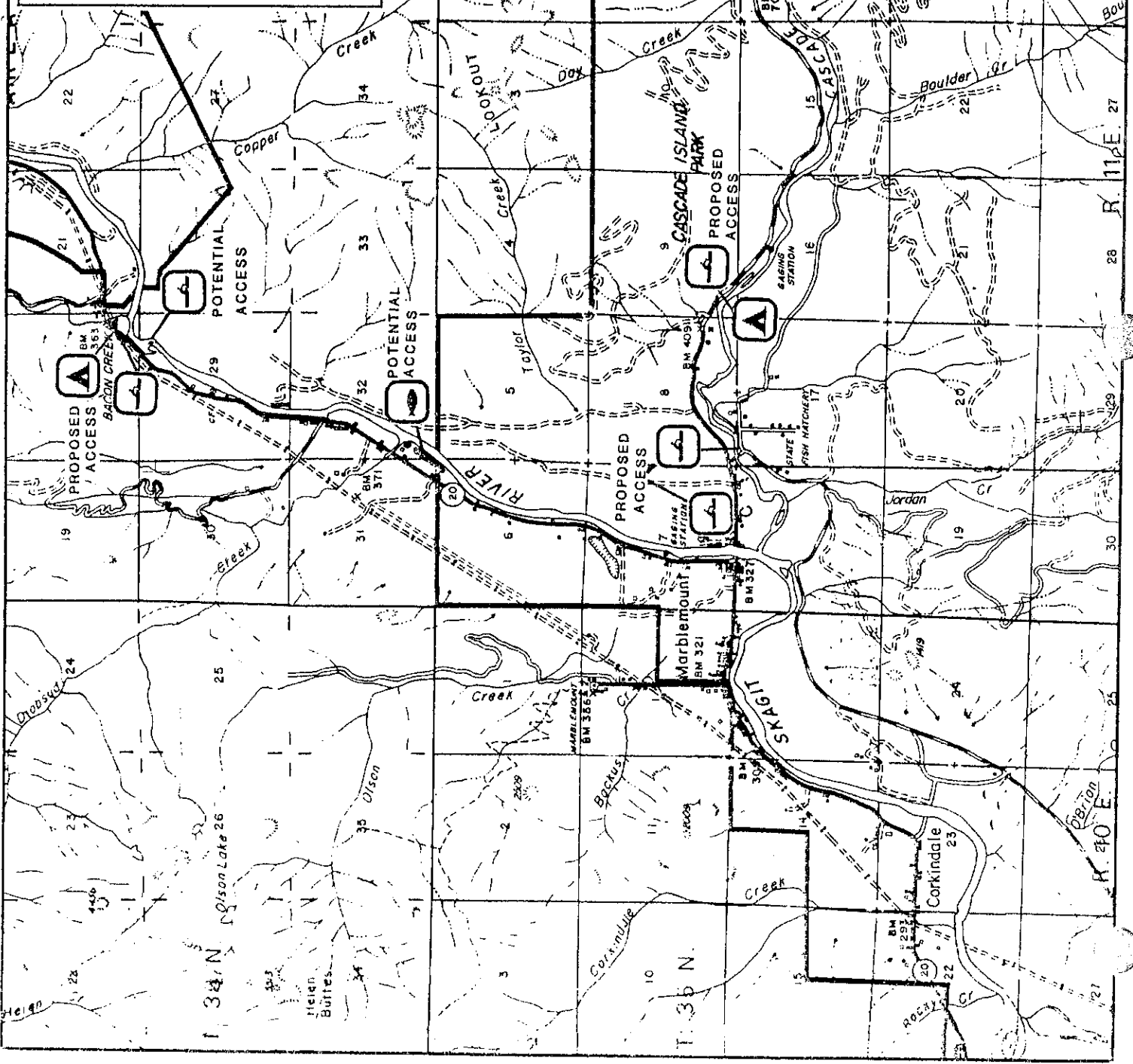
POTENTIAL ACCESS - Alternate or additional sites



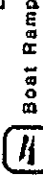


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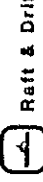
- Boat Ramp
- Ratt & Drift Boats, Put-In/Take-Out
- Bank Fishing Access
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- Hiking Trail
- Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites



LEGEND



Boat Ramp



Reft & Drift Boats, Put-in/Take-out



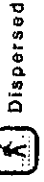
Bank Fishing Access



Campground



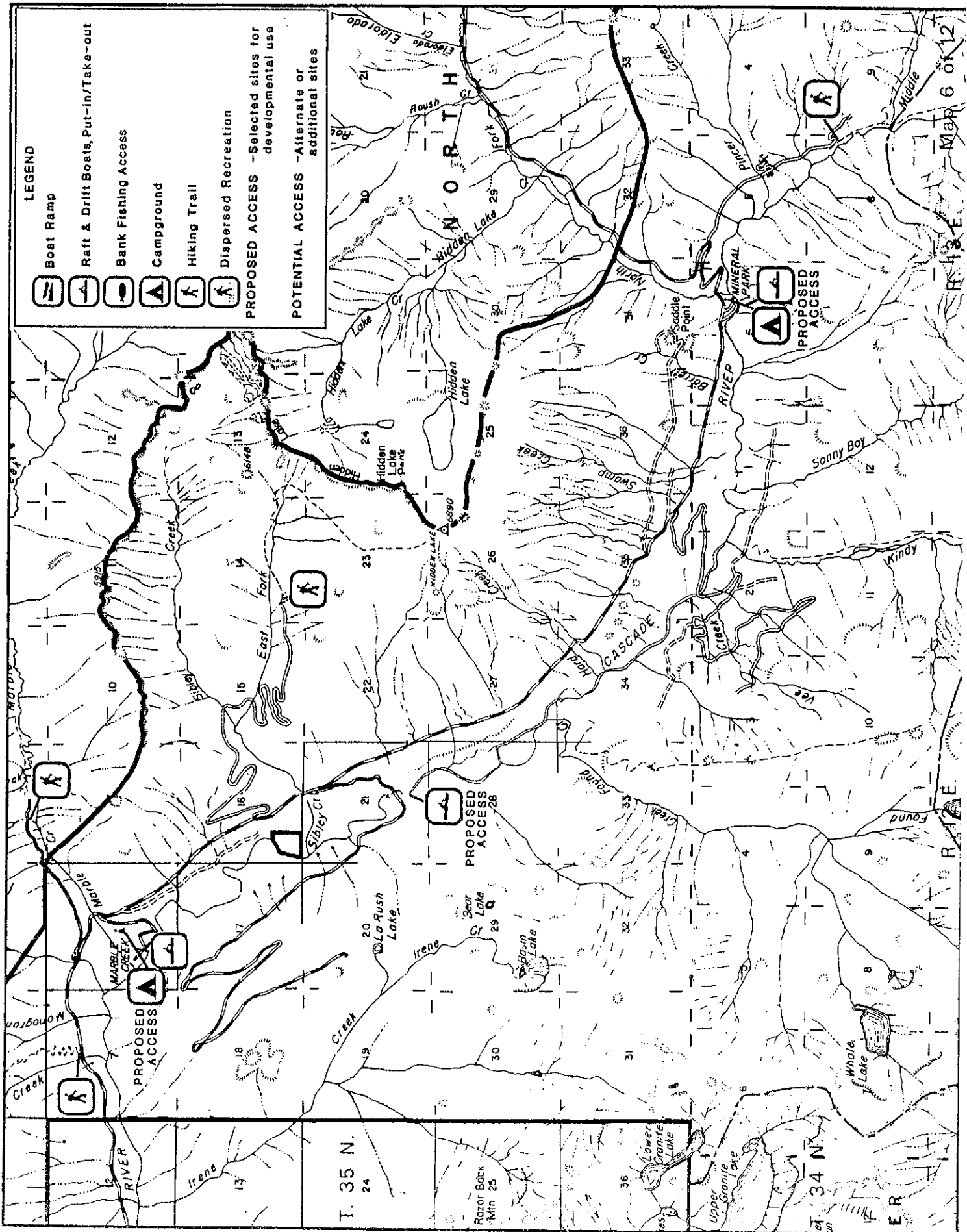
Hiking Trail



Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

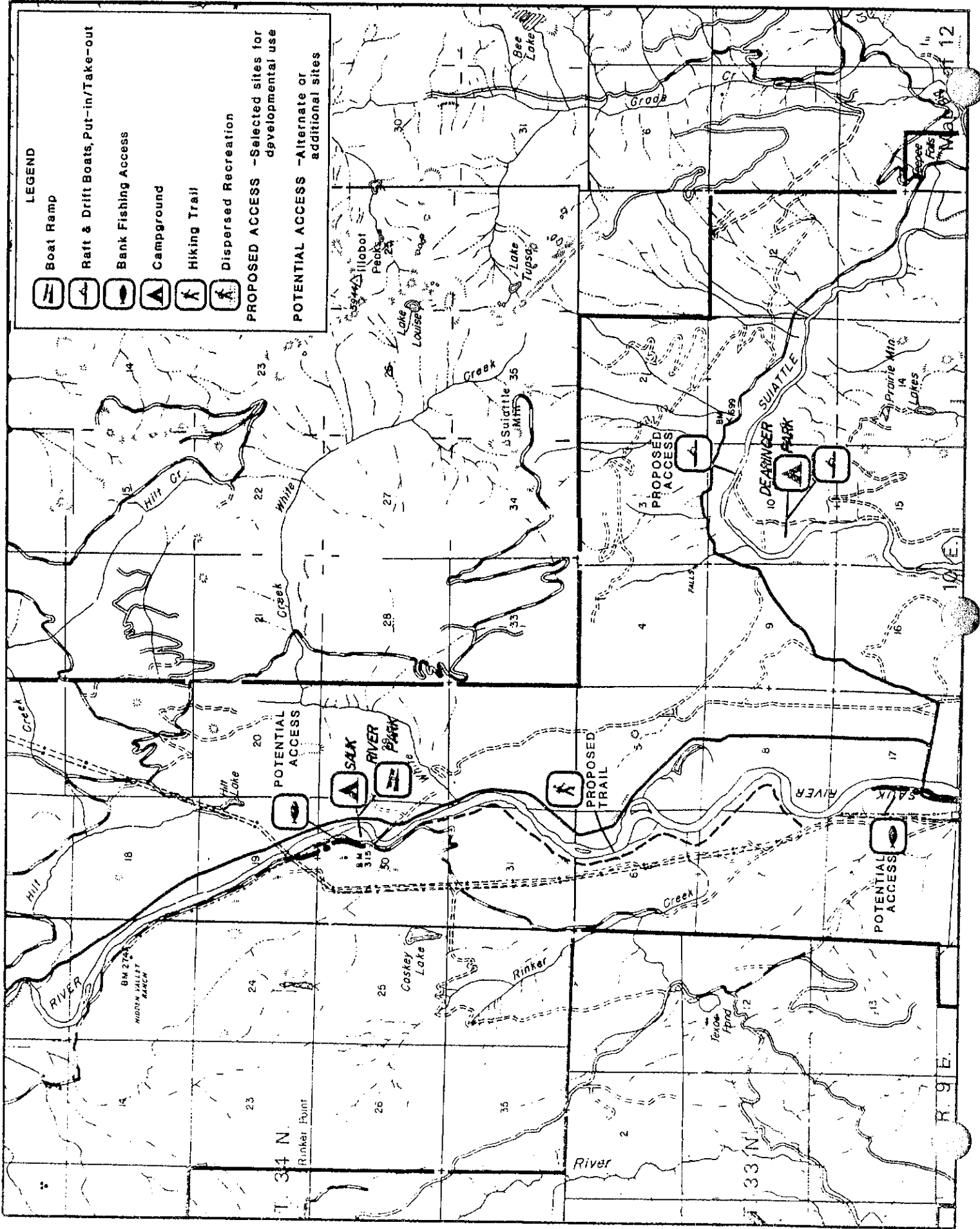
POTENTIAL ACCESS - Alternate or additional sites



Mar 6 01 12

R 13 E

T. 35 N.



LEGEND

- Boat Ramp
- Raft & Drift Boats, Put-in/Take-out
- Bank Fishing Access
- Campground
- Hiking Trail
- Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use







POTENTIAL ACCESS - Alternate or additional sites

12

R. 9 E.

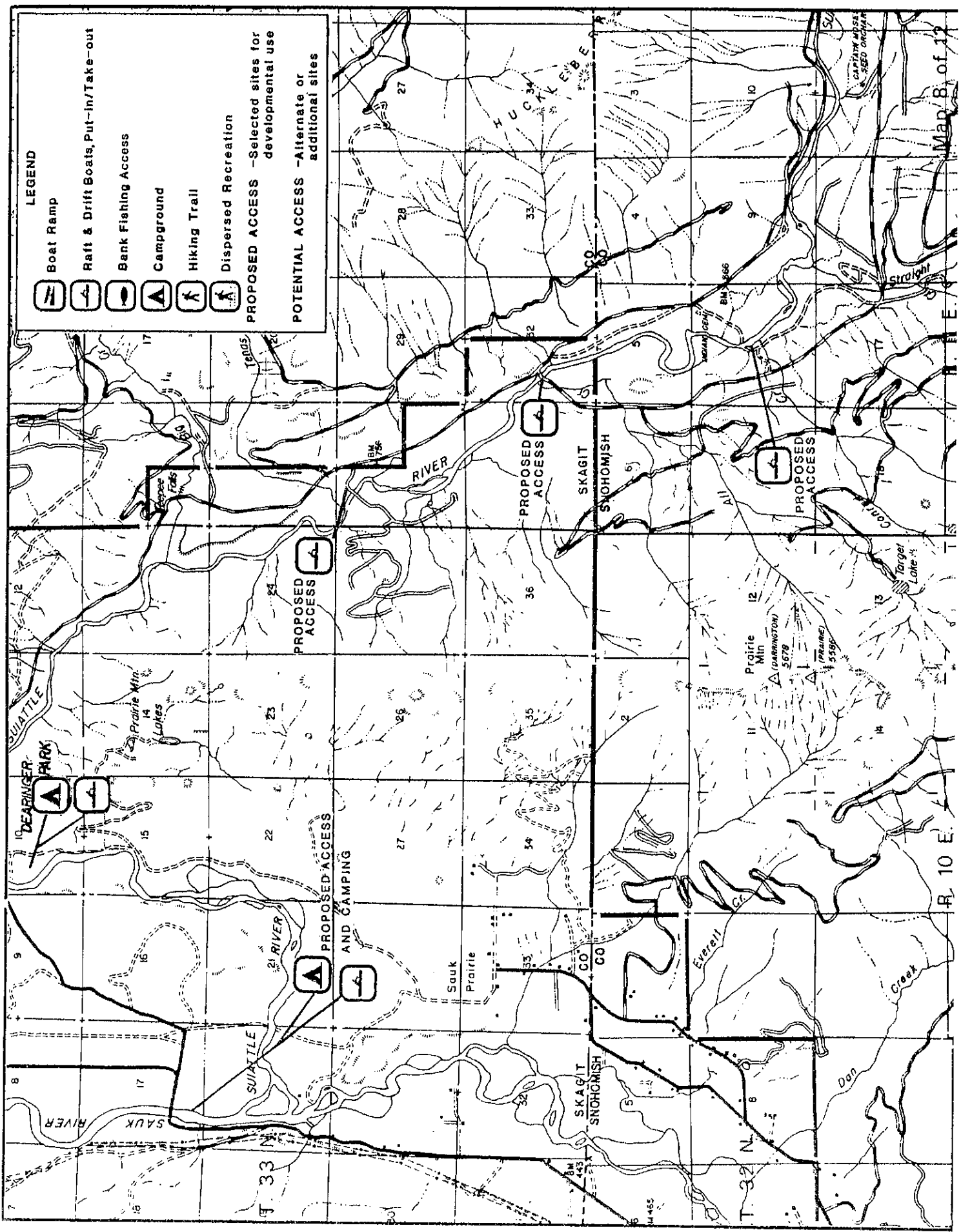
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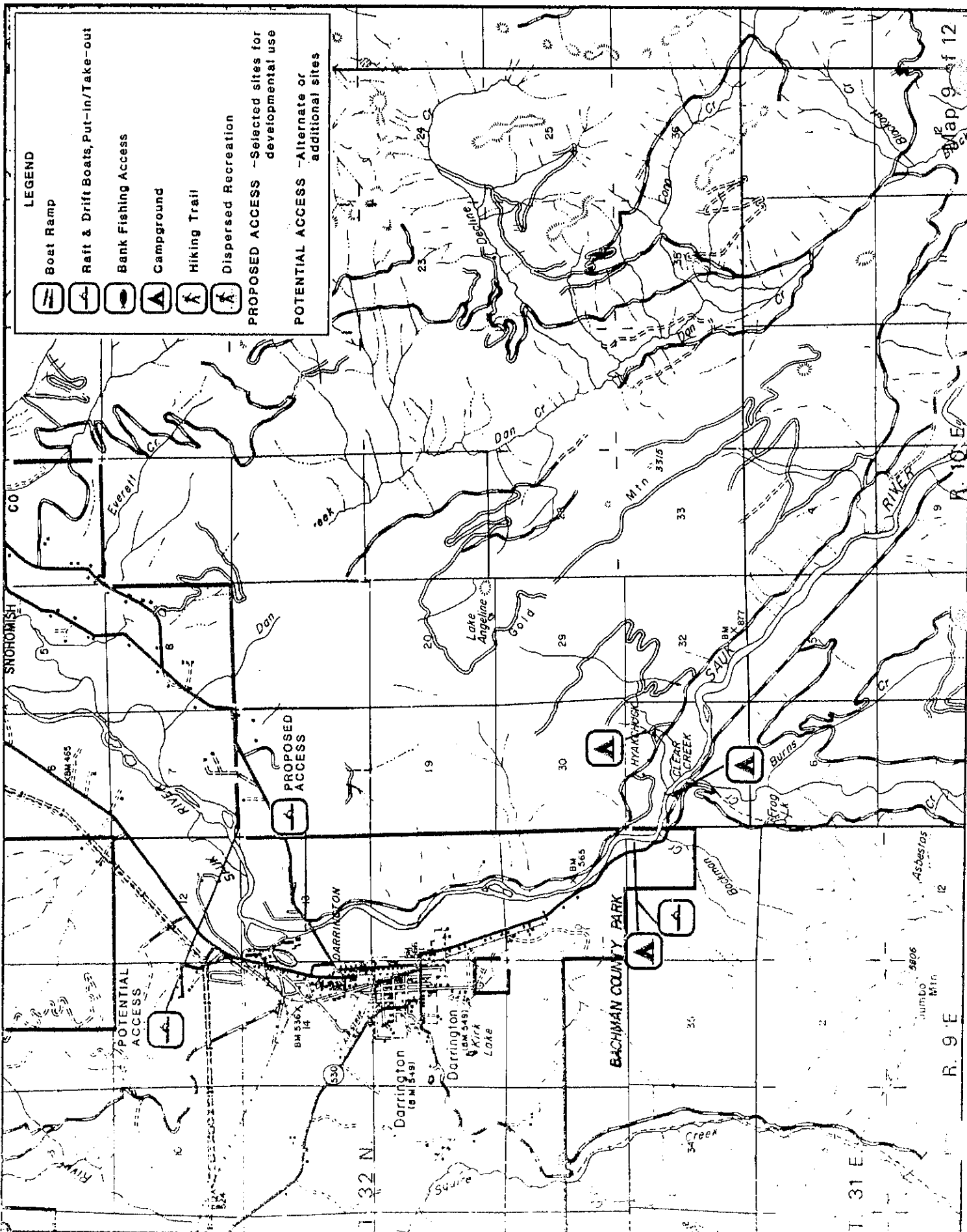
LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use









POTENTIAL ACCESS - Alternate or additional sites

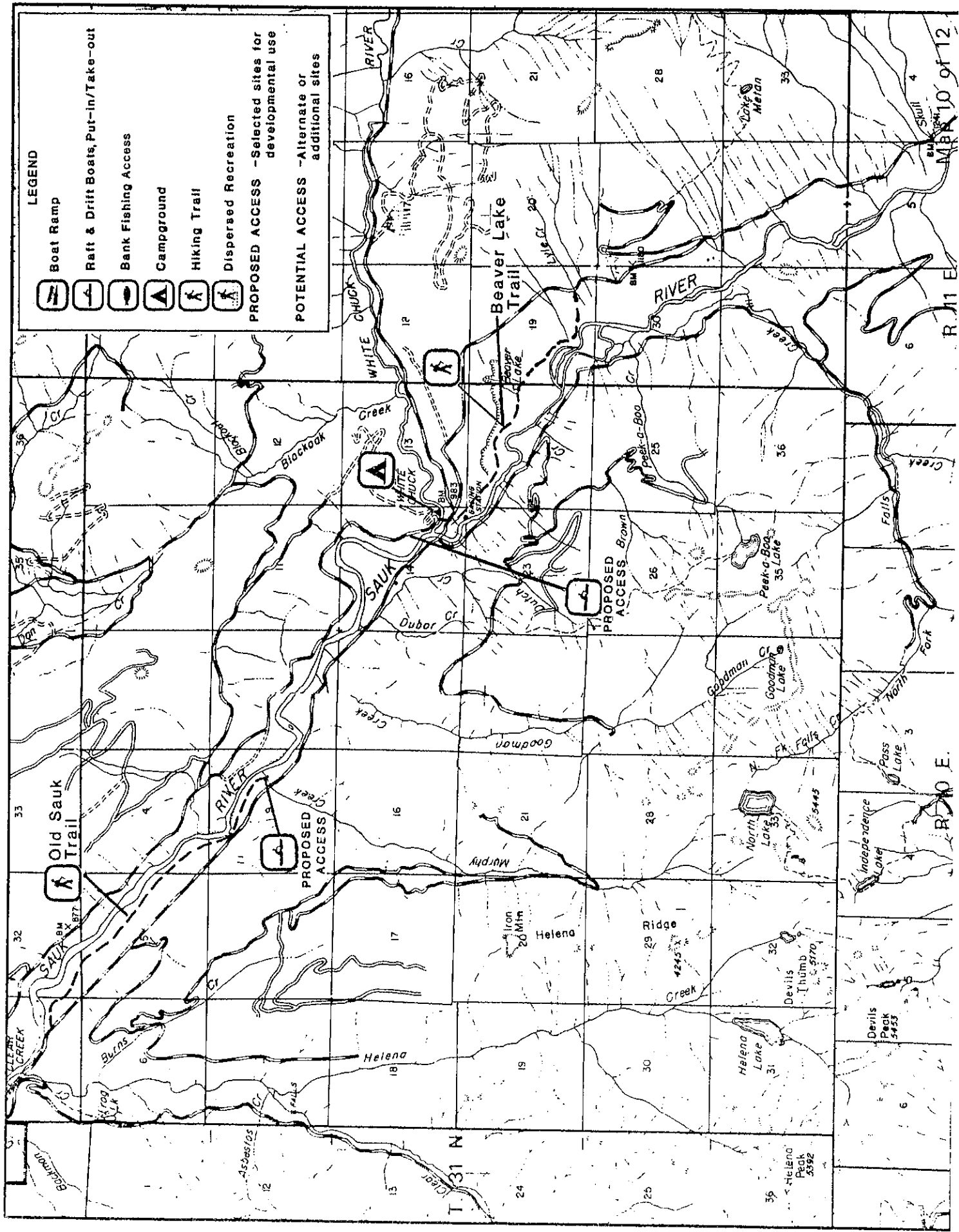




- LEGEND**
- Boat Ramp
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LEGEND

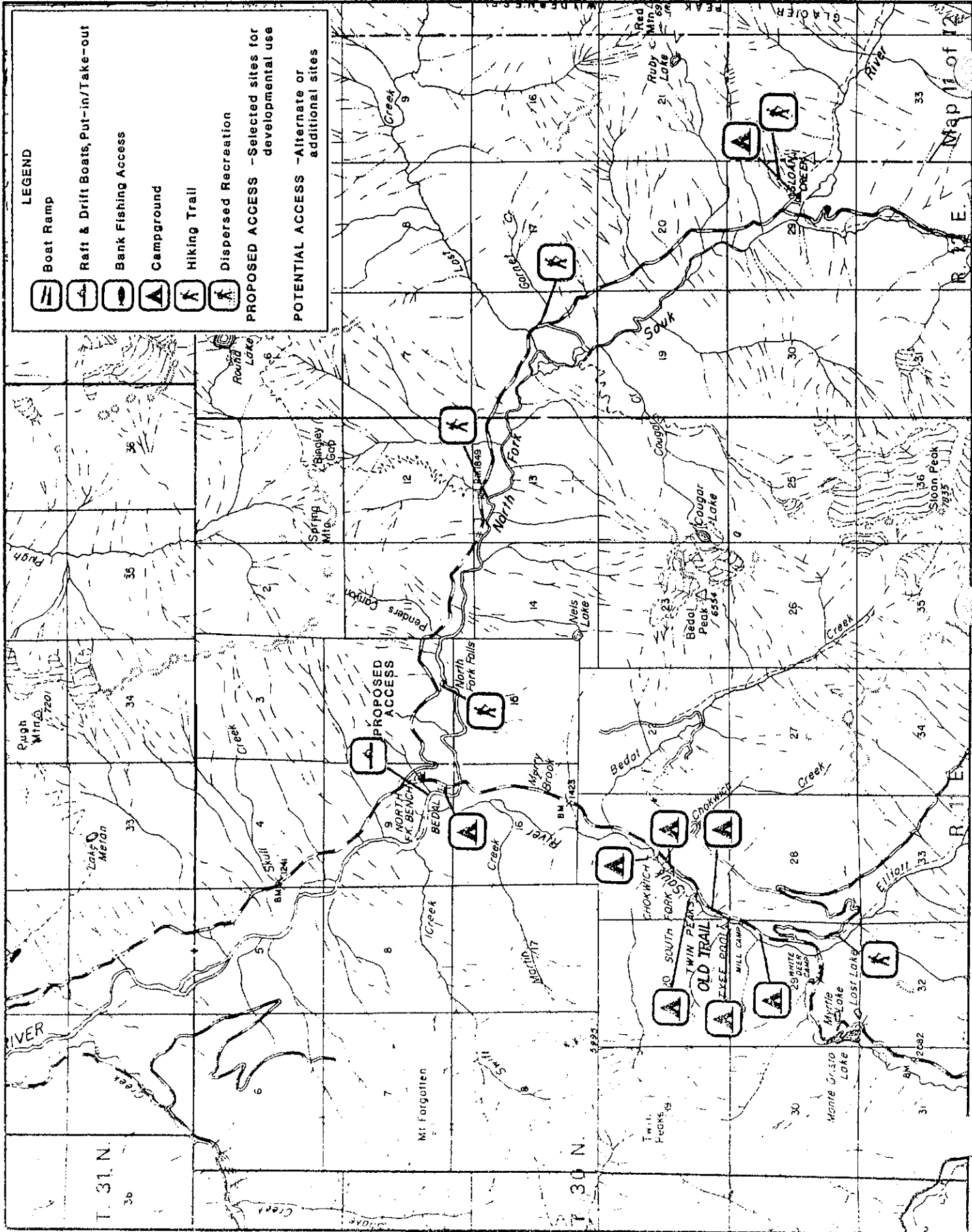
-  Boat Ramp
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-  Bank Fishing Access
-  Campground
-  Hiking Trail
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-  PROPOSED ACCESS - Selected sites for developmental use
-  POTENTIAL ACCESS - Alternate or additional sites



MBN 10 of 12

R. 11 E

R. 10 E



- LEGEND**
- Boat Ramp
 - Raft & Drift Boats, Put-in/Take-out
 - Bank Fishing Access
 - Campground
 - Hiking Trail
 - Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites

T. 31 N.
36

T. 30 N.
33

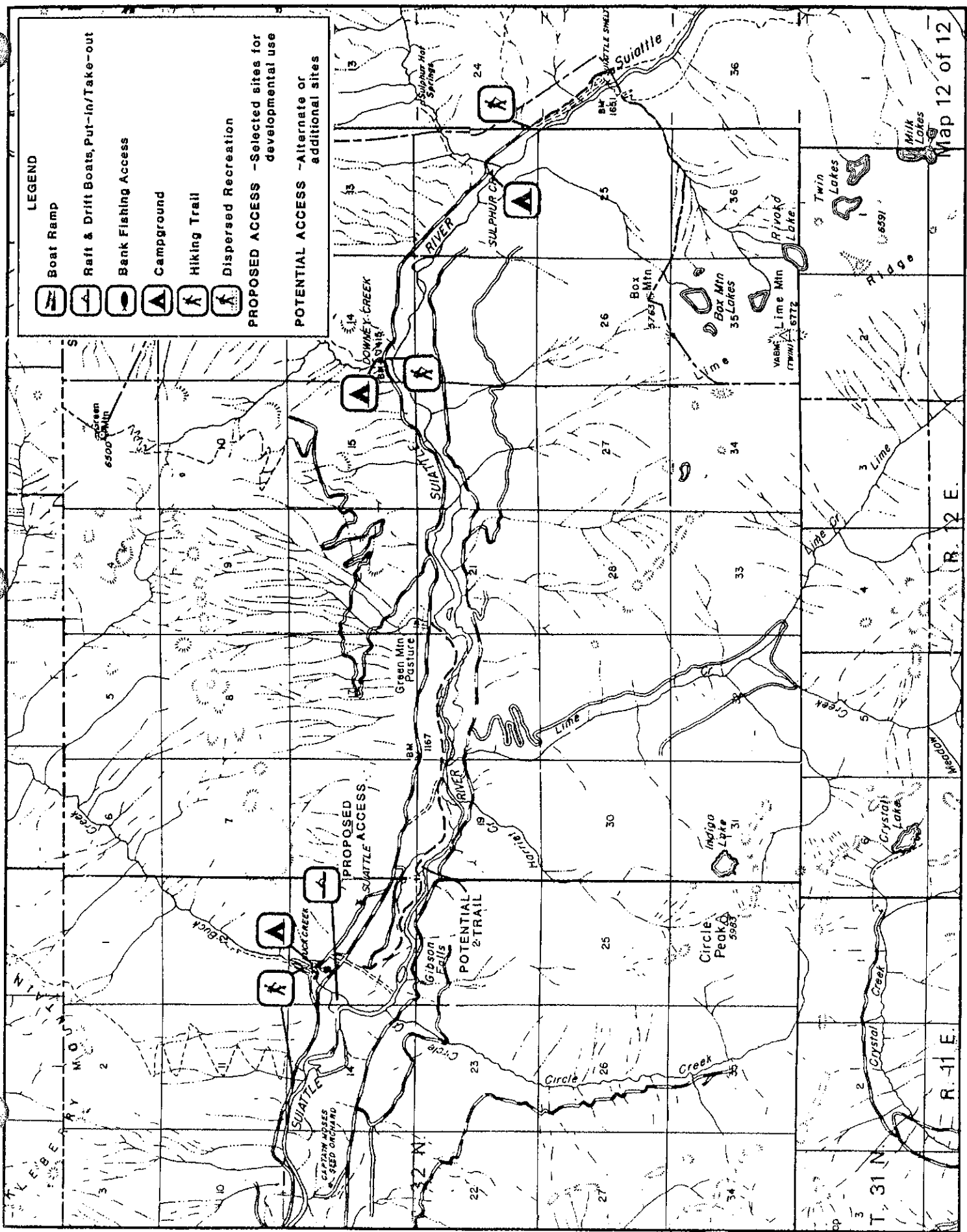
Map 11 of 12

LEGEND

- Boat Ramp
- Raft & Drift Boats, Put-in/Take-out
- Bank Fishing Access
- Campground
- Hiking Trail
- Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites



Section III Current Situation and Assumptions

CULTURAL RESOURCES:

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III



Cultural
Resources



CULTURAL RESOURCES: RECREATION AND SCENIC RIVERS

Current Situation

With over 100 lineal miles of the Skagit River W&SR outside National Forest boundaries and consisting principally of private lands, a question of the applicability of cultural resource laws arose. A basic assumption made early in the planning process was that Federal leadership in cultural resource protection would be applicable regardless of land use or ownership. Based upon this assumption, it was felt the consultation process identified through 36CFR 800 was applicable to the entire Skagit W&SR corridor, regardless of ownership.

Thus, in March, 1979, the Forest Service initiated early consultation with the Washington State Office of Archaeology and Historic Preservation. That consultation resulted in identification of baseline data necessary for formulation of the management plan and identification of ultimate cultural resource inventory requirements. These base line data determination and inventory requirements were developed upon advice of the President's Advisory Council of Historic Preservation.

In summary, the consultation procedure identified that for the initial planning, a representative sample of Federal and private lands programmed for some type of Federal undertaking must be inventoried, and a thorough literature review must be accomplished. Ultimately, all Federal lands must be inventoried, as required by various Federal laws, Acts, and Executive Orders, and all private lands that will be impacted by a Federal undertaking must be inventoried as a part of that undertaking's planning. In addition, it was suggested a Programmatic Memorandum of Agreement between the Forest, State Historic Preservation Office, and the Advisory Council of Historic Preservation should be developed if the Forest chose to phase the inventory requirements over a period of years.

In September, 1979, the Mt. Baker-Snoqualmie National Forest entered into a contract (number 53-05M6-9-0050SNC) with the Institute of Cooperative Research (ICR). The objectives of the contract were:

1. to provide an overview of known data relevant to the history, ethnography, and pre-history of the Skagit Wild and Scenic River Study Area, including an assessment of the probable nature, location, and significance of cultural resources within the study area;
2. to identify specific localities, if any, within the study area where site preparation activities and/or public use may impact known or suspected prehistoric or historic sites;
3. to recommend alternative measures to avoid or mitigate potential adverse effects on these sites or areas;
4. to identify opportunities for interpretation of cultural resources, where such opportunities exist.

The Skagit has always provided a water route between the coast (Puget Sound) and the Cascade Range. With its tributaries, it was a travel corridor also, through and over the Cascades to the Columbia plateau and eastern flanks of the Cascade Range.

The lands encompassed by the Skagit W&SR corridor were once the home and territory of several Native American Indian groups or tribes. Chief among these were the Upper Skagit and Sauk/Suiattle group. In addition, the Samish and Swinomish groups have identified the upper river areas as traditional territories. Ethnographic documents indicate that all four rivers within the Skagit W&SR hosted either permanent or semi-permanent villages up through the mid-1800's. After that time, many of the Native Americans appeared to move onto the lower river segments, concentrating at various points along the Skagit Segment.

Archaeological research, to date, has been mainly limited to coastal areas below Sedro Woolley. Ethnographic documents indicate, however, that significant archaeological remains should exist either in or adjacent to the Skagit W&SR corridor.

Historical activity apparently began with a venture across the Cascades by Alexander Ross in 1814. This venture originated on the east slope of the Cascade Mountains, traveled down the Cascade River and returned over the same route. In 1882, a military expedition apparently followed closely the route travelled by Ross down the Cascade. Other exploration of the Skagit occurred during the 1850's, 70's and 80's. Miners ventured into the area in the 1870's.

Mining was the first industrial activity in the area. It resulted in various mines and smelters. Not only was lode mining actively pursued, coal mining occurred along the Skagit also.

Skagit Segment

At least seven distinct Native American communities were present along the Skagit prior to the mid-1800's. The communities often had permanent villages located along the river. Most were located near the mouths of tributaries and consisted of a few to numerous houses. These buildings were made of cedar and were resistant to the cold and weather.

Within or adjacent to the Skagit Segment are eight verified archaeological sites or areas. Seven of which are considered to be significant and potentially eligible for the National Register of Historic Places. In addition, there are numerous areas of archaeological potential. One Native American cemetery is located near the corridor of the Skagit Segment.

Along this Skagit Segment are over 27 verified historic sites and areas. These vary from town sites, ferry crossings, and homesteads, to mining and lumbering operations. A National Register of Historic Places site exists near the Skagit Segment, the Baker River Bridge across the Baker River within the town of Concrete. The site is outside the management corridor but is visible from a few sites near to and across from the confluence of the Baker River with the Skagit River.

Cascade River

Within this segment of the Skagit W&SR are at least two archaeological sites of significance. The lower Cascade River portions of the W&SR corridor hold good potential for additional archaeological remains.

This river has witnessed much historical activity. Early explorations, homesteading and mining all left materials and evidence of the past.

Sauk River

As the traditional territory of the Sauk tribe, this river holds good potential for archaeological remains. There are at least two Native American cemeteries located in the vicinity of the W&SR corridor. Several Native American allotments are located in the vicinity. At least three important crossings of the river, used extensively (by both Native Americans and settlers) in the historic past lie within the corridor.

This river has experienced much history. Scattered through the W&SR corridor can be found remains of mining roads, logging camps, partially deteriorated railroad trestles, railroad grades, and old structural remains of buildings and bridges.

Suiattle River

This river valley was the traditional territory of the Suiattle tribe. Within the river valley and the W&SR management corridor are sites and areas of good potential for archaeological remains. There are over five verified and unverified archaeological sites. In addition, several prehistoric trails ran up this river. The Sauk-Suiattle tribes maintain and use a cemetery within the W&SR corridor along the Suiattle.

Historically, this river valley experienced somewhat less use than the other rivers in the Skagit W&SR. However, remains of railroad logging grades and trestles can be found within the Suiattle segment of the W&SR corridor. The Suiattle Guard Station, a classic example of early Forest Service Administration (and reflecting early structural craftsmanship) lies adjacent to the W&SR corridor.

Assumptions

1. The river corridors within the Skagit W&SR have a high potential for cultural resource materials and remains.
2. The Forest Service will continue to be looked upon for leadership in the management of cultural resources.
3. All management activities or undertakings proposed by Federal agencies will require evaluation according to the Section 106 procedures of the National Historic Act of 1966.
4. Cultural resource sites will need protection.
5. Cultural Resource sites and events have excellent interpretive and public interest opportunities.

Section III Current Situation and Assumptions

INTERPRETIVE SERVICE:

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III



Interpretive
Service

INTERPRETIVE SERVICE:
RECREATION AND SCENIC RIVERS

Current Situation

The motives of the various visitors in visiting the Skagit are as varied as the river resource itself: nature study; fishing; the search for solitude and a quiet place for reflection; excitement, adventure, and achievement in the challenge of white water. Most users are only visiting for the day. Some may, however, stay for 2 to 3 days. Many of the river visitors utilize the services of commercial outfitters. There are also many historic sites of potential interest within the Skagit W&SR. All of these patterns of use, and also the variation in seasons of the year, will be significant factors in determining the role of interpretation and visitor information.

No printed information exists on river use opportunities within the Recreation River (Skagit Segment) corridor. The Mt. Baker-Snoqualmie National Forest Recreation map does provide some information about those facilities located within the National Forest boundary. Recreation information is currently available at Verlot Public Service Center, Darrington and Mt. Baker Ranger Stations. The visitor may also obtain data from the Joint Park Service-Forest Service information centers located at Concrete and Seattle.

The National Park Service provides interpretation on the Skagit River upstream from Marblemount. A brochure which covers the entire upper Skagit River area and gives information on the bald eagle is available to interested people. A handout entitled "Skagit Lore" is also available. This brochure discusses the human and natural history of the Skagit. Some float trips and fishing guides are providing interpretation to their customers.

The most obvious problem with the current situation is the lack of a complete inventory of currently used recreation sites and access points that can be officially recognized. Another problem is the lack of knowledge relating to stream flow conditions and various forms of boating activities. This would include data on stream characteristics, stream suitability for different types of crafts, information on difficulty, ratings, and safety considerations. Put-in and take-out points are only known by word-of-mouth and are often located by trial and error.

Assumptions

1. Interpretive Services will continue to be provided at the Ranger Stations and both the Seattle and Concrete Joint Information centers.
2. Operating hours of the existing information facilities are reduced during the winter (off season) months.

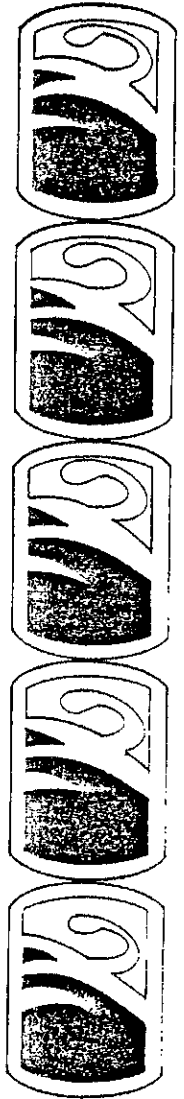
3. There is a need for accurate information on recreation opportunities and access. This need is greatest along the Skagit Segment of the W&SR.
4. Interpretive Services contribute to an enjoyable public visit, and provides the manager his best opportunity to obtain public cooperation in helping to reduce user impacts.
5. Currently, the season of highest rafting and boating use on the Skagit Segment occurs between October and March during the winter anadromous fish runs. Congregations of feeding bald eagles associated with the fish runs are a major visitor attraction. This will continue to be the heavy use season on the Skagit Segment into the near future.
6. Interpretation may be used to reduce conflicts with Eagles.
7. Interpretive services may be used to help reduce potential conflict between recreationists and private ownership.
8. The users of Scenic and Recreation Rivers need and desire information on recreation opportunities.
9. Commercial outfitters can provide a range of experiences that satisfy an inner need people have to grow, to gain something from the adventure of floating these rivers.
10. Insufficient education of visitors regarding safe and low impact use of these rivers causes too much of the manager's efforts and budget to go into remedying negative impacts.
11. The most effective and flexible visitor education medium is personal contact.
12. Signs will be subject to vandalism, but some signs will be necessary.

Section III Current Situation and Assumptions

III

SIGNING:

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Signing

SIGNING: RECREATION AND SCENIC RIVERS

Current Situation

No effort has been made to intensively sign the Skagit W&SR area. This has been primarily due to the fact that management boundaries have not been finalized nor has funding been available.

Within the potential W&SR management corridor, numerous agencies conduct various types of management and administer assorted types of projects and facilities. Not all of these agencies have indicated their presence through signing. Public agencies who presently maintain individual signs within the potential corridor are:

- Forest Service
- State of Washington
 - Department of Game
 - Department of Natural Resources
 - Department of Fisheries
- Skagit County
- Snohomish County
- National Park Service

In addition, numerous private and quasi-private groups maintain signs. Some examples are:

- Public utility companies
- Real Estate developments
- Native American Indian Groups and Tribes
- Game and Fish clubs and associations
- Timber companies

None of these agencies, groups, or associations have identified themselves with the Wild and Scenic River System via their signing.

Assumptions

1. Signing can be an effective management tool within the W&SR management corridor. Over 100 miles of lands along the W&SR corridor are predominately privately owned. Within those lands there is a strong concern about potential conflicts between public activity (associated with the river) and private landowners. Signing could be used to reduce some of these potential conflicts.
2. With the multi-agency involvement and complicated land use patterns, identification of the Skagit Wild and Scenic River Area becomes important.

3. With the complexity of the land use pattern, multitude of various public agencies, and resources present within the river, management corridor could spawn a duplication of signs. A few situations that could lead to a belief that a sign is desired are:

- access routes
- stream conditions (relating to water craft)
- eagle habitats
- eagle sanctuary
- access sites (by use)
- interpretative
- log jams and obstructions
- fish habitats
- historical and archaeological sites
- trails and trail use
- launch and take-out areas
- viewpoints

Section III Current Situation and Assumptions

III

MOTORIZED AND MECHANICAL USE:

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Current Situation _____	I	96
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Management Direction _____	II	45



**Motorized
and
Mechanical
Uses**

MOTORIZED AND MECHANICAL USE:
RECREATION AND SCENIC RIVERS

Current Situation

All rivers in the Skagit W&SR have motorized access from the land. In most cases, this is not a uniform access, but access along sections or at specific points such as bridges, abandoned ferry crossings, old road and railroad grades, or private subdivisions and public recreation areas (i.e., campgrounds, picnic grounds, etc.).

Only two of the rivers have any significant degree of motorized water use at present, although considering present technology (for example, air boats and jet boats), portions of all the rivers could be considered accessible.

Public response indicates some people object to motorized use due to disturbance to themselves and to wildlife. The use of motorized boats may have some impact on the wildlife feeding along river and may reduce viewer observation opportunities.

MOTORIZED AND MECHANICAL USE: RECREATION RIVER

Current Situation

The Skagit Segment has motorized land access at various points from both banks. Public roads traverse along each bank. Such roads provide access for long stretches along the south bank. The river also has historically experienced commercial watercraft use. Current mechanized boating use varies from motor driven boats such as those used by fishing guides, to boats used by private parties, to administrative craft used by the State and by the Skagit River Cooperative.

Assumptions

1. Motorized access is compatible with Recreation River designation.
2. Use of motor powered fishing boats will continue.
3. There is some concern as to the disturbance factor that motorized boats represent with regard to eagles feeding along the rivers.
4. Motorized use on the Skagit Segment is an established use.
5. Presently, there appear to be no safety problems associated with the combination of motorized and non-motorized boats on this river.

MOTORIZED AND MECHANICAL USE: SCENIC RIVERS

Current Situation

Sauk:

The Sauk has motorized land access along its entire length. This access is principally from only one bank (switching from one bank to another). Along the lower Sauk, and along a stretch above Darrington, roads parallel each bank.

Only the lower seven miles of the river (the stretch from junction with the Skagit to the first bridge along the Sauk) have experienced motorized boat access of any consequence. This is primarily jet boat use, although a few propeller craft venture up the river at high water. The State has closed the river to fishing from motorized watercraft. The motor restriction relates to fishing while the motor is in operation. Motorized boats continue to be used for fishing access and transportation.

Suiattle:

The Suiattle also has road access. However, contrary to the Skagit and Sauk, road access to the Suiattle is very spotty, even though roads parallel both banks. For the most part, the parallel roads are some distance from the river's edge. Small access roads lead to or near to the river. Except for those leading to the campgrounds (DNR and Forest Service), most of these access roads are narrow and low standard.

As far as is known, motorized watercraft use has been insignificant on the Suiattle. It may be possible for some jet boat or air boat travel on short stretches of the extreme lower Suiattle near where it flows into the Sauk. However, no history of such use to date, is known.

Cascade:

A road parallels this river also, although, like the Suiattle, access is only from a few side roads and recreational developments.

Although some motorized water use of the extreme lower Cascade may have occurred, it is insignificant (probably due to flow fluctuations in the river). There is no record of motorized water use on the upper Cascade.

Assumptions

1. Motor access by road or railroad to short stretches of the rivers is acceptable.
2. There is limited historical precedence for motorized boat use.
3. The Sauk river is closed to fishing from motor driven boats during the winter season.
4. There is some concern as to the disturbance factor that motorized boats represent with regard to eagles feeding along the rivers.
5. At the present time, there appears little problem associated with motorized use of these rivers.

Section III Current Situation and Assumptions

VISITOR MANAGEMENT:

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Visitor
Management

VISITOR MANAGEMENT:
RECREATION RIVER

Current Situation

The dominance of private lands along the banks of the Skagit Segment provides the focus for visitor control. Use of the land area is strictly controlled by limited public lands and sites, a few parcels of private lands (where public use is either permitted or ignored), and a proliferation of fences and posted properties. The State hunting and fishing laws provide an umbrella of controls over use seasons and provide some measure of control over user number and conduct.

Control over water use is mainly via fishing laws, Native American Treaty Rights, the Skagit System Cooperative, State licenses for fishing guides, and club or association rules such as those of Steelhead Guides Association. With the exception of controls related to a few rafting outfitters entering the Skagit W&SR (after floating through the Ross Lake National Recreation Area), no Federal control over surface water use is in effect.

One other form of visitor control exists in association with the Skagit River Eagle Natural Area. During the winter season, (October through March), the river bars and shores within this natural area are posted and patrolled by the Nature Conservancy Refuge manager to minimize human use of the areas frequented by the wintering bald eagle populations.

Assumptions

1. Use of the Skagit Segment will increase gradually in the foreseeable future. Most of this increase will occur in the portion of the river above the town of Concrete.
2. As use increases, the potential for conflict increases between:
 - users and adjacent landowners
 - human use and key resource values (for example, the overwintering eagle population).
3. If visitor controls are necessary on the Skagit Segment, such controls will be seasonal.
4. At present, use of surface waters is self-controlling (due to the size of the river). Use is also limited by access.
5. Due to lack of quantifiable information on current use and wildlife and bald eagle habitat, permitted use of the Skagit will be based upon best professional judgment. Completion of eagle research (Wildlife Management Direction) and monitoring of use (Wildlife Management Direction) may allow, or require adjustment, to a more scientifically established permitted use capacity.

VISITOR MANAGEMENT:
SCENIC RIVERS

Current Situation

The three Scenic Rivers are distinctly different from the Skagit Segment as the Scenic Rivers flow through much larger areas of public lands.

Outside the National Forest boundary, private lands dominate. Use of these lands is controlled by a combination of a few public agencies, some permitted use of private lands, and posted or fenced properties. The state hunting and fishing laws provide a central means of control over use seasons and some measure of control over user numbers and user conduct.

At the present time, control over the water use is mainly through fishing laws, Native American Treaty rights, State requirements for commercial guides and limited access. There is a growing use of these waters outside National Forest boundaries by commercial rafters, especially on the Sauk and Suiattle rivers.

Within the National Forest, visitor management is accomplished through the applicable U.S. Department of Agriculture Regulations for National Forest lands. Recreation management has emphasized roaded dispersed use, resulting in few constraints on visitor activities. Within designated use areas, (i.e., campgrounds, etc.), signs, traffic control devices, gates, and special facilities such as campstoves, tent pads, tables, and toilet structures provide the principle management tools. Seasonally, the State hunting and fishing laws apply to National Forest lands in terms of user numbers and conduct.

On the surface waters of the Sauk and Suiattle rivers located within the National Forest, controls regulating commercial use were put into effect 1978 by the Mt. Baker-Snoqualmie N.F. Commercial boating use of these two rivers has been under a permit system designed to protect the key resources of each river. The user day levels suggested have been:

	<u>1978</u>	<u>1979</u>	<u>1980</u>
Sauk above Clear Creek	800	800	900
Sauk below Clear Creek	600	800	1000
Suiattle	300	400	500

As of 1978, all commercial rafting outfitters operating within the National Forest, have been required to have a permit. Up to 20 applications for permits have been received but less than 25% of the applicants have received permits. Currently, two applications for commercial float fishing are being considered. There is, at present, no permit requirement for non-commercial river users.

On the Cascade River there are no visitor controls being exercised over surface water use inside the National Forest. Outside the National Forest, controls over surface water use are those provided by the State of Washington. At Cascade Island Campground and river access site, a sign provides key information to users of the river below.

Assumptions

1. Requests for commercial use of the Scenic Rivers will continue to grow.
2. There is potential for conflicts between bald eagle use of the rivers and recreation use during the winter season (October through March).
3. The upper portions of the rivers are usually not readily accessible from December to May.
4. The greatest season of use can be expected to be from May through August or September of each year.
5. During periods of low water and especially during and after fish spawning periods, potential impacts resulting from recreation use can occur in the form of harassment and unintentional disturbance of adult fish on the spawning ground, and destruction of eggs and fry.
6. There will be a continuing interest in obtaining use permits for overnight floats by the commercial users of the rivers.
7. Use of the land portions of the W&SR management corridors will increase.
8. The river section above Marble Creek is a primary spring chinook spawning area. Controls related to boating, similar to the Sauk River above Clear Creek, may be necessary if use increases.

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Wildlife

WILDLIFE: RECREATION
AND SCENIC RIVERS

Current Situation

Species Occurrence and Status

Appendix C documents wildlife occurrence and abundance in the vicinity of the Skagit W&SR, however, the extent to which the occurrence and abundance of listed species actually characterize the Skagit W&SR remains uncertain. Much of the data, on which the lists were based, originated from larger (and spatially removed) geographical areas.

Moreover, these lists provide information primarily on occurrence rather than abundance or population trends. Trends cannot be determined accurately as the intensity of observation has varied temporally and spatially. Consequently, these lists can be used only for general applications.

The occurrence of 199 vertebrate species utilizing riparian habitat in the Mt. Baker-Snoqualmie National Forest has been estimated (Table 1, Appendix C). In addition, 25 riparian habitat-dependent species are estimated to occur in the Mt. Baker-Snoqualmie National Forest (Table 2, Appendix C). State relative abundance and temporal residence are also given for each species. These lists are adapted from the WILDHAB program, U.S.F.S. Region 6 in Portland. Species are listed when verified or expected to occur by virtue of their general geographical range.

Ralph (1979) provided a partial listing of species, and in some cases subspecies, of particular concern (suspected of being rare or having declining populations) in the Skagit W&SR (Table 3, Appendix C).

Additionally, Washington Department of Game (State Game Department) submitted a list of verified sightings of rare non-game species occurring in the vicinity of the Skagit W&SR. This represents a summary of observations by knowledgeable observers during 1969 - 1979 (Table 4, Appendix C).

Use of Habitat

To be reproductively successful and survive, vertebrates require a wide variety of conditions that fall within their physiological and behavioral ranges of tolerance. Among the most important are food, water, temperature, protection from predation, and accessibility of mates. The extent to which these conditions are met depends on the quantity and quality of habitat. Vegetative, physiographic, chemical, microclimatological, and elevational attributes of habitats vary extensively. Each species thrives best when these attributes occur in the specific combination that maximizes fulfillment of its needs.

Habitat types usually receive general classification based on characteristics of the dominant plant species present. Successional stage also frequently differentiates habitat and sometimes the type of disturbance to succession (fire, flood, avalanche, logging, agricultural clearing) also differentiates habitat.

In general terms aquatic, riparian, marsh, floodplain, forested bottomland, forested slope, agricultural, and clear-cut habitats currently predominate in the Skagit W&SR. Reasonably detailed vegetative characteristics of these habitats pertaining to life zones, plant communities, and associations are known for the Skagit W&SR (See USDAFS Bald Eagle Biological Assessment, Flora).

Beak Consultants (1979) made perhaps the most recent and complete assessment of habitat use and species occurrence in the vicinity of the Skagit W&SR. Trapping in April, June, and July indicated that Trowbridge shrew (Sorex trowbridgii) and deer mouse (Peromyscus maniculatus) were the most common mammals in both mixed bottomland and upland conifer sites during those months. Other species included shrew mole (Neurotrichus gibbsii) and creeping vole (Microtus oregoni), suggesting that the small mammal species composition was typical of other areas in northwest Washington with similar habitats. Many larger mammals also occurred there, but at lower densities.

Birds censused during the study totalled 79 species, which occupied several habitat types. These habitat types included mixed bottomland, upland conifer, aquatic, urban, and transmission line right-of-way. Observations in the terrestrial habitats commonly recorded the hairy woodpecker, common raven, chestnut-backed chickadee, winter wren, golden-crowned kinglet, and dark-eyed junco. Common mergansers and dippers were the most frequently observed species in the aquatic habitat, while others included bufflehead, common goldeneye, and trumpeter swan.

Beak Consultants considered very general habitat features in this study. Also, the extent and seasons of censusing were limited. Consequently, their data may not be completely representative of the existing situation.

Threatened and Endangered Wildlife

In accordance with Section 7 (c) of the Endangered Species Act, the U.S. Fish and Wildlife Service identified Threatened or Endangered species that either currently or historically occurred, or are suspected of occurring, in the Skagit W&SR. These include the bald eagle (Haliaeetus leucocephalus), listed as threatened and the peregrine falcon (Falco peregrinus), and grizzly bear (Ursus arctos), listed as endangered.

The State Game Department provided an Element Status Summary for the Skagit W&SR. In addition to the bald eagle and grizzly bear, it suggested the spotted owl (Strix occidentalis) as having a Candidate for Threatened status, and the osprey (Pandion haliaetus), trumpeter swan (Olor buccinator), and barred owl (Strix varia) as Species of Concern.

The U.S. Forest Service, Region 6, Regional Forester List of Sensitive Animal Species for the Mt. Baker-Snoqualmie N.F., lists northern spotted owl (Strix occidentalis), Swainson's hawk (Buteo swainsoni), Columbian sharp-tailed grouse (Pedioetes phasianellus columbianus), and wolverine (Gulo gulo).

The status of these species in the Skagit W&SR is assessed briefly as follows:

Bald Eagle

Winter concentrations of the threatened northern bald eagle represent perhaps the most significant and extensively studied (Servheen 1975, Wiley 1977 and 1978, Skagen 1979 and 1980, The Nature Conservancy 1976, BioSystems Analysis Inc. 1980, Forest Service 1980) wildlife resource in the Skagit W&SR. Eagles in the system apparently are among the six largest wintering groups in the conterminous United States, reaching peaks of 200-450 individuals per day.

Bald eagles usually occupy the Skagit W&SR from October to March, with peaks in numbers during January and February. Eagle occurrence is synchronous with spawning of anadromous salmon, primarily chum (Oncorhynchus keta). After spawning, salmon die and their carcasses become deposited on sand and gravel bars where they provide an abundant, easily exploited food source for the eagles.

The highest concentration of eagles, (presumably reflecting optimal habitat), normally occurs on the Skagit River between McLeod Slough (River Mile 66.0) and Rocky Creek (River Mile 73.6). This section currently contains the Skagit River Bald Eagle Natural Area (SRBENA), which is managed by the State Game Department and The Nature Conservancy (TNC). Relatively dense concentrations occur also near the Sauk Prairie area, on the Sauk River between Darrington and the mouth of the Suiattle River; and on the lower Skagit River in the vicinities of Day Creek and Concrete.

Bald eagles tend to disperse from the Skagit W&SR when salmon carcasses no longer are available. Most birds apparently disperse to estuarine or riparian areas of Puget Sound or British Columbia where adults soon begin to breed. No individuals are known to remain to breed in the Skagit W&SR, though two active nests exist nearby. There is a substantial movement back and forth between the Nooksack and Skagit Rivers, depending on the abundance of chum.

The ability of the eagles to utilize the salmon resource partially depends on the attributes of the existing habitat. Among the most important are the extensive rivers, streams, and sloughs that the salmon occupy. Gravel and sand bars with a low or moderate gradient combined with wide, shallow, and braided channels facilitate deposition of salmon carcasses.

Vegetative characteristics such as heterogeneous stands of deciduous and coniferous trees provide sites for perching and at least nine known communal-night roosts. Interspersion of dense vegetation and clearings provides buffers, so human disturbance frequently is not visible from areas of eagle activity, and eagles are not readily susceptible to predation.

Approximately 63% of the Skagit Section has been rated as excellent bald eagle habitat, 34% good, and 3% less important.

The dramatic reduction in eagle numbers throughout their range has resulted entirely from human activities. Direct mortality, reduced breeding productivity, and habitat loss have contributed most to this decline. Shooting, electrocution, accidental trapping, and poisoning most frequently cause eagle deaths. Productivity has declined primarily from DDT pesticide contamination of ecosystems. Although DDT was banned from general use in 1973, application of other pesticides, herbicides, fungicides, and fertilizers is prevalent in the Skagit W&SR drainage. The direct and indirect effects of these compounds on eagles is unknown. Logging, dams, and construction of houses, roads, bridges, and riprap along rivers have had the greatest impact on eagle habitat.

In addition to the above impacts, interactions with recreational and other human users on or near the rivers can potentially impact eagles. If interactions are severe, eagles might be unable to obtain sufficient food, which could cause deaths or a decline in productivity. Reasonably complete records are available showing short-term behavioral, physiological, and distributional responses of eagles to human disturbance. At the present time, no studies have been carried out or designed to determine the effects of these disturbances on the viability of the populations. This will require further research in the future.

A biological assessment of bald eagles in the Skagit W&SR has been completed by the Forest Service.

Peregrine Falcon

Historic peregrine falcon nesting and wintering status in Washington is not well known. Apparently, 15-25 eyries were active during any one year throughout the state (Clifford Anderson, pers. comm.). Presumably, a large number of individuals wintered in coastal areas. Bond (1946) provides a useful assessment of the peregrine in Washington.

The Skagit and Samish Flats in Skagit and Whatcom Counties are presently occupied by a substantial population of peregrines during winters (Anderson and DeBruyn 1979). At least one individual presently hunts, primarily water fowl, around Sedro Woolley near the western terminis of the Skagit W&SR (Clifford Anderson, pers. comm.).

The absence of significant cliffs within the Skagit W&SR is one factor that precludes nesting by peregrines. Suitable nesting cliffs appear to be abundant at higher elevations in the drainages above the Skagit W&SR boundaries, though none have been reported to contain nesting peregrines. In recent years, no more than three active eyries have been observed in the same nesting season in Washington (Clifford Anderson, pers. comm.).

Grizzly Bear

Grizzlies are known to have occurred historically in the North Cascades of Washington (Hall and Kelson 1959, Cahalane 1947, Herrero 1972, Seton 1937); and apparently represented a viable breeding population (Bjorklund 1980).

At least six confirmed and unconfirmed sightings occurred from the late 1800's to 1950 in the Skagit, Sauk, and Suiattle River drainages (Bjorklund 1980). Among these, one occurred immediately adjacent to the Skagit W&SR boundary at Sauk Prairie (Majors 1975). Also, Collins (1974) related that the Upper Skagit Tribe hunted grizzlies and engaged in religious ceremonies surrounding this animal. The most recent confirmed sighting (carcass examined) was in 1964 along Fisher Creek, a tributary of Thunder Creek which flows into the Skagit 20 miles upstream from the Skagit W&SR terminis at Bacon Creek.

The Skagit W&SR almost certainly now lacks a breeding population, though individuals may occur on occasion in the more northerly areas of the Skagit River drainage, outside the Skagit W&SR. Between 1950 and 1980, there were seven unconfirmed sightings in this area, suggesting the presence of transient grizzlies from a breeding population in southern British Columbia (Bjorklund 1980).

Spotted Owl

Forsman (1975) provided probably the most complete information on spotted owl ecology and behavior in the Pacific Northwest. However, his assessment of the status of this cryptic nocturnal species was confined to Oregon. The spotted owl has not received such extensive attention in Washington and little is known of its numbers and distribution.

Spotted owls are known from a few isolated records to occur within, or in close proximity to, the Skagit W&SR. Three observations occurred at separate locations along the North Fork of the Sauk River, and two each from the Sauk (near Darrington) and Suiattle Rivers (the State Game Department, pers. comm.). The lack of records from the Skagit River could result from the lower amount of old growth timber available for nesting (Russell - U.S.F.S., pers. comm.). Additional observations of spotted owls in the Skagit W&SR are likely to occur in old growth forests near streams and rivers.

Barred Owl

The barred owl originally occurred in the U.S. only east of the Rocky Mountains, where it is common (Bent 1961). It has been recorded increasingly farther west in recent years, and a few records indicate it is currently breeding in Washington (Leder and Walters 1980).

At least four breeding pairs have been reported in the Skagit River drainage. However, none of these are in the Skagit W&SR boundary (Jim Fackler, pers. comm.). One of these lies northwest of Minkler Lake. Jim Fackler observed the other three pairs in the vicinity of Diablo and Ross Lakes after a season of intensive survey for the National Park Service. He felt barred owls would be discovered in the Skagit W&SR if an equally intensive survey were conducted there. He also noted that barred owls tend to have similar habitat preference as spotted owls and goshawks, in old-growth forests near water, particularly where more than one water source adjoins.

Osprey

The worldwide distribution of the osprey reflects the success of the fish-eating niche. Ironically, the osprey's dependence on fish (which concentrate pesticide residues in their body tissues) is one of the major factors contributing to species decline. However, enough pesticide apparently has become inactive in aquatic ecosystems following the 1973 ban on DDT, and osprey populations now appear to be relatively stable throughout their range.

Apparently, ospreys have not been studied extensively in the Skagit W&SR. At least six active nests occur in or near the system. These sites include the Sauk River near Darrington, Baker Lake, and the Skagit River at Concrete, Birdsvew, and two near Sedro Woolley.

Osprey occupy the Skagit W&SR vicinity year round, but may be more abundant in summer. Population estimates may be inaccurately low because residents and visitors may not consider osprey rare or threatened enough to warrant reports to wildlife agencies.

Trumpeter Swan

As early as 1912, trumpeter swans were extremely rare and presumed to be on the verge of extinction (Bent 1964). Their large size, loud vocalizations, loss of flight during molt, and economically valuable feathers made them conspicuous and vulnerable to hunters.

The wintering population of trumpeter swans in Skagit County has increased dramatically, from just 20 in 1953 to 436 in 1980-81 (Meredith Pfahl - Skagit Co. Rural Devel. Committee, pers. comm.). These populations are concentrated in shallow fresh water lakes, marshes, and fields in the Skagit Flats.

Trumpeter swans apparently have not been censused in the Skagit W&SR. However, their presence is known there from two recent observations of small groups on the Skagit River in the vicinity of the gas pipeline above Sedro Woolley, and at Rockport. Several sightings have occurred on the Skagit River upstream from the Skagit W&SR (Beak Consultants 1979). Even though suitable habitat for trumpeter swans may be available in the sloughs and side channels along the rivers and streams in the Skagit W&SR, the area does not appear to be used much by them at the present time. However, if the winter population continues to increase and carrying capacity is reached in the fresh water marshes and small lakes in the Skagit Flats, then individuals could disperse and start occupying sloughs and side channels in the Skagit W&SR at a much higher density.

Swainson's Hawk

Swainson's hawks are rare in western Washington and probably occur only as migrants since they winter exclusively in South America and breed primarily in open, arid prairie or desert habitats. They are more common in eastern Washington. Swainson's hawks frequently migrate in groups or large flocks.

No records of Swainson's hawk exist for the Skagit W&SR. Three sightings in Skagit County have been reported to the State Game Department. These occurred in coastal areas 10-20 miles from the Skagit W&SR. A small group was observed in 1973 about the 5,000 foot elevation near the summit of Desolation Peak (North Cascades National Park files), in Ross Lake National Recreation Area, which is about 35 miles from the eastern boundary of the SWSRS.

Columbia Sharp-Tailed Grouse

The Columbia sharp-tailed grouse, a resident of arid prairies and grasslands, now occurs in Washington only as a remnant population east of the Cascade Divide, primarily in Okanogan, Douglas, and Lincoln Counties. Sharp-tailed grouse do not presently occur in or near the humid western-slope Skagit W&SR, and perhaps never inhabited this region.

Wolverine

Wolverines are very rare in the conterminous U.S. and occur as a remnant, possibly declining, population in the North Cascades of Washington. Wolverines have not recently been reported in the Skagit W&SR. Recent sightings have occurred at Colonial Creek (North Cascade National Park files 1974), Cascade Pass (State Game Department files 1974), and Mix-up Arm (North Cascade National Park files 1971). Each of these areas is in the Skagit drainage. Several recent sightings have occurred in the Stehekin River drainage, east of the North Fork of the Cascade River. Wolverines require extensive wilderness habitat. If they presently occur in the Skagit W&SR it is undoubtedly in the remote upper reaches of the Cascade, and possibly Sauk and Suiattle River drainages.

Assumptions

1. Wildlife is one of the outstanding values for which the Skagit Wild and Scenic River was established. Under W&SR classification the integrity and diversity of wildlife species, populations, and habitats must be maintained.
2. Declines within populations or degradation of habitat can be detected only if the status and habitat requirements of these species have been assessed accurately. At the present time, we have limited understanding of most non-game wildlife populations and their uses of habitat in the Skagit W&SR.
3. The species lists presented in Appendix C represent only an initial step in gaining sufficient knowledge for managing wildlife. With an increase in this knowledge (which is currently being pursued by governmental and private groups), the integrity and diversity of species, populations, and habitats may ultimately be maintained.
4. The details of habitat use by wildlife species remain obscure. Understanding a species' use of habitat is fundamental to management since man-induced change or reduction of habitat can seriously impact the species. Habitat loss in the Skagit W&SR is likely to continue if precautionary measures are not taken.

5. Individuals displaced by habitat loss are unlikely to locate any other suitable habitat since alternate areas usually are occupied. The immigration of additional numbers of various species into an area increases competition among members of the respective species and the influx stresses both the existing and displaced populations. Moreover, if man-related activities have reduced suitable habitat to isolated patches, the viability and genetic variability of these isolated groups often declines.
6. Recreation and other human activities in the Skagit W&SR have the potential to impact wildlife populations, and are likely to increase in the future.
7. A biological assessment may be required for species listed as Threatened or Endangered by the U.S. Fish and Wildlife Service and the State Game Department .

BALD EAGLE MANAGEMENT

The primary function of bald eagle management is to maintain or enhance the density, distribution, and viability of the eagle population and habitat that existed when the Skagit W&SR was established.

This section focuses on bald eagle management, which supplements general wildlife management described for the Skagit W&SR. The section discusses bald eagles; their major food source (Salmon); general biological and physical requirements (Habitat); potential conflicts between eagles and human use of the Skagit W&SR -- particularly recreational use -- (Human Disturbance); and finally, visitor education (Interpretation). Assumptions and Management Directions are itemized for each subject area.

A Biological Assessment of the bald eagle has been completed (under a separate cover). Management and research of particular importance to the bald eagle is outlined in the Bald Eagle Management and Future Research Section of this document (following section).

It should be noted that while some needed future research is identified below, the Research Section of this document contains a complete overview of research needs related to bald eagle management along the Skagit W&SR.

Assumptions

Eagles

1. The primary requirement is to maintain or enhance the density, distribution, and viability of the bald eagle population that existed in the Skagit W&SR when it was established.

2. Eagles, salmon, habitat, and human-use in the Skagit W&SR are currently being managed to various degrees. The USFS, USFWS, USGS, Army Corps of Engineers, BLM, U.S. Soil Conservation Service, U.S. Dept. of Energy, U.S. Dept. of Housing and Urban Development, U.S. Dept. of Transportation, Federal Power Commission, the State Game Department, Wash. Dept. of Fisheries, Wash. Dept. of Natural Resources, Wash. Dept. of Ecology, Wash. Dept. of Transportation, Skagit County, Snohomish County, Tribal governments and incorporated towns each have jurisdiction over certain resources in some areas of the Skagit W&SR. Management regulations and guidelines of these groups provide a substantial framework within which the Mt. Baker-Snoqualmie N.F. can coordinate its management efforts. Although these regulations and guidelines are quite complete, lack of funding and other factors sometimes preclude complete implementation.
3. Presently, the Sauk and Suiattle Rivers (Russell 1980) and the Skagit River from Sedro Woolley to Rockport (Ralph 1980, WDF 1980) have received only single-season studies. Due to annual variability in eagle and salmon numbers, combined with water level and other factors, studies carried out only during a single season may not accurately reflect the average or range of conditions that occur. Consequently, replicate data for the above areas would be valuable.
4. As data increase, it will be easier for Mt. Baker-Snoqualmie N.F. to make informed decisions on seeking easements, purchasing land, and determining practices required to protect the bald eagle.
5. Management will strive to identify and implement methods that will alleviate or reduce direct and indirect threats to the bald eagle population and habitat.

Salmon

6. The primary objective is to maintain or enhance the abundance, distribution, and genetic variability that existed in the natural populations of each salmon species when the Skagit W&SR was established.
7. Salmon species that eagles feed on (chum and coho) need to be censused annually to determine trends in abundance and distribution. WDF conducts census on the Skagit above Rockport intensively. Supplemental data from the lower Skagit, Suiattle and Sauk Rivers would be beneficial.

Habitat

8. The primary requirement is to maintain habitat of sufficiently high quality and quantity to insure that current abundance and distribution of bald eagle and salmon populations will not decline.
9. Alteration of habitat should be regulated in areas that were rated "excellent" or "good" on the Skagit Segment. (Such ratings are determined in the habitat evaluation procedure discussed in the Forest Service Bald Eagle Biological Assessment).

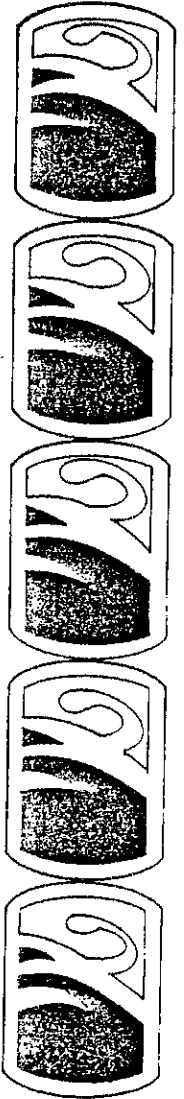
10. Habitat rating must be completed for the Scenic Rivers and results recorded for easy access on maps and/or computer files. If necessary, ratings should be ground-verified.
11. Habitat evaluation cannot proceed until the following data are available:
 - Salmon carcass abundance and distribution for the Upper Sauk, Suiattle, and Cascade Rivers. The WDF has information for the Lower Sauk and Cascade Rivers.
 - Eagle numbers and distribution on the Cascade River and Upper Sauk River.
12. Habitat enhancement is a policy stated in the 1982 Inter-Agency guidelines. Protection does not necessarily assure survival. The peregrine falcon in the eastern U.S., for example, was protected to extinction (Temple 1977). Frequently, physical manipulation of a threatened species and its habitat are required to save it. Active management methods have proved their usefulness just recently, and this field continues to grow rapidly.
13. Habitats suspected of being most sensitive (streams, marshes) or habitats known to be currently sustaining impacts, should receive priority for study.
14. Human activities effecting habitat are monitored and, if necessary, regulated by the WDF and WDG.
15. Water quality is a vital factor in habitat quality and should be maintained at or above present levels.
16. At the present time, no studies have been designed to determine whether encounters with humans affect the viability (mortality rate and productivity) of the wintering population of bald eagles on the Skagit River. In the absence of this information, severe unsupported restrictions on human activities in the Skagit W&SR are not justified at the present time.
17. Until studies can be conducted to clarify the significance of encounters with humans to the eagle population, management of human activity should concentrate on maintaining or enhancing the conditions that currently exist and on education of users.
18. Greater restriction on human use may be required in the future if visitation increases, or it is determined that human use is increasing mortality, reducing productivity, or significantly altering numbers and distribution of eagles.

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Fisheries

FISHERIES:
RECREATION AND SCENIC RIVERS

Current Situation

The Skagit, Sauk, Suiattle, and Cascade Rivers comprise the largest drainage basin in the Puget Sound area. These rivers support a wide variety of resident and anadromous fish. The anadromous fish population includes five species of Pacific salmon (Chinook, Coho, Pink, Chum, and Sockeye) plus summer and winter steelhead, sea-run cutthroat, and sea-run Dolly Varden trout. The more important resident fish are rainbow trout, cutthroat trout, Dolly Varden, brook trout, and whitefish. Other species present include stickleback, cottids, squawfish, suckers, sturgeon and dace.

Salmon, steelhead, sea-run cutthroat and sea-run Dolly Varden enter and spawn in the river throughout the year. Chinook salmon "runs" are divided into three rather distinct groups - spring, summer and fall. Fall chinook are largely of hatchery origin and are propagated at the Department of Fisheries salmon hatchery on the Cascade River near Marblemount. Steelhead runs are divided into winter and summer runs. Coho salmon enter the river from late July to the end of the year. Pink salmon enter largely during the month of September, while chum salmon enter during October and November. Use of the study area by sockeye salmon is limited to transportation. Mainstem areas and tributaries throughout the study area are used for spawning and rearing.

Pacific coast and Puget Sound commercial fisheries are partially dependent upon salmon and steelhead runs produced by the Skagit system. Coho and chinook salmon are harvested by ocean troll fisheries from California to Alaska as well as the Puget Sound net fishery. Current management policy is aimed at increasing coho and chinook returns and harvest in the Puget Sound and terminal areas in order to meet treaty allocation requirements. While pink salmon are caught in the ocean troll fishery, the major harvest is in the Puget Sound net fishery. Nearly all of the chum harvest is also taken by this fishery. Commercial fishing contributes the primary income for many people residing in the Puget Sound region. (See Table 13).

The study area contributes chinook and coho to various commercial fisheries over a broad geographic area; however, a large segment of the harvest occurs in British Columbia. Chinook contribution is similar to coho. Coastal commercial fishing is conducted from troll boats which use hook and line gear. In Puget Sound, the commercial harvest is taken by purse seines, gillnet or reef net gear. Table 13 presents contribution rates for Skagit Chinook and Coho salmon.

Table 13

Contribution rates for Skagit Chinook and Coho Salmon.

<u>Species</u>	<u>British^{1/} Columbia</u>	<u>Troll</u>	<u>Washington</u>		<u>Oregon</u>	<u>Escapement</u>
			<u>Sport</u>	<u>Net^{2/}</u>		
coho	33.3%	10.0	12.4	12.0	2.4	29.8
chinook (yearling)	34.7	0.6	40.4	14.0	0.2	10.1
(fingerling)	53.1	2.4	13.1	15.0	0.4	16.0

- 1/ all gear
2/ Puget Sound

The Native American fishery harvests a large number of fish in Puget Sound and on the Skagit River. A portion of the harvest by the Upper Skagit and Sauk/Suiattle tribes occurs within the study area. In the Skagit fishery, the tribes primarily use gillnets to conduct their fishing operations. All five species of Pacific salmon and steelhead are included in their catch. The Indian fisheries, under a 1974 court decision regarding treaty fishing rights, are allocated 50% of the harvestable component of the run. Fish harvested for commercial, subsistence, and ceremonial purposes are included in the 50% allocation.

Salmon produced by the study area also contribute to both the marine and freshwater sport fisheries. Contribution covers a geographic range similar to the commercial fishery. In the Skagit River, both anadromous and resident fish alike are sought by sport fishermen. For the years 1975 through 1978, about 3,000 salmon were caught annually in the river. Catch is divided almost equally between chinook and coho.

The sport salmon fishery in the river is among the best in Puget Sound and is unsurpassed for size and quality of chinook. Summer and fall chinook, coho and pink salmon contribute to this fishery. Chinook are caught each year which exceed 50 pounds and sometimes 60 pounds. While the Skagit can be fished from either a boat or shore, because of its large size, boat anglers are generally more successful. All five species of Pacific salmon native to North America are present in the Skagit River system and enter the sport fishery. Chum and sockeye salmon do not bite readily in the river and are taken only occasionally. However, catches of pink, coho and chinook salmon make the Skagit one of the most productive rivers for sport fishing in the Puget Sound area.

The sport harvest of steelhead trout has varied from approximately 12,000 to 22,000 over the past fifteen years (this includes both summer-runs and winter-runs) and the spawner escapement has averaged an additional one-fourth to one-half the number harvested. The sea-run cutthroat population averages around eight to ten thousand fish and the Dolly Varden population is approximately four to six thousand fish. The resident cutthroat numbers in the hundreds of thousands (all age classes) in all the systems tributaries. There is a limited population in the main stream.

Table 14 lists the mean annual harvest and economic value of commercial and sportfish production in the classified area.

Table 14

Mean annual (68-78) harvest and economic value of commercial and sportfish production in Skagit W&SR (except where noted).

Fish Species	Fish Harvest			Fish Value (\$) 1/		
	Comm	Sport	Total	Comm	Sport	Total
Spring						
Chinook	4,150	2,170	6,320	108,730	119,328	228,058
Summer						
Fall						
Chinook	30,040	15,704	45,744	787,048	863,563	1,650,611
Pink	53,274	1,237	54,511	206,170	22,266	228,436
Chum	11,136	-----	11,136	164,145	-----	164,145
Coho	18,583	7,306	25,889	242,322	430,250	672,572
Steel head*2/	3,897	4,061	7,958	62,352	763,468	825,820
SeaRun** Trout3/	-----	25,600	25,600	-----	409,600	409,600
Resident*** Trout 4/ (angler days)	-----	10,000- 20,000			120,000- 240,000	-----

- 1/ Value based on price paid to the fisherman in 1978 (for commercial value) and the 1980 sportfish values.
- 2/ Commercial harvest value for steelhead from 1979 treaty commercial harvest values:
- Commercial value of steelhead is approximately 188 (Dept. of Game 1983 data).
 - sportfish value of steelhead is approximately 2x the commercial value, WDF, 1981.
- 3/ Value of Sea Run Trout, 1/2 value of steelhead is \$16.00 (1980 estimate).
- 4/ Value of Resident Trout = \$12.00/angler day, USFS 1978.

Pink salmon enter the Skagit largely in odd numbered years. The strength of the run fluctuates considerably and the sport catch varies accordingly. The runs may be large (over one million in 1963) but may also be very low resulting in conservation closures, as in 1975 and 1977 when the Skagit was closed to the taking of pink salmon.

Coho salmon return to the Skagit over an extended period of time, entering the river as early as July. The peak months for upstream migration are September and October. Early coho stocks are a mixture of Baker and Cascade River stocks. Baker stock are also propagated at the Skagit hatchery and (because of desirable sportfishing characteristics) have been released from central and south Puget Sound hatcheries.

Three races of chinook enter the Skagit River. The spring run enters the river from April through June and spawns in the upper Sauk, upper Cascade and Suiattle River system during late July, August and September. This stock has been depleted and conservation closures have been imposed on the sport and commercial fisheries to ensure escapement. The summer run chinook enter the river from June through August. These fish are noted for their brightness, large size and catchability. Fall chinook runs have been the result of artificial propagation at the Skagit hatchery. This stock enters the river from mid-August through September. It was felt that some of these fish may have been established in the wild; however, spawning ground surveys do not indicate this phenomena. Production of fall chinook has been reduced at the Skagit hatchery because of poor returns. Steps are being taken to replace fall chinook with native summer stocks.

The sport fishery is concentrated in the lower river with major effort near the forks below Mt. Vernon and in the North Fork (channel) of the Skagit. Fishing effort is concentrated near shore and boat access points such as at the pipeline crossing near Sedro Woolley and at Blake's Resort on the North Fork. The lower river from Gilligan Creek downstream is open the entire year, except for recent conservation closures to protect spring chinook. The limit is the general limit for Puget Sound rivers: 6 salmon over ten inches in length, no more than two of which may exceed 20 inches in length. This may occasionally be modified by emergency regulation as it was in 1979 when a bonus limit of four pink salmon was added to the existing limit of two salmon over 20 inches. Additional pinks were allowed in response to a large run of pink salmon. Sport regulations are subject to change.

In addition, the area of the Skagit from Gilligan Creek to the mouth of the Cascade is open from July 1 to December 31, with the same limit, except that chinook over 28 inches must be released. This area was also closed to the taking of pink salmon in 1979. This area is open to allow for the additional harvest of coho and jack chinook. The stipulations are primarily to protect mainstem spawning adult chinook and pink in this section. All other freshwater areas within the watershed are closed to fishing for salmon. Other food fish entering the Skagit River include shad, eulochen smelt, and sturgeon, but these occur in such low numbers or so infrequently that the sport harvest is insignificant.

Fisheries resources are impacted as a result of both natural and man-made causes and one major impact on the Skagit results from streamflow fluctuation. All of the rivers and streams are subject to naturally occurring seasonal floods and low flows. Floods or high flows are damaging to spawning areas and reduce egg survival by increasing bedload movement and crushing or displacing pre-emergent eggs or alevins. In addition, siltation deposited in the streambed is a major cause of pre-emergent mortality and in high concentrations can cause mortality to fish. Receding water can also strand juvenile fish. Low water reduces fish production by limiting the available rearing and spawning area and can reduce access to tributaries. The diurnal flow fluctuations resulting from hydroelectric power generating procedures at Ross, Diablo and Gorge create problems related to artificially fluctuating flows. These problems have been compounded by their long-term and daily occurrence. River level fluctuations caused by "power peaking" are detrimental with salmon and steelhead during all stages of their freshwater life. While adult fish can be trapped and die as a result of rapid flow reductions, the recently emerged juvenile fish are most susceptible to river level reduction. These juvenile fish are trapped in isolated pools or on gravel bars, by a sudden drop in the river, and soon die due to exposure, high water temperature, low dissolved oxygen or predation. Artificial flow regimes can create high flows during spawning, expose redds during spawning, incubation and emergency, and generally disrupt natural fish behavior. Losses of fish can be severe. State and Federal agencies are working jointly with Seattle City Light to develop a method to minimize this adverse impact to Skagit fisheries resources.

