

# PACIFIC NORTHWEST TRAIL

A REPORT BASED ON A JOINT STUDY

BY THE

FOREST SERVICE

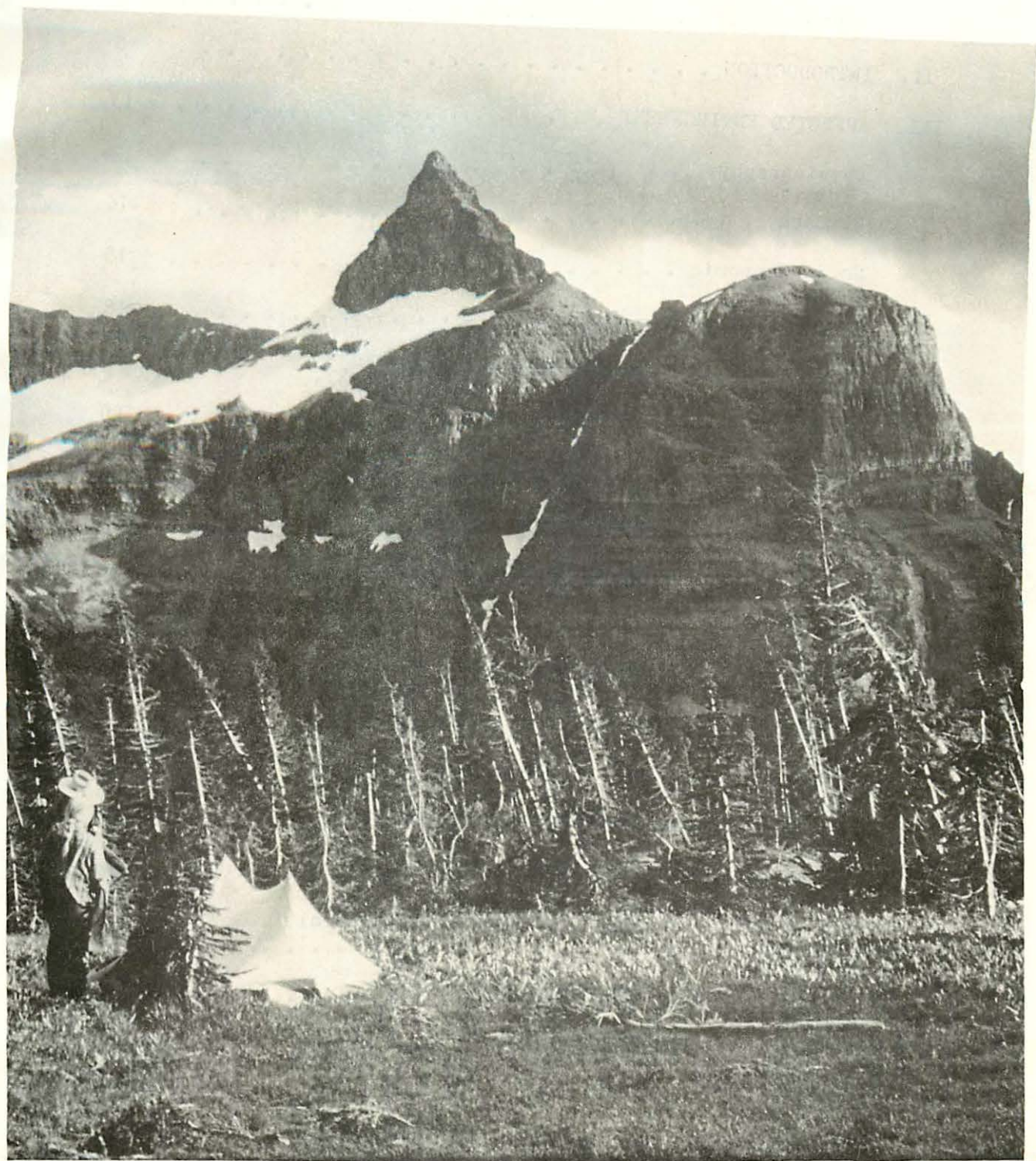
AND

NATIONAL PARK SERVICE



June 1980





Continental Divide in Glacier National Park.