The City of Seattle began development of the hydroelectric potential of the Skagit River in the early 1900's. The Lighting Department of the City undertook a staged development of three dams: Gorge, Diablo, and Ross, which were begun in 1919, 1927, and 1937, respectively. The presence and operation of these dams has altered the general flow and thermal regimes of the Skagit River downstream of the Skagit Project.

Operational constraints in addition to those specified by Federal license were implemented in 1972 by informal agreement between the Washington Department of Fisheries (WDF) and Seattle City Light (SCL). Minimum flows were established during the period of peak juvenile salmon abundance in an effort to reduce the impact of dam operation on downstream fish survival.

In 1979, relicensing of these existing projects stimulated negotiations to obtain greater resolution of the relationships between regulated discharge and salmon and steelhead production. The City of Seattle, Washington Department of Fisheries and Game, Skagit System Cooperative, U.S. Fish and Wildlife Service, and U.S. National Marine Fisheries Service entered into a two-year interim agreement (FERC Bocket No. EL-78-36) regulating the rate and magnitude of flow fluctuation in the Skagit River. Fisheries studies are required by this agreement to obtain additional data on salmon and steelhead reproduction.

Problems involving boaters and fish range from intentional harassment and poaching to unintentional disturbance of fish on their spawning grounds in the classified area. The smaller the river area, the greater the problem. Fish in the main Skagit are largely protected by the large size of the river. During the time that spring chinook salmon are in the Skagit River, the river is flowing glacial melt providing protection until the fish move into the tributaries to spawn or move off the mouths of streams. Probably the area of most concern in the Skagit W&SR is the Sauk River above Darrington. Spring chinook salmon run in July, August and early September which are also prime recreation months.

The river is frequently very low and clear at this time. Besides being easy targets for poachers, spawning fish are disturbed by boats floating over or near their spawning areas. Repeated disruption of spawning activity leads to less than optimum spawning success, physical injury, and displacement to poorer spawning areas.

In view of these potential problems, it has been (State of Washington) suggested that consideration be given to restricting the activities of jet boats in spawning areas during the spawning season on the Skagit System (includes Skagit W&SR). Boating in the upper Sauk must continue to be controlled as to the number of boats and frequency of trips during the spring chinook spawning season.

The Washington Dept. of Game recognizes positive effects as well: there is a catchable surplus of fish and these boaters enhance the fisheries on the Skagit system. There is a need to allow people access to these catchable fish. On a river the size of the Skagit, boats are essential to the recreational sport fishery.

Logging continues to be one of the activities which has the most significant and damaging impact on fisheries in the Skagit W&SR. Extensive clear-cutting and road building in the area has influenced runoff patterns, and almost always has degraded stream quality with respect to capacity for producing anadromous fish.

Shoreline development frequently results in demands for riprap channeling, and diking the river. Channelization and diking cause the destruction of spawning habitat by straightening and narrowing the river. The removal of gravel from streams for construction purposes can also destroy productive spawning sites. The practice of diking sloughs has also resulted in a loss in both spawning and rearing areas.

Assumptions

1. The demand for fish, both commercial and sport, will continue to rise in the Pacific Northwest.
2. Increased river use will place increased pressure on the fishery. Controlling recreation visits, producing more fish, tighter fishing regulations or requiring adequate flows may be necessary to prevent decline in the fisheries.
3. Sport fishing will continue to be a major attraction of the Skagit W&SR.
4. The quality fishery in the Skagit system is primarily dependent on high water quality, sufficient spawning and rearing habitat, constant water flows, and sufficient runs of anadromous fish.
5. The Washington Department of Fisheries is responsible for the management of the salmon fishery resources of the Skagit River. Its goal is to preserve and enhance natural stocks, protect and enhance habitat, and optimize natural production.
6. The Washington Department of Game has management responsibilities for game fish other than salmon.
7. The United States Forest Service has management responsibilities for fish habitat within the National Forest boundary.

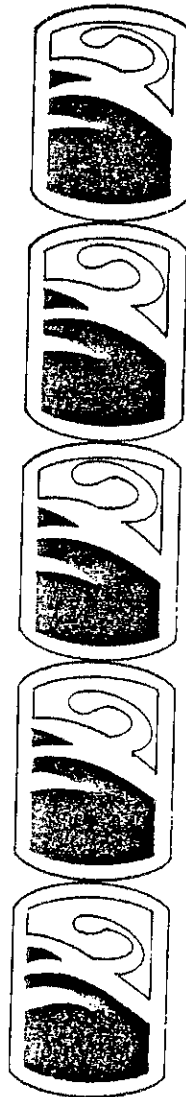
8. The Washington Department of Game and the Washington Department of Fisheries will continue to study streamflows and management practices to determine the effects various flows and management practices have on fish production, and also the measures necessary to minimize adverse impacts.
9. Because sport fishing and commercial fishing exist on the same resource and in the same location, conflicts related to management policy and harvest will continue.
10. Native American involvement in fishery management will take a more active role in the future.

Section III Current Situation and Assumptions

WATER QUALITY:

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Water
Quality

WATER QUALITY:
RECREATION AND SCENIC RIVERS

Current Situation

The intent of the Wild and Scenic Rivers Act is to maintain designated rivers in a free flowing condition and to protect and enhance the water quality in those rivers: In addition, the 1965 State Water Quality Act states, State and Federal water quality standards provide the baseline from which present and future needs for water quality control are determine. Table 15 summarizes water quality standards for fresh waters adopted by the State of Washington under the Water Quality Act of 1965.

TABLE 15
Water quality classifications and criteria for class AA
Extraordinary (fresh water)

	Fecal Coliform	Dissolved Oxygen	Total Dissolved Gas	Temperature	PH	Turbidity
Class AA	50 MPN	9.5 mg/L	110% of sat.	16.0° C	6.5 to 8.5	5 NTU background

General characteristics. Water quality of class AA shall markedly and uniformly exceed the requirements for all or substantially all uses.

1. Fecal Coliform Organisms shall not exceed a geometric mean value of 50 organisms/100 mL, with not more than 10 percent of samples exceeding 100 organisms/100 mL.
2. Dissolved oxygen shall exceed 9.5 mg/L.
3. Total dissolved gas shall not exceed 110 percent of saturation at any point of sample collection.
4. Temperature shall not exceed 16.0° due to human activities. Temperature increases shall not, at any time, exceed $t=23/(T+5)$.

When natural conditions exceed 16.0° C (freshwater), no temperature increase will be allowed which will raise the receiving water temperature by greater than 0.3° C.

For purposes hereof, "t" represents the permissive temperature change across the dilution zone; and "T" represents the highest existing temperature in this water classification outside of any dilution zone.

Provided that temperature increase resulting from nonpoint source activities shall not exceed 2.8° C, and the maximum water temperature shall not exceed 16.3° C (freshwater).

5. PH shall be within the range of 6.5 to 8.5 or with a man-caused variation within a range of less than 0.2 units.
6. Turbidity shall not exceed 5 NTU over background turbidity when the background turbidity is 50 NTU or less, or have more than a 10 percent increase in turbidity when the background is more than 50 NTU.

7. Toxic, radioactive, or deleterious material concentrations shall be less than those which may affect public health, the natural aquatic environment, or the desirability of the water for any use.
8. Aesthetic values shall not be impaired by the presence of materials or their effects, excluding those of natural origin, which offend the senses of sight, smell, touch, or taste.

A number of stations have been monitored. The purpose of sampling has been to determine baseline data as well as effects of man's activities on the streams. This information is needed to comply with State water quality standards and possibly improve the environment of the streams. The U.S. Geological Survey monitors flow at 25 stations. Table 16 lists these stations.

Table 16.

U.S. GEOLOGICAL SURVEY

GAGING STATIONS IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

(Letter after station name designates type of data: (d) discharge (e) elevation, gage height or contents; (c) chemical; (b) biological; (m) microbiological; (t) water temperature; (s) sediment; (p) pesticide.)

SKAGIT RIVER BASIN

Skagit River at international boundary near Hope, British Columbia. . .	(e)
Ross Reservoir near Newhalem.	(e)
Skagit River:	
Thunder Creek near Newhalem	(d)
Stetattle Creek near Newhalem	(d)
Skagit River at Newhalem.	(d)
Newhalem Creek near Newhalem.	(d)
Skagit River above Alma Creek near Marblemount.	(dt)
Skagit River above Bacon Creek near Marblemount	(d)
Skagit River at Marblemount	(dc)
Cascade River:	
South Fork Cascade River at South Cascade Glacier near Marblemount	(d)
Salix Creek at South Cascade Glacier near Marblemount	(d)
Cascade River at Marblemount.	(d)
Sauk River above White Chuck River near Darrington.	(d)
Suitttle River above Big Creek near Darrington.	(d)
Sauk River near Rockport.	(c)
Sauk River near Sauk.	(d)
Reservoirs in Skagit River basin.	(d)
Baker River at Concrete	(dc)
Skagit River near Concrete.	(dc)
Minkler Creek:	
Tank Creek near Lyman	(dt)
Minkler Creek near Lyman.	(dt)
Wiseman Creek:	
Black Creek near Minkler.	(dt)
Wiseman Creek near Lyman.	(dt)
Skagit River near Sedro Wooley.	(dct)
Skagit River near Mount Vernon.	(dcbmts)

Above Burlington, and on all the tributaries, the rivers are rated Class AA, Extraordinary.

Water quality of the Skagit River has been measured on a routine basis since July, 1959, at Mt. Vernon and Marblemount.

Chemical dissolved solids concentrations in the Skagit River at Marblemount have ranged from 23 to 44 milligrams per liter, and values of hardness have ranged from 14 to 30 mg/l. Mineralization of Skagit River water increases only slightly downstream. Near Mount Vernon, the dissolved solids concentration ranged from 22 to 52 mg/l, and hardness ranged from 15 to 32 mg/l.

Phosphate values are very low. Six years of water quality data have not indicated concentrations over 1.10 mg/l. Nitrate values are also low, the maximum recorded value being 0.34 mg/l.

High iron concentrations are common, especially in the vicinity of the Skagit River.

The bacteriological water quality data for the Skagit River show a general trend of decreasing quality downstream from Marblemount. The most probable number of coliform organisms per 100 ml (MPN) ranged from a low of 0 to a high of 230 at Marblemount, but is usually less than 50/100 ml. This low average is typical of streams draining remote mountain areas. At Mount Vernon, the MPN has ranged from a low of 0 to a maximum value of 24,000. The normal range for the MPN for this station is from about 91 to 4,600. Bacteriological water quality of the Sauk and Baker Rivers generally indicates better quality than the Skagit River. The maximum recorded MPN values obtained on the Sauk River and Baker River are 2,400 and 930 coliforms per 100 ml, respectively.

The Skagit River and its major tributaries are relatively fast-moving water courses. Dissolved oxygen (DO) concentrations throughout the length of the Skagit River are near saturation. At Mount Vernon, on the lower Skagit River, DO concentrations have ranged from a low recorded value of 9.3 mg/l to a high of 13.7 mg/l. The recorded low DO concentrations on the Sauk and Baker Rivers were 10.2 and 9.7 mg/l.

Generally, cool stream temperatures occur in the Skagit River. The temperature of the Skagit River at Mount Vernon has reached a maximum recorded value of 64°F (15.2°C) recorded for the Skagit River at Marblemount, 55.4°F (13.0°C) for the Sauk River near Darrington, 62°F (16.7° C) for the Baker River at Concrete.

Fluvial sediment in the upper Skagit Basin is of glacial origin. Non-glacial streams normally transport little sediment except during periods of high runoff. Analysis of data obtained indicates that the Skagit River can be expected to transport a sediment load of ten million tons during a year of normal streamflow. Observed concentrations of suspended sediments in the Skagit River near Mount Vernon ranged from 19 to 654 mg/l during 1965 to 1966.

Most parameters do not appear to be significantly different between stations.

The exceptions are Iron (Fe), Turbidity (maximums) and Coliform counts, all of which increase at the downstream (Mount Vernon) station when compared with the upstream (Marblemount) station. The most significant increase is the coliform counts which are probably reflecting the intervening agricultural and urban lands.

The main tributaries of the Skagit, the Sauk and Baker Rivers, do not vary greatly in quality from the Skagit itself. The Baker River does show a slight increase in sulfate concentration. This may be reflecting the escape of Sulfur Dioxide gases into the waters coming off volcanic Mount Baker.

The Skagit appears to have the characteristic that sharp increases in flow markedly increase the total suspended portion of constituents carried as opposed to the dissolved portion. Such a flow increase occurred on January 18, 1977 at the Near Mt. Vernon station. The flow was 36,200 cfs., as compared to 14,600 on the 17th. The total metals concentration for Zinc, Mercury, Manganese, Iron Phosphorus, Copper, Chromium and Arsenic increase significantly while their dissolved components (except for Zinc) were not increased. Also increased were total organic carbon, Suspended sediment, turbidity, nitrogen, coliform, fecal coliform, fecal strep and non-carbonate hardness.

Assumptions

1. Increased residential and commercial development along the Skagit W&SR will have an adverse impact on the water quality.
2. Development alongside streams will continue outside the designated boundary. This development will affect the water quality of these streams and in the Skagit W&SR.
3. Increasing population densities and intensified farm operations along the drainage has resulted in decreasing water quality closer to the lower terminis of the Skagit River.
4. Maintaining a high quality fisheries and wildlife environment will require some prohibition of developments that would adversely affect the water quality. Water quality will need to be monitored.

Section III Current Situation and Assumptions

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Air
Quality

AIR QUALITY: RECREATION
AND SCENIC RIVERS

Current Situation

The responsibility for management of air quality in the State of Washington rests with the State Department of Ecology (DOE). Through State Implementation Plan (SIP), DOE delegates monitoring and enforcement authority for certain pollutants to local pollution control authorities. In the Skagit drainage, the Northwest Pollution Control Authority has been delegated these responsibilities for most of the state air quality standards. The notable exception is that the State Department of Natural Resources works directly with DOE to coordinate all forest land burning including that on National Forest lands.

In addition, the Federal Clean Air Act requires that Federal Land Managers must review, and may recommend disapproval of, new major stationary emitting sources where damage to air quality related values, including visibility in Class I areas is anticipated. Locally, this could require both U.S. Forest Service and National Park Service review of any such project proposal since both the North Cascades National Park (NPS) and the Glacier Peak Wilderness Area (USFS) are mandatory Class I areas. These recommendations are forwarded through DOE to the Federal Environmental Protection Agency (where final permit approval authority for major pollutant-generating facilities rests).

Presently, the only monitoring data available is from the Tolt River Station and it indicates that the air quality of the area is well within the established state standards for the various pollutant elements. The annual geometric mean for suspended particulates at this station is 11 micrograms per cubic meter. The trend at this location has been level over the past 3 to 5 years. There is no data for the eastern portion of the drainage but data from comparable sites in mountainous areas of western Washington indicate that suspended particulate levels in the 12-15 micrograms per cubic meter could be expected in the upper reaches of the drainages.

At the present time, forest land burning within the Skagit W&SR corridor consists of piled debris from land clearing and road construction and an occasional broadcast burn for site preparation or hazard reduction following timber harvest activities. Most of this activity is concentrated in the eastern 1/3 of the area.

In addition, broadcast burning regularly occurs on much of the forested areas outside the W&SR corridor which may affect what is viewed from the river proper, but seldom persists for more than 24 hours from any one burn. All burning is guided by the Washington State Smoke Management Plan which severely restricts the amount of burning that can be done on days when there is an easterly component to the wind with the objective of minimizing the amount of particulate dispersion and visibility impairment to the more populated areas around Puget Sound.

The natural vegetation in the area is generally of low flammability. This is due to the high water table in most of the area and its proximity to the river course which creates a generally moist microclimate year long. Rarely does the living vegetation dry out to the extent that it would permit a fire to spread freely. The dead, woody material which either results from natural mortality or from cultural or harvest activities in the coniferous stands, is more flammable. There are from 10-15 days per year when a fire would spread in these fuels with such intensity that direct attack with hand tools would be of marginal effectiveness. It is on these days that regulation of industrial activities, prescribed burning activities, and other public uses may be expected to be curtailed. The remainder of the year, fires would either smolder or spread at a low intensity.

An objective of the Management Plan will be to maintain the air quality related values and visibilities that presently exist along the W&SR corridor. Overall air quality management direction for the Mt. Baker-Snoqualmie National Forest, including the W&SR corridor, will be addressed in the Forest Land Resource Management Plan scheduled for public review in 1982.

Assumptions

1. Air quality in the upper Skagit drainage should remain about the same level. This is because of the large expanse of public land surrounding the Scenic Rivers on which very little polluting activity occurs.
2. Some minor local air quality reduction does occur and will continue within the lower segments of the Skagit W&SR. This is from local industrial activity, located primarily in the Sedro Woolley, Burlington and Mt. Vernon communities.
3. Land use conversion from agriculture to residential and light industry will continue within the Skagit drainage, leading to a gradual decrease in air quality.

Section III Current Situation and Assumptions

III

TRANSPORTATION UTILITY:

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Transportation
Utility

TRANSPORTATION - UTILITY:
RECREATION RIVER

Current Situation

The Cascade Mountains (running north-south at the eastern extremity of the Skagit W&SR) constitute a massive natural barrier to east-west traffic. Consequently, traffic patterns in the coastal strip of Washington state are most intensively developed for north-south travel, paralleling the mountains. The transportation system serving the immediate Skagit W&SR area is presented in figure 5.

The Skagit River basin is served by several major forms of transportation. One railroad (the Burlington Northern Inc.), provides access to the area.

Interstate 5 and State Route 9 are the major north-south highways serving the region. Both routes pass through the Seattle-Bellingham urbanized areas and border the basin on the west. The two major east-west highways are U. S. 2 to the south and the North Cross-State Highway (State Route 20) to the north.

State Highway 20 (called the North Cascades Highway) traverses from Anacortes on the west through the Skagit River Valley to the Cascades and extends into eastern Washington, is presently closed during winter months at Newhalem. An interlocking network of State, county, and Forest Service roads provides vehicular access within the river basin.

State Route 530, enters Darrington from the west and provides a link to the North Cascades Highway from Arlington through Rockport. SR 530 is the terminus of Forest Highway Route 7 in Darrington and forms the northern portion of the Mountain Loop Highway from that point to the west. Entry from the south is by way of State Route 92 through Granite Falls to Forest Highway Route 7.

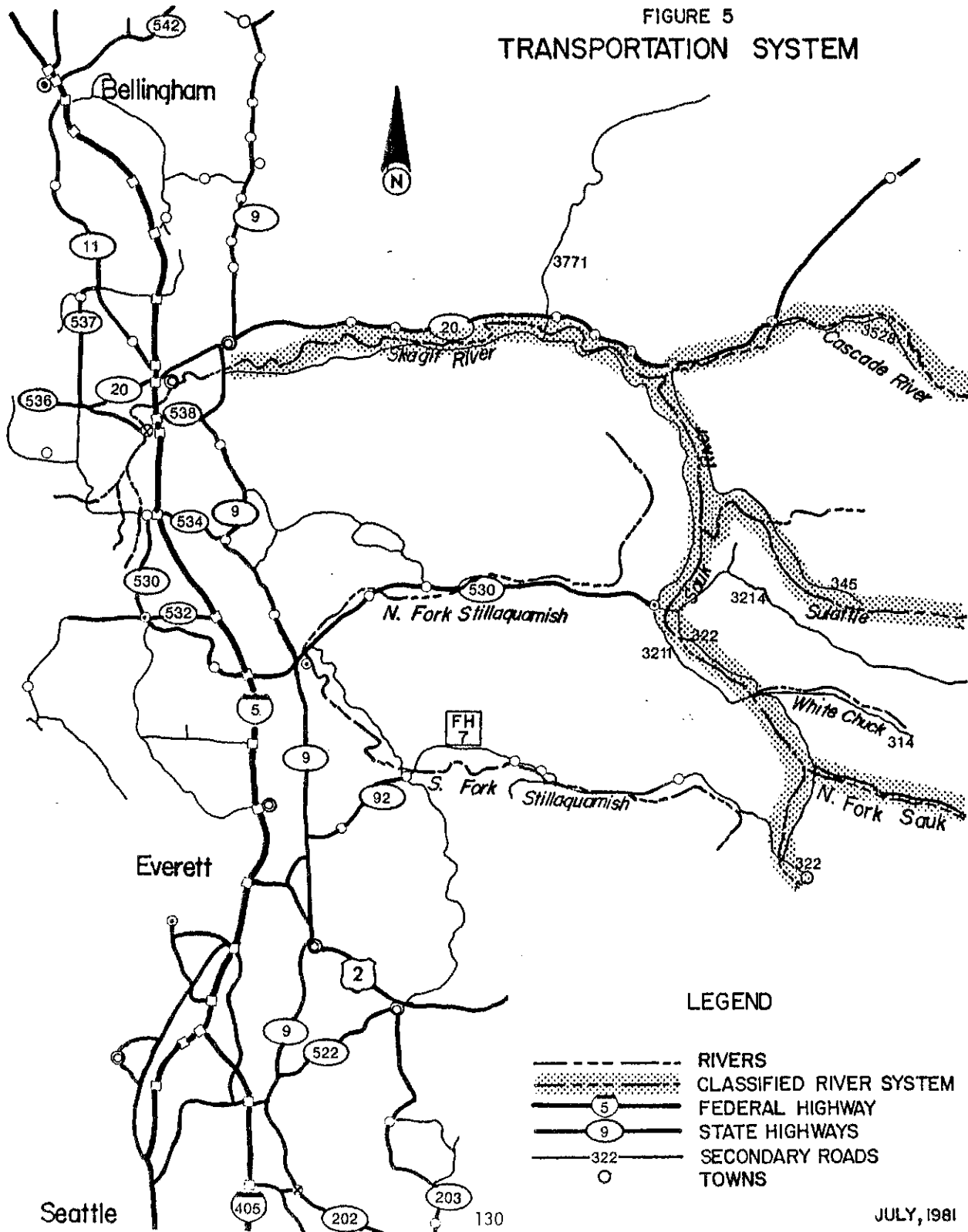
There are no major scheduled commercial airlines serving the area, but local fields are operated for charter and regional airline service.

The Skagit is crossed by two gas pipelines, two railroad bridges, and six highways. Within the Recreation River there are 3 bridges and two principal transmission lines. One line crosses approximately 1.5 miles upstream from the lower termini of the Skagit W&SR corridor. The line is considered to be compatible with the Recreation River classification. The second line crosses the Skagit downstream from Marblemount (see Figure 6).

Many people take advantage of driving the North Cascade Highway to view the Cascades. This highway also offers occasional glimpses and views of the Skagit river as it meanders through the valley. Even though the river may only be occasionally visible from the highway, the landscape within the river corridor is readily visible. Many travelers derive satisfaction from viewing this area. This North Cascades highway is also a popular bicycling route.

To date, there are no additional major roads planned in the corridor. Secondary road construction does occur (i.e., for the purpose of logging access).

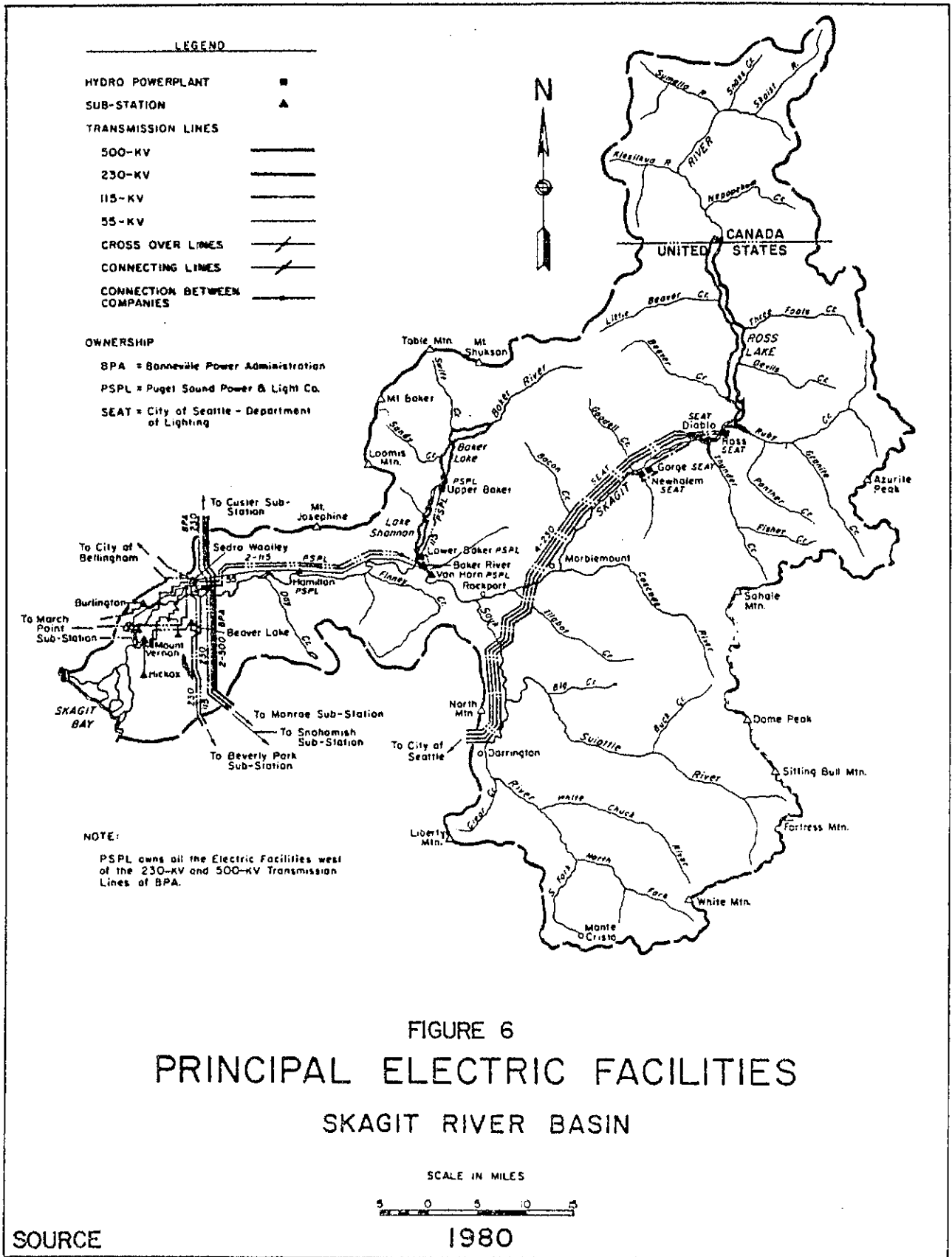
FIGURE 5
TRANSPORTATION SYSTEM



LEGEND

- RIVERS
- CLASSIFIED RIVER SYSTEM
- (5)— FEDERAL HIGHWAY
- (9)— STATE HIGHWAYS
- 322— SECONDARY ROADS
- TOWNS

JULY, 1981



F E R C - Water Resources Appraisal For Hydroelectric Licensing

Assumptions

1. Driving for pleasure across the North Cascade Highway has potential for considerable increase in use (barring a severe fuel shortage).
2. As use of the road system increases, the opportunity for recreational experiences such as solitude and uncrowded, unregimented atmosphere will diminish along the road. The increase in road use will not have a major impact to recreation opportunities along the rivers themselves.
3. The demand for additional railroad right-of-way is unlikely.
4. The need for additional electric transmission line capacity is almost certain.
5. The need for road and bridge reconstruction and/or relocation projects will be likely. Most of these roads will be on private property.
6. County roads paralleling the Skagit provide opportunities for bicycle touring.

TRANSPORTATION - UTILITY
SCENIC RIVERS

Several paved roads provide access to the eastern portion of the Scenic Rivers area. Highway 92 leaves Highway 9 at Lake Stevens and connects via a county road from Granite Falls with Forest Road 322 on the South Fork of the Sauk at Barlow Pass, near Monte Cristo, (just outside the study area). Highway 530 exits from I-5 near Arlington and follows the North Fork of the Stillaguamish River to Darrington, which lies within the study area. The South Skagit Highway, a county road, follows the Skagit River on its south bank from Clear Lake to a point across the river from Van Horn as a paved road, and then continues to a junction with the Rockport-Darrington County road as an all-weather gravel surface. The Rockport-Darrington County road follows the east bank of the Sauk River from Rockport to the mouth of the Suiattle, where the road crosses the river and follows the west bank to Darrington. Highway 20 parallels the Skagit on the north bank, from Mount Vernon to the old road's end (at Thunder Creek, near Ross Dam), and then continues across the Cascades to Winthrop. (See Figure 7.)

Upstream from Darrington, Forest Service Road 322 follows the east bank of the Sauk to the South Fork, and then up the east bank of the South Fork to Barlow Pass. The west bank of the Sauk has a road from Darrington to the White Chuck River; this road, number 3211, is scheduled for reconstruction to two-lane, paved status. The portion of Road 322 from the Whitechuck River to Barlow Pass may be upgraded in the future. Beyond the White Chuck, Road 3113, a logging road, follows the west bank of the Sauk for two miles before turning up-country.

The transportation system along the Suiattle River is fairly well-developed. There are roads running along both sides of the Suiattle River drainage for almost the entire classified segment. The river is visible from short stretches of road throughout the drainage.

The main access road up the Suiattle drainage follows along the west side of the drainage. The first 9.8 miles of this road is a two-lane, paved road. The remaining 14.3 miles is a one-lane gravel road with intervisible turnouts. Except for some minor reconstruction, these roads are felt to be adequate for existing and immediate future traffic. The road system within the Suiattle drainage provides access for wilderness users, general recreation river boating, religious activity, hunting, fishing and timber harvesting.

The Cascade River is paralleled on the north by Road 3528 from its mouth to Mineral Park. Road 3404 then continues up the South Fork to the trailhead near the junction of the South Fork and Middle Fork. The south bank of the Cascade has a network of private logging roads which extends nearly to the National Forest boundary.

The Sauk is crossed by eight bridges and the Suiattle by one. There is also one principal electric transmission line crossing the Sauk River between Darrington and Rockport. The Cascade is crossed by four bridges.

A road construction proposal, which will have a significant impact on the scenic rivers, is the potential reconstruction of the Mountain Loop Highway.

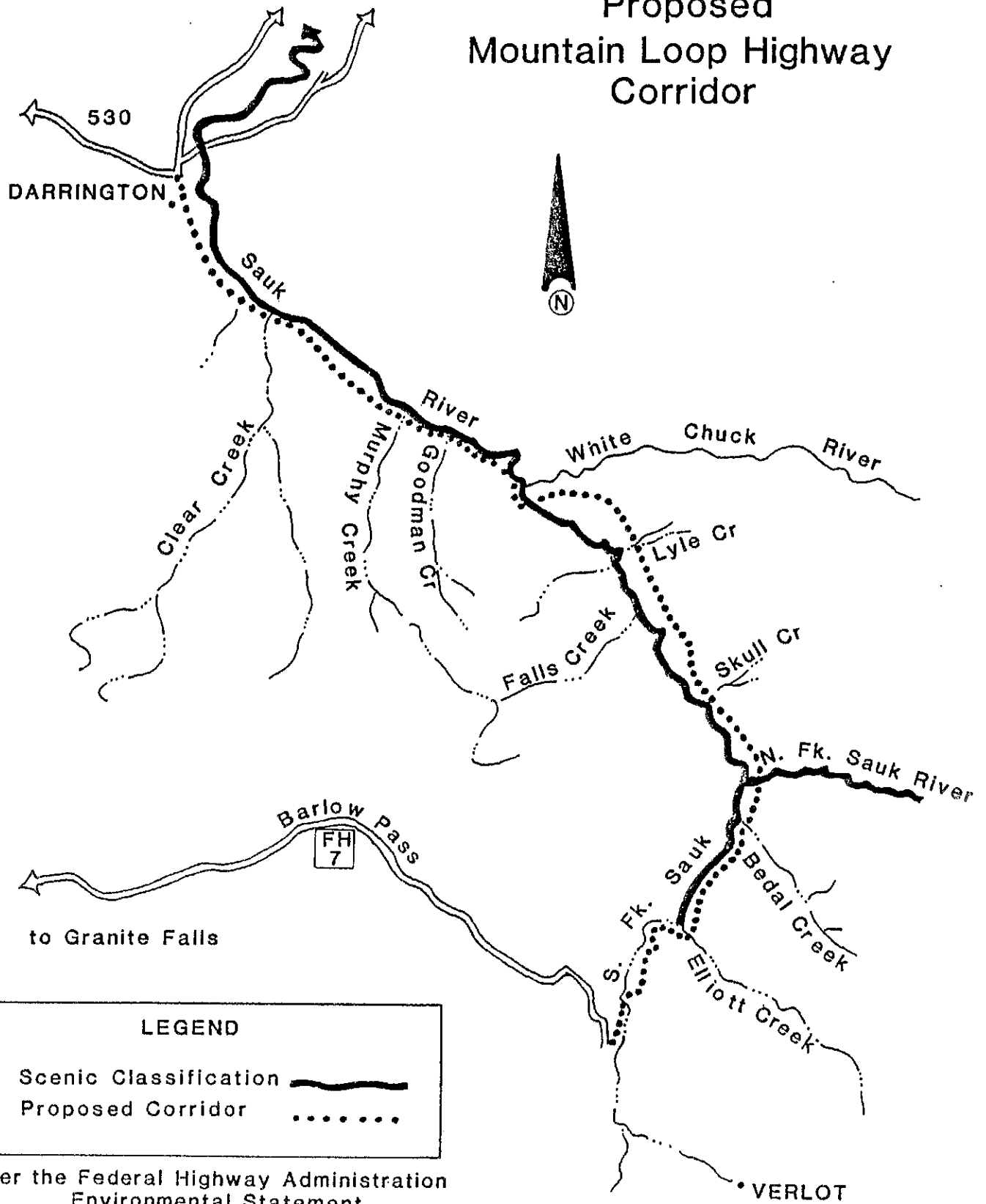
This scenic route is designed as a day-outing for motorists from the Seattle metropolitan area. Leaving I-5 at Marysville, travelers proceed east on Highway 92 up the South Fork of the Stillaguamish River to Granite Falls and then via County road to Forest Road 322 at Barlow Pass near Monte Cristo. Here the present single land route 322 would be upgraded to paved two-lane down the South Fork of the Sauk to the White Chuck Bridge, cross over and go on to Darrington over reconstructed Road 3211 (paved two-lane) and return to I-5 on Highway 530, which follows the North Fork of the Stillaguamish. The scheduled completion date of this is not firm. (See Figure 7)

The Federal Highway Administration's (FHWA) proposal to upgrade FH Route 7, Mountain Loop Highway, from Barlow Pass to Darrington was documented in a Final Environmental Statement and is considered consistent with the Scenic River classification for the Sauk River. The corridor selected by FHWA from Barlow Pass (Mile 20.2) is identical to the USFS's preferred route as indicated in its May 28, 1974, letter providing review comments on the FH Route 7 draft Environmental Statement. This corridor is generally restricted to the existing Mountain Loop Highway. Slight deviations from the existing road, as preferred by the USFS, are at Mile 6.8 - Mile 7.6 (the "A" route was preferred as it avoids an area which promises severe slide problems while not unduly intruding on the Sauk River), and at Mile 17.0 - Mile 18.4 (the "A" route was preferred by the USFS to introduce some curvature in the highway alignment for visual attractiveness). The segment of road between Darrington and the White Chuck bridge will be completed by 1983 or 1984. The portion from White Chuck to Barlow Pass may be reconstructed to a single lane standard by the Forest Service in the late 80's.


In 1980, a revision of the criteria used to designate Forest Highways was finalized. This revision in criteria resulted in FH-7 being removed from the Forest Highway status. During late December of 1980, several segments of FH 7 were severely damaged due to floodwaters which may have approached the intensity of a 100-year flood. Cost of restoration to the area may approach one million dollars.


FIGURE 7

Proposed Mountain Loop Highway Corridor



LEGEND

Scenic Classification 

Proposed Corridor 

per the Federal Highway Administration
Environmental Statement

Assumptions

1. Until the reconstruction of FH 7 (Mt. Loop Highway) is completed, "through" traffic will be minor and consist mainly of weekend campers, recreationists enroute to or from the Glacier Peak Wilderness, and those using the highway as a scenic route.
2. The reconstruction of FH 7 may not be completed by 1990. However, the segment between Darrington and the White Chuck bridge may be completed by 1985.
3. The eventual completion of the FH 7 will result in a substantial increase in traffic. From about 70,000 vehicles per year to about 160,000 vehicles per year.
4. The existing highway between Barlow Pass and White Chuck is a narrow, twisting, dusty road. Currently, it is known that minor collisions and one-car accidents occur due to the narrow roadway, inadequate sight distance, and traffic congestion. It is assumed that as recreation traffic increases over the next 10 years, the accident rate will increase.
5. When FH 7 is completed, the demand for developed sites along the Sauk River will greatly increase. Until provided, the public will use all available dispersed sites. User developed sites will be commonplace.
6. Use of rip-rap and some minor channel encroachment will be needed to reconstruct FH 7 to a two-lane standard.
7. There may be a demand to include a lane for bike use along the FH 7 route.
8. The need for additional bridge crossings for logging and private land access will continue to surface.

Section III Current Situation and Assumptions

III

VEGETATION MANAGEMENT:

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**Vegetation
Management**

1

VEGETATION MANAGEMENT
RECREATION AND SCENIC RIVERS

Current Situation

Most of the Skagit W&SR belongs to the Humid Transition Timbered or Coast Forest Biotic Zone of the Puget Lowland area. The zone has a wet, mild, maritime climate with much of the climatic variation associated with latitude, elevation, and location in relation to mountains.

The upriver portions of the Cascade, Suiattle and Sauk rivers flow through or adjacent to a Canadian life zone. Most of this zone occurs on steep slopes and experiences heavy precipitation; in winter, in the form of snow.

Climax species in the Puget Lowland are Western hemlock (Tsuga heterophylla) and Western redcedar (Thuja plicata). The former is dominant at higher elevations with heavy precipitation and well-drained mineral soil; the latter occurs along floodplains and in somewhat swampy situations. The subclimax species is the Douglas-fir (Pseudotsuga menziesii); it also appears on disturbed locations. Areas dominated by Western hemlock are characterized by an understory of vine maple (Acer circinatum), Western yew (Taxus brevifolia), and Pacific Dogwood (Cornus nuttallii). Beneath the dominant trees grow a number of forest floor plants: swordfern (Polystichum munitum), salal (Gaultheria shallon), Oregon grape (Berberis nervosa), queencup beadlelily (Clintonia uniflora), bunchberry dogwood (Cornus canadensis), oakfern (Gymnocarpium dryopteris), red flowering currant (Ribes sanguineum), and salmonberry (Rubus spectabilis).

In addition, at the higher elevations the abundant undergrowth produces rich humus soils derived from decaying vegetation. Several species of saprophytic plants, lacking chlorophyll, will be found living on the decaying vegetation. Among these, are various species of fungi, orchids and heather.

In areas dominated by Western redcedar, the understory is made up of swordfern, Oregon oxalis (Oxalis oregona), devilsclub (Oplopanax horridum), ladyfern (Athyrium filix-femina) and skunk cabbage (Lysichitum americanum).

Dry locations in the floodplain may be dominated by Douglas fir and contain an understory of oceanspray (Holodiscus discolor) and salal. Along major waterways, red alder (Alnus rubra), bigleaf maple (Acer macrophyllum), golden chinkapin (Castanopsis chrysophylla), black cottonwood (Populus trichocarpa); and Oregon ash (Fraxinus latifolia) are often found. Red alder is also associated with recently disturbed locations.

In the upland forests, the understory contains vine maple (Acer circinatum), salmonberry, huckleberry, devil's club (Oplopanax horridum), hardhack (Spiaea spp.), willow, thimbleberry (Rubus parviflorus), salal, swordfern, blackberries, crabapple, and bear berry. Vine maple, salal, devil's club, and fern are the most commonly mentioned of these. Maples, alders, pines (probably either Pinus contorta or Pinus monticola), juniper, yew (Taxus brevifolia), and silver fir (Abies amabilis) are the less common trees.

Threatened and Endangered Plants

The Washington Natural Heritage Program completed a review of their files for information on significant natural features in the study area on May 2, 1980. The results of their review are as follows.

Three special plant species listed on the Revised Working List of Rare, Endangered and Threatened Vascular plants in Washington are reported from the study area. Two species from the Review List are also reported. Field studies are needed to confirm the reported localities of special plants in the study area. None of the three special plant species have been recently confirmed to occur in the Skagit W&SR.

Timber

Most of the area within the Skagit W&SR probably is of good timber site potential. An average estimate is site III (130 to 150 - 100 yr. basis). In an unmanaged stand, this will produce a Douglas-fir with a diameter breast height (dbh) of 13 to 15 inches in 80 yrs. In a managed stand (full stocking control), these sizes may be reached considerably earlier. Western hemlock can be expected to obtain a dbh of 21 to 24 inches on similar sites in 80 years--when managed. Without stocking control, the same stand over the same time would produce trees with a dbh of 16 to 18 inches.

One main consideration with coniferous forest regeneration programs within the bottoms or flood plains is that of vegetative competition. Other species such as willow, big leaf maple and salmonberry are likely to cause a stocking problem if not considered in a regeneration prescription. Stand examinations should be planned frequently, at least once a year, for the first couple of years to observe this competition. Activities must be prescribed for in the prescription to cover the eventuality of unacceptable competition.

Douglas-fir

Douglas-fir is probably the species about which most is known. It is a species which has high productivity on most sites within its range. The climatic factors west of the Cascade Mountains in Washington are generally ideal for its growth. It has high productivity rates, and the wood produced is desirable in the wood using industry.

Because of its shade intolerance, the species most often is managed under either a clear-cut or shelter wood system of harvest. Because of its poor performance on moist to excessively moist sites, such as those found in the Skagit W&SR, its use may be limited at some sites.

If considering the Individual Tree Selection (ITS) systems, sufficient openings must be provided to permit sunlight. This management regime may be less productive than a clear cut or a shelterwood regime.

Western Redcedar

Western redcedar is found throughout most of the Mt. Baker-Snoqualmie N.F. up to elevations of about 4,000 feet above sea level. It rarely occurs as pure stands. It is found associated with Douglas-fir, Western hemlock, Sitka Spruce, Pacific silver fir, noble fir and red alder. It is considered a slow grower on drier sites; however, it is capable of rapid growth on moist sites. It can also survive moist sites where other species may not. It is very resistant to tree-killing diseases, and has the ability to recover from severe damage by many agents. Western redcedar is capable of living several hundred years.

Since western redcedar is shade tolerant, and a reasonable and frequent seed producer, it has desirable characteristics for management using the shelterwood harvest system.

Because of this characteristic, the species may be managed in an all-age regime. To do so, however, may eliminate other desirable species from the stand composition. It should also be noted that exposing cedar to too much sunlight may retard growth as it is very sensitive to light and does better with partial shade.

Western Hemlock

Within the Skagit W&SR, western hemlock is a frequently found species. While commonly found in pure stands, it may also grow in association with Pacific silver fir, Douglas-fir, western redcedar and red alder. Hemlock's excellent wood volume production has been known for sometime by managers; however, it has not been until recently that interest has been shown in intensive timber management.

Because of the shallow root system of the species and the fact that it is found in more moist sites, hemlock is prone to wind throw. This vulnerability makes clear cutting or individual tree selection the preferred harvest methods in hemlock stands.

Red Alder

Little research has been directed toward examination of growth potential of red alder until recent years. Much of existing information comes from older, existing stands rather than research designed specifically for red alder. The consensus is that red alder may be a desirable species to consider for intensive management.

The species is considered to be short lived (50-90 years), and has the capacity to establish itself in dense stands. If such stands are not managed for stocking control, the seedlings will compete against one another causing early mortality. Such stand conditions produce trees of small diameter over a rotation, but can produce great amounts of biomass.

The species may be managed for various rotation periods. Without stocking control and rotation periods of 10 to 15 years, a stand will produce an economic return in terms of useful chippable wood. The species may also (through cultural practices of stem control and a 34 year rotation) be managed for saw-log and peeler production.

Variations to these objectives may be made which would increase the rotation age, thus increasing the average tree size, reduce stems per acre and also reduce mean annual increment.

Commercial Forest Base

The commercial forest base has decreased over the past several decades. Establishment of the North Cascades National Park and associated National Recreation Area withdrew substantial portions of the commercial forest land base.

In addition, the allocation of some lands and investigations regarding potential allocation of other lands in the National Forests for wilderness designation have reduced the commercial forest land base. Another important way the forest base is being reduced is through conversion of forest land to non-forest uses.

The generalized forest ownership pattern within the study region consists of farms and small, private holdings in the lowland areas, Department of Natural Resources (DNR) and forest industry lands just to the east in the middle elevations, and National Forest lands in the higher elevations. Due to this elevation pattern and related characteristics, Mt. Baker-Snoqualmie National Forest lands generally represent the least productive of the major ownership blocks. However, the National Forest lands contain a disproportionate share of all standing sawtimber in the region, due to the volume of old-growth timber standing on these lands, and few conversions to non-forest uses.

Table 17

Current and Projected Commercial Forest Area
In the Skagit-Samish Basins 1968-2020

Period	Ownership (In Thousand Acres)						
	Private			Public			
	Large	Medium	Small	NF	Other Federal	Other	Total
1965	101.6	9.1	187.3	386.5	63.1	87.1	834.7
1980	106.9	9.1	172.8	322.1	61.3	85.6	757.8
2000	117.9	9.0	145.8	318.5	60.4	83.8	735.4
2020	121.8	8.8	122.9	314.1	59.6	81.8	709.0

The harvesting and processing of timber is a very important economic activity in the study area. Under present law, timber from Federal land cannot be exported. This contrasts with timber from state and private land which can be (and frequently is), exported. The fact that over one-third of the state's logs are exported and none of these come from the National Forest means that the National Forest's contribution to non-export sectors is proportionately more important.

Harvest of wood for firewood use constitutes a special and very rapidly growing use of forests in the Skagit Basin. Personnel on some National Forest ranger districts estimated that the number of firewood permits issued had doubled every year for each of the past three or four years. Although the number of firewood permits issued has increased rapidly, it is very doubtful that the National Forest is the single largest source of firewood supply for the study area. The alternative supplies represented by other forest ownerships are located closer to the bulk of the demand. This is particularly true for the farms and miscellaneous private ownerships, which tend to be located within the lowland and also adjacent to the major roads in the valleys. These sites also have a higher composition of hardwoods, which are most valued for firewood use.

Timber harvest activity on privately owned lands within the river area boundary is controlled by laws which require the reforestation of all cutover lands, and by the recently enacted State Shorelines Management Act, which initiated a permit system for timber harvest along the shorelines of principal rivers in the state. Timber management activities on National Forest lands along the W&SR corridor have been curtailed in recent years due to management for water quality and scenic values.

The Shoreline Management Act of 1971, requires and defines a planning program and a regulatory permit system. This system is administered at the local level under State guidance with respect to timber situated within two hundred feet abutting landward of the ordinary high water mark. The State shall allow only selective commercial timber cutting within the two hundred foot strip. No more than thirty percent of the merchantable trees may be harvested in any ten-year period of time. Other timber harvesting methods such as clear cutting; may be permitted when selective logging would be ecologically detrimental.

The relationship of the shorelines classification to the Skagit Wild and Scenic River Environments can be found in Volume I page 37 - Visual Resource and the Skagit Wild and Scenic River Study Report, Appendix C; Visual Resource.

VEGETATION MANAGEMENT: RECREATION RIVER

Current Situation

The area lying within the Skagit W&SR occupies floodplains and lower elevation ground. Because of this, most of the area is (and has been) readily available by trails and access roads. As a result, most of these lands have had the old growth timber stands removed and, in some places, second and third harvest cuts have been made.

This has resulted in many young, immature stands of mixed conifer and hardwood, pure hardwood, and pure conifer stands. Hardwoods dominate a good share of the area.

The Skagit Segment lies entirely outside the National Forest boundary. There is approximately 1,067 acres of conifer stands with an estimated 115MMBF (million board feet) net volume; 1,422 acres of mixed hardwood/conifer stands with an estimated 55MMBF net volume; and 4,227 acres of hardwoods stands with an estimated 665MMBF net volume.

Assumptions

1. Timber within the Skagit Wild and Scenic River System is available for harvest.
2. Timber harvest can only occur if all the resource values are considered.
3. Timber harvest is restricted along rivers and streams by state floodplain, wetland and shoreline management regulations.
4. Timbered lands in the private sectors are not all used for timber harvest.
5. Timber harvest in the private sector will go up or down depending on market conditions.
6. Timbered lands along the shoreline are important for bank stabilization.
7. A large percentage of the timbered acreage is important eagle habitat.
8. Future timber harvesting from private lands may conflict with eagle management goals.
9. Timber stand diversity will continue to be important from a visual resource and wildlife management standpoint.

VEGETATION MANAGEMENT:
SCENIC RIVERS

Current Situation

The Scenic Rivers portion of the Skagit W&SR has had a varied history of human activity. Portions of the area were railroad logged in the 1930's and 1940's, some of these areas regenerated to conifers, but most regenerated to hardwoods or mixed conifer and hardwoods; other portions were never logged. The younger regeneration is just now coming to merchantable size; the old growth stands have been repeatedly salvage-logged over the years to capture mortality. The effect of repeated salvage logging has been to reduce the stocking of commercial species and permit widespread undergrowth of brush species. Approximately half of the area which was formerly old growth is in this brushy condition and would require special regeneration prescriptions to recapture useful wood production. The logged areas which regenerated to hardwoods are in need of conversion to conifers.

Cascade River
Outside National Forest Boundary

The Cascade River flows for approximately six miles below the National Forest boundary before it joins the Skagit River at the town of Marblemount. The W&SR management boundary follows the river fairly closely along this six mile stretch. Even with the closeness of the boundary, there are approximately 310 acres of conifer stands with an estimated 7,432 MBF of timber, 53 acres of mixed hardwood and conifer stands with an estimated value of 83 MBF, and 74 acres of pure hardwood stands with an estimated volume of 74 MBF.

The availability of this timber for commercial harvest is extremely uncertain. Property ownership patterns along the entire six mile stretch of river are dominated by small 10-20 acres home sites and recreation subdivisions. There is a high probability a great majority of the timber may never be harvested.

Cascade River
Within National Forest Boundary

Within designated W&SR boundaries are approximately 3,401 acres of productive forest land. These lands are considered suitable for timber harvest. The 3,401 acres are further broken down into the following components:

- 450 acres of seedlings and saplings.
- 500 acres of hardwoods with no volume estimate at this time. These stands could either be converted to conifer types or maintained in a hardwood eco-type (depending on site conditions and management direction). In the future, some timber volume should become available from the stands.
- 2,451 acres of pole and saw log stands with an estimated 98MMBF of timber available for harvest.

Sauk River
Outside National Forest Boundary

There are approximately 1,114 acres of conifer with 36,275 MBF net volume, 320 acres of mixed conifer/hardwood with 5,004 MBF net volume, and 2,379 acres pure hardwood with 3,742 MBF net volume.

Sauk River
Within National Forest Boundary

There are approximately 8,312 acres of productive forest land suitable for timber harvest. These lands contain 244MMBF net volume.

Suiattle River System
Outside Forest Boundary

There are approximately 1,562 acres of conifer stands with 23,833 MBF net volume, 1,812 acres of mixed hardwood/conifer with 21,996 MBF net volume and 211 acres hardwood with 3,165 MBF.

Suiattle River
Within National Forest Boundary

There are approximately 4,104 acres of productive forest land suitable for timber harvest within the W&SR boundaries. These lands contain 173MMBF net volume.

Assumptions

1. Timber within the Skagit Wild and Scenic River System is available for harvest.
2. Timber harvest can only occur if all the resource values are considered.
3. Timber harvest is restricted along rivers and streams by floodplain, wetland and shoreline management regulations.
4. Timbered lands in the private sectors are not all used for timber harvest.
5. Timber harvest in the private sector will go up or down depending on market conditions.
6. The use of single tree selection could result in a type conversion from conifer to hardwood and brush.

7. The timber and vegetation provide important elements to the visual character of the aesthetic and visual values for which the rivers were designated.
8. Timbered lands along the shoreline are important for bank stabilization.
9. A large percentage of the timbered acreage is important eagle habitat.
10. Future timber harvesting from private lands may conflict with eagle management goals.
11. Timber stand diversity will continue to be important from a visual resource and wildlife management standpoint.

Section III Current Situation and Assumptions

INSECTS AND DISEASES:

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III



Insects
and
Diseases

INSECTS AND DISEASES:
RECREATION AND SCENIC RIVERS

Current Situation

The entire W&SR is currently, essentially, free of any insect or disease problems as indicated by the Regional Coop insect flights. These flights have been flown for the past 10-15 years.

There was a major outbreak of Douglas-fir Beetle (Dendroctonus pseudotsugae) in 1974 which carried through to 1975. At this time, most of the damaged trees have been logged on the Sauk and Suiattle rivers. The area south of Teepee Fall and running south and east along the Suiattle to about Green Mt. Pasture was most affected.

In 1977, a small insect outbreak was detected at Sonny Boy Creek. The insect involved was the fir engraver. Damage amounted to an estimated five trees and is considered very minor. No evidence existed prior to '77 nor after 1977, of this insect.

In general, the W&SR area has had previous minor buildups of Douglas-fir Beetle, fir engraver insects. Some bear damage occurs.

Laminated root rot (Phellia Weirii) is found within stands of Douglas-fir. This species is very susceptible to this root rot. Once found, there is no known practical way of eradicating it from the stand. In specific cases, it may be treated by exposing all roots of the affected tree to oxygen. From a commercial standpoint, this is impractical. The other alternative is to reforest with tree species immune to the rot. Such species as Western red cedar, red alder, and other hardwoods may be used.

Western hemlock is also affected by laminated root rot. Where this is found in the stand, hemlock should not be planted in the affected area including a 100-foot bufferzone outside the obvious affected area.

One other major disease is of concern in western hemlock management, dwarf mistletoe, (Arceuthobium tsugense). Dwarf mistletoe is parasitic on western hemlock and other conifers. It is found extensively within stands of hemlock west of the Cascade Mountains and causes significant volume loss within conifer species. To date, little is known of the exact impact to trees. It is known that dwarf mistletoe causes mortality and/or growth loss. More research is underway. It is now felt that short rotations of hemlock (60 - 80 years) on good sites will not be significantly effected from a growth reduction standpoint. On poorer sites, this is not expected to be the case. Most sites where "old growth" western hemlock existed can be expected to have some mistletoe present. Because of this, broadcast burning is preferred as a site preparation following harvest and before restocking to rid the new stand of this parasite.

Assumptions

1. Regional Coop insect flights will continue ensuring early detection of any outbreaks.
2. Expect future outbreaks of Douglas-fir Beetle and fir engraver at the intensity reported in the situation report.
3. Mortality from insect and disease infestations will continue in the future.
4. As the large acres of young stands approach maturity, they will become more susceptible to epidemic outbreaks of insects and disease.
5. Salvage of insect and diseased trees offers an opportunity for timber yields.
6. Some wildlife populations will benefit from the creation of snags through insect and disease attack.

Section III Current Situation and Assumptions

FIRE MANAGEMENT:

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Fire
Management

FIRE:
RECREATION AND SCENIC RIVERS

Current Situation

The Forest Service has the responsibility for all fire protection activities on National Forest land while the State Department of Natural Resources has the responsibility for fire protection on State and privately owned forest lands in the area. Under the cooperative agreement between the Forest Service and the Department of Natural Resources (dated 2/18/77), in areas of adjacent or intermingled protection responsibilities, the two agencies will provide reciprocal initial attack services.

Skagit County:

Fire District #	Area Covered
4	South side Skagit-Clear Lake area
8	North side Skagit, Sedro Woolley, Lyman, and Hamilton areas
10	Concrete and Birdsvie
16	South side Skagit-Day Creek and Finney Creek
19	Rockport and Marblemount

Snohomish County:

Fire District #	Area Covered
1	Sauk Prairie area

Each of these protection agencies or organizations has its own rules and regulations that affect fire protection on the lands under their jurisdiction.

From a historical perspective, wildfire occurrence in the area is very low. This is probably due to the vegetation and limited public use of the forested areas.

From 1965-1980, there were two lightning and six person-caused fires on National Forest lands within the corridor; only one of these exceeded 1/2 acre in size. Three of the fires were campfires located between the riverbank and the road system; two were from timber harvest activities and one was a burning vehicle.

State protected lands have recorded only one fire, which actually started outside the area and burned into it, for the 1965-1980 period. Records are not available for fires suppressed by landowners or rural fire districts but they are expected to be low.

The vegetation in the area is generally of low flammability, due to a high water table and a moist microclimate. Rarely does the living vegetation dry out to the extent that it would permit a fire to spread freely.

The dead, woody material which either results from natural mortality or from cultural or harvest activities in the coniferous stands is more flammable. There are from 10-15 days per year when a fire would spread in these fuels. The remainder of the year, fires would either smolder or spread at a low intensity.

Assumptions

1. Fire occurrence will remain about the same in the near future.
2. Fire potential will increase to fuel accumulation with the absence of fire.
3. The absence of fire will result in plant communities tending toward climax species.
4. An increase in recreation use of the river system will result in an increase in man-caused fires.

Section III Current Situation and Assumptions

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III



Mineral
Resource

MINERAL RESOURCE: RECREATION RIVER

Current Situation

State and Private Land

Mining in the Skagit River drainage has been confined primarily to the production of non-metallic commodities, principally sand, gravel and stone. Large quantities of limestone, used in the production of cement, have also been mined.

Despite the promises of the 1879 gold rush, mining, that is, the extraction of metallic minerals contained in crude ore, has never been a significant factor in the economy of the Skagit basin. This is not to say that gold, silver and other precious metals do not exist in the basin, but rather that no technology has yet evolved which can profitably produce them.

The Bureau of Mines, U.S. Department of Interior, classifies most of the metals in the Skagit basin as "potential future sources," meaning that their successful utilization must await increased prices, improved technology or better access. Among these "future sources" are estimated deposits of 4.8 million ounces of gold, 149 million ounces of silver, 609,000 tons of copper, 1.1 million tons of lead, 320,000 tons of zinc, 9,000 tons of cobalt, 70,000 tons of molybdenum, 510,300 tons of nickel, 190,000 tons of iron and 5.8 million tons of arsenic. No commercial mining of metallic minerals occurs within the designated boundaries of the Skagit W&SR.

Despite these potentially sizeable deposits of metals, it is the nonmetals which have been the background of mining activities in the Skagit basin. Since the 1870's only \$2.5 million of metals have been produced, while nonmetals totaling over \$130 million have been removed during the same period.

The metals are located primarily in the headwaters of the basin, the non-metals are found in the more accessible lower valley. Foremost among these non-metallic deposits is limestone. The quarry at Concrete produced limestone for use in the manufacture of cement for 61 years, and while it is presently out of operation due to economic pressures, the quarry's remaining reserves are estimated to be 20 million tons of top quality limestone. Total limestone reserves for the basin are estimated at over 1 billion tons. There is a proposal to reactivate production by 1983.

Since the closure of the limestone quarry at Concrete in 1968, sand, gravel, and stone have become the principal nonmetal minerals in the basin. Talc-soapstone is also mined, but on a minor scale. Other minerals removed in small quantity include silica, asbestos, travertine, pumicite and serpentine.

There is potential for the mining of coal in the general area south of Hamilton. With increased focus on energy there may be renewed interest in reopening some of the older mines or new exploration work which, although it is outside of the established boundaries, could have an effect on water quality or other resources.

Sand and gravel valued at over \$9 million has been mined near the Skagit River in the vicinity of Mt. Vernon, Burlington and Sedro Woolley. These operations continue today and, although they are downstream and outside the boundary of the Skagit W&SR, they may occur close to the river channel. Little, if any, withdrawal is made from the streambed. Sand and gravel deposits for use in building and road construction that are of high quality and readily accessible are, in parts of the northwest, becoming scarce. The Skagit River between Bacon Creek and Sedro Woolley contains within its banks, bars and river bed, large quantities of sand and gravel that are easily accessed. Most of the gravel contains soft metamorphic rock that makes it unsuitable for use as aggregate. This gravel could be used as fill, although the associated sand can be recovered and used in making concrete. Glacial deposits of hard, subrounded gravel, relatively free of clay, are present in large quantity only in the Burlington-Sedro Woolley area and is being utilized.

Federal permits, through the Army Corps of Engineers, and State permits, through the Department of Natural Resources, Department of Game and the Department of Fisheries as well as county permits through Shoreline Management Plan are required prior to beginning any mining activities located above or below the wetted perimeter of navigable rivers. The 1981 Aquatic Land Management Plan for the Skagit (State Dept. of Natural Resources) provides the guidelines for evaluating proposals for sand and gravel extraction.

There are several sites within the boundaries of the Skagit W&SR where sand and gravel have been mined in past years, but the only active commercial operation is at Concrete on the north bank of the Skagit River adjacent to the West bank of Baker River at its mouth.

Another significant nonmetallic mineral mined in the basin area is stone. Over 9 million tons of basalt and related rock, valued at some \$15 million, have been quarried for use as ballast and riprap.

Assumptions

1. There will be a continued demand for sand, gravel and stone along parts of the Skagit River.
2. The required Federal and State permits will continue to be administered by the respective agencies for any mining activities located above or below the wetted perimeter of the Skagit W&SR.
3. With the exception of sand, gravel, and stone, practically none of the previously described mining activities could be anticipated to occur within the designated boundaries of the Skagit River.
4. The limestone quarry at Concrete will be reopened for the production of raw materials for use in the manufacture of concrete.
5. The 1981 Aquatic Land Management Plan for the Skagit River (State Dept. of Natural Resources) provide adequate guidelines and controls over sand and gravel extraction.

MINERAL RESOURCE: SCENIC RIVERS

Current Situation

The designated Scenic Rivers which originate in the headwaters of the Skagit basin were the location of most of the early day prospecting for valuable and precious metals. The searching followed rivers and streams which were the primary access routes for settlers and prospectors and even today the evidence of fruitless searches for wealth can occasionally be seen.

The Scenic Rivers differ in landownership pattern from the Recreation River. On the Skagit Segment, all lands are in private or state ownership; however, the breakdown on Scenic Rivers by miles of river is as follows:

	Private Land - National Forest land	
Cascade River	35%	65%
Sauk River	49%	51%
Suiattle River	45%	55%

On public domain land within the National Forest boundary, one of the valid uses is to prospect for, locate and develop valuable deposits of metallic minerals. This use is authorized under United States mining laws of May 10, 1872, and as amended. Department of Agriculture regulations, Part 252 - Minerals, states, "All functions, work, and activities in connection with prospecting, exploration, development, mining or processing of mineral resources and all uses reasonably incident thereto, including roads and other means of access on lands are subject to the regulations in this part, regardless of whether said operations take place on or off mining claims."

All persons proposing mineral activities which could cause disturbance to lands administered by the Forest Service, must submit an operating plan for approval to the authorized officer. An environmental analysis (EA) will be prepared in connection with each proposed operating plan; the EA will be prepared by the Forest Service.

Valid mining claims on record as of April 26, 1981, include, for the:

- Cascade River - Several claims, all or part within the Wild and Scenic River boundary near Sibley Creek.
- Suiattle River - Several claims upstream from the mouth of Lime Creek.
- Sauk River - Locations near Murphy Creek, a location above the mouth of the White Chuck near Falls Creek, and a location near Dutch Creek.

Assumptions

1. Prospecting for mineral deposits will continue to be a valid use on National Forest lands within the W&SR boundaries.

2. There has been little recent evidence to indicate strong or serious interest in developing the mineral potential on any of the existing claims within the W&SR boundaries. Although there is infrequent active exploration or minor development, this situation could change rapidly with increased prices and shortages of some critical metals.
3. The F.S. Manual 252 Minerals Regulations, with requirements for resource and environmental protection, are considered adequate to protect the W&SR resource values, with respect to minerals operations..

Section III Current Situation and Assumptions

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Research

RESEARCH: RECREATION AND SCENIC RIVERS

Current Situation

Presently, research activities within the Skagit W&SR have been limited. It could be assumed that the superior tree program carried on at the Captain Moses Seed Orchard on the Suiattle River falls under research. Also, some work on the use of gravel sifting machines to improve fish spawning beds has occurred periodically. The State Game Department and State Fisheries Department have done work that could be categorized as research at the fish hatchery sites located within the corridor.

The City of Seattle, as a part of their studies on the proposed Copper Creek and High Ross projects has contracted Bio-Systems Inc., of San Francisco, to conduct research related studies on the bald eagle within the Skagit W&SR during the past two years. These studies have indicated a possible impact caused by interaction between eagles and the increasing recreation use of the rivers.

Assumptions

1. Eagle Research opportunities exist in several subject areas.
2. Questions concerning compatibility between recreational activities and specific wildlife species and habitat can be answered best through research procedures.
3. Research will be needed to identify and analyze the expected recreational experience of various user groups to facilitate future management and to determine carrying capacity.

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Needed Regulations

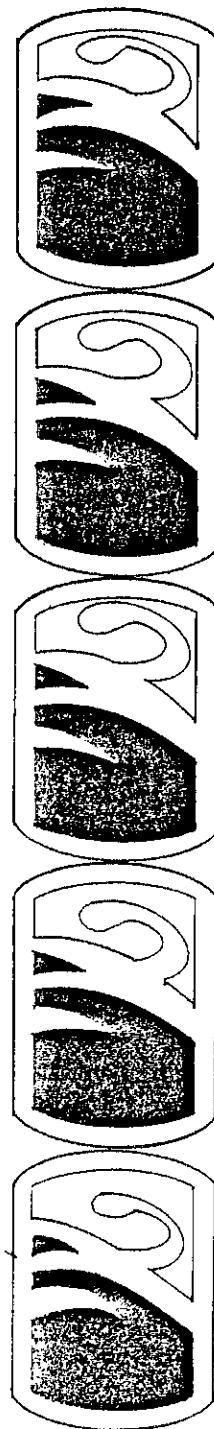
IV



See
Volume II

Section V
Coordination and Responsibilities
of Other Organizations
and Agencies

V



Coordination
and Responsibilities
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Organizations
and Agencies

SECTION V.

COORDINATION AND RESPONSIBILITIES
OF OTHER ORGANIZATIONS AND AGENCIES

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COORDINATION AND ORGANIZATION:
RESPONSIBILITIES OF OTHER AGENCIES

To aid in understanding the main aspects of the existing legal and administrative responsibilities for the Skagit W&SR, this section briefly outlines the regulatory and management functions carried out by various governmental agencies which have a direct bearing on management of the Skagit River system. A complete review of the legal and administrative responsibilities concerning water and related land resources has been published as "Appendix II Political and Legislative Environment" of the Puget Sound and Adjacent Waters Study, 1970.

Political Subdivisions

1. Municipalities

Incorporated cities and towns adjacent to the Skagit W&SR have a wide range of powers, affecting water and related land resources. Unincorporated communities are governed by Skagit and Snohomish Counties. In brief summary, these powers are:

Planning - Cities may form planning commissions, undertake planning studies, develop and adopt comprehensive land use plans, and adopt zoning and subdivision ordinances and building codes. Of direct interest to the Skagit W&SR, cities also have jurisdiction over water and land thereunder to the same extent as their jurisdiction extends over land with the corporate limits.

Flood Control - Cities are authorized to provide protection from overbank flows by constructing and maintaining dikes, levees and embankments, and opening, deepening and straightening natural water courses, waterways and other channels.

Parks and Recreation - All incorporated cities may levy property tax millage for acquiring, developing or maintaining parks and recreation areas, either within or outside, contiguous or non-contiguous to city boundaries.

Solid Waste - Cities have full authority for refuse collection and disposal. This function is carried out through strict guidelines and review by the State Department of Ecology.

Waterworks - A number of State statutes grant cities authority to operate water utilities. Recognizing the license, permit and review responsibilities of numerous state and federal agencies, cities may construct, condemn or purchase, acquire, add to, maintain and operate waterworks within or without corporate limits for the purpose of water supply for all purposes, public and private, including water power and other power derived therefrom, with full power to regulate and control the use, distribution and price.

Sewage Systems - Subject to State review and permits, cities may construct, purchase and operate sewage systems within or without corporate limits, including: (1) sanitary sewers, (2) combined sanitary/storm sewers, (3) storm or surface water sewers, (4) outfalls for storm or sanitary sewers and works, plants and facilities for sanitary sewage treatment and disposal, or (5) any combination of such facilities.

2. Counties

There are two Counties within the study area, Skagit and Snohomish. Both counties have the same legal powers relating to the rivers, including land use planning, zoning, building codes, subdivision regulations and flood control. Of special interest is the Counties' responsibility in the planning and administering of the regulatory permit system of the Shoreline Management Act and the Floodplain Management Program.

Shoreline Management Act

The State Shoreline Management Act (S.M. Act) requires and defines a planning program and a regulatory permit system, both of which are initiated at the local level under State guidance. The planning program for each local government consists of a comprehensive shoreline inventory and a master program for the regulation of shoreline uses. The Management goals in the S.M. Act place a strong emphasis upon a balance between conservation and use of the shorelines. In RCW 90.58.020, the Legislature declares that "unrestricted construction on the privately owned or publicly owned shorelines of the State is not in the best public interest," which should be protected through coordinated planning, while "at the same time, recognizing and protecting private property rights consistent with the public interest." The Legislature further declares that it is the policy of the State to provide for the management of the State's shorelines "by planning for and fostering all reasonable and appropriate uses" and that this policy is designed to:

"insure the development of these shorelines in a manner which, while allowing for limited reduction of rights of the public in the navigable waters, will promote and enhance the public interest. This policy contemplates protecting against adverse effects to the public health, the land and its vegetation and wildlife, and the waters of the State; while protecting generally public rights of navigation and corollary rights incidental thereto."

Floodplain Management

The State Floodplain Management Program includes a very minimal attention toward maintenance of flood control works pursuant to Chapter 86.26 RCW, and the administration of the State Flood Coastal Zone permit program pursuant to Chapter 86.16 RCW. The permit program can only be administered within the riverine floodplains of established flood control zones. Zone permits are required within the zones for any works, structures and improvements which adversely influence the regimen of the stream or might adversely affect the

security of life, health and property against damage by flood waters. Current Department of Ecology policy is to establish new zones only at the request of local governments. The Department of Ecology has been designated by the Governor to coordinate the National Flood Insurance Program (NFIP) (PL 93-234) in Washington. Floodplain management regulation in riverine floodplains are the responsibility of local governments under the National Flood Insurance Program standards and criteria as set forth in 24 CFR 1910.3. Failure to meet those requirements and purchase flood insurance might result in the loss of federal aid to communities and individuals associated with construction or acquisition of building in the special flood hazard areas.

3. Special Districts

The term "special district" is applied to any local governmental entity which is neither city, town, township nor county. These districts are financed primarily by property tax millage and are accountable locally to serve the area from which such millage is collected. The principle State agency having responsibility for program liaison and coordination is the Department of Ecology. The primary districts operating within the study area are:

A. Flood Control Zone District

Within the study area, all lands within the 100-year flood level are within a flood control zone. As such, all structures within this zone must be either floodproofed or placed on fill above the 100-year flood level.

The governing body of a flood control zone district is the board of County Commissioners. This body is empowered to:

1. Exercise all powers vested in the county for county flood control and joint county flood control. In exercising these powers, all actions must be taken in the name of the zone entitled to all property and property rights vested in the zone.
2. Plan, construct, acquire, repair, maintain, and operate all necessary improvements and work to control, conserve, and remove flood waters.
3. Take action necessary to protect life and property from flood water damage.
4. Control, conserve, retain, reclaim, and remove flood waters and dispose of them for beneficial or useful purposes.
5. Acquire necessary property, property rights, facilities, and equipment necessary to the purposes of the zone by purchase, gift, or condemnation.
6. Acquire or reclaim land when incidental to the purpose of the zone, and dispose of lands which are surplus to the needs of the zone.
7. Remove the debris, logs, or other material which may impede the orderly flow of waters in streams or water courses.

8. Diking District

Diking districts have the authority to straighten, widen, deepen, and improve rivers which cause overflow damage to land within the district and to construct the necessary works to protect the land from overflow.

State Agencies

1. Department of Fisheries

The Department of Fisheries has jurisdiction over the food fish and shellfish resources of the State. In the Skagit River and tributaries, this includes management of five species of Pacific Salmon.

Management includes commercial and sport fish regulations for all salmon, as well as studies related to such things as stock condition, habitat improvement, low-flow studies, etc.

Artificial propagation facilities are maintained by the Department at Marblemount, Washington, and at Baker Lake that substantially supplement the natural spawning populations of the basin.

The Department does not operate any recreational facilities such as boat ramps or fishing access areas.

In carrying out this management function, the Department, in cooperation with the Department of Game, administers a hydraulic permit program which will affect any development activity that occurs within the streamway. The law specifically provides that "...in the event any person or government agency desires to construct any form of hydraulic project, or other work that will use, divert, obstruct or utilize any of the waters of the State or materials from the stream beds," shall submit plans of the proposed project to the Departments of Fisheries and Game. Written approval must be secured from the Directors of both agencies before commencing construction or work.

2. Department of Game

The Game Department is mandated by Title 77 of the Revised Code of Washington (RCW) to preserve, protect, and perpetuate the wildlife of the State of Washington. Wildlife is defined by Title 77 as all species of the animal kingdom which exist in a wild state, including those species classified by the department as game species, fur-bearing animals, predatory birds, protected wildlife, and endangered wildlife. Specifically excluded from the department's management authority are feral domestic animals, old world rats and mice, and fish, shellfish, and marine invertebrates classified by the Department of Fisheries. The department may regulate the collection, distribution, importation, transportation, and sale of wildlife and deleterious exotic wildlife species, and shall govern the taking and possession of game animals, game birds and game fish.

From a wildlife management standpoint, this department manages all wildlife species in the Skagit W&SR Corridor. Of particular interest would be the Nature Conservancy's Skagit River Bald Eagle Natural Area which is the subject of intensive study both by the department and academic and consulting agencies.

The Barney Lake area downstream of the Skagit W&SR is of vital importance to a wintering population of trumpeter swans. These birds are suspected to travel infrequently to the lower stretches of the Skagit Segment where suitable habitat is also available.

The Department has jurisdiction over the game fish resources in the Skagit River watershed and has developed regulations and management programs to maintain and enhance the fisheries programs on this system. These regulations and programs are reviewed each year and changes are made whenever it is deemed appropriate. The Department annually plants the Skagit River and its major tributaries with winter and summer steelhead smolts to maintain the fisheries for these species in the Skagit River system. Additionally, the Department maintains a trout program on both high and low elevation lakes within this drainage.

The Department has constructed and maintains boat and trailer access ramps along the Skagit River. A portion of the maintenance is performed by the Skagit County road district through an agreement with the State Game Department. The Department is currently developing long-range management plans for the entire State. The Skagit River system would be included in these plans.

The Department has the responsibility for enforcement of game laws; management of all wild species and game fish; management and control of the approximately 10,000 acres of land which are located between the mouths of the North and South Forks of the Skagit River - these lands are known as the "Skagit Habitat Management Area".

Authorities include: Game Code; Administration Orders; Permit and Review procedures under State and Federal Laws, i.e., State Environmental Policy Act, Shoreline Management Act, U.S. Fish and Wildlife Coordination Act, Hydraulic Code review and recommendations regarding Water Right Applications, and review and recommendations regarding U.S. Army Corps of Engineers Public Notice, Section 10 and Section 404 Permits.

3. Department of Social and Health Services

The State Board of Health has legislative authority in "...all matters relating to the preservation of the life and health of the people of the State." Regulations of the Board are administered by the Health Division of the Department of Social and Health Services in cooperation with city, county and district health departments.

4. Department of Natural Resources (DNR)

The Department of Natural Resources (DNR) has expressed their interest in both the joint preparation of a management plan and joint management of the Wild and Scenic River areas.

DNR manages trust lands along the Skagit River and tributaries for the purpose of maximizing income to the public institutions of the State. These lands are managed primarily for forestry, but may be leased to private individuals or public agencies for other purposes.

Additionally, the DNR manages the State-owned beds of navigable rivers, which are not subject to income-maximization restrictions as are trust lands. In administering these bedlands, the DNR has direct control over gravel mining and any structures or piling placed on or over the beds of navigable rivers.

Through Article XVII of the Washington State Constitution, the State asserted the ownership to the beds and shores of all navigable bodies of water up to and including the line of ordinary high water mark. The responsibility for the proprietary management of the aquatic land ownership has been empowered to the DNR.

The State defines "shorelands" as the area of the river waterward from the line of ordinary high water to a line of navigability and the "beds" as the area waterward of the line of navigability.

Prior to 1971, shorelands were sold, but a moratorium on sales was implemented in that year.

The term navigability, as used to determine title to the bed of lakes and streams, is based on the Federal definition which has developed over the years through numerous Federal Court tests. The position of the Forest Service in the management of the beds of lakes and streams within the National Forest System is to administratively determine the navigability of these waters using the Federal test. Based on that determination, the Forest Service would assure jurisdiction under applicable laws, rules, and regulations for the management and protection of the adjacent National Forest System lands, the waters, and interests therein.

This position does not preclude or impair the State's police powers or interests in these waters or their use. The overall intent of the Forest Service policy is cooperative management in areas of common interest, and to seek a joint approach in overlapping situations created by unresolved navigational questions arising from the myriad of State and Federal laws and regulations related to those areas.

Consequently, except for those streams that have been declared by Congress or determined by Federal Courts to be navigable for title purposes in accordance with the Federal rule, the Forest Service will consider all streams upon National Forest System lands to be non-navigable for title purposes.

In 1975, the Board of Natural Resources adopted a Statewide River Management Policy Plan developed by the Marine Resources Advisory Committee. During the past two years, the Department of Natural Resources has been developing an Aquatic Land Management Plan for the Skagit River. This plan was for the mainstem Skagit from the mouth to Bacon Creek. The Draft Plan and Environmental Statement were published in July 1980. Public comment was received and a final plan is being prepared now. This plan will be used to guide the Department of Natural Resources in its management of the aquatic land which the State still owns and manages. It is not an upland management plan but is closely allied with the management plans of other State and local agencies.

5. The Department of Ecology (DOE).

The Department of Ecology has several programs that may affect the management of the Skagit W&SR.

The most significant is the Shoreline Management Program. A brief summary of this most important legislation was presented under (2. Counties).

Another program that could impact the river is the issuance of water right permits and the associated Instream Resources Protection Program.

The Western Washington Instream Resources Protection Program is designed to protect fish and wildlife in rivers and streams. The DOE will set instream flows on rivers and streams throughout Western Washington.

These flows will specify the amount of water that must be left in a stream for preservation of fish and wildlife, maintenance of water quality, navigation, recreation, aesthetic and other environmental values (instream resources). In many streams, fish and wildlife are the most threatened instream resources and they will be the primary focus of this program. Once the flows are adopted, they will become State regulations. When DOE issues future water rights that would permanently remove water from the stream, the instream flow regulation would be applied to that right. After these regulations are adopted, anyone receiving a new water right may be required to cease taking water if the stream level goes below the instream flow levels. Anyone using water from a stream or river must obtain a water right. This program does not affect existing water rights.

Other department programs that may indirectly affect the Skagit Wild and Scenic River include:

- a. Air Quality and Pollution Control - It is through DOE that many of the mandates of the Clean Air Act of 1972 are implemented, that all State air laws are implemented, controlled or coordinated, that specific direction and control authority is provided to local air pollution control authorities (Northwest Air Pollution Control Authority, Whatcom - Skagit, San Juan and Island Counties) and that all federal funds dealing with air quality maintenance, protection and enhancement are channeled for both State and local use.

b. Water Quality Programs - Within the Water Quality Division of the Office of Water Programs there are five major program activities: (1) the issuance, renewal, and modification of permits; (2) compliance assurance and enforcement; (3) municipal facilities management; (4) planning and management; and (5) data acquisition (including special studies). The basic program is oriented in the Federal Water Pollution Control Act of 1972 (PL92-500) and the State Water Pollution Control Act of 1973 (RCW Chapter 90.48) which implements the federal act of the State level and expands in certain control and management areas.

c. Solid Waste Program - With the passage of the Solid Waste Management Act (RCW Chapter 70.95) in 1971, Washington recognized the need to control the State's increasing solid waste flow. The law divides the responsibilities of solid waste management between the State and local governments. The purpose of the solid waste program is four-fold: (1) to assign the primary responsibility for adequate solid waste handling to local government, reserving to the State those functions necessary to assure effective programs throughout the State; (2) to provide for adequate planning for solid waste handling by local government; (3) to provide for adoption and enforcement of basic minimum performance standards for solid waste handling; and (4) to provide technical and financial assistance to local governments in the planning, development, and operation of solid waste handling programs.

d. Floodplain Management - See County Floodplain Management on page 44.

e. Environmental Review - There are two main environmental review activities. The first is involvement with the State Environmental Policy Act (SEPA). Work under SEPA involves providing assistance to other sections in the Department in the writing of environmental assessments and impact statements, development and distribution of materials concerning Environmental Impact Statements (EIS) and SEPA, and special coordinative work on impact statements relating to highway projects. The other is the review of both the National Environmental Policy Act (NEPA) and SEPA EIS's for the Department and providing to the State as a whole specific assistance on major environmental questions where EIS's are involved.

6. Parks and Recreation Commission

State Parks basic responsibilities are for the acquisition, development and operation of State parks and parkways. Related directly to the Skagit Basin, this function includes the potential for identification and interpretation of natural, historical, geological, archeological and botanical areas, in addition to potential expansion of the State Park System beyond that currently existing at Rockport State Park.

The Commission also has the responsibility to cooperate with the Department of Highways in preservation and development of the State's scenic and recreational highway system. Within the Skagit Basin this includes S.R. 20 from I-5 at the western terminous of the study area upriver to Bacon Creek, eastern terminous.

With regard to Title 43 RCW sections 43.51.040(8), 43.51.060(4) and (9) which define the Commission role, jurisdictions, responsibilities and authorities; the Commission has not adopted any other powers which would affect the Skagit Wild and Scenic River System. Should the Washington State Legislature at some time in the future incorporate the Skagit Wild and Scenic River System within Chapter 79.72 RCW, the State's Scenic River System with revisions of that law would then apply.

The only additional responsibilities and authorities of the Commission would pertain to any State Parks owned properties abutting the system.

7. Interagency Committee for Outdoor Recreation

The Committee was created to administer State funds and certain federal and other matching funds available to Washington State for conservation and outdoor recreation purposes. The Committee is made up of four (4) State directors and five citizen members appointed by the Governor, and brings together the experience and viewpoints of the major land management agencies and the independent views of citizen members. (State agencies include the Department of Fish, Game, and Natural Resources, and the Parks and Recreation Commission.)

In general, the Committee has two principal functions. These are: (1) State-wide recreational planning, and (2) Grants-in-Aid program. Either or both of these functions can be applicable to the Skagit System.

Source of Funds:

- 1965 Initiative 215 - Marine Recreation Land Act of 1964 (Chapter 5, Laws of 1965; RCW 43.99)
- 1963 Referendum 11 - Outdoor Recreational Bond Issue (Chapter 12, Laws of 1963, Ex. Sess.; RCW 43.98)
- 1967 Referendum 18 - \$40,000,000 Outdoor Recreation Bond Issue (Chapter 126, Laws of Ex. Sess. 1967, RCW 43.99A)
- 1972 Referendum 28 - \$40,000,000 Outdoor Recreation Bond Issue (Chapter 43.83C RCW) (1972)
- 1979 State Legislature - \$10,000,000 Outdoor Recreation Bonds (Chapter 229, Laws of 1979 - Extraordinary Session I - RCW 43.99B)
- 1965 Land and Water Conservation Fund (LWCF) - Heritage Conservation and Recreation Service, Department of the Interior - (Public Law 88-578) - HCRS

Applicant Eligibility:

Any agency may apply to the Committee for funding assistance provided that it is a public agency such as: county, city, town, port district, park and recreation district, metropolitan park district, school district, or other

municipal corporation or State agency empowered by law to acquire and/or improve outdoor recreation areas and facilities, and Indian tribes now or hereafter recognized by the federal government for participation in the Land and Water Conservation Fund Program.

Comprehensive Plans:

In order to qualify for Federal matching funds, the State of Washington is required to prepare a Statewide Comprehensive Outdoor Recreation Plan (SCORP). The Plan for Washington State received continuing eligibility from the Department of the Interior, and is updated and kept current through various reports and Issue Papers, plus necessary statistical data.

8. Office of Archaeology and Historic Preservation

This is the office headed by the Washington State Historic Preservation Officer, a position authorized by the National Historic Preservation Act of 1966. The Office provides multi-resource skills in archaeology, history, achitecture, and historic architecture to aid Federal Agencies in the consultation procedures required by the Historic Act of 1966.

In addition, the Office of Archaeology and Historic Preservation is responsible for development of a State-wide Comprehensive Plan of Cultural Resources Management. The programs of Cultural Resource Management of Federal Agencies should complement such a State-wide comprehensive plan.

Cultural Resource management on non-Federal public lands and the private lands within the State are coordinated by the Office of Archaeology and Historic Preservation.

Coordination with this office becomes important to:

1. Provide a coordinated management program of the Cultural Resources on this river system.
2. Meet the Federal regulations concerning Cultural Resource Management.

9. Department of Transportation

This department manages considerable acreage within its right-of-way within the W&SR boundaries. Coordination will be needed for such items as road relocation or new construction, public access, space for parking, roadside vegetation management, bike routes, etc.

Federal Agencies

1. Department of Agriculture

A. Forest Service

The U.S.F.S. is a major land managing agency within the study area. The area is managed by the Mt. Baker-Snoqualmie National Forest for multiple-use, primarily for timber, recreation and wildlife. The Skagit W&SR lies within three ranger districts; the Baker River District near Concrete; the Darrington District at Darrington; and, Monte Cristo District at Verlot.

The Forest Service, through the Secretary of Agriculture, is charged with the administration of the Skagit Wild and Scenic River.

B. Soil Conservation Service

The Soil Conservation Service is responsible for developing and carrying out a national program of conserving land and water resources. The central objective is an integrated system of land use and conservation treatment in harmony with the capabilities and needs of the land. Under this objective, the service channels most of its on-the-ground assistance to landowners through soil and water conservation districts. This assistance consists primarily of professional help in planning and applying practical conservation measures needed for each kind of land and operation.

Districts are organized under various State laws and are autonomous and governed by locally elected supervisors who serve without pay. Each district is responsible for soil and water conservation within its boundaries, much as a county is responsible for its roads or a school district for education.

The Soil Conservation Service also administers the Watershed Protection and Flood Prevention Act (Public Law 566) for the Department of Agriculture. Under this authority, the Service provides planning, financial and credit assistance to groups of private landowners who organize under State law to provide a variety of flood prevention works and resource developments that cannot be installed by individual initiative. The fundamental principles of such projects are: local initiative and responsibility; Federal technical, financial and credit aid; and State review and approval of local proposals with wide-open opportunities for State financial and other assistance.

Financial assistance provided by the Service includes 100 percent of engineering costs, 100 percent of flood control, and up to 50 percent of the project costs for irrigation, drainage, fish and wildlife and recreation. Municipal and industrial water may be included as an integral part of a multiple-purpose watershed project. The cost of land rights and easements are a responsibility of local sponsors, except that Public Law 566 funds may be used to share up to 50 percent of the cost of land rights for public recreation or fish and wildlife developments in authorized multiple-purpose projects.

The State Department of Water Resources must approve applications by sponsors before the project receives planning authorization by the Service.

2. Department of the Interior

A. Bonneville Power Administration

The specific mission of Bonneville Power Administration (BPA) is to market power produced at Federal multipurpose projects in the Pacific Northwest. BPA is directed by the Bonneville Project Act and the Flood Control Act of 1944 to do this in a manner that will:

1. Encourage the widest possible use of all electric energy that can be generated and marketed.
2. Prevent the monopolization thereof by limited groups.
3. Benefit the general public and particularly domestic and rural consumers.
4. Provide power at the lowest possible rates to consumers consistent with sound business principles.

Bonneville Power Administration, in marketing the power from the Federal dams in the Pacific Northwest, constructs, operates, and maintains the substations and transmission lines which interconnect those projects at more than a hundred locations with other public and private transmission systems. A BPA line crosses the Skagit Segment near the lower terminus.

B. Bureau of Indian Affairs

The objectives of the Bureau's program include: maximum Native American economic self-sufficiency; full participation of Native Americans in American life; and equal citizenship privileges and responsibilities for Native Americans. The Bureau is recognized as a management authority concerning treaty fisheries within the Skagit River Basin.

The Skagit River System is included in the "Adjudicated usual and accustomed fishing places" (U.S. v. Washington, 1-1-77), of the Sauk-Suiattle, Swinomish, and Upper Skagit Tribes. In addition, there are public domain Native American allotments along the Skagit River and its tributaries.

C. Bureau of Land Management (BLM)

The Bureau of Land Management's responsibilities are to manage public lands under its administration for multiple use purposes. Land in the Skagit W&SR corridor will also be managed so that activities will not be detrimental to the Wild and Scenic River designation status.

The BLM will coordinate all proposed changes on BLM lands with the U.S. Forest Service regarding their impact on the Wild and Scenic River status.

D. Bureau of Reclamation

The Bureau of Reclamation's major responsibilities are: (1) Investigate and develop plans for potential projects to conserve and utilize water and related land resources; (2) Design and construct authorized projects for which funds have been appropriated by the Congress; (3) Operate and maintain projects and project facilities constructed by the Bureau, and inspect the operation and maintenance of projects and project facilities constructed by the Bureau but operated and maintained by water users; and (4) Negotiate, execute, and administer repayment contracts, water service contracts, and water-user operation and maintenance contracts.

In the Puget Sound Study, the Bureau of Reclamation has had the primary responsibility of identifying irrigation needs and potentials, and for determining and developing effective means to satisfy these needs.

E. Fish and Wildlife Service

The Fish and Wildlife Service's primary interest in the Skagit River System is preservation of existing fish and wildlife resources and uses, with particular emphasis on anadromous fish, migratory waterfowl, and federally listed threatened and endangered species. Toward this end, the Ecological Services Division of the Fish and Wildlife Service strives to prevent or reduce negative impacts to these resources through its involvement with other Federal agencies and programs. Primary examples in the Skagit Basin are the Service's involvement with the Section 10/404 permit program of the Corps of Engineers, the licensing activities of the Federal Energy Regulatory Commission and the Nuclear Regulatory Commission, and the flood control activities of the Corps of Engineers. Authority for Service involvement in these programs is found primarily in the Fish and Wildlife Coordination Act, the Clean Water Act, the Federal Power Act, the Endangered Species Act, and memoranda of understanding between the Service and other Federal agencies.

Of special interest is the Forest Service joint involvement and responsibilities as defined in the 1973 Federal Endangered Species Act. According to Section 7 of the 1973 Endangered Species Act, as amended, it is incumbent on the Forest Service to review any of its actions or programs that may affect, either adversely or beneficially, federally listed threatened or endangered species. Should a "no effect" conclusion be reached by the Forest Service, then no formal Section 7 consultation is required. However, the Service may request Section 7 consultation if, after reviewing the proposed action, they believe that there may be an effect.

F. U.S. Geological Survey

The continuous data-collection program of the Geological Survey includes streamflow, ground-water levels, miscellaneous discharge measurements, and some sediment and quality-water data in the Puget Sound Comprehensive Water Resources Study Area. In addition, a number of cooperative studies both completed and in progress will contribute to the knowledge of the hydrologic environment in the study area. As a participating agency in the Puget Sound Study, the Survey is provided Federal funds to implement its role in the comprehensive water resource plan.

The responsibility of the Washington District Office of the Water Resources Division is to determine and appraise the water resources of the State. Included in this broad objective are: (a) comprehensive, continual accounting of the sources, movement, amount, storage, and quality of water supplies, and evaluation of the effect on water supplies of geologic, topographic, and other factors; (b) systematic quantitative accounting of the uses and disposition of water, of its chemical usability, and of the effects of use on quality; (c) evaluation of the State's total water resources, region by region and studies of development, use, and regulation; (d) research on hydrologic principles and processes and other phenomena related to water in order to improve the scientific basis for solving water problems.

G. National Park Service

National Park Service programs, as they relate to administration of the Skagit W&SR are:

1. National Park System planning and the management, in accordance with their respective purposes, of the natural, historic, and recreational areas of the System as an integral part of the nationwide recreation plan of the United States.
2. Administration of the Registry of National Landmarks under the authority of the Historic Sites Act of 1935. It is the purpose of this program to establish an inventory of nationally significant historical and natural properties under other Federal, State, local or private ownership and to encourage their continued preservation. The program is voluntary, and Landmark designation does not change ownership or responsibility for the property.
3. Administration of the Historic Properties Preservation program, authorized by Congress in 1966. The basic purposes of this program are threefold: (a) expansion and maintenance of a national register of properties significant in American history, architecture, archeology and culture and to grant funds to States for the preparation of comprehensive Statewide historic surveys and plans; (b) provision of matching grant-in-aid to the States for the preservation of significant historical, architectural, archeological, and cultural properties; and (c) establishment of a program of matching grants-in-aid to the National Trust for Historical Preservation in the United States.
4. Recreation phases of comprehensive river basin planning dealing with history, archeology, and natural science; and post-authorization recreation planning for individual Federal water projects.
5. Studies or surveys which involve the above responsibilities; evaluation of potential additions to the National Park System; recreation planning and related assistance requested by other Federal agencies; and special studies as assigned.

6. Continuing planning relationships with State and local park departments and others on specific area planning, management, interpretation, and related matters.

7. Of special interest within the Skagit W&SR is rafting. This is an increasingly popular activity on the section of the Skagit River between Newhalem and Bacon Creek. Most rafters, commercial and private, put in the river at the Goodell Creek Campground near Newhalem. Traditional take-out points are located near the national recreation area boundary on either private (with special permission) or Federal lands. Most take-outs occur right at the mouth of Bacon Creek and within the area designated for the Skagit W&SR. Some rafting parties continue on down river to Marblemount or other destinations. The development of designated take-out/launch sites at or near Bacon Creek and other appropriate downriver areas with adequate vehicle access and parking is therefore viewed as a major need for Skagit River recreationists, and cooperation in this activity would provide a much needed visitor service.

8. A continued need for updating of information as it applies to eagle and osprey activity within respective areas of responsibility is needed.

3. U.S. Environmental Protection Agency (EPA)

Generally, relevant EPA authority on the Skagit comes from the Clean Water Act of 1977 and the National Environmental Policy Act of 1969 (NEPA). Under these Acts, EPA, or the Washington State Department of Ecology, will use available opportunities to evaluate the water quality impacts of proposed projects in the Skagit River area in the context of Wild and Scenic River Values. Additionally, EPA will consult with the Forest Service to determine the consistency of proposed EPA projects with the Wild and Scenic River.

High water quality values were an important reason for designation of the Skagit under the Wild and Scenic Rivers Act, and these values should be maintained. EPA will review proposed projects along the river as part of their responsibility under Section 404 of the Clean Water Act and under NEPA. Under Section 404, they review dredge and fill permits issued by the Corps of Engineers. Under NEPA, they review environmental impact statements or assessments prepared for Federal actions. On the Skagit, EPA will be particularly interested in proposed road construction and timber harvest.

Under the Clean Water Act, the responsibility for setting and enforcing water quality standards, including nondegradation standards, and for issuing permits under the National Pollution Discharge Elimination System has been delegated to the Washington State Department of Ecology. The State permit process includes a period for public and agency review of proposed permit decisions. Although EPA does not routinely review all State permits, in special cases they would consider a DOE or Forest Service request to review proposed permits in the context of maintaining Wild and Scenic River water quality values.

EPA carries out two major funding programs under the Clean Water Act: Grants for State or area-wide water quality management planning under Section 208 of the Act and grants for municipal wastewater treatment facilities construction under Section 201. Their environmental analysis procedures under NEPA require consultation with the affected land management agency for projects on a Wild and Scenic River. In the case of the Skagit, we would seek Forest Service determination whether a project would have a direct and adverse effect on the values for which the river was established. A positive determination on Forest Service part would foreclose EPA approval of the project.

4. U.S. Department of Transportation.

A. Federal Highway Administration (FHWA).

FHWA's responsibility in the Skagit W&SR relate to the highways in the area. FHWA is not a land management agency. They would become involved only when the Washington State Department of Transportation or a local agency proposes a highway improvement using Federal-aid Funds. The State Dept. of Transportation (DOT), or local agency is the owner of the right-of-way for the existing highways in the area. They also have the maintenance responsibility for these facilities. Coordination with these agencies, as well as FHWA, should be maintained throughout this administration.

B. U.S. Coast Guard.

In the area of water and related land resource management, the Coast Guard, as the Federal Maritime Law Enforcement Agency for the United States, is responsible for water pollution control and the enforcement of regulations to prevent pollution and/or reduce the undesirable effects of unavoidable pollution in accordance with the provisions of Federal Maritime Law.

The Coast Guard, by statute, is responsible for and has authority to establish and maintain the Federal Aids to Navigation System for the waters over which the Federal Government exerts jurisdiction and control.

The Coast Guard is responsible for operational control of all search and rescue cases occurring in the maritime province as well as the development of systems and administration of activities related thereto.

The Coast Guard is responsible for the administration of the Federal Recreational Boating Program and for implementing this program by appropriate regulations.

The Coast Guard is responsible for the establishment of anchorage areas and issuance and enforcement of pertinent regulations.

Specific items of interest in relationship to the Skagit follow:

- a. The Skagit River is considered navigable water, by the Coast Guard, from the mouth to Marblemount (mile 80) including the waters from Ross Dam to the Canadian border.

b. The U.S. Forest Service may control types of boating allowed and numbers permitted to use the waters at a given time but authority to enforce Federal navigation laws on those waters is retained by the Coast Guard.

c. Sheriffs of counties in the State of Washington involved may wish to exercise their enforcement authorities on joint jurisdictional waters.

d. Designation of a Wild and Scenic River does not alter these other existing law enforcement responsibilities.

5. U.S. Department of Commerce, National Oceanic and Atmospheric Administration, (National Marine Fisheries Service, NMFS).

NMFS is an agency of the Federal Government entrusted with certain responsibilities over anadromous fish resources in and adjacent to the waters of the United States. Consequently, they have intervened in two separate Federal Energy Regulatory Commission (FERC) proceedings concerning the Skagit River. One proceeding involves the relicensing of Seattle City Light's existing three dam complex - Ross, Diablo, and Gorge Dams - on the river (FERC Project 553). The other proceeding involves the preliminary permit and related feasibility studies for Seattle City Light's proposed Copper Creek Project (FERC Project 2795). These projects have both existing and potentially adverse impacts upon anadromous fish which utilize the Skagit River. Their basic legal authority permitting intervention is the Fish and Wildlife Coordination Act (FWCA). Under provisions of this Act, NMFS must be consulted "...whenever the waters of any stream or other body of water are proposed or authorized to be impounded...for any purpose whatever...by any public or private agency under Federal permit or license..." (Section 2(a)). In addition, FWCA consultation requirements are frequently coupled with requirements under the National Environmental Policy Act. NEPA does not explicitly address the protection of fish and wildlife resources but this goal is implicit in its intended promotion "of efforts which will prevent or eliminate damage to the environment biosphere" (Section 4331).

Throughout these proceedings, NMFS has been coordinating with other project intervenors--Washington State Departments of Fisheries and Game, Skagit System Cooperative, U.S. Fish and Wildlife Service and the U.S. Forest Service--and the City of Seattle to help insure that anadromous fishery concerns and requirements are being thoroughly addressed. A major feature of the proceeding for Project 553 is a two-year interim flow agreement between the above intervenors and the City specifying a flow regime to protect anadromous fish. Another aspect of the agreement is studies designed to further quantify anadromous fishery flow needs in the Skagit River upon which to base a permanent flow agreement.

NMFS also participates in activities of the Pacific Fishery Management Council (PFMC) and is a voting member of the Council. The PFMC, created by the Fishery Conservation and Management Act of 1976, has fishery management authority over anadromous fish seaward of the territorial seas of California, Oregon, and Washington. Council membership consists of 18 State, federal, and public individuals. In addition, many organizational elements such as a scientific and statistical committee and advisory subpanels assist the PFMC in accomplishing its management activities. A major consideration is that Council decisions (e.g., ocean fishing seasons) can significantly affect catch distribution and escapement of salmon produced in Skagit River system.

6. U.S. Department of the Army, Seattle District, Corps of Engineers

The Corps of Engineers' Civil Works Program embraces the investigations and works for navigation, flood control and related purposes which have been authorized by Congress for prosecution by the Department of Army under the supervision of the Corps of Engineers. This program has a broad legislative basis which requires consideration of almost every aspect of water resource and river basin development. The following is further detail on this program:

Authorized Projects/Studies

a. Skagit River Levee and Channel Improvement Project, authorized by Section 203 of Public Law 89-789, dated 7 November 1966. This authorization provided for flood control improvements from the mouth of the Skagit River to about 20 miles upstream. In the late 1970's, postauthorization reformulation studies of the authorized project examined increased levels of protection and extension of the protection upstream to the vicinity of Sedro Woolley. Coordination was conducted with the U.S. Forest Service regarding this project and the determination made by the Secretary of Agriculture that the project would not unreasonably diminish the values for which the upper Skagit River was designated under the national system. The current status of this flood control project is that it has been voted down by Skagit County and deferred for future study.

b. Avon Bypass, authorized by the Flood Control Act of 1936. This authorization provided for diverting a portion of the Skagit River floodwaters between Burlington and Mount Vernon into Padilla Bay. This project is currently inactive.

c. Upper Baker Dam. In 1977, Congress authorized a plan to provide 74,000 acre-feet of flood control storage in the existing Upper Baker Dam during the winter flood season. Flood control storage was first made available during the winter of 1977-1978. In major floods, the Corps of Engineers specifies releases from both the Upper Baker and the Ross Dams.

d. Puget Sound and Adjacent Waters Comprehensive Study. A preliminary investigation of the feasibility of upstream storage for flood control and multipurpose development in the Skagit River Basin was made under authority of the Puget Sound and Adjacent Waters (PS&AW) Comprehensive Study. The Corps of Engineers participated in this study, which was conducted by a Federal-State interagency task force of the Pacific Northwest River Basins Commission. The study was transmitted to Congress in 1974 with recommendations for additional flood control storage at the Upper Baker Project (subsequently authorized) and construction of the previously authorized Avon Bypass and Skagit River Levee and Channel Improvement projects.

Continuing Authorities that have applicability to the Skagit River

Continuing authorities are items of legislation under which the Secretary of the Army, acting through the Chief of Engineers, is authorized to plan, design, and construct certain types of water resource improvement without individual congressional authorizations. These authorities are distinguished as the "Continuing Authorities Program" (small projects program).

a. Small Flood Control Project Authority (Section 205 Flood, Control Act of 1948, as amended) - Funds are authorized for the construction of small projects for flood control and related purposes. A Detailed Project Report (DPR) and Environmental Report (Environmental Impact Statement (EIS) or Environmental Assessment (EA) are required prior to construction of any project facilities.

b. Authorities for Snagging and Clearing for Flood Control (Section 208, Flood Control Act of 1954, as amended) - In the interest of flood control, funds can be authorized for removing accumulated snags and other debris, and clearing and straightening of the channel in navigable streams and tributaries thereof. If placement of revetment is needed to provide a complete and fully effective project, local interests should provide for the construction of revetment either by work or cash contribution. A DPR and an environmental report are required prior to the granting of construction funds.

c. Authority for Snagging and Clearing for Navigation (Section 3, River and Harbor Act of 1945, as amended) - This program is the same as that for flood control except that it is in the interest of navigation under a different authorization.

d. Authority for Emergency Streambank and Shoreline Protection of Public Works and Nonprofit Public Services (Section 14, Flood Control Act of 1946, as amended) - Funds are authorized for the prevention of flood caused bank erosion and shore erosion which endanger:

- highways and highway bridge approaches,
- important and essential public facilities which serve the general public and are owned by the Federal, State, or local government,
- nonpublic facilities that provide nonprofit public services such as churches, hospitals, and schools.

Work under this authority is not restricted to bank revetments and may include other features such as channel stabilization or realignment, when such work offers the best engineering and most economical solution. A Reconnaissance Report sufficient to permit engineering review is required. No EIS is required with this authority; however, EA's are prepared and retained on file at Seattle District.

e. Floodplain Management Services (Section 206, Flood Control Act of 1960). The Corps is authorized by Section 206 to provide information, technical planning assistance, and guidance upon request to both Federal and non-Federal entities in identifying the magnitude and extent of the flood hazard and in planning wise use of the floodplains. Direct response and assistance of this kind are provided through the Floodplain Management Services Program. Under this program, the Seattle District is presently analyzing floodway alternatives for Skagit County in the vicinity of Hamilton. The Corps is also involved in a coordinated effort with State and local governments to try to define and then analyze floodway boundaries in the Skagit delta.

Flood Insurance

A National Flood Insurance Program is available to protect the individual in covered communities from financial disaster in the event of a flood. Under the National Flood Insurance Program (P.L. 90-448, as amended) insurance is subsidized, up to an amount specified, on properties in areas designated as hazardous by the Federal Insurance Administration. The land-use control measures required of communities to gain and maintain eligibility for flood insurance are complementary to other floodplain management efforts.

Section 202 of Public Law 93-234 States that no Federal officer or agency shall approve any financial assistance for acquisition or construction purposes after 1 July 1975 for use in any area identified by the Federal Emergency Management Agency (FEMA) as an area having special flood hazards unless the community in which such area is situated is then participating in the National Flood Insurance Program. The Seattle District is presently conducting a Flood Insurance Study of Skagit County for FEMA. The results of this study will be to provide floodplain and floodway boundaries and flood profiles for portions of the Skagit, Cascade, Suiattle, Sauk, and Samish Rivers. The study is scheduled for completion in 1981.

Permit Authorities

a. Under Section 10 of the River and Harbor Act of 3 March 1899, a Department of the Army permit is required for the performance of any dredging activity within the limits of ordinary high water (or mean high water where the river is tidally influenced) for the navigable portion of the river. The Skagit River is considered to be a navigable water of the United States from its mouth to the Ranger Station at Marblemount, Washington, a total length of approximately 77 miles.

b. Under Section 404 of the Clean Water Act of 1977, a Department of the Army permit is required for the discharge of any dredged or fill material waterward of the mean higher high waterline (tidal) or the ordinary high waterline up to the headwaters of the Skagit River. The term "headwaters" means the point on a nontidal stream above which the average annual flow is less than 5 cubic feet per second.

Other Activities

a. Public Law 99, 84th Congress, 69 Stat. 186, 33 U.S.C. provides for emergency and disaster recovery actions. Environmental assessments are prepared and are retained on file at the Seattle District.

b. Real Estate and Management disposal actions, including granting of easements and leases. These actions are excluded from the requirement for preparation of an EA or EIS as these actions do not have a significant impact on the human environment.

Coordination between the U.S. Forest Service and the Corps of Engineers regarding the relationship of Corps programs to the management of the Skagit River System will continue as it has in the past through the normal established

review and comment processes associated with environmental impact statements and assessments and public notices for permit activities. In addition, the Corps is available to confer with the Forest Service, as necessary, to clarify or resolve specific issues that may arise as the management plan is developed and eventually implemented. The Corps emergency actions, such as emergency snagging and clearing and emergency bank protection, do not typically require a public review by virtue of their nature; however, environmental assessments are accomplished and copies of the assessments are on file at the Seattle District and are available upon request. The Corps does not foresee that their emergency actions will have any impact on the management of the Skagit River under the National Wild and Scenic River Act.

7. Federal Emergency Management Agency (FEMA)

The Federal Emergency Management Agency's primary responsibility is the administration of the National Flood Insurance Program, which makes flood insurance available for local property owners to purchase. They have contracted with the Army Corps of Engineers to make hydrologic and hydraulic studies of the Skagit River to delineate areas that are subject to flooding. The study report also establishes flood elevations at most locations on the main stem of the river and its major tributaries. An additional product of the study is the delineation of insurance zones used in premium rate determinations.

The study report is used as the primary basis for promulgating zoning and building code provisions aimed at controlling future growth in flood damage potential. Since the federal government does not have police powers in these areas, the program is dependent on the governments of local communities participating in the program to control future growth in the flood hazard areas.

Federal agencies are not obligated to abide by local land use and building ordinances. However, EOI1988 establishes an obligation for all federal agencies to conduct their business in a manner that is entirely consistent with the floodplain management features of the flood insurance program. The requirements of EOI1988 have been adopted in agency regulations in most cases.

8. Federal Energy Regulatory Commission (FERC)

The FERC is a quasi-judicial agency which is set up to develop the Nation's water resource in a responsible manner including the encouragement and issuance of licenses for non-Federal development of hydroelectric power in the public domain and navigable streams.

Basic authority for the Commission's water resource studies is contained in Sections 4(a), 4(c), 10(a) and 7(b) of the Federal Power Act. These Sections are as follows:

The Commission's policy with respect to water resource development is governed by its responsibilities and authority granted to it in this field under the sections of the Federal Power Act, and the Flood Control Acts, under the Inter-Agency Agreement on Water and Related Land Resources approved by the President on May 26, 1954, and those conferred on its chairman by his membership in the Water Resources Council, organized under the Water Resources Planning Act of July 1965.

The Federal Energy Regulatory Commission has need for up-to-date and reasonably complete plans for the development of the Nation's river basins in order to carry out several provisions of the Federal Power Act. Because of this unfulfilled need for basin plans and its responsibility under the Federal Power Act, the Commission is presently engaged in a limited, but essential Water Resources Appraisal Program of the Nation's river basins.

Other Organizations

1. The Nature Conservancy

This non-profit organization has acquired 850 acres along the Skagit River. These acres, intermingled with existing Department of Game lands, provides a total of 1,500 acres of critical eagle lands, providing a continuous corridor along a seven-mile stretch of the Skagit between the mouths of the Sauk River and Illabot Creek. This area is known as the Skagit Bald Eagle Natural Area. The Conservancy has an area manager in the area to assure protection of the eagles.

The Conservancy manages one of the areas of outstandingly significant eagle habitat which is dependent in a large part to the key spawning areas upstream. Close coordination between the Forest Service and Conservancy is necessary to assure:

- a. protection of key eagle habitat
- b. continuation of the Conservancy programs of:
 1. protection of the eagle
 2. public information and interpretation about the eagle
 3. recreational access to the Conservancy area during summer seasons

2. Audubon Society

This group is a member of the Bald Eagle Advisory Committee. As such, the Audubon is an advisory agency that is both knowledgeable and advisory on the eagle. This group is keenly interested in the Forest Service's proposals concerning eagle management.

We should maintain close contact with them for an advisory capacity.

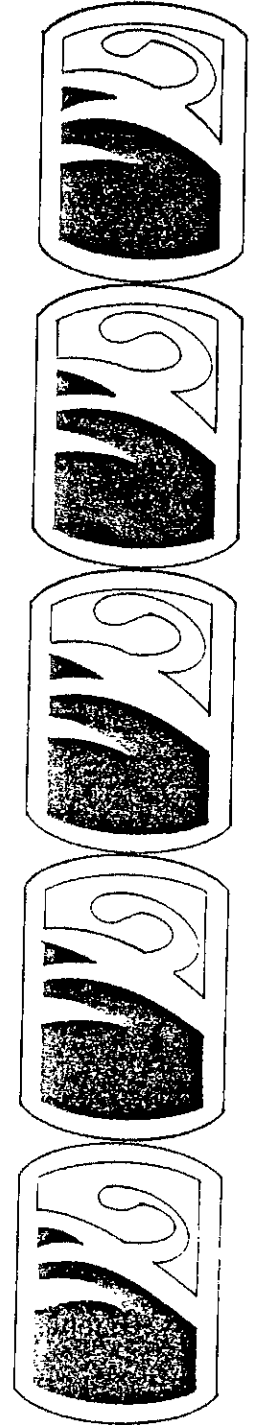
3. Skagit System Cooperative

This is an organization formed by the Upper Skagit, Sauk-Suiattle, and Swinomish Tribes. The purpose of the Cooperative is to provide police patrol, fishery management, fishery research, and coordination with the State of Washington on all matters concerning the Native American Treaty rights and fishery on the Skagit system.

We need to maintain close coordination with the cooperative on matters such as:

- (a) Spawning channels proposed for development by the Native Americans
- (b) Conflicts of use between recreation and Native American fishing rights.

Appendix

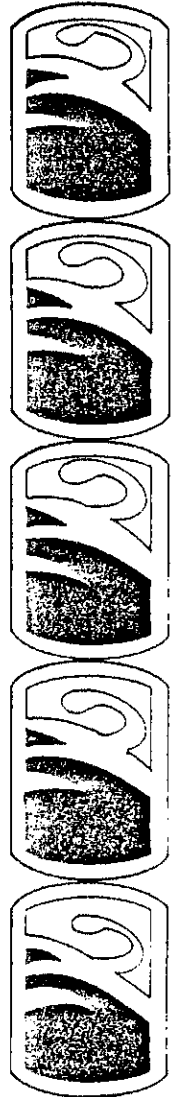


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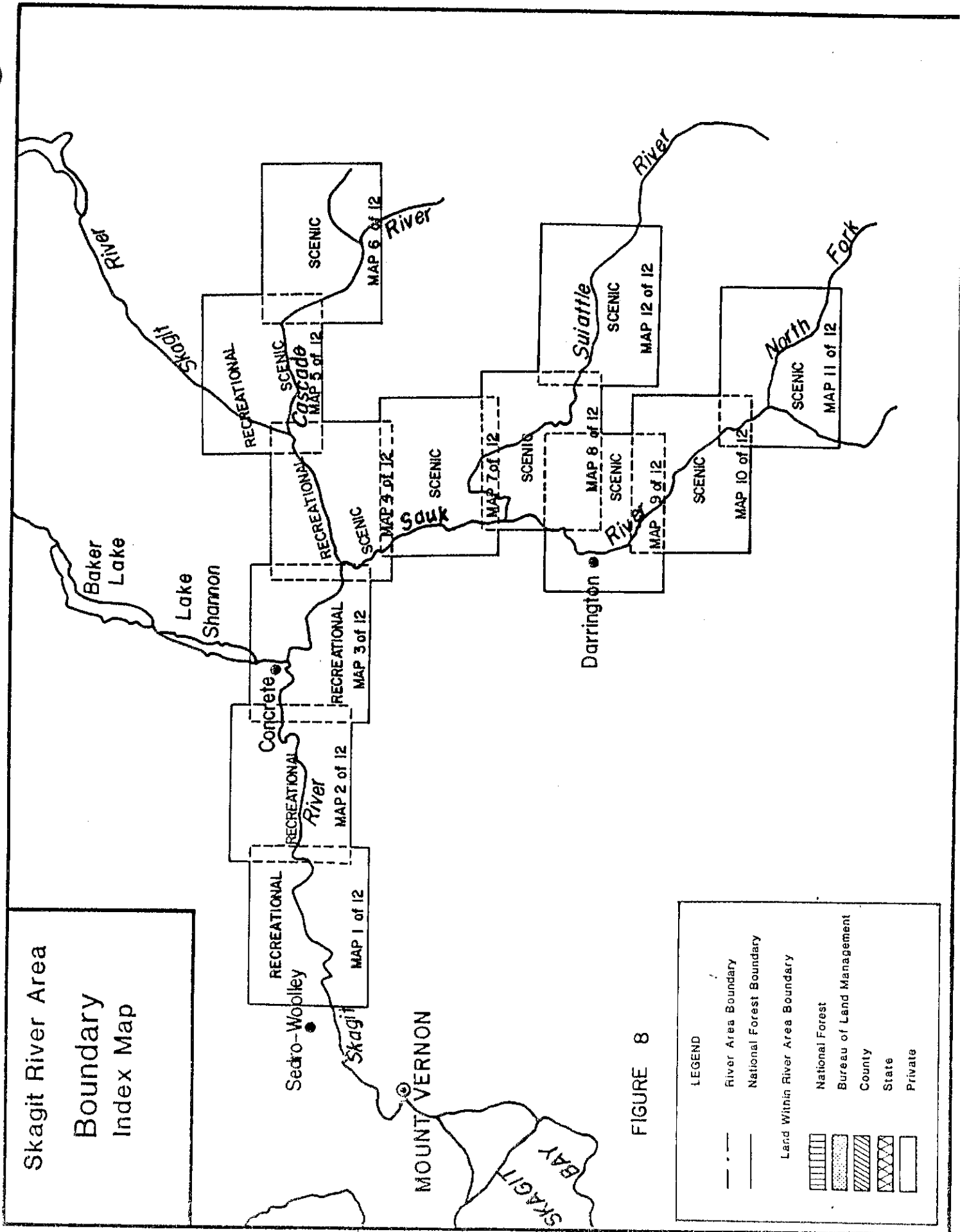
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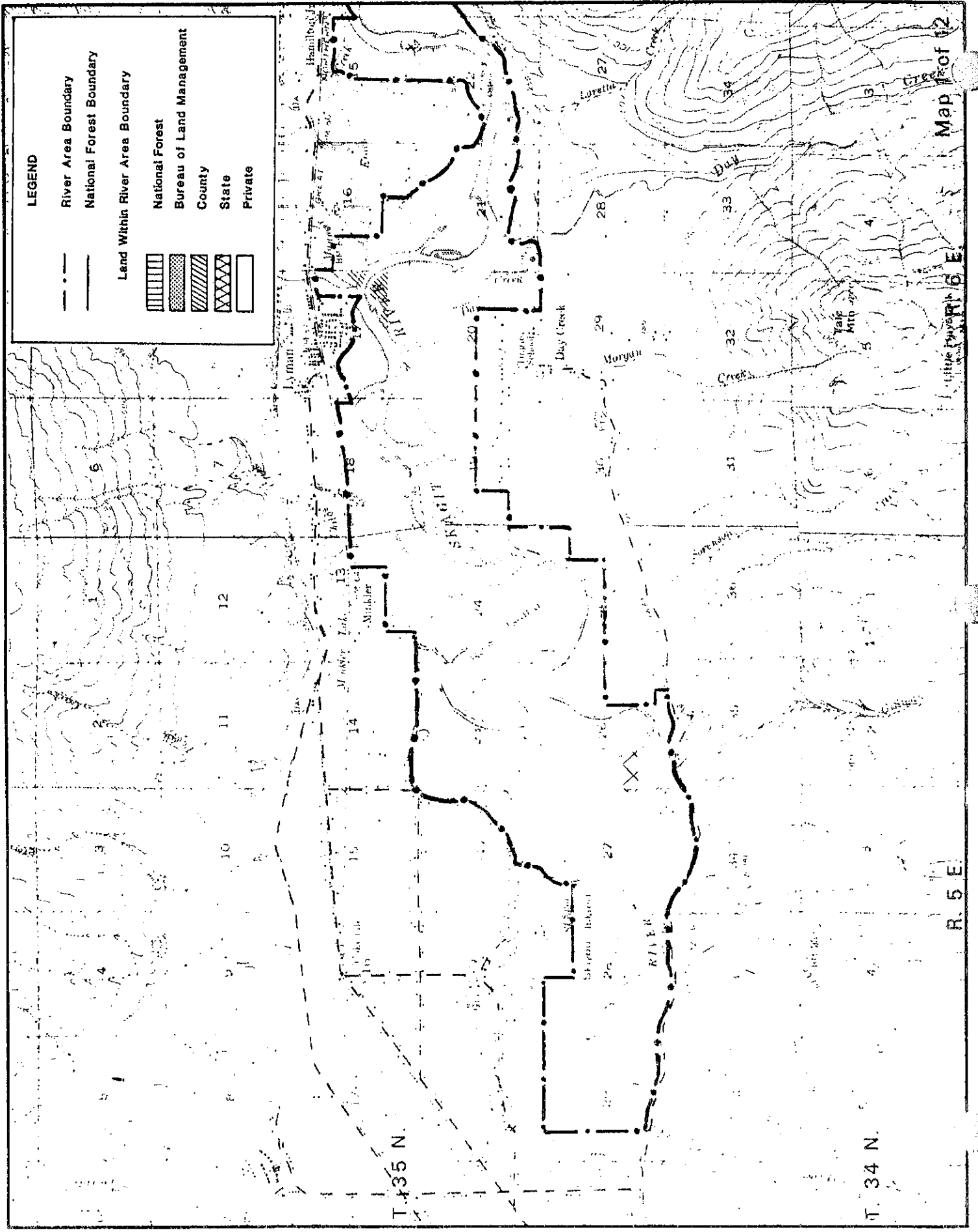
APPENDIX A

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Appendix
A





LEGEND

- River Area Boundary
- National Forest Boundary
- Land Within River Area Boundary
- [Vertical Lines] National Forest
- [Cross-hatch] Bureau of Land Management
- [Diagonal Lines] County
- [Horizontal Lines] State
- [White Box] Private

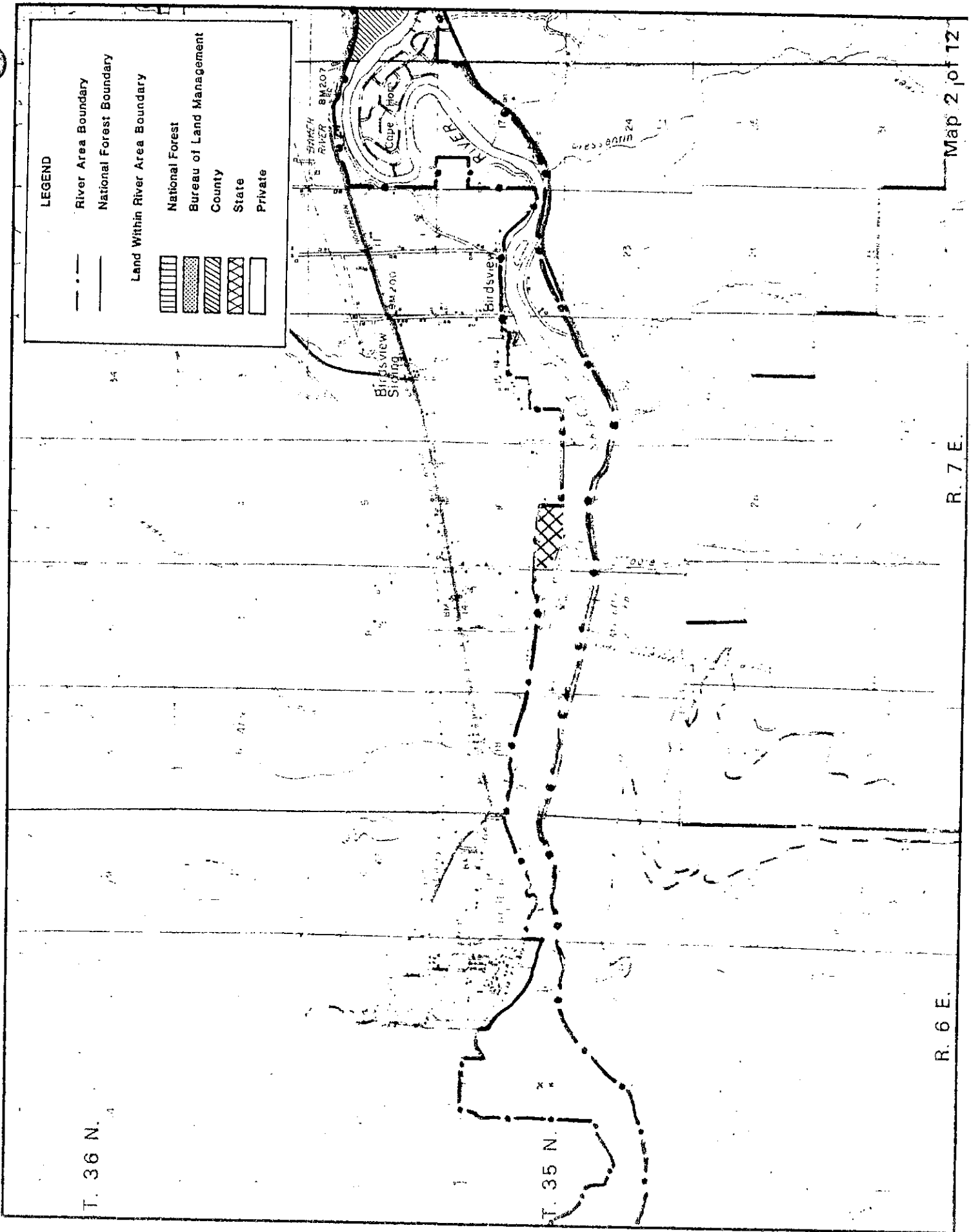
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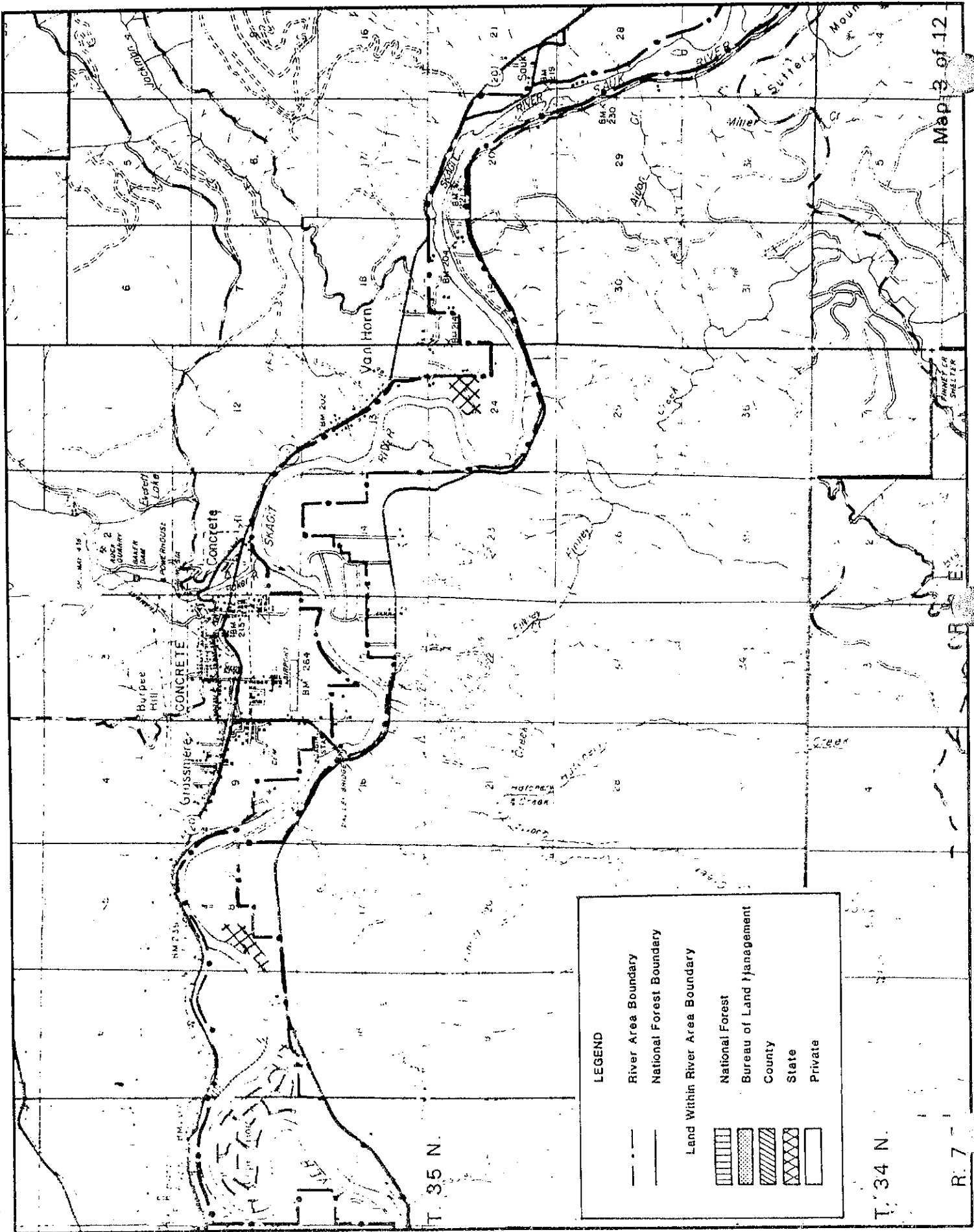
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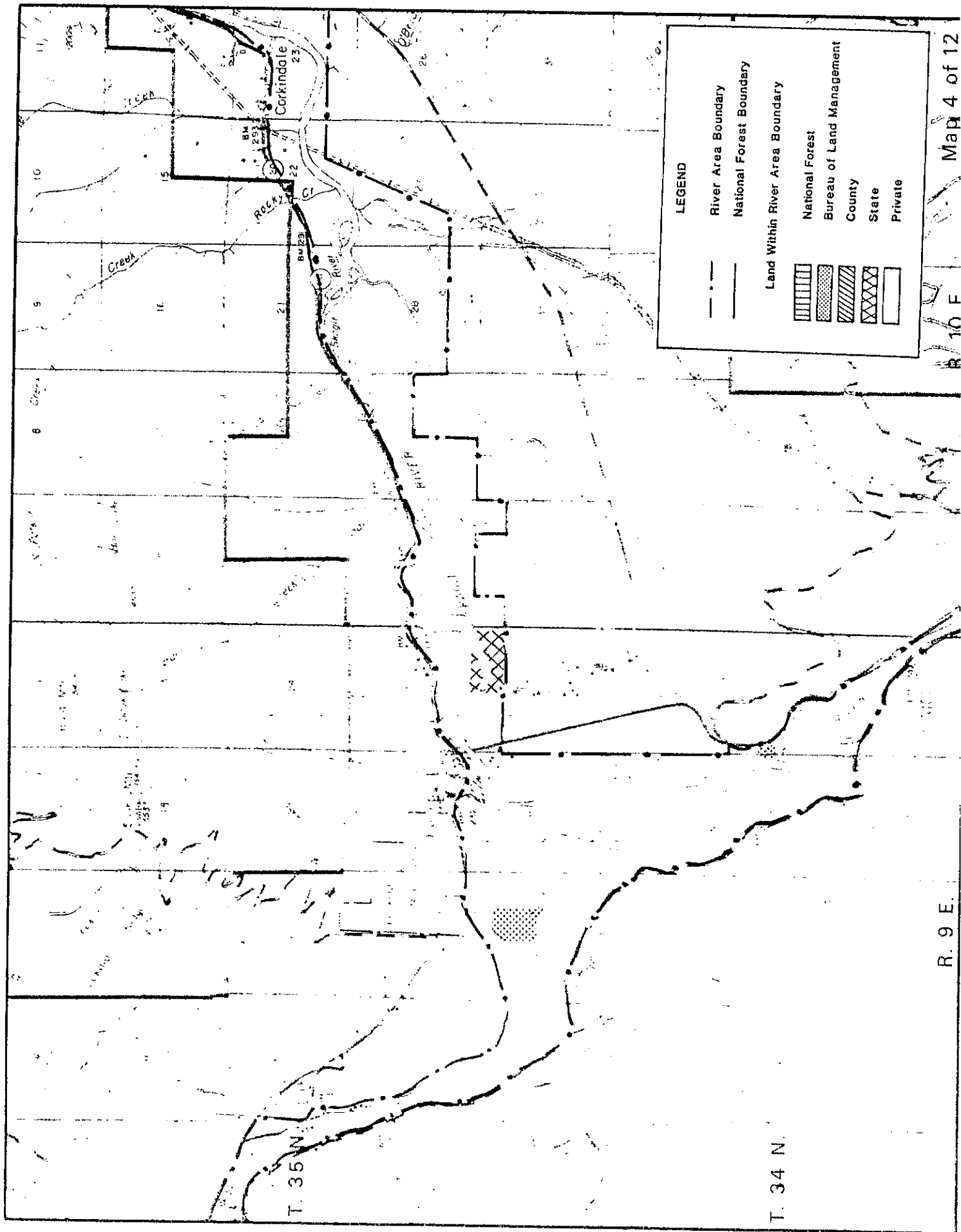
R. 5 E.

T. 35 N.

T. 34 N.







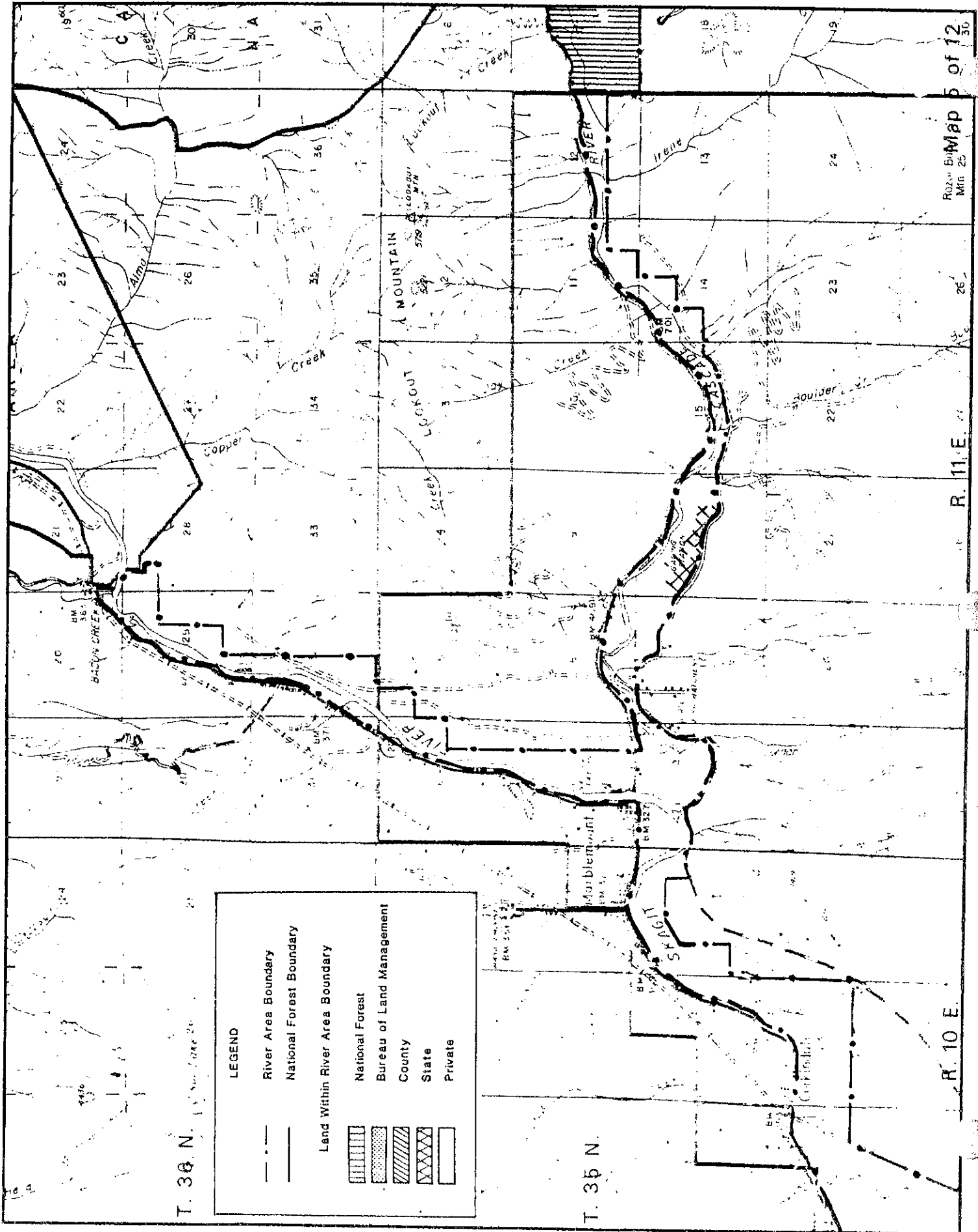
Map 4 of 12

R. 10 F.

R. 9 E.

T. 34 N.

T. 35 N.



T. 36 N.

T. 35 N.

R. 10 E.

R. 11 E.

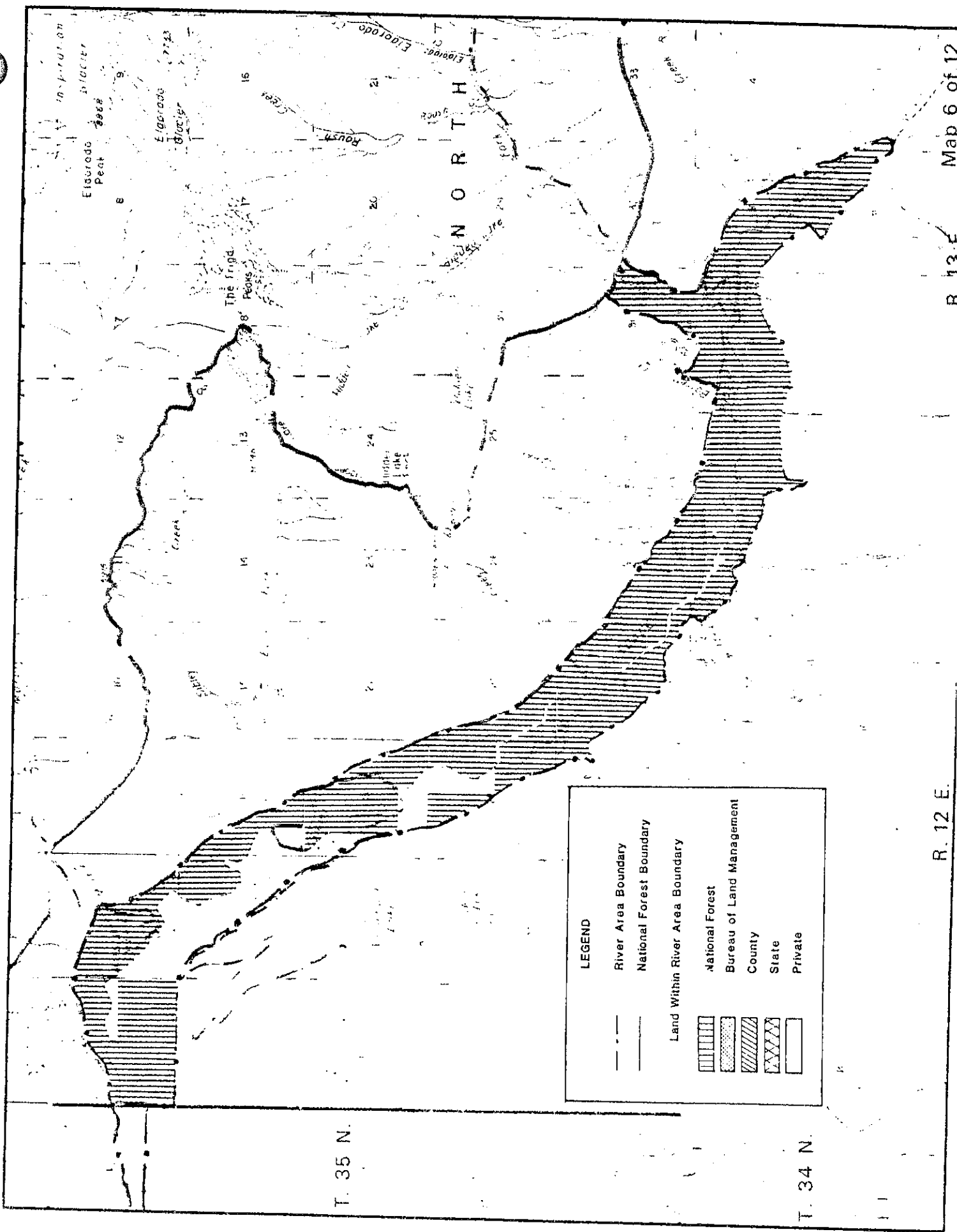
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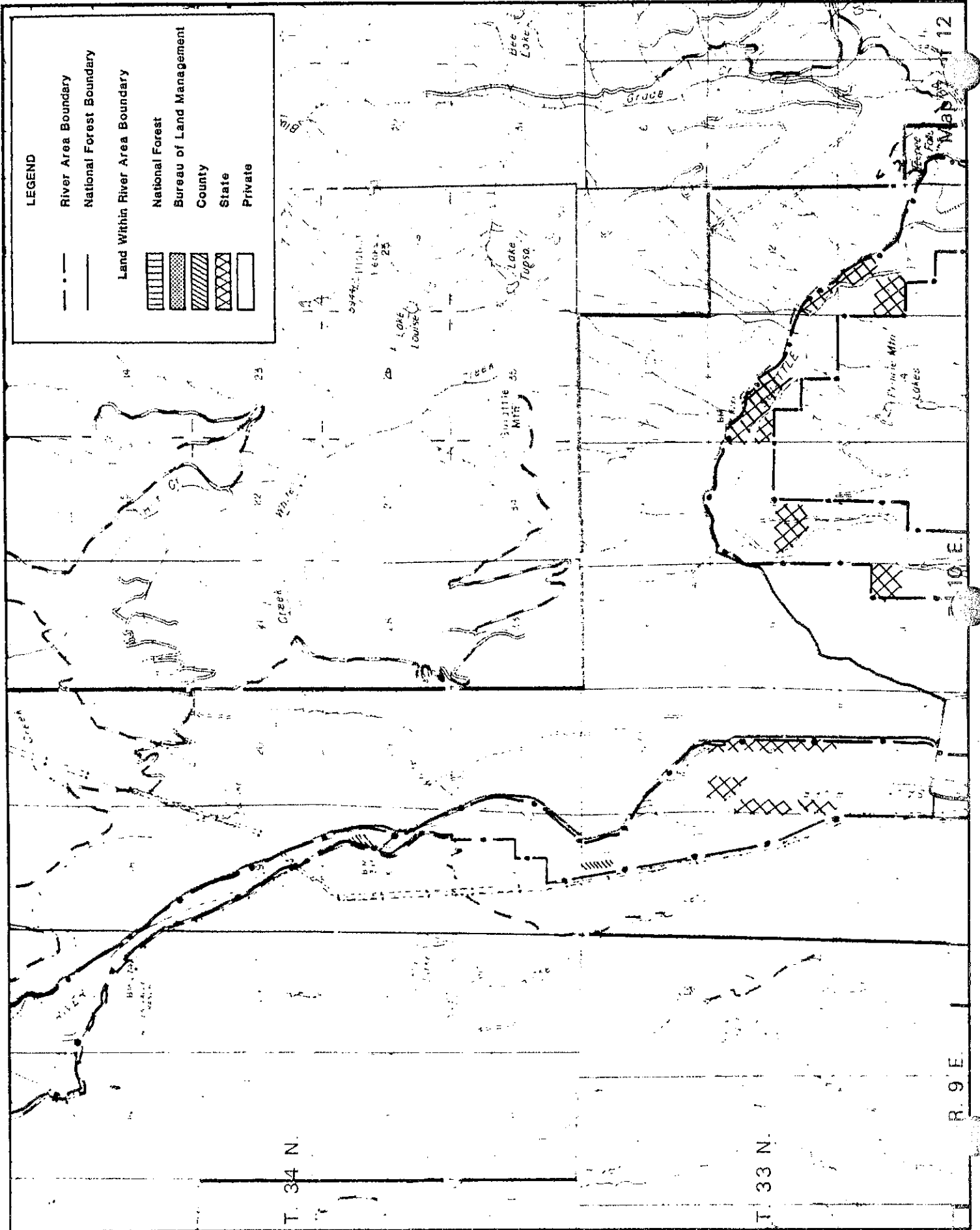
LEGEND

- River Area Boundary
- National Forest Boundary

Land Within River Area Boundary

- National Forest
- Bureau of Land Management
- County
- State
- Private

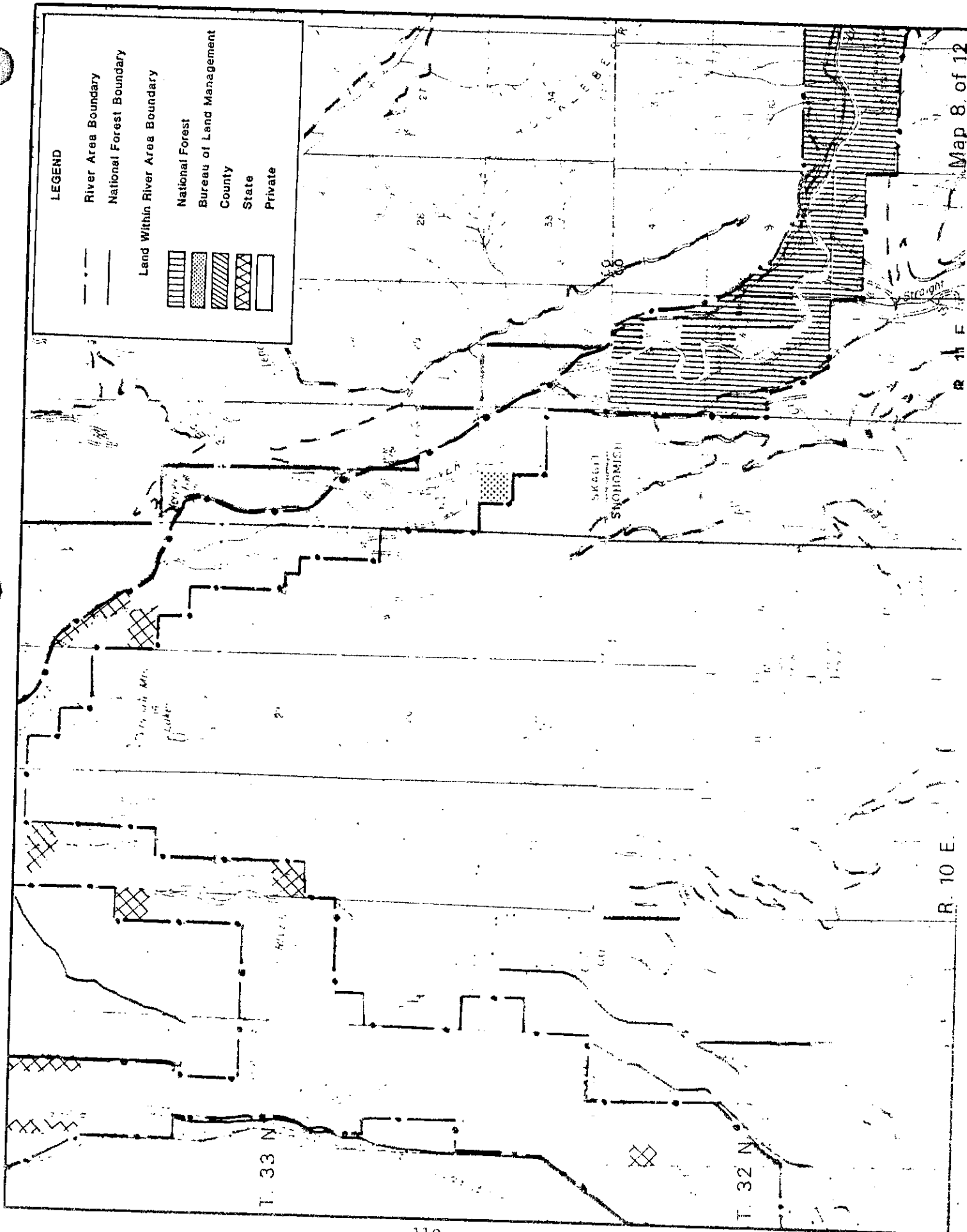


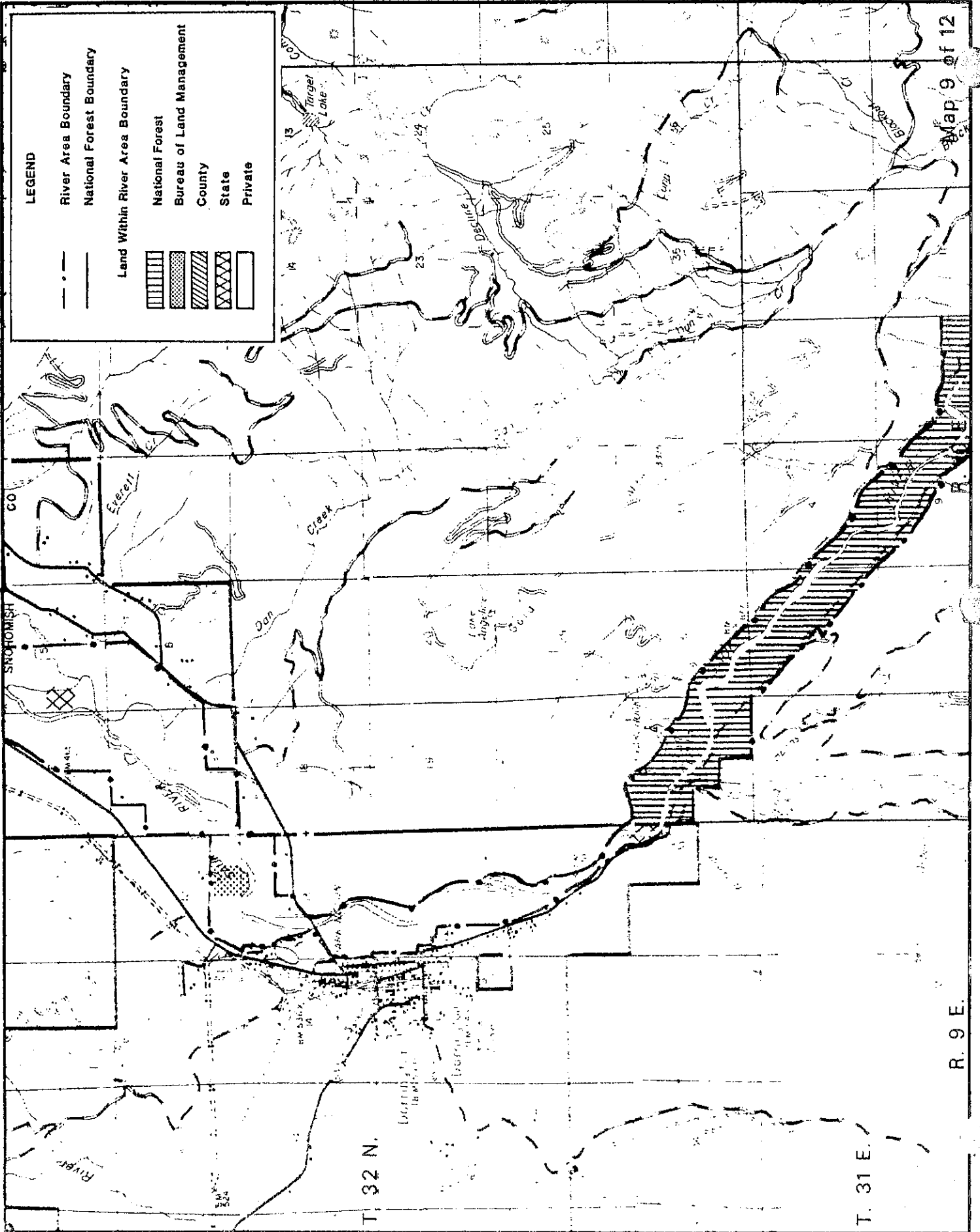


LEGEND

River Area Boundary
 National Forest Boundary
 Land Within River Area Boundary

National Forest
 Bureau of Land Management
 County
 State
 Private

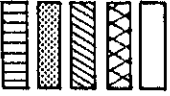




LEGEND

River Area Boundary
 National Forest Boundary

Land Within River Area Boundary

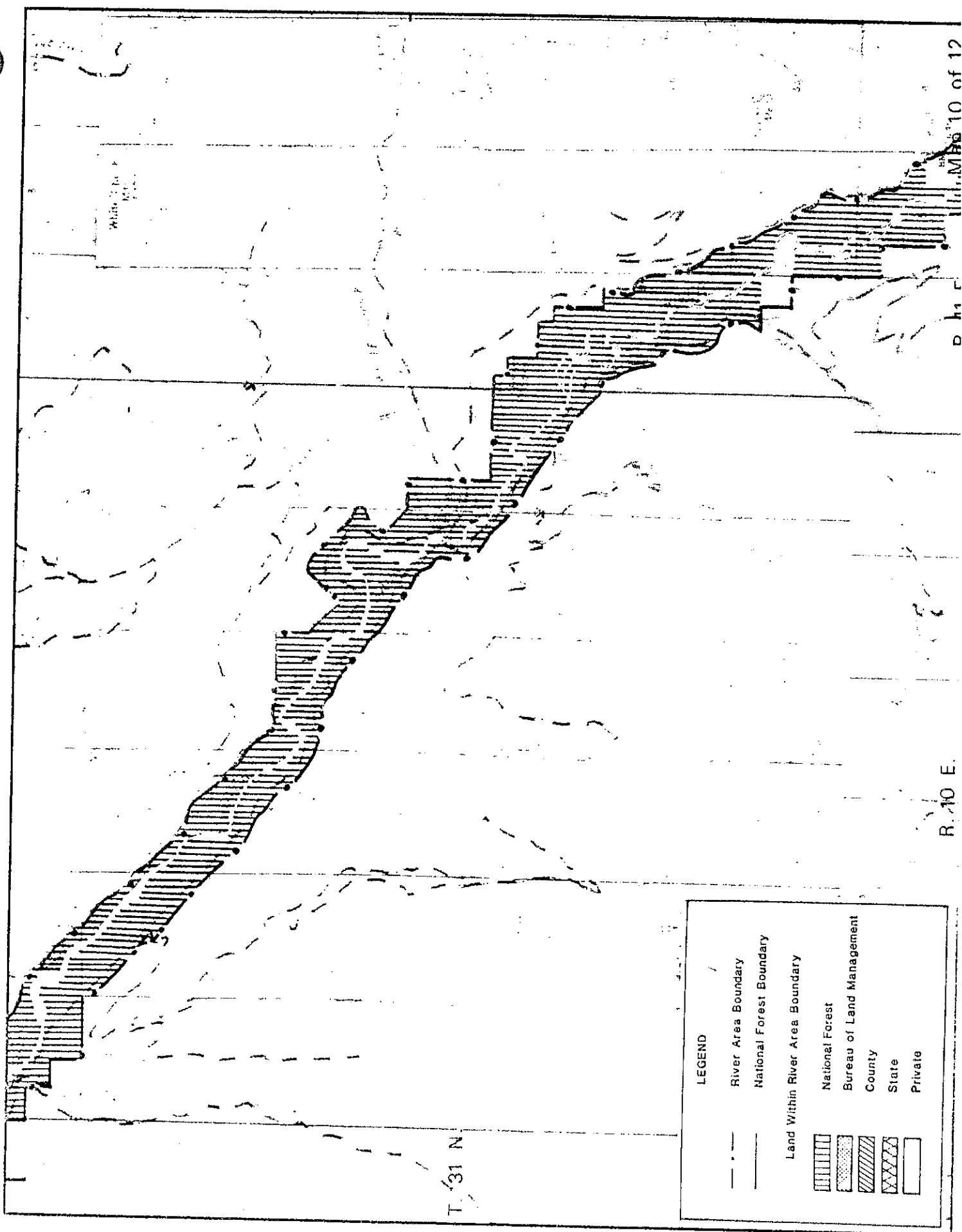


Map 9 of 12

T. 32 N.

T. 31 E.

R. 9 E.



T. 31 N

R. 10 E

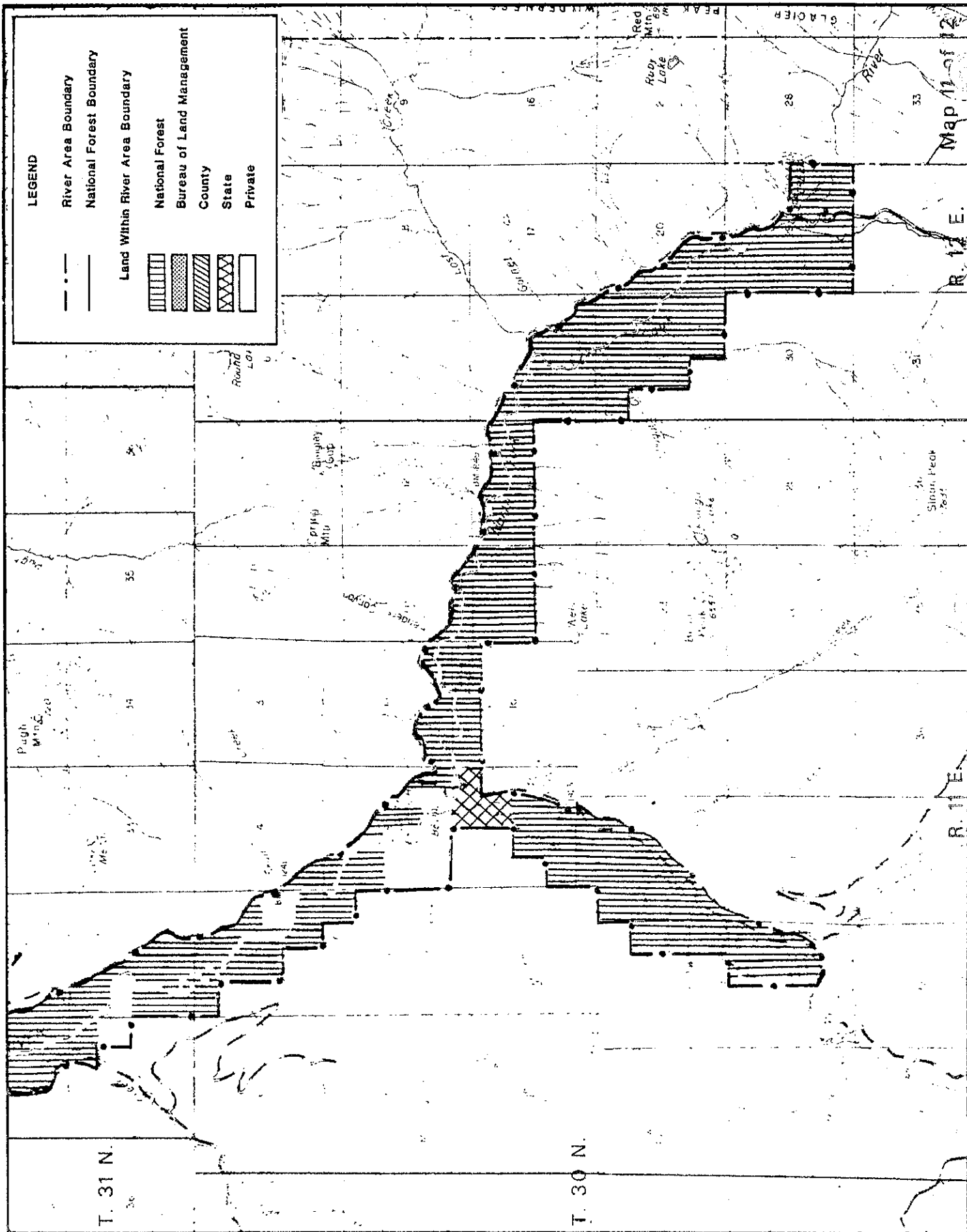
Sheet 10 of 12

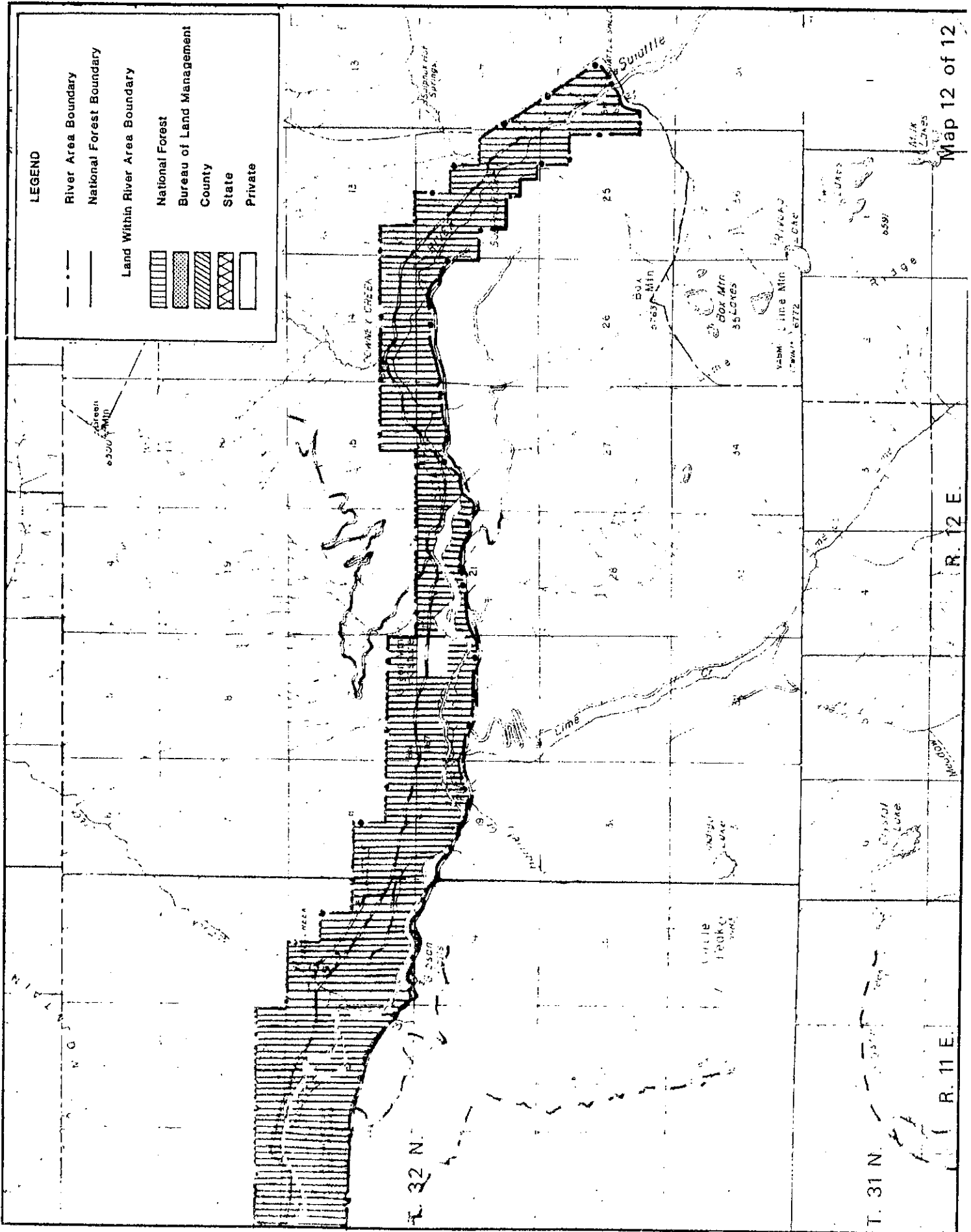
LEGEND

- River Area Boundary
- - - National Forest Boundary

Land Within River Area Boundary

- ▨ National Forest
- ▩ Bureau of Land Management
- ▧ County
- ▦ State
- ▤ Private





LEGEND

River Area Boundary

National Forest Boundary

Land Within River Area Boundary

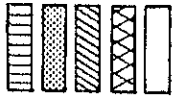
National Forest

Bureau of Land Management

County

State

Private



SKAGIT RIVER

Recreation River Classification includes portions of the lands lying on each side of the Skagit River and is that exterior line which encompasses the following described areas:

WILLAMETTE MERIDIAN

T. 35N., R. 5E.

- Section 13: Lots 1,2,3, NE1/4SE1/4, SE1/4SW1/4
Section 14: That portion of S1/2SE1/4, S1/2SW1/4 lying south of centerline of Road #9144 as shown in records of Skagit County, Washington.
Section 15: That portion of SE1/4SE1/4 lying south of centerline of Hoehn Road #9100 as shown in records of Skagit County, Washington.
Section 22: S1/2SE1/4, Lot 37, 44 of Peaveys Acreage, Tract 2 as filed in records of Skagit County, Washington.
That portion of E1/2NE1/4, N1/2SE1/4 lying east and south of Hoehn Road #9100 as shown in records of Skagit County, Washington.
Section 23: All
Section 24: Lots 1 to 11 inclusive, 13, 14, 15, S1/2NW1/4, N1/2SW1/4
Section 25: Lots 1, 2, 3, NE1/4NE1/4, SW1/4NE1/4, S1/2NW1/4
Section 26: Lots 1 to 9 inclusive, NW1/4NW1/4, S1/2SW1/4, SW1/4SE1/4
Section 27: Lots 1, 2, 3, 6 to 14 inclusive, S1/2SE1/4, SW1/4NW1/4
Section 28: Lots 3 to 16 inclusive, S1/2NE1/4, NE1/4NW1/4
Section 29: Lots 2, 3, 4, NE1/4, E1/2NW1/4
That portion of Lots 6, 7, 8, S1/2S1/2 lying northerly of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
Section 33: That portion of Lot 1, N1/2NE1/4, NW1/4NW1/4 lying northerly of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
Section 34: That portion of N1/2N1/2 lying northerly of the centerline of the South Skagit Highway #0700, as shown in records of Skagit County, Washington.
Section 35: That portion of the N1/2N1/2 lying north of the centerline of the South Skagit Highway #0700, as shown in records of Skagit County, Washington.

T. 35N., R. 6E.

- Section 13: That portion of Sec. 13 lying south of Shangri-La Drive records in plats of Shangri-La on the Skagit and plat of Smith-Skagit Hideaway records of Skagit County, Washington.
That portion of Lot 5, S1/2SE1/4SW1/4, S1/2SW1/4SE1/4 lying north of the South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 14: Lots 3, 4, 5, 6
That portion of of Sec. 13 lying south of centerline of Burlington Northern Railroad grade, except those portions lying within the city limits of the Town of Hamilton as shown in records of Skagit County, Washington, on December 31, 1981. Any lands which lie below the ordinary high water mark as defined by Washington State Department of Natural Resources shall be included with the Wild and Scenic Rivers Boundary.
- Section 15: Lots 1, 2
That portion of SW1/4NE1/4, W1/2SE1/4 lying east of centerline of Cockreham Island Road #9441, as shown in records of Skagit County, Washington.
That portion of S1/2NE1/4 lying south of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
- Section 16: Lots 2, 3, 4, S1/2SW1/4NW1/4
That portion of Lot 5, SW1/4SE1/4 lying west of centerline of Cockreham Island Road #9441, as shown in records of Skagit County, Washington.
- Section 17: That portion of Sec. 17 lying south of centerline of Burlington Northern Railroad, except those portions lying within the city limits of the Town of Lyman as shown in records of Skagit County, Washington, on December 31, 1981. Any lands which lie below the ordinary high water mark as defined by Washington State Department of Natural Resources shall be included within the Wild and Scenic Rivers Boundary.
- Section 18: Lots 3 to 9 inclusive
That portion of Lot 2, S1/2NE1/4, SE1/4NW1/4 lying south of centerline of Great Northern Railroad as shown in records of Burlington Northern.
- Section 19: Lots 1, 2, 3, 4, 6, 7, 8, 9, 10, SE1/4NW1/4
That portion of Lot 5 lying north and west of centerline of Walberg Road #0764, as shown in records of Skagit County, Washington.
- Section 20: Lots 1 to 6 inclusive, W1/2NW1/4, E1/2SE1/4

- Section 21: Lots 2, 3, 5, 6, 7, NW1/4SW1/4,
That portion of Lots 1, 4, NE1/4NE1/4, and Heart of the Skagit
Plat as shown in records of Skagit County, Washington, lying
south and west of centerline of Cockreham Island Road #9441, as
shown in records of Skagit County, Washington.
That portion of Lots 8, 9, SE1/4SW1/4 lying north of centerline of
Old South Skagit Highway, as shown in records of Skagit County,
Washington.
That portion of SW1/4SW1/4 lying north of centerline of South
Skagit Highway #0700, and west and north of the South Lyman Ferry
Road #0706, as shown in records of Skagit County, Washington.
- Section 22: Lots 1, 3, 6, NW1/4NE1/4
That portion of Lots 2, 7, 8, 10, S1/2SW1/4 lying north and west of
centerline of South Skagit Highway #0700, as shown in records of
Skagit County, Washington.
That portion of Lots 4, 5, and Heart of the Skagit Plat as shown in
records of Skagit County, Washington, lying south of centerline
of Cockreham Island Road #9441, as shown in records of Skagit
County, Washington.
- Section 23: That portion of Lots 1, 2, 3, 4, NE1/4NW1/4 lying north of
centerline of South Skagit Highway #0700, as shown in records of
Skagit County, Washington.
- Section 24: That portion of Lots, 1, 11, 12 and Hamilton Iron Claim MS 1186
lying north of centerline of South Skagit Highway #0700, as shown
in records of Skagit County, Washington.