TABLE OF CONTENTS

	<u>Page No.</u>
I. SUMMARY . . . . .	1
II. INTRODUCTION . . . . .	5
III. AFFECTED ENVIRONMENT . . . . .	13
Physiography . . . . .	13
Climate . . . . .	14
Socio-Economic . . . . .	15
Transportation . . . . .	18
Flora . . . . .	18
Fauna . . . . .	20
Land Ownership . . . . .	21
Recreation Opportunities and Demand . . . . .	25
Areas of Environmental Concern . . . . .	29
IV. ALTERNATIVES . . . . .	39
Selection of Alternative Routes . . . . .	39
Alternative Routes Selected . . . . .	46
Analysis of Alternative Routes . . . . .	46
Alternative One, Most Scenic Route . . . . .	46
Alternative Two, Least Costly Route . . . . .	58
Alternative Three, Minimum Environmental Impact Route . . . . .	64
Alternative Four, No Action . . . . .	70
V. FINDINGS AND RECOMMENDATIONS . . . . .	81
Findings . . . . .	81
Recommendations . . . . .	84

MAPS:

1	National Trails System . . . . .	7
2	Location . . . . .	9
3	Regional Transportation . . . . .	19
4	Land Ownership . . . . .	23
5	Regional Recreation . . . . .	27
6	Areas of Environmental Concern . . . . .	31
7	Suggested Routes . . . . .	41
8	Scenic Quality . . . . .	43
9	Costs . . . . .	47
10	Selected Alternatives . . . . .	49
11	Most Scenic - Alternative 1 . . . . .	53
12	Least Cost - Alternative 2 . . . . .	59
13	Minimum Environmental Impact - Alternative 3 . . . . .	65
14	Existing Trail System Density . . . . .	73
15	Season of Use . . . . .	77

TABLES:

1	Selected Population Data for Counties in Study Area . .	16
2	Land Ownership - Most Scenic Alternative . . . . .	55
3	Land Acquisition Cost - Most Scenic Alternative . . . .	56
4	Trail Development Costs - Most Scenic Alternative . . .	57
5	Land Ownership - Least Costly Alternative . . . . .	61
6	Land Acquisition Cost - Least Costly Alternative . . . .	62
7	Trail Development Costs - Least Costly Alternative . . .	64
8	Land Ownership - Minimum Environmental Impact Alternative . . . . .	68

9	Land Acquisition Cost - Minimum Environmental Impact Alternative . . . . .	69
10	Trail Development Costs - Minimum Environmental Impact Alternative . . . . .	70
11	Value of Recreation Benefits Received for each Dollar of Costs . . . . .	84
12	Comparison of Alternative Routes . . . . .	85
13	Views on Pacific Northwest Trail Expressed at Public Meetings . . . . .	90
14	Views on Pacific Northwest Trail Expressed in Written Responses . . . . .	90
15	Hiking and Horseback Riding Demand . . . . .	96
16	Existing Trail Miles on Federal Lands within Study Area . . . . .	98

APPENDIX:

1	Public Involvement . . . . .	89
2	Variety Classes of Scenic Quality . . . . .	93
3	Trail Demand, Supply, and Needs . . . . .	95
4	Benefit-Cost Analysis . . . . .	101
5	Review Comments . . . . .	107

## I. SUMMARY

In 1977, Congress authorized a study to determine the feasibility and desirability of constructing a Pacific Northwest National Scenic Trail extending between the Continental Divide in Glacier National Park and the Pacific Ocean beach of Olympic National Park and designating it a unit of the National Trails System. The study, initiated in 1978, was conducted jointly by the National Park Service and U. S. Forest Service. Ideas were obtained from various individuals, groups, and agencies where the route might best be located since no specific route was defined in the legislation authorizing the study. From the route ideas suggested, four alternatives were identified for analysis: (1) the most scenic route, (2) the least costly route, (3) the route having the minimum environmental impact, and (4) no trail.