T. 35N., R. 7E.

- Section 12: Lots 5 to 15 inclusive.
That portion of Lots 1, 2, 3, 4, NW1/4NW1/4 lying south of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
- Section 13: Lots 2, 3, 4, 5, 8
That portion of Lots 1, 6, 7, 9, SE1/4NE1/4, NW1/4SE1/4, SE1/4SW1/4, including Skagit Wilde Tract as shown in records of Skagit County, Washington, lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 14: That portion of Lots 1, 2, 3, 4, N1/2SW1/4, lying south of centerline of Presentin Road #9575, as shown in records of Skagit County, Washington.
That portion of Lots 5, 6, 7, 8 lying north of centerline of South Skagit Highway #9575, as shown in records of Skagit County, Washington.
- Section 15: Lots 2, 3, 4, SE1/4SW1/4
That portion of Lot 1, NW1/4SE1/4 lying south of centerline of Cape Horn Road #9500, as shown in records of Skagit County, Washington.
- Section 16: That portion of Lot 1, SE1/4SW1/4 lying south of centerline of Cape Horn Road #9500, as shown in records of Skagit County, Washington.
- Section 17: Lots 5, 6, 7
That portion of Lots 1, 2, 3, 4 lying south of centerline of Cape Horn Road #9500, as shown in records of Skagit County, Washington.
- Section 18: Lots 8, 9
That portion of Lots 3, 6, 7, 10 lying south of centerline of Cape Horn Road #9500, as shown in records of Skagit County, Washington.
That portion of Lots 4, 5, lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 19: That portion of NE1/4NW1/4, N1/2NE1/4 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 20: That portion of Lots 1, 2, NW1/2NE1/4, N1/2NW1/4 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 21: Lots 1, 2, 3
That portion of Lots 4, 5, 6, 7, SW1/4NW1/4 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 22: Lots 3, 4
That portion of Lots 1, 2, 5, 6, 7 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 23: That portion of NW1/4NW1/4 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.

T. 35N., R. 8E.

- Section 7: Lots 3, 7, 8, 9
 That portion of Lots 2, 10, 11, NW1/4NE1/4, SE1/4NW1/4 lying south of centerline of SR20 as it exists in January of 1981.
 That portion of Lots 4, 5, 6, W1/2SW1/4 including Cape Horn on the Skagit #2 as shown in records of Skagit County, Washington, lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 8: Lots 5, 6, 8, 9, 10, and the N1/2 of Lot 7
 That portion of Lots 1, 2, 3, 4 lying south of centerline of SR20 as it exists in January of 1981.
 That portion of SW1/4SW1/4 lying north of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington.
- Section 9: Lot 2, 3, 6, 7
 That portion of Lots 1, 2, 4 lying south and west of centerline of Dallas Road #9680, as shown in records of Skagit County, Washington.
- Section 11: Lots 5, 9 to 12 inclusive
 That portion of Lots 3, 4, 6, 7, 8, SW1/4NW1/4, SW1/4 lying south of centerline of SR20 as it exists in January of 1981, except for Everett Garden tracts. Any portion of Sec. 11 lying within the city limits of the Town of Concrete as shown in records of Skagit County, Washington, on December 31, 1981, shall not be included within the boundary. Any portion that lies below the ordinary high water mark as defined by the Washington State Department of Natural Resources shall be included within the Wild and Scenic Rivers Boundary.
- Section 12: That portion of Lot 1 lying south of centerline of SR20 as it exists in January of 1981.
- Section 13: Lots 2, 5, 6, 7, 8
 That portion of Lots 1, 3, 4, NE1/4NW1/4, NW1/4SE1/4 lying west and south of centerline of SR20 as it exists in January of 1981.

- Section 14: Lots 1, 2, 3, SE1/4NE1/4, NE1/4NW1/4, W1/2NW1/4 including Cedar Grove on the Skagit, as recorded in records of Skagit County, Washington, NW1/4SE1/4NW1/4, NW1/4NE1/4SE1/4NW1/4.
- Section 15: Lots 1, 2, 4, 5, 7, 8, 9, SW1/4NW1/4 including Cedar Grove on the Skagit, as recorded in records of Skagit County, Washington. That portion of Lot 6 lying north of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington. Any portion of Sec. 15 lying within the platted boundary of the town of Concrete as shown in the records of Skagit County, Washington, on December 13, 1981, shall not be included within the boundary. Any portion so platted that lies below the ordinary high water mark as defined by the Washington State Department of Natural Resources shall be included.
- Section 16: Lots 2, 5, SW1/4 of Lot 1
That portion of Lots 3, 4, 6, NW1/4NW1/4, NW1/4SE1/4 lying northeast of centerline of South Skagit Highway #0700, as shown in records of Skagit County, Washington. That portion of Lot 4, 5, 6 lying east and north of centerline of Sauk Valley Road, as shown in records of Skagit County, Washington.
- Section 24: Lots 1 to 8 inclusive, SW1/4NE1/4 including Thunderbird plats of Skagit County, Washington.
That portion of Lots 9, 10, 11, 12 lying north of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.

T. 35N., R. 9E.

- Section 17: That portion of S1/2SW1/4 lying south of centerline of SR20 as it exists in January of 1981.
- Section 19: Lots 1, 2, 3, 5, 6, 9
That portion of Lots 7, 8, 10, 11, SE1/4NE1/4, NW1/4SE1/4 lying north and west of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
- Section 20: Lot 11
That portion of Lots 1, 2, 3, 7, 8 lying south and west of centerline of Great Northern Railroad Grade as shown in records of Burlington Northern.
That portion of Lots 4, 5, 6, 9, 10 lying north and east of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
- Section 21: That portion of Lot 1 (SW1/4SW1/4) lying west of centerline of Northern Railroad, as shown in records of Burlington Northern.
- Section 25: Lots 1, 2, 5, 6
That portion of Lots 3, 4, 12, N1/2SE1/4 lying south of Great Northern Railroad, as shown in records of Burlington Northern.
- Section 26: That portion of S1/2S1/2 lying south of Great Northern Railroad, as shown in records of Burlington Northern.
- Section 27: That portion of S1/2SE1/4 lying south of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
- Section 28: That portion of Lots 1, 3, 4, 7 lying west of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
That portion of Lots 2, 5, 6 lying east of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
- Section 29: That portion of Lots 1, 2 lying east of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
- Section 33: Lot 4
That portion of Lots 1, 5 lying south and west of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
That portion of Lots 2, 3, 6, 7, NE1/4SW1/4 lying north and east of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.

- Section 34: Lots 1, 5 to 12 inclusive, NE1/4SW1/4
That portion of Lots 2, 3, 4 lying south of centerline of Great Northern Railroad, as shown in records of Burlington Northern.
That portion of S1/2SW1/4 lying north of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
That portion of SW1/4SE1/4 lying north and east of centerline of Sauk Valley Road #0800, as shown in records of Skagit County, Washington.
- Section 36: Lots 1, 2, NE1/4NW1/4
That portion of Lot 3 lying north of centerline of Road #0867, as shown in records of Skagit County, Washington.

T. 35N., R. 10E.

- Section 12: That portion of Lots 1, 2, SE1/4SE1/4 lying south of centerline of SR20 as it exists in January of 1981.
- Section 13: Lots 1, 2, 3, 5, NW1/4SW1/4
That portion of Lot 6 lying north of centerline of Rockport-Cascade Road #0870, as shown in records of Skagit County, Washington.
That portion of SE1/4NW1/4 described as parcel 2-001-05, 2-001-06, 2-001-03, 2-001-07, 2-001-22 in the records of Assessor's Office of Skagit County, Washington.
- Section 14: Lots 1, 4
That portion of Lots 2, 3, 5, NE1/4NE1/4, NW1/4SE1/4 lying east of centerline of SR20 as it exists in January of 1981.
- Section 20: That portion of Lot 1 lying south of centerline of SR20 as it exists in January of 1981.
- Section 21: Lots 4, 5, 6
That portion of Lots 1, 2, 3, NW1/4SW1/4, NE1/4SE1/4 lying south of centerline of SR20 as it exists in January of 1981.
- Section 22: Lots 1, 2, 4, 5, 7
That portion of Lot 6 lying west of centerline of Diablo-Seattle transmission lines, as shown in records of the City of Seattle.
That portion of Lot 3, SW1/4NE1/4, SE1/4NW1/4, NW1/4SW1/4 lying south of centerline of SR20 as it exists in January of 1981.
- Section 23: Lots 1, 3 to 7 inclusive, SE1/4NE1/4, N1/2SE1/4
That portion of Lot 2 lying south and east of centerline of SR20 as it exists in January of 1981.
- Section 27: Lots 2, 3
That portion of Lots 1, 4, 5, NW1/4NE1/4, NE1/4SW1/4 lying west of centerline of Diablo-Seattle transmission lines, as shown in records of the City of Seattle.
- Section 28: Lots 1 to 7 inclusive, NE1/4NW1/4, S1/2NW1/4, N1/2SW1/4
- Section 29: Lots 3, 7, 8, 10, 12, 13, SW1/4NE1/4, SW1/4SW1/4, S1/2NW1/4
That portion of Lots 1, 2, NE1/4NW1/4, SW1/4NW1/4 lying south of centerline of SR20 as it exists in January of 1981.

Section 30: Lots 1, 3 to 8 inclusive, SE1/4SW1/4
That portion of Lots 2, 10, S1/2NE1/4, SE1/4NW1/4 lying south of
centerline of SR20 as it exists in January of 1981.

Section 31: Lots 1, 2, 3

T. 35N., R. 11E.

- Section 5: Lot 4
- Section 6: Lots 1, 2, 9, 10, 15
That portion of Lots 3, 4, 8, 11, 14 lying east of centerline of SR20 as it exists in January of 1981.
- Section 7: Lots 1, 6, 7, 12, W1/2SE1/4
That portion of Lots 2, 3, 5, 8, 11 lying east of centerline of SR20 as it exists in January of 1981.
- Section 18: Lots 1 to 10 inclusive, 12
That portion of Lots 11, 13, NE1/4SW1/4, N1/2SE1/4 lying north of centerline of Rockport-Cascade Road #0870, as shown in records of Skagit County, Washington.

T. 36N., R. 11E.

- Section 20: Lot 4, 5
That portion of Lots 1, 2, 3 lying south of centerline of SR20 as it exists in January of 1981.
- Section 21: Lot 4
That portion of Lot 3, lying west of Ross Lake National Recreation area.
- Section 28: That portion of Lot 2, lying west of Ross Lake National Recreation area.
- Section 29: Lots 1, 2, 5, 6, 9
That portion of Lots 3, 4, 7, 8 lying east of centerline of SR20 as it exists in January of 1981.
- Section 31: Lot 4
That portion of Lot 5 lying east of centerline of SR20 as it exists in January of 1981.
- Section 32: Lots 1, 4, 5, 8, 9, SE1/4SW1/4
That portion of Lots 2, 3, 6, 7 lying east of centerline of SR20 as it exists in January of 1981.

CASCADE RIVER

Scenic River Classification includes portions of the lands lying on each side of the Cascade River and is that exterior line which encompasses the following described areas:

WILLAMETTE MERIDIAN

T. 35N., R. 11E.

- Section 7: That portion of the SE1/4SE1/4 lying south of centerline of the Cascade River Road #9795, as shown in records of Skagit County, Washington.
- Section 8: Lots 1, 2, 3
That portion of Lot 4, N1/2S1/2 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
- Section 9: That portion of Lot 1, SE1/4SW1/4 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
- Section 11: Lots 4, 5
That portion of Lots 1, 2, 3 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
- Section 12: Lots 5 to 8 inclusive
That portion of Lots 1, 2, 3, 4 lying south of centerline of the Cascade River Road #9795, as shown in records of Skagit County, Washington.
- Section 14: Lots 1, 2, 4
That portion of Lot 3 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
That portion of Lots 5, 6, 7, 8 lying north of centerline of South Boundary of Cascade River Park #1, as shown in records of Skagit County Plats.
- Section 15: That portion of Lots 1, 2, 3, 4 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
That portion of Lots 5, 6, 7, 8 lying north of centerline of South Boundary of Cascade River Plats #2 and #3, as shown in records of Skagit County Plats.
- Section 16: Lots 4 to 8 inclusive
That portion of Lots 1, 2, 3 lying south of centerline of Cascade River Road #9795, as shown in records of Skagit County, Washington.
That portion of N1/2SE1/4, S1/2NW1/4 lying north of centerline of South Cascade Road, as shown in records of Skagit County, Washington.
- Section 17: That portion of Lots 1, 2, 3, 4, N1/2NW1/4 lying north of centerline of South Cascade Road #9795, as shown in records of Skagit County, Washington.
- Section 18: Lots 1 to 8 inclusive, 10, NW1/4NE1/4
That portion of Lots 9, 11, 12, 13, N1/2SE1/4 lying north of centerline of South Cascade Road #9795, as shown in records of Skagit County, Washington.

T. 35N., R. 12E.

- Section 7: Lots 1, 2, 3, 4, S1/2
That portion of S1/2NW1/4 lying south of centerline of Cascade River Road, F.S. #3528.
- Section 8: Lots 1, 2, 3, 5, 6, 7,
That portion of Lot 4, N1/2NW1/4, SE1/4NW1/4, SW1/4NE1/4, SE1/4SE1/4 lying south of centerline of Cascade River Road, F.S. #3528.
- Section 16: Lots 2, 4, 5,
That portion of Lots 1, 3, NW1/4NW1/4, SE1/4NW1/4, SE1/4SW1/4, SW1/4SE1/4 lying west of centerline of Cascade River Road, F.S. #3528.
- Section 17: Lots 2 to 6 inclusive
That portion of Lot 7, N1/2NW1/4, SW1/4NW1/4, NE1/4SW1/4, S1/2SE1/4 lying east of centerline of Irene Creek Road, F.S. #3542.
That portion of Lot 1 lying south and west of centerline of Cascade River Road, F.S. #3528.
- Section 20: That portion of E1/2NE1/4 lying east of centerline of Irene Creek Road, F.S. #3542.
- Section 21: Lots 1, 2, 4, 5, 7, NE1/4NW1/4
That portion of Lot 8, W1/2NE1/4, SE1/4NE1/4, NE1/4SE1/4 lying west of centerline of Cascade River Road, F.S. #3528.
That portion of Lots 3, 6, 7, SW1/4SW1/4 lying east of a line beginning at the intersection of Irene Creek Road, F.S. #3542, with the 1400 ft. elevation line; thence approximately 2600 ft. along that elevation line to the south line of Sec. 21.
- Section 22: (Unsurveyed)
That portion of the SW1/4SW1/4 lying west of centerline of the Cascade River Road, F.S. #3528.
- Section 27: (Unsurveyed)
That portion of what if surveyed would probably be W1/2NW1/4, S1/2 lying west of centerline of Cascade River Road, F.S. #3528.
- Section 28: Lots 1, 2, S1/2NE1/4, E1/2SE1/4
That portion of the E1/2NW1/4, NE1/4SW1/4, W1/2SE1/4 lying east of the 1600 ft. elevation line beginning at the north line of Sec. 28; thence approximately 6600 ft. in a southeasterly direction to its intersection with the south line of Sec. 28.
- Sections 33 and 34: (Unsurveyed)
That portion lying east of the following described line: beginning at what would probably be if surveyed, the north line of NW1/4NE1/4 of Sec. 33; thence approximately 1650 ft. in a southerly direction to Fourth Creek; thence approximately 1300 ft. in an easterly direction to its intersection with the east line of NE1/4NE1/4 of Sec. 33; thence approximately 400 ft. in a southwesterly direction to the intersection of the 1600 ft. elevation line with an unnamed creek in what would be if surveyed

the S1/2NW1/4; thence along South Side Road, F.S. #1570013 a distance of approximately 3300 ft. to its intersection with F.S. Road #1570; thence approximately 50 ft. in a southerly direction to what would probably be when surveyed the south line of SE1/4SE1/4 of Sec. 34.

Section 35: (Unsurveyed)

All that portion lying west of the Cascade River Road, F.S. #3528 in what would probably be when surveyed the SW1/4NW1/4, SW1/4, W1/2SE1/4, SE1/4SE1/4.

Section 36: (Unsurveyed)

All that portion lying south of the Cascade River Road, F.S. #3528 in what would probably be when surveyed the S1/2SW1/4. That portion lying east of Barrett Creek in what would probably be when surveyed the SE1/4SE1/4.

T. 35N., R. 13E.

Section 31: (Unsurveyed)

All that portion lying within a line described as follows:
Beginning at the intersection of Barrett Creek and the 2400 ft. elevation line; thence approximately 7200 ft. along that contour line to the second unnamed stream located in what would probably be if surveyed the SW1/4NE1/4; thence approximately 1400 ft. along that unnamed stream to its intersection with the north fork of the Cascade River; thence perpendicular to the thread of the stream approximately 200 ft. to Cascade Road, F.S. #3528; and lying west of Cascade River including portions of what would probably be if surveyed SW1/4NE1/4, SE1/4NW1/4, E1/2SW1/4, SW1/4SW1/4, W1/2SE1/4.

T. 34N., R. 11E.

Sections 1 and 2: (Unsurveyed)

That portion lying north of a line described as follows:
Beginning at the intersection of F.S. Road #1570 with the north line of what would probably be where surveyed NE1/4NW1/4 of Sec. 2; thence south a distance of approximately 2900 ft. along F.S. Road #1570 to its intersection with F.S. Road #1571; thence approximately 4000 ft. along F.S. Road #1571 to its intersection with Sonny Boy Creek; thence along Sonny Boy Creek a distance of approximately 1900 ft. to its intersection with the 1800 ft. elevation line; thence along the 1800 ft. elevation line to its intersection with what would probably be when surveyed the section line of the NE1/4SE1/4 of Sec. 1.

T. 34N., R. 12E.

Sections 4, 5, 6, 8, 9: (Unsurveyed)

That portion of Sections 4, 5, 6, 8, 9 lying north of a line beginning at the intersection of what would probably be when surveyed the NW1/4SW1/4 Sec. 6 and the 1800 ft. elevation line; thence along the elevation line approximately 1200 ft. to its intersection with an unnamed creek; thence south approximately 200 ft. to the intersection of the creek with the 2000 ft. elevation line; thence along the 2000 ft. elevation line across Sec. 5, 6 approximately 8500 ft. to its intersection with an unnamed stream in what would probably be when surveyed the SE1/4SW1/4; thence along that unnamed stream a distance of approximately 1300 ft. to its intersection with the 2600 ft. elevation line; thence along the 2600 ft. elevation line approximately 4900 ft. to the north line of what will probably be when surveyed the SW1/4SW1/4 Sec. 9

That portion of what would probably be when surveyed the NE1/4NE1/4 Sec. 5 lying south of Cascade Road, F.S. #3528.

That portion of what would probably be when surveyed the NW1/4, NW1/4NE1/4, S1/2NE1/4, SW1/4 of Sec. 5 lying south and west of F.S. Road #1590.

That portion of what would probably be when surveyed the SW1/4SW1/4 of Sec. 4 lying west of F.S. Road #1590.

That portion of what would probably be when surveyed the NW1/4NW1/4 lying west of F.S. Road #1590.

That portion of SW1/4NW1/4, NW1/4SW1/4 lying west of a trail which follows the 1800 ft. elevation line.

SUIATTLE RIVER

Scenic River Classification includes portions of the lands lying on each side of the Suiattle River and is that exterior line which encompasses the following described areas:

WILLAMETTE MERIDIAN

T. 33N., R. 10E.

- Section 3: That portion of Lots 13, 14, 15 lying south of centerline of Suiattle River Road (F.S. #345).
- Section 10: Lots 3, 6 to 15 inclusive
That portion of Lots 1, 2, 4, 5 lying south of centerline of Suiattle River Road (F.S. #345).
- Section 11: Lots 5, 7, 10 to 13 inclusive
That portion of Lots 4, 6, 8, 9, SW1/4NE1/4 lying south of centerline of Suiattle River Road (F.S. #345).
- Section 12: Lots 5, 6
That portion of N1/2SW1/4, SE1/4SW1/4 lying south of centerline of Suiattle River Road (F.S. #345).
- Section 13: Lots 2 to 5 inclusive, 7 to 10 inclusive, SE1/4SE1/4
That portion of Lots 1, 6, NW1/4NE1/4, SE1/4NE1/4, NE1/4SE1/4 lying south of centerline of Suiattle River Road (F.S. #345).
- Section 15: Lots 1, 2, 4, 6 to 10 inclusive
- Section 16: Lots 1, 2, 3
- Section 20: Lots 4 to 8 inclusive, 11
- Section 21: Lots 1 to 8 inclusive, NE1/4NE1/4, S1/2S1/2
- Section 22: Lots 1, 2, 3, 5
- Section 24: Lots 1 to 8 inclusive, NE1/4NW1/4SE1/4
- Section 25: Lots 1, 2

T. 33N., R. 11E.

- Section 18: That portion of Lots 3, 4 lying west of centerline of Suiattle River Road (F.S. #345).
- Section 19: That portion of Lots 1 to 5 inclusive, SE1/4SW1/4 lying west of centerline of Suiattle River Road (F.S. #345).
- Section 30: Lots 1 to 7 inclusive
That portion of Lots 8, 9, W1/2NE1/4, NW1/4SE1/4 lying west of centerline of Suiattle River Road (F.S. #345).
- Section 31: Lots 2, 5, 6
That portion of Lot 1 lying west of centerline of Suiattle River Road (F.S. #345).
- Section 32: Lots 2, 5, 6
That portion of Lots 1, 3, 4, 7, SE1/4NW1/4, SW1/4SE1/4 lying west of centerline of Suiattle River Road (F.S. #345).

T. 32N., R. 11E.

- Section 5: Lots 2 to 8 inclusive, NW1/4SW1/4
That portion of Lot 1, E1/2SE1/4 lying west of a line parallel to and 500 ft. east of the centerline of Suiattle River Road (F.S. #345).
- Section 8: Lots 2 to 6 inclusive, 8, 9
That portion of Lot 1, SE1/4NE1/4 lying west of a line running parallel to and 500 ft. east of the centerline of Suiattle River Road (F.S. #345).
That portion of Lot 7, W1/2NW1/4, SE1/4SW1/4 lying east of centerline of the South Side Suiattle Road (F.S. Road #325).
- Section 9: Lots 3 to 7 inclusive
That portion of Lots 1, 2, W1/2NW1/4, NE1/4SE1/4 lying west of a line running parallel to and 500 ft. east of the centerline of Suiattle River Road (F.S. #345).
- Section 10: Lot 1, S1/2SW1/4, SW1/4SE1/4
- Section 11: Lot 1, SE1/4SW1/4, S1/2SE1/4
- Section 13: Lots 1 to 4 inclusive, SW1/4NE1/4, N1/2NW1/4, SW1/4NW1/4, NW1/4SW1/4, N1/2SE1/4
That portion of Lots 5, 6, 7, 8 lying north of centerline of South Side Suiattle Road (F.S. Road #325).
- Section 14: Lots 1 to 7 inclusive, NE1/4NE1/4, S1/2NW1/4
That portion of Lots 8, 9, N1/2SW1/4 lying north of centerline of South Side Suiattle Road (F.S. Road #325).
- Section 15: Lots 1 to 7 inclusive, SE1/4NE1/4
- Section 16: Lots 1, 2, NW1/4NE1/4, N1/2NW1/4
- Section 24: That portion of Lots 1, 2, NE1/4NE1/4, NW1/4NW1/4 lying north of centerline of South Side Suiattle Road (F.S. #325).

T. 32N., R. 12E.

- Section 13: SW1/4SW1/4
 Section 14: Lots 2 to 5 inclusive
 Section 15: Lot 1, SW1/4SE1/4
 Section 17: S1/2S1/2
 Section 18: Lots 3, 4, E1/2SW1/4, S1/2SE1/4
 Section 19: Lots 1, 2, 3, 4
 That portion of Lots 5 to 8 inclusive lying north of centerline of South Side Suiattle Road (F.S. Road #325).
 Section 20: Lots 1 to 4 inclusive, NE1/4NE1/4
 That portion of Lots 5, 6, 7, 8 lying north of centerline of South Side Suiattle Road (F.S. Road #325).
 Section 21: Lots 1 to 4 inclusive
 That portion of Lots 5, 6, 7, 8 lying north of centerline of South Side Suiattle River Road (F.S. Road #325).
 Section 22: Lots 2, 3, 4
 That portion of Lots 1, 5, 6, 7, 8 lying north of centerline of South Side Suiattle River Road (F.S. Road #325).
 Section 23: Lots 1, 2
 That portion of Lots 3, 4, N1/2NW1/4 lying north of centerline of South Side Suiattle River Road (F.S. Road #325).
 Section 24: Lots 1 to 9 inclusive, NE1/4NW1/4, N1/2SW1/4SE1/4, SE1/4SW1/4SE1/4
 Section 25: Lot 1

T. 32., R. 13E.

- Section 24: That portion of the SE1/4 lying west of the boundary as described in the National Wilderness Preservation System - Glacier Peak Wilderness Designation dated December 19, 1968.
- Section 25: That portion of the W1/2, SW1/4NE1/4, NW1/4SE1/4 lying west of the boundary as described in the National Wilderness Preservation System - Glacier Peak Wilderness Designation dated December 19, 1968.

SAUK RIVER

Scenic River Classification includes portions of the lands lying on each side of the Sauk River and is that exterior line which encompasses the following described areas:

WILLAMETTE MERIDIAN

T. 34N., R. 9E.

- Section 2: Lots 1 to 10 inclusive, SE1/4NE1/4, SE1/4SW1/4
That portion of SW1/4NW1/4, W1/2SW1/4 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 3: That portion of Lots 1, 2, SE1/4NE1/4 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 11: Lots 1, 2, W1/2NE1/4, E1/2SE1/4
That portion of NW1/4NW1/4, E1/2NW1/4, NE1/4SW1/4, W1/2SE1/4 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 12: Lots 2, 6, 7, 8, SW1/4SW1/4
That portion of Lots 1, 3, 4, 5, 9, lying to the west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 13: That portion of Lots 1, 4, NE1/4NE1/4 lying west of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of Lots 2, 3, 5, NW1/4NW1/4, SE1/4NW1/4 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 14: That portion of N1/2NE1/4 lying north of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.

T. 34N., R. 10E.

- Section 18: That portion of Lots 2, 3, 5, SE1/4SW1/4 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of Lot 4 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 19: That portion of Lots 1, 4, 5, 10, 13, 16 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of Lots 2, 3, 6, 9 lying east of centerline of Sauk Road #0800, as shown in records of Skagit County, Washington.
- Section 30: That portion of Lots 1, 6, 7, 12 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of Lots 2, 5, 8, 11, SW1/4SE1/4 lying east of centerline of Suak Road #0800, as shown in records of Skagit County, Washington.
- Section 31: Lots 1, 2, 5, 6, 7, 11, E1/2 of Lot 8
That portion of SE1/4SW1/4 lying east of the Seattle-Skagit Transmission line, as shown in records of Skagit County, Washington.
That portion of Lot 12 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 32: That portion of Lots 1, 2, 3, SW1/4SW1/4 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.

T. 33N., R. 10E.

- Section 5: Lot 7
That portion of Lots 5, 6, E1/2SW1/4, SW1/4SE1/4 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 6: Lots 2, 6, 8, 11
That portion of Lots 1, 7 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of Lot 3, W1/2SE1/4, SE1/4NW1/4 lying east of centerline of Diablo-Seattle transmission lines as shown in records of the City of Seattle, Washington.
- Section 7: Lot 1, SE1/4NE1/4
That portion of W1/2NE1/4, NW1/4SE1/4, E1/2SE1/4 lying east of centerline of Diablo-Seattle transmission lines as shown in records of the City of Seattle, Washington.
- Section 8: Lots 1 to 7 inclusive, E1/2NW1/4
That portion of W1/2NE1/4, W1/2SE1/4 lying west of centerline of East of Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 17: Lots 1 to 6 inclusive, 8
That portion of Lot 7 east of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
That portion of W1/2NE1/4, NW1/4SE1/4 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 18: That portion of E1/2NE1/4, E1/2SE1/4 lying east of centerline of Diablo-Seattle transmission lines as shown in records of the City of Seattle, Washington.
- Section 20: Lots 1, 4 to 11 inclusive, SE1/4SE1/4
That portion of Lots 2, 3, W1/2SW1/4 lying east of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 28: NW1/4NW1/4
- Section 29: Lots 1 to 7 inclusive, NE1/4NE1/4, SE1/4NW1/4, E1/2SW1/4, SW1/4SE1/4
That portion of NW1/4NW1/4 lying east of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 31: That portion of E1/2SE1/4 lying west of centerline of East Sauk Road #0860, as shown in records of Skagit County, Washington.
- Section 32: A11
- Section 33: W1/2NW1/4

T. 32N., R. 10E.

- Section 5: Lot 3 to 10 inclusive
- Section 6: SE1/4NE1/4, SW1/4SE1/4, E1/2SE1/4
That portion of Lot 1 lying east of the centerline of the Bennetsville Store Road, as shown in records of Snohomish County, Washington.
- Section 7: Lots 2 to 11 inclusive, NW1/4NE1/4, NE1/4NW1/4, SE1/4SW1/4
- Section 8: Lots 1, 2, 3
That portion of E1/2NW1/4, N1/2SW1/4 lying west of centerline of Crawford Road, as shown in records of Snohomish County, Washington.
- Section 31: Lots 1, 2, 3, 6 to 11 inclusive, SW1/4NE1/4, SW1/4SE1/4
That portion of NE1/4NW1/4, NW1/4NE1/4, E1/2NE1/4 lying south and west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 32: Lot 2
That portion of Lots 1, 3, NE1/4SW1/4, SW1/4NW1/4 lying west and south of centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.

T. 32N., R. 9E.

- Section 12: Lots 1, 2, 3, 4, 5
That portion of SW1/4SW1/4 lying east of centerline of Bennetsville Store Road, as shown in records of Snohomish County, Washington.
- Section 13: Lots 1 to 5 inclusive, 7, 10, 11, 12
That portion of NW1/4, N1/2SW1/4 lying east of the ordinary high water mark as defined by the Washington State Department of Natural Resources.
That portion of Lot 13 lying east of a line described as follows: Beginning at the intersection of the Sauk River and the Sauk Prairie Road; thence along the centerline of that road in a southwesterly direction to the west section line of Section 13; thence south to the north line of Lot 7; thence along the North line of Lot 7 to the east line of Lot 7; thence south along the east line of Lot 7 to the south line of Section 13; thence west along the south line of Section 13 to a point which is 200 feet from corner common to Sections 13, 14, 23, and 24.
That portion of Lots 9, 13, SW1/4SE1/4, and Howard Rose #2 Mining Claim lying west of centerline of the Mountain Loop Highway (North Side Sauk F.S. Road #322) as it exists in January of 1981.
- Section 24: Lots 2, 3, 6, 7
That portion of W1/2NW1/4 lying east of the City Limits of Darrington, as shown in records of Skagit County, Washington.
That portion of SW1/4SW1/4 lying east of Darrington-Clear Creek Road, as shown in records of Skagit County, Washington.
That portion of Lots 1, 4, 5, 8, Howard Rose #2, Burns, Moline, Johnston, Forest #4, and North Pole Mining Claims lying west of centerline of Mountain Loop Highway (North Side Sauk F.S. Road #322) as it exists in January of 1981.
- Section 25: That portion of Lots 2, 3, 6, 7, 9, 10 lying east of centerline of Clear Creek Road as shown in records of Snohomish County, Washington; which includes Begis Sauk River Tracts and Darrington River Front Tracts, portion of Timber Bowl River Tracts and other lands.
That portion of Lots 1, 4, 5, 8, NE1/4SE1/4 lying west of centerline of Mountain Loop Highway (North Side Sauk F.S. Road #322), as it exists in January of 1981.
- Section 36: Lot 1
That portion of Lots 2, 3 lying east of centerline of Clear Creek Road, as shown in records of Snohomish County, Washington; including Timber Bowl River Tracts and other lands.

T. 31N., R. 10E.

- Section 4: Lots 6, 7
That portion of Lots 5, 8, SW1/4NW1/4, NE1/4SW1/4, S1/2SE1/4 lying south of centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 5: Lots 3, 5, 7
That portion of Lots 1, 2, 6 lying south of centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
That portion of Lot 4, SE1/4NW1/4, lying north of South Side Sauk River Road (F.S. Road #3211) as it exists in January of 1981.
That portion of W1/2SE1/4, SE1/4SE1/4 lying north and east of a line described as follows:
Beginning at the intersection of the south line of Lot 5 and the centerline of South Side Sauk River Road (F.S. Road #3211) as it exists in January of 1981; thence west a distance of 400 feet; thence south and east along a line 400 feet west and parallel to the centerline of South Side Sauk River Road (F.S. Road #3211) as it exists in January of 1981, to the south line of Section 5.
- Section 9: Lots 1, 2, 3, 6, 7, 8
That portion of NE1/4NE1/4 lying south of centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
That portion of Lot 4, 5, 9, NW1/4NW1/4, NW1/4SE1/4, SE1/4SE1/4 lying north of a line running parallel to and 400 feet south of the South Side Sauk Road (F.S. Road #3211) as it exists in January of 1981.
- Section 10: Lots 1, 2, 3, 4, 5, 7, 8, 9, NE1/4SE1/4
That portion of Lot 6, S1/2SW1/4 lying north of a line parallel to and 400 feet south of centerline of the South Side Sauk Road (F.S. Road #3211) as it exists in January of 1981.
- Section 11: That portion of S1/2S1/2 lying south of a line beginning approximately 1300 feet north of the section corner common to Sections 10, 11, 14, 15, being parallel to and 600 feet north and east of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981, and ending at the section corner common to Sections 11, 12, 13, 14.
- Section 13: W1/2SW1/4
- Section 14: Lots 2 to 9, 11 to 13 inclusive
That portion of Lot 1, SE1/4NE1/4 lying west of a line beginning at the section corner common to Sections 11, 12, 13, 14 being parallel to and 600 feet east of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981, and ending at the centerline of Section 14; thence east along the centerline of the section to the east section line.

That portion of Lots 10, 14, S1/2NW1/4, NE1/4SW1/4 lying north of a line parallel to and 400 feet south of the centerline of the South Side Sauk Road (F.S. Road #3211) as it exists in January of 1981.

Section 15: Lot 1

That portion of Lot 2, NW1/4NE1/4, SE1/4NE1/4 lying north of a line parallel to and 400 feet south of the centerline of the South Side Sauk Road (F.S. Road 3211) as it exists in January of 1981.

Section 23: Lot 1

That portion of Lot 2, NW1/4NE1/4, SE1/4NE1/4 lying east of a line beginning approximately 1300 feet west of the section corner common to Sections 13, 14, 23, 24 being parallel to and 400 feet west of centerline of the South Side Sauk Road (F.S. Road #3211) as it exists in January of 1981, and ending at a point approximately 1600 feet south of the corner common to Sections 13, 14, 23, 24.

Section 24:

Lots 2, 4 to 10 inclusive, S1/2 of Lot 1, S1/2N1/2NE1/4
That portion of Lots 3, 11, 12, 13, NW1/4SW1/4, SW1/4SE1/4 lying north of a line beginning approximately 1600 feet south of the corner common to Sections 13, 14, 23, 24 being parallel to and 400 feet south of centerline of the South Sauk River Road (F.S. Road #3211) as it exists in January of 1981, and ending approximately 600 feet north of the section common to Sections 19, 24, 25, 30.

T. 31N., R. 11E.

- Section 19: SW1/4 of Lot 1, Lots 2, 3, 4, 5, NE1/4SW1/4, NW1/4NW1/4SE1/4, S1/2NW1/4SE1/4, SW1/4SE1/4
- Section 29: That portion of W1/2W1/2, SE1/4SW1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 30: Lots 1, 2, 3, 7, 8, 9, 13
That portion of E1/2NE1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981. That portion of Lots 4, 5, 6, 12, E1/2SW1/4 lying east of a line beginning approximately 500 feet east of the section corner common to Sections 19, 30, 24, 25 being parallel to and 400 feet west of centerline of the South Side Sauk River Road (F.S. Road 3211) as it exists in January of 1981, and ending at a point on the south line of the section approximately 3000 feet east of the corner common to Sections 30, 31, 25, 36.
- Section 31: Lots 1, 2, SE1/4NE1/4
That portion of Lot 3 lying east of a line beginning approximately 3000 feet east of the section corner common to Sections 30, 31, 25, 36 and ending on the south line of Lot 3, Section 31 being parallel to and 400 feet west of centerline of the South Side Sauk River Road (F.S. Road #3211) as it exists in January of 1981.
- Section 32: Lots 1, 2, 3, 4, 6, 7, 8, 9
That portion of Lot 5, SW1/4NE1/4, NE1/4NW1/4, W1/2SE1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exist in January of 1981.

T. 30N., R. 11E.

- Section 4: Lot 2
That portion of Lot 1, NW1/4SW1/4, SE1/4SW1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 5: Lots 1, 2, 3, 6, 7, 8, 9, 10, NW1/4NW1/4, SW1/4SE1/4
That portion of Lots 4, 5, NW1/4NE1/4, SE1/4NE1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 8: Lots 1, 2
- Section 9: Lots 2, 3, 4, 7 to 11 inclusive, 13, W1/2SW1/4
That portion of Lots 1, 5, 6, 12, SW1/4NE1/4, E1/2SE1/4 lying west and south of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981, and south of the North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 10: That portion of S1/2 lying south of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 11: That portion of Lots 3, 4, S1/2SE1/4 lying south of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 13: That portion of N1/2 lying south of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 14: Lots 1, 2, NE1/4
- Section 15: N1/2N1/2
- Section 16: NE1/4SW1/4, S1/2SW1/4, N1/2NE1/4, SW1/4NE1/4
That portion of the SE1/4NE1/4 and the W1/2SE1/4 lying west of centerline of the Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 20: SE1/4NE1/4, E1/2SE1/4
- Section 21: Lots 2, 3, 4, 5, NW1/4NW1/4, S1/2NW1/4, NW1/4SW1/4
That portion of Lots 1, 6, SW1/4NE1/4, NE1/4SW1/4, S1/2SW1/4, NW1/4SE1/4 lying west of line beginning on the north line of Lot 6 running parallel to and 500 feet east of centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981.
- Section 28: That portion of NW1/4NW1/4 lying west of line beginning on the north line of Section 28 running parallel and 500 feet east of the centerline of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981, and ending on the west line of Section 28.
- Section 29: W1/2NE1/4
That portion of E1/2NE1/4, N1/2SE1/4 lying north and west of a line beginning on the east line of NE1/4NE1/4 and runs parallel to and 500 feet east of Mountain Loop Highway (F.S. Road #322) as it exists in January of 1981, and ending on the north line of SE1/4SE1/4 of Section 29.

T. 30N., R. 12E.

- Section 18: Lots 3, 4, E1/2SW1/4, SW1/4SE1/4
That portion of Lots 1, 2, SE1/4NW1/4, SE1/4NE1/4, NW1/4SE1/4, E1/2SE1/4 lying west of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 19: Lot 1, NE1/4, NE1/4NW1/4, SE1/4, SE1/4NW1/4, NE1/4SW1/4
- Section 20: That portion of W1/2 lying west of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.
- Section 29: NW1/4, S1/2
That portion of W1/2NE1/4 lying west of centerline of North Fork Sauk Road (F.S. Road #308) as it exists in January of 1981.

Appendix

APPENDIX B

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Appendix
B

An Act

Public Law

90-542

90th Congress

October 2, 1968



Public Law 90-542
 90th Congress, S. 119
 October 2, 1968

An Act

To provide for a National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That (a) this Act may be cited as the "Wild and Scenic Rivers Act".

Wild and Scenic
Rivers Act.

(b) It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

(c) The purpose of this Act is to implement this policy by instituting a national wild and scenic rivers system, by designating the initial components of that system, and by prescribing the methods by which and standards according to which additional components may be added to the system from time to time.

SEC. 2. (a) The national wild and scenic rivers system shall comprise rivers (i) that are authorized for inclusion therein by Act of Congress, or (ii) that are designated as wild, scenic or recreational rivers by or pursuant to an act of the legislature of the State or States through which they flow, that are to be permanently administered as wild, scenic or recreational rivers by an agency or political subdivision of the State or States concerned without expense to the United States, that are found by the Secretary of the Interior, upon application of the Governor of the State or the Governors of the States concerned, or a person or persons thereunto duly appointed by him or them, to meet the criteria established in this Act and such criteria supplementary thereto as he may prescribe, and that are approved by him for inclusion in the system, including, upon application of the Governor of the State concerned, the Allagash Wilderness Waterway, Maine, and that segment of the Wolf River, Wisconsin, which flows through Langlade County.

National wild
and scenic
rivers system.

82 STAT. 906
82 STAT. 907

(b) A wild, scenic or recreational river area eligible to be included in the system is a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in section 1, subsection (b) of this Act. Every wild, scenic or recreational river in its free-flowing condition, or upon restoration to this condition, shall be considered eligible for inclusion in the national wild and scenic rivers system and, if included, shall be classified, designated, and administered as one of the following:

Eligibility
for inclusion.

(1) Wild river areas—Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

(2) Scenic river areas—Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

(3) Recreational river areas—Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some

National wild
and scenic
rivers.

development along their shorelines, and that may have undergone some impoundment or diversion in the past.

SEC. 3 (a) The following rivers and the land adjacent thereto are hereby designated as components of the national wild and scenic rivers system:

(1) CLEARWATER, MIDDLE FORK, IDAHO.—The Middle Fork from the town of Kooskia upstream to the town of Lowell; the Lochsa River from its junction with the Selway at Lowell forming the Middle Fork, upstream to the Powell Ranger Station; and the Selway River from Lowell upstream to its origin; to be administered by the Secretary of Agriculture.

(2) ELEVEN POINT, MISSOURI.—The segment of the river extending downstream from Thomasville to State Highway 142; to be administered by the Secretary of Agriculture.

(3) FEATHER, CALIFORNIA.—The entire Middle Fork; to be administered by the Secretary of Agriculture.

(4) RIO GRANDE, NEW MEXICO.—The segment extending from the Colorado State line downstream to the State Highway 96 crossing, and the lower four miles of the Red River; to be administered by the Secretary of the Interior.

(5) ROGUE, OREGON.—The segment of the river extending from the mouth of the Applegate River downstream to the Lobster Creek Bridge; to be administered by agencies of the Departments of the Interior or Agriculture as agreed upon by the Secretaries of said Departments or as directed by the President.

(6) SAINT CROIX, MINNESOTA AND WISCONSIN.—The segment between the dam near Taylors Falls, Minnesota, and the dam near Gordon, Wisconsin, and its tributary, the Namekagon, from Lake Namekagon downstream to its confluence with the Saint Croix; to be administered by the Secretary of the Interior: *Provided*, That except as may be required in connection with items (a) and (b) of this paragraph, no funds available to carry out the provisions of this Act may be expended for the acquisition or development of lands in connection with, or for administration under this Act of, that portion of the Saint Croix River between the dam near Taylors Falls, Minnesota, and the upstream end of Big Island in Wisconsin, until sixty days after the date on which the Secretary has transmitted to the President of the Senate and Speaker of the House of Representatives a proposed cooperative agreement between the Northern States Power Company and the United States (a) whereby the company agrees to convey to the United States, without charge, appropriate interests in certain of its lands between the dam near Taylors Falls, Minnesota, and the upstream end of Big Island in Wisconsin, including the company's right, title, and interest to approximately one hundred acres per mile, and (b) providing for the use and development of other lands and interests in land retained by the company between said points adjacent to the river in a manner which shall complement and not be inconsistent with the purposes for which the lands and interests in land donated by the company are administered under this Act. Said agreement may also include provision for State or local governmental participation as authorized under subsection (e) of section 10 of this Act.

(7) SALMON, MIDDLE FORK, IDAHO.—From its origin to its confluence with the main Salmon River; to be administered by the Secretary of Agriculture.

(8) WOLF, WISCONSIN.—From the Langlade-Menominee County line downstream to Keshena Falls; to be administered by the Secretary of the Interior.

(b) The agency charged with the administration of each component of the national wild and scenic rivers system designated by subsection

82 STAT. 907

82 STAT. 908.

(a) of this section shall, within one year from the date of this Act, establish detailed boundaries therefor (which boundaries shall include an average of not more than three hundred and twenty acres per mile on both sides of the river); determine which of the classes outlined in section 2, subsection (b), of this Act best fit the river or its various segments; and prepare a plan for necessary developments in connection with its administration in accordance with such classification. Said boundaries, classification, and development plans shall be published in the Federal Register and shall not become effective until ninety days after they have been forwarded to the President of the Senate and the Speaker of the House of Representatives.

Publication in
Federal Register.

82 STAT. 908

82 STAT. 909

Sec. 4. (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and from time to time submit to the President and the Congress proposals for the addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system; which, in his or their judgment, fall within one or more of the classes set out in section 2, subsection (b), of this Act; and which are proposed to be administered, wholly or partially, by an agency of the United States. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each proposal shall be accompanied by a report, including maps and illustrations, showing among other things the area included within the proposal; the characteristics which make the area a worthy addition to the system; the current status of landownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area be administered; the extent to which it is proposed that administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area as a component of the system. Each such report shall be printed as a Senate or House document.

Report, maps,
etc.

(b) Before submitting any such report to the President and the Congress, copies of the proposed report shall, unless it was prepared jointly by the Secretary of the Interior and the Secretary of Agriculture, be submitted by the Secretary of the Interior to the Secretary of Agriculture or by the Secretary of Agriculture to the Secretary of the Interior, as the case may be, and to the Secretary of the Army, the Chairman of the Federal Power Commission, the head of any other affected Federal department or agency and, unless the lands proposed to be included in the area are already owned by the United States or have already been authorized for acquisition by Act of Congress, the Governor of the State or States in which they are located or an officer designated by the Governor to receive the same. Any recommendations or comments on the proposal which the said officials furnish the Secretary or Secretaries who prepared the report within ninety days of the date on which the report is submitted to them, together with the Secretary's or Secretaries' comments thereon, shall be included with the transmittal to the President and the Congress. No river or portion of any river shall be added to the national wild and scenic rivers system subsequent to enactment of this Act until the close of the next full session of the State legislature, or legislatures in case more than one

Printing as
Senate or
House document.

State is involved, which begins following the submission of any recommendation to the President with respect to such addition as herein provided.

(c) Before approving or disapproving for inclusion in the national wild and scenic rivers system any river designated as a wild, scenic or recreational river by or pursuant to an act of a State legislature, the Secretary of the Interior shall submit the proposal to the Secretary of Agriculture, the Secretary of the Army, the Chairman of the Federal Power Commission, and the head of any other affected Federal department or agency and shall evaluate and give due weight to any recommendations or comments which the said officials furnish him within ninety days of the date on which it is submitted to them. If he approves the proposed inclusion, he shall publish notice thereof in the Federal Register.

Publication in
Federal Register.

Potential
additions.
Designation.

SEC. 5. (a) The following rivers are hereby designated for potential addition to the national wild and scenic rivers system:

- (1) Allegheny, Pennsylvania: The segment from its mouth to the town of East Brady, Pennsylvania.
- (2) Bruneau, Idaho: The entire main stem.
- (3) Buffalo, Tennessee: The entire river.
- (4) Chattooga, North Carolina, South Carolina, and Georgia: The entire river.
- (5) Clarion, Pennsylvania: The segment between Ridgway and its confluence with the Allegheny River.
- (6) Delaware, Pennsylvania and New York: The segment from Hancock, New York, to Matamoras, Pennsylvania.
- (7) Flathead, Montana: The North Fork from the Canadian border downstream to its confluence with the Middle Fork; the Middle Fork from its headwaters to its confluence with the South Fork; and the South Fork from its origin to Hungry Horse Reservoir.
- (8) Gasconade, Missouri: The entire river.
- (9) Illinois, Oregon: The entire river.
- (10) Little Beaver, Ohio: The segment of the North and Middle Forks of the Little Beaver River in Columbiana County from a point in the vicinity of Negly and Elkton, Ohio, downstream to a point in the vicinity of East Liverpool, Ohio.
- (11) Little Miami, Ohio: That segment of the main stem of the river, exclusive of its tributaries, from a point at the Warren-Clermont County line at Loveland, Ohio, upstream to the sources of Little Miami including North Fork.
- (12) Maumee, Ohio and Indiana: The main stem from Perrysburg, Ohio, to Fort Wayne, Indiana, exclusive of its tributaries in Ohio and inclusive of its tributaries in Indiana.
- (13) Missouri, Montana: The segment between Fort Benton and Ryan Island.
- (14) Moyie, Idaho: The segment from the Canadian border to its confluence with the Kootenai River.
- (15) Obed, Tennessee: The entire river and its tributaries, Clear Creek and Daddys Creek.
- (16) Penobscot, Maine: Its east and west branches.
- (17) Pere Marquette, Michigan: The entire river.
- (18) Pine Creek, Pennsylvania: The segment from Ansonia to Waterville.
- (19) Priest, Idaho: The entire main stem.
- (20) Rio Grande, Texas: The portion of the river between the west boundary of Hudspeth County and the east boundary of Terrell County on the United States side of the river: *Provided*, That before undertaking any study of this potential scenic river, the Secretary of the Interior shall determine, through the channels of appropriate

executive agencies, that Mexico has no objection to its being included among the studies authorized by this Act.

(21) Saint Croix, Minnesota and Wisconsin: The segment between the dam near Taylors Falls and its confluence with the Mississippi River.

(22) Saint Joe, Idaho: The entire main stem.

(23) Salmon, Idaho: The segment from the town of North Fork to its confluence with the Snake River.

(24) Skagit, Washington: The segment from the town of Mount Vernon to and including the mouth of Bacon Creek; the Cascade River between its mouth and the junction of its North and South Forks; the South Fork to the boundary of the Glacier Peak Wilderness Area; the Suiattle River from its mouth to the Glacier Peak Wilderness Area boundary at Milk Creek; the Sauk River from its mouth to its junction with Elliott Creek; the North Fork of the Sauk River from its junction with the South Fork of the Sauk to the Glacier Peak Wilderness Area boundary.

(25) Suwannee, Georgia and Florida: The entire river from its source in the Okefenokee Swamp in Georgia to the gulf and the outlying Ichetucknee Springs, Florida.

(26) Upper Iowa, Iowa: The entire river.

(27) Youghiogheny, Maryland and Pennsylvania: The segment from Oakland, Maryland, to the Youghiogheny Reservoir, and from the Youghiogheny Dam downstream to the town of Connellsville, Pennsylvania.

(b) The Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture shall proceed as expeditiously as possible to study each of the rivers named in subsection (a) of this section in order to determine whether it should be included in the national wild and scenic rivers system. Such studies shall be completed and reports made thereon to the President and the Congress, as provided in section 4 of this Act, within ten years from the date of this Act: *Provided, however*, That with respect to the Suwannee River, Georgia and Florida, and the Upper Iowa River, Iowa, such study shall be completed and reports made thereon to the President and the Congress, as provided in section 4 of this Act, within two years from the date of enactment of this Act. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers with respect to which there is the greatest likelihood of developments which, if undertaken, would render them unsuitable for inclusion in the national wild and scenic rivers system. Studies.

(c) The study of any of said rivers shall be pursued in as close cooperation with appropriate agencies of the affected State and its political subdivisions as possible, shall be carried on jointly with such agencies if request for such joint study is made by the State, and shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

(d) In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic and recreational river areas, and all river basin and project plan reports submitted to the Congress shall consider and discuss any such potentials. The Secretary of the Interior and the Secretary of Agriculture shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas within the United States shall be evaluated in planning reports by all Federal agencies as potential alternative uses of the water and related land resources involved.

Land acquisition. SEC. 6. (a) The Secretary of the Interior and the Secretary of Agriculture are each authorized to acquire lands and interests in land within the authorized boundaries of any component of the national wild and scenic rivers system designated in section 3 of this Act, or hereafter designated for inclusion in the system by Act of Congress, which is administered by him, but he shall not acquire fee title to an average of more than 100 acres per mile on both sides of the river. Lands owned by a State may be acquired only by donation, and lands owned by an Indian tribe or a political subdivision of a State may not be acquired without the consent of the appropriate governing body thereof as long as the Indian tribe or political subdivision is following a plan for management and protection of the lands which the Secretary finds protects the land and assures its use for purposes consistent with this Act. Money appropriated for Federal purposes from the land and water conservation fund shall, without prejudice to the use of appropriations from other sources, be available to Federal departments and agencies for the acquisition of property for the purposes of this Act.

(b) If 50 per centum or more of the entire acreage within a federally administered wild, scenic or recreational river area is owned by the United States, by the State or States within which it lies, or by political subdivisions of those States, neither Secretary shall acquire fee title to any lands by condemnation under authority of this Act. Nothing contained in this section, however, shall preclude the use of condemnation when necessary to clear title or to acquire scenic easements or such other easements as are reasonably necessary to give the public access to the river and to permit its members to traverse the length of the area or of selected segments thereof.

(c) Neither the Secretary of the Interior nor the Secretary of Agriculture may acquire lands by condemnation, for the purpose of including such lands in any national wild, scenic or recreational river area, if such lands are located within any incorporated city, village, or borough which has in force and applicable to such lands a duly adopted, valid zoning ordinance that conforms with the purposes of this Act. In order to carry out the provisions of this subsection the appropriate Secretary shall issue guidelines, specifying standards for local zoning ordinances, which are consistent with the purposes of this Act. The standards specified in such guidelines shall have the object of (A) prohibiting new commercial or industrial uses other than commercial or industrial uses which are consistent with the purposes of this Act, and (B) the protection of the bank lands by means of acreage, frontage, and setback requirements on development.

(d) The appropriate Secretary is authorized to accept title to non-Federal property within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress and, in exchange therefor, convey to the grantor any federally owned property which is under his jurisdiction within the State in which the component lies and which he classifies as suitable for exchange or other disposal. The values of the properties so exchanged either shall be approximately equal or, if they are not approximately equal, shall be equalized by the payment of cash to the grantor or to the Secretary as the circumstances require.

(e) The head of any Federal department or agency having administrative jurisdiction over any lands or interests in land within the authorized boundaries of any federally administered component of the national wild and scenic rivers system designated in section 3 of this Act or hereafter designated for inclusion in the system by Act of Congress is authorized to transfer to the appropriate secretary jurisdic-

tion over such lands for administration in accordance with the provisions of this Act. Lands acquired by or transferred to the Secretary of Agriculture for the purposes of this Act within or adjacent to a national forest shall upon such acquisition or transfer become national forest lands.

(f) The appropriate Secretary is authorized to accept donations of lands and interests in land, funds, and other property for use in connection with his administration of the national wild and scenic rivers system.

(g) (1) Any owner or owners (hereinafter in this subsection referred to as "owner") of improved property on the date of its acquisition, may retain for themselves and their successors or assigns a right of use and occupancy of the improved property for noncommercial residential purposes for a definite term not to exceed twenty-five years or, in lieu thereof, for a term ending at the death of the owner, or the death of his spouse, or the death of either or both of them. The owner shall elect the term to be reserved. The appropriate Secretary shall pay to the owner the fair market value of the property on the date of such acquisition less the fair market value on such date of the right retained by the owner.

(2) A right of use and occupancy retained pursuant to this subsection shall be subject to termination whenever the appropriate Secretary is given reasonable cause to find that such use and occupancy is being exercised in a manner which conflicts with the purposes of this Act. In the event of such a finding, the Secretary shall tender to the holder of that right an amount equal to the fair market value of that portion of the right which remains unexpired on the date of termination. Such right of use or occupancy shall terminate by operation of law upon tender of the fair market price.

(3) The term "improved property", as used in this Act, means a detached, one-family dwelling (hereinafter referred to as "dwelling"), the construction of which was begun before January 1, 1967, together with so much of the land on which the dwelling is situated, the said land being in the same ownership as the dwelling, as the appropriate Secretary shall designate to be reasonably necessary for the enjoyment of the dwelling for the sole purpose of noncommercial residential use, together with any structures accessory to the dwelling which are situated on the land so designated.

SEC. 7. (a) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act (41 Stat. 1063), as amended (16 U.S.C. 791a et seq.), on or directly affecting any river which is designated in section 3 of this Act as a component of the national wild and scenic rivers system or which is hereafter designated for inclusion in that system, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration. Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or unreasonably diminish the scenic, recreational, and fish and wildlife values present in the area on the date of approval of this Act. No department or agency of the United States shall recommend authorization of any water resources project that would have a direct and adverse effect on the values for which such river was established, as determined by the Secretary charged with its administration, or request appropriations to begin

Right of use
and occupancy.

"Improved
property."

Water resources
projects.
Restrictions.

construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior or the Secretary of Agriculture, as the case may be, in writing of its intention so to do at least sixty days in advance, and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(b) The Federal Power Commission shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the Federal Power Act, as amended, on or directly affecting any river which is listed in section 5, subsection (a), of this Act, and no department or agency of the United States shall assist by loan, grant, license, or otherwise in the construction of any water resources project that would have a direct and adverse effect on the values for which such river might be designated, as determined by the Secretary responsible for its study or approval—

49 Stat. 863.
16 USC 791a.

Publication
in Federal
Register.

(i) during the five-year period following enactment of this Act unless, prior to the expiration of said period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, conclude that such river should not be included in the national wild and scenic rivers system and publish notice to that effect in the Federal Register, and

(ii) during such additional period thereafter as, in the case of any river which is recommended to the President and the Congress for inclusion in the national wild and scenic rivers system, is necessary for congressional consideration thereof or, in the case of any river recommended to the Secretary of the Interior for inclusion in the national wild and scenic rivers system under section 2(a) (ii) of this Act, is necessary for the Secretary's consideration thereof, which additional period, however, shall not exceed three years in the first case and one year in the second.

Nothing contained in the foregoing sentence, however, shall preclude licensing of, or assistance to, developments below or above a potential wild, scenic or recreational river area or on any stream tributary thereto which will not invade the area or diminish the scenic, recreational, and fish and wildlife values present in the potential wild, scenic or recreational river area on the date of approval of this Act. No department or agency of the United States shall, during the periods hereinbefore specified, recommend authorization of any water resources project on any such river or request appropriations to begin construction of any such project, whether heretofore or hereafter authorized, without advising the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture in writing of its intention so to do at least sixty days in advance of doing so and without specifically reporting to the Congress in writing at the time it makes its recommendation or request in what respect construction of such project would be in conflict with the purposes of this Act and would affect the component and the values to be protected by it under this Act.

(c) The Federal Power Commission and all other Federal agencies shall, promptly upon enactment of this Act, inform the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, of any proceedings, studies, or other activities within their jurisdiction which are now in progress and which affect or may affect any of the rivers specified in section 5, subsection (a), of this Act. They shall likewise inform him of any such proceedings, studies, or other activities which are hereafter commenced or resumed before they are commenced or resumed.

(d) Nothing in this section with respect to the making of a loan or grant shall apply to grants made under the Land and Water Conservation Fund Act of 1965 (78 Stat. 897; 16 U.S.C. 4601-5 et seq.).

SEC. 8. (a) All public lands within the authorized boundaries of any component of the national wild and scenic rivers system which is designated in section 3 of this Act or which is hereafter designated for inclusion in that system are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States.

(b) All public lands which constitute the bed or bank, or are within one-quarter mile of the bank, of any river which is listed in section 5, subsection (a), of this Act are hereby withdrawn from entry, sale, or other disposition under the public land laws of the United States for the periods specified in section 7, subsection (b), of this Act.

SEC. 9. (a) Nothing in this Act shall affect the applicability of the United States mining and mineral leasing laws within components of the national wild and scenic rivers system except that—

Mining and
mineral leas-
ing laws.

(i) all prospecting, mining operations, and other activities on mining claims which, in the case of a component of the system designated in section 3 of this Act, have not heretofore been perfected or which, in the case of a component hereafter designated pursuant to this Act or any other Act of Congress, are not perfected before its inclusion in the system and all mining operations and other activities under a mineral lease, license, or permit issued or renewed after inclusion of a component in the system shall be subject to such regulations as the Secretary of the Interior or, in the case of national forest lands, the Secretary of Agriculture may prescribe to effectuate the purposes of this Act;

(ii) subject to valid existing rights, the perfection of, or issuance of a patent to, any mining claim affecting lands within the system shall confer or convey a right or title only to the mineral deposits and such rights only to the use of the surface and the surface resources as are reasonably required to carrying on prospecting or mining operations and are consistent with such regulations as may be prescribed by the Secretary of the Interior or, in the case of national forest lands, by the Secretary of Agriculture; and

(iii) subject to valid existing rights, the minerals in Federal lands which are part of the system and constitute the bed or bank or are situated within one-quarter mile of the bank of any river designated a wild river under this Act or any subsequent Act are hereby withdrawn from all forms of appropriation under the mining laws and from operation of the mineral leasing laws including, in both cases, amendments thereto.

Regulations issued pursuant to paragraphs (i) and (ii) of this subsection shall, among other things, provide safeguards against pollution of the river involved and unnecessary impairment of the scenery within the component in question.

(b) The minerals in any Federal lands which constitute the bed or bank or are situated within one-quarter mile of the bank of any river which is listed in section 5, subsection (a) of this Act are hereby withdrawn from all forms of appropriation under the mining laws during the periods specified in section 7, subsection (b) of this Act. Nothing contained in this subsection shall be construed to forbid prospecting or the issuance or leases, licenses, and permits under the mineral leasing laws subject to such conditions as the Secretary of the Interior and, in the case of national forest lands, the Secretary of Agriculture find appropriate to safeguard the area in the event it is subsequently included in the system.

82 STAT. 916

Administration.

SEC. 10. (a) Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area.

16 USC 1131
note.

(b) Any portion of a component of the national wild and scenic rivers system that is within the national wilderness preservation system, as established by or pursuant to the Act of September 3, 1964 (78 Stat. 890; 16 U.S.C., ch. 23), shall be subject to the provisions of both the Wilderness Act and this Act with respect to preservation of such river and its immediate environment, and in case of conflict between the provisions of these Acts the more restrictive provisions shall apply.

(c) Any component of the national wild and scenic rivers system that is administered by the Secretary of the Interior through the National Park Service shall become a part of the national park system, and any such component that is administered by the Secretary through the Fish and Wildlife Service shall become a part of the national wildlife refuge system. The lands involved shall be subject to the provisions of this Act and the Acts under which the national park system or national wildlife system, as the case may be, is administered, and in case of conflict between the provisions of these Acts, the more restrictive provisions shall apply. The Secretary of the Interior, in his administration of any component of the national wild and scenic rivers system, may utilize such general statutory authorities relating to areas of the national park system and such general statutory authorities otherwise available to him for recreation and preservation purposes and for the conservation and management of natural resources as he deems appropriate to carry out the purposes of this Act.

Cooperative
agreements with
State or local
governments.

(d) The Secretary of Agriculture, in his administration of any component of the national wild and scenic rivers system area, may utilize the general statutory authorities relating to the national forests in such manner as he deems appropriate to carry out the purposes of this Act.

(e) The Federal agency charged with the administration of any component of the national wild and scenic rivers system may enter into written cooperative agreements with the Governor of a State, the head of any State agency, or the appropriate official of a political subdivision of a State for State or local governmental participation in the administration of the component. The States and their political subdivisions shall be encouraged to cooperate in the planning and administration of components of the system which include or adjoin State- or county-owned lands.

Assistance in
financing State
and local proj-
ects.

16 USC 4601-4
note.

16 USC 4601-
4601-3.

SEC. 11. (a) The Secretary of the Interior shall encourage and assist the States to consider, in formulating and carrying out their comprehensive statewide outdoor recreation plans and proposals for financing assistance for State and local projects submitted pursuant to the Land and Water Conservation Fund Act of 1965 (78 Stat. 897), needs and opportunities for establishing State and local wild, scenic and recreational river areas. He shall also, in accordance with the authority contained in the Act of May 28, 1963 (77 Stat. 49), provide technical assistance and advice to, and cooperate with, States, political subdivisions, and private interests, including nonprofit organizations, with respect to establishing such wild, scenic and recreational river areas.

(b) The Secretaries of Agriculture and of Health, Education, and Welfare shall likewise, in accordance with the authority vested in them, assist, advise, and cooperate with State and local agencies and private interests with respect to establishing such wild, scenic and recreational river areas.

SEC. 12. (a) The Secretary of the Interior, the Secretary of Agriculture, and heads of other Federal agencies shall review administrative and management policies, regulations, contracts, and plans affecting lands under their respective jurisdictions which include, border upon, or are adjacent to the rivers listed in subsection (a) of section 5 of this Act in order to determine what actions should be taken to protect such rivers during the period they are being considered for potential addition to the national wild and scenic rivers system. Particular attention shall be given to scheduled timber harvesting, road construction, and similar activities which might be contrary to the purposes of this Act.

Administration and management policies. Review.

(b) Nothing in this section shall be construed to abrogate any existing rights, privileges, or contracts affecting Federal lands held by any private party without the consent of said party.

(c) The head of any agency administering a component of the national wild and scenic rivers system shall cooperate with the Secretary of the Interior and with the appropriate State water pollution control agencies for the purpose of eliminating or diminishing the pollution of waters of the river.

SEC. 13. (a) Nothing in this Act shall affect the jurisdiction or responsibilities of the States with respect to fish and wildlife. Hunting and fishing shall be permitted on lands and waters administered as parts of the system under applicable State and Federal laws and regulations unless, in the case of hunting, those lands or waters are within a national park or monument. The administering Secretary may, however, designate zones where, and establish periods when, no hunting is permitted for reasons of public safety, administration, or public use and enjoyment and shall issue appropriate regulations after consultation with the wildlife agency of the State or States affected.

Fish and wildlife. Jurisdiction under State and Federal laws.

(b) The jurisdiction of the States and the United States over waters of any stream included in a national wild, scenic or recreational river area shall be determined by established principles of law. Under the provisions of this Act, any taking by the United States of a water right which is vested under either State or Federal law at the time such river is included in the national wild and scenic rivers system shall entitle the owner thereof to just compensation. Nothing in this Act shall constitute an express or implied claim or denial on the part of the Federal Government as to exemption from State water laws.

Compensation for water rights.

(c) Designation of any stream or portion thereof as a national wild, scenic or recreational river area shall not be construed as a reservation of the waters of such streams for purposes other than those specified in this Act, or in quantities greater than necessary to accomplish these purposes.

(d) The jurisdiction of the States over waters of any stream included in a national wild, scenic or recreational river area shall be unaffected by this Act to the extent that such jurisdiction may be exercised without impairing the purposes of this Act or its administration.

82 STAT. 917
82 STAT. 918

(e) Nothing contained in this Act shall be construed to alter, amend, repeal, interpret, modify, or be in conflict with any interstate compact made by any States which contain any portion of the national wild and scenic rivers system.

(f) Nothing in this Act shall affect existing rights of any State, including the right of access, with respect to the beds of navigable streams, tributaries, or rivers (or segments thereof) located in a national wild, scenic or recreational river area.

82 STAT. 916.

Easements and rights-of-way.

(g) The Secretary of the Interior or the Secretary of Agriculture, as the case may be, may grant easements and rights-of-way upon, over, under, across, or through any component of the national wild and scenic rivers system in accordance with the laws applicable to the national park system and the national forest system, respectively: *Provided*, That any conditions precedent to granting such easements and rights-of-way shall be related to the policy and purpose of this Act.

Claim and allowance as charitable contribution or gift. 76 Stat. 1034. 68A Stat. 410.

SEC. 14. The claim and allowance of the value of an easement as a charitable contribution under section 170 of title 26, United States Code, or as a gift under section 2522 of said title shall constitute an agreement by the donor on behalf of himself, his heirs, and assigns that, if the terms of the instrument creating the easement are violated, the donee or the United States may acquire the servient estate at its fair market value as of the time the easement was donated minus the value of the easement claimed and allowed as a charitable contribution or gift.

Definitions.

SEC. 15. As used in this Act, the term—

(a) "River" means a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes.

(b) "Free-flowing", as applied to any river or section of a river, means existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: *Provided*, That this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

(c) "Scenic easement" means the right to control the use of land (including the air space above such land) for the purpose of protecting the scenic view from the river, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement.

Appropriations.

SEC. 16. There are hereby authorized to be appropriated such sums as may be necessary, but not more than \$17,000,000, for the acquisition of lands and interests in land under the provisions of this Act.

Approved October 2, 1968.

LEGISLATIVE HISTORY:

HOUSE REPORTS: No. 1623 accompanying H. R. 18260 (Comm. on Interior & Insular Affairs) and No. 1917 (Comm. of Conference).

SENATE REPORT No. 491 (Comm. on Interior & Insular Affairs).

CONGRESSIONAL RECORD:

Vol. 113 (1967): Aug. 8, considered and passed Senate.

Vol. 114 (1968): July 15, Sept. 12, considered and passed House, amended, in lieu of H. R. 18260.

Sept. 25, House agreed to conference report.

Sept. 26, Senate agreed to conference report.

An Act

Public Law

93-279

93rd Congress

May 10, 1974



Public Law 93-279
 93rd Congress, H. R. 9492
 May 10, 1974

An Act

88 STAT. 122

To amend the Wild and Scenic Rivers Act by designating the Chattooga River, North Carolina, South Carolina, and Georgia as a component of the National Wild and Scenic Rivers System, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Wild and Scenic Rivers Act (82 Stat. 906; 16 U.S.C. 1274 et seq.), as amended, is further amended as follows:

(a) In section 3(a) after paragraph (9) insert the following new paragraph:

“(10) CHATTOOGA, NORTH CAROLINA, SOUTH CAROLINA, GEORGIA.— The Segment from 0.8 mile below Cashiers Lake in North Carolina to Tugaloo Reservoir, and the West Fork Chattooga River from its junction with Chattooga upstream 7.3 miles, as generally depicted on the boundary map entitled ‘Proposed Wild and Scenic Chattooga River and Corridor Boundary’, dated August 1973; to be administered by the Secretary of Agriculture: *Provided*, That the Secretary of Agriculture shall take such action as is provided for under subsection (b) of this section within one year from the date of enactment of this paragraph (10): *Provided further*, That for the purposes of this river, there are authorized to be appropriated not more than \$2,000,000 for the acquisition of lands and interests in lands and not more than \$800,000 for development.”

(b) (1) In section 4 delete subsection (a) and insert in lieu thereof the following:

“Sec. 4. (a) The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act. Such studies shall be completed and such reports shall be made to the Congress with respect to all rivers named in subparagraphs 5(a) (1) through (27) of this Act no later than October 2, 1978. In conducting these studies the Secretary of the Interior and the Secretary of Agriculture shall give priority to those rivers with respect to which there is the greatest likelihood of developments which, if undertaken, would render the rivers unsuitable for inclusion in the national wild and scenic rivers system. Every such study and plan shall be coordinated with any water resources planning involving the same river which is being conducted pursuant to the Water Resources Planning Act (79 Stat. 244; 42 U.S.C. 1962 et seq.).

Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential uses of the land and water which would be enhanced, foreclosed, or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which it is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration, including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in

Wild and Scenic
 Rivers Act,
 amendments.
 16 USC 1271 note.
 86 Stat. 1174.
 16 USC 1274.

Appropriation.

16 USC 1275.

Studies, sub-
 mitted to Presi-
 dent.

Report to Con-
 gress.

16 USC 1276.

Contents.

Printing as
Senate or House
document.
82 Stat. 910.
16 USC 1276.
16 USC 1278.

land and of administering the area, should it be added to the system. Each such report shall be printed as a Senate or House document."

(2) In section 5 delete subsection (b) and reletter subsections (c) and (d) as (b) and (c), respectively.

(3) In section 7(b) delete clause (i) and insert in lieu thereof the following:

"(i) during the ten-year period following enactment of this Act or for a three complete fiscal year period following any Act of Congress designating any river for potential addition to the national wild and scenic rivers system, whichever is later, unless, prior to the expiration of the relevant period, the Secretary of the Interior and, where national forest lands are involved, the Secretary of Agriculture, on the basis of study, determine that such river should not be included in the national wild and scenic rivers system and notify the Committees on Interior and Insular Affairs of the United States Congress, in writing, including a copy of the study upon which the determination was made, at least one hundred and eighty days while Congress is in session prior to publishing notice to that effect in the Federal Register, and".

(4) In section 7(b) (ii) delete "which is recommended", insert in lieu thereof "the report for which is submitted", and delete "for inclusion in the national wild and scenic rivers system".

(c) In section 15(c) delete "for the purpose of protecting the scenic view from the river," and insert in lieu thereof "within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area,".

(d) Delete section 16 and insert in lieu thereof:

"Sec. 16. (a) There are hereby authorized to be appropriated, including such sums as have heretofore been appropriated, the following amounts for land acquisition for each of the rivers described in section 3(a) of this Act:

Clearwater, Middle Fork, Idaho, \$2,900,800;

Eleven Point, Missouri, \$4,906,500;

Feather, Middle Fork, California, \$3,935,700;

Rio Grande, New Mexico, \$253,000;

Rogue, Oregon, \$12,447,200;

St. Croix, Minnesota and Wisconsin, \$11,768,550;

Salmon, Middle Fork, Idaho, \$1,237,100; and

Wolf, Wisconsin, \$142,150.

"(b) The authority to make the appropriations authorized in this section shall expire on June 30, 1979."

Approved May 10, 1974.

Notification to
congressional
committees.
Publication in
Federal Register.

16 USC 1286.

Appropriation.
16 USC 1287.

Ante, p. 122.

Expiration
date.

LEGISLATIVE HISTORY:

HOUSE REPORT No. 93-675 (Comm. on Interior and Insular Affairs).

SENATE REPORT No. 93-738 (Comm. on Interior and Insular Affairs).

CONGRESSIONAL RECORD:

Vol. 119 (1973): Dec. 3, considered and passed House.

Vol. 120 (1974): Mar. 22, considered and passed Senate, amended.

Apr. 10, House concurred in Senate amendment with an amendment.

Apr. 23, Senate agreed to House amendment with amendments.

Apr. 25, House concurred in Senate amendments.

**Addition
of
Skagit Segments**

**Public Law
95-625
Section 703**

November 10, 1978

ADDITION OF SKAGIT SEGMENTS

Boundaries.

SEC. 703. Section 3 (a) of the Wild and Scenic Rivers Act is amended by adding the following new paragraph at the end thereof:

"(18) SKAGIT, WASHINGTON.—The segment from the pipeline crossing at Sedro-Woolley upstream to and including the mouth of Bacon Creek; the Cascade River from its mouth to the junction of its North and South Forks; the South Fork to the boundary of the Glacier Peak Wilderness Area; the Suiattle River from its mouth to the boundary of the Glacier Peak Wilderness Area at Milk Creek; the Sauk River from its mouth to its junction with Elliott Creek; the North Fork of the Sauk River from its junction with the South Fork of the Sauk to the boundary of the Glacier Peak Wilderness Area; as generally depicted on the boundary map entitled 'Skagit River—River Area Boundary'; all segments to be administered by the Secretary of Agriculture. Riprapping related to natural channels with natural rock along the shorelines of the Skagit segment to preserve and protect agricultural land shall not be considered inconsistent with the values for which such segment is designated. After consultation with affected Federal agencies, State and local government and the interested public, the Secretary shall take such action as is provided for under subsection (b) with respect to the segments referred to in this paragraph within one year from the date of enactment of this paragraph; as part of such action, the Secretary of Agriculture shall investigate that portion of the North Fork of the Cascade River from its confluence with the South Fork to the boundary of the North Cascades National Park and if such portion is found to qualify for inclusion, it shall be treated as a component of the Wild and Scenic Rivers System designated under this section upon publication by the Secretary of notification to that effect in the Federal Register. For the purposes of carrying out the provisions of this Act with respect to the river designated by this paragraph there are authorized to be appropriated not more than \$11,734,000 for the acquisition of lands or interest in lands and not more than \$332,000 for development."

Consultation.

Investigation and
publication in
Federal Register.Appropriation
authorization.

**North Fork
Cascade River
Evaluation**

Federal Register

Vol. 46 No. 54

March 20, 1981

Notices

Federal Register

Vol. 46, No. 54

Friday, March 20, 1981

This section of the FEDERAL REGISTER contains documents other than rules or proposed rules that are applicable to the public. Notices of hearings and investigations, committee meetings, agency decisions and rulings, delegations of authority, filing of petitions and applications and agency statements of organization and functions are examples of documents appearing in this section.

ADVISORY COMMITTEE ON FEDERAL PAY

Continuation of Committee; Public Inquiry

This is to request any expressions from the public as to the desirability of continuation of the Advisory Committee on Federal Pay.

The Advisory Committee on Federal Pay was established by the Federal Pay Comparability Act of 1970. It consists of three experts on pay and labor relations who are Federal employees only for the time that they serve on this Committee. The Committee serves as an independent third party in advising the President on salary adjustments for Federal white-collar employees. In making its recommendations on pay increases for these Federal employees, the Committee considers pay in the private sector, the views of Federal employee organizations, government officials and pay experts.

Any comments should be sent in writing to the Advisory Committee on Federal Pay, Suite 205, 1730 K Street, NW., Washington, D.C. 20006, by April 10. Any such communications will be incorporated in the report that the Advisory Committee makes to the Administrator of GSA.

Jerome M. Rosow,
Chairman.

[FR Doc. 81-8533 Filed 3-19-81; 8:45 am]
BILLING CODE 5820-43-M

DEPARTMENT OF AGRICULTURE

Forest Service

North Fork Cascade River Wild and Scenic River Evaluation, Mount Baker-Snoqualmie National Forest, Skagit County, Wash.; Decision Notice and Finding of No Significant Impact

The Wild and Scenic Rivers Act (Pub. L. 90-542), as amended by the National

Parks and Recreation Act of 1978 (Pub. L. 95-625), directed that a segment of the North Fork Cascade River from its confluence with the South Fork to the boundary of the North Cascades National Park be investigated to find if it qualifies for the National Wild and Scenic Rivers System.

The river segment is located within the Mount Baker-Snoqualmie National Forest and is approximately one mile long. About 280 acres of National Forest System lands are encompassed by the study area. The act further provides that, if the segment is found to be qualified and suitable for the National Wild and Scenic Rivers System, notice of the finding shall be published in the Federal Register and the segment will become a component of the National System.

A Forest Service interdisciplinary study team developed three alternatives for possible management of the river area. Public involvement and interagency coordination were important parts of this phase of the study process. This involvement led to the elimination of one alternative; namely, partial designation of the segment. Therefore, the alternatives given consideration were: a no action alternative that would maintain current management, and an alternative to designate the entire one mile segment as a component of the National Wild and Scenic Rivers System. Subsequently, the study team prepared a report which contains the elements of an environmental assessment and documents the analysis and evaluation of the alternatives. The report is available for public review in the Forest Service office in Seattle, Washington, and in the Office of the Chief, Forest Service, Washington, D.C.

Based on the analysis and evaluation described in the environmental assessment, it is my decision to implement the alternative for designating the North Fork of the Cascade River from its confluence with the South Fork to the boundary of the North Cascades National Park as a component of the National Wild and Scenic Rivers System. This segment meets the criteria for designation, as established by the Wild and Scenic Rivers Act and the Department of Agriculture—Department of the Interior Guidelines for Evaluating Wild and Scenic Rivers. Designation will ensure

future protection of the water quality and scenic values and will protect or enhance cultural resources. Final management plans for this segment will be developed in the Skagit Wild and Scenic River Management Plan.

I have determined through the environmental analysis that this is not a major Federal action that would significantly affect the quality of the human environment; therefore, an environmental impact statement is not needed. This determination was made considering the following factors: (a) designation will protect and/or enhance cultural resources; (b) there are no irreversible or irretrievable commitments of resources; (c) there are no adverse effects on the physical or biological environment, and effects on the social and economic environment are minimal or insignificant; (d) wetlands along the North Fork will not be affected; and (e) there are no known threatened or endangered plants or animals.

Project implementation will take place on the date this decision is published in the Federal Register, pursuant to Pub. L. 95-625.

John R. Block,
Secretary.
March 16, 1981.

[FR Doc. 81-8589 Filed 3-19-81; 8:45 am]
BILLING CODE 3410-11-M

CIVIL AERONAUTICS BOARD

[Docket 39412]

Air Berlin USA Fitness Investigation; Assignment of Proceeding

This proceeding is hereby assigned to Administrative Law Judge Elias C. Rodriguez. Future communications should be addressed to Judge Rodriguez.

Dated at Washington, D.C., March 16, 1981.

Joseph J. Saunders,
Chief Administrative Law Judge.

[FR Doc. 81-8654 Filed 3-19-81; 8:45 am]
BILLING CODE 6320-01-M

[Order 81-3-79; Docket 39166]

Air Transport Association; Order Granting Exemption

Issued Under Delegated Authority
March 13, 1981.



GUIDELINES FOR EVALUATING WILD,
SCENIC AND RECREATIONAL RIVER
AREAS PROPOSED FOR INCLUSION IN
THE NATIONAL WILD AND SCENIC
RIVERS SYSTEM UNDER SECTION 2,
PUBLIC LAW 90-542.

February 1970

PURPOSE

The following criteria supplement those listed in Section 2 of the Wild and Scenic Rivers Act, which states that rivers included in the National Wild and Scenic Rivers System shall be free-flowing streams which possess outstandingly remarkable scenic, recreational, geological, fish and wildlife, historic, cultural and other similar values.

These guidelines are intended to define minimum criteria for the classification and management of free-flowing river areas proposed for inclusion in the national system by the Secretary of the Interior or the Secretary of Agriculture, and for State rivers included in the system by the Secretary of the Interior.

In reading these guidelines and in applying them to real situations of land and water it is important to bear one important qualification in mind. There is no way for these statements of criteria to be written so as to mechanically or automatically indicate which rivers are eligible and what class they must be. It is important to understand each criterion; but it is perhaps even more important to understand their collective intent. The investigator has to exercise his judgment, not only on the specific criteria as they apply to a particular river, but on the river as a whole, and on their relative weights. For this reason, these guidelines are not absolutes. There may be extenuating circumstances which would lead the appropriate Secretary to recommend, or approve pursuant to Section 2(a)(ii), a river area for inclusion in the system because it is exceptional in character and outstandingly remarkable even though it does not meet each of the criteria set forth in these guidelines. However, exceptions to these criteria should be recognized only in rare instances and for compelling reasons.

The three classes of river areas described in Section 2(b) of the Wild and Scenic Rivers Act are as follows:

- "(1) Wild river areas--Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive

and waters unpolluted. These represent vestiges of primitive America.

"(2) Scenic river areas--Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

"(3) Recreational river areas--Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past."

GENERAL CHARACTERISTICS

The Wild and Scenic Rivers Act, Section 10(a), states that, "Each component of the national wild and scenic rivers system shall be administered in such manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development, based on the special attributes of the area."

In order to qualify for inclusion in the national system, a State free-flowing river area must be designated as a wild, scenic, or recreational river by act of the State legislature, with land areas wholly and permanently administered in a manner consistent with the designation by any agency or political subdivision of the State at no cost to the Federal Government, and be approved by the Secretary of the Interior as meeting the criteria established by the Wild and Scenic Rivers Act and the guidelines contained herein. A river or related lands owned by an Indian tribe cannot be added to the national system without the consent of the appropriate governing body.

In evaluating a river for possible inclusion in the system or for determining its classification, the river and its immediate land area should be considered as a unit, with primary emphasis upon the quality of the experience and overall impressions of the recreationist using the river or the adjacent riverbank. Although a free-flowing river or river unit frequently will have more than one classified area, each wild, scenic, or recreational area must be long enough to provide a meaningful experience. The number of different classified areas within a unit should be kept to a minimum.

Any activity, use, or development which is acceptable for a wild river is also acceptable for scenic and recreational river areas, and that which is acceptable for a scenic river is acceptable for a recreation river area. Activity and development limitations discussed below should not necessarily be interpreted as the desired level to which development or management activity should be planned. Hunting and fishing will be permitted, subject to appropriate State and Federal laws.

● The Wild and Scenic Rivers Act provides that rivers must be in a free-flowing natural condition, i.e., a flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes which are without impoundment, diversion, straightening, rip-rapping or other modification of the waterway. However, low dams, diversion works, and other minor structures will not automatically preclude the river unit from being included in the National Wild and Scenic Rivers System, providing such structures do not unreasonably diminish the free-flowing nature of the stream and the scenic, scientific, geological, historical, cultural, recreational, and fish and wildlife values present in the area.

● The river or river unit must be long enough to provide a meaningful experience. Generally, any unit included in the system should be at least 25 miles long. However, a shorter river or segment that possesses outstanding qualifications may be included in the system.

● There should be sufficient volume of water during normal years to permit, during the recreation season, full enjoyment of water-related outdoor recreation activities general-

ly associated with comparable rivers. In the event the existing supply of water is inadequate, it would be necessary to show that additional water can be provided reasonably and economically without unreasonably diminishing the scenic, recreational, and fish and wildlife values of the area.

●The river and its environment should be outstandingly remarkable and, although they may reflect substantial evidence of man's activity, should be generally pleasing to the eye.

●The river should be of high quality water or susceptible of restoration to that condition. A concept of nondegradation whereby existing high water quality will be maintained to the maximum extent feasible will be followed in all river areas included in the national system.

All rivers included in the national system should meet the "Aesthetics--General Criteria" as defined by the National Technical Advisory Committee on Water Quality in the Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968. Water quality should meet the criteria for fish, other aquatic life, and wildlife, as defined in that document, so as to support the propagation of those forms of life which normally would be adapted to the habitat of the stream. Where no standards exist or where existing standards will not meet the objectives of these criteria, standards should be developed or raised to achieve those objectives. Wild river areas can be included in the national system only if they also meet the minimum criteria for primary contact recreation, except as these criteria might be exceeded by natural background conditions. Scenic or recreation river areas which qualify for inclusion in the system in all respects except for water quality may be added to the system provided adequate and reasonable assurance is given by the appropriate Federal or State authority that the water quality can and will be upgraded to the prescribed level for the desired types of recreation, and support aquatic life which normally would be adapted to the habitat of the stream at the prescribed level of water quality. At such time as water quality fully meets the criteria, it may be desirable to change the classification of a river.

●New public utility transmission lines, gas lines, water

lines, etc., in river areas being considered for inclusion in the national system are discouraged. However, where no reasonable alternative exists, additional or new facilities should be restricted to existing rights-of-way. Where new rights-of-way are indicated, the scenic, recreational, and fish and wildlife values must be evaluated in the selection of the site in accordance with the general guidelines described in the Report of the Working Committee on Utilities prepared for the President's Council on Recreation and Natural Beauty, December 1968.

● Mineral activity subject to regulations under the Act must be conducted in a manner that minimizes surface disturbance, sedimentation and pollution, and visual impairment. Specific controls will be developed as a part of each management plan.

CRITERIA FOR RIVER DESIGNATION

The following criteria for classification, designation, and administration of river areas are prescribed by the Act. These criteria are not absolutes, nor can they readily be defined quantitatively. In a given river, a departure from these standards might be more than compensated by other qualities. However, if several "exceptions" are necessary in order for a river to be classified as wild, it probably should be classified as scenic. If several "exceptions" are necessary in order for a river to be classified as scenic, it probably should be classified as recreational.

Wild River Areas

The Wild and Scenic Rivers Act states that "these represent vestiges of primitive America," and they possess these attributes:

1. "Free of impoundments"
2. "Generally inaccessible except by trail"
3. "Watersheds or shorelines essentially primitive"
4. "Waters unpolluted"

● Classification criteria.

Despite some obvious similarities, the "wildness" associated with a wild river area is not synonymous with the "wildness"

involved in wilderness classification under the Wilderness Act of 1964. One major distinction, in contrast to wilderness, is that a wild river area also may contain recreation facilities for the convenience of the user in keeping with the primitive setting.

1. An "impoundment" is a slack water pool formed by any man-made structure. Except in rare instances in which esthetic and recreational characteristics are of such outstanding quality as to counterbalance the disruptive nature of an impoundment, such features will not be allowed on wild river areas. Future construction of such structures that would have a direct and adverse effect on the values for which that river area was included in the national system, as determined by the Secretary charged with the administration of the area, would not be permitted. In the case of rivers added to the national system pursuant to Sec.2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.

2. "Generally inaccessible" means there are no roads or other provisions for overland motorized travel within a narrow, incised river valley, or if the river valley is broad, within 1/4 mile of the riverbank. The presence, however, of one or two inconspicuous roads leading to the river area will not necessarily bar wild river classification.

3. "Essentially primitive" means the shorelines are free of habitation and other substantial evidence of man's intrusion. This would include such things as diversions, straightening, rip-rapping, and other modifications of the waterway. These would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area. In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system. With respect to watersheds, "essentially primitive" means that the portion of the watershed within the boundaries has a natural-like appearance. As with shorelines, developments within the boundaries should emphasize a natural-

like appearance so that the entire river area remains a vestige of primitive America. For the purposes of this Act, a limited amount of domestic livestock grazing and pasture land and cropland devoted to the production of hay may be considered "essentially primitive." One or two inconspicuous dwellings need not necessarily bar wild river classification.

4. "Unpolluted" means the water quality of the river at least meets the minimum criteria for primary contact recreation, except where exceeded by natural background conditions, and esthetics as interpreted in the Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968. In addition, the water presently must be capable of supporting the propagation of aquatic life, including fish, which normally would be adapted to the habitat of the stream. Where no standards exist or where existing standards will not meet the objectives of these criteria, standards should be developed or raised to achieve those objectives.

● Management objectives.

The administration of a wild river area shall give primary emphasis to protecting the values which make it outstandingly remarkable while providing river-related outdoor recreation opportunities in a primitive setting.

To achieve these objectives in wild river areas, it will be necessary to:

1. Restrict or prohibit motorized land travel, except where such uses are not in conflict with the purposes of the Act.
2. Acquire and remove detracting habitations and other non-harmonious improvements.
3. Locate major public-use areas, such as large campgrounds, interpretive centers or administrative headquarters, outside the wild river area. Simple comfort and convenience facilities, such as fireplaces, shelters, and toilets, may be provided for recreation users as necessary to provide an enjoyable experience, protect popular sites, and meet the management objectives. Such facilities will be of a design and

location which harmonize with the surroundings.

4. Prohibit improvements or new structures unless they are clearly in keeping with the overall objectives of the wild river area classification and management. The design for any permitted construction must be in conformance with the approved management plan for that area. Additional habitations or substantial additions to existing habitations will not be permitted.

5. Implement management practices which might include construction of minor structures for such purposes as improvement of fish and game habitat; grazing; protection from fire, insects, or disease; rehabilitation or stabilization of damaged resources, provided the area will remain natural appearing and the practices or structures will harmonize with the environment. Such things as trail bridges, an occasional fence, natural-appearing water diversions, ditches, flow measurement or other water management devices, and similar facilities may be permitted if they are unobtrusive and do not have a significant direct and adverse effect on the natural character of the area.

Scenic River Areas

The Wild and Scenic Rivers Act states that scenic rivers:

1. Are "free of impoundments"
2. Are "accessible in places by road"
3. Have "shorelines or watersheds still largely primitive and shorelines largely undeveloped"

● Classification criteria.

1. An "impoundment" is a slack water pool formed by any man-made structure. Except in rare instances in which esthetic and recreational characteristics are of such outstanding quality as to counterbalance the disruptive nature of an impoundment, such features will not be allowed on scenic river areas. Future construction of such structures that would have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area, would not be permitted. In the case of rivers added to the national

system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.

2. "Accessible in places by road" means that roads may occasionally bridge the river area. Scenic river areas will not include long stretches of conspicuous and well-traveled roads closely paralleling the riverbank. The presence, however, of short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or screened railroads will not necessarily preclude scenic river designation. In addition to the physical and scenic relationship of the free-flowing river area to roads, consideration should be given to the type of use for which such roads were constructed and the type of use which would occur within the proposed scenic river area.

3. "Largely primitive" means that the shorelines and the immediate river environment still present an overall natural character, but that in places, land may be developed for agricultural purposes. A modest amount of diversion, straightening, rip-rapping, and other modification of the waterway would not preclude a river from being considered for classification as a scenic river. Future construction of such structures would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area.

In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system. "Largely primitive" with respect to watersheds means that the portion of the watershed within the boundaries of the scenic river area should be scenic, with a minimum of easily discernible development. Row crops would be considered as meeting the test of "largely primitive," as would timber harvest and other resource use, providing such activity is accomplished without a substantially adverse effect on the natural-like appearance of the river or its immediate environment.

river access points.

2. "Some development along their shorelines" means that lands may be developed for the full range of agricultural uses and could include small communities as well as dispersed or cluster residential developments.

3. "Undergone some impoundment or diversion in the past" means that there may be water resources developments and diversions having an environmental impact greater than that described for wild and scenic river areas. However, the degree of such development should not be to the extent that the water has the characteristics of an impoundment for any significant distance.

Future construction of impoundments, diversions, straightening, rip-rapping, and other modification of the waterway or adjacent lands would not be permitted except in instances where such developments would not have a direct and adverse effect on the values for which that river area was included in the national system as determined by the Secretary charged with the administration of the area. In the case of rivers added to the national system pursuant to Section 2(a)(ii), such construction could result in a determination by the Secretary of the Interior to reclassify or withdraw the affected river area from the system.

● Management objectives.

Management of recreational river areas should be designed to protect and enhance existing recreational values. The primary objectives will be to provide opportunities for engaging in recreation activities dependent on or enhanced by the largely free-flowing nature of the river.

Campgrounds and picnic areas may be established in close proximity to the river, although recreational river classification does not require extensive recreational developments. Recreational facilities may still be kept to a minimum, with visitor services provided outside the river area.

Adopted:

Harrison Loesch 2-2-70
Department of the Interior (Date)

Edward P. Cliff 2-3-70
Department of Agriculture (Date)

4. "Largely undeveloped" means that small communities or any concentration of habitations must be limited to relatively short reaches of the total area under consideration for designation as a scenic river area.

● Management objectives.

A scenic river area should be managed so as to maintain and provide outdoor recreation opportunities in a near natural setting. The basic distinctions between a "wild" and a "scenic" river area are degree of development, type of land use, and road accessibility. In general, a wide range of agricultural, water management, silvicultural and other practices could be compatible with the primary objectives of a scenic river area, providing such practices are carried on in such a way that there is no substantial adverse effect on the river and its immediate environment.

The same considerations enumerated for wild river areas should be considered, except that motorized vehicle use may in some cases be appropriate and that development of larger scale public-use facilities within the river area, such as moderate size campgrounds, public information centers, and administrative headquarters, would be compatible if such structures were screened from the river.

Modest facilities, such as unobtrusive marinas, also would be possible if such structures were consistent with the management plans for that area.

Recreational River Areas

The Wild and Scenic Rivers Act states that recreational rivers:

1. Are "readily accessible by road or railroad"
2. "May have some development along their shoreline"
3. May have "undergone some impoundment or diversion in the past"

● Classification criteria.

1. "Readily accessible" means the likelihood of paralleling roads or railroads on one or both banks of the river, with the possibility of several bridge crossings and numerous

SUMMARY 1/
Attributes and management objectives of the three river classifications for
inclusion in the National Wild and Scenic River System

	Wild	Scenic	Recreation
Attributes	<ol style="list-style-type: none"> 1. Free-flowing. Low dams, diversion works or other minor structures which do not inundate the natural riverbank may not bar consideration as wild. Future construction restricted. 2. Generally inaccessible by road. One or two inconspicuous roads to the area may be permissible. 3. Shorelines essentially primitive. One or two inconspicuous dwellings and land devoted to production of hay may be permitted. Watershed natural-like in appearance. 4. Water quality meets minimum criteria for primary contact recreation except where such criteria would be exceeded by natural background conditions and aesthetics 2/ and capable of supporting propagation of aquatic life normally adapted to habitat of the stream. 	<ol style="list-style-type: none"> 1. Free-flowing. Low dams, diversion works or other minor structures which do not inundate the natural riverbank may not bar consideration. Future construction restricted. 2. Accessible by roads which may occasionally bridge the river area. Short stretches of conspicuous or longer stretches of inconspicuous and well-screened roads or railroads paralleling river area may be permitted. 3. Shoreline largely primitive. Small communities limited to short reaches of total area. Agricultural practices which do not adversely affect river area may be permitted. 4. Water quality should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and aesthetics 2/ and capable of supporting propagation of aquatic life normally adapted to habitat of the stream, or is capable of and is being restored to that quality. 	<ol style="list-style-type: none"> 1. May have undergone some impoundment or diversion in the past. Water should not have characteristics of an impoundment for any significant distance. Future construction restricted. 2. Readily accessible, with likelihood of paralleling roads or railroads along river banks and bridge crossings. 3. Shoreline may be extensively developed. 4. Water quality should meet minimum criteria for desired types of recreation except where such criteria would be exceeded by natural background conditions and aesthetics 2/ and capable of supporting propagation of aquatic life normally adapted to habitat of the stream or is capable of and is being restored to that quality.
Management objectives	<ol style="list-style-type: none"> 1. Limited motorized land travel in area. 2. Nonharmonious or new habitations or improvements permitted. 3. Only primitive-type public use provided. 4. New structures and improvement of old ones prohibited if not in keeping with overall objectives. 5. Unobtrusive fences, gauging stations and other management facilities may be permitted if no significant adverse effect on natural character of area. 6. Limited range of agriculture and other resource uses permitted. 	<ol style="list-style-type: none"> 1. Motorized vehicles allowed on land area. 2. Nonharmonious improvements and few habitations permitted. 3. Limited modern screened public use facilities permitted, i. e. campgrounds, visitor centers, etc. 4. Some new facilities allowed, such as unobtrusive marifas. 5. Unobtrusive fences, gauging stations and other management facilities may be permitted if no significant adverse effect on natural character of area. 6. Wide range of agriculture and other resource uses may be permitted. 	<ol style="list-style-type: none"> 1. Optimum accessibility by motorized vehicle. 2. May be densely settled in places. 3. Public use areas may be in close proximity to river. 4. New structures allowed for both habitation and for intensive recreation use. 5. Management practice facilities permitted. 6. Full range of agriculture and other resource uses may be permitted.

1/ To be used only in conjunction with the text.
2/ Federal Water Pollution Control Administration's Water Quality Criteria, April 1, 1968.

February 1970

National Wild and Scenic Rivers Systems,
Final Revised Guidelines
for Eligibility Classification
and Management of River Areas

Federal Register

Volume 47,

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September 7, 1982

DEPARTMENT OF THE INTERIOR**Office of the Secretary****National Park Service****DEPARTMENT OF AGRICULTURE****Office of the Secretary****Forest Service****National Wild and Scenic Rivers System; Final Revised Guidelines for Eligibility, Classification and Management of River Areas**

AGENCY: National Park Service and Office of the Secretary, Interior; Forest Service and Office of the Secretary, USDA.

ACTION: Publication of final revised guidelines.

FOR FURTHER INFORMATION CONTACT: Bob Brockwehl (NPS), 202/272-3566. William R. Snyder (USFS), 202/382-8014.

SUPPLEMENTARY INFORMATION:

Guidelines for the study of potential national wild and scenic rivers and management of designated rivers were first issued jointly by the Department of Agriculture and the Department of the Interior in 1970. On January 28, 1981 draft revised guidelines were published in the *Federal Register* for public comment (Vol. 46, No. 18, pp. 9148-9158). The document which follows was prepared after consideration of 50 letters of comment received from other Federal agencies, State governments, private industry, citizens' groups and individuals. Major comments and responses are summarized below. Many of the comments received were not addressed because they related to aspects of the wild and scenic rivers program beyond the scope of these guidelines. (See Preface of the revised guidelines.)

Comments and Responses

Comment: The definition of the term outstandingly remarkable value is too vague and too liberal. Too many rivers will be eligible for designation, unreasonably constraining economic development of natural resources.
Response: Balancing of the need for protection versus development of each river area will be considered by the Congress in deciding whether or not to designate the river area. A determination that a particular river is eligible for designation does not necessarily imply that designation is the best use of the river in terms of the national interest.

Comment: The guidelines give inadequate emphasis to public

involvement in the study process.

Response: Public involvement is sufficiently addressed in the context of environmental statements or assessments prepared in the study process.

Comment: The guidelines do not make sufficiently clear which of the management principles apply to private lands.
Response: The guidelines may be unclear to the general reader in this respect. The management principles are to be implemented throughout each river area to the fullest extent possible under the managing agency's general statutory authorities and other existing Federal, State and local laws, including zoning ordinances where available. Some management principles obviously apply only to Federal lands within the river area. For instance, the Wild and Scenic Rivers Act does not open private lands to public recreation. Management principles may apply to private lands only to the extent required by other laws such as local zoning and air and water pollution regulations.

Comment: Restriction of timber harvest to selective harvest techniques is unnecessarily limiting from both the timber production and the natural resource preservation standpoints.
Response: The guidelines have been amended in accordance with this comment.

Comment: Specific guidance contained in the 1970 guideline with respect to the granting of rights-of-way for transmission lines is omitted from the revised draft guidelines.
Response: The subsection on rights-of-way has been amended in accordance with this comment.

Comment: A protected study area extending one half mile from each bank of the river is excessive when the final boundaries of a river area must average no more than one quarter mile from each bank (320 acres per mile).
Response: The half-mile figure was intended to ensure that all areas likely to be included within the boundaries of a designated river area would be considered in the study process. Setting a study boundary based on the "visual corridor" concept was considered but rejected. The one-quarter-mile figure was finally selected to avoid unnecessary limitations on resource developments. Some developments which may be initiated beyond the one-quarter-mile boundary during the study period might be affected in the future if the area under development is included in the boundaries of the river area designated by Congress.

Comment: Evaluation of the study area in its existing condition for classification purposes does not allow

for the fact that a forest area growing in relatively natural condition at the time of the study may be scheduled for clearcutting at some future date. The classification process should allow for authorized and scheduled future uses which could change the condition and, thus, the classification of the river area.
Response: The guidelines have been amended to permit consideration of alternative classifications for the river area where authorized future uses could alter classification.

The following additional changes were made in response to suggestions from the reviewing public or from reviewers within the responsible agencies.

- Unnecessary definitions were deleted.
- Quotations and paraphrases of the Wild and Scenic River Act (including the whole of Section II—Policy) were eliminated as much as possible. Instead, the guidelines will reference the appropriate sections of the Act where necessary.
- The entire subsection titled "Findings and Recommendations" and portions of the subsection titled "General Management Principles" were deleted and their content was placed in other appropriate sections.

Additional copies of the guidelines, the Wild and Scenic Rivers Act, as amended, and further information on the National Wild and Scenic Rivers System may be obtained from: National Park Service, Rivers and Trails Division (780), 440 G Street, N.W., Washington, D.C. 20243.

Dated: July 12, 1982.

G. Ray Arnett,

Assistant Secretary for Fish and Wildlife and Parks (Interior).

Dated: August 26, 1982.

Douglas W. MacCleery,

Deputy Assistant Secretary for Natural Resources and Environment (Agriculture).

Department of Agriculture**Department of the Interior****National Wild and Scenic Rivers System Guidelines for Eligibility, Classification and Management of River Areas.****Contents***Preface*

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The Wild and Scenic Rivers Act (Pub. L. 90-542 as amended through Pub. L. 96-487)

Preface

The National Wild and Scenic Rivers System

The Wild and Scenic Rivers Act, (Pub. L. 90-542 as amended; 16 U.S.C. 1271-1287) established a method for providing Federal protection for certain of our country's remaining free-flowing rivers, preserving them and their immediate environments for the use and enjoyment of present and future generations. Rivers are included in the system so that they may benefit from the protective management and control of development for which the Act provides.

The preamble of the Act states:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

Addition of Rivers to the System

The Wild and Scenic Rivers Act provides two methods for adding a river to the National Wild and Scenic Rivers System. The first method is by an act of Congress. Congress can designate a river directly or it can authorize a river for study as a potential wild, scenic or recreational river. Upon completion of a study conducted by the Department of the Interior or the Department of Agriculture, a study report is prepared

and transmitted to the President who, in turn, forwards it with his recommendations to Congress for action.

The second method for inclusion of a river in the national system is through the authority granted to the Secretary of the Interior in section 2(a)(ii) of the Act. Upon application by the Governor or Governors of the State or States involved, the Secretary can designate a river as a component of the national system provided that the river has been designated as a wild, scenic or recreational river by or pursuant to an act of the legislature of the State or States through which it flows to be permanently administered as a wild, scenic, or recreational river by an agency or political subdivision of the State or States concerned.

To be eligible for inclusion in the system through either method, rivers must meet certain criteria set forth in section 2(b) of the Act. Procedures for proposing State-administered rivers for designation have been issued by the Department of the Interior.

The Guidelines

Subsequent to enactment of the Wild and Scenic Rivers Act in October 1968, the Departments of Agriculture and the Interior initiated studies of twenty-seven rivers which the Act authorized for study as potential additions to the National Wild and Scenic Rivers System. As these studies progressed, it became evident that specific requirements of the Act concerning the evaluation, classification and management of these rivers were subject to differing interpretations within and between the two departments.

It was therefore agreed that a uniform evaluation and management approach should be formulated for use by the two departments, and through a cooperative effort, *Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System Under Section 2, Public Law 90-542* was prepared and promulgated in February 1970.

The guidelines not only provide guidance for the congressionally mandated studies under section 5(a) of the Act, but are also useful for evaluations conducted by water resource development agencies under section 5(d) and for States applying for inclusion of State-designated rivers in the national system.

Revision of the Guidelines

While these guidelines were effective throughout a decade, it became clear

that revision was necessary to incorporate changes identified through use and to reflect requirements of new laws and regulations. Therefore, on August 2, 1979, the President directed in his Environmental Message that "the Secretary of Agriculture and the Secretary of the Interior shall jointly revise their guidelines for evaluating wild, scenic and recreational rivers to ensure consideration of river ecosystems and to shorten the time currently used to study rivers for designation."

This revision of the guidelines has been prepared in response to the President's 1979 directive and includes:

- Clarification of the fact that free-flowing rivers which contain outstandingly remarkable ecological values are eligible for addition to the national system.
- Clarification of the fact that free-flowing river segments in or near urban areas that possess outstandingly remarkable values are eligible for addition to the national system.
- Elimination of the 25-mile minimum length guideline.
- Revision of the definition of sufficient river flow or volume of water in the river. Sufficient flow was not defined in the Act and the definition in the existing guidelines was unnecessarily limiting.
- Revised water quality guidelines to allow inclusion in the system of rivers where restoration to high water quality is planned.
- A revised section on management of designated river areas.
- A study schedule to accelerate completion of the river studies authorized by Congress.

Section I—Definitions

The following definitions are provided for the purpose of these guidelines only. *Act: The Wild and Scenic Rivers Act.*

Carrying capacity: The quantity of recreation use which an area can sustain without adverse impact on the outstandingly remarkable values and free-flowing character of the river area, the quality of recreation experience, and public health and safety.

Classification criteria: Criteria specified in Section 2(b) of the Act for determining the classification (wild, scenic or recreational) of eligible river segments.

Classification: The process of determining which of the classes outlined in section 2(b) of the Act (wild, scenic, or recreational) best fit the river or its various segments.

Component: A river area designated as a unit of the National Wild and Scenic Rivers System.

Designation: Inclusion of a river area in the national system either by act of Congress or by authority of the Secretary of the Interior.

Development: Any manmade structure or modification of the natural or existing river environment.

Eligibility: Qualification of a river for inclusion in the national system through determination that it is free-flowing and with its adjacent land area possesses at least one outstandingly remarkable value.

Flow: The volume of water in a river passing a given point in a given period of time, usually expressed in terms of cubic feet per second or cubic meters per second.

Impoundment: A body of water formed by any manmade structure.

Management plan: The detailed development plan required under section 3(b) of the Act which states the boundaries and classification of the river area and presents a plan for its public use, development and administration.

Primary contact recreation: Activities in which there is prolonged and intimate contact with the water, (e.g., swimming, water skiing, surfing, kayaking, "tubing," and wading or dabbling by children.

River area: For a river study, that portion of a river authorized by Congress for study and its immediate environment comprising an area extending at least one-quarter mile from each bank. For designated rivers, the river and adjacent land within the authorized boundaries.

Secondary contact recreation: Activities in which contact with the water is either incidental or accidental, e.g., boating, fishing and limiting contact with water incident to shoreline activities.

Study agency: The agency within the Department of Agriculture or the Department of the Interior delegated the responsibility for a wild and scenic river study.

Study report: The report on the suitability or nonsuitability of a study river for inclusion in the national system, which section 4(a) requires the Secretary of Agriculture, or the Secretary of the Interior, or both jointly to prepare and submit to the President. The President transmits the report with his recommendation to the Congress.

Study team: A team of professionals from interested local, State and Federal agencies invited by the study agency and participating in the study.

Section II—The River Study

The Study Process

Section 4(a) mandates that all rivers designated as potential additions to the system in section 5(a) be studied as to their suitability for inclusion in the system:

The Secretary of the Interior or, where national forest lands are involved, the Secretary of Agriculture or, in appropriate cases, the two Secretaries jointly shall study and submit to the President reports on the suitability or nonsuitability for addition to the national wild and scenic rivers system of rivers which are designated herein or hereafter by the Congress as potential additions to such system. The President shall report to the Congress his recommendations and proposals with respect to the designation of each such river or section thereof under this Act.

The purpose of a wild and scenic river study is to provide information upon which the President can base his recommendation and Congress can make a decision. Procedures for developing the necessary information and preparing the study report may vary depending on the agency which conducts the study, but generally will include the steps shown on Table 1, Accelerated Study Schedule.

Wild and scenic river studies will comply with all applicable statutes and executive orders, which may include the following: the National Environmental Policy Act (Pub. L. 91-190), the National Historic Preservation Act (Pub. L. 89-665), the Endangered Species Act (Pub. L. 93-205), the Fish and Wildlife Coordination Act (Pub. L. 85-264), the Water Resources Planning Act (Pub. L. 89-80), the Floodplain and Wetlands Executive Orders (E.O. 11988 and E.O. 11990), the National Forest Management Act of 1976 (Pub. L. 94-588), the Federal Land Policy and Management Act of 1976 (Pub. L. 94-579), the Wild and Scenic Rivers Act (Pub. L. 90-542, as amended), and any rules and regulations issued pursuant thereto.

The Study Report

Each river study report will be a concise presentation of the information required in sections 4(a) and 5(c) of the Act as augmented by the Council on Environmental Quality regulations implementing the procedural provisions of the National Environmental Policy Act (40 CFR Parts 1500-1508).

Section 4(a):

Each report, including maps and illustrations, shall show among other things the area included within the report; the characteristics which do or do not make the area a worthy addition to the system; the current status of land ownership and use in the area; the reasonably foreseeable potential

uses of the land and water which would be enhanced, foreclosed or curtailed if the area were included in the national wild and scenic rivers system; the Federal agency (which in the case of a river which is wholly or substantially within a national forest, shall be the Department of Agriculture) by which is proposed the area, should it be added to the system, be administered; the extent to which it is proposed that such administration including the costs thereof, be shared by State and local agencies; and the estimated cost to the United States of acquiring necessary lands and interests in land and of administering the area, should it be added to the system.

In addition, section 5(c) requires that

The study of any of said rivers * * * shall include a determination of the degree to which the State or its political subdivisions might participate in the preservation and administration of the river should it be proposed for inclusion in the national wild and scenic rivers system.

Study reports may be combined with draft and final environmental impact statements (EIS) as permitted by § 1506.4 of the Council on Environmental Quality regulations. Study reports will be reviewed by other Federal agencies, states and the public as required by section 4(b) of the Wild and Scenic Rivers Act. Each of the following subsections describes the way in which the information is generated, analyzed and presented in the report.

Description of the River Area

Each report will contain a description of the area included in the study. The study area will cover, as a minimum, an area extending the length of the river segment authorized for study and extending in width one-quarter mile from each bank of the river.

Adjacent river areas beyond one quarter mile from each river bank may be studied if their inclusion could facilitate management of the resources of the river area. For example, there may be important historic, archeological or ecological resource areas which may extend beyond the boundaries of the mandated study area, but could be better managed by inclusion in the river area. Also, management of the river area may be facilitated by extension to include established or available access points not included in the study.

For the purposes of study and determining eligibility and classification the river area may be divided into segments.

The description of the river area will identify the outstandingly remarkable values and the extent of man's activity in the river environment to provide a clear basis for findings of eligibility and classification. While only one

outstandingly remarkable value is necessary for eligibility, the study report should carefully document all values of the river area.

In addition to the information required by Sections 4(a) and 5(c) of the Act, this section of the report will describe any existing zoning ordinances or other provisions of law governing land use in the study area.

If the study report and the environmental impact statement are combined, the same chapter may describe both the river area and the affected environment. For EIS purposes and for general information, a brief description of the regional setting will also be included.

Determination of Eligibility

Each report will contain a determination as to the eligibility of all portions of the authorized study area.

Section 2(b) of the Act states that a "wild river area" shall be included in the system as a free-flowing stream and the related adjacent land area that possesses one or more of the values referred to in section 1, subsection (b) of this Act." The terms "river" and "free-flowing" are defined in section 15 of the act.

In reading and applying the criteria for eligibility, the following points are relevant:

- The fact that a river segment may flow between large impoundments will not necessarily preclude its designation. Such segments may qualify if conditions within the segment meet the criteria.
- Rivers or river segments in or near urban areas that possess outstandingly remarkable values may qualify. Only one outstandingly remarkable value is needed for eligibility.
- In addition to the specific values listed in Section 1(b) of the Act, other similar values, such as ecological, if outstandingly remarkable, can justify inclusion of a river in the national system.
- The determination of whether a river area contains "outstandingly remarkable" values is a professional judgment on the part of the study team. The basis for the judgment will be documented in the study report.
- There are no specific requirements concerning the length or the flow of an eligible river segment. A river segment is of sufficient length if, when managed as a wild, scenic or recreational river area, the outstandingly remarkable values are protected. Flows are sufficient if they sustain or complement the

outstandingly remarkable values for which the river would be designated.

Classification

Study reports will indicate the potential classification which best fits each eligible river segment as viewed in its existing condition. Section 2(b) of the Act states that rivers which are found eligible and included in the National Wild and Scenic Rivers Systems shall be classified as one of the following:

(1) **Wild river areas**—Those rivers or sections of rivers that are free of impoundments and generally inaccessible except by trail, with watersheds or shorelines essentially primitive and waters unpolluted. These represent vestiges of primitive America.

These criteria are interpreted as follows:

a. "Free of impoundments." All portions of the river shall be free of impoundments.

b. "Generally inaccessible except by trail." Generally accessible except by trail shall mean areas will not be reached, or reached only under provisions of a written leave, within the river area. The existence of a few inconspicuous roads leading to the boundary of the study area at the time of study will not disqualify a river for wild river classification.

c. "Watersheds or shorelines essentially primitive." Wild river areas shall show little or no evidence of human activity. Shorelines and watersheds within the river area should be essentially free of structures including such things as buildings, pipelines, powerlines, dams, pumps, generators, diversion works, rip-rap and other modifications of the waterway or adjacent land within the river corridor. The existence of a few inconspicuous structures, particularly those of historic or cultural value, at the time of study need not bar wild classification.

d. "Waters unpolluted." A limited amount of domestic livestock grazing or hay production may be considered "essentially primitive." There should be no row crops or ongoing timber harvest and the river area should show little or no evidence of past logging activities.

e. "Waters unpolluted." The water quality of a wild river will meet or exceed Federal criteria or federally approved State standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the stream, and for primary contact recreation except where exceeded by natural conditions.

(2) **Scenic river areas**—Those rivers or sections of rivers that are free of impoundments, with shorelines or watersheds still largely primitive and shorelines largely undeveloped, but accessible in places by roads.

These criteria are interpreted as follows:

a. "Free of impoundments." Scenic river areas will be free of impoundments.

b. "Shorelines or watersheds still largely primitive." To qualify for scenic classification, the rivers segment's shorelines and immediate environment should not show substantial evidence of human activity. The portion of the watershed within the boundary of the scenic river may have some discernible existing development. "Largely primitive" means that the shorelines and the immediate river environment still present an overall natural character, but that in places land may be developed for agricultural purposes. Row crops would be considered as meeting the test of "largely primitive," as would timber production and other resource use. Human activity is accomplished only if it has a substantial adverse effect on the natural appearance of the river or its immediate environment.

c. "Watersheds largely undeveloped" means that any structures or concentration of structures must be limited to relatively short reaches of the total watershed consideration for the entire scenic river area.

d. "Watersheds largely undeveloped" means that tracts may reach the river area and occasionally bridge the river. The presence of short stretches of conspicuous or longer stretches of conspicuous and well-screened roads or railroads will not necessarily preclude scenic river designation. In addition to the physical and scenic relationship of the free-flowing river area to roads, railroads, consideration should be given to the type of use for which such tracts or railroads were constructed and the type of use which would occur within the proposed scenic river area.

(3) **Recreation river areas**—Those rivers or sections of rivers that are readily accessible by road or railroad, that may have some development along their shorelines, and that may have undergone some impoundment or diversion in the past.

These criteria are interpreted as follows:

a. "Readily accessible by road or railroad." River areas classified as recreational may contain existing parallel roads or railroads in close proximity to one or both banks of the river as well as bridge crossings and roads fording or ending at the river.

b. "Some development along their shorelines." Lands may have been developed for the full range of agricultural and forestry uses, may show evidence of past and ongoing timber

harvest, and may include some residential, commercial or similar development.

c. "Some impoundment or diversion in the past." There may be some existing impoundments, diversions and other modifications of the waterway having an impact on the river area. Existing low dams, diversion works, rip-rap and other minor structures will not bar recreational classification, provided the waterway remains generally natural and riverine in appearance.

The classification criteria are summarized in Table 2, appended to these guidelines.

There are several points which all participants and observers of the study process should bear in mind when reading and applying the classification criteria:

- It is important to understand each criterion, but it is more important to understand their collective intent. Each river segment and its immediate environment should be considered as a unit. The basis for classification is the degree of naturalness, or stated negatively, the degree of evidence of man's activity in the river area. The most natural rivers will be classified wild; those somewhat less natural, scenic, and those least natural, recreational.
- Generally, only conditions within the river area determine classification; however, occasionally conditions outside the river area, such as developments which could impact air and water quality, noise levels or scenic views within the river area, may influence classification.
- For the purpose of classification, a river area may be divided into segments. Each segment, considered as a whole, will conform to one of the classifications. In segmenting the river the study team should take into account the management strategies necessary to administer the entire river area and should avoid excessive segmentation.
- The Wild and Scenic Rivers Act provides no specific guidance on water quality for scenic and recreational rivers. However, the Clean Water Act has made it a national goal that all waters of the United States be made fishable and swimmable, and provides the legal means for upgrading water quality in any river which would otherwise be suitable for inclusion in the system. Therefore, rivers will not necessarily be excluded from the system because of poor water quality at the time study, provided a water quality improvement plan exists or is being

developed in compliance with applicable State and Federal laws.

- Although each classification permits certain existing development, the criteria do not imply that additional inconsistent development is permitted in the future.
- The classification criteria provide uniform guidance for professional judgment, but they are not absolutes. It is not possible to formulate criteria so as to mechanically or automatically classify river areas. Therefore, there may occasionally be exceptions to some of the criteria. For example, if the study team finds that strict application of the statutory classification criteria would not provide the most appropriate classification for a specific river segment, the study report may recommend for congressional consideration an exception to the classification criteria.

Analysis of the Alternatives

To provide for decisionmaking and to satisfy the requirements of the National Environmental Policy Act, study reports will include an analysis of alternatives. The study team will develop an array of alternative plans encompassing all reasonable proposals for use of the river area including uses which may be incompatible with designation of the river area as a component of the national system. Where appropriate, alternative plans for the river area may be based on, but not limited to:

- Alternative managing agencies for the river area;
- Alternative protective measures other than national designation;
- Alternative uses of the area incompatible with designation as a component of the national system; and
- Alternative classifications for the river area. Occasionally there may be authorized but not yet constructed projects, which if constructed would alter the classification of the river area. In such cases, alternatives may be presented to permit consideration of the river area as it would be classified both with and without the authorized project. Authorized projects may include approved land management plans prepared by a Federal land management agency under its statutory authorities.

The study report will present at least one alternative plan calling for national designation through either Congressional or Secretarial designation of all eligible segments of the congressionally authorized study area.

If the study team finds a segment ineligible for designation as a

component of the National Wild and Scenic Rivers System, but still worthy of protection, alternatives for State, local or private preservation may be presented, as well as protection under other Federal programs.

If areas adjacent to the study area have been studied and found eligible, the report may present alternatives which incorporate such areas into the river area proposed for designation. Such expansion of the original study area either in length or in width may be desirable to preserve and facilitate management of river ecosystems, historic or archeological areas or other special areas.

Section III—Management

Wild and scenic rivers shall be managed with plans prepared in accordance with the requirements of the Act, other applicable laws, and the following general management principles. Management plans will state: General principles for any land acquisition which may be necessary; the kinds and amounts of public use which the river area can sustain without impact to the values for which it was designated; and specific management measures which will be used to implement the management objectives for each of the various river segments and protect esthetic, scenic, historic, archeologic and scientific features.

If the classification or classifications determined in the management plan differ from those stated in the study report, the management plan will describe the changes in the existing condition of the river area or other considerations which required the change in classification.

General Management Principles

Section 10(a) states,

Each component of the national wild and scenic rivers system shall be administered in such a manner as to protect and enhance the values which caused it to be included in said system without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values. In such administration primary emphasis shall be given to protecting its esthetic, scenic, historic, archeologic, and scientific features. Management plans for any such component may establish varying degrees of intensity for its protection and development on the special attributes of the area.

This section is interpreted as stating a nondegradation and enhancement policy for all designated river areas, regardless of classification. Each component will be managed to protect and enhance the values for which the river was designated, while providing for public

recreation and resource uses which do not adversely impact or degrade those values. Specific management strategies will vary according to classification but will always be designed to protect and enhance the values of the river area. Land uses and developments on private lands within the river area which were in existence when the river was designated may be permitted to continue. New land uses must be evaluated for their compatibility with the purposes of the Act.

The management principles which follow stem from section 10(a). Managing agencies will implement these principles to the fullest extent possible under their general statutory authorities and existing Federal, State and local laws. Because of these limitations, however, implementation of the principles may differ among and within components of the system depending on whether the land areas involved are federally, State, locally or privately owned.

Carrying Capacity. Studies will be made during preparation of the management plan and periodically thereafter to determine the quantity and mixture of recreation and other public use which can be permitted without adverse impact on the resource values of the river area. Management of the river area can then be planned accordingly.

Public Use and Access. Public use will be regulated and distributed where necessary to protect and enhance (by allowing natural recovery where resources have been damaged) the resource values of the river area. Public use may be controlled by limiting access to the river, by issuing permits, or by other means available to the managing agency through its general statutory authorities.

Basic Facilities. The managing agency may provide basic facilities to absorb user impacts on the resource. Wild river areas will contain only the basic minimum facilities in keeping with the "essentially primitive" nature of the area. If facilities such as toilets and refuse containers are necessary, they will generally be located at access points or at a sufficient distance from the river bank to minimize their intrusive impact. In scenic and

recreational river areas; simple comfort and convenience facilities such as toilets, shelters, fireplaces, picnic tables and refuse containers are appropriate. These, when placed within the river area, will be judiciously located to protect the values of popular areas from the impacts of public use.

Major Facilities. Major public use facilities such as developed campgrounds, major visitor centers and administrative headquarters will, where feasible, be located outside the river area. If such facilities are necessary to provide for public use and/or to protect the river resource, and location outside the river area is infeasible, such facilities may be located within the river area provided they do not have an adverse effect on the values for which the river area was designated.

Motorized Travel. Motorized travel on land or water is generally permitted in wild, scenic and recreational river areas, but will be restricted or prohibited where necessary to protect the values for which the river area was designated.

Agricultural and Forestry Practices. Agricultural and forestry practices should be similar in nature and intensity to those present in the area at the time of designation. Generally, uses more intensive than grazing and hay production are incompatible with wild river classification. Rowcrop production and timber harvest may be practiced in recreational and scenic river areas. Recreational river areas may contain an even larger range of agricultural and forestry uses. Timber harvest in any river area will be conducted so as to avoid adverse impacts on the river area values.

Other Resource Management Practices. Resource management practices will be limited to those which are necessary for protection, conservation, rehabilitation or enhancement of the river area resources. Such features as trail bridges, fences, water bars and drainage ditches, flow measurement devices and other minor structures or management practices are permitted when compatible with the classification of the river area and provided that the area remains natural in appearance and the practices or structures harmonize with the

surrounding environment.

Water Quality. Consistent with the Clean Water Act, water quality in wild, scenic and recreational river areas will be maintained or, where necessary, improved to levels which meet Federal criteria or federally approved State standards for aesthetics and fish and wildlife propagation. River managers will work with local authorities to abate activities within the river area which are degrading or would degrade existing water quality.

Additional management principles stem from other sections of the Act as follows:

Land Acquisition: Section 8
Water Resource Development: Section 7
Mining: Section 9
Management of Adjacent Federal Lands: Section 12(a)
Hunting and Fishing: Section 13(a)
Water Rights: Section 13(b)-(f)
Rights-of-Way: Section 13(g)

The following policies are consistent with and supplement the management principles stated in the Act:

Land Use Controls. Existing patterns of land use and ownership should be maintained, provided they remain consistent with the purposes of the Act. Where land use controls are necessary to protect river area values, the managing agency will utilize a full range of land-use control measures including zoning, easements and fee acquisition.

Rights-of-Way. In the absence of reasonable alternative routes, new public utility rights-of-way on Federal lands affecting a Wild and Scenic River area or study area will be permitted. Where new rights-of-way are unavoidable, locations and construction techniques will be selected to minimize adverse effects on scenic, recreational, fish and wildlife and other values of the river area.

Other legislation applicable to the various managing agencies may also apply to wild and scenic river areas. Where conflicts exist between the provisions of the Wild and Scenic Rivers Act and other acts applicable to lands within the system, the more restrictive provisions providing for protection of the river values shall apply.

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TABLE 1.
ACCELERATED STUDY SCHEDULE

River Study Tasks	MONTHS																													
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
1. Organize study team Prepare study plan Public information meetings Scope critical issues	Shaded																													
2. Resource inventories (a) Study history, locations (b) River eligibility and classification eval. (c) Literature search (d) Other agency contacts (e) Resource maps	Shaded	Shaded	Shaded	Shaded																										
3. Develop alternative (a) Prepare alternatives display (b) Public meetings on findings and alternate. (c) Analyze Public Input (d) Evaluate alternatives							Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded	Shaded
4. Complete Preliminary Report/DEIS																														
5. Review of Draft (a) Internal Review (b) Revise preliminary as needed (c) Prepare osaca ready copy (d) Print Draft Report/EIS (e) Distribute for 90-day review (a) Public meetings or formal hearings during review																														
6. Analyze Review Input Revise draft as needed. / Internal Review																														
7. Print Final Report																														
8. Secretary's declination and transmittal of report w/ recommendations to OMB																														
9. Executive review and transmittal to the Congress																														

This schedule does not take into account the possibility of delays due to Congressional concern, interagency or intradepartmental concerns or other possible outside influences that cannot be planned for.

TABLE 2.
CLASSIFICATION CRITERIA FOR WILD, SCENIC AND RECREATIONAL RIVER AREAS *

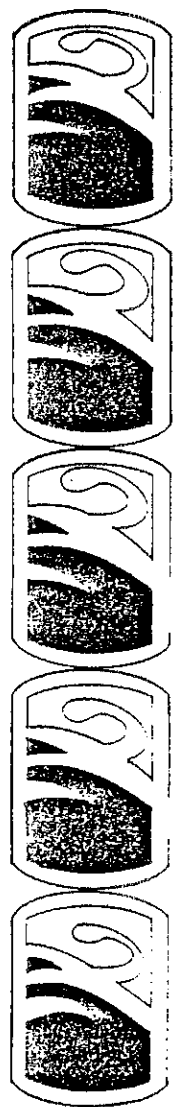
ATTRIBUTE	WILD	SCENIC	RECREATIONAL
Water Resources Development	Free of impoundment.	Free of impoundment.	Some existing impoundment or diversion. The existence of low dams, diversions or other modifications of the waterway is acceptable, provided the waterway remains generally natural and riverine in appearance.
Shoreline Development	Essentially primitive. Little or no evidence of human activity. The presence of a few inconspicuous structures, particularly those of historic or cultural value, is acceptable. A limited amount of domestic livestock grazing or hay production is acceptable. Little or no evidence of past timber harvest.	Largely primitive and undeveloped. No substantial evidence of human activity. The presence of small communities or dispersed dwellings or farm structures is acceptable. The presence of grazing, hay production or row crops is acceptable. Evidence of past or ongoing timber harvest is acceptable, provided the forest appears natural from the riverbank.	Some development. Substantial evidence of human activity. The presence of extensive residential development and a few commercial structures is acceptable. Lands may have been developed for the full range of agricultural and forestry uses. May show evidence of past and ongoing timber harvest.
Accessibility	Generally inaccessible except by trail. No roads, railroads or other provision for vehicular travel within the river area. A few existing roads leading to the boundary of the river area is acceptable.	Accessible in places by road. Roads may occasionally reach or bridge the river. The existence of short stretches of conspicuous or longer stretches of inconspicuous roads or railroads is acceptable.	Readily accessible by road or railroad. The existence of parallel roads or railroads on one or both banks as well as bridge crossings and other river access points is acceptable.
Water Quality	Meets or exceeds Federal criteria or federally approved State standards for aesthetics, for propagation of fish and wildlife normally adapted to the habitat of the river, and for primary contact recreation (swimming) except where exceeded by natural conditions.	No criteria prescribed by the Wild and Scenic Rivers Act. The Federal Water Pollution Control Act Amendments of 1972 have made it a national goal that all waters of the United States be made fishable and swimmable. Therefore, rivers will not be precluded from scenic or recreational classification because of poor water quality at the time of their study, provided a water quality improvement plan exists or is being developed in compliance with applicable Federal and State laws.	

* Table to be used only in conjunction with text.

Appendix

APPENDIX C

Wildlife Tables		<u>Volume</u>	<u>Page</u>
Table 1	Species that are known to occur, or suspected of occurring, in riparian habitat in Mt. Baker-Snoqualmie National Forest _____	I	A92
Table 2	Species that are known to depend, or suspected of depending, on riparian habitat (to maintain maximum population densities) in Mt. Baker-Snoqualmie National Forest _____	I	A100
Table 3	Partial listing of wildlife and/or subspecies of particular concern (suspected of being rare or having declining populations) utilizing the Skagit Wild and Scenic River System (Ralph 1979) _____	I	A101
Table 4	Verified sightings of wildlife species of concern (suspected of being rare or having declining populations in the vicinity of the Skagit Wild and Scenic River System (WDG, Non-game Wildlife Program 1979) _____	I	A105



Appendix
C

Table 1. Species that are known to occur, or suspected of occurring, in riparian habitat in Mount Baker-Snoqualmie National Forest, with state abundance (C = common, U = uncommon, R = rare) and state residence (M = migrant, W = winter, Y = year round, S = spring/summer) (Adapted from WILDHAB, USFS R-6, 1980).

Common Name	Species	State	
		Abundance	Residence
MAMMALS			
ORDER MARSUPIALIA			
Family Didelphidae			
Opposum	<u>Didelphis virginiana</u>	C	Y
ORDER INSECTIVORA			
Family Soricidae			
Masked shrew	<u>Sorex cinereus</u>	C	Y
Trowbridge's shrew	<u>Sorex trowbridgii</u>	C	Y
Dusky shrew	<u>Sorex obscurus</u>	C	Y
Northern water shrew	<u>Sorex palustris</u>	C	Y
Pacific water shrew	<u>Sorex bendirei</u>	C	Y
Family Talpidae			
Shrew-mole	<u>Neurotrichus gibbsii</u>	C	Y
ORDER CHIROPTERA			
Family Vespertilionidae			
Keen's myotis	<u>Myotis keenii</u>	U	Y
Long-eared myotis	<u>Myotis evotis</u>	C	Y
Long-legged myotis	<u>Myotis volans</u>	C	Y
California myotis	<u>Myotis californicus</u>	C	Y
Silver-haired bat	<u>Lasionycteris noctivagans</u>	C	Y
Big brown bat	<u>Eptesicus fuscus</u>	C	Y
Hoary Bat	<u>Lasiurus cinereus</u>	C	Y
Townsend's big-eared bat	<u>Plecotus townsendii</u>	C	Y
Pallid bat	<u>Antrozous pallidus</u>	C	Y
ORDER CARNIVORA			
Family Ursidae			
Black bear	<u>Ursus americanus</u>	C	Y
Grizzly bear	<u>Ursus arctos</u>	R	Y
Family Procyonidae			
Raccoon	<u>Procyon lotor</u>	C	Y
Family Mustelidae			
Marten	<u>Martes americana</u>	C	Y
Fisher	<u>Martes pennanti</u>	U	Y
Short-tailed weasel	<u>Mustela erminea</u>	C	Y
Long-tailed weasel	<u>Mustela frenata</u>	C	Y
Wolverine	<u>Gulo gulo</u>	U	Y
Western spotted skunk	<u>Spilogale gracilis</u>	C	Y
Striped skunk	<u>Mephitis mephitis</u>	C	Y

Common Name	Species	State	
		Abundance	Residence
Family Canidae			
Coyote	<u>Canis latrans</u>	C	Y
Red fox	<u>Vulpes vulpes</u>	C	Y
Family Felidae			
Cougar	<u>Felis concolor</u>	C	Y
Lynx	<u>Lynx canadensis</u>	C	Y
Bobcat	<u>Lynx rufus</u>	C	Y
ORDER RODENTIA			
Family Aplodontiidae			
Mountain beaver	<u>Aplodontia rufa</u>	C	Y
Family Sciuridae			
Yellow-bellied marmot	<u>Marmota flaviventris</u>	C	Y
Least chipmunk	<u>Eutamias minimus</u>	C	Y
Yellow-pine chipmunk	<u>Eutamias amoenus</u>	C	Y
Western gray squirrel	<u>Sciurus griseus</u>	C	Y
Red squirrel	<u>Tamiasciurus hudsonicus</u>	C	Y
Douglas squirrel	<u>Tamiasciurus Douglasii</u>	C	Y
Northern flying squirrel	<u>Glaucomys sabrinus</u>	C	Y
Family Geomyidae			
Northern pocket gopher	<u>Thomomys talpoides</u>	C	Y
Family Heteromyidae			
Great basin pocket mouse	<u>Perognathus parvus</u>	C	Y
Family Cricetidae			
Deer mouse	<u>Peromyscus maniculatus</u>	C	Y
Bushy-tailed woodrat	<u>Neotoma cinerea</u>	C	Y
Heather vole	<u>Phenacomys intermedius</u>	C	Y
Southern red-backed (gapper) vole	<u>Clethrionomys gapperi</u>	C	Y
Townsend's vole	<u>Microtus townsendii</u>	C	Y
Long-tailed vole	<u>Microtus longicaudus</u>	C	Y
Creeping vole	<u>Microtus oregoni</u>	C	Y
Water vole	<u>Arvicola richardsoni</u>	C	Y
Family Zapodidae			
Pacific jumping mouse	<u>Zapus trinotatus</u>	C	Y
Family Erethizontidae			
Porcupine	<u>Erethizon dorsatum</u>	C	Y
ORDER LAGOMORPHA			
Family Leporidae			
Snowshoe hare	<u>Lepus americanus</u>	C	Y
Eastern cottontail	<u>Sylvilagus floridanus</u>	C	Y
ORDER ARTIODACTYLA			
Family Cervidae			
Roosevelt elk	<u>Cervus elaphus roosevelti</u>	C	Y
Columbian black-tailed deer	<u>Odocoileus hemionus columbianus</u>	C	Y

Common Name	Species	State	
		Abundance	Residence
BIRDS			
ORDER GAVIIFORMES			
Family Gaviidae			
Common loon	<u>Gavia immer</u>	C	Y
ORDER PODICIPEDIFORMES			
Family Podicipedidae			
Western grebe	<u>Aechmophorus occidentalis</u>	C	Y
Red-necked grebe	<u>Podiceps grisegena</u>	U	Y
Horned grebe	<u>Podiceps auritus</u>	C	Y
Pied-billed grebe	<u>Podilymbus podiceps</u>	C	Y
ORDER ANSERIFORMES			
Family Anatidae			
Whistling swan	<u>Olor columbianus</u>	C	M
Trumpeter swan	<u>Olor buccinator</u>	C	M
Canada goose	<u>Branta canadensis</u>	C	Y
White-fronted goose	<u>Anser albifrons</u>	C	M
Snow goose	<u>Chen caerulescens</u>	C	M
Mallard	<u>Anas platyrhynchos</u>	C	Y
Pintail	<u>Anas acuta</u>	C	Y
Gadwall	<u>Anas strepera</u>	C	S
American wigeon	<u>Anas americana</u>	C	Y
Shoveler	<u>Anas clypeata</u>	C	Y
Blue-winged teal	<u>Anas discors</u>	C	S
Cinnamon teal	<u>Anas cyanoptera</u>	C	S
Green-winged teal	<u>Anas crecca</u>	C	W
Greater scaup	<u>Aythya marila</u>	C	W
Lesser scaup	<u>Aythya affinis</u>	C	W
Common goldeneye	<u>Bucephala clangula</u>	C	W
Barrow's goldeneye	<u>Bucephala islandica</u>	C	W
Bufflehead	<u>Bucephala albeola</u>	C	W
Harlequin duck	<u>Histrionicus histrionicus</u>	C	Y
Ruddy duck	<u>Oxyura jamaicensis</u>	C	Y
Common merganser	<u>Mergus merganser</u>	C	Y
Hooded merganser	<u>Lophodytes cucullatus</u>	C	Y
ORDER FALCONIFORMES			
Family Cathartidae			
Turkey vulture	<u>Cathartes aura</u>	C	S
Family Accipitridae			
Goshawk	<u>Accipiter gentilis</u>	U	Y
Cooper's hawk	<u>Accipiter cooperi</u>	C	Y
Sharp-shinned hawk	<u>Accipiter striatus</u>	C	Y
Marsh hawk	<u>Circus cyaneus</u>	C	Y
Rough-legged hawk	<u>Buteo lagopus</u>	C	Y
Red-tailed hawk	<u>Buteo jamaicensis</u>	C	Y
Swainson's hawk	<u>Buteo swainsoni</u>	C	S

Common Name	Species	State	
		Abundance	Residence
Golden eagle	<u>Aquila chrysaetos</u>	C	Y
Family Falconidae			
Peregrine falcon	<u>Falco peregrinus</u>	U	Y
Merlin	<u>Falco columbarius</u>	U	Y
American kestrel	<u>Falco sparverius</u>	C	Y
ORDER GALLIFORMES			
Family Tetraonidae			
Blue grouse	<u>Dendragapus obscurus</u>	C	Y
Spruce (Franklin's) grouse	<u>Canachites canadensis</u>	U	Y
Ruffed grouse	<u>Bonasa umbellus</u>	U	Y
Sharp-tailed grouse	<u>Pedfoecetes phasianellus</u>	U	Y
California (valley) quail	<u>Lophortyx californicus</u>	C	Y
Mountain quail	<u>Oreortyx pictus</u>	U	Y
Family Phasianidae			
Ring-necked pheasant	<u>Phasianus colchicus</u>	C	Y
ORDER CICONIIFORMES			
Family Ardeidae			
Great blue heron	<u>Ardea herodias</u>	C	Y
Green heron	<u>Butorides virescens</u>	U	S
American bittern	<u>Botaurus lentiginosus</u>	C	Y
ORDER GRUIFORMES			
Family Gruidae			
Sandhill crane	<u>Grus canadensis</u>	U	S
Family Rallidae			
Virginia rail	<u>Rallus limicola</u>	U	Y
Sora rail	<u>Porzana carolina</u>	C	S
American coot	<u>Fulica americana</u>	C	Y
ORDER CHARADRIIFORMES			
Family Charadriidae			
Snowy plover	<u>Charadrius alexandrinus</u>	U	Y
killdeer	<u>Charadrius vociferous</u>	C	Y
Family Scalopacidae			
Solitary sandpiper	<u>Tringa solitaria</u>	U	M
Spotted sandpiper	<u>Actitis macularia</u>	C	S
Family Phalaropodidae			
Wilson's phalarope	<u>Steganopus tricolor</u>	C	S
Family Scolopacidae			
Common snipe	<u>Capella gallinago</u>	C	Y
Family Laridae			
Glaucus-winged gull	<u>Larus glaucescens</u>	C	W
Western gull	<u>Larus occidentalis</u>	C	W
Herring gull	<u>Larus argentatus</u>	C	W
California gull	<u>Larus californicus</u>	C	Y
Ring-billed gull	<u>Larus delawarensis</u>	C	Y

Common Name	Species	State	
		Abundance	Residence
ORDER COLUMBIFORMES			
Family Columbidae			
Band-tailed pigeon	<u>Columba fasciata</u>	C	S
Mourning dove	<u>Zenaidura macroura</u>	C	Y
ORDER STRIGIFORMES			
Family Tytonidae			
Barn owl	<u>Tyto alba</u>	U	Y
Family Strigidae			
Screech owl	<u>Otus asio</u>	C	Y
Great horned owl	<u>Bubo virginianus</u>	C	Y
Long-eared owl	<u>Asio otus</u>	U	Y
Short-eared owl	<u>Asio flammeus</u>	U	Y
Barred owl	<u>Strix varia</u>	U	Y
Spotted owl	<u>Strix occidentalis</u>	U	Y
Great gray owl	<u>Strix nebulosa</u>	R	Y
Saw-whet owl	<u>Aegolius acadicus</u>	U	Y
Pigmy owl	<u>Glaucidium gnoma</u>	C	Y
ORDER CAPRIMULGIFORMES			
Family Caprimulgidae			
Common nighthawk	<u>Chordeiles minor</u>	C	S
ORDER APODIFORMES			
Family Apodidae			
Black swift	<u>Cypseloides niger</u>	U	S
Vaux's swift	<u>Chaetura vauxi</u>	C	S
Family Trochilidae			
Calliope hummingbird	<u>Stellula calliope</u>	C	S
Rufous hummingbird	<u>Selasphorus rufus</u>	C	S
ORDER PICIFORMES			
Family Picidae			
Common flicker	<u>Colaptes auratus</u>	C	Y
Pileated woodpecker	<u>Dryocopus pileatus</u>	U	Y
Lewis' woodpecker	<u>Melanerpes lewis</u>	U	Y
Yellow-bellied sapsucker	<u>Sphyrapicus varius</u>	U	Y
Hairy woodpecker	<u>Picoides villosus</u>	C	Y
Downy woodpecker	<u>Picoides pubescens</u>	C	Y
ORDER PASSERIFORMES			
Family Tyrannidae			
Eastern kingbird	<u>Tyrannus tyrannus</u>	C	S
Western kingbird	<u>Tyrannus verticalis</u>	C	S
Say's phoebe	<u>Sayornis saya</u>	C	S
Hammond's flycatcher	<u>Empidonax hammondi</u>	C	S
Dusky flycatcher	<u>Empidonax oberholseri</u>	U	S
Western flycatcher	<u>Empidonax difficilis</u>	C	S
Western wood peewee	<u>Contopus sordidulus</u>	C	S
Olive-sided flycatcher	<u>Nuttallornis borealis</u>	C	S

Common Name	Species	State	
		Abundance	Residence
Family Hirundinidae			
Barn swallow	<u>Hirundo rustica</u>	C	S
Cliff swallow	<u>Petrochelidon pyrrhonota</u>	C	S
Violet-green swallow	<u>Tachycineta thalassina</u>	C	S
Tree swallow	<u>Iridoprocne bicolor</u>	C	S
Rough-winged swallow	<u>Stelgidopteryx ruficollis</u>	C	S
Family Corvidae			
Steller's jay	<u>Cyanocitta stelleri</u>	C	Y
Gray jay	<u>Perisoreus canadensis</u>	C	Y
Black-billed magpie	<u>Pica pica</u>	C	Y
Common raven	<u>Corvus corax</u>	C	Y
Common crow	<u>Corvus brachyrhynchos</u>	C	Y
Family Paridae			
Black-capped chickadee	<u>Parus atricapillus</u>	C	Y
Boreal chickadee	<u>Parus hudsonicus</u>	C	Y
Chestnut-backed chickadee	<u>Parus rufescens</u>	C	Y
Common bushtit	<u>Psaltriparus minimus</u>	U	Y
Family Sittidae			
White-breasted nuthatch	<u>Sitta carolinensis</u>	U	Y
Red-breasted nuthatch	<u>Sitta canadensis</u>	C	Y
Family Certhiidae			
Brown creeper	<u>Certhia familiaris</u>	C	Y
Family Troglodytidae			
House wren	<u>Troglodytes aedon</u>	C	S
Winter wren	<u>Troglodytes troglodytes</u>	U	Y
Bewick's wren	<u>Thryomanes bewickii</u>	U	Y
Long-billed marsh wren	<u>Telematodytes palustris</u>	C	Y
Family Mimidae			
Catbird	<u>Dumetella carolinensis</u>	U	S
Family Turdidae			
Varied thrush	<u>Ixoreus naevius</u>	C	Y
American robin	<u>Turdus migratorius</u>	C	S
Hermit thrush	<u>Hylocichla guttata</u>	C	S
Swainson's thrush	<u>Catharus ustulatus</u>	C	S
Family Sylviidae			
Golden-crowned kinglet	<u>Regulus satrapa</u>	C	Y
Ruby-crowned kinglet	<u>Regulus calendula</u>	C	Y
Family Bombycillidae			
Bohemian waxwing	<u>Bombycilla garrulus</u>	U	Y
Cedar waxwing	<u>Bombycilla cedrorum</u>	C	Y
Family Sturnidae			
Starling	<u>Sturnus vulgaris</u>	C	Y
Family vireonidae			
Solitary vireo	<u>Vireo solitarius</u>	C	S
Warbling vireo	<u>Vireo gilvus</u>	C	S
Family Parulidae			
Orange-crowned warbler	<u>Vermivora celata</u>	C	S
Yellow warbler	<u>Dendroica petechia</u>	C	S
Yellow-rumped warbler	<u>Dendroica coronata</u>	C	Y
Black-throated gray warbler	<u>Dendroica nigrescens</u>	C	S

Common Name	Species	State	
		Abundance	Residence
Maggillivray's warbler	<u>Oporonis tolmiei</u>	C	S
American redstart	<u>Setophaga ruticilla</u>	U	S
Family Icteridae			
Brewer's blackbird	<u>Euphagus cyanocephalus</u>	C	Y
Brown-headed cowbird	<u>Molothrus ater</u>	C	S
Family Thraupidae			
Western tanager	<u>Piranga ludoviciana</u>	C	S
Family Fringillidae			
Black-headed grosbeak	<u>Pheucticus melanocephalus</u>	C	S
Evening grosbeak	<u>Hesperiphona vespertina</u>	C	Y
Lazuli bunting	<u>Passerina amoena</u>	C	S
Purple finch	<u>Carpodacus purpureus</u>	C	Y
Rufous-sided towhee	<u>Ripilo erythrophthalmus</u>	C	S
Dark-eyed junco	<u>Junco hyemalis</u>	C	Y
Chipping sparrow	<u>Spizella passerina</u>	C	S
White-crowned sparrow	<u>Zonotrichia leucophrys</u>	C	Y
Fox sparrow	<u>Passerella iliaca</u>	C	Y
Lincoln's sparrow	<u>Melospiza lincolni</u>	C	S
Song sparrow	<u>Melospiza melodia</u>	C	Y

REPTILES

ORDER TESTUDINATA

Family Testudinidae

Painted turtle	<u>Chrysemys picta</u>	C	Y
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ORDER SQUAMATA

Family Anguidae

Northern alligator lizard	<u>Gerrhonotus coeruleus</u>	C	Y
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Sagebrush lizard	<u>Sceloporus graciosus</u>	C	Y
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Western skink	<u>Eumeces skiltonianus</u>	C	Y
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Family Boidae

Rubber boa	<u>Charina bottae</u>	C	Y
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Family Colubridae

Racer	<u>Coluber constrictor</u>	C	Y
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Pine (gopher) snake	<u>Pituophis melanoleucus</u>	C	Y
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Common gartersnake	<u>Thamnophis sirtalis</u>	C	Y
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Western gartersnake	<u>Thamnophis elegans</u>	C	Y
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Northwestern gartersnake	<u>Thamnophis ordinoides</u>	C	Y
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Striped whipsnake	<u>Masticophis taeniatus</u>	C	Y
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Western rattlesnake	<u>Crotalus viridis</u>	C	Y
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AMPHIBIANS

ORDER CAUDATA

Family Ambystomatidae

Long-toed salamander	<u>Ambystoma macrodactylum</u>	C	Y
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Common Name	Species	State	
		Abundance	Residence
Tiger salamander	<u>Ambystoma tigrinum</u>	C	Y
Northwestern salamander	<u>Ambystoma gracile</u>	C	Y
Western red-backed salamander	<u>Plethodon vehiculum</u>	U	Y
ORDER SALENTIA			
Family Ranidae			
Western toad	<u>Bufo boreus</u>	C	Y
Pacific treefrog	<u>Hyla regilla</u>	C	Y
Red-legged frog	<u>Rana aurora</u>	C	Y

FISH

Covered in separate section.

Table 2. Species that are known to depend, or suspected of depending, on riparian habitat (to maintain maximum population densities) in Mt. Baker-Snoqualmie National Forest, with state abundance (C = common, U = uncommon) and state residence (Y = year round, S = spring/summer). (Adapted from WILDHAB, USFS R-6, 1980).

Common Name	Species	State	
		Abundance	Residence
<u>Mammals</u>			
Vagrant shrew	<u>Sorex vagrans</u>	C	Y
Yuma myotis	<u>Myotis yumanensis</u>	C	Y
Nutria	<u>Myocastor coypus</u>	C	Y
Beaver	<u>Castor canadensis</u>	C	Y
Muskrat	<u>Ondatra zibethicus</u>	C	Y
Mink	<u>Mustela vison</u>	C	Y
River otter	<u>Lutra canadensis</u>	C	Y
<u>Birds</u>			
Wood duck	<u>Aix sponsa</u>	C	Y
Bald eagle	<u>Haliaeetus leucocephalus</u>	U	Y
Osprey	<u>Pandion haliaetus</u>	U	S
Belted kingfisher	<u>Megasceryle alcyon</u>	C	Y
Willow flycatcher	<u>Empidonax traillii</u>	U	S
Dipper	<u>Cinclus mexicanus</u>	C	Y
Yellowthroat	<u>Geothlypis trichas</u>	C	S
Yellow-breasted chat	<u>Icteria virens</u>	C	S
Wilson's warbler	<u>Wilsonia pusilla</u>	C	S
Red-eyed vireo	<u>Vireo olivaceus</u>	U	S
Red-winged blackbird	<u>Agelaius phoeniceus</u>	C	Y
<u>Amphibians</u>			
Pacific giant salamander	<u>Dicamptodon ensatus</u>	C	Y
Rough-skinned newt	<u>Taricha granulosa</u>	C	Y
Tailed frog	<u>Ascaphus truei</u>	C	Y
Bullfrog	<u>Rana catesbeiana</u>	C	Y
Cascades frog	<u>Rana cascadae</u>	C	Y
Great basin spadefoot	<u>Scaphiopus inermontanus</u>	C	Y

Table 3. Partial listing of wildlife species and/or subspecies of particular concern (suspected of being rare or having declining populations) utilizing the Skagit Wild and Scenic Rivers System (USFS 1979).

MAMMALS

ORDER INSECTIVORA

Family Soricidae
Masked Shrew

Insectivores
Shrews
Sorex cinereus

ORDER CHIROPTERA

Family Vespertilionidae
Keen's Myotis
Long-eared Myotis
Fringed Myotis
Long-legged Myotis

Bats
Evening bats
Myotis keenii
Myotis evotis
Myotis thysanodes
Myotis volans

ORDER RODENTIA

Family Sciuridae
Hoary Marmot
Western Gray Squirrel
Fox Squirrel
Family Geomyidae
Western Pocket Gopher
Family Microtidae
Heather Vole
Gray-tailed Vole
Townsend's Vole
Northern Bog Lemming

Rodents
Squirrels
Marmota caligata
Sciurus griseus
Sciurus niger
Pocket Gophers
Thomomys mazama
Microtine Rodents, Voles
Phenacomys intermedius
Microtus canicaudus
Microtus townsendii
Synaptomys borealis

ORDER CARNIVORA

Family Ursidae
Grizzly Bear
Family Canidae
Gray Wolf
Red Fox
Family Mustelidae
Marten
Fisher
Wolverine
Family Felidae
Mountain Lion
Lynx

Carnivores
Ursus arctos horribilis
Canids
Canis lupus
Vulpes fulva
Mustelids
Martes americana
Martes pennanti
Gulo luscus
Cats
Felis concolor
Lynx canadensis

BIRDS

ORDER PODICIPEDIFORMES

Family Podicipedidae
Red-Necked Grebe
Western Grebe

Grebes
Podiceps grisegena
Aechmophorus occidentalis

BIRDS CONTINUED

ORDER CICONIIFORMES

Family Ardeidae
Green Heron
Black-Crowned Night Heron
American Bittern

Hérons and Bitterns
Butorides virescens
Nycticorax nycticorax
Botaurus lentiginosus

ORDER ANSERIFORMES

Family Anatidae
Trumpeter Swan
Aleutian Canada Goose

Lesser Canada Goose
Lesser Snow Goose

Canvasback
Hooded Merganser

Swans, Ducks and Geese
Olor buccinator
Branta canadensis
leucopareia
Branta canadensis parvipes
Chen caerulescens
caerulescens
Aythya valisineria
Lophodytes cucullatus

ORDER FALCONIFORMES

Family Accipitridae
Sharp-Shinned Hawk
Cooper's Hawk
Swainson's Hawk
Golden Eagle
Northern Bald Eagle

Marsh Hawk
Family Pandionidae
Osprey
Family Falconidae
Prairie Falcon
Peregrine Falcon
Merlin

Hawks, Accipiters
Accipiter striatus
Accipiter cooperii
Buteo swainsoni
Aquila chrysaetos
Haliaeetus leucocephalus
alascanus
Circus cyaneus
Ospreys
Pandion haliaetus
Falcons
Falco mexicanus
Falco peregrinus
Falco columbarius

ORDER GALLIFORMES

Family Tetraonidae
Northern White-Tailed Ptarmigan
Family Phasianidae

Mountain Quail

Grouse and Ptarmigan
Lagopus leucurus leucurus
Quail, Pheasants, and
Peacocks
Oreotyx pictus

ORDER CHARADRIIFORMES

Family Laridae
Glaucous Gull

Gulls and Terns
Larus hyperboreus

ORDER STRIGIFORMES

Family Tytonidae
Barn Owl

Barn Owls
Tyto alba

Family Strigidae
Burrowing Owl
Spotted Owl
Short-Eared Owl
Saw-Whet Owl
Barred Owl

ORDER APODIFORMES

Family Apodidae
Black Swift
Family Trochilidae
Anna's Hummingbird

ORDER PICIFORMES

Family Picidae
Pileated Woodpecker
Lewis' Woodpecker
Hairy Woodpecker
Black-Backed Three-Toed Woodpecker
Northern Three-Toed Woodpecker

ORDER PASSERIFORMES

Family Tyrannidae
Ash-Throated Flycatcher
Family Hirundinidae
Bank Swallow
Purple Martin
Family Corvidae
Scrub Jay
Family Troglodytidae
Bewick's Wren
Family Turdidae

Western Bluebird
Family Vireonidae
Warbling Vireo
Family Parulidae
Black-And-White Warbler
Yellow Warbler
Hermit Warbler
Yellow-Breasted Chat
Family Fringillidae

Alaskan Pine Grosbeak

White-Winged Crossbill
Vesper Sparrow
Oregon Vesper Sparrow
Yakutat Fox Sparrow

Typical Owls
Athene cunicularia
Strix occidentalis
Asio flammeus
Aegolius acadicus
Strix varia

Swifts
Cysetoides niger
Hummingbirds
Calypte anna

Woodpeckers
Dryocopus pileatus
Melanerpes lewis
Picoides villosus
Picoides arcticus
Picoides tridactylus

Tyrant Flycatchers
Myiarchus cinerascens
Swallows
Riparia riparia
Progne subis
Jay, Magpies, and Crows
Aphelocoma coerulescens
Wrens
Thryomanes bewickii
Thruses, Solitaires, and
Bluebirds
Sialia mexicana
Vireos
Vireo gilvus
Wood Warblers
Mniotilta varia
Dendroica petechia
Dendroica occidentalis
Icteria virens
Grosbeaks, Finches,
Sparrows, and Buntings
Pinicola enucleator
alascensis
Loxia leucoptera
Poocetes gramineus
Poocetes gramineus affinis
Passerella iliaca annectens

REPTILES AND AMPHIBIANS

ORDER CAUDATA

Family Ambystomatidae

Long-Toed Salamander
Pacific Giant Salamander
Olympic Salamander

Family Salamandridae

Northern Rough-Skinned Newt

Family Plethodontidae

Van Dyke's Salamander
Larch Mountain Salamander

Family Ascaphidae

Tailed Frog

Family Ranidae

Leopard Frog
Green Frog

ORDER TESTUDINATA

Family Testudinidae

Western Pond Turtle
Painted Turtle

ORDER SQUAMATA

Family Anguidae

Southern Alligator Lizard

Family Boidae

Rubber Boa

Family Colubridae

Sharp-Tailed Snake
Coral Kingsnake or California
Mountain Kingsnake
Common Garter Snake
Dusky Garter Snake

Northwestern Garter Snake

Mole Salamanders and
Relatives

Ambystoma macrodactylum

Dicamptodon ensatus

Rhyacotriton olympicus

Newts

Taricha granulosa granulosa

Lungless Salamanders

Plethodon vandykei

Plethodon tarsei

Tailed Frogs

Ascaphus truei

True Frogs

Rana pipiens

Rana clamitans

Water Turtles and Allies

Clemmys marmorata

Chrysemys picta

Alligator Lizards and Allies

Gerrhonotus multicarinatus

Boas

Charina bottae

Colubrids

Contia tenuis

Lampropeltis zonata

Thamnophis sirtalis

Thamnophis elegans

nigrescens

Thamnophis ordinoides

Table 4. Verified sightings of wildlife species of concern (suspected of being rare or having declining populations) in the vicinity of the Skagit Wild and Scenic Rivers System (WDC, Non-game Wildlife Program 1979).

Date	Species	Common name	Observer	Location	Comments
1969	<u>Alces alces</u>	Moose	Douglas, 1969	Hozomeen campground	
1972	<u>Canis lupus</u>	Gray Wolf	Wasem, 1979	Hozomeen campground	
1971	<u>Rana aurora</u>	Red-legged Frog	Miller & Miller	Big Beaver Valley	
1971	<u>Charina bottae</u>	Rubber Boa	Miller & Miller	Big Beaver Valley	
1978	<u>Canis lupus</u>	Gray Wolf	Wasem, 1979	Sourdough Mtn.	
1974	<u>Vulpes fulva</u>	Red Fox	Wasem, 1979	Behind Diablo Resort	
1974	<u>Gulo gulo</u>	Wolverine	Wasem, 1979	Crossing Road at Colonial Creek	
1978	<u>Martes pennanti</u>	Fisher	Wasem, 1979	Happy Flat west of Hwy 20	
1979	<u>Strix occidentalis</u>	Spotted Owl	Wasem, 1979	Stetattle Cr. 1.5	
1971	<u>Martes pennanti</u>	Fisher	Yocum & McCollum, 1973	8-10 mi. NE Marblemount	
1975	<u>Nymphalidae</u>	Oreas angle	Pyle, 1976	Hamilton, 95 ft.	
1975	<u>Polygonia oreas</u>	wing butterfly			
1975	<u>Haliaeetus leucocephalus</u>	Bald Eagle	Grubb, 1975	S19, T35N., R6E	1971-75 active 1978 territory
1972	<u>Pandion haliaetus</u>	Osprey	Adkins-Nelson	Near Skagit River	Active
1977	<u>Olor buccinator</u>	Trumpeter Swan	Dick Parker	Clear Lake	Winter Use
1978	<u>Olor buccinator</u>	Trumpeter Swan	Matia, 1978	Barney Lake	
1975	<u>Haliaeetus leucocephalus</u>	Bald Eagle	Grubb, 1975	Dodge Valley	1975 active nest
	<u>alascanus</u>				1977-78 status unknown

Appendix

APPENDIX D

Bibliography _____

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APPENDIX E

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INTERNATIONAL SCALE
OF RIVER DIFFICULTY
(from ~~USA~~ Safety Code)

If rapids on a river generally fit into one of the following classifications, but the water temperature is below 50°F, or if the trip is an extended one into wilderness area, the river should be considered one class more difficult than normal.

CLASS I Moving water with a few riffles and small waves. Few or no obstructions.

CLASS II Easy rapids with waves up to 3 feet and wide, clear, channels that are obvious without scouting. Some maneuvering is required.

CLASS III Rapids with high, irregular waves often capable of swamping an open canoe. Narrow passages that often require complex maneuvering. May require scouting from shore.

UNSUITABLE FOR OPEN CANOES

CLASS IV Long, difficult rapids with constricted passages that often require precise maneuvering in very turbulent waters. Scouting from shore is necessary, and conditions make rescue difficult. *Generally not possible for open canoes.* Boaters in covered canoes and kayaks should have the ability to Eskimo roll.

CLASS V Extremely difficult, long, and very violent rapids with highly congested routes, which always should be scouted from shore. Rescue conditions are difficult, and there is significant hazard to life in the event of a mishap. Ability to Eskimo roll is essential for boaters in kayaks and decked canoes.

CLASS VI Difficulties of Class V carried to the extreme of navigability. Nearly impossible and very dangerous. For teams of experts only, after close study has been made and all precautions have been taken.

Generally, Class I and II rivers can be run in open canoes. Some Class III rivers are suitable for open canoes if time is allowed for emptying water from the boat. A CLASS OF RIVER MAY CHANGE ACCORDING TO THE AMOUNT OF RIVER RUNOFF AND THE DEPTH OF WATER AT A GIVEN POINT. REMEMBER, VERY COLD WATER DOES NOT HAVE TO BE FAST TO BE FATAL!

Appendix

APPENDIX F

ISSUES, CONCERNS, OPPORTUNITIES

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Appendix
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ISSUES, CONCERNS AND OPPORTUNITIES

The following account is a detailed analysis of the public issues, management concerns, and opportunities.

Information and data in this analysis were obtained from (1) the above mentioned public input, (2) State and County government and agency input, (3) federal agencies, and (4) Forest Service administrative units, including Ranger Districts, Forest Supervisor, and regional offices. This analysis simply attempts to separate all the above input data into its constituent elements.

Administrative Organization and Responsibility

Issues, Concerns

P.L. 90-542 recommends coordination between Federal agencies, State and local governments.

P.L. 90-542 outlines the process for accomplishing this coordination.

P.L. 90-542 Section 10(a) states that "each component of the National Wild and Scenic River System shall be administered in such a manner as to protect and enhance the values"....." without, insofar as is consistent therewith, limiting other uses that do not substantially interfere with public use and enjoyment of these values."

As the Secretary of Agriculture, through the Forest Service, has the responsibility for administration and management of the Skagit river systems (albeit with possible cooperative agreement of state and local governments), ultimate regulatory authority is with the Secretary's Regulations.

The Study Plan and 1977 Final Skagit Environmental Statement recommended joint federal and state administration and responsibilities.

Congress directed that the Secretary of Agriculture have responsibility for administration and management of the river system (1978 Amendment to the Wild & Scenic Rivers Act).

The Governor of the State of Washington has appointed a representative of the State to the planning team.

State management of the Skagit segment would require State Legislature approval and classification, along with a written cooperative agreement between the Governor of the State and the Secretary of Agriculture.

The Governor has stated that "joint State-Federal management should remain a goal of the program and is the preferable way to administering the river". He also stated that "present financial conditions preclude a significant State role in administering (the plan)".

With the completion of the management plan, the level of involvement that the state is going to take needs to be identified and agreed upon.

The main focus of county and state regulations and ordinances along the Skagit System appears to be prevention of construction within the 100-year floodplain, and administration of the 1972 State Shoreline Management Act.

State agencies along with Skagit and Snohomish counties are on record seeking maximum coordination and involvement in administration of the Skagit W&SR.

Other Federal agencies have jurisdiction on the river system (see Sec. V, Coordination And Organization: Responsibilities of Other Organizations).

State agencies are concerned about their individual responsibilities and authorities.

The public is concerned about the extent of Federal, State and local controls.

People living near the river appear to prefer state and local control over federal control.

The Forest Service will actively provide input to state relating to fishery and protection of habitat. The state, by law, retains the right to manage the fishery.

Hunting within classified area is addressed in Section 13a of P.L. 90-542. The state retains the right to control hunting. For public safety, the Forest Service may designate areas of limited hunting. This would require consultation with state.

Opportunities

Seek future state management of the Skagit Segment, through the use of written cooperative agreements with state and local governments for participation.

Maximize the use of state and local regulations.

Integrate other federal agency authorities.

Forest Service administrative requirements should "dovetail" with other federal agency, state and county permit systems.

Land Use and Acquisition

Issues, Concerns

Congress, in the Wild and Scenic Rivers Act (of 1968) directed the Secretary of Agriculture to provide for public access and use.

Landowners have varied objectives for their land; objectives often change with change in ownership.

Congress identified values (scenic, recreational, geologic, fish and wildlife, historic, cultural and other similar values) in the Wild and Scenic Rivers System and directed the Secretary of Agriculture to protect them (1968 W.S.R. Act).

Landowners' objectives may not always be compatible with the values identified for preservation in the 1968 W.S. R. Act.

State and local government regulations may protect values identified in the 1968 W.S.R. Act.

Federal regulations may protect values identified in the 1968 W.S.R. Act.

The intent of this Management Plan is to establish and implement administration of the Skagit Wild & Scenic River in accordance with 1968 W.S.R. Act. In collecting information for this plan, it has become apparent that specific parcels of land are of particular significance to the management and protection of river qualities. When the role of these parcels is critical in management to meet the intent of the 1968 W.S.R. Act, the plan should identify the method or means by which these parcels can be so managed, either through acquisition or some suitable form of land use control.