Based on an evaluation of the four alternatives, the study determined that a Pacific Northwest Trail would have the scenic and recreational qualities needed for designation as a National Scenic Trail, but concluded that its construction was neither feasible nor desirable and recommended the "no trail" alternative. In arriving at this recommendation, the study found that little new recreation opportunity would be provided if a trail were constructed since extensive trail systems already exist throughout most of the study area; that the cost of land acquisition and construction would be excessive (from \$64 million to \$106 million based on a width averaging 1,000 feet and from \$39 million to \$60 million for a width averaging 500 feet) in comparison with the benefits which would result; and that there would be significant adverse environmental impacts on the grizzly bear and on fragile and frequently over-utilized high elevation areas.



introduction

## II. INTRODUCTION

Public Law 90-543, enacted by Congress and signed by the President in 1968, established a National Trails System. (See Map 1.) The purpose of the system is to provide for the ever-increasing outdoor recreation needs of an expanding population and to promote the preservation of, public access to, travel within, and enjoyment and appreciation of the open air, outdoor areas, and historic resources of the nation. The Act designated as the initial two units of the National System the Appalachian National Scenic Trail in the eastern United States and the Pacific Crest National Scenic Trail in the West. In 1978, the Act was amended to add a new classification of trails, National Historic Trails, to the System and to designate five new units: the Continental Divide National Scenic Trail, and the Oregon, Lewis and Clark, Mormon, and Iditarod National Historic Trails.

The Act also provides for the addition to the National System by Congress of other trails found to be feasible and desirable and lists 22 for study. One of those listed for study is a Pacific Northwest Trail... "extending approximately 1,000 miles from the Continental Divide in Glacier National Park, Montana, to the Pacific Ocean beach of Olympic National Park, Washington, by way of--

(A) Flathead National Forest and Kootenai National Forest in the State of Montana;

(B) Kaniksu National Forest in the State of Idaho; and

(C) Colville National Forest, Okanogan National Forest, Pasayten Wilderness Area, Ross Lake National Recreation Area, North Cascades National Park, Mount Baker, the Skagit River, Deception Pass, Whidbey Island, Olympic National Forest, and Olympic National Park in the State of Washington."

Responsibility for study of a Pacific Northwest Trail was assigned jointly to the U. S. Forest Service in the Department of Agriculture and the National Park Service in the Department of the Interior. The study was initiated in February of 1978 with the appointment of a small study team from the Pacific Northwest Regional Offices of the two agencies. Also early in 1978, a steering committee was established to advise and assist the study team. The steering committee consisted of representatives from the public agencies and private groups having a primary interest in the proposed trail. Included were designees from the States of Montana, Idaho, and Washington; the American Horse Council; the Scott Paper Company, representing private landowners; The Mountaineers; the Bureau of Land Management; the Pacific Northwest Trail Association; and the North Cascades Conservation Council (N.C.C.C.), representing wilderness interests.