Local zoning ordinances are particularly subject to revision and exception, state and local regulation may not be as actively enforced as might be desired.

The 1968 W.S.R. Act authorizes acquisition of lands and interests in lands to protect Wild & Scenic River values.

The 1968 W.S.R. Act authorizes when and how condemnation can occur.

The 1968 W.S.R. Act limits the amount of land and easements that can be acquired.

The U.S. General Accounting Office, in a 1979 audit report which critiqued land acquisition for the NW&SRS, recommended that, "Buying lands and easement should be used only if local government grants permit for noncompatible uses, and for the acquisition of appropriate public access sites."

Opportunities

Section 10(a) of the 1968 W&SR Act, indicates that there may be degrees of intensity in protection and development for a river component. Identification of the limits of acceptable change will establish criteria for initiating acquisition action, with the basic overall purpose being to meet the intent of the Act.

Identify the location of lands necessary for public access and use.

Identify limits of acceptable change to Wild & Scenic River values as identified in the 1968 Act.

Identify locations of outstanding examples of Wild & Scenic River values as identified in the 1968 Act.

Minimize direct (Forest Service) federal involvement on Skagit Segment.

Work with federal Flood Insurance Agency whenever their acquisition and rehabilitation program for floodplain sites complements land use management goals for the Skagit W&SR.

An acquisition plan needs to be prepared following guidelines provided in the management plan.

Boundary

Issues, Concerns

The 1978 Amendment to the 1968 W.S.R. Act, identified the terminal boundaries. Lateral boundaries are to be established by the management plan.

The 1968 W.S.R. Act specified the maximum land per lineal mile that could be included within the boundary.

The final boundary should contain less than 50% private ownership. A change to less than 50% in federal ownership may constitute a major federal action since it would change the land acquisition authorities (1968 W&SR Act).

The Skagit river actually flows outside the 1977 EIS recommended Wild & Scenic River boundary in some locations.

Any change to the Wild & Scenic River boundary should cause minimum inconvenience to landowners and river management.

The 1978 Amendment to the 1968 W.S.R. Act directed that the final lateral boundary should be as generally depicted on the boundary map - Skagit River Study Report.

The amount of land within the Wild & Scenic River boundary should be only that amount necessary to protect the values.

The boundary should respect the meandering nature of the river (free-flowing characteristics).

To be effective, a boundary must be readily identifiable on the ground, or at the very least, capable of being determined with minimal survey retracement effort. The use of a 200-foot setback or a 100-year floodline does not meet this goal, particularly in a situation involving a meandering stream course.

To the extent that landownership transfer is usually consummated on the basis of aliquot parts, identification of estates to be acquired would be simplified if the boundary followed related section and internal projection lines as much as possible. The use of existing roadways is similarly acceptable, as there usually is a survey of record tied into the basic GLO survey grid.

Some of the "features" for which the river was established, fall outside the lateral boundary recommended in the 1978 Amendment to the 1968 W.S.R. Act..

Opportunities

The boundary has been adjusted to:

1. Stay as close to the original boundary as possible.
2. Include important features where feasible.
3. Include only that amount of area necessary to protect the Wild & Scenic River values.
4. Retain an acreage limitation of less than 50% in private ownership.
5. Utilize as fully as possible all recognizable features such as roads and railroads along with aliquot parts for boundary locations.

Timber Resource and Vegetation

Issues, Concerns

1977 Final E.S. identified timber harvest as an activity that will occur.

1977 Final E.S. identified an average timber volume that could be harvested annually. It was at 80% of potential yield.

Updated inventory and knowledge concerning retention of natural character indicates only 40-60% yield should be expected.

Public response and other agency comments indicate timber harvest should be quite restricted.

Timber harvest proposed in the 1977 F.E.S. didn't give consideration to the Endangered Species Act, and the American Indian Religious Freedom Act.

1981 Draft Guidelines for W&SR published in the Federal Register places strict limitations on timber management systems.

Forest Service standards (relating to Streamside Management Units, Visual Resource Management, Wildlife) apply to National Forest lands and acquired lands.

Wild & Scenic River values (1968) Act may require further controls than those presently available through local, state and federal regulations and standards.

There is direction to maintain a shoreline that presents an overall natural character.

Public access, State Shorelines Management Act, & Forest Service Streamside Management policies, topography and economics may limit timber harvest opportunities.

Opportunities

Maintain timber harvest opportunities on all lands.

Identify those areas where timber harvest will have a positive effect upon the Wild & Scenic River values.

Identify those areas where Wild & Scenic River values preclude timber harvest.

Utilize silviculture methods to reduce insect and disease problems.

Recreation and Public Access

Issues, Concerns

The 1968 W.S.R. Act requires Forest Service to protect the values identified therein.

The Forest Service shall provide regulations relating to recreational and other uses as may be necessary to protect lands within the Skagit W&SR. Outside the National Forest boundary, however, the Forest Service has authority to invoke and enforce regulations on the water surface only.

The Forest Service is to plan for recreational uses, to protect all lands, within the boundary and adjacent to the boundary, from damage or destruction by overuse, and to meet management objectives as described in the Guidelines for the Evaluation and Management of Wild and Scenic Rivers.

Recreation use has increased: rafting, drifting, shoreline viewing of eagles are current popular attractions.

The Skagit Segment permits the greatest number of activities but also contains the greatest potential limitations.

Sites for potential conflict between recreation and other resource uses include cultural sites, eagle feeding sites and eagle perch areas; Native American tribal fishing locations; spawning areas (Bacon Creek); private land developments; The Nature Conservancy's Skagit River Bald Eagle Natural Area. A permit system may be required for use at some of these areas.

On the Skagit, conflict areas are between river miles 65-73 and occur during the winter season with the eagle habitat, fishing and rafting use..

Congress directed Secretary of Agriculture to provide public access.

Need to use existing public access as much as possible.

Several known existing public access sites are presently undeveloped.

Private landowners generally object to public access on or adjacent to their property.

Private (riverfront) landowners are concerned that public access might separate their property from river shorelines.

Public access should not diminish any of the "values" identified by Congress as its basis for Wild and Scenic River classification.

Opportunities

The management plan must assure that recreational activities conform with management objectives designed to meet the intent of the 1968 W.S.R. Act.

The management plan should provide a full range of recreation activities and also recognize and utilize state and local access and recreation sites.

Public access would be a high priority for acquisition in the event present access opportunities are inadequate.

Public access location will respect concerns of the private landowners to the extent possible.

Location and type of public access will protect the values identified in the 1968 W.S.R. Act.

Known and existing public access opportunities will be used wherever possible and appropriate.

Watercraft Use

Issues, Concerns

Both motorized and nonmotorized boating occur as commercial and non-commercial recreational activities.

A large percent of above users are not owners of land within designated boundary.

Nearly the entire river system is classified as navigable by the State. Army Corps of Engineers and U.S. Coast Guard consider the Skagit navigable from its mouth to the Ranger Station at Marblemount.

Ross Lake National Recreation Area administered by the National Park Service is developing a watercraft use plan above the designated river termini.

There is an interim river management plan now in effect for the Sauk and Suiattle rivers, administered by Darrington Ranger District of the Forest Service.

Current and historic watercraft use includes recreational, research, management, administration, scientific and commercial.

Opportunities

Allow varied watercraft use opportunities within the limits necessary to protect and enhance the Wild & Scenic River values as identified in the 1968 Act.

Identify the point at which control of watercraft is required.

Wildlife, Fisheries and Water

Issues, Concerns

Wildlife values are recognized in the 1968 Wild & Scenic Rivers Act.

U.S. Fish and Wildlife Service and State Department of Game are responsible for protection of eagles.

There is an established Skagit River Bald Eagle Natural Area (The Nature Conservancy).

Eagle observation is becoming very popular and has resulted in some threat to welfare of the eagles and also to quality of viewing opportunity.

Growing concern among some public and biologists that river use causes stress to eagles.

The eagles are observed throughout the river system.

There are places within the system where the eagles appear in greater concentrations.

The eagles appear to prefer specific trees for day perching and night roosting.

The eagles move into the river system in increasing concentrations on a seasonal cycle, apparently dependent upon the chum salmon run as major food supply.

City Light is proceeding with extensive studies of regional eagle habitat within WSR System as well as outside. The results of these could have significant impact on management of W.S.R. (1/3 of the critical habitat may be inside W.S.R.S.).

The Skagit river system is the traditional fishing area for Native American with treaty rights.

Historically, the Skagit has been the prime steelhead river. The salmon fishery has also been substantial.

Fishery is subject to strong competition and pressure - sport, Native American, and commercial.

There may be a need to set a minimum escapement number to meet eagle management requirements through Public Law 90-542 Sec. 13(a). It is the State's responsibility to set escapement levels.

Existing flow regimes have an impact on spawning survival within WSRS segments, and have a major impact on spawning and survival above the terminal boundary (Bacon Creek). The adult salmon drift carcasses provide a significant food source to the eagle sanctuary from above Bacon Creek.

There appears to be an increasing demand for a natural spawning channel within the Skagit system.

Riprapping has been used extensively in the past on the Skagit and Sauk - it has been for the purpose of protecting facilities (property other than agriculture land), also, to change the flow of the river.

Present dams on the Skagit cause minimal flow changes due to influence of the Sauk, Suiattle, Cascade and other tributaries. When the tributaries are at low levels, the impact of the dams is more severe.

Flow changes that could result from new dam construction will be evaluated under Section 7a process in the 1968 W.S.R. Act.

Federal and state (in cooperation with City of Seattle) and Skagit System Cooperative, are currently studying the effects of stream flows on fishery. The Forest Service is a part of this study.

Opportunities

Continue to study those factors influencing eagle habitat preferences within the Wild and Scenic River System.

Determine if there are critical habitat areas that need immediate protection.

Assure that the management proposals provide for continued protection of eagle habitat.

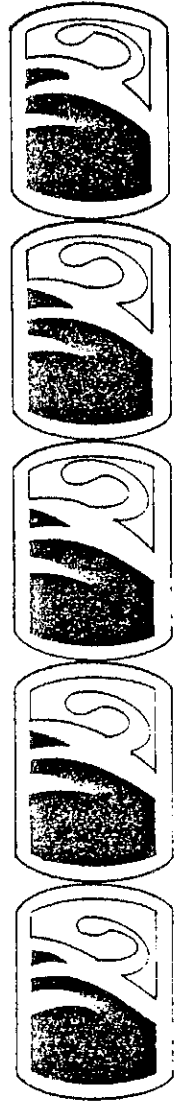
Recognize existing Skagit River Bald Eagle Natural Area.

Because disproportionately more wildlife species use riparian habitat than any other single class of habitat, impacts such as vegetative damage, harassment, and poaching should be quantitatively examined and be part of any decision analysis for managing the riparian areas.

Appendix

APPENDIX G

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Summary and Priority of Management Direction Task

- Priority A - Immediate actions that must be taken to meet the requirements of W&SR legislation and to protect the river environment from immediate modification.
- Priority B - Needed to fully maintain the quality and integrity of the river and its corridor.
- Priority C - Desirable to optimize public benefits of the W&SR.

<u>Page</u> - Vol II	<u>Task</u>	<u>Priority</u>
5	Review Management Plan in 1985 and 1990	A
7	Develop cooperative agreements with State, county and agencies to protect the river.	A
8	Prepare public access and conservation easement plan (with state and county governments).	A
8	Review and monitor zoning hearings and on-the-ground use. This is to be coordinated with the State and county.	A
8	With each county, prepare sample county and municipal uniform zoning ordinances.	A
10	Update plan to adjust to court decision on Boldt (Orrick) ruling.	A
10	Coordinate with Skagit River Cooperative.	A
11	Obtain properties for public use facilities.	B
11	Conduct a comprehensive review of country codes and ordinances.	A
11	Obtain conservation easements to protect properties threatened with development or nonconforming use.	B
12	Conduct an intensive corridor analysis to identify specific noncompatible structures.	C
12	Work with utility companies to diminish visual impact of utility crossings.	C
14	Inventory and monitor the visual resource.	B
15	Encourage the coordination of all floodplain and wetland management programs.	B

<u>Page</u>	<u>Task</u>	<u>Priority</u>
16	Obtain from the Corps of Engineers a "Memorandum of Understanding", to review all 404 Section 10 permits.	A
16	Prepare or review Environmental Assessments on all bankside modification projects.	A
17	Initiate interim procedures and determine demand and capability of the rivers.	B
17	Monitor existing recreation use.	A
17	Develop additional boat access sites.	B
18	Routine river patrol, identification of boating hazards; if possible, remove extreme hazards.	B
18	Provide developed river float campsites.	C
19	Develop bank access (fishing) sites.	B
20	Work with counties to provide for bicycle trails.	C
20	Monitor and protect spawning from recreation use on the upper Sauk.	B
22	Reconstruct existing trails and trailheads.	C
22	Construct new trails and trailheads.	C
23	Prepare a cooperative agreement with State and County to locate and construct a trail on the west side of the Sauk.	C
23	Develop day use sites for pleasure drivers.	C
23	Reconstruct existing developments to be screened from the river view.	C
24	Rehabilitate existing developed sites to meet standards for full service level.	C
42	Follow cultural resource protection review process.	A
42	Obtain a programmatic memorandum of agreement with SHPO.	B
42	Protect all significant historic or cultural sites.	A
43	Design a VIS plan.	B

<u>Page</u>	<u>Task</u>	<u>Priority</u>
43	Prepare a user opportunity guide.	A
43	Provide river information at several existing VIS sites.	A
44	Prepare a sign plan.	A
44	Construct and install signs.	B
45	Monitor the Skagit system to determine if use by both drift and motorized boat use becomes a safety hazard.	B
46	Place all commercial river boating use of the Wild and Scenic River System under outfitter/guide permits.	B
46	Working with the State and counties - provide for the protection of private lands from public users.	A
46	Provide, when needed, input to State Game on hunting regulations.	B
46	With other agencies, provide boating regulations as needed.	B
46	Promote public use of designated sites, as opposed to dispersed sites.	B
47	Study the four rivers to determine recreational demand, resource capabilities and proper levels of use and management.	B
50	Initiate a wildlife species inventory.	B
50	Monitor trends in Threatened and Endangered species.	A
50	Identify disturbance factors between use activities and eagles.	A
50	Regulate human use if conflicts develop with eagle use.	A
50	Protect eagle habitat rated excellent.	A
50	Establish eagle night roost protection zones within the National Forest.	B
51	Interpret eagles.	C
51	Complete eagle habitat rating for scenic rivers.	A

<u>Page</u>	<u>Task</u>	<u>Priority</u>
51	Conduct eagle and salmon carcasses inventory on the scenic rivers.	B
53	Rate fish habitat	A
53	Coordinate fish habitat needs with the State.	A
54	Establish a water monitoring system utilizing existing monitoring programs as much as possible.	A
54	Locate sources of water degradation and prepare action plans to eliminate.	B
54	Develop an air quality monitoring program with State Department of Ecology.	C
54	Identify key views for air quality.	C
55	Work with utility districts to obtain a vegetative management plan.	C
55	Review the Forest Highway 7 proposal along with the double lane standard between White Chuck and Barlow Pass.	A
56	Conduct field studies to locate endangered and threatened plants.	C
56	Develop protection requirements for threatened and endangered plants.	C
58	Continue to monitor insect and disease activity through aerial flights.	A
58	Maintain cooperative fire agreements between the Forest Service and DNR.	A
59	Obtain agreements with the State and counties to review all mining activities outside of the National Forest but within the W&SR boundary.	A
59	Work with county to zone areas of special significance.	B
59	Work with the State to retain the integrity of gravel bars.	A
59	Administer mining laws within the National Forest boundary.	A
60	Implement regulations as needed.	A

Appendix

APPENDIX H

GLOSSARY _____

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Appendix
H

Access easement - The acquired right to pass over land for the purpose of entering or leaving the river or adjacent public lands.

Acronyms and Abbreviations - Definitions (used in this document).

<u>BLM</u>	- Bureau of Land Management
<u>BPA</u>	- Bonneville Power Administration
<u>CFR</u>	- Code of Federal Regulations
<u>DNR</u>	- State Department of Natural Resources
<u>DO</u>	- Dissolved Oxygen
<u>DOE</u>	- State Department of Ecology
<u>EA</u>	- Environmental Assessment
<u>EPA</u>	- Environmental Protection Agency
<u>E.S. (E.I.S.)</u>	- Environmental Statement
<u>FEMA</u>	- Federal Emergency Management Agency
<u>FERC</u>	- Federal Energy Regulatory Commission
<u>FH</u>	- Forest Highway
<u>FHWA</u>	- Federal Highway Administration
<u>F.S.</u>	- U.S. Forest Service
<u>FWCA</u>	- Fish and Wildlife Coordination Act
<u>F&WS</u>	- Fish and Wildlife Service
<u>GLO</u>	- General Land Office
<u>ICR</u>	- Institute of Cooperative Research
<u>ITS</u>	- Individual Tree Selection
<u>JTU</u>	- Johnson Turbidity Unit
<u>MBF</u>	- Thousand board feet of timber
<u>MMBF</u>	- Million board feet of timber
<u>MBSNF</u>	- Mt. Baker-Snoqualmie National Forest
<u>NACHP</u>	- National Advisory Council of Historic Preservation
<u>NEPA</u>	- National Environmental Policy Act
<u>N.F.</u>	- National Forest
<u>NFIP</u>	- National Flood Insurance Program
<u>NMFS</u>	- National Marine Fisheries Service
<u>NPS</u>	- National Park Service
<u>NW & SRS</u>	- National Wild & Scenic River System
<u>ORV</u>	- Off Road Vehicle
<u>PAOT</u>	- Persons at one time. The number of people in an area or using a facility at the same time.
<u>PFMC</u>	- Pacific Fishery Management Council
<u>P.L.</u>	- Public Law
<u>PNW</u>	- Pacific Northwest Forest and Range Experiment Station
<u>RCW</u>	- Revised Code of Washington
<u>SCORP</u>	- Statewide Comprehensive Outdoor Recreation Plan
<u>S.C.S.</u>	- Soil Conservation Service
<u>SEPA</u>	- State Environmental Policy Act
<u>SHPO</u>	- Washington State Historic Preservation Office
<u>SIP</u>	- State Implementation Plan
<u>S.M. Act</u>	- State Shoreline Management Act
<u>U.S.</u>	- United States
<u>USDA</u>	- United States Department of Agriculture

Acronyms and Abbreviations - Continued.

USFS - United States Forest Service
USFWS - U.S. Fish and Wildlife Service
U.S.G.S. - U.S. Geological Survey
VIS - Visitor Information Service
WDF - Washington Department of Fisheries
WILDHAB - Fish and Wildlife Habitat Relationship Data Base
W&SR - (W.S.R.) Wild and Scenic River

Administration - The carrying out of all responsibilities and the exercise of all authorities vested in the administering Secretary or his designee by the Wild and Scenic Rivers Act for a particular component of the National Wild and Scenic Rivers System.

Administering agency - The agency to which the responsibility for administration and management of a component of the national system has been delegated by the administering Secretary. Components may be administered by a single State or Federal agency, or jointly by two or more agencies.

Administering Secretary - The Secretary charged by Congress with the responsibility for administering a component of the national system, either the Secretary of the Interior or, where National Forest lands are involved, the Secretary of Agriculture.

Anadromous Fish - Species which migrate from salt water up rivers and streams to spawn at their place of birth, e.g., salmon and steelhead trout.

B

Biologically Unique - Species which are not endangered but have considerable scientific, local or national interest.

Board Feet - A volume of solid wood, one foot square and one inch thick.

Boat ramp - is an inclined slab, set of pads, planks, or graded slope used for launching boats with trailers or occasionally by hand; extensive parking and turn around areas are usually accessory to launch ramps.

Building - means any structure designed for or used for the support, shelter, or enclosure of persons, animals, or personal property, and which is used in a fixed location on land, shorelands, or tidelands.

Bulkheads - are wall-like structures normally constructed parallel to shore and near the high water mark and are for protecting the shore and uplands from erosion by current and wave action; they may also be for retaining uplands and fills that are prone to sliding, mass movement, or erosion. "Normal protective" bulkheads are the former, utilized to protect single family residences and properties.

Capability - The ability of land unit to sustain certain activities with acceptable environmental consequences.

Carrying capacity - The quantity of recreation use which an area can sustain without adverse impact on the outstandingly remarkable values and free-flowing character of the river area, the quality of recreation experience, and public health and safety. Carrying capacity also depends to some extent on the quality of recreation experience desired and would be altered by installation of facilities.

Channelization - is the straightening, deepening or lining of stream channels, and/or prevention of natural meander progression of stream ways, through artificial means such as relocation of channels, dredging, and/or placement of continuous levees or bank revetments along significant portions of the stream. Dredging of sediment or debris alone is excluded.

Classification criteria - Criteria specified in Section 2(b) of the Act for determining the classification (wild, scenic or recreational) of eligible river segments.

Classify - To evaluate a river area in terms of the classification criteria and determine which set of criteria best describes the river area: wild, scenic, or recreational.

Climax Native Vegetation - The vegetation that will drastically dominate a site if not disturbed by fire, grazing, logging or erosion.

Commercial Forest Land - Available forest land that is producing or is capable of producing crops of industrial wood in excess of 20 cubic feet per acre of annual growth and is not in a permanently inoperable location.

Component - A river area or group of river areas designated as a unit of the National Wild and Scenic Rivers System.

Concern - To be of interest or importance, important relationship or bearing.

Conceptual plan - A plan presented in the study report for each alternative which gives the general boundaries and classification of the proposed river area and describes general land acquisition, development and management strategies which would apply if the alternative were to be implemented.

Conservation easement - The right to control the use of land (including the air space above such land) within the authorized boundaries of a component of the wild and scenic rivers system, for the purpose of protecting the natural qualities of a designated wild, scenic or recreational river area, but such control shall not affect, without the owner's consent, any regular use exercised prior to the acquisition of the easement.

D

Dam - means a barrier across a streamway to confine or regulate streamflow or raise water level for purposes such as flood or irrigation water storage, erosion control, power generation, or collection of sediment or debris.

Designation - Inclusion of a river area in the national system either by act of Congress or by authority of the Secretary of the Interior; inclusion of a river area in a State or local river preservation system; (study designation) authorization for study by Act of Congress. See study authorization.

Development - Any manmade structure or modification of the natural or existing river environment.

Dike - is a manmade embankment or revetment normally setback from the riverbank or channel in the floodplain for the purpose of keeping floodwaters from inundating adjacent land; material is normally river sand or gravel.

Dispersed Recreation - Recreation use outside a developed recreation site, including scenic driving, camping, hunting and backpacking.

Developed (recreation sites) - A campground, picnicground, interpretive site or other facility constructed and managed by the Forest Service for intensive use.

Diversion - The diverting by means of any manmade structure or man induced action of part or all of the flow of a waterway from its natural course.

Dredging - is the removal or displacement of earth such as gravel, sand, mud, or silt and/or other materials or debris from any stream, river, lake, or marine water body and associated shorelines and wetlands. Dredging is normally done for specific purposes or uses such as for constructing and maintaining canals, navigation channels, turning basins, harbors and marinas, sub-marine pipeline or cable crossings, for obtaining material for fill or construction, as part of an aqua-cultural operation, or dike repair and maintenance.

E

Ecoclass - A classification system for identification and mapping of basic vegetative resources and their characteristics.

Ecosystem - The interacting system of a biological community and its non-living environment.

Eligibility - Qualification of a river area for inclusion in the national system through determination that it is free-flowing and with its adjacent land area possesses at least one outstandingly remarkable value.

Estuary - A semi-enclosed coastal body of water which has a free connection with the open sea. Estuaries are strongly affected by tidal action and the mixing of seawater with freshwater from land drainage. Examples are river mouths, coastal bays, tidal marshes, and bodies of water behind barrier beaches.

F

Feature - An esthetic, scenic, historic, archeologic, scientific or other unique resource context of a river area.

Fee simple title - Full title to real property including all rights of use and occupancy.

Feedlot - is an enclosure or facility used or capable of being used for feeding all forms of livestock hay, grain, silage, or other feed, but shall not include land for growing crops or vegetation for livestock feeding and/or grazing, nor shall it include normal livestock wintering operations.

Flood control works and flood protection - means all structures and works on streams designed to retard bank erosion, to reduce flooding of adjacent lands, to control or divert stream flow, or to create a reservoir, including but not limited to revetments, dikes, levees, channelization, dams, vegetative stabilization, weirs, flood and tidal gates. Excluded are water pump apparatus.

Flood protection includes the above structural devices but may also include various techniques of floodplain, river basin, and watershed management which may be applied in lieu of or complementary to structural measures.

Floodplain - means all lands along a river or stream which may be inundated by the base flood of such river or stream.

Floodplain management - means a long term local government program to reduce flood damages to life and property and to minimize public expenses due to floods through a comprehensive system of planning, development regulations, building standards, structural works, and monitoring and warning systems.

Floodway - means those portions of the area of a river valley lying streamward from the outer limits of a watercourse upon which flood waters are carried during periods of flooding that occur with reasonable regularity, although not necessarily annually, said floodway being identified, under normal condition, by changes in surface soil conditions or changes in types or quality of vegetative ground cover condition. The floodway shall not include those lands that can reasonably be expected to be protected from flood waters by flood control devices maintained by or maintained under license from the federal government, the state, or a political subdivision of the state.

Flow - The volume of water in a river passing a given point in a given period of time, usually expressed in terms of cubic feet per second or cubic meters per second.

Free flowing - Existing or flowing in natural condition without impoundment, diversion, straightening, rip-rapping, or other modification of the waterway. The existence, however, of low dams, diversion works, and other minor structures at the time any river is proposed for inclusion in the national wild and scenic rivers system shall not automatically bar its consideration for such inclusion: provided, that this shall not be construed to authorize, intend, or encourage future construction of such structures within components of the national wild and scenic rivers system.

I

Individual Tree Selection - The selection of trees for harvest based on individual tree characteristics, rather than characteristics of trees as a group.

Impoundment - A slack water pool formed by any manmade structure.

Inter-disciplinary Team - A group of individuals with differing training assembled to solve a problem or perform a task.

Intrusion - Manmade development in a river area which detracts from the naturalness of the area and is considered in applying the classification criteria.

Issue - A point, matter or question to be resolved.

J

Jetties - are structures generally built perpendicular to the shore extending through or past the intertidal zone or foreshore. They are built singly or in pairs at harbor entrances or river mouths mainly to prevent the shoaling or accretion of littoral sand drift. Jetties also protect channels and inlets from storm waves and cross-currents. The material used is generally quarry rock.

L

Landfill - is the creation, extension, or raising of land area by filling or depositing sand, soil, gravel, dredge spoils, or other materials onto a shoreline, wetland, or water body area.

Land Sensitivity - The susceptibility of a land unit to deterioration as a result of activities.

Land Type - Classifications of land by certain common characteristics, on the assumption that common inferences as to land capability or sensitivity can be described.

Less-than-fee techniques - Methods of controlling land use by acquisition of easements, zoning, taxation, regulation or other methods other than fee-simple acquisition.

Levee - means a natural or man-made embankment on the bank of a stream for the purpose of keeping floodwaters from inundating adjacent land. Some levees have revetments on their sides.

M

Management measure - A specific action designed to achieve a management objective.

Management objective - A standard or goal which management measures and strategies are designed to achieve.

Management plan - A detailed development plan required under section 3(b) of the act to be prepared within one year of designation of a component of the national system except where a different date is provided by law which states the boundaries and classification of the river area and presents a plan for its public use, development and administration.

Management Practice - A specific action, measure or treatment applied to a management area or part thereof.

Management principle - A general statement which guides management agencies in choosing management measures and strategies; part of a management policy.

Marinas - are fresh or salt water facilities that provide storage (wet and/or dry), launch areas, supplies, and services for pleasure and/or fishing craft. Marinas may be available to the general public through rental or fee arrangements or they may be totally private, or for members of a yacht or country club, or a recreational subdivision.

Master program - means the comprehensive use plan for a described area, and the use regulations together with maps, diagrams, charts, or other descriptive material and text, a statement of desired goals and standards developed in accordance with the policies enunciated in R.C.W. 90.58.020.

N

Non-point Pollution - Pollution whose source is general rather than specific in location.

O

Old-Growth Habitat - An environmental condition of a timbered area that includes trees in varying conditions of age, decay and other infirmities. Usually includes a high degree of solitude in a relatively undisturbed environment. Often will provide habitat for maximum potential populations of snag dependent wildlife.

Ordinary high water mark (OHWM) - on all lakes, streams, and tidal water is that mark that will be found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists on June 1, 1971, or as it may naturally change thereafter: PROVIDED, that in any area where the ordinary high water mark cannot be found, the ordinary high water mark adjoining salt water shall be the line of mean higher high tide and the ordinary high water mark adjoining fresh water shall be the line of mean high water.

Organic authority - An authority granted to an agency in its enabling legislation or other legislation applying to all of its programs.

Outstandingly remarkable value - A value of the river area which is of sufficient merit in the opinion of the study team to justify inclusion of the river area in the national system. See Value.

P

Perfected claim - The perfection of a mining claim as referred to in section 9(a) of the Act, means the discovery of a valuable mineral deposit after a mining claim is located, and the claimant's achievement thereby of possessory right to the claim. As long as the claimant continues to comply with the mining laws, he retains his possessory right and may receive a patent. For the purposes of section 9(a), the date of perfection of the claim is the date which determines whether a particular claim is subject to regulation.

Plant Association - Plants which typically grow together, given certain site conditions.

Potential Yield - The sustainable output level of wood fiber available after deductions for other resource needs.

R

Recreational development - Modification of the natural or existing environment to accommodate recreation. This includes clearing land, earth modifications, structures and other facilities such as parks, camps, campgrounds, camping clubs, golf courses, and other outdoor recreation areas. Second home subdivisions of land, resorts, motels, hotels, and other commercial enterprises are not included; however, the policies and regulations of the Recreation section apply to recreation use associated with such development.

Residential Development - is the subdivision of land for human occupancy normally in the structural forms of single family homes, trailers, mobile homes and parks, condominiums, multi-family units, and planned unit residential developments (PURD). Recreational subdivisions and camping developments or clubs are included in this section and definition. Motels, hotels and other transient or commercial housing are considered under "Commercial Development".

Revetments - are sloped walls constructed of rip rap or other substantial material, placed on stream banks or marine shorelines to retard bank erosion from high velocity currents or waves respectively.

Riparian Zone (Habitat) - Area influenced by water such as streamside or lake shore.

Rip rapping - Any type of manmade protection of a river bank from erosion.

River - A flowing body of water or estuary or a section, portion, or tributary thereof, including rivers, streams, creeks, runs, kills, rills, and small lakes. (Section 15(a) of the Act.)

River area (river corridor) - A river segment and its immediate environment.

River segment - A portion of a river.

Road - A general term denoting a way for purposes of travel by vehicles greater than 40 inches in width. (FSM 7721.15c)

S

Salvage Cutting - Removal of recently dead trees.

Sanitation Cutting - The removal of dead, diseased, infested, damaged or susceptible trees essentially to prevent the spread of pests or pathogens and so promote forest hygiene.

Scenic river area - One of three classifications for components of the national system, defined in section 2(b) of 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."

Secondary contact recreation - Activities in which contact with the water is either incidental or accidental, e.g., boating, fishing and limited contact with water incident to shoreline activities.

Selective timber harvest - For the purposes of river corridor classification and management, selective timber harvest is defined as uneven-aged silviculture using single-tree selection cutting or small group selection cutting to harvest trees and obtain regeneration in order to maintain or restore a natural appearing forest stand.

Shoreline permit - means a permit issued by Skagit County pursuant to R.C.W. 90.58.140 as required for substantial development on shorelines of the state.

Shoreline Stabilization - Shoreline stabilization activities include river and streamway modifications designed to stabilize eroding or erosion prone stream banks, protecting the adjacent property and existing developments. These modifications commonly occur in the form of rip rap, revetments, and other structural stream bank defense works.

Shorelines - means all of the water areas of the State, including reservoirs, and their associated wetlands, together with the lands underlying them; except:

1. Shorelines of Statewide significance.
2. Shorelines on segments of streams upstream of a point where the mean annual flow is twenty cubic feet per second or less and the wetlands associated with such upstream segments.
3. Shorelines on lakes less than twenty acres in size and wetlands associated with such small lakes.

Shorelines of Statewide Significance - refers to the following shorelines of the Skagit component for the purposes of this plan:

Those natural rivers or segments thereof as follows:

- a. Any west of the crest of the Cascade Range downstream of a point where the mean annual flow is measured at one thousand cubic feet per second or more.
- b. Any east of the crest of the Cascade range downstream of a point where the annual flow is measured at two hundred cubic feet per second or more, or those portions of rivers east of the crest of Cascade range downstream from the first three hundred square miles of drainage area, whichever is longer.
- c. Those wetlands associated with the above.

Single Tree Selection - The selection of trees for harvest based on individual tree characteristics, rather than characteristics of trees as a group.

Special attribute - Particular characteristic of a river area, e.g., access, flow fluctuation, ecologically fragile area, terrain, soil erodability, hazard, etc., taken into consideration in developing management plans.

Species Endangered - An animal or plant species whose prospects of survival and reproduction are in immediate jeopardy.

Species Threatened - A species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and which has been designated in the Federal Register by the Secretary of Interior as a threatened species. (Endangered Species Act of 1973.)

State-administered river - A component of the National Wild and Scenic Rivers System administered by a state. State protected rivers may be included in the national system upon application of the Governor of the state and approval by the Secretary of the Interior.

Stocking Level - In a forest, a subjective indication of the number of existing trees as compared to the desirable number for best results - e.g., maximum productivity of wood.

Straightening - The diverting of the entire flow of part or all of a waterway to a straighter channel or course.

Structure - is anything constructed or erected with a fixed location on the earth and joined together in a different manner (pursuant to the Uniform Building Code).

Study - See wild and scenic river study.

Study agency - The agency within the Department of Agriculture or the Department of the Interior delegated the responsibility for a wild and scenic river study.

Study area (study corridor) - For the purposes of determining eligibility and classification, study segment (q.v.) and its immediate environment or related adjacent lands, normally defined as an area extending the length of the study segment and extending in width one quarter mile from each bank of the river.

Study authorization (study designation) - Addition by Congress of a river area to the list of potential additions to the national system under section 5(a) of the Act. Study authorization requires that a study of the river area be made by either the Department of Agriculture or the Department of the Interior within a specified time period and places a moratorium through section 7(b) on water resource projects adversely affecting the values of the river area for certain specified periods of time provided for the study and for its consideration by Congress.

Study report - The report on the suitability or unsuitability of a study river for inclusion in the national system, which section 4(a) requires the Secretary of Agriculture, or the Secretary of the Interior, or both jointly to prepare and submit to the President. The President transmits the report with his recommendation to the Congress.

Study river - See study segment.

Study segment - A river segment authorized by Congress for study. See study authorization.

Study team - A team of professionals and citizens from interested local, State and Federal agencies and citizens' groups invited by the study agency and participating in the study.

Suitability - The appropriateness of applying certain resource management practices to a particular unit of land, as determined by an analysis of the economic and environmental consequences and the alternative uses foregone. A unit of land may be suitable for a variety of individual or combined management practices.

I

Timber - shall mean forest trees standing or down of a commercial species, including Christmas trees.

Trail - A general term denoting a way for purposes of travel by foot, stock, or trail vehicle.

U

Unevenaged Management - The course of action involved in maintaining a forest or stand composed of intermingled trees that differ markedly in age.

Unit - See component.

V

Value (key value) - Any aspect of the river area which is of benefit to man. Wild, scenic and recreational river areas are designated to protect all their values, outstandingly remarkable or otherwise. The Act cites "scenic, recreational, geologic, fish and wildlife, historic, cultural or other similar values as values which, if "outstandingly remarkable," can qualify free-flowing rivers for inclusion in the national system.

Visual Absorption Capability - A measure of the relative ability of the land to absorb visual change.

Vehicle (motorized) Camping - Camping where access is primarily by vehicle as opposed to camping where access is primarily by foot or horseback.

Visitor Day - The use of an area by one or more persons for 12 hours, either continuously or accumulated.

Visual Quality Objectives - Combines inherent scenic quality and public interest to establish a permissible (or impermissible) degree of alteration for any given area.

W

Water resource project - For the purpose of section 7 of the Act, any human activity affecting the free-flowing characteristics of a river. See free-flowing.

Wild and scenic river - A component of the National Wild and Scenic Rivers System or a State or locally protected river (may be classified wild, scenic or recreational in the national system and the same or variously in State and local systems).

Wild and scenic river study - The study or evaluation of a river area as to eligibility and suitability for inclusion in the national system as required by section 4(a) of the Act. See value.

Wild and scenic values (wild, scenic and recreational values) - The values of a wild, scenic or recreational river or potential wild, scenic or recreational river, as defined in section 1(b) of the Act.

Wild river area - One of three classifications for components of the national system, defined in section 2(b) of 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."

Appendix

APPENDIX I

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Appendix

I

RIVER SURFACE USE CARRYING CAPACITY FORMULA

Recreational carrying capacity is a continuing controversy which confronts managers of river systems. Carrying capacity is a management concept, a framework or a way of thinking about how to plan a particular recreation resource. Carrying capacity is not some magic formula which gives a manager the answer to the question "How much use is too much?" How much and what kind of use that is acceptable for an area must be based on managerial judgment and experience. There is no magic formula for capacity and there is no magic number that is the capacity for a given river or area.

In expressing carrying capacity it is assumed that the primary goal of recreation management is to provide enjoyment and benefits for people.

"The natural resources of a Forest belong to all the people. Mere title without actual privilege of USE is a delusion and a snare. We possess only that which we can actually USE. A condition which interferes with the USE of the recreational features of a Forest deprives a citizen of the enjoyment and USE of that to which his citizenship gives him title, and is directly opposed to the fundamental policy of the Forest Service, the principle of conservation, or the principle of constructive USE."

The preceding paragraph is a direct quote from the "Washington Hatchet" a semi-annual publication of the Washington National Forest dated April 1, 1916.

The quoted statement is not inconsistent with present day policy for management of National Forest or other designated lands and waters which the Secretary of Agriculture has directed the Forest Service to administer. There are constraints, however, in doing this; budgetary, administrative, legal, and the capabilities of the physical environment.

Sections 1(b) and 10(a) of the Wild and Scenic Rivers Act, taken together, state the primary intent of the Act, natural resource preservation and appropriate public use. (Emphasis added.)

Section 1(b) in part says: "...for the benefit and enjoyment of present and future generations." Section 10(a) states: "...limiting other uses that do not substantially interfere with public use and enjoyment of these values."

In deriving carrying capacities, the kinds and amounts of public use, which the rivers can sustain, without unacceptable impact to the values for which they are designated are considered.

Factors Which Impact Resources and Influence Use on the Skagit W&SR System are:

1. Season of Use - there are two separate and distinct seasons which impact resource values in different ways:

- a. Summer Season - that period of time including April 1 through September 30.
 - b. Winter Season - October 1 through March 31.
2. Environments - the two primary environments referenced here are:
- a. Land - is that part of the resources landward from the shores of the rivers to the designated boundaries.
 - b. Water - includes the water from shoreline to shoreline.
3. Pattern of Use -
- a. Overnight use.
 - b. Day use - the largest percentage of use reported in the RIM data base for the river system is day use. Almost all of the water surface use occurs during the day time.

Optimum Recreation Carrying Capacity

As described here and applied separately to each river, is the amount of recreation use of a recreation resource which reflects the level of use most appropriate for both the protection of the resource and the satisfaction of the participant. Optimum capacity, in these guidelines, is comparable to "instant capacity" or the capacity of a given resource area at any single point in time.

Optimum Capacity considers:

- a. Physical Carrying Capacity - the level of activity an area can support without causing an unacceptable change in the recreation environment.

The optimum level of the physical carrying capacity, as it relates to resource capabilities, will be adjusted after monitoring and use studies have been completed. (See R&S-1-4 Vol II, page 55.) During the interim a factor of .5 of the maximum physical carrying capacity will be used.

- b. Social Capacity - the level of activity most acceptable to the participant.

The maximum social capacity was based on daily launches per segment, number of days available and persons per launch. These use figures were then modified by a factor to reflect the optimum social carrying capacity for the experience level of the various river segments. (See Figure 3, page 52, Vol I for river segment classifications.)

Experience Level	Description	Sight/Sound Of Man	Factor
2	Recreation opportunities to satisfy basic-needs to near maximum degree except as tempered by motorized access. Little modified natural environment is dominate consideration. Modifications for confort and convenience are few. Some feeling of achievement for reaching the opportunity through challenging motorized access is important. Minumum controls evident to the user.	Occasional	.40
3	Recreation opportunities to satisfy basic-needs to an intermediate degree. Moderate degrees of outdoor skills are involved. Natural environment dominates but some modifications for confort and convenience are also important to the user. Controls and regimentation afford sense of security although some taste of adventure is still important to the user.	Acceptable	.60
4	Recreation opportunities to satisfy basic-needs to only a moderate degree. Moderate degree of activity skills suffice. Natural environment important but modifications for confort and convenience are more important. Sense of security afforded the user. Regimentation and fairly obvious controls important to the user.	Expected	.80
5	Recreation opportunities to satisfy basic-needs to a modest degree. Skills required for outdoor activities are minimal. Natural environment is important but dominated by man-made modifications. Feeling of security is very important to the user. Learning or beginning skills suffice when supplemented by administrative controls.	Encouraged	1.00

The distribution of use between commercial and non-commercial use was based on the International Scale of River Difficulty. As the difficulty of the river raises, the ration of commercial to non-commercial use increases. This rationale was based on the need to provide expert guides for the majority of users on the more difficult segments of the various rivers.

1. Season of use:
 - a. April through September 182 days
 - b. October through March 182 days
2. Daily launches per segment: 5 based on a 30-minute launch interval to allow for minimum contact between individual launch groups.
3. Persons per launch: 25.
- 4.* Optimum carrying capacity factor (OCC): .50.
5. Recreation experience level factor (R.E.L.):
 - a. R.E.L. 5 1.00
 - b. R.E.L. 4 .80
 - c. R.E.L. 3 .60
 - d. R.E.L. 2 .40

FORMULA

(Days) (launches) (persons) (optimum carrying capacity)
 (Recreation experience level) = user days.

* This factor may be adjusted up or down as future monitoring provides better information concerning physical, social or biological needs.

Summer Use

Commercial/Non-commercial use ratio based on International Scale of River Difficulty.

<u>Class</u>	<u>Comm/Non-Comm Use Ratio</u>
I	20/80
II	35/65
III	50/50
IV	65/35
V	N/A

(These ratios may be adjusted to reflect data collected from future monitoring.)

SAUK RIVER
(Summer Season)

- A. Upper Sauk (Experience level 2) (Difficulty IV)
(182 days) (5 launches) (25 persons) (.50 O.C.C.) (.4 R.E.L.) = 4,550
or 4,600 user days
Commercial use @ 65% = 3,000 user days
- B. Middle Sauk (Experience Level 3) (Difficulty II+)
182 days (5 launches) (25 persons) (.50 O.C.C.) (.6 R.E.L.) = 6,825 or
6,800 user days
Commercial use @ 40% = 2,720 or 2,700 user days
- C. Lower Sauk (Experience Level 3) (Difficulty II)
182 days (5 launches) (25 persons) (.50 O.C.C.) (.6 R.E.L.) = 6,825 or
6,800 user days
Commercial use @ 35% = 2,380 or 2,400 user days

(Winter Season)

An arbitrary commercial use figure of 900 user days has been assigned to the Sauk River. This figure will be adjusted to fit actual needs, as identified by future monitoring.

SUIATTLE RIVER
(Summer Season)

- Upper Suiattle (Experience Level 2) (Difficulty III)
(182 days) (5 launches) (25 persons) (.50 O.C.C.) (.4 R.E.L.) = 4,550
or 4,600 user days
Commercial use @ 50% = 2,300 user days
- Lower Suiattle (Experience Level 2) (Difficulty IV)
182 days (5 launches) (25 persons) (.50 O.C.C.) (.4 R.E.L.) = 4,550 or
4,600 user days
Commercial use @ 65% = 2,990 or 3,000 user days

(Winter Season)

Initially, commercial use will be limited to the summer season.

SKAGIT RIVER
(Summer Season)

- A. Upper Skagit (Experience Level 3-4) (Difficulty II)
(182 days) (5 launches) (25 persons) (.50 O.C.C.) (.70 R.E.L.) = 7,962
or 8,000 user days
Commercial use @ 35% = 2,800 user days
- B. Middle Skagit (Experience Level 3-4) (Difficulty II) (same as Upper Skagit)
- C. Lower Skagit (Experience Level 2) (Difficulty II)
(182 days) (5 launches) (25 persons) (.50 O.C.C.) (.40 R.E.L.) = 4,550
or 4,600 user days
Commercial use @ 35% = 1,600 user days

(Winter Season)

An arbitrary commercial use figure of 6,000 user days has been assigned to the Skagit. This figure will be adjusted to fit actual needs, as identified by monitoring use and research.

Appendix

APPENDIX J

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Appendix
J

American Whitewater Affiliation

SAFETY CODE



Revised 1980

A guide to safe river boating in canoe, kayak or raft. Prepared and published by the American Whitewater Affiliation, a volunteer organization of paddlers and clubs interested in whitewater sport, and publishers of the bimonthly *American Whitewater Journal*, which offers not only entertainment but also up-to-date information on technique, equipment, safety, conservation, racing and river access developments as well as a complete listing of affiliated clubs and how to contact them.

AMERICAN WHITEWATER AFFILIATION
SAFETY CODES
P.O. Box 1261
Jefferson City, MO 65102

I. PERSONAL PREPAREDNESS AND RESPONSIBILITY

1. Be a Competent Swimmer with ability to handle yourself underwater.
2. WEAR a Lifejacket.
3. Keep Your Craft Under Control. Control must be good enough at all times to stop or reach shore before you reach any danger. Do not enter a rapid unless you are reasonably sure you can safely navigate it or swim the entire rapid in event of capsize.
4. BE AWARE OF RIVER HAZARDS AND AVOID THEM. Following are the most frequent KILLERS.
 - A. HIGH WATER. The river's power and danger, and the difficulty of rescue increase tremendously as the flow rate increases. It is often misleading to judge river level at the put-in. Look at a narrow, critical passage. Could a sudden rise from sun on a snow pack, rain, or a dam release occur on your trip?
 - B. COLD. Cold quickly robs one's strength, along with one's will and ability to save oneself. Dress to protect yourself from cold water and weather extremes. When the water temperature is less than 50 degrees F., a diver's wetsuit is essential for safety in event of an upset. Next best is wool clothing under a windproof outer garment such as a splash-proof nylon shell; in this case one should also carry matches and a complete change of clothes in a waterproof package. If, after prolonged exposure, a person experiences uncontrollable shaking or has difficulty talking and moving, he must be warmed immediately by whatever means available.
 - C. STRAINERS: Brush, fallen trees, bridge pilings, or anything else which allows river current to sweep through but pins boat and boater against the obstacle. The water pressure on anything trapped this way is overwhelming, and there may be little or no whitewater to warn of danger.
 - D. WEIRS, REVERSALS, AND SOUSE HOLES. The water drops over an obstacle, then curls back on itself in a stationary wave, as is often seen at weirs and dams. The surface water is actually going UPSTREAM, and this action will trap any floating object between the drop and the wave. Once trapped, a swimmer's only hope is to dive below the surface where current is flowing downstream, or try to swim out the end of the wave.
5. Boating Alone is not recommended. The preferred minimum is three craft.
6. Have a Frank Knowledge of Your Boating Ability. Don't attempt waters beyond this ability. Learn paddling skills and teamwork, if in a multiple-manned craft, to match the river you plan to boat.
7. Be in Good Physical Condition consistent with the difficulties that may be expected.
8. Be Practiced in Escape from an overturned craft, in self rescue, in rescue, and in Artificial Respiration. Know first aid.

9. The Eskimo Roll should be mastered by kayakers and canoers planning to run large rivers and/or rivers with continuous rapids where a swimmer would have trouble reaching shore.
10. Wear a Crash Helmet where an upset is likely. This is essential in a kayak or covered canoe.
11. Be Suitably Equipped. Wear shoes that will protect your feet during a bad swim or a walk for help, yet will not interfere with swimming (tennis shoes recommended). Carry a knife and waterproof matches. If you need eyeglasses, tie them on and carry a spare pair. Do not wear bulky clothing that will interfere with your swimming when water-logged.

II. BOAT AND EQUIPMENT PREPAREDNESS

1. Test New and Unfamiliar Equipment before relying on it for difficult runs.
2. Be Sure Craft is in Good Repair before starting a trip. Eliminate sharp projections that could cause injury during a swim.
3. Inflatablecraft should have Multiple Air Chambers and should be test inflated before starting a trip.
4. Have Strong, Adequately Sized Paddles or Oars for controlling the craft and carry sufficient spares for the length of the trip.
5. Install Flotation Devices in non-inflatable craft, securely fixed, and designed to displace as much water from the craft as possible.
6. Be Certain There is Absolutely Nothing to Cause Entanglement when coming free from an upset craft; i.e., a spray skirt that won't release or tangles around legs; life jacket buckles or clothing that might snag; canoe seats that lock on shoe heels; foot braces that fail or allow feet to jam under them; flexible decks that collapse on boater's legs when a kayak is trapped by water pressure; baggage that dangles in an upset; loose rope in the craft, or badly secured bow/stern lines.
7. Provide Ropes to Allow You to Hold Onto Your Craft in case of upset, and so that it may be rescued. Following are the recommended methods:
 - A. Kayaks and Covered Canoes should have 6 inch diameter grab loops of 1/4 inch rope attached to bow and stern. A stern painter 7 or 8 feet long is optional and may be used if properly secured to prevent entanglement.
 - B. Open Canoes should have bow and stern lines (painters) securely attached consisting of 8 to 10 feet of 1/4 or 3/8 inch rope. These lines must be secured in such a way that they will not come loose accidentally and entangle the boaters during a swim, yet they must be ready for immediate use during an emergency. Attached balls, floats, and knots are not recommended.
 - C. Rafts and Dories should have taut perimeter grab lines threaded through the loops usually provided.
8. Respect Rules for Craft Capacity and know how these capacities should be reduced for whitewater use. (Life raft ratings must generally be halved.)
9. Carry Appropriate Repair Materials: tape (heating duct tape) for short trips, complete repair kit for wilderness trips.
10. Car Top Racks Must Be Strong and positively attached to the vehicle, and each boat must be tied to each rack. In addition, each end of each boat should be tied to car bumper. Suction cup racks are poor. The entire arrangement should be able to withstand all but the most violent vehicle accident.

III. LEADER'S PREPAREDNESS AND RESPONSIBILITY

1. **River Conditions.** Have a reasonable knowledge of the difficult parts of the run, or if an exploratory trip, examine maps to estimate the feasibility of the run. Be aware of possible rapid changes in river level, and how these changes can affect the difficulty of the run. If important, determine approximate flow rate or level. If trip involves important tidal currents, secure tide information.
2. **Participants.** Inform participants of expected river conditions and determine if the prospective boaters are qualified for the trip. All decisions should be based on group safety and comfort. Difficult decisions on the participation of marginal boaters must be based on total group strength.
3. **Equipment.** Plan so that all necessary group equipment is present on the trip; 50 to 100 foot throwing rope, first aid kit with fresh and adequate supplies, extra paddles, repair materials, and survival equipment if appropriate. Check equipment as necessary at the put-in, especially: life jackets, boat flotation, and any items that could prevent complete escape from the boat in case of an upset.
4. **Organization.** Remind each member of individual responsibility in keeping group compact and intact between leader and sweep (capable rear boater). If group is too large, divide into smaller groups, each of appropriate boating strength, and designate group leaders and sweeps.
5. **Float Plan.** If trip is into a wilderness area, or for an extended period, your plans should be filed with appropriate authorities, or left with someone who will contact them after a certain time. Establishment of checkpoints along the way at which civilization could be contacted if necessary should be considered. Knowing location of possible help could speed rescue in any case.

IN CASE OF UPSET

1. **Evacuate Your Boat Immediately** if there is imminent danger of being trapped against logs, brush, or any other form of strainer.
2. **Recover With an Eskimo Roll if Possible.**
3. **If You Swim, Hold Onto Your Craft.** It has much flotation and is easy for rescuers to spot. Get to the upstream end so craft cannot crush you against obstacles.
4. **Release Your Craft if This Improves Your Safety.** If rescue is not imminent and water is numbing cold, or if worse rapids follow, then strike out for the nearest shore.
5. **When Swimming Rocky Rapids,** use backstroke with legs downstream and Feet Near the Surface. If your foot wedges on the bottom, fast water will push you under and hold you there. **Get to Slow Or Very Shallow Water Before Trying to Stand or Walk. Look Ahead.** Avoid possible entrapment situations: rock wedges, fissures, strainers, brush, logs, weirs, reversals and soue ~~holes~~. Watch for eddies and slack-water so that you can be ready to use these when you approach. Use every opportunity to work your way toward shore.
6. **If others spill, Go After the Boaters.** Rescue boats and equipment only if this can be done safely.

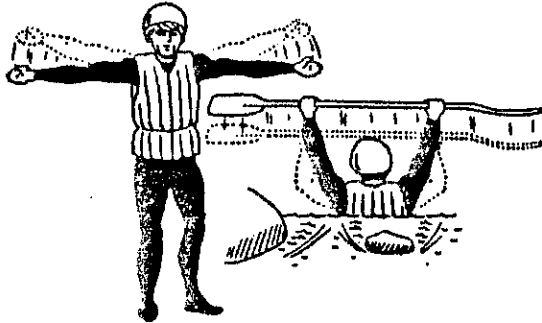
V. INTERNATIONAL SCALE OF RIVER DIFFICULTY

(If rapids on a river generally fit into one of the following classifications, but the water temperature is below 50 degrees F., or if the trip is an extended trip in a wilderness area, the river should be considered one class more difficult than normal.)

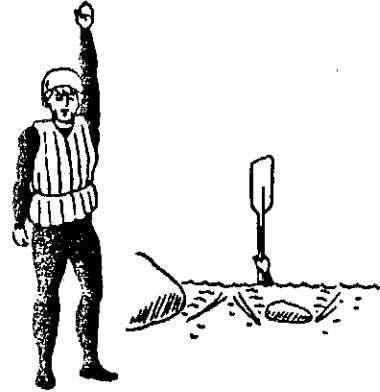
- CLASS I.** Moving water with a few riffles and small waves. Few or no obstructions.
- CLASS II.** Easy rapids with waves up to 3 feet, and wide, clear channels that are obvious without scouting. Some maneuvering is required.
- CLASS III.** Rapids with high, irregular waves often capable of swamping an open canoe. Narrow passages that often require complex maneuvering. May require scouting from shore.
- CLASS IV.** Long, difficult rapids with constricted passages that often require precise maneuvering in very turbulent waters. Scouting from shore is often necessary, and conditions make rescue difficult. Generally not possible for open canoes. Boaters in covered canoes and kayaks should be able to Eskimo roll.
- CLASS V.** Extremely difficult, long, and very violent rapids with highly congested routes which nearly always must be scouted from shore. Rescue conditions are difficult and there is significant hazard to life in event of a mishap. Ability to Eskimo roll is essential for kayaks and canoes.
- CLASS VI.** Difficulties of Class V carried to the extreme of navigability. Nearly impossible and very dangerous. For teams of experts only, after close study and with all precautions taken.

This American Whitewater Safety Code, in lots of 50, is available at a low cost to cover printing and mailing: Write AWA, P.O. Box 1261, Jefferson City, MO 65102. Send self-addressed, stamped envelope for a single copy.

A New System of Universal River Signals:



STOP: Potential hazard ahead. Wait for "all clear" signal before proceeding, or scout ahead. Form a horizontal bar with your paddle or outstretched arms. Move up and down to attract attention, using a pumping motion with paddle or flying motion with arms. Those seeing the signal should pass it back to others in the party.



ALL CLEAR: Come ahead (In the absence of other directions, proceed down the center.) Form a vertical bar with your paddle or one arm held high above your head. Paddle blade should be turned flat for maximum visibility. To signal direction or a preferred course through a rapid around obstruction, lower the previously vertical "all clear" by 45 degrees toward the side of the river with the preferred route. Never point toward the obstacle you wish to avoid.



HELP/EMERGENCY: Assist the signaller as quickly as possible. Give three long blasts on a police whistle while waving a paddle, helmet or life vest over your head in a circular motion. If a whistle is not available, use the visual signal alone. A whistle is best carried on a lanyard attached to the shoulder of a life vest.



Signalling system devised by AWA committee composed of Jim Sindelar, Tom McCloud, O.K. Goodwin, Bev Hartline, Walt Blackadar and Charles Walbridge. Illustrations by Les Fry.

Appendix

APPENDIX K

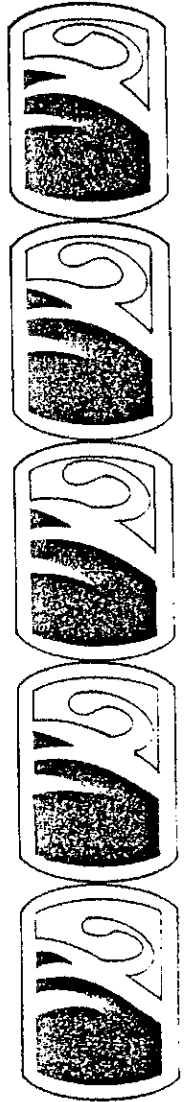
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Appendix
K

APPENDIX K

Shorelines Within Skagit Wild and Scenic River System

Suggested revisions to standards of Current County Shoreline Master Programs - Skagit and Snohomish Counties.

USES	SUBURBAN/ RURAL RESID.	RURAL	CONSERVANCE	NATURAL
Agriculture	---Per Current	Master	Programs----	-----
Aquaculture	*	*	*	Per Current
Commercial Development	Per Current---	-----	*	Per Current
Dredging	*	*	Per Current-	-----
Forest Practices	Per Current Ma	ster Pr	ograms-----	-----
Land Fills	Per Current Ma	ster Pr	ograms-----	-----
Marinas/Launch Ramps	Per Current	*	*	Per Current
Mining	Per Current Ma	ster Pr	ograms-----	-----
Outdoor Advertising/Signing	Per Current Ma	ster Pr	ograms-----	-----
Piers and Docks	*	*	*	*
Ports and Industry	Per Current	*	*	Per Current
Recreation	Per Current Ma	ster Pr	ograms-----	-----
Residential Development				
Scientific/Educational Resources (Archaeological and Historical)	Per Current Ma	ster Pr	ograms-----	-----
Shore Defense Works Breakwaters, Jetties, Groins	*	*	Per Current	Per Current
Shoreline Stabilization and Flood Protection	*	*	*	Pre Current
Transportation Facilities	*	*	*	*
Utilities	*	*	*	*

* Revisions or additions to Current Shoreline Master Programs recommended to maintain Wild and Scenic River characteristics. See attached for specifics.

NOTE: Current Shoreline Master Programs: Skagit County Shoreline Management Master Program - December 1976; Snohomish County Shoreline Management Master Program - September 1974.

Suggested Revisions and Additions to Skagit and Snohomish Counties Shoreline Management Master Programs - for only those shorelines within the Skagit Wild and Scenic River System Corridor.

Aquaculture

Activities which do not require structures, either fixed or floating; alteration of the shoreline character; alteration of natural features; or bottom land mechanical harvest and propagation procedures may be permitted. Use setback and height regulations of Skagit County - Table AQ - Skagit County Shoreline Master Program.

Commercial Development

Conservancy - Commercial development not permitted. For all areas use Table CO - Tabular Shoreline Use Regulations - 1976 Skagit Program.

Dredging

Conditional activity in Suburban/Rural Residential; Rural; and Conservancy when the purpose is to maintain or enhance fish habitat and when dredging and slash disposal will not alter natural character of the shoreline.

Marinas/Launch Ramps

Conditional activity in Rural and Conservancy areas. Marinas not to be permitted; launch ramps permitted if fully available to all public users. For Rural and Conservancy areas use Table M - Tabular Shoreline Area Regulations - 1976 Skagit Program.

Rivers and Docks

Not permitted in Natural. Conditional in Conservancy; Rural; and Suburban/Rural Residential areas in that piers and wharfs and docks for commercial use not permitted. Docks permitted only in conjunction with public launch ramps, and only when the free-flowing character of the river is not altered.

Ports and Industry

Not permitted in Rural and Conservancy areas; including the water and bank-side storage and handling of logs. All other activities to meet Tabular Shoreline Regulations - Table PI - 1976 Skagit Program.

Shore Defense Works
Breakwaters, Jetties,
Groins

Conditional in Suburban/Rural Residential and Rural areas. New construction will normally not be permitted, except where necessary to protect existing improvements and construction will not alter shoreline character; fish spawning; free-flowing character of the river. Will be permitted to replace existing breakwaters, jetties, and groins and does not alter the shoreline character or fish spawning.

Shoreline Stabilization
and Flood Protection

Conditional in Suburban/Rural Residential; Rural; and Conservancy. Channel modification, dams and impoundments not permitted where free-flowing character of the river is altered; fish/wildlife habitat deminished.

Riprap for protection of agricultural lands along the Skagit River is permitted, but such riprap must be of natural appearing rock. Riprap along Cascade, Sauk, and Suiattle Rivers is conditional if it replaces existing, or is necessary for protection or improvements and does not alter free-flowing character; shoreline character; diminish floodway volume; or diminish fish/wildlife habitats.

Transportation
Facilities

Meet general requirements of 1974 Snohomish Program and incorporate Tabular Shoreline Area Regulations - Table TF - 1976 Skagit County Program.

Utilities

Add to existing general and conditional standards of each counties' program. Crossings of the river will be generally restricted to existing utility crossings.



United States
Department of
Agriculture

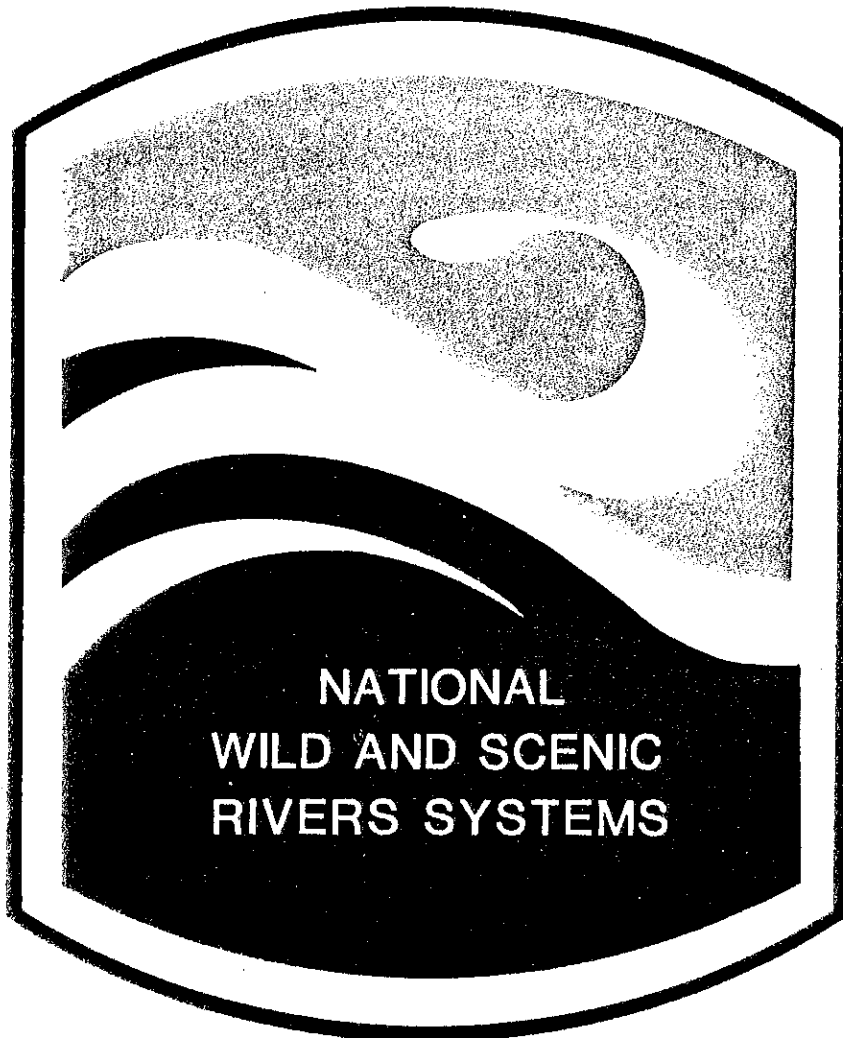
Forest
Service

Mt. Baker-
Snoqualmie
National
Forest



RIVER MANAGEMENT PLAN (FINAL) SKAGIT RIVER

VOLUME II



VOLUME II

River Management Plan

National Wild and Scenic River Systems

Skagit and Snohomish Counties, Washington
1983

Responsible Agency: USDA Forest Service
Responsible Official: Jeff M. Sirmon
Regional Forester
Pacific Northwest Region

For Further Information Contact: J.D. MacWilliams
Mt. Baker-Snoqualmie
National Forest
1022 First Avenue
Seattle, Washington 98104
(206) 442- 5400

Abstract:

The River Management Plan (Vol. II) displays management authority, goals, and direction for the administration of the river system. Background information, resource overviews, assumptions, and the Wild and Scenic River boundary are presented in Volume I, the River Management Analysis.

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COORDINATION AND RESPONSIBILITIES OF OTHER ORGANIZATIONS AND AGENCIES

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Introduction

Establishment

Section 5(a) of Public Law 90-542 (10/2/68) designated portions of the Skagit, Cascade, Sauk and Suiattle Rivers as having potential for additions to the National Wild and Scenic River System and required the Secretary of Agriculture to study them to determine if they should be added to the system. This study was to be completed within ten years.

The Study was completed in 1977 and recommended that a total of 157.5 miles of the study Rivers be designated by Congress. This recommendation estimated a total of 34,654 acres be included within the River Corridor.

Section 703 of Public Law 95-625 (11/10/78) amended Section 3(a) of the Wild and Scenic Rivers Act to designate selected segments of the Skagit, Cascade, Suak, and Suiattle Rivers, and to study a small portion of the North Fork Cascade River to determine if it qualified for inclusion in the Wild and Scenic River System and, if so, to treat it as a component of the system upon notification to that effect in the Federal Register. The determination was made that the North Fork Cascade was qualified and a notification to that effect was published in the Federal Register on March 20, 1981, making a total of 158.5 miles designated as Skagit Wild and Scenic River.

Public Law 95-625 established the terminal boundaries of the designated rivers, but required the Secretary of Agriculture to establish detailed boundaries for the designated segments, not to exceed an average of more than 320 acres per mile on both side of the river. This detailed boundary determination has resulted in an increase in total acres from 34,654 to 38,939. This increase was due to a number of factors, including:

- addition of the North Fork Cascade River
- Locating boundaries on identifiable features
- Locating boundaries so they do not cross ownership lines except on aliquot part boundaries
- Locating boundaries to include the entire river
- Locating boundaries to include major resource inventory features
- use of more accurate maps that were not available at the time of the 1977 study recommendation.

The detailed description of the boundary does not alter the original concept in the study report and Final Environmental Impact Statement of more than 50% of total acreage in public ownership.

The detailed boundary is well below the maximum allowed by Public Law 90-542 of 50,720 acres.

Basic Management Authority

Authorities for management of the river and its designated corridor are found in the following:

Public Law 90-542, October 2, 1968, "Wild & Scenic Rivers Act"

Public Law 93-279, May 10, 1974, "Amendment to the Wild & Scenic Rivers Act"

Public Law 95-625, November 10, 1978, "Amendment to the Wild & Scenic Rivers Act"

Authority for Management - Surface Waters

The Forest Service, through the Department of Agriculture, has the authority to regulate the surface use of waters within the National Wild and Scenic Rivers System. This statutory authority is found in the United States Code (U.S.C.), specifically, 16 U.S.C. 551 and 16 U.S.C. 1281(d). Implementation of this statutory authority is through the Code of Federal Regulations (CFR), 36 CFR 261.1(a)(4) and 36 CFR 261.58(z).

Authority for Management of Lands

Authority for managing National Forest lands within the designated corridor are in the laws and regulations pertaining to National Forest lands and 36 CFR 261. Approximately 44% of the lands within the designated corridor are National Forest. Private lands within the designated corridor can be managed by the Forest Service only when acquisition of specific rights to the private lands has been accomplished. Approximately 50% of the lands within the designated corridor are private. The remaining 6% of the lands are State, County, or other Federal than National Forest.

Management Plan Organization

The management plan is contained in two documents, for clarity and ease of use by river managers.

Volume I contains background information, resource overviews, assumptions and the appendix.

Volume II contains Management Goals, Management Direction and Tasks.
(See Appendix G for Tasks)

All pages in Volume I are color coded to identify the type of information presented.

- White pages - General background information.
- Yellow pages - Information and assumptions for both Recreation and Scenic Rivers.
- Green pages - Information and assumptions for Recreation River only.
- Blue pages - Information and assumptions for Scenic Rivers only.

Management Plan Background

This management plan is based upon the direction in Section 10 of Public Law 90-542. In addition, this management plan is designed to meet, as far as is practicable, the criteria and specifics outlined in:

February, 1970, Guidelines for Evaluating Wild, Scenic and Recreational River Areas Proposed for Inclusion in the National Wild and Scenic Rivers System under Section 2, Public Law 90-542"

and

National Wild and Scenic Rivers System; September 7, 1982, Final Revised Guidelines for Eligibility, Classification and Management of River Areas.

Additional management criteria has been developed from the 1977 Forest Service Environmental Statement that documents impacts and recommends inclusion of the Skagit System into the National Wild and Scenic Rivers System.

In this Environmental Statement was the recommendation that the State of Washington fully administer the Skagit Segment with the Forest Service administering the three other rivers on the system. State administration would have been possible through State Legislature actions outlined in Section 4c, Public Law 90-542 and through written cooperative agreements between the Federal Government and State.

State legislation was not enacted and through Public Law 95-625, Congress placed the entire Skagit System under Federal Administration. The option for written cooperative agreements is retained. Administrative and priority changes by the State of Washington has resulted in the State revamping their involvement in management of the Skagit Wild and Scenic River. The State does not currently plan to administer the Skagit Segment independently or purchase easements as recommended in the 1977 Environmental Statement, but wishes the concept to remain a goal. The State wishes to continue exercising its State regulatory authorities.

Implementation of Management Plan

In Public Law 95-625, Congress authorized the appropriation of \$11,734,000 for acquisition of lands or interest in lands and not more than \$332,000 for development. Administration would be accomplished from normal National Forest appropriations using interim management estimates and requirements of this management plan to request necessary administration funding.

As of 1982, no appropriations for acquisition, development or administration have been made to facilitate management of the Skagit System.

Implementation of this management plan is directly dependent upon appropriations for acquisition, development, and administration. The funding made available will determine the administrative organization established to accomplish the tasks. Within Volume II, these tasks have been prioritized to help facilitate the development of an organization to accomplish the most critical items, with funding available. (See Appendix G, Volume II.)

Administration and Management Concept

Management of the Skagit Wild and Scenic River System is to maintain or enhance:

1. Free-flowing characteristics of each of the four rivers.
2. Outstanding, remarkable values for which the rivers were placed into the Federal River System:
 - a. Wildlife
 - b. Fish
 - c. Scenic Qualities

On National Forest lands, Federal laws, regulations and policies will be utilized to achieve this.

Federal laws that pertain to National Forest lands are not applicable to non-Federal lands. These non-Federal lands are currently subject to State and County laws and regulations such as Shorelines Management Master Program, Zoning, Permit Center and flood zoning.

These current State and County laws may be sufficient to protect the values for which the River System was designated. Rather than impose another layer of control on private lands, it is the intent of this Management Plan to rely on existing State and County controls for administration of the River System.

The Forest Service will monitor the results of these local controls against the values for which the River System was designated. In the event that this monitoring indicates that local authority does not appear to be providing the necessary protection, the Forest Service will initiate discussions with local and County Government and/or State Agencies to determine the action needed to obtain necessary protection.

If local Government action can not be implemented, it may be necessary for the Federal Government to impose additional controls for protection of the River System values. This would generally require acquisition of rights from the private party.

This management concept on non-Federal lands will require close and frequent coordination between the Forest Service Manager and local Governments, especially the Counties. To clearly define the authorities and responsibilities between the Forest Service, Counties, and State, a series of cooperative agreements will be prepared.

Direction which relates to Forest Service, County, and State coordination can be found in the following sections:

DIRECTION WHICH RELATES TO COUNTY AND
STATE COORDINATION AND ADMINISTRATION

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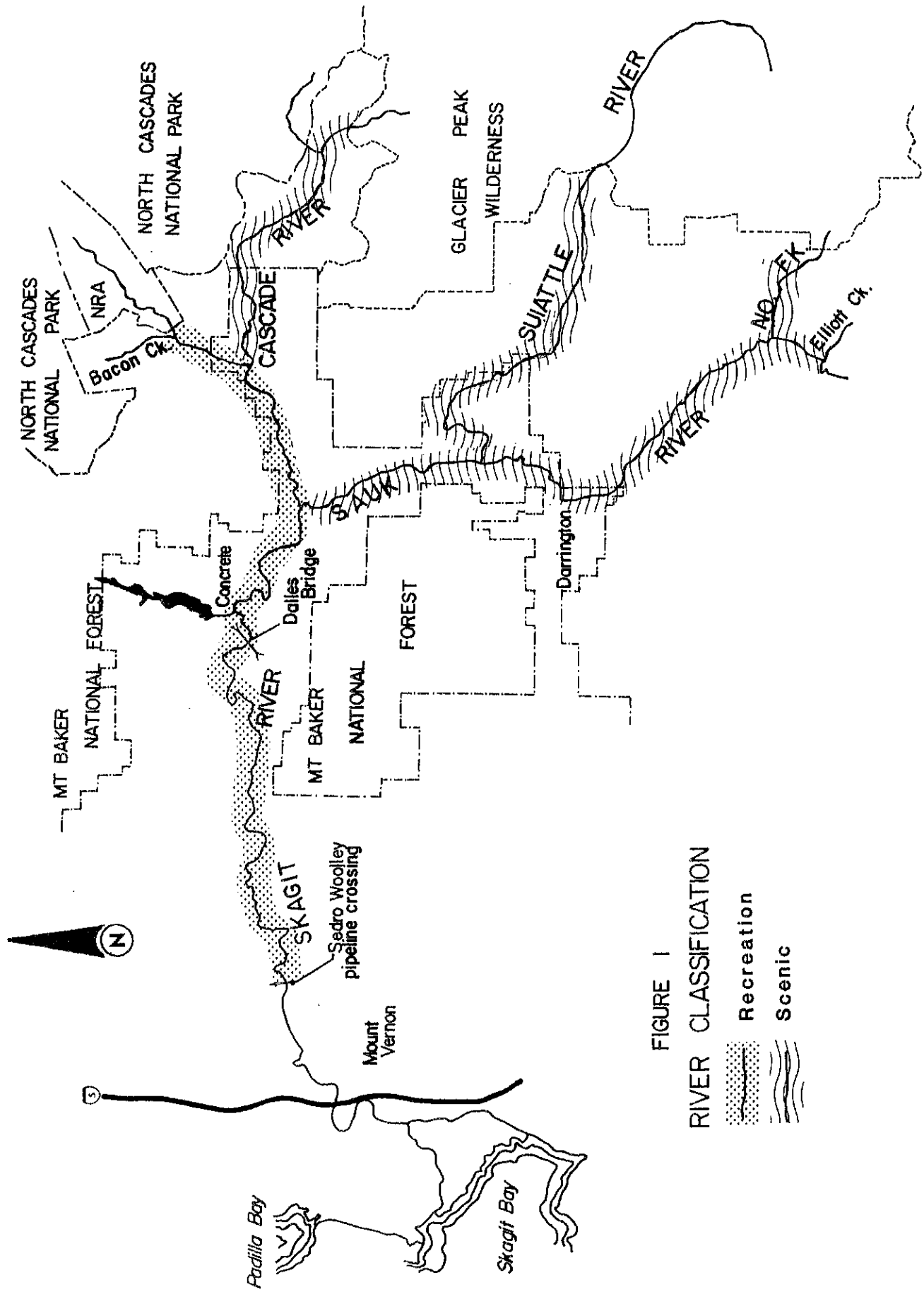

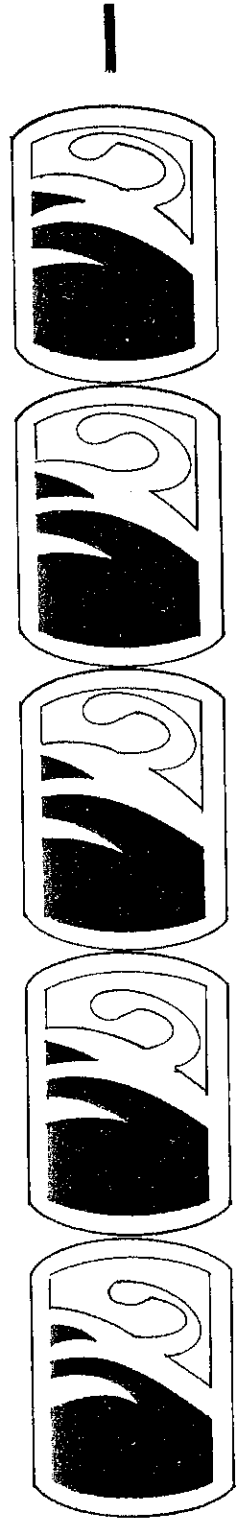


FIGURE 1
RIVER CLASSIFICATION

-  Recreation
-  Scenic

Section I
Review,
Updating and Relationship
to Forest Plan
for Mt. Baker-Snoqualmie
National Forest



SECTION I

REVIEW, UPDATING AND RELATIONSHIP TO FOREST PLAN FOR MT. BAKER-SNOQUALMIE NATIONAL FOREST

Management Direction:

This Skagit River Management Plan will be reviewed in 1985 and 1990. The Management Plan will be revised or amended when:

- a. New resource data indicates management direction in this plan will no longer protect key resource values (esthetic, scenic, historic, archaeological, and scientific features), and the values for which it was designated (Fish, Scenic, and Wildlife).
- b. When a change in the river's course takes it significantly outside the designated corridor boundary.
- c. New regulations governing federal agencies invalidate or change authorities in the management of the river.
- d. With future Forest planning revisions, the Skagit Plan will be reviewed and incorporated into the Forest Plan.

Section II
Management Goals

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SECTION II

* MANAGEMENT GOALS

- A. Provide for maximum involvement of local, County, State, and other federal agencies in the management and administration of the Skagit Wild and Scenic River System.
- B. Minimize conflicts between public use and private landowners within the Wild & Scenic River corridor.
- C. Provide for the conservation and continuation of the patterns of agriculture, forests, and structures to retain the environments of primitive, rural, and pastoral landscapes.
- D. Protect and enhance the various landscapes visible from the river, as well as from its banks.
- E. Provide for public access to and along the banks of the Skagit, Cascade, Sauk & Suiattle rivers consistent with other resource capabilities, and the 1982 inter-agency guidelines.
- F. Allow timber management for commodity purposes consistent with the 1968 Wild and Scenic Rivers Act and 1982 inter-agency guidelines.
- G. Protect the cultural resources within the Skagit Wild & Scenic River System corridor.
- H. Protect and maintain wildlife habitat.
- I. Protect and maintain fish habitat.
- J. Maintain and enhance the identified important eagle habitat within the Skagit Wild & Scenic River corridor.
- K. Provide coordination with National Park Service river management of the Skagit River above Bacon Creek.
- L. Provide coordination with The Nature Conservancy management of the Bald Eagle Natural Area.
- M. Improve the opportunities for a wide variety of water-related recreation opportunities consistent with river character and 1968 WSR Act.
- N. Maintain or improve present water quality.
- O. Maintain and enhance free-flowing characteristics of the rivers.

* Management Goals are not listed by priority.

Section III
Administrative Organization
and
Responsibilities



SECTION III

<u>Symbol</u>	<u>Applies to:</u>
R&S	(Recreation and Scenic Rivers)
R	(Recreation River)
S	(Scenic River)

ADMINISTRATIVE ORGANIZATION AND RESPONSIBILITIES

Management Direction:

- R&S-1 The concept of joint State-Federal management will remain a goal of administration of the Skagit W&SR. The State of Washington in conjunction with the Counties will be encouraged to assume the major responsibility for the administration of the Skagit Segment; the Federal government for the Cascade, Sauk and Suiattle River components of the Skagit W&SR. The Forest Service will seek cooperative agreements with the State and Counties at the earliest possible date.
- R&S-2 Until the State elects to assume cooperative management for the 58.5 mile Skagit section, the Forest Service will take a positive leadership role in protecting and managing the recreation river values. This will most often be accomplished by working through and with State and County agencies and by employing existing legislative authority.
- R&S-3 The Forest Supervisor will initiate action with the other administrative agencies to jointly develop such cooperative agreements, etc., as may be necessary to administer the classified river area, and to protect or enhance the values which caused the Skagit inclusion in the National Wild and Scenic Rivers System. Emphasis would be timber harvest plans, riprap and other flood protection measures and the development of zoning ordinances.
- R&S-4 The implementation of portions of this plan will be contingent upon allocation of funds for administration and acquisition of conservation easements and lands.

- R&S-5 The Mt. Baker-Snoqualmie National Forest, with the administrative agencies for the State and Federal governments, in cooperation with appropriate County and municipal agencies, will jointly develop a land, public access and conservation easement acquisition plan which fulfills the requirements and intent of the 1968 Wild and Scenic Rivers Act. The acquisition plan will identify what additional resources need protection and will identify the most effective land control strategy to accomplish the objectives of the management plan within realistic cost constraints. To meet both Counties needs in updating zoning, Shorelines Management Act, and Flood Insurance Program; this proposed planning needs to be initiated as soon as this plan is implemented. The Federal government's acquisition of lands in fee versus acquisition of easements or use of local controls to protect and enhance the classified rivers, will be considered. The U.S. Forest Service has the responsibility and the authority (P.L. 90-542) to obtain conservation easements when resource protection cannot be assured thru mitigation or State/county authorities.
- R&S-6 The Mt. Baker-Snoqualmie National Forest will take an active role in encouraging State and Federal agencies to coordinate with the appropriate County and municipal agencies in preparing guidelines for uniform zoning ordinances to meet the provisions of the 1968 W.S.R. Act. If such land use controls are not adopted or enforced, and uses or actions are proposed that would adversely affect the river values , or violate the guidelines, the Forest Service will propose acquisitions of the rights to protect the river.
- R&S-7 The Mt. Baker-Snoqualmie National Forest River administrator(s) will become actively involved in local zoning hearings, land subdivision reviews and State/County permit reviews, for those activities which will have an impact on the Skagit Wild and Scenic River System. A cooperative agreement will be needed to define roles.
- R&S-8 The Mt. Baker-Snoqualmie National Forest will coordinate with the respective administrative agencies for the State, County and Federal governments to develop necessary cooperative agreements to achieve a coordinated monitoring program for evaluation of impacts on the river corridor. Monitoring programs will be directed at measuring changes in the ecological and sociological character of the classified corridor and its values over time. Cooperative agreements should respect and emphasize current authorities and expertise of each coordinating agency (example: fishery; Skagit System Cooperative and Washington Department of Fisheries, Washington Department of Game). See Vol II page 8, R&S-7; page 14, R&S-1; page 17, R&S-2; page 20, S-20; page 45, R-2; page 50, R&S-3; page 54, R&S-1 (water); page 54, R&S-1 (air); page 58, R&S-1 (Insects and Diseases).