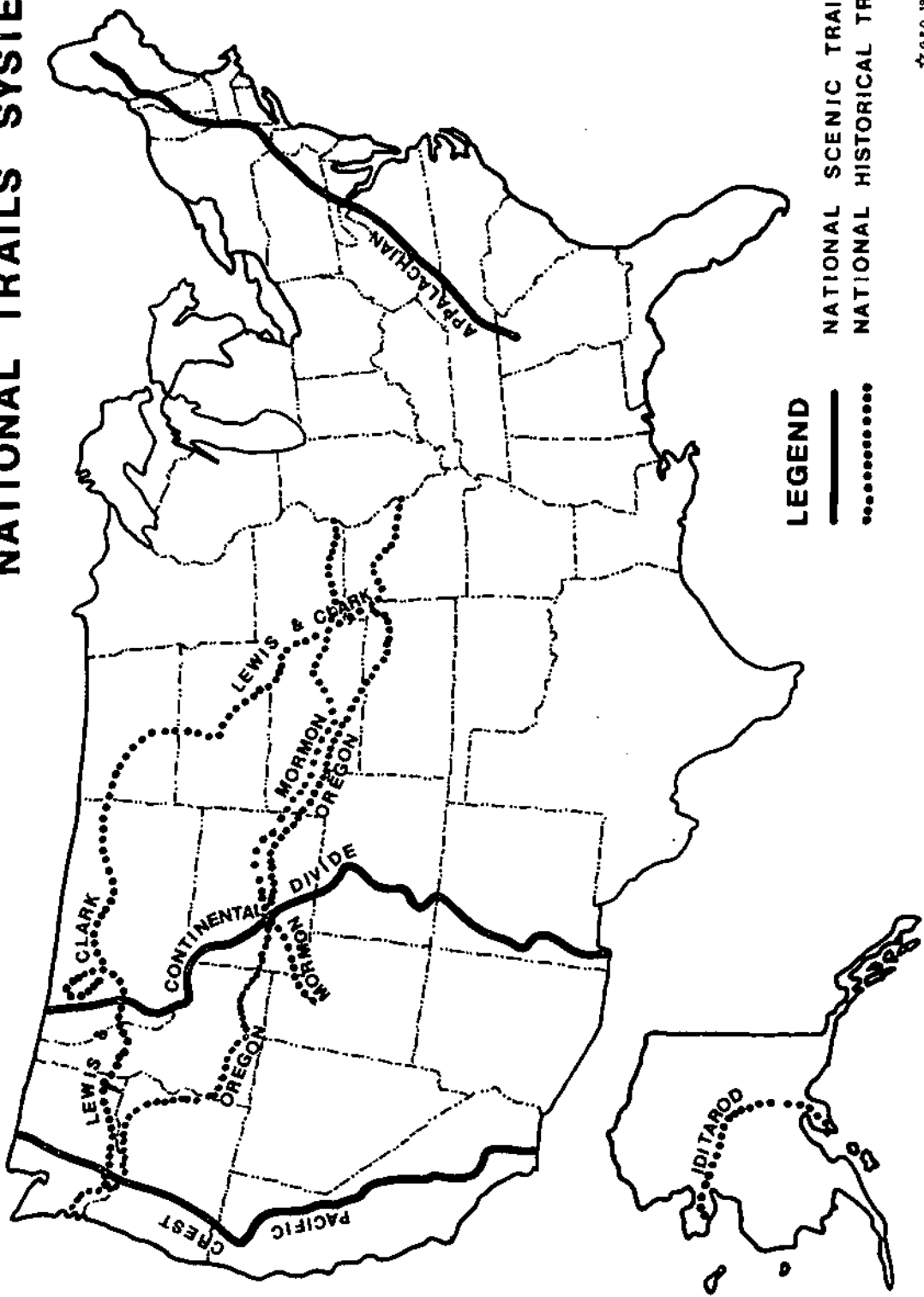
The following sequence of steps were followed in making the study:





Meeting of Steering Committee and Study Team.

**MAP 1  
NATIONAL TRAILS SYSTEM**



**LEGEND**  
 ————— NATIONAL SCENIC TRAILS  
 ..... NATIONAL HISTORICAL TRAILS

☆ G.P.O. 1975-888-409

1. In May 1978, public meetings were held in Seattle, Port Angeles, Mount Vernon, Okanogan, and Spokane, Washington; Bonners Ferry, Idaho; and Kalispell, Montana, to inform residents living in or near the study area about the study and invite their suggestions on whether they thought a trail should be developed, and if so, where they preferred it be located. Prior to the meetings, 1,500 brochures were mailed to agencies, groups, and individuals inviting their participation and views at the meetings or in mailed responses. The meetings were also publicized in the media. See Appendix 1 for a summary and tabulation of results.