- R&S-9 The Forest shall initiate procedures to request authorizations from Congress to establish a new boundary in the event any of the rivers should meander beyond the existing boundaries.
- R&S-10 The Mt. Baker-Snoqualmie National Forest will prepare a five year action plan within six months after the approval of this plan. The Action Plan will include, a) river administrative organization, b) "Management Direction Task" from Appendix G to be accomplished with target dates, assignement of responsibilities, and estimated costs, c) consulatation with the United States Fish and Wildlife Service.

NATIVE AMERICAN TREATY RIGHTS

Management Direction:

- R&S-1 Upon the final ruling on the state's appeal to phase II of the Boldt (Orrick) Decision relating to Indian treaty rights, this management plan will be reviewed and revised as necessary to meet the court's decision.
- R&S-2 Native American fishing rights will be honored in management of recreation carrying capacities of the Skagit W&SR.
- R&S-3 Coordinate with the Skagit System Cooperative on matters effecting fishing rights including the location and development criteria for natural spawning channels to assure the outstanding key values of the river system are protected or enhanced.
- R&S-4 Individual Native American groups that have identified religious and ceremonial sites or areas within the National Forest portions of the Skagit W&SR corridor will be consulted when projects that might cause impacts are proposed within 1/4 mile of the boundaries of these areas. Values identified as necessary to the use of these religious and ceremonial sites and areas will be protected, when feasible, and in accordance with P.L. 93-341. Reference Inventory of Native American Religious Use, Practices, Localities and Resources of the Mt. Baker-Snoqualmie National Forest - 4/81.
- R&S-5 The Bureau of Indian Affairs will be consulted when an action has the potential of impacting Indian lands within the Wild and Scenic River boundary.
- R&S-6 National Forest Trust responsibilities relating the Indian Treaty Rights will be met.

LANDOWNERSHIP

Management Direction:

- R&S-1 Public access will be sought primarily through reliance upon County and State acquisition (see Coordination and Organization Responsibilities of Other Agencies.) Fee title acquisition by the Forest Service will be obtained for access only when it is clear that no other means is feasible, including the possibility of conservation easements with the private landowner.
- R&S-2 The width and location of federally acquired public use easements along the riverbank or water's edge will depend upon riverbank characteristics, the desires of the landowner, and the needs of the public.
- R&S-3 All public access sites will have a scenic screen adjacent to adjoining properties, where possible. This will be accomplished through conservation easements, and is to result in only minimal, necessary acquisition of private landowner rights.
- R&S-4 As a guide, public access will be along the river banks for approximately 1/2 mile on either side of key public access sites. These bank access strips should be the maximum necessary to accommodate public use and will probably not exceed an average of 25 feet in width.
- R&S-5 A comprehensive review of all local county and State codes, ordinances and plans to determine their compliance with this plan and necessary changes proposed will be made jointly with the two counties. (See Appendix K, Volume 1)
- R&S-6 County and State acts, ordinances, and plans will be relied upon initially to administer land use activities within the Skagit W&SR corridor for protection of the system's key resources, i.e., eagles, cultural resources, visual accents. The river administrator will actively monitor County and State permit reviews, planning and zoning ordinance administration. In the event the permit, planning, or ordinances do not protect river values, conservation easement procedures will be initiated.
- R&S-7 Acquisition Priorities:

Acquisition priority will generally be guided by the policy of first acquiring those lands or interests in those lands (conservation easements) which provide maximum benefit to the Skagit W&SR resource. A more specific listing of priorities is as follows:

1. Properties being developed or threatened with development or a use that is or could be adverse to the key values of the river system (wildlife, fisheries, cultural, scenic, free-flowing character, and eagle habitat rated excellent or good).
2. Properties identified in the Recreation Section for access. (Sec Vol II, page 22, Table 12 and R-17 page 19)
3. Other opportunities identified on Figure 4 Recreation Development Map - page 125.

The above priorities are guidelines that are subject to adjustment on a case-by-case basis.

R&S-8 Acquisition Process:

Except for land donations and exchanges P.L. 91-646, the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 will be followed in the acquisition of properties on the Skagit System. The Act outlines Federal procedures for land acquisition. It directs that acquisitions be fair, equitable and consistent for all property owners.

R&S-9 Until the acquisition plan is complete (R&S-5 Page 8) the Forest will take the necessary steps, in coordination with the Lands and Minerals Unit in the RO, to assure prompt action to meet emergency needs necessary to protect river values.

R-10 Where feasible, the boundary has been located to exclude incorporated land areas of towns; however, work with the town of Lyman to jointly develop standards for zoning for those portions of the incorporated town that encompass the river and island areas. (Reference Sec 6(c) P.L. 90-542)

STRUCTURES AND IMPROVEMENTS

Management Direction:

R&S-1 In conjunction with the acquisition plan, an intensive corridor analysis will be made to identify specific noncompatible structures. Guidelines for the corridor study will be according to the National Forest landscape management system (FSM 2380).

R&S-2 Existing Structures:

Utility crossings/towers, etc. - Forest Service will work with appropriate utility companies to diminish visual impacts.

Building - Property owners will be encouraged to use earth tone colors. When conservation easements become necessary, Forest Service landscape architects will assist the landowner in the development of color schemes.

Earth structures - Use of plantings will be encouraged.

R&S-3 The number of structures visible from the rivers will be kept to as few as practical. Forest Service will develop procedures with the two Counties to provide input to all zoning and platting requests. The goal should be to have all new structures take advantage of natural screening (as viewed from the river), utilize natural-appearing, non-reflective materials and earth tone colors. (See Visual for set back requirements.)

R&S-4 Proposed Structures:

Within the National Forest, all proposed structures will be evaluated using the Visual Quality Objective of retention when viewed from the river and sensitivity 1 or 2 trails or roads within the corridor boundaries.

Outside the National Forest boundary, all proposed structures will be evaluated using the respective Shoreline Management Master Program Designations of 1978. It is recommended structures not associated with farm or Forest use within the rural and conservancy environments be screened from the river.

VISUAL RESOURCE

Management Direction:

R&S-1 On other than Federal lands, use procedures identified in the following documents (listed in order of priority) to maintain, protect, and enhance the visual resource along the Skagit W&SR:

1. Shoreline Management Master Program administered by County.
2. State Forest Practices Act as administered by State of Washington.
3. County zoning.
4. If the above fail to sufficiently protect the visual resource, the Forest Service will obtain conservation easements where key values are in jeopardy.

R&S-2 Coordinate with Skagit and Snohomish Counties to achieve the following shoreline classification distribution within the river corridor.

Shoreline Management Act Classifications	Landscape Environments			
	Outside National Forest Boundary			Inside National Forest Boundary
	Rural Recreation River	Pastoral Recreation River	Pastoral Scenic River	Primitive Scenic River
Natural	---	15%	20%	50%
Conservancy	30%	57%	70%	40%
Rural	60%	25%	8%	8%
Rural Residential or Suburban	10%	3%	2%	2%

Note: Outside of the National Forest boundary, 92 percent of the Wild and Scenic River corridor is located within the area classified under the Shoreline Management Act and 73 percent is within the 100-year floodplain.

River Designation: See Volume I pages 37 and 38 for a definition of Rural, Pastoral and Primitive Landscape Environments.

Rural

Skagit River: From the lower boundary at Sedro Woolley to the mouth of Baker River (32.5 miles).

Pastoral

- Skagit River: From the mouth of Baker River upstream to the upper terminus at Bacon Creek (26.0 miles).
- Sauk River: From the mouth of the Sauk River upstream to the National Forest boundary (24.8 miles).
- Suiattle River: From the mouth of the Suiattle upstream to the National Forest boundary (12.2 miles).
- Cascade River: From the mouth of the Suiattle River upstream to the National Forest boundary (7.2 miles).

Primitive

- Sauk River: From the National Forest boundary upstream to its terminus at Elliott Creek on the South Fork and to its terminus at the Glacier Peak Wilderness boundary on the North Fork (26.0 miles).
- Suiattle River: From the National Forest boundary upstream to the Glacier Peak Wilderness boundary (15.2 miles).
- Cascade River: From the National Forest boundary upstream to its boundary at the Glacier Peak Wilderness boundary and the North Cascades National Park (14.6 miles).

FLOODPLAINS

Management Direction:

- R&S-1 The construction of dams, levees (which cut off natural sloughs) and other water resource projects which would adversely affect the free-flowing character of the rivers, their esthetics, their water quality or their other values as identified in the 1968 W&SR Act and its 1978 Amendment are prohibited.
- R&S-2 The placement of artificial stabilization devices such as car bodies, concrete bunkers, bin walls, revetments and similar objects constructed from materials other than natural rock is incompatible. Also, see R&S-8, R-9, and S-10 for additional direction with artificial stabilization.
- R&S-3 The use of floodplain management, as opposed to the use of flood control measures, will be encouraged and supported as a means to reduce the potential increase in monetary damage caused by floods. This will include the management of log jams, to reduce unacceptable damage to property, provided it is consistent with key river values.

- R&S-4 The Mt. Baker-Snoqualmie National Forest will work with the two Counties, State, Indian, and Federal agencies to obtain cooperation that any actions that adversely affect the floodplain within the W&SR corridor will be avoided (example: diking, water diversion, filling).
- R&S-5 Federal agencies will not participate financially, either directly or indirectly, in any bankside stabilization project which threatens the visual or free-flowing characteristics of classified rivers until each such project has been judged on its own merits through the Environmental Assessment process. (Decision authority with Forest Supervisor on the Skagit River and Regional Forester on Scenic Rivers.)
- R&S-6 Obtain from the Army Corps of Engineers a "Memorandum of Understanding" to review all 404 and Section 10 permits applied for within the classified corridor to determine compliance with the Wild and Scenic River Act.
- R&S-7 All bankside modification project proposals will require an Environmental Assessment to determine if the project conflicts with the purpose of the 1968 W&SR Act. (Decision authority - Forest Supervisor on the Skagit and the Regional Forester on all other Rivers.)
- R&S-8 Riprapping with natural appearing rock along the shoreline to preserve and protect investments existing since 1978, shall be acceptable, providing that there are no other viable alternatives to the proposed action, short of abandonment. All riprap projects should be promptly revegetated with native or naturalized plant material. (Decision authority - Forest Supervisor on the Skagit and the Regional Forester on all other Rivers.)
- R-9 Riprapping, related to natural channels with natural rock along the shorelines of the Skagit Segment to preserve and protect agricultural land, shall not be considered inconsistent with Recreation classification (1978 Amendment to the W&SR Act). All dike, levee and riprap projects should be promptly revegetated with native or naturalized plant material.
- S-10 Artificial stabilization will only be used under strict controls and in very limited locations on the Scenic Rivers. See R&S 8. (Decision authority - Regional Forester)

RECREATION

Management Direction:

- R&S-1 The Forest will develop strategies, initiate interim procedures and request Pacific Northwest Research Station to determine recreation demands, user conflict resolution, resource capabilities, and proper levels of use and management. (Reference Vol I - page 40; Vol II - page 47, R&S-10; page 59, R&S-3) In the event PNW cannot do these studies, the Forest will do the project.
- R&S-2 In order to provide adequate resource protection, ongoing monitoring will be necessary to establish resource degradation thresholds so that use can be positively managed within those thresholds. It is imperative that this monitoring system provide both social and biological data on which rational, defensible management decisions can be based. Surface use of the water must be monitored in terms of user days commercial and user days non-commercial; by types of activity and by segments identified in Visitor Management, Vol II, Page 46.
- R&S-3 Favor significant wildlife/fisheries habitat over recreation developments where conflicts occur.
- R&S-4 Off-road vehicle use will not be encouraged within the Skagit W&SR corridor.
- R&S-5 Permit commercial services to serve the public needs commensurate with meeting the intent of the act, this plan and with maintaining fish, scenic and wildlife values.
- R&S-6 Outside of the National Forest, campers will be directed to state, county, or other developed sites.
- R&S-7 Provide recreation opportunities and a forest environment that is based on a natural or near natural setting throughout the river management zone. Use Recreation Experience Levels, as modified by this plan, as a guideline for recreation management and development within the river corridor. (Figure 3 and Tables 6 and 7)
- R&S-8 Boat access sites will need to be developed or upgraded to provide suitable facilities for raft launching and takeout. Basic facilities should consist, as a minimum, of:
- a. Beach of at least 25 feet in length.
 - b. Parking for a minimum of 10 cars and if needed, 2 buses. Parking area to be screened with vegetation or land form mounding, from the view of river users (on the water at mid-channel).

- c. An all-season trail ten feet wide between parking and the boat launch.
 - d. Basic sanitation facilities adjacent to parking areas, out of the 25-year floodplain, and screened from the view of river users.
- R&S-9 Access, easements, and sites will be provided with adequate visual and audio buffers to reduce conflicts between public use and adjacent private lands.
- R&S-10 When provided, developed river float campsites will generally consist of back-country toilets located in upland areas adjacent to the campsite, access trail to the toilet, and standardized campsite identification sign. Toilets will be screened by vegetation or topography from the river and from the campsites but adequately signed for easy location. Sites will be located where impacts on wildlife is minimized. Campsites will not be located within view of main road, administrative sites, or within 100 yards of any private lands (where possible). (See Appendix K - Volume 1)
- R&S-11 Put in and take out will be encouraged and directed to designated sites. Landings will be promoted at designated sites and designated gravel bars.
- R&S-12 Conflicts of use between commercial and public use such as fisherman, kayakers, and canoeists will be reduced by regulating commercial use. To reduce conflict such techniques as limiting the time of use by outfitters to those less likely used by other groups will be considered.
- R&S-13 Log jams should be considered a natural hazard to be encountered by floaters. They will not be removed solely to facilitate floaters (See R&S-3, page 15). However, individual sweeper logs may be removed if they present an extreme hazard to boaters.
- R-14 The Recreation River segment of the Skagit W&SR corridor will be managed with emphasis on day use.
- R-15 Dispersed recreation use should be facilitated within limits of R&S-3 above, in the lower stretch of the Skagit W&SR (west of Lyman). Such use should be from boat access only. To accomplish this, public right of use to islands and bars between Cape Horn on the Skagit and Ross Island will need to be obtained. Developments on the Skagit River Islands should be no greater than level #2 of Table 7. Wildlife values and other values will be considered prior to any development. See R&S-3, page 17.

R-16 Priorities for put-in and take-out facility development will be:
(See boat ramp and raft sites in Figure 4.)

1. Vicinity of Bacon Creek - Coordination with National Park Service on location, design and cost will be necessary. Land acquisition may be necessary.
2. Vicinity of Birdsvew, north side of river - Land acquisition is necessary. Cooperative development with Skagit County should be encouraged.
3. Vicinity of Marblemount, east side of river - Utilize County right-of-way under bridge. Coordination with Skagit County is necessary. Land acquisition will be necessary.
4. East of Sedro Woolley, north side of river - Land acquisition is necessary.
5. Mouth of Baker River; east side of Baker River - Land acquisition may be necessary.

R-17 River access for fishing and day use - Priorities for acquisition and development.

These sites should consist of parking facilities for at least ten cars, and all season trail between parking area and river. Access along the river will not involve a constructed trail. Sanitation facilities will be provided only above 25-year floodplain. (See proposed sites Figure 4.)

1. Vicinity of Birdsvew, north side of river - Land acquisition or easements will be necessary.

Cooperative development with Skagit County should be encouraged. Overnight capabilities for river users should be developed in this vicinity.

2. Walking easement between County Park at Rockport and Rockport State Park via old Burlington Northern right-of-way.
3. Old State Hatchery site at Birdsvew - Riverbank easement west for two miles.
4. Lyman Ferry Landing, north bank - Bank access for one mile upstream.
5. Presentin Creek Game Department launch site - Riverbank access east to mouth of Finney Creek. May require enlargement of present launch site (cooperative acquisition with Game Department encouraged).

6. Dalles Bridge - Off-road parking and access to bank on northwest side of bridge.
7. Cedar grove - Walking easement along bank upstream for two miles.
8. Dutchman Hole - South side of river opposite Thunderbird Lane development.
9. Larsen Bar.
10. Gilligan Creek - Bank access to the west for 1/2 mile.
11. Faber Ferry Crossing - South side of river.
12. Additional sites as warranted (see Figure 4.)

R-18 Public overnight facilities should be concentrated at:

Rockport State Park
 Skagit County Park at Rockport
 In the vicinity of Birdsvew

R-19 The Forest Service should encourage the State and County to develop a bicycle trail up the Skagit Valley, using shoulders of public roads and other public right-of-ways. Such a trail would be within the Skagit W&SR corridor or be as close to the corridor as existing public roads will allow.

S-20 To protect anadromous fish spawning sites on the Sauk, limit and monitor use of the section of river from Forks to the mouth of the White Chuck during the last week in August and the first three weeks of September. Limitations on the number of boats and boating techniques that reduce disturbance to spawning gravels (such as reducing the number of paddles used) will be required when necessary. In the event of low water flow during April 1 through June 30, spawning disturbance and redd trampling will need to be prevented.

S-21 On National Forest lands (within the National Forest boundary) use of roaded dispersed sites will be allowed, as long as river values are not degraded.

S-22 River Access:

- a. River access for fishing and day use will be provided on all three rivers. Sites, both within and outside of the National Forest will be inventoried and prioritized. Where necessary for critical sites, public access will be acquired. When visitor demand warrants it (and in accordance to priority), facilities will be designed and developed for the sites. See R&S-1, 2, 3, page 17 for resource constraints to recreation development and use.

- b. Within resource constraints, necessary lands will be acquired for put-in/take-out sites, including space for parking and toilet facilities, in the vicinity of the locations listed in Table 12.
- c. Mineral Park, Marble Creek and Irene Creek Bridge launch sites should be developed only if field investigation reveals that the segment of river between these three sites is suitable for boat use.
- d. Additional sites will be considered and determinations made on a case-by-case basis.
- e. All existing launch facilities should be brought to the standards outlined under R&S-8, page 17. Cooperative agreements will be made with Washington State Department of Game to accomplish this as necessary.

Table 12.

Existing (to be maintained) and Proposed
Put-in/Take-out Sites Along the Scenic Rivers.

<u>River Priority</u>	<u>Site Priority</u>	<u>Sauk River</u>	<u>Status</u>
I	4	Bedal Campground	proposed
	2	Site of the new Sauk Bridge	proposed
	7	Murphy Creek	proposed
	6	Bachman Creek County Park	existing
	5	Darrington	proposed
	1	Sauk River Park	existing (flood damaged)
	3	Near Skagit River (McCleod Slough) or Hilt Creek	proposed
<u>Cascade River</u>			
III	1	Cascade Island Park	existing
	5	Fish Hatchery Bridge	proposed
	3	Mineral Park (See S-22-C)	proposed
	2	Marble Creek Campground (See S-22-C)	proposed
	4	Irene Creek Bridge (See S-22-C)	proposed
<u>Suiattle River</u>			
II	*4	Buck Creek	proposed
	5	Conrad Creek	proposed
	1	Boundary Bridge (All Creek)	proposed
	6	Tenas Creek	proposed
	3	Mile Post 5	proposed
	2	Confluence of Suiattle and Sauk	proposed

* A potential conflict exists between the proposed put-in at Buck Creek and a proposed egg-taking station by the Department of Fisheries. Coordination will be needed. (R&S-3 Page 17)

S-23 Trails:

Existing trailheads will be scheduled for needed design improvements and reconstruction. New trails will be constructed to improve access, use, and compliment recreation opportunities as appropriate. Trail and trailhead construction and reconstruction will be consistent with Recreation Experience Levels for the segment of the river being utilized. Trailhead facilities will be designed and constructed or reconstructed to be either not visible or not recognizable by viewers from the river. Trail priorities should be:

1. The Forest Service will maintain the two existing trails along the Sauk (the old Sauk Trail and the Beaver Lake Trail).
2. Trailhead parking facilities will be designed and constructed to serve the Old Sauk and Beaver Lake trails.
3. Explore the possibility of constructing a 10-mile foot trail on the north bank of the Cascade River, beginning at the existing trailhead near the Glacier Peak Wilderness and continuing downstream to Marble Creek campground.
4. Encourage the State DNR to consider developing river side trail opportunities from their campground along the south bank of the Suiattle.
5. The Forest Service will explore the potential of trail location along terrace edges following the north bank of the Suiattle between Buck Creek and Green Mountain Pasture.
6. The Forest Service will seek a cooperative agreement with the County and State to locate and develop a pedestrian trail along the west side of the Sauk River (a 5 to 6 mile trail proposed on the west bank of the river between the Suiattle bridge downstream to Government Bridge).

S-24 Campground Development:

- a. Overnight camping for commercial float trips will be at designated sites only. These sites will be designated in the outfitter/guide permits.
- b. Dispersed developed sites for pull offs, parking, viewing and picnicing will need to be studied and developed for pleasure driving use.
- c. Floater overnight camping will be directed to designated sites. These sites may or may not be developed.
- d. Design and construct or reconstruct developments to maintain a pleasing view from the river (mid-channel) and retain harmony with W&SR values. Recreation facilities will be: (1) located outside the immediate foreground, (2) complimentary to the view from the river, and (3) designed with the benefit of a detailed site analysis to determine site capability and suitability. (See Table 7.)

- e. The long-range plan will be to remove existing developments which do not meet, nor can be upgraded to meet item (d). Generally, replacement units will be constructed prior to the removal of existing units to help reduce the impact on, and displacement of established users. Replacement units will be located within the same drainage and, when possible, within the same area as the displaced sites.
- f. Existing sites will be rehabilitated to meet standards for full service level. ^{1/} Where feasible, additional vegetative screening will be established to help screen campgrounds from the river view. Maintenance and administration will be scheduled to retain these sites at full service level.

^{1/} Forest Service, U.S. Dept. of Agriculture, Publication ED & T 9009, Cleaning Recreation Sites Publication, July 1980; Equipment Development Center, San Dimas, California 91773.

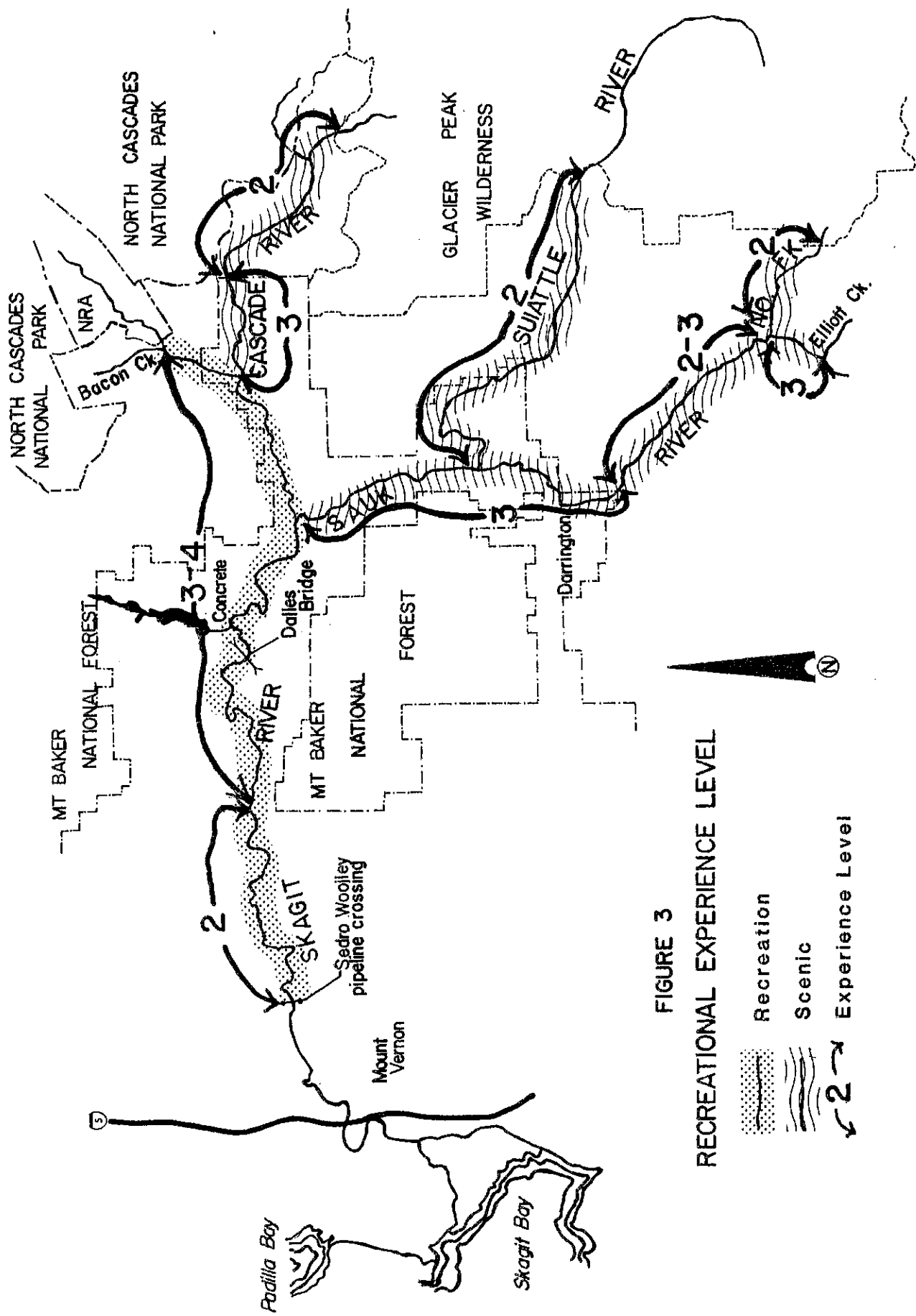


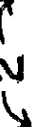


FIGURE 3
RECREATIONAL EXPERIENCE LEVEL

-  Recreation
-  Scenic
-  Experience Level

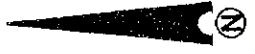


Table 6.

RECREATION EXPERIENCE LEVELS

LEVEL	DESCRIPTION
PRIMITIVE	Recreation opportunities to satisfy basic-needs to the maximum degree. A maximum degree of outdoor skills required. Unmodified natural environment and an absence of man-made developments and comfort or convenience facilities dominates. Feelings of adventure, challenge, and physical achievement, in the absence of obvious controls, important to the user.
1	Recreation opportunities to satisfy basic-needs to a near maximum degree. High degree of outdoor skills involved. Little modified natural environment is dominant consideration. Modifications for comfort and convenience are minimal. Feeling of physical achievement at reaching opportunities without mechanized access is important to the user. Adventure and challenge afforded through minimum controls.
2	Recreation opportunities to satisfy basic-needs to near maximum degree except as tempered by motorized access. Little modified natural environment is dominant consideration. Modifications for comfort and convenience are few. Some feeling of achievement for reaching the opportunity through challenging motorized access is important. Minimum controls evident to the user.
3	Recreation opportunities to satisfy basic-needs to an intermediate degree. Moderate degrees of outdoor skills are involved. Natural environment dominates but some modifications for comfort and convenience are also important to the user. Controls and regimentation afford sense of security although some taste of adventure is still important to the user.
4	Recreation opportunities to satisfy basic-needs to only a moderate degree. Moderate degree of activity skills suffice. Natural environment important but modifications for comfort and convenience are more important. Sense of security afforded the user. Regimentation and fairly obvious controls important to the user.
5	Recreation opportunities to satisfy basic-needs to a modest degree. Skills required for outdoor activities are minimal. Natural environment is important but dominated by man-made modifications. Feeling of security is very important to the user. Learning or beginning skills suffice when supplemented by administrative controls.

TABLE 7

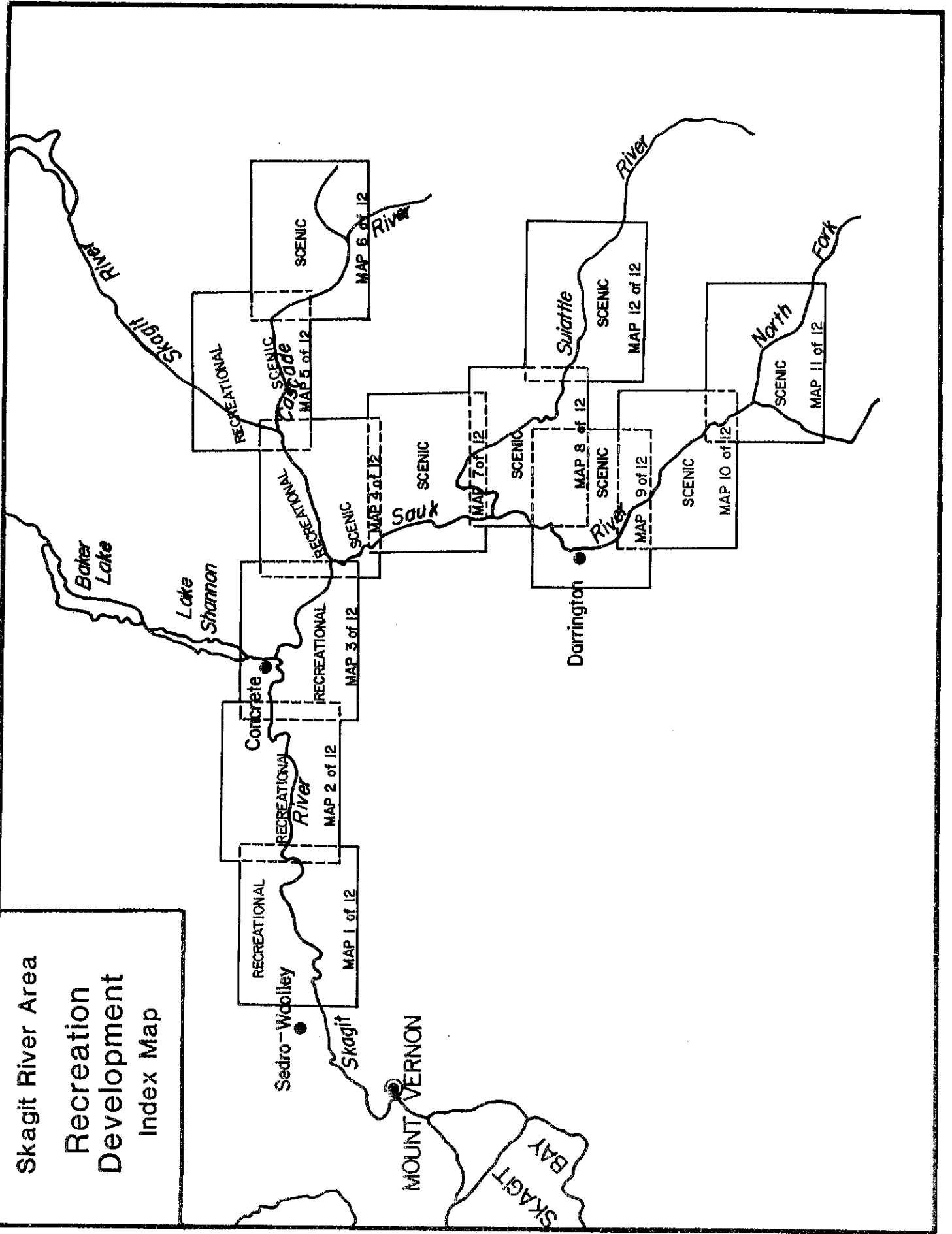
Skagit Wild & Scenic River Criteria for Evaluation of Recreational Facilities by Development Levels

	Development vs. Setting	Sight/Sound of man	Color/Form Line/ Texture	Architectural Style	Materials	Site Modification
LEVEL 1 (No Road Access)	Not Evident	Seldom/ Discouraged	Repeats Native	Not Recognizable	-Native to Site -No Dimensional Material -No Synthetics	Minimum Not Evident
LEVEL 2 (Road - Native Mats)	Subordinate and Harmonious	Occasional	Repeats Natural	Fully Subordinate	-Natural Materials Dominate -Dimensional Material Accepted -No Synthetics	Limited
LEVEL 3 (Road - All Weather)	Co-Dominant	Acceptable	Harmonious	Co-Dominant	-Dimension Material Expected -Synthetics Accepted/ Subordinate	Moderate
LEVEL 4 (Road w/Dust Control)	Co-Dominant	Expected	Co-Dominant	May Dominate	-Dimensional Materials May Dominate -Synthetics Co-Dominate	Heavy
LEVEL 5 (Road - Synthetic)	Dominates/ Compatible	Encouraged	Dominate/ Compatible	Featured (Family of Shapes)	-Dimensional Material Dominate -Synthetics May Dominate	Heavy

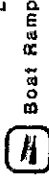
Figure 4

**Recreation
Development
Map**

Skagit River Area Recreation Development Index Map



LEGEND



Boat Ramp



Raft & Drift Boats, Put-in/Take-out



Bank Fishing Access



Campground



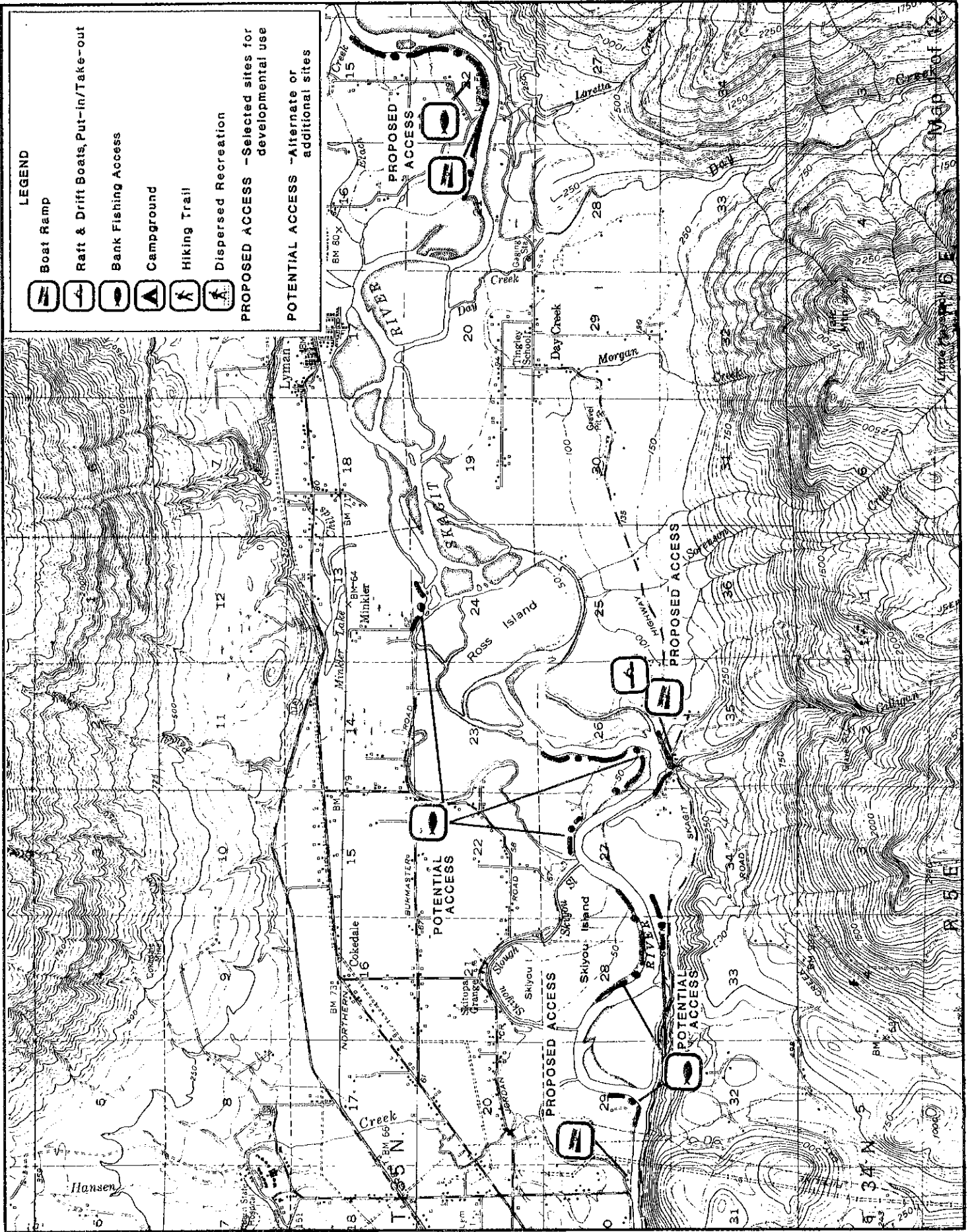
Hiking Trail

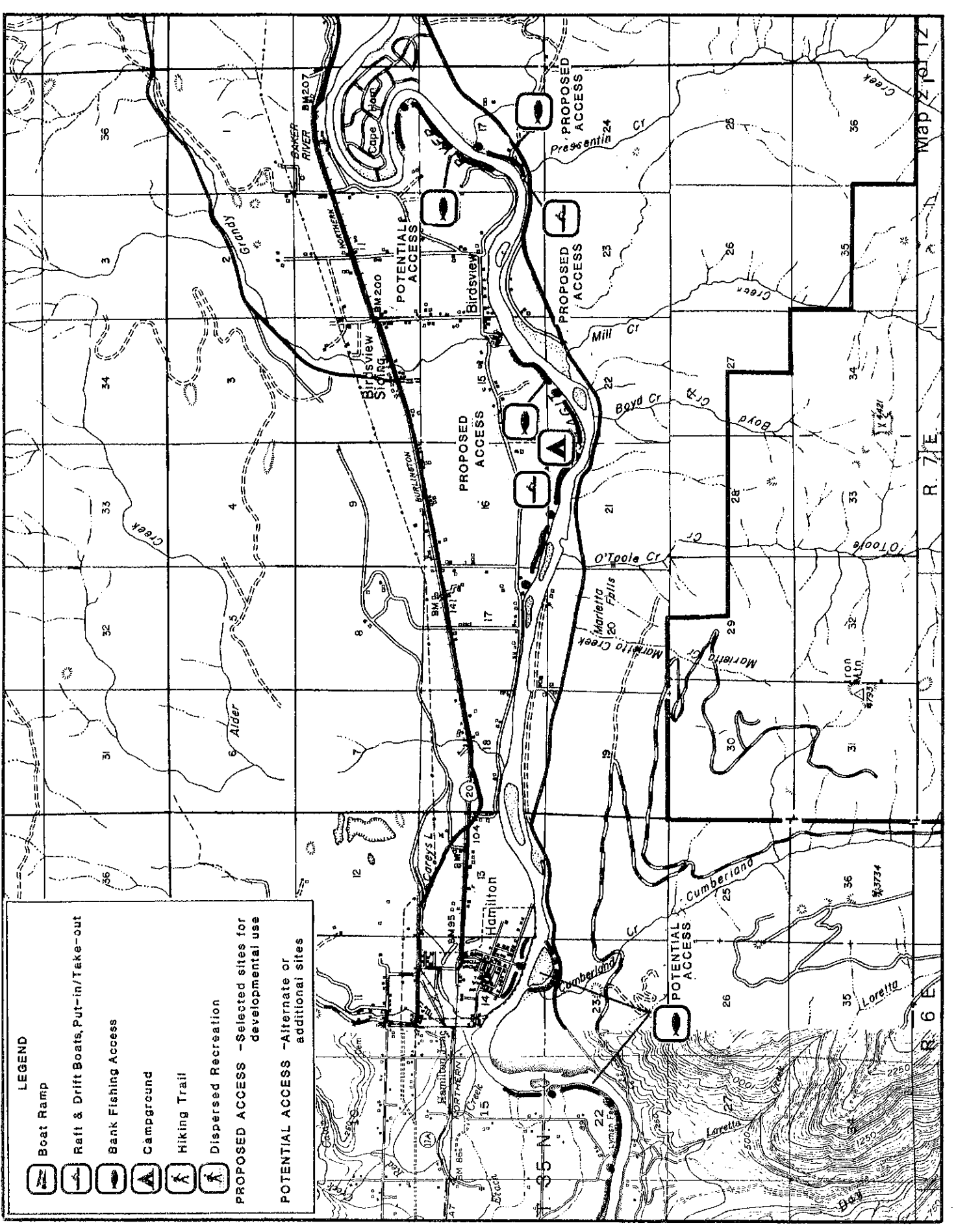


Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites





LEGEND

- Boat Ramp
- Raft & Drift Boats, Put-in/Take-out
- Bank Fishing Access
- Campground
- Hiking Trail
- Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use







POTENTIAL ACCESS - Alternate or additional sites

Map 2 of 12

R. 7 E

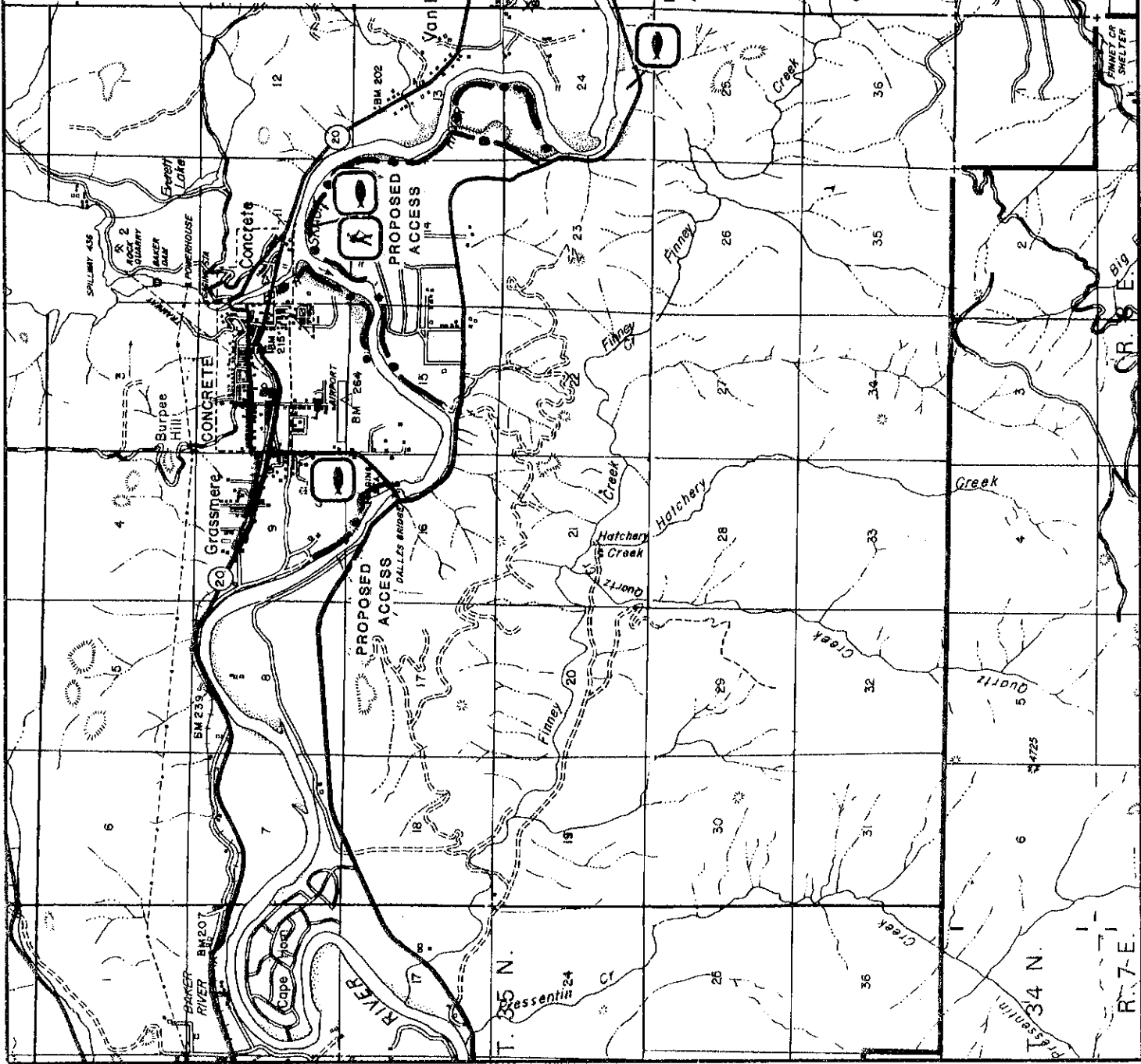
R. 6 E

LEGEND







-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites

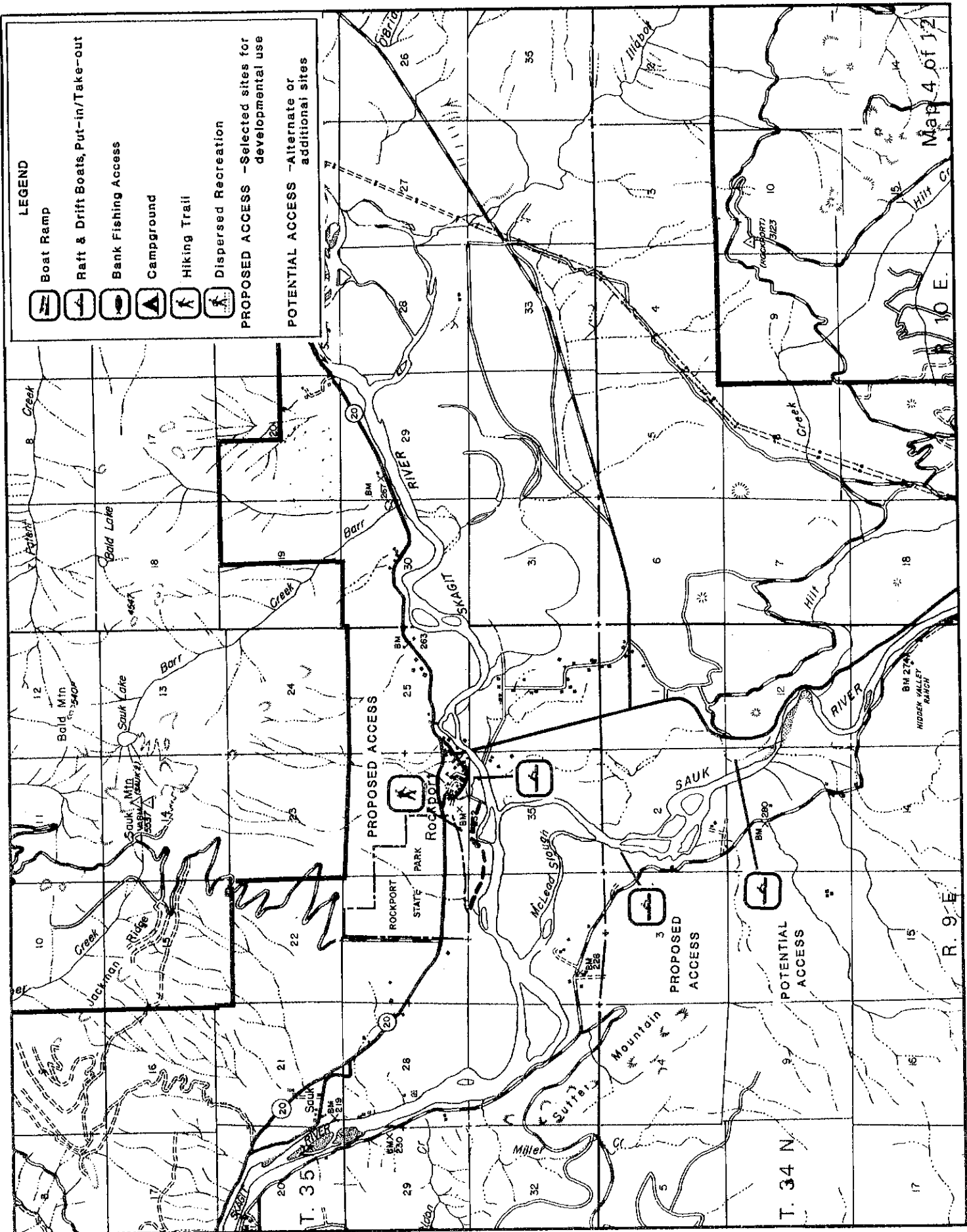


LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites

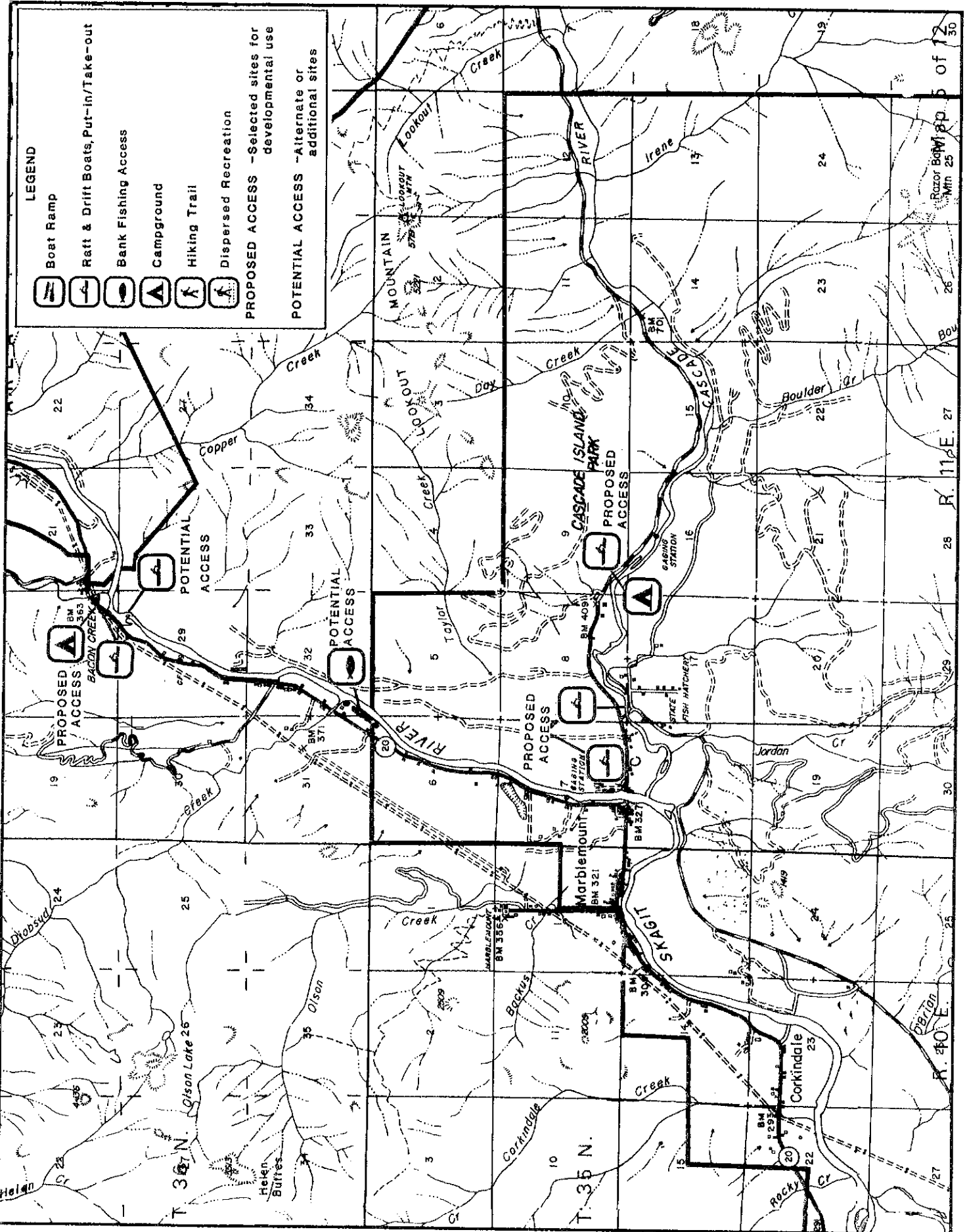


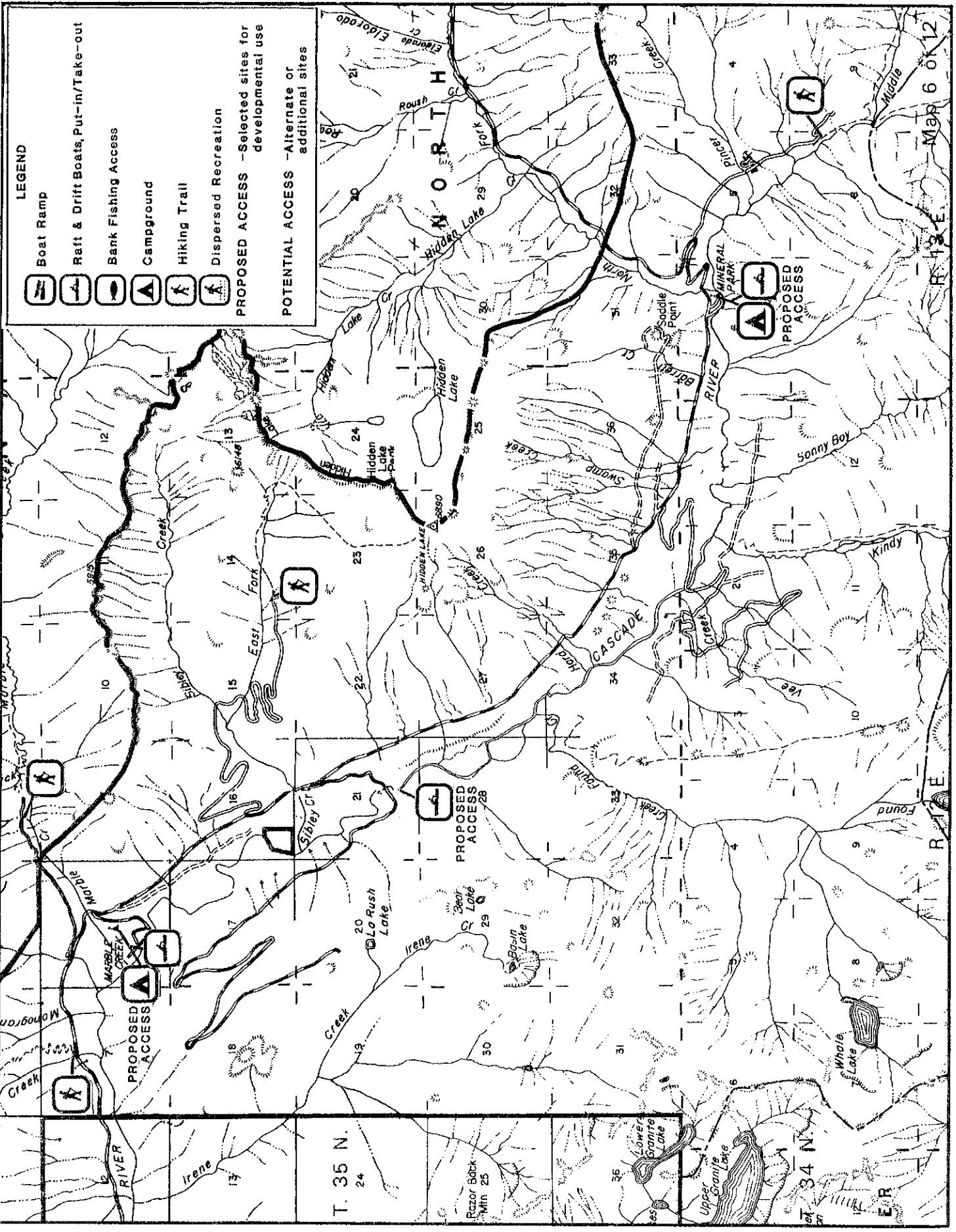
LEGEND

- Boat Ramp
- Raft & Drift Boats, Put-in/Take-out
- Bank Fishing Access
- Campground
- Hiking Trail
- Dispersed Recreation









PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites





LEGEND

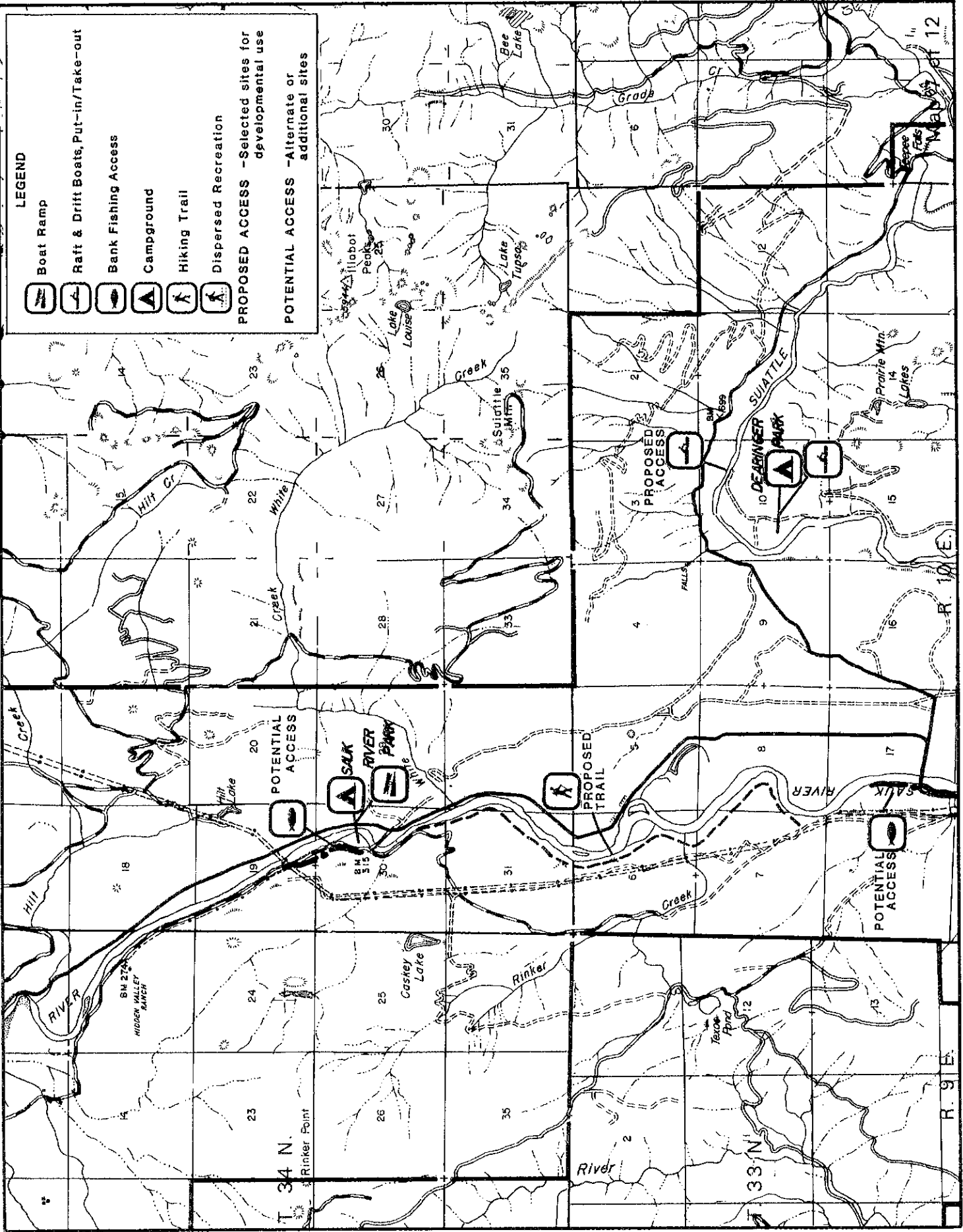
-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation
-  **PROPOSED ACCESS** - Selected sites for developmental use
-  **POTENTIAL ACCESS** - Alternate or additional sites

Map 6 of 12
R 13 E







T. 35 N.
24

T. 34 N.
27

R 13 E



LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites

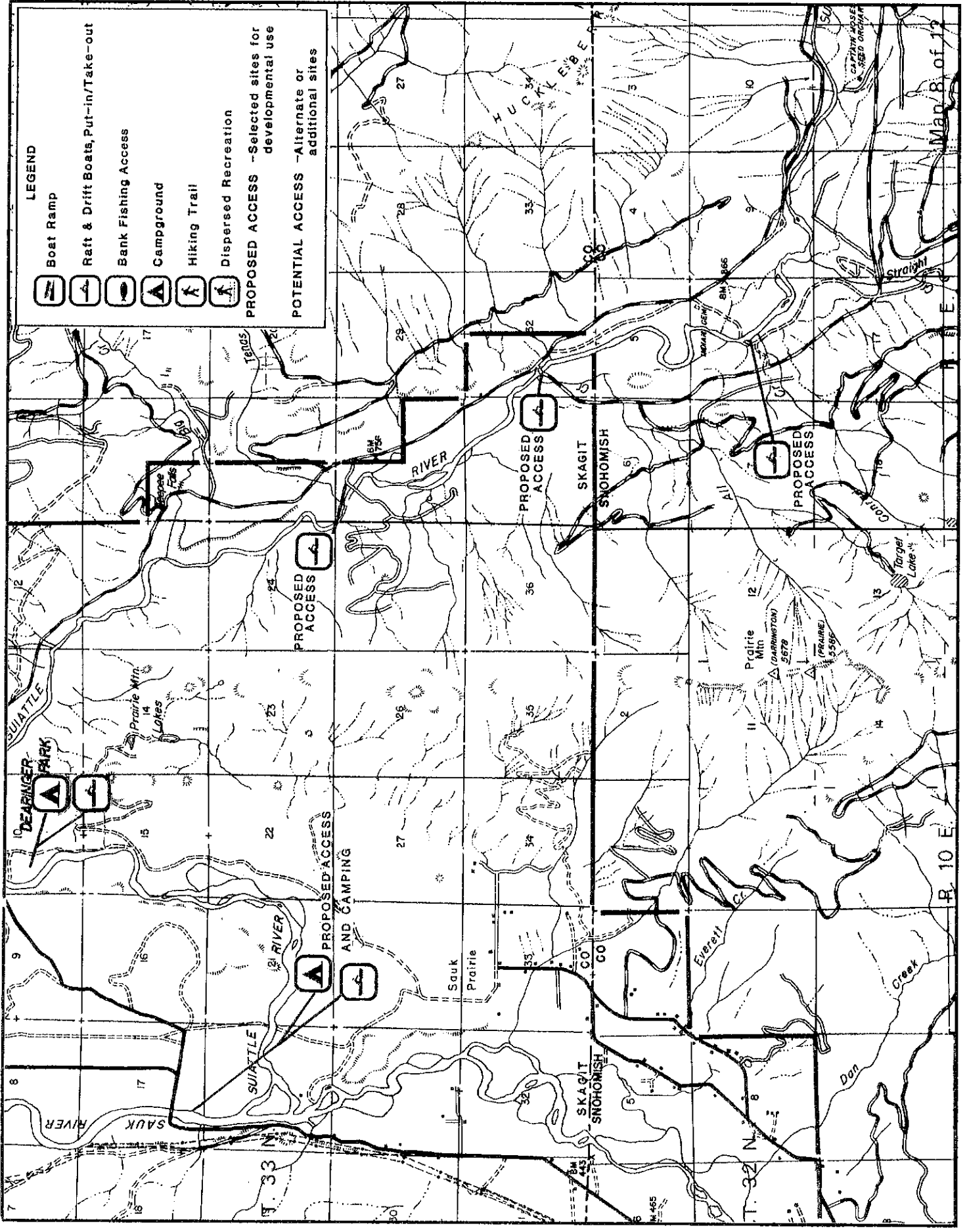
T. 34 N.

T. 33 N.

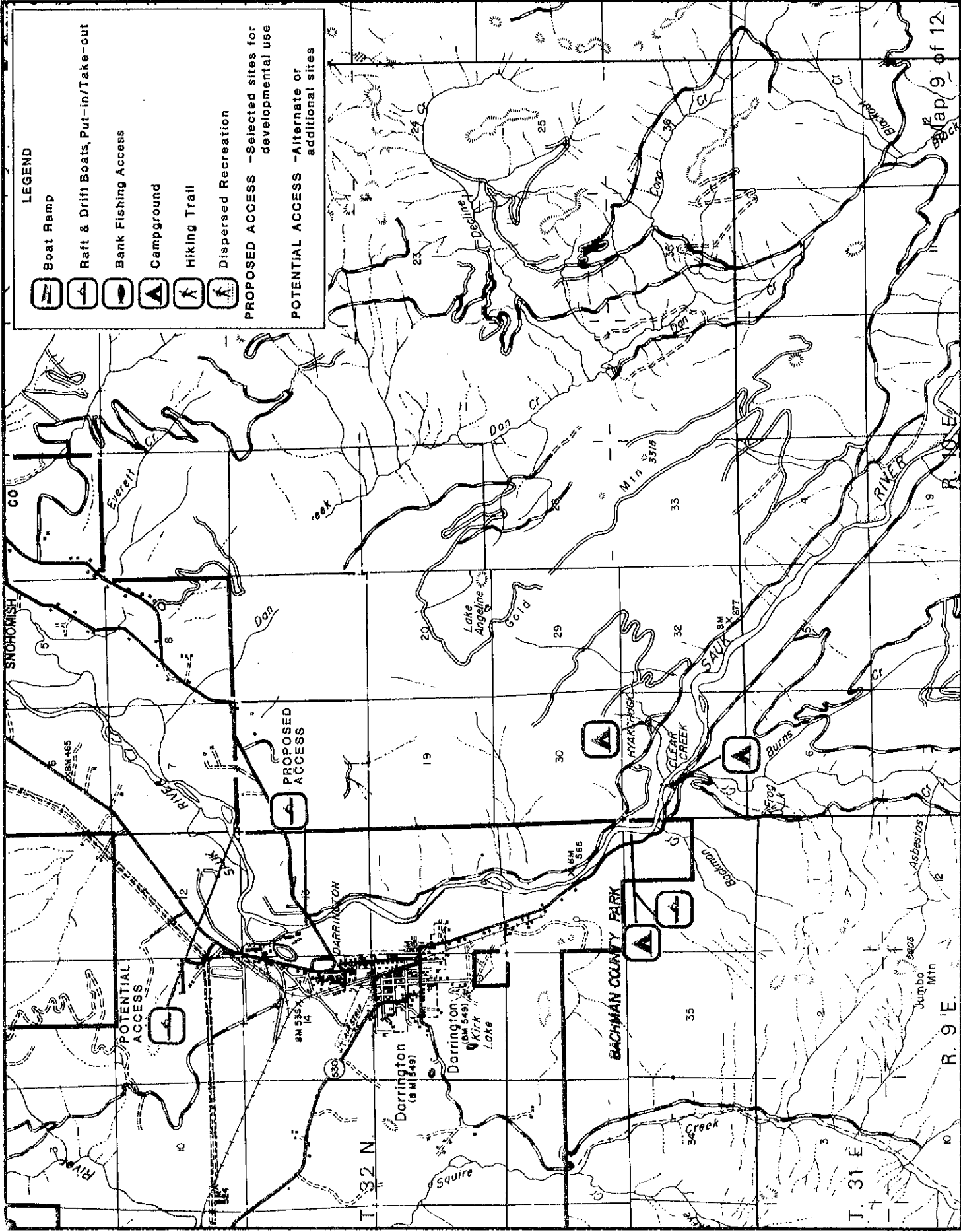
R. 9 E.

R. 10 E.

Section 12



- LEGEND**
- Boat Ramp
 - Raft & Drift Boats, Put-in/Take-out
 - Bank Fishing Access
 - Campground
 - Hiking Trail
 - Dispersed Recreation
- PROPOSED ACCESS** - Selected sites for developmental use
- POTENTIAL ACCESS** - Alternate or additional sites

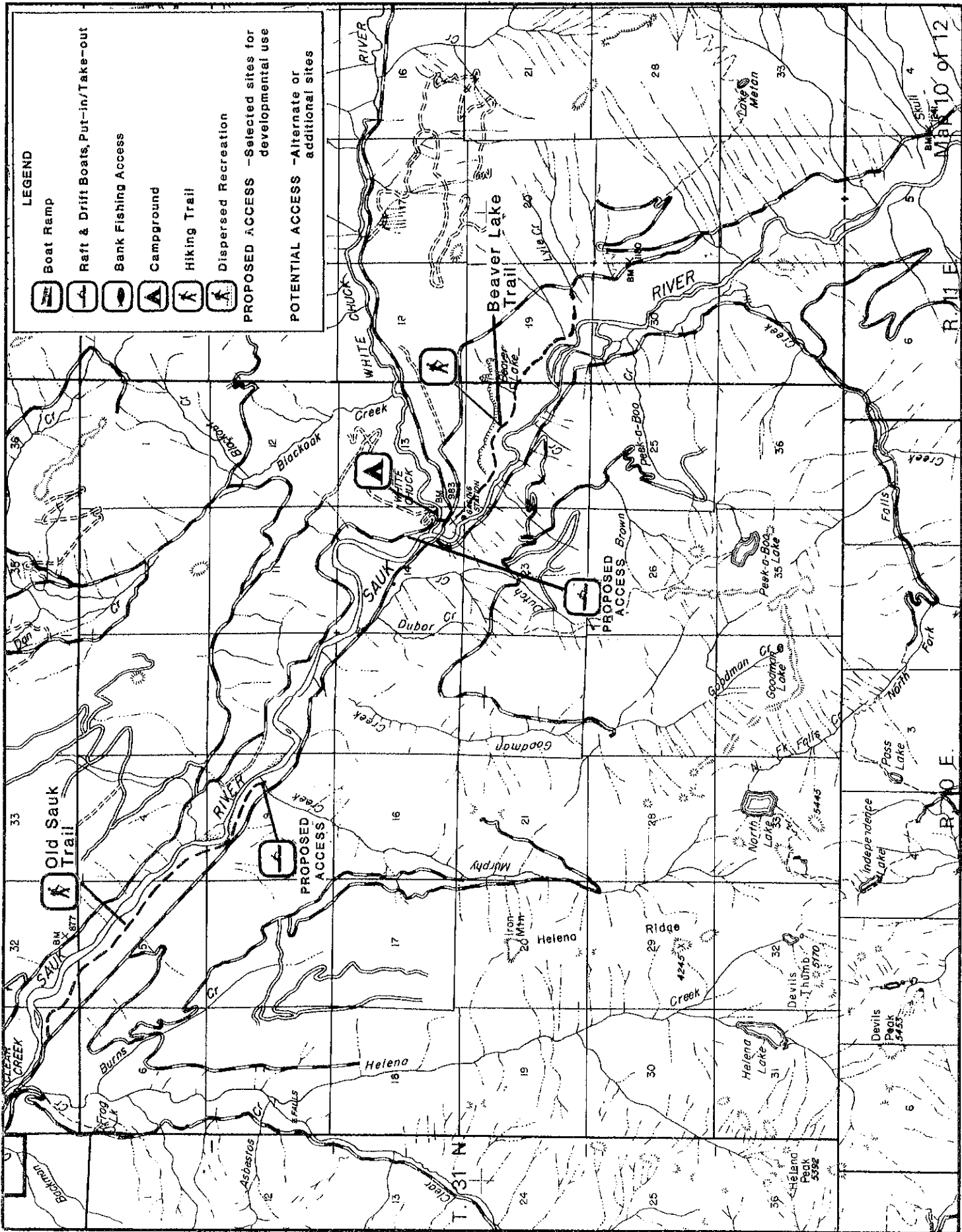


LEGEND







- Boat Ramp
- Raft & Drift Boats, Put-in/Take-out
- Bank Fishing Access
- Campground
- Hiking Trail
- Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites



LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

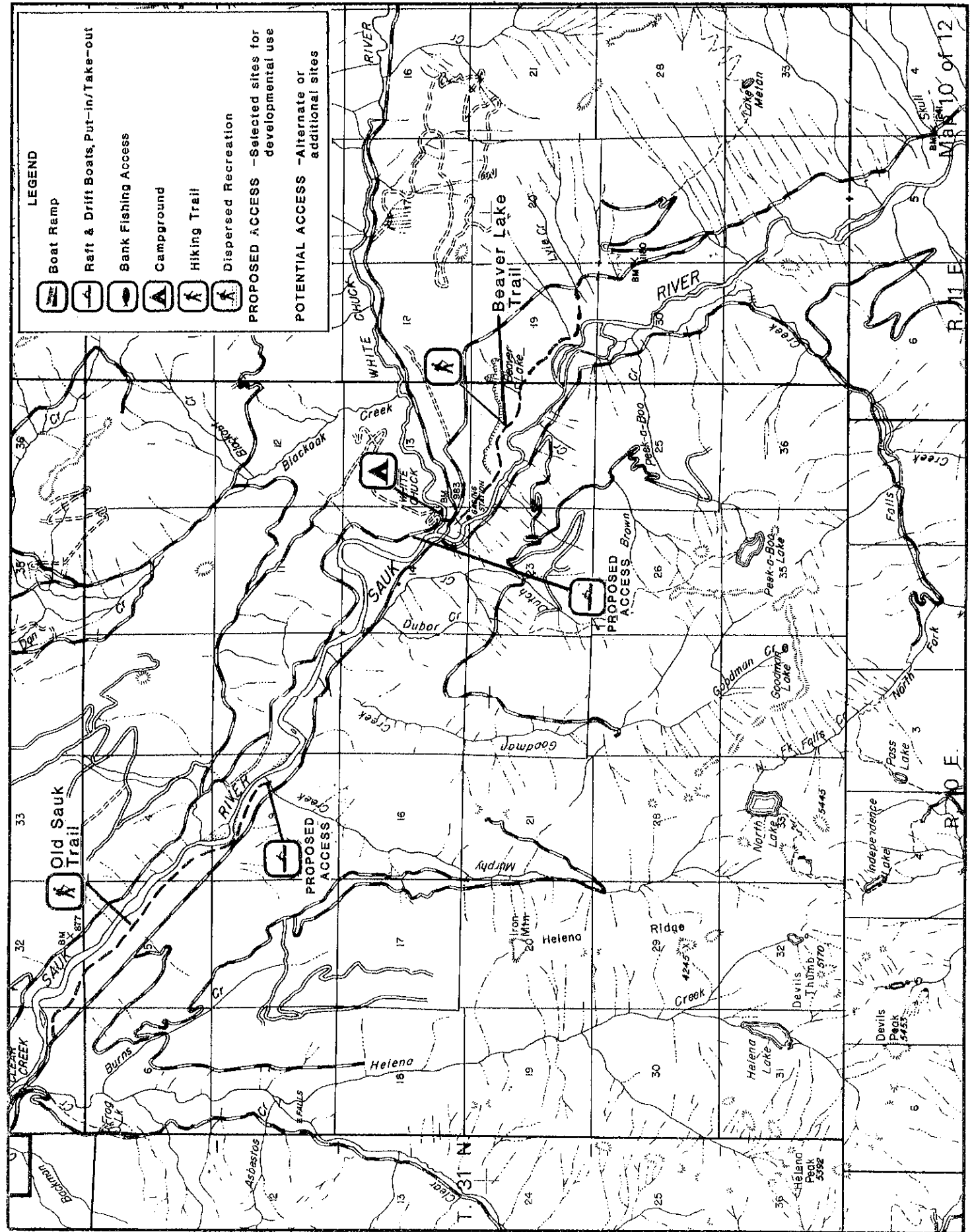
POTENTIAL ACCESS - Alternate or additional sites

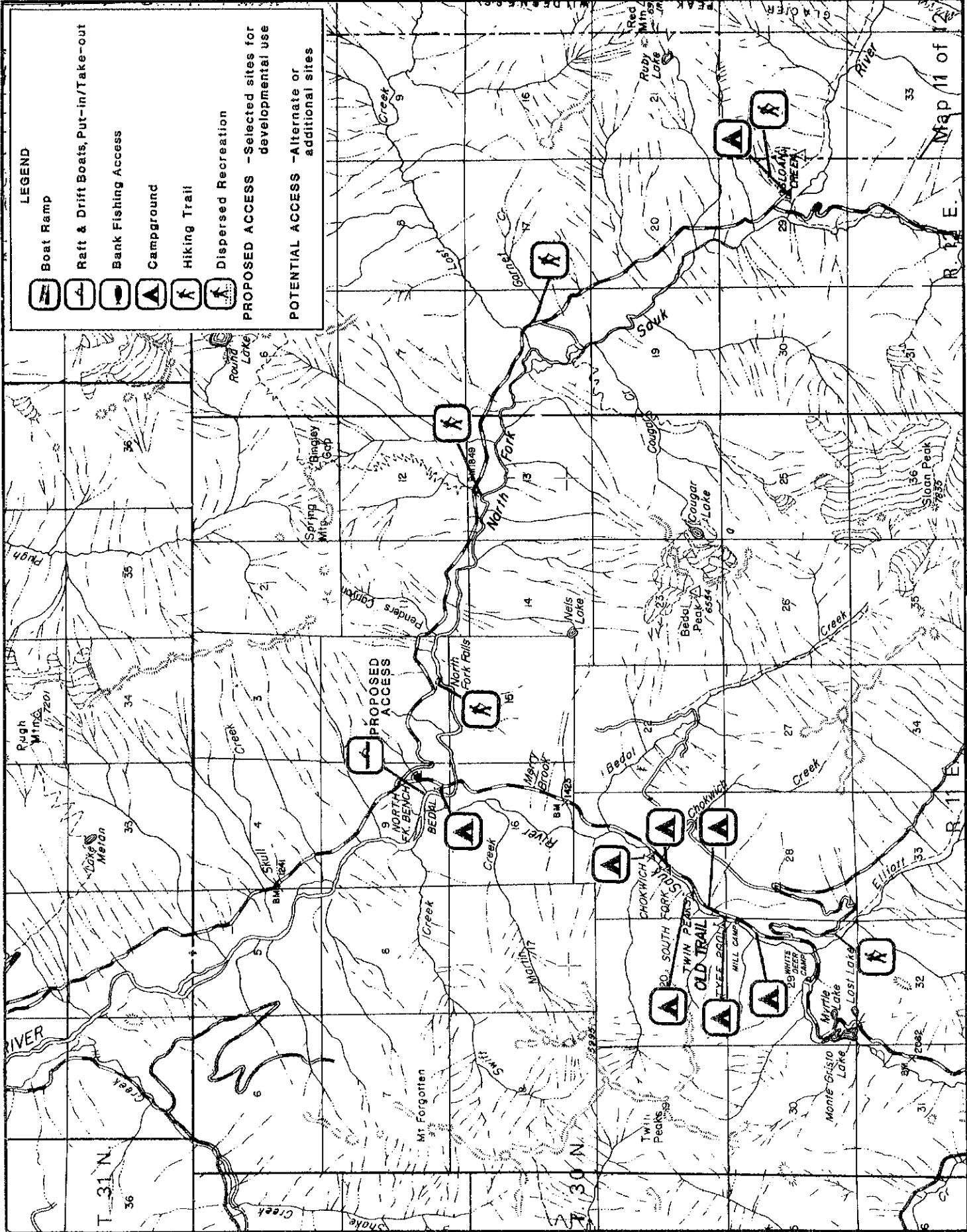
Old Sauk Trail

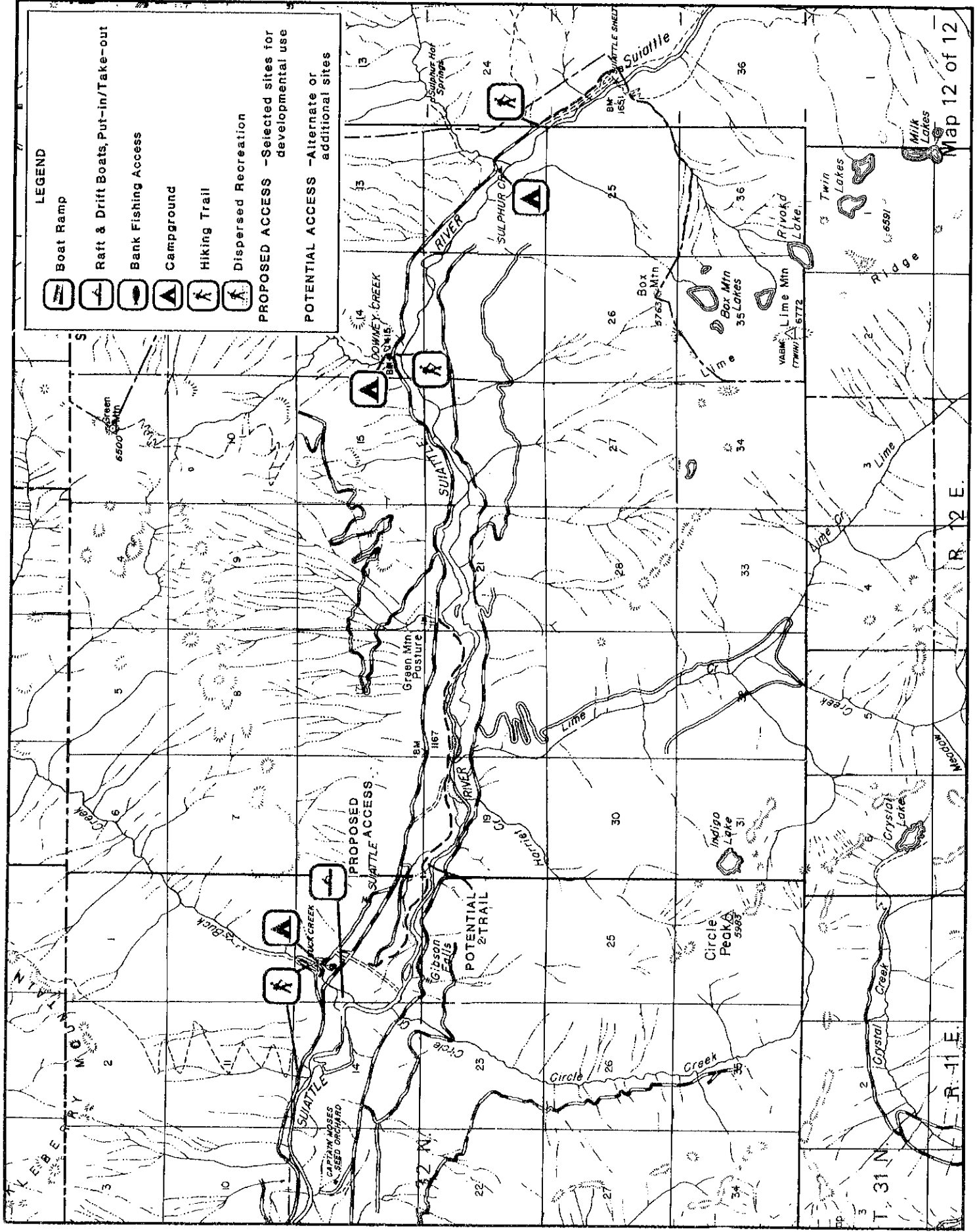
Beaver Lake Trail

PROPOSED ACCESS







PROPOSED ACCESS







LEGEND

-  Boat Ramp
-  Raft & Drift Boats, Put-in/Take-out
-  Bank Fishing Access
-  Campground
-  Hiking Trail
-  Dispersed Recreation

PROPOSED ACCESS - Selected sites for developmental use

POTENTIAL ACCESS - Alternate or additional sites

CULTURAL RESOURCES

Management Direction:

- R&S-1 On National Forest lands, procedures in FSM 2360, 36 CFR 800 and current Memorandum of Agreement with the State Historic Preservation Office (SHPO) will be followed to inventory, evaluate and protect cultural resources.
- R&S-2 On private lands, procedures in FSM 2360 and 36 CFR 800 will be followed to evaluate and protect cultural resources impacted by a Federal undertaking.
- R&S-3 State laws will be relied upon to protect cultural resources impacted by activities of private landowners and private land development.
- R&S-4 If State laws do not protect a major cultural site and the cultural resource affected is significant, the Forest Service may attempt purchase of necessary rights to insure protection.