2. During the summer and fall of 1978, the study team met with representatives of county, State, and Federal jurisdictions managing lands within the three-state study area. Additional ideas about route location and data to be used in evaluating the various route suggestions were obtained.

3. In November 1978, the study team made an aerial reconnaissance to observe the various suggested routes from a low altitude. Also in November, a meeting was held in Montana with Federal, State, and university interests concerned about the possible adverse effects of such a trail on the grizzly bear. Much of the study area in Montana and Idaho includes critical grizzly bear habitat.

4. In a January 19, 1979, meeting of the study team and steering committee, it was decided that the study report would evaluate four alternatives: most scenic route, least costly route, route having the minimum environmental impact, and no trail.

5. During the winter of 1978-79, data collection was completed, information was collated and evaluated, and a preliminary draft of the study report prepared.

6. In July 1979, a field-level study report was distributed to steering committee members and other interested agencies and organizations for preliminary review and comment, and a meeting of the steering committee and study team was held to discuss the draft.

7. Early in 1980, a draft study report was made available by the Secretaries of the Interior and Agriculture to Federal, State, and local agencies and other involved interests for their review and comment.

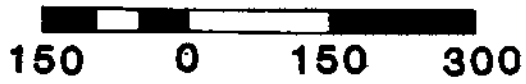
8. As a final step, the study report was revised, based on the comments received, for submission to the Congress. See Appendix 5 for a summary and analysis of the review comments.

The study area was defined by the description contained in Section 5(b) of the Act, as quoted above. In general terms, this encompasses the northern one-fourth of the States of Washington, Idaho, and Montana, from the Pacific Ocean to the Continental Divide, as shown on Map 2.

# PACIFIC NORTHWEST TRAIL STUDY AREA

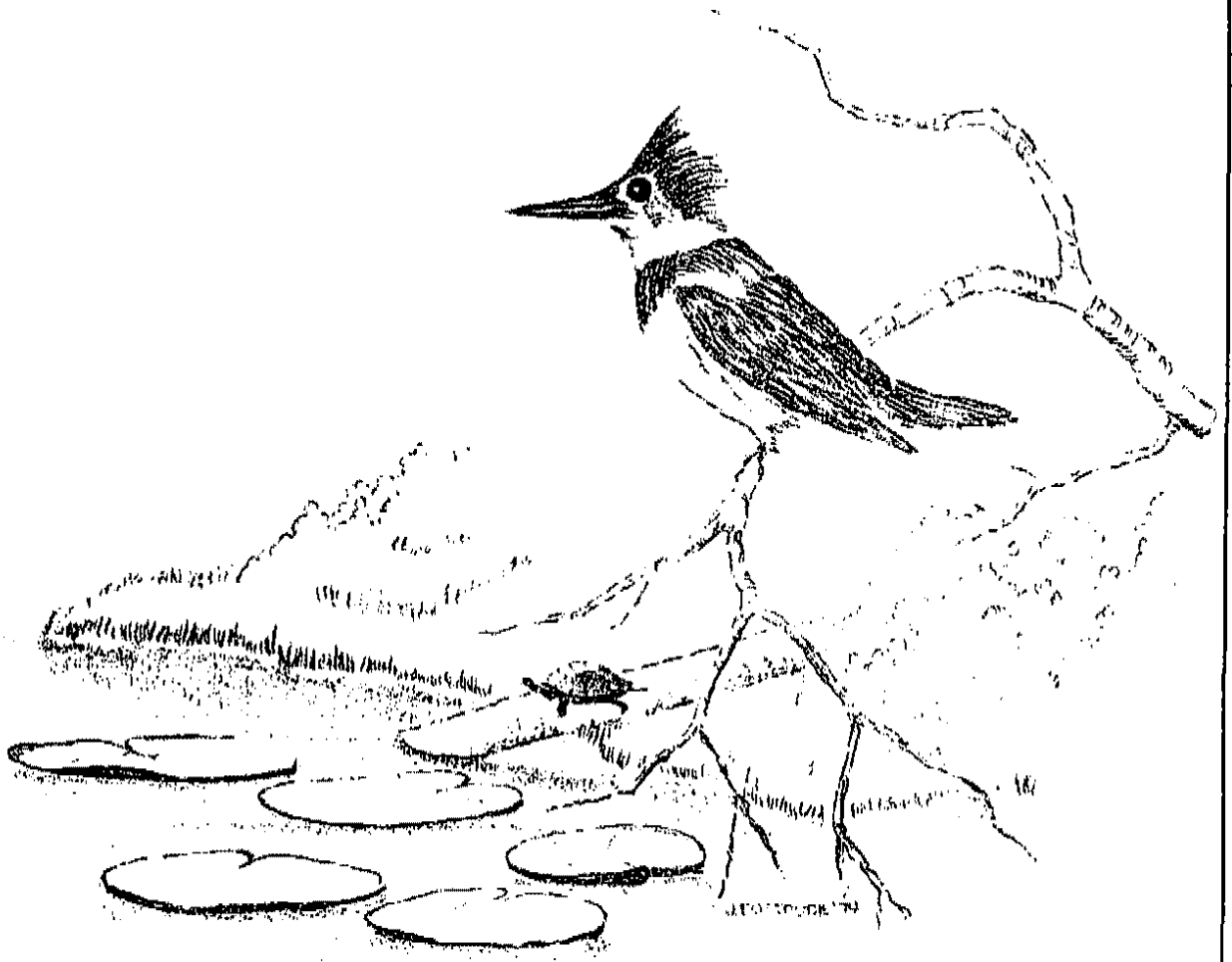


scale in miles



## MAP 2 LOCATION

 Study area



**affected  
environment**

### III. AFFECTED ENVIRONMENT

The study area includes a wide swath of some of the Nation's most scenic and diverse landscapes, featuring major mountain ranges, ocean beaches, a large island, verdant forests, high alpine meadows, and attractive river valleys.

#### Physiography

Most of the study area is mountainous. There are three major mountain ranges and seven lesser ranges. The major ranges are the Olympics of western Washington, Cascades of central Washington, and Rockies of western Montana. In between the Cascades and the Rockies are the Okanogan, Kettle, Selkirk, Purcell, Cabinet, Salish, and Whitefish Mountains.

The Olympic Range occupies the central portion of the Olympic Peninsula, bordered on the west by the Pacific Ocean, on the north by the Strait of Juan de Fuca, and on the east by Puget Sound. These are geologically new mountains with more than a dozen peaks over 7,000 feet, topped by Mount Olympus at 7,965 feet.

The Cascades are a broad belt of mountains extending north into Canada and south through Washington and Oregon and into northern California. The two dominant peaks within the study area, both volcanoes, are Mt. Baker (10,778 feet) and Glacier Peak (10,541 feet).

The Rocky Mountains are the backbone of the continent. Their west-flowing waters drain into the Pacific Ocean and east-flowing into the Gulf of Mexico. Within the study area, the heart of the range is contained within Glacier National Park. There, dozens of peaks rise above 8,000 feet and several over 10,000 feet.

Within the study area, the Olympics, Cascades, and Rockies are characterized by sharp peaks, large areas above timberline, and extensive evergreen forests. They achieve their rugged beauty through the diverse geologic and climatic process of formation, sedimentation, upheaval, volcanic action, and finally water and glacial erosion. Vegetation for all three ranges generally varies with elevation. Forests and meadows on lower slopes transcend into tundra and rock at timberline. The forests of the study area are sought after for timber production. The lesser mountain ranges lying between the Cascades and Rockies run, generally, north-south, and are separated by river valleys.

Puget Sound is an inland sea carved by glaciers. It is the largest glacier-carved basin in the West. The Sound's beaches are broken occasionally by rock outcroppings; numerous streams, creeks, and rivers; and