INTERPRETIVE SERVICE

Management Direction:

- R&S-1 Design a unified mix of visitor information media to effectively communicate about, and also compliment, the Skagit W&SR setting.
- R&S-2 All interpretive material should include input and coordination of town, county, and state governments and also the various Federal agencies which have responsibilities in the W&SR corridor.
- R&S-3 Interpretive and information media highly vulnerable to vandalism will be avoided when other forms of communication are available.
- R&S-4 Information services will be directed towards (a) resource protection, and reducing bald eagle disturbance, (b) recreation opportunities and access, (c) safety and (d) interpretation of the river and how it relates to the National Wild and Scenic River System.
- R&S-5 Detailed river information regarding the river and its use will be available at the Ranger District offices and both the Seattle and Concrete Joint Visitor Information stations.
- R&S-6 Obtain and provide information on river stage and forecasts.
- R&S-7 Recreation aids, volunteer "River Rangers" and outfitter guides, along with Federal and State officials, will be utilized to provide information and interpretation to the public.
- R&S-8 A user opportunity guide or "Recreation Opportunity Guide" will be prepared. This guide should include:
 - a. Listing of applicable regulations, including Skagit Preserve rules.
 - b. Identify known existing, and relatively permanent, major hazards, such as potential rapid change in stream flow due to up stream dams.
 - c. Map may display recommended channels.
 - d. Points of interest, including scenic, historical and cultural areas.
 - e. Launch and take-out sites.
 - f. Other public use areas, including picnicking, overnight camping and bank fishing sites.
 - g. Private lands and property owners' rights.
 - h. Emergency services and safety.
 - i. American Whitewater Affiliation Safety Code.
 - j. Ways to limit or minimize human disturbance to wildlife.

SIGNING

Management Direction:

- R&S-1 The Mt. Baker-Snoqualmie National Forest will prepare a sign plan. Forest Service Handbook 7109, 11a and b will be used for sign standards and specifications. Coordination will be needed with all other interested agencies.
- R&S-2 Signing should be used where appropriate in advising river users of not only areas and sites managed for various public activities and uses but also the various agencies associated with each particular use area.
- R&S-3 Signing will be needed wherever practical to identify sites, access, and facilities available to the public.
- R&S-4 Signs will be used as a principle tool in reducing conflicts between private landowners and public use.
- R&S-5 Each sign proposal will be preceded by a brief analysis:
1. What is purpose or objective of the sign?
 2. Will the sign draw unwanted attention?
Examples: - interpretation of eagle habitats could lead to possible disturbance of the birds.
- signing of an archaeological site could lead to vandalism of site.
 3. Are there other signs in the vicinity?
 4. Will another sign lead to confusion?
 5. Are required signs already possessed by one of the principle agencies involved? (i.e., State, Forest Service, Corps of Engineers, Coast Guard, Soil Conservation Services, etc.).
 6. Will the sign be unusually vulnerable to vandalism?
 7. Can the objective be achieved by other means i.e., addition to map or brochure etc.
- R&S-6 Design a distinctive sign base/silhouette and logo. Identification of responsible management agencies must be a part of each major sign installation.

MOTORIZED AND MECHANICAL USE

Management Direction:

- R&S-1 Motorized boat use will be allowed to continue as currently allowed under State laws, and will be monitored. Procedures to modify this use (such as zoning portions of the rivers for non motorized use) may need to be initiated with the State upon results of monitoring and the interim and final findings of studies on resource compatibility and eagle disturbance. (Reference Vol II - page 50, R&S-5 and page 17, R&S-1)
- R-2 The stretch of river between Marblemount and Concrete will be monitored to determine whether use by both drift and motorized boats presents hazards to safety. Action will be required if a serious hazard is identified.
- S-3 Outfitter/Guide permits for commercial motorized use will not be issued on any of the Scenic Rivers.

VISITOR MANAGEMENT

Management Direction:

- R&S-1 Visitor management on the lands within the Skagit W&SR corridor will rely mainly upon clear, simple and strategically located signing (see Signing) and easily readable brochure and maps.
- R&S-2 All commercial river boating operations on the Skagit W&SR System will be under an outfitter/guide permit system.
- R&S-3 Outfitter/Guide permits will be issued on the basis of National Forest award procedure for Forest Service outfitter/guide permits.* A permit will be issued in response to all applications for river guide permits until 1985.
- R&S-4 The Mt. Baker-Snoqualmie National Forest, with the County and State governments, determine ordinances and regulations needed and applicable to private lands which will aid in controlling public use.
- R&S-5 The Mt. Baker-Snoqualmie National Forest, in cooperation with the State, County and local governments, determine if regulations in relation to hunting on land within the River Corridor are needed. (Ref Sec. 13a, 1968 WS&R Act.)
- R&S-6 At each designated public use and river access site, regulations pertaining to land and water use, and hazards relating to user safety on land and on water, will be available to the public.
- R&S-7 Work with the State, County, Coast Guard, and river guides associations to develop uniform safety standards for the classified rivers. Such standards to become a part of each commercial special use permit. Authorities to enforce Federal navigation laws will be retained by the Coast Guard and appropriate counties.
- R&S-8 No permit for non-commercial use be required at the present time. The future need for permits will be re-evaluated at each update of this plan using monitoring and research data.
- R&S-9 Public overnight and day use of the lands along the Skagit System will be promoted in designated areas or sites only. Such sites will be identified through clauses in appropriate Special Use Permits, by signs, and also by identification in brochures, or on maps. The Washington State Department of Game and the Nature Conservancy have prohibited beaching of water-borne craft within the Bald Eagle Natural Area.
- * The National Forest award procedure for Outfitter/Guide permits at publication was in the review process. The final approved document will be used in issuing permits on the Skagit W&SR System. (FSM 2721)

R&S-10 Study the four rivers to determine recreational demand, user conflict, resource capabilities, and compatibility of use. From these studies determine optimum levels of use consistent with planned experience levels and the preservation of river values. Systems such as voluntary visitor registration or, automatic photography and actual on site surveys should be considered for use. (See Recreation, Vol II, R&S-1, page 17.)

For existing conflict resolution criteria see Vol II, Rec., R&S-2, R&S-3, pg. 17, R&S-12, pg. 18, S-20, pg. 20; Motorized use, R&S-1, pg. 45; Visitor use, R&S 11, pg. 47, R-14, pg. 48, S-18, pg. 48; Wildlife, R&S-1, R&S-5, R&S-7, pg. 50; Fisheries, R&S-3, pg. 53; Researcy R&S-1, pg. 59

R&S-11 Monitor all water surface use to measure acutal rates of use between commercial and non-commercial use, types of activity, volume of use and resource damage. Adjust use to meet optimum levels of use determined in this plan and through R&S-10 above.

R&S-12 During the summer season no more than twenty percent of the available user days will be allotted for any one month period. (See 12-14, S-18 and S-22)

Skagit River

R-13 Initially, the Skagit River surface use should be managed as three (3) segments. Those segments will be:

- a. Bacon Creek to Rockport (upper segment).
- b. Rockport to Pressentin Creek (middle segment).
- c. Pressentin Creek to Sedro Woolley (lower segment).

R-14 With the acquisition of required public access and development of needed basic facilities, the following calculation of capacity for surface use (user day) could be acceptable, it is the optimum recreation carrying capacity for the Skagit River. *

(NOTE: The term "user day" is more appropriate than visitor day. A "user day" describes one trip on a river by one person during the period of one day.)

Summer Season (April through September):

<u>Segment</u>	<u>Commercial Use</u>	<u>User Days</u>	
		<u>Non Commercial Use (Unregulated)</u>	<u>Total</u>
Upper Skagit	2,800	5,200	8,000
Middle Skagit	2,800	5,200	8,000
Lower Skagit	1,600	3,000	4,600
Total	7,200	13,400	20,600

(Winter Season, October through March):

An arbitrary commercial use figure of 6,000 user days has been assigned to the Skagit with no more than 20 percent to be used in any one month. These figure will be adjusted to fit actual needs, as identified by research and monitoring use.

* Calculations for Carrying Capacity - Appendix I, Volume I, Page A-144.

- R-15 The Forest Service, in coordination with other concerned groups, shall annually monitor use on the river section between Marblemount and Rockport during the period of October through March. If the monitoring or other studies (See Wildlife section) identify adverse impacts upon the bald eagle associated with use, the optimum recreation carrying capacity of the river will be adjusted to accommodate eagles.
- S-16 With the acquisition of required public access and development of needed basic facilities, the following calculation of capacity for experienced white water rafters and kayakers could be acceptable, it is the optimum recreation carrying capacity for the Suiattle and Sauk rivers.

Sauk River

- S-17 Initially, the Sauk River surface use should be managed in four (4) segments. Those segments will be:
- a. Bedal Campground to the White Chuck.
 - b. White Chuck to Bachman County Park (upper segment).
 - c. Bachman County Park to the mouth of the Suiattle River (middle segment).
 - d. Mouth of the Suiattle River to the mouth of the Sauk at the Skagit River (lower segment).

As experience and additional resource information indicates, the number and length of sections may be altered.

- S-18 The optimum recreation carrying capacity for each of the above segments has been calculated at: *

Summer Season (April through September):

<u>Segment</u>	<u>Commercial Use</u>	<u>User Days</u>	
		<u>Non Commercial Use (Unregulated)</u>	<u>Total</u>
a. Bedal/White Chuck	1,840	2,760	4,600
b. White Chuck/Bachman	3,000	1,600	4,600
c. Bachman/Suiattle	2,700	4,100	6,800
d. Suiattle/Skagit	2,400	4,400	6,800
Total	9,940	12,860	22,800

Winter Season (October through March)

An arbitrary commercial use figure of 900 user days has been assigned to the Sauk River. This figure will be adjusted to fit actual needs, as identified by research and monitoring use.

- S-19 In coordination with the Washington State Departments of Fisheries and Game, annually monitor use on the Sauk river to identify impacts upon spawning and spawning beds by river users. If monitoring or research identify adverse impacts, measures will be taken to decrease these impacts.

* Calculations for Carrying Capacity - Appendix I, Volume I, page A-144.

Suiattle River

S-20 Initially, the Suiattle River will be managed as two (2) segments:

- a. Above Boundary Bridge (upper segment).
- b. Below Boundary Bridge (lower segment).

S-21 The optimum recreation carrying capacity for each of the two segments has been calculated at: *

Summer Season (April through September):

<u>Segment</u>	<u>Commercial Use</u>	<u>User Days</u>	
		<u>Non Commercial Use (Unregulated)</u>	<u>Total</u>
Upper Suiattle	2,300	2,300	4,600
Lower Suiattle	3,000	1,600	4,600
Total	<u>5,300</u>	<u>3,900</u>	<u>9,200</u>

Winter Season (October through March)

An arbitrary commercial use figure of 900 user days has been assigned to the Suiattle. This figure will be adjusted to fit actual needs, as identified by research and monitoring use.

Cascade River

S-22 No commercial use be allowed on the Cascade River until the segment between Mineral Park and Cascade Island Campground is inventoried as to rating and carrying capacity.

* Calculations for Carrying Capacity are in Appendix I, Volume I.

WILDLIFE

Management Direction:

- R&S-1 The primary objective is to maintain the integrity and diversity of the wildlife species, populations, and habitats that existed in the Skagit W&SR when it was established. Coordinate with Federal and State agencies to obtain this objective.
- R&S-2 Initiate a species inventory to verify occurrence, distribution, and abundance of wildlife, with emphasis on sensitive species. Results should be integrated into WILDHAB files.
- R&S-3 Monitor trends in numbers of each Threatened and Endangered species present in the classified rivers.
- R&S-4 Initiate eagle research designed to supplement studies (City of Seattle 1980, WDF 1980) already completed. Such studies to be coordinated with National Park Service, State Game, and U.S. Fish and Wildlife Service.
- R&S-5 Upon adoption of this plan, conduct administrative studies or research to identify disturbance factors and limits between public use activities and migratory bald eagle use of the river. This program will be coordinated with the U.S. Fish & Wildlife Service, the Washington State Department of Game, and National Park Service. The data that will provide protection to the eagles and to complete consultation under section 7a of the Endangered Species Act.
- R&S-6 The Mt. Baker-Snoqualmie N.F. will strongly encourage Washington Department of Fisheries and Skagit System Cooperative to continue to manage for natural rather than hatchery populations of fish to provide continuing food supply to eagles.
- R&S-7 Emphasis protection of eagle habitat rated "excellent" or "good" (Biological Assessment of Bald Eagles in the Skagit Wild & Scenic River System - U.S. Forest Service - 6/20/81, page 61-69). In addition direction provided in the "Pacific States Bald Eagle Recovery Plan" will be utilized. On private lands within the corridor, utilize the Shorelines Management Act administered by county initially. If a potential alteration is not controlled by the Shorelines Plan or its administration, initiate acquisition procedures.
- R&S-8 The U.S. Fish and Wildlife Service (USFWS) recommends protection of communal-night roosts. For those communal-night roosts that may be found on National Forest lands within the corridor the protective measures outlined in the:
- USFWS' Bald Eagle Management Guidelines, Oregon - Washington, will be utilized.

R&S-9 Cooperative interpretive programs regarding eagle-human interactions should be developed with USFWS, State Game Dept., National Park Service, and Nature Conservancy to:

- encourage public support and involvement with eagle management.
- display and communicate ways to limit or minimize human disturbance through education and understanding.
- Identify, and where possible, quantify which habitats are most sensitive to disturbance.

R&S-10 Habitat needs for snag and cavity-dependent wildlife will be provided per Forest Service Policy (FSM 2630) on a majority of commercial forest land within the National Forest. Dead trees, both standing and down, will be provided in sufficient numbers to maintain primary cavity excavators at 100 percent of their potential population capacity.

S-11 Complete eagle habitat rating for Scenic Rivers and, if possible, record (maps and/or computer) for easy access. Ground check where necessary.

S-12 Conduct required inventory to determine:

- Abundance and distribution of salmon carcasses along the Sauk, Suiattle, and Cascade Rivers.
- Eagle numbers and distribution along the Cascade River.

Direction For Eagle Habitat Management

A. Data Gathering: To facilitate consultation required by Section 7a of the Endangered Species Act.

<u>Section</u>	<u>Page No.</u>	<u>Item No.</u>
Visitor Management	47	R&S-10
Wildlife	50	R&S-4; 5
Wildlife	51	S-11; 12

B. Action:

Direction which relates to eagle habitat management.

<u>Section</u>	<u>Page No.</u>	<u>Item No.</u>
Admin. Org. & Respon.	8	R&S-8
Land Ownership	11	R&S-6
Recreation	17	R&S-3
Interpretive Services	43	R&S-4
Motorized Use	45	R&S-1
Visitor Management	48	R-14
Wildlife	50	R&S-3, 6, 7, 8
Wildlife	51	R&S-9, S11, S12
Vegetative Management	56	R&S-1, 7
Mineral Resource	59	R&S-1

FISHERIES

Management Direction:

- R&S-1 Direction for fish management activities of the Forest Service, Washington Department of Game, and Department of Fisheries is provided in the Memorandum of Understanding between Forest Service and the Departments. Reference Forest Service Manual 2611.1--9, R-6 Supplement No. 98 and 2611.1--17, R-6 Supplement No. 215.
- R&S-2 Fish habitat management will be coordinated with the Washington State Fish and Game Departments. The Forest Service has primary responsibility for the management of fisheries habitat within the National Forest. The State has the responsibility for in-stream habitat outside of the National Forest Boundary. Stocking and setting of fishing areas, seasons, limits, and catch quotas continue to be the responsibility of the State departments.
- R&S-3 Priority will be given to all management decisions which protects or enhance existing fishery values.
- R&S-4 Habitat preservation, enhancement and rehabilitation measures for natural propagation will be encouraged.
- R&S-5 Options will be maintained for construction of fish hatcheries, spawning channels, rearing and acclimation ponds, trapping facilities, incubation box sites and other fishery enhancement facilities in the Skagit drainage.
- R&S-6 Cooperate with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, Skagit System Cooperative and the State of Washington, to pursue opportunities to maintain and to increase existing populations of fish.
- R&S-7 Proposals for construction of recreation facilities such as boat launching ramps, roads and trails, or camping areas, for the express purpose of harvesting biological surpluses of fish will be coordinated with the Fisheries and Game Departments of the State of Washington.
- R&S-8 The Mt. Baker-Snoqualmie National Forest, Washington State Departments of Game and Fisheries to prepare a habitat rating for fisheries to help facilitate future management decisions.
- R&S-9 The United States Forest Service will continue to participate in the interim agreement regulating the rate and magnitude of flow fluctuation in the Skagit River with the City of Seattle, Washington Department of Fisheries and Game, Skagit System Cooperative, U.S. Fish and Wildlife Service, and U.S. National Marine Fisheries Service. (Skagit Interim Flow Agreement Standing Committee)

WATER QUALITY

Management Direction:

- R&S-1 In cooperation with the State of Washington and U.S. Geological Survey, establish a water quality monitoring system that utilizes and enhances the existing monitoring stations.
- R&S-2 Maximize cooperation with other agencies responsible for water quality control. Principle among these will be EPA, U.S. Health Service, Soil Conservation Service, Department of Ecology, and USGS. The need for cooperative agreements should be explored with each agency.
- R&S-3 Locate sources of water quality degradation and prepare action plans to eliminate the pollutant.
- R&S-4 Place special emphasis on protecting streamside vegetation.
- R&S-5 Give priority to protection of water quality in cases of conflict between water quality and other resource uses. Prevent alteration of natural channels or streambanks that would significantly affect (1) the free-flow of water (2) the appearance of the stream, (3) fish habitat, or (4) water quality.
- R&S-6 Water quality standards must be consistent with the objectives of the Federal Water Pollution Control Acts--Amendments of 1972 (Public Law 92-500) and Amendments of 1977 (Public Law 95-217). Any application of pesticides must be done in compliance with the Federal Environmental Pesticide Control Act of 1972 (Public Law 92-516).
- R&S-7 Maintain the Recreation and Scenic Rivers to a Class AA Extraordinary Standard. (See Vol. I page 121 for water quality classification criteria.)

AIR QUALITY

Management Direction

- R&S-1 Annually review the State Department of Ecology (DOE) air monitoring results to determine if action is needed to meet the National Air Quality Standards.
- R&S-2 Coordinate with the State of Washington (DOE) to comply with and provide monitoring of visibility, to meet Federal visibility regulations.

TRANSPORTATION - UTILITY

Management Direction:

- R&S-1 Include in the cooperative agreement (R&S-4, pg. 7) between the state, counties and Forest Service direction pertaining to maintenance and rehabilitation of state and county roads within the river corridor. Such items as visual quality, borrow pits, disposal sites, spraying and brushing, safety, rip-rap, etc., should be included.
- R&S-2 Coordinate with the Counties in the location, design, or permit for future roads to ensure that the key values of the river (wildlife, fish, visual) are protected.
- R&S-3 Proposed future road and utility crossings, including temporary, will be reviewed through the environmental assessment process. In the absence of reasonable alternative routes, new public utility rights-of-way on National Forest lands within the River area will be permitted. Locations and construction techniques will be selected to minimize adverse effects on the key values (scenic, fish, and wildlife).
- R&S-4 Work with the Federal and State Departments of Transportation and Counties to encourage that no additional airstrips or railroads be permitted within the W&SR corridor.
- R&S-5 Work with and obtain from utility districts, management plans prescribing vegetative management in utility corridors. Management measures should be compatible with River classification.
- R&S-6 Rock and gravel borrow within the river corridors will be discouraged. (See page 59, R&S-1, R&S-2, R&S-3, S-4, and S-5. Also See Vol II, Mineral Resource.) As a minimum, and where applicable, the Policies and Guidelines of the State River Management Plan (Policy 4) and State Aquatic Land Management Plan for the Skagit River (1981) should be followed.
- S-7 Wherever practical, secondary utility lines should be buried.
- S-8 The Forest should review the Federal Highway proposal for FH7 (Mountain Loop Highway) to determine if it should be implemented with Forest funds, as proposed, or if the proposal and standards need revision.
- S-9 Reconstruction of those roads existing as of November 10, 1978 will assure the reconstruction will not decrease the values in existence at that date of classification.
- S-10 Most Forest Service roads in the corridor should be closed to commercial traffic on weekends from mid-May through November.

- S-11 All future roads will be located and designed to remain visually inconspicuous from the river surface and opposite bank. Such roads should be administered to carry a low volume of traffic.
- S-12 Herbicide sparying of public roadsides within the National Forest Boundary will conform to standards and controls established for the Mt. Baker-Snoqualmie National Forest.

VEGETATIVE MANAGEMENT

Management Direction:

- R&S-1 On non-National Forest land, rely upon county and state programs, such as Shorelines Management Act and Forest Practices Act, to the fullest extent possible to achieve management direction, and to provide protection to the values for which the river was classified - Wildlife, Fisheries, and Visual.
- a. If county and state programs are unable to provide protection to "key resources", consider the need to acquire conservation easements.
 - b. The guiding objective on non-National Forest land will be to meet direction to the extent practical with the least restraint permissible under the act.
- R&S-2 Within the designated corridor timber and other vegetation within view from the river, trails, roads and recreation sites should be managed primarily for scenic quality, wildlife, and fisheries purposes. The primary objectives for management of the forest cover are described under the Recreation, Visual, Wildlife, Water Quality, and other management sections of this plan. Distribution of landscape environments are described in R&S-2, page 14. Landscape descriptions are in Volume I, page 37-39.
- R&S-3 Field studies should be conducted throughout the system to determine the location of threatened and endangered plants.
- R&S-4 Protection requirements will need to be developed for each area identified to have threatened and endangered plants.
- R&S-5 Harvest areas should blend with surrounding features.
- R&S-6 Some timber stands will need to be maintained in hardwoods to ensure variety.
- R&S-7 Timing of timber harvest will need to be controlled to minimize conflicts between harvest activities and eagles, spawning fish, recreation users.

- R&S-8 Timber harvest in the river corridors will be conducted so as to avoid adverse impacts on the "key resources" - Wildlife, Fisheries, and Visual.
- R&S-9 On non-National Forest lands, Forest Management practices may be similar in nature and intensity to those present at the time of River designation (1978), and must meet the direction contained in the State Forest Practices Act.
- R-10 Forest management may utilize a wide range of appropriate silvicultural prescriptions provided "key resources" are protected.
- S-11 On National Forest land along scenic classified rivers there is significantly less opportunity for modification of the natural environment.
- A) The objective will be: to maintain or improve the scenic qualities as viewed from travel routes; and to maintain a natural appearing forest stand associated with a river bottom or terrace.
 - B) Appropriate silvicultural prescriptions may be used to harvest trees along the scenic rivers on National Forest land in order to maintain or restore natural appearing forest stands.
 - C) Small openings may be created through timber harvest to:
 - a. Improve vistas.
 - b. Improve appearance of existing cutting units.
 - c. Improve wildlife habitat.
 - d. Meet fuel management needs.
 - e. Meet other recreation site development needs.
 - D) Salvage of wind, fire, flood, and insect/disease killed trees covering large areas will be decided on a case-by-case basis through the environmental assessment process. (Decision Authority - Based on Volume of Timber - See FSM 2400.)

INSECTS AND DISEASES

Management Direction:

- R&S-1 Through cooperative agreements, Forest Service and State of Washington will continue to monitor insect and disease activity through aerial flights and field reconnaissance.
- R&S-2 When insect or disease infestations threaten to reach epidemic proportions, appropriate control measures will be taken. The choice of control measures will fully provide for the protection of the values recognized in W&SR classification.

FIRE MANAGEMENT

Management Direction:

- R&S-1 Fire suppression methods which least alter the landscape will be used.
- R&S-2 Fire will be an acceptable tool for meeting resource objectives.
- R&S-3 Maintain cooperative agreement between Forest Service and State Department of Natural Resources.

MINERAL RESOURCE

Management Direction:

Outside National Forest Boundary

- R&S-1 Encourage State to retain integrity of gravel bars within the classified river system. (See Aquatic Land Management Plan for the Skagit River, D.N.R., page 49 for State policy and Landownership Vol. I, page 31.)
- R&S-2 Work with County, State, and Federal agencies to establish a system to review and comment on all proposals and permits for mining activities and gravel extraction which could effect the classified rivers.
- R&S-3 Work with Skagit County and Snohomish County agencies to determine if zoning regulations should be developed which would protect areas of special significance, within the established boundaries of the designated rivers, from adverse effects of any mining activities. Encourage counties to designate areas of special significance as "Environmentally Sensitive" under Washington State Environmental Policy Act.

Inside National Forest Boundary

- S-4 On public domain lands, follow procedures in FSM 2800.
- S-5 The integrity of gravel bars within the classified rivers will be retained.

RESEARCH

Management Direction:

- R&S-1 Upon adoption of this plan, conduct administrative studies or research to identify disturbance factors and limits between public use activities and migratory bald eagle use of the river. This program will be coordinated with the U.S. Fish & Wildlife Service, Washington State Department of Game, and the National Park Service. The data collected will be used to identify the carrying capacity of the rivers that will provide protection to the eagles and to complete consultation under Section 7a of the Endangered Species Act.
- R&S-2 Initiate eagle research designed to supplement single season studies (City of Seattle 1980, WDF 1980). Coordinate with State Game Department.
- R&S-3 Study the four rivers to determine recreational demand, use conflict resolution, resource capabilities and proper levels of use and management. (Proposed PNW study, see page 17, R&S-1)
- R&S-4 Conduct field studies to locate and inventory threatened and endangered vascular plants.

Section IV
Needed Regulations
Recreation and Scenic Rivers

IV



SECTION IV
NEEDED REGULATIONS
RECREATION AND SCENIC RIVERS

The purpose of this section is to propose regulations to be used by the Secretary of Agriculture in administering the Skagit W&SR. There is no statutory authority under which the Secretary can apply regulations related to the National Forest System to private lands. Within the W&SR corridor (outside N.F.), regulation of private land by the Secretary cannot be enforced without acquisition of the right to do so. The United States has, under the 1968 Wild and Scenic Rivers Act, the authority to regulate the surface use of waters within the National W&SR System. The authority to apply the prohibited acts regulations, if properly implemented, is found in 16 U.S.C. 551 and 16 U.S.C. 1281(d). The statutory authority is generally implemented by 36 CFR 261.1(a)(4) and 36 CFR 261.58(z). Application to the Skagit W&SR and its included tributaries can be accomplished by regulation under 36 CFR 261.70 and 261.76, or by order under 36 CFR 261.50-.58.

The issuance of secretary guidelines regarding zoning standards may become necessary if incorporated areas annex lands which are within the Wild and Scenic River Corridor. The Town of Lyman has incorporated an island and portions of the river within the corridor. (See R-10, page 12)

Control over surface waters (via special use permit system):

- Cascade River
- Sauk River
- Suiattle River
- Skagit River

Control over public use of certain lands or areas:

- developed sites
- dispersed area
- access right-of-ways
- access easements
- trails
- river access sites

Private land development:

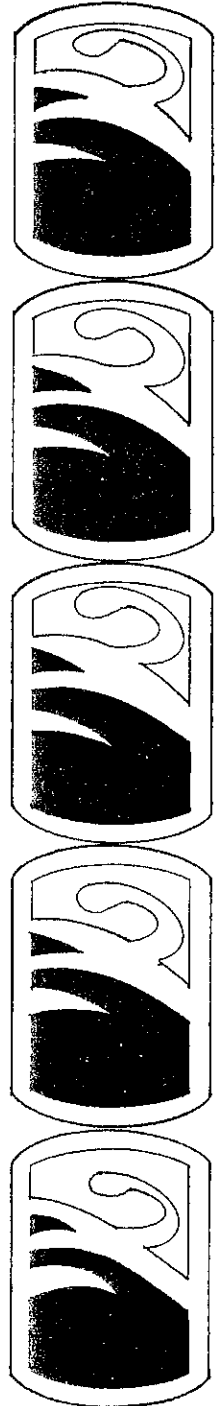
Regulations for the use and development of private land which would correspond with County and municipal zoning ordinance, developed to meet the provisions of the 1968 W&SR Act. (See Administration section of this document.)

Measures to protect:

- Eagle perch trees - all rivers
- Key bars that entrap spawned salmon carcasses
- Historical and archaeological sites and areas
- Private properties from public use
- Key salmon spawning beds

Section V
Coordination and Responsibilities
of Other Organizations
and Agencies

V

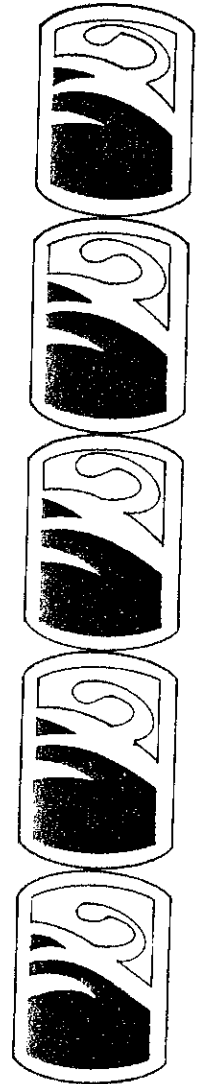


See
Volume
I

Appendix

APPENDIX A

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Wild And Scenic River Boundary Maps _____	I	A2
	II	A2
Wild And Scenic River Boundary Description _____	I	A15



Appendix

A

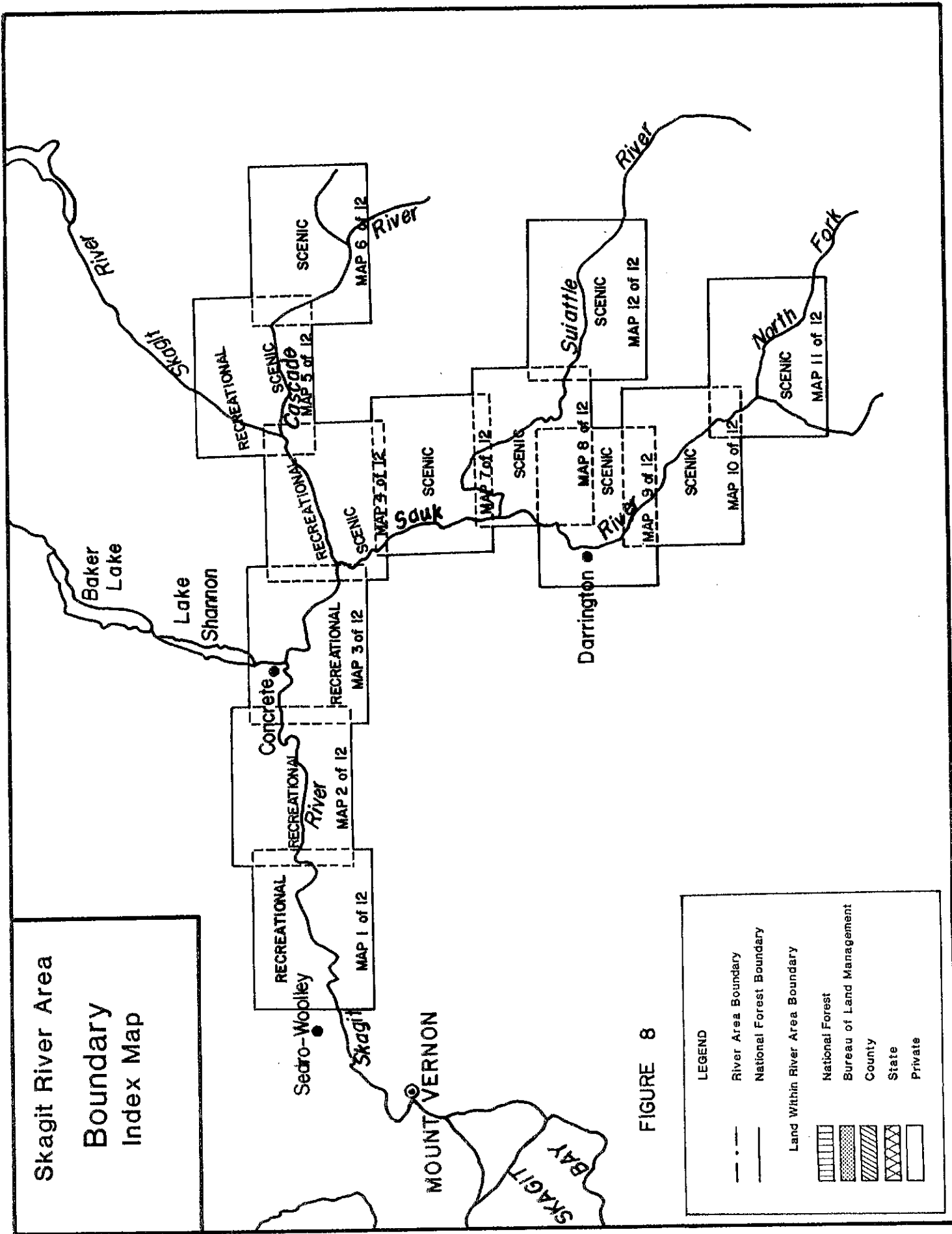
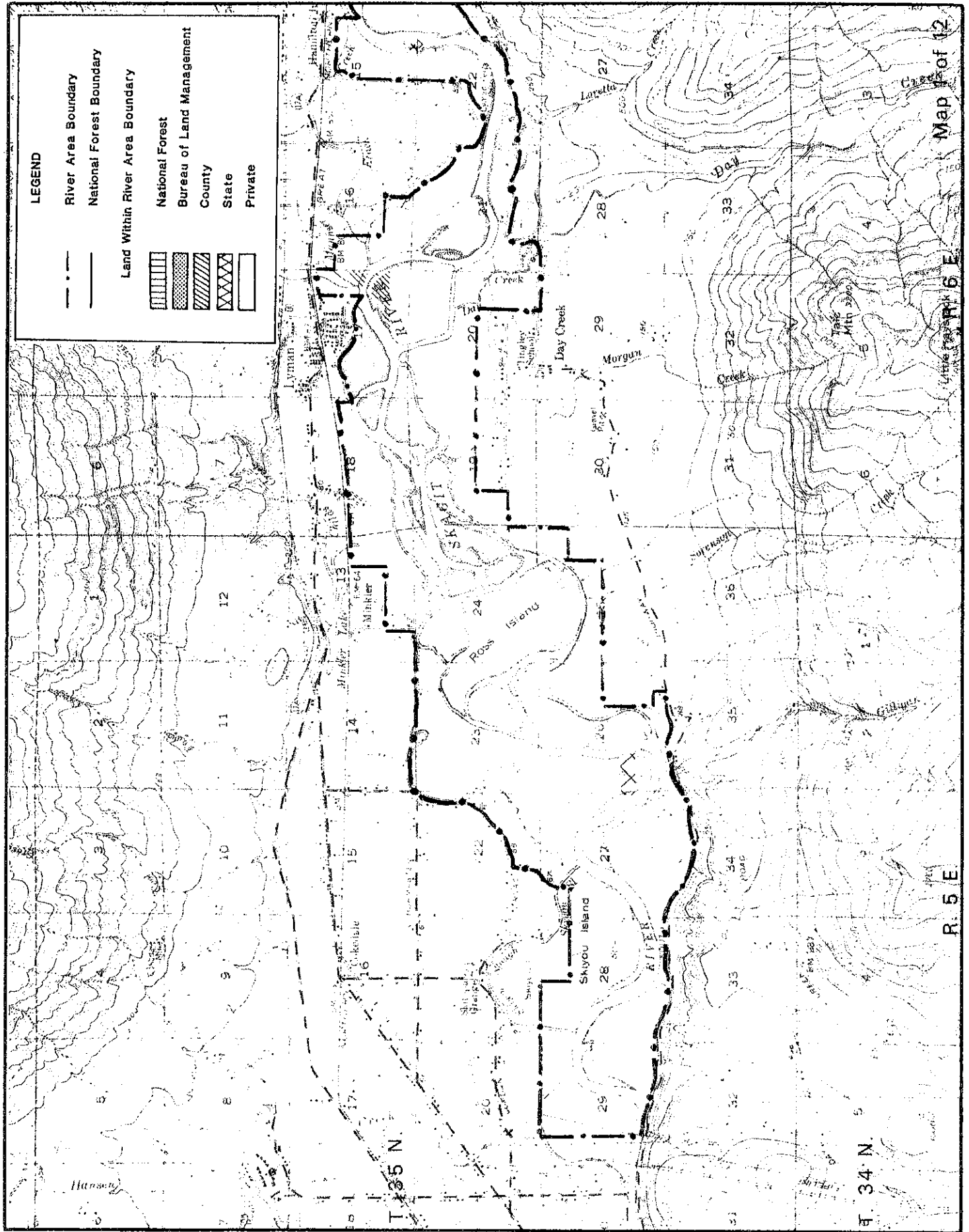


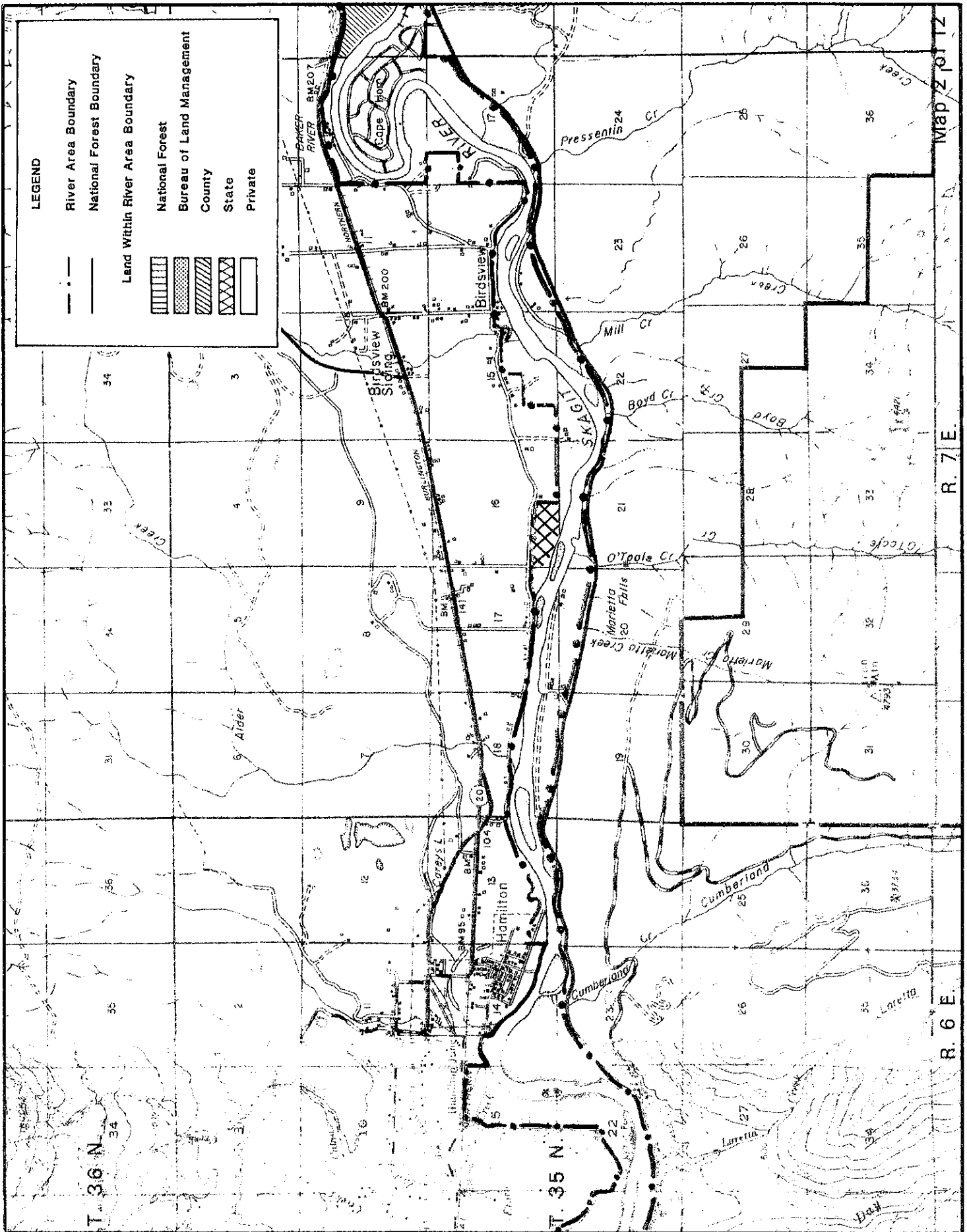
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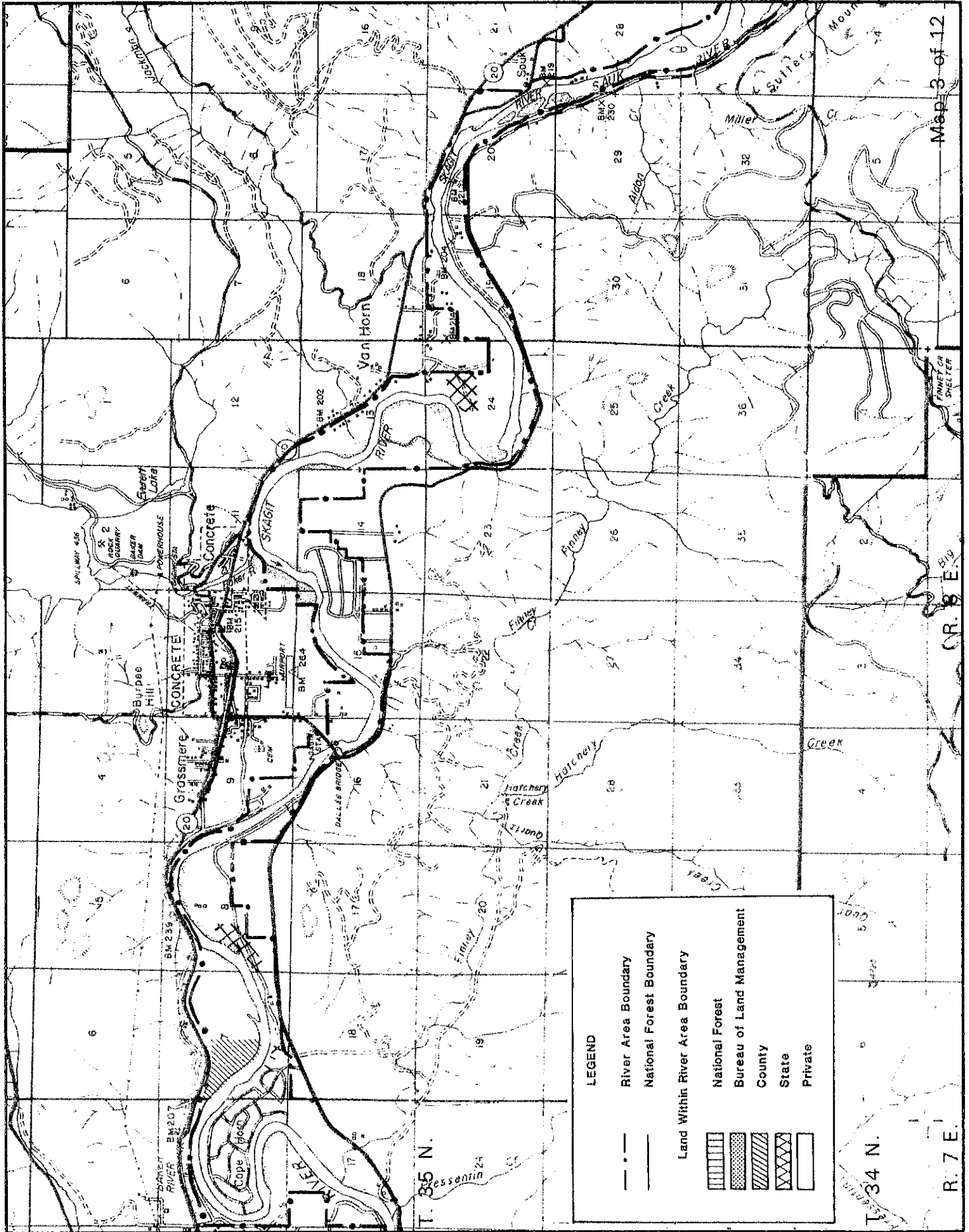


Map 1 of 12

R. 5 E

R. 5 E





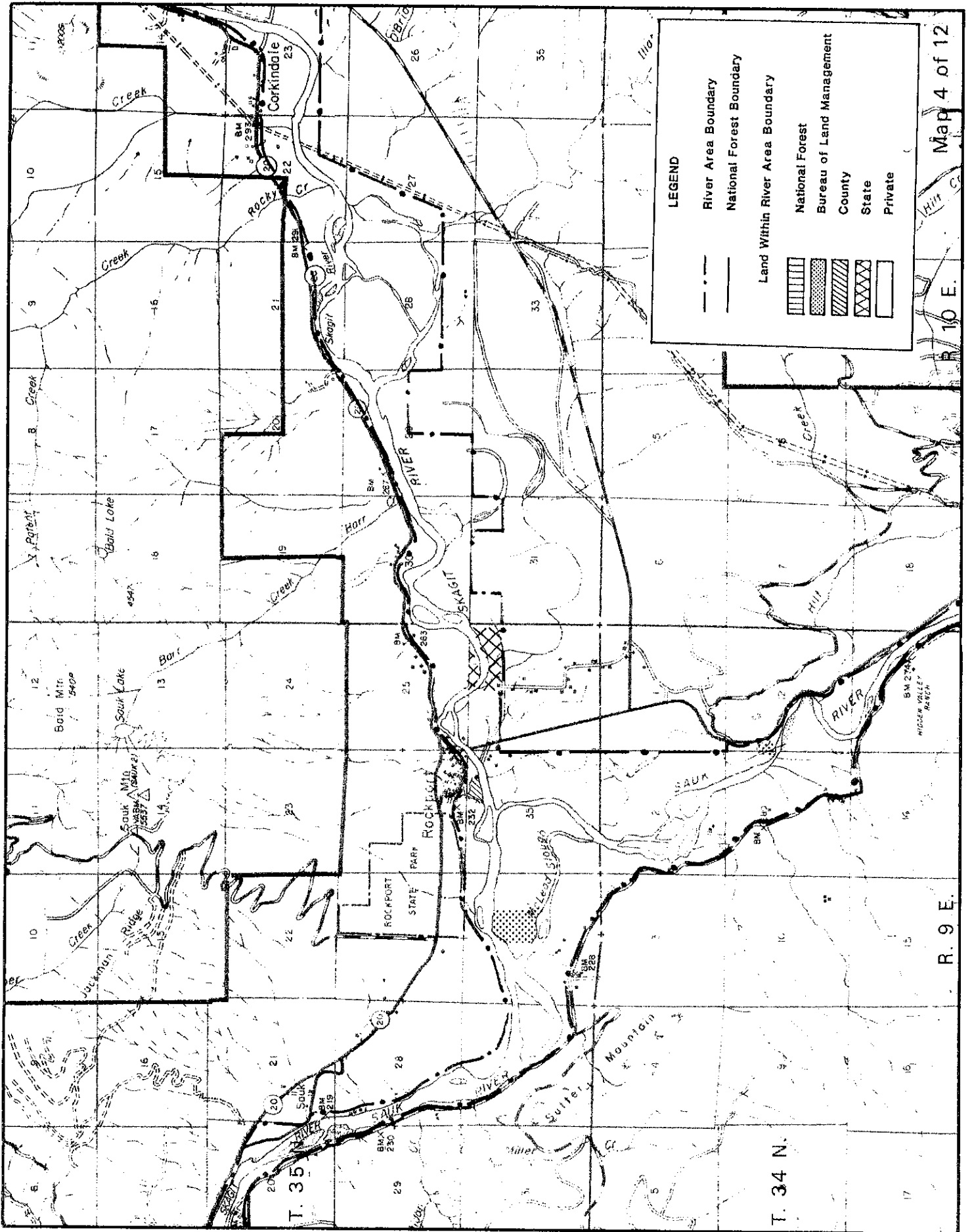
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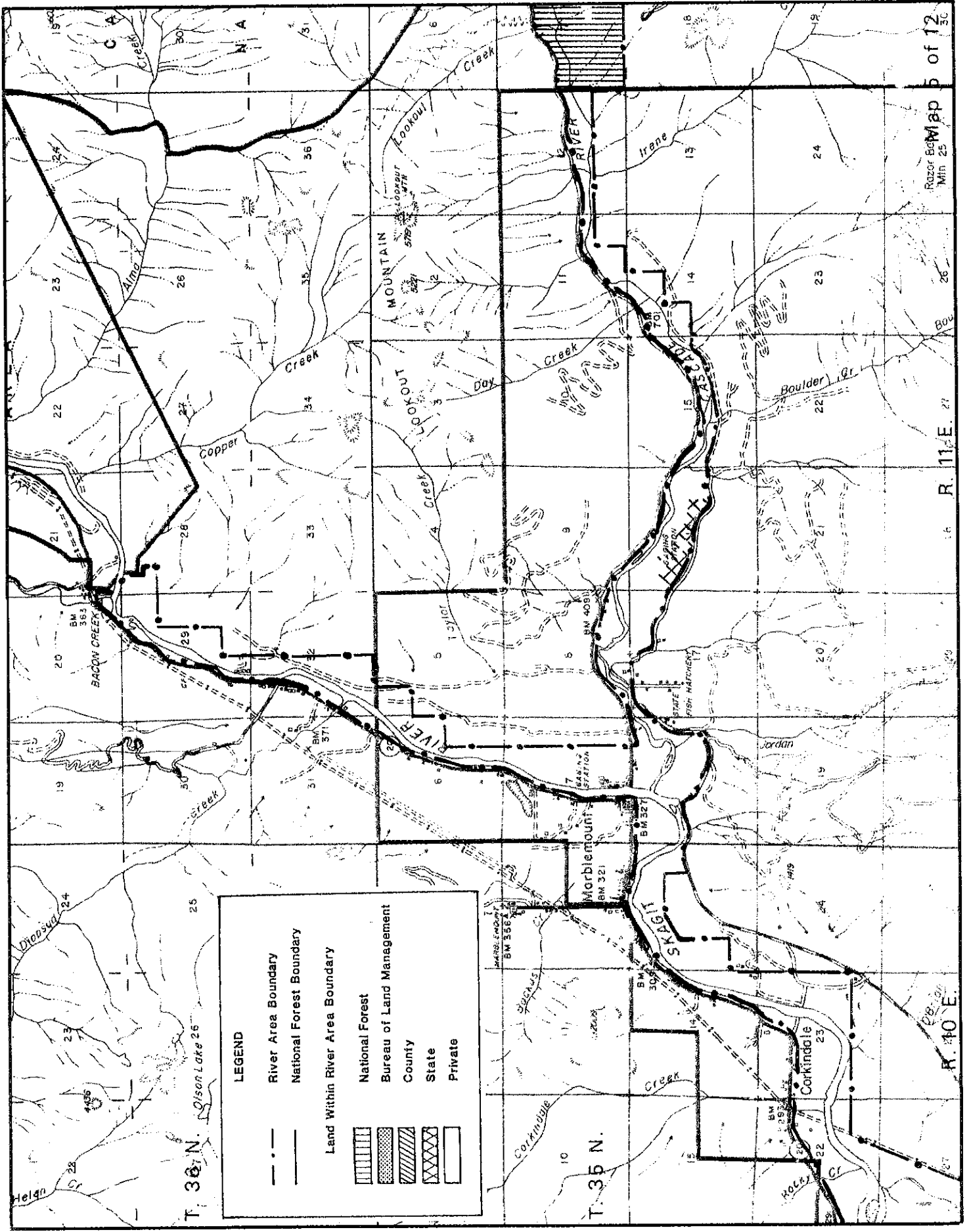
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- National Forest Boundary
- Land Within River Area Boundary
 - ▨ National Forest
 - ▩ Bureau of Land Management
 - ▧ County
 - ▦ State
 - ▤ Private

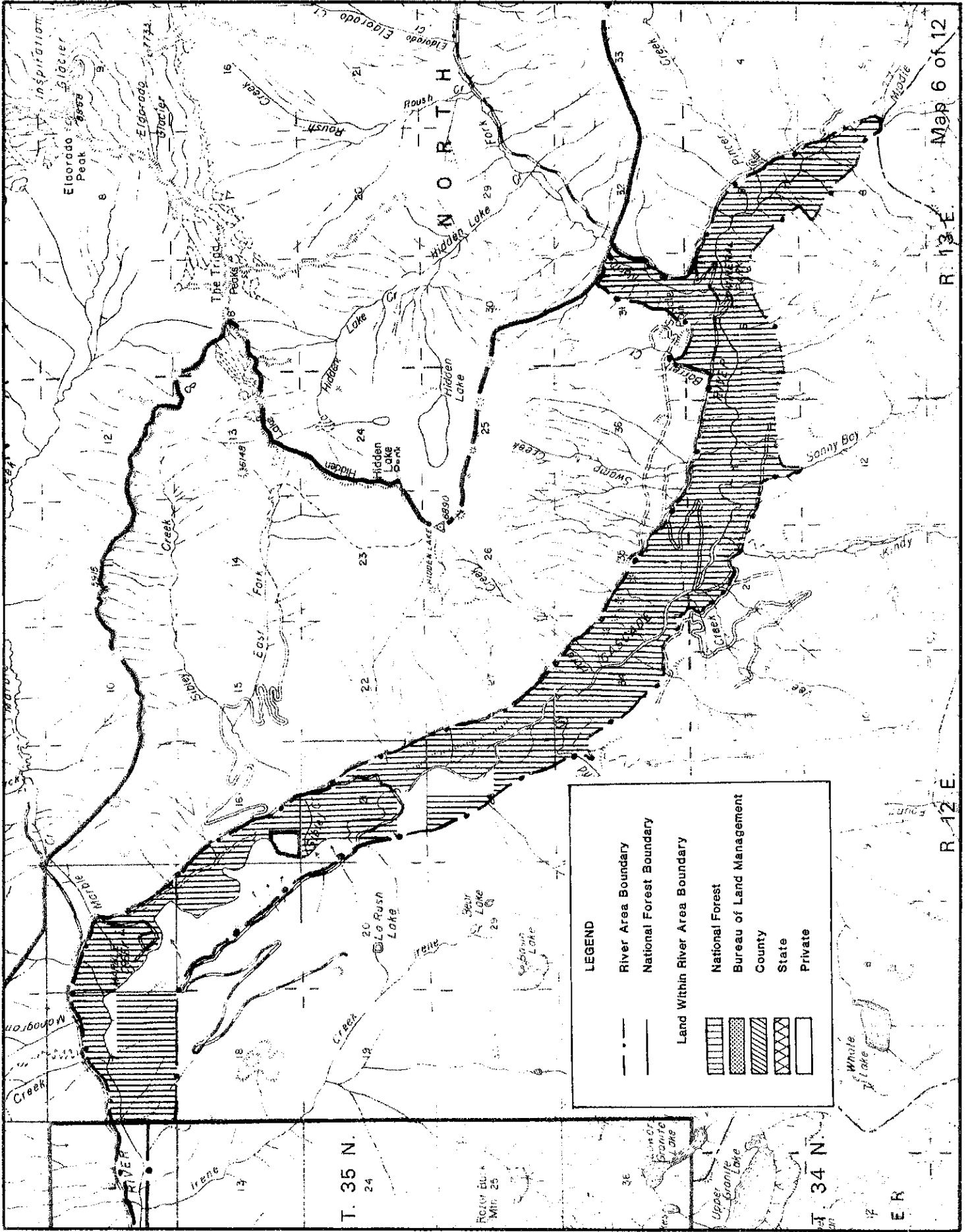
Map 3 of 12

R. 8 E.

R. 7 E.







LEGEND

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- National Forest Boundary
- Land Within River Area Boundary**
 - National Forest
 - Bureau of Land Management
 - County
 - State
 - Private

T. 35 N.
24

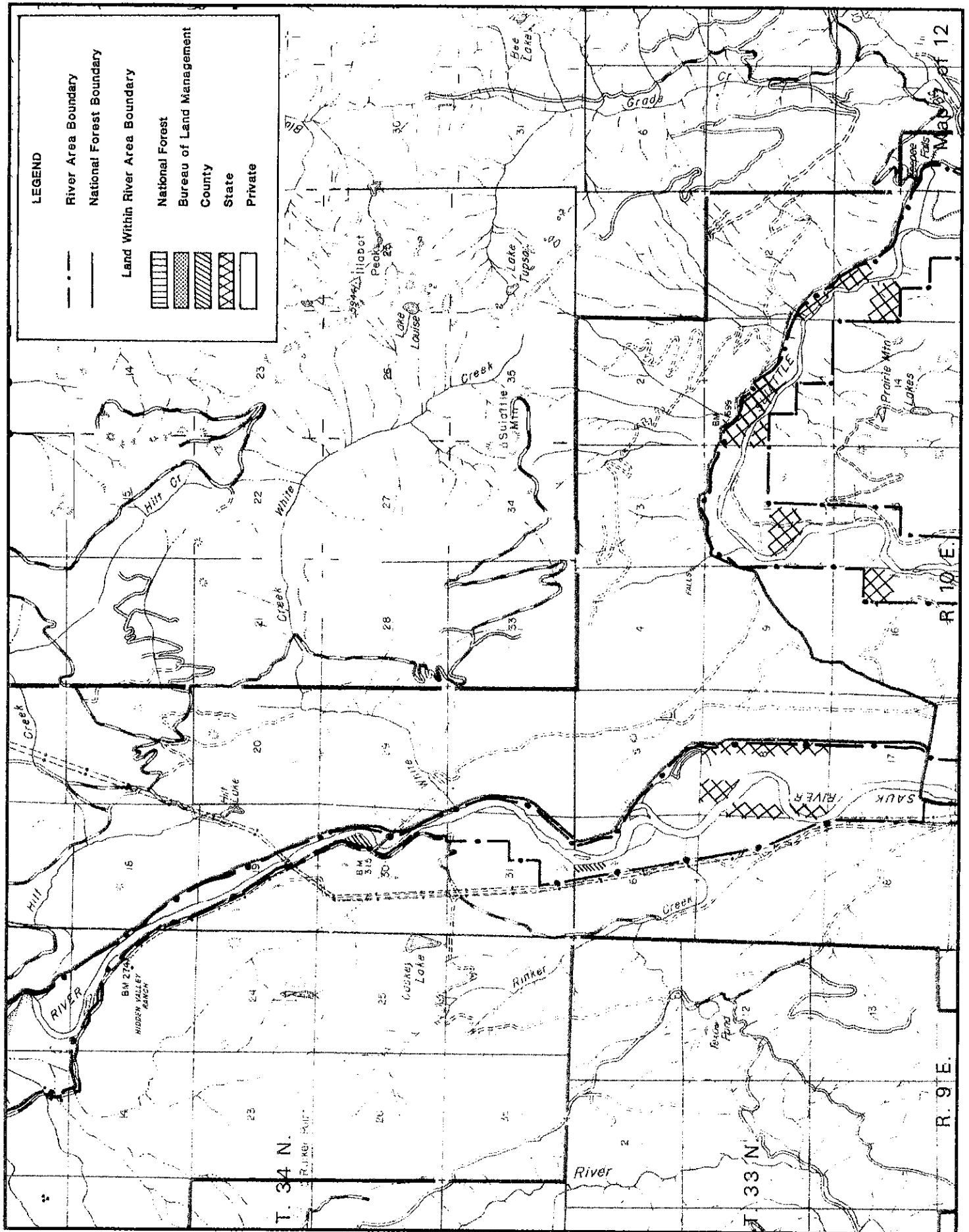
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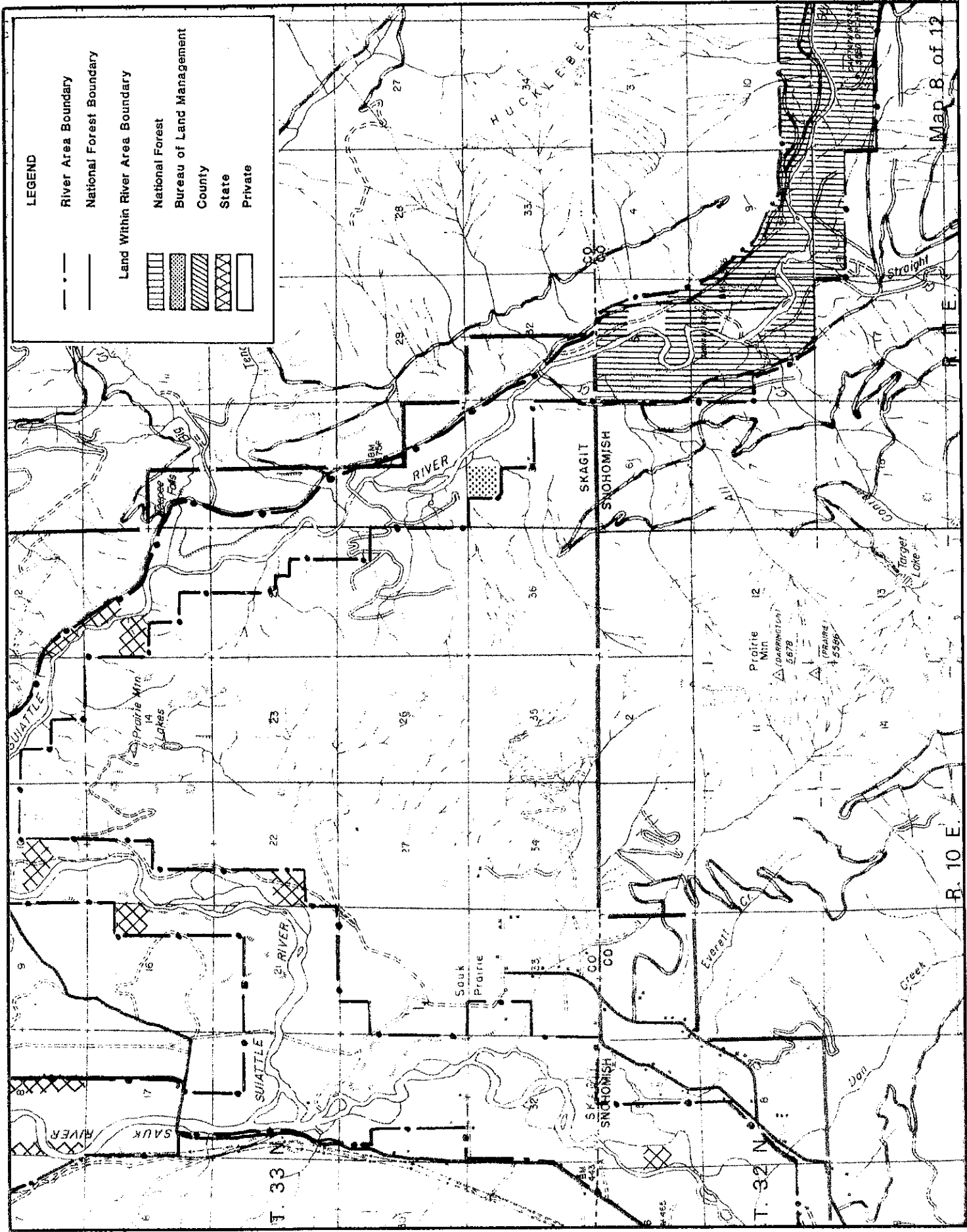
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R. 13 E.

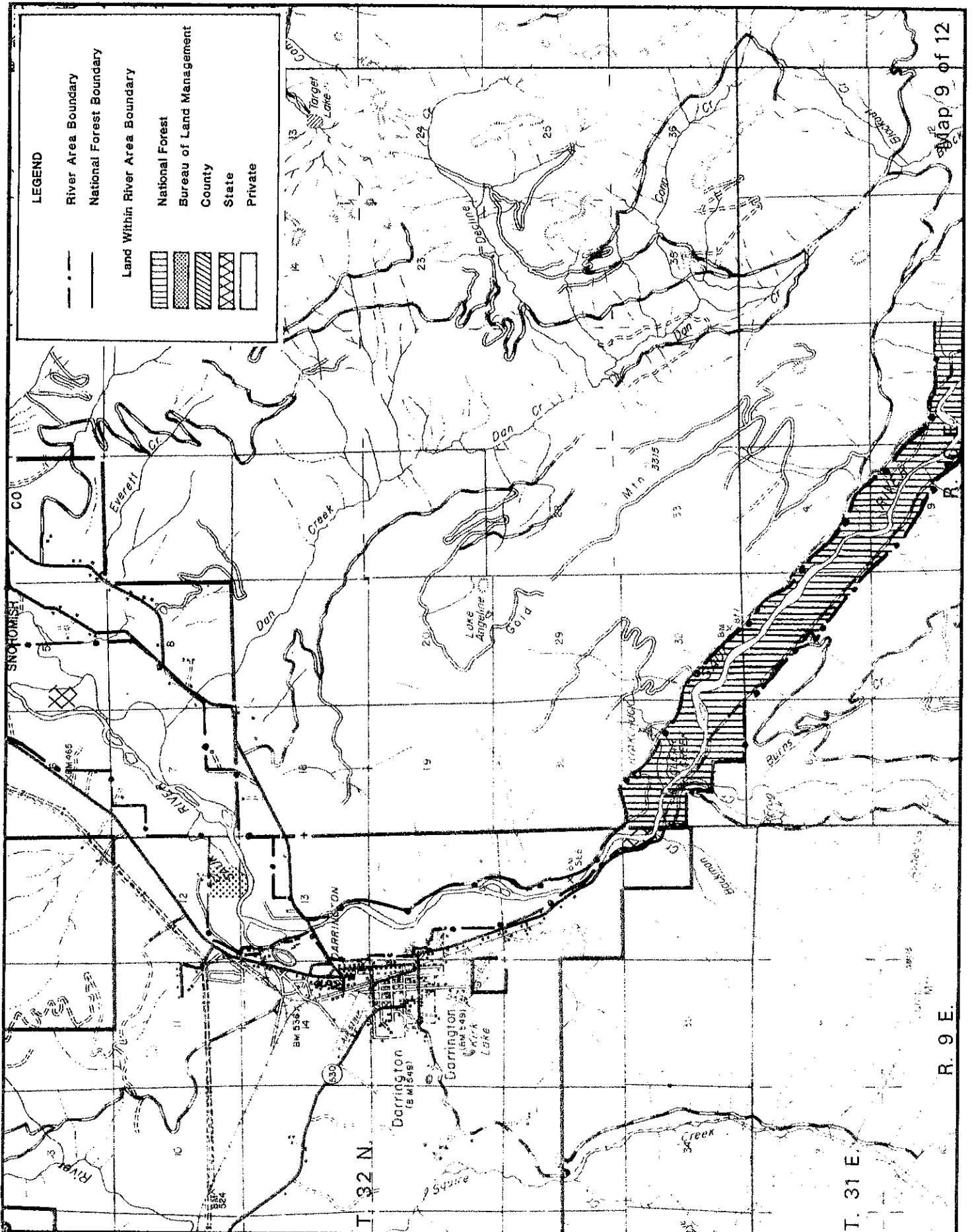
Map 6 of 12



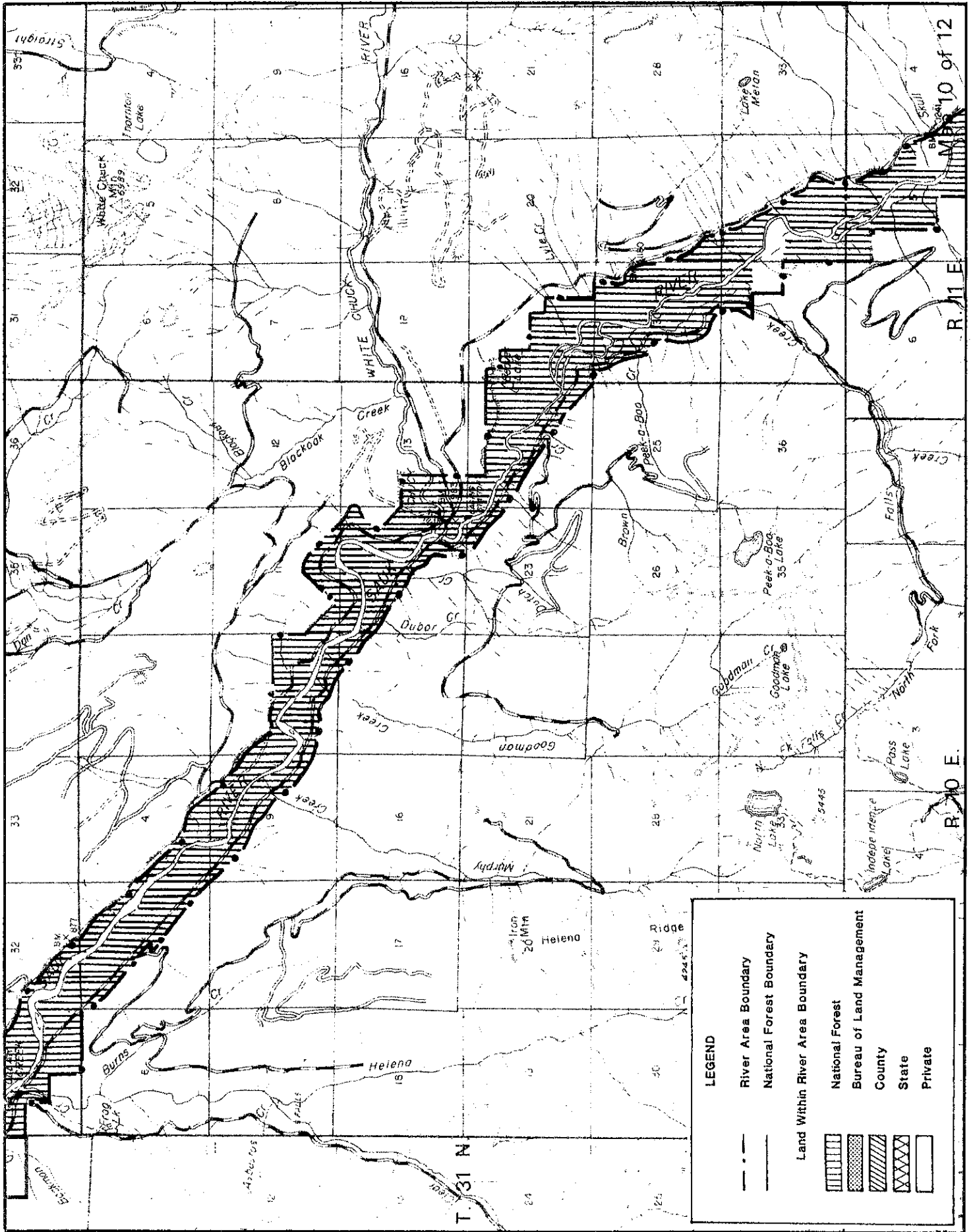


LEGEND

- River Area Boundary
- National Forest Boundary
- - - Land Within River Area Boundary
- [Vertical Lines] National Forest
- [Cross-hatch] Bureau of Land Management
- [Diagonal Lines /] County
- [Diagonal Lines \] State
- [White Box] Private



Map 9 of 12

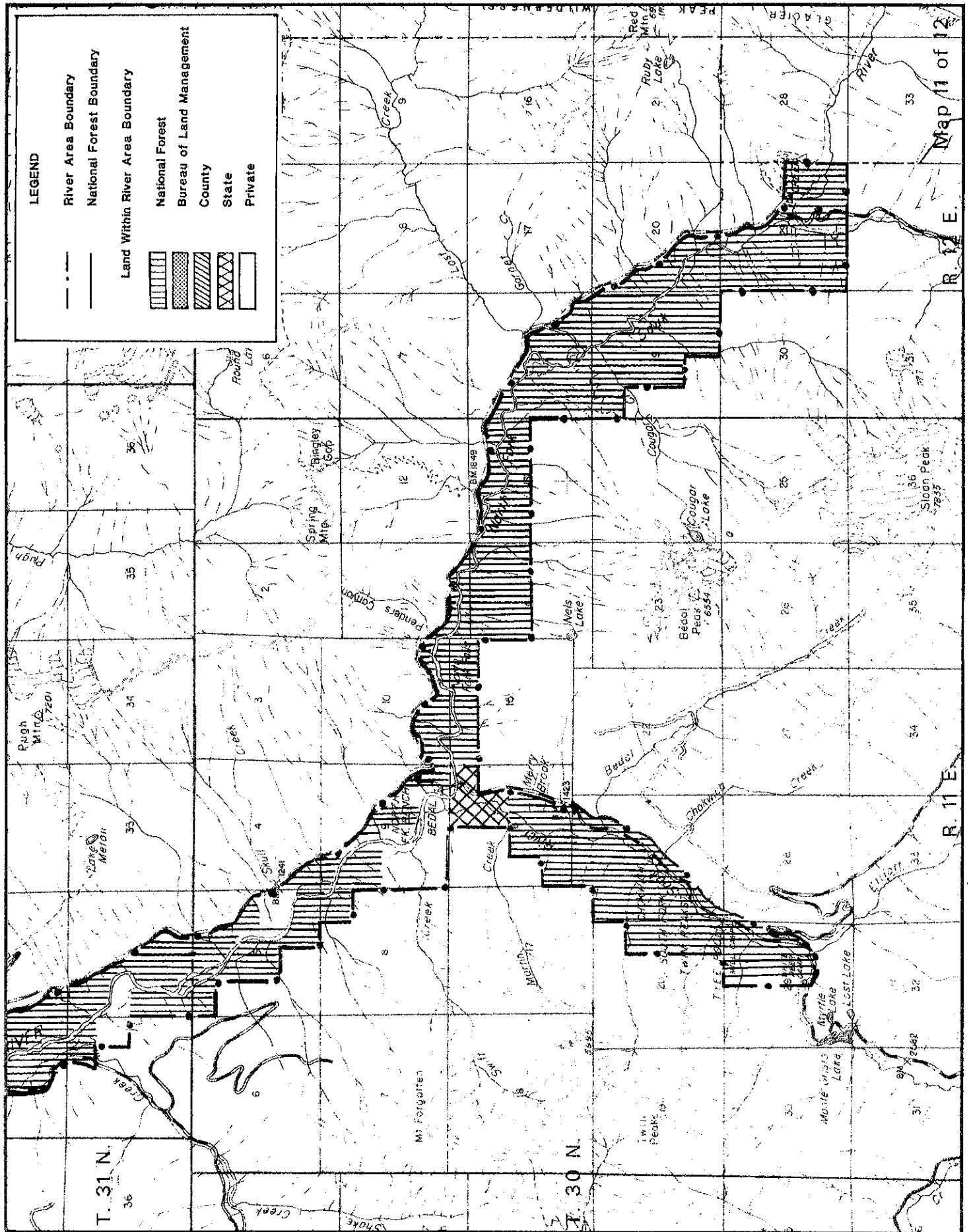


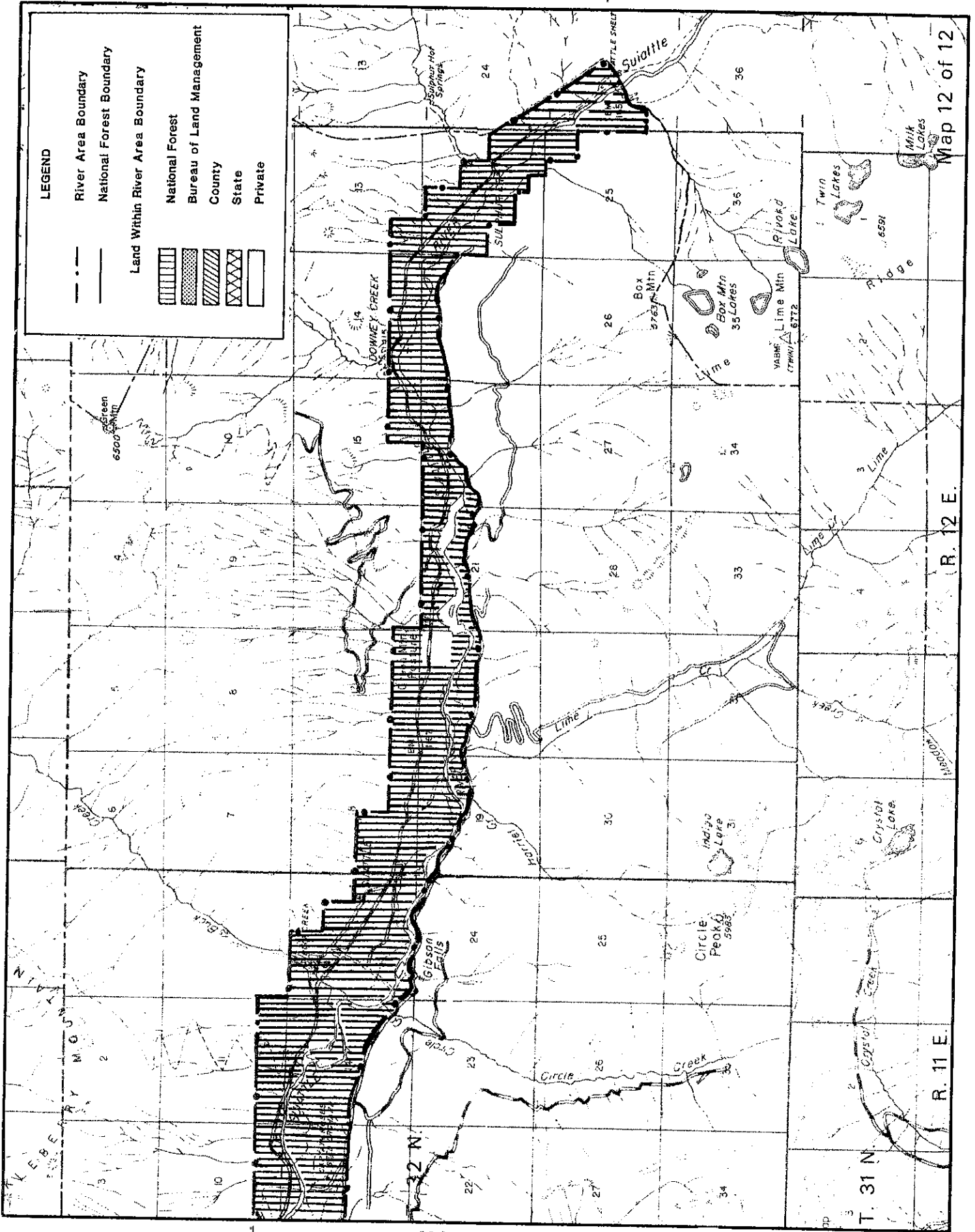
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- River Area Boundary
- National Forest Boundary

Land Within River Area Boundary

- [Vertical lines] National Forest
- [Stippled] Bureau of Land Management
- [Diagonal lines /] County
- [Diagonal lines \] State
- [Cross-hatched] Private





LEGEND

- River Area Boundary
- National Forest Boundary
- Land Within River Area Boundary
- [Vertical Hatching] National Forest
- [Horizontal Hatching] Bureau of Land Management
- [Diagonal Hatching] County
- [Cross Hatching] State
- [White] Private

A14

R. 11 E.

R. 12 E.

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Appendix

APPENDIX G

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SUMMARY AND PRIORITY OF MANAGEMENT	I	A123
DIRECTION TASK _____	II	76



Appendix
G

Summary and Priority of Management Direction Task

Priority A - Immediate actions that must be taken to meet the requirements of W&SR legislation, 1977 E.I.S., and to protect the river environment from immediate modification.

Priority B - Needed to fully maintain the quality and integrity of the river and its corridor.

Priority C - Desirable to optimize public benefits of the W&SR.

<u>Page</u> - Vol II	<u>Task</u>	<u>Priority</u>
5	Review Management Plan in 1985 and 1990	A
7	Develop cooperative agreements with State, county and agencies to protect the river.	A
8	Prepare public access and conservation easement plan (with state and county governments).	A
8	Review and monitor zoning hearings and on-the-ground use. This is to be coordinated with the State and county.	A
8	With each county, prepare sample county and municipal uniform zoning ordinances.	A
9	Prepare a five year Action Plan within six months after the approval of this plan.	A
10	Update plan to adjust to court decision on Boldt (Orrick) ruling.	A
10	Coordinate with Skagit River Cooperative.	A
11	Obtain properties for public use facilities.	B
11	Conduct a comprehensive review of county codes and ordinances.	A
11	Obtain conservation easements to protect properties threatened with development or nonconforming use.	B
13	Conduct an intensive corridor analysis to identify specific noncompatible structures.	C
13	Work with utility companies to diminish visual impact of existing utility crossings.	C
14	Coordinate with Counties on Shoreline Classification.	B
15	Encourage the coordination of all floodplain and wetland management programs.	B

<u>Page</u>	<u>Task</u>	<u>Priority</u>
16	Obtain from the Corps of Engineers a "Memorandum of Understanding", to review all 404 Section 10 permits.	A
16	Prepare or review Environmental Assessments on all bankside modification projects.	A
17	Initiate interim procedures and determine demand and capability of the rivers.	B
17	Monitor existing recreation use.	A
17	Develop additional boat access sites.	B
18	Provide developed river float campsites.	C
19	Develop bank access (fishing) sites.	B
20	Work with counties to provide for bicycle trails.	C
20	Monitor and protect spawning from recreation use on the upper Sauk.	B
22	Reconstruct existing trails and trailheads.	C
22	Construct new trails and trailheads.	C
23	Prepare a cooperative agreement with State and County to locate and construct a trail on the west side of the Sauk.	C
23	Develop day use sites for pleasure drivers.	C
23	Reconstruct existing developments to be screened from the river view.	C
24	Rehabilitate existing developed sites to meet standards for full service level.	C
42	Follow cultural resource protection review process.	A
42	Protect all significant historic or cultural sites.	A
43	Design a VIS plan.	B
43	Obtain and provide information on river stage and forecast.	B

<u>Page</u>	<u>Task</u>	<u>Priority</u>
43	Prepare a user opportunity guide.	A
43	Provide river information at several existing VIS sites.	A
44	Prepare a sign plan.	A
44	Construct and install signs.	B
45	Monitor the Skagit system to determine if use by both drift and motorized boat use becomes a safety hazard.	B
46	Place all commercial river boating use of the Wild and Scenic River System under outfitter/guide permits.	B
46	Working with the State and counties - provide for the protection of private lands from public users.	A
46	Provide, when needed, input to State Game on hunting regulations.	B
46	With other agencies, provide boating regulations as needed.	B
46	Promote public use of designated sites, as opposed to dispersed sites.	B
47	Study the four rivers to determine recreational demand, resource capabilities and proper levels of use and management.	B
47	Monitor and manage river use activities.	A
50	Initiate a wildlife species inventory.	B
50	Monitor trends in Threatened and Endangered species.	A
50	Identify disturbance factors between use activities and eagles.	A
50	Regulate human use if conflicts develop with eagle use.	A
50	Protect eagle habitat rated excellent.	A
50	Establish eagle night roost protection zones within the National Forest.	B
51	Interpret eagles.	C
51	Complete eagle habitat rating for scenic rivers.	A
51	Complete Formal Consultation with U.S. Fish and Wildlife Service.	A

<u>Page</u>	<u>Task</u>	<u>Priority</u>
51	Conduct salmon carcasses inventory on the scenic rivers, and eagle distribution on Cascade River.	B
53	Rate fish habitat.	A
53	Coordinate fish habitat needs with the State.	A
53	Participate in Standing Committee Flow Agreement	A
54	Establish a water monitoring system utilizing existing monitoring programs as much as possible.	A
54	Locate sources of water degradation and prepare action plans to eliminate.	B
54	Coordinate an air quality and visibility monitoring program with State Department of Ecology.	C
55	Work with utility districts to obtain a vegetative management plan.	C
55	Review the Forest Highway 7 proposal along with the double lane standard between White Chuck and Barlow Pass.	A
56	Conduct field studies to locate endangered and threatened plants.	C
56	Develop protection requirements for threatened and endangered plants.	C
58	Continue to monitor insect and disease activity through aerial flights.	A
58	Maintain cooperative fire agreements between the Forest Service and DNR.	A
59	Obtain agreements with the State and counties to review all mining activities outside of the National Forest but within the W&SR boundary.	A
59	Work with county to zone areas of special significance.	B
59	Work with the State to retain the integrity of gravel bars.	A
59	Administer mining laws within the National Forest boundary.	A
60	Implement regulations as needed.	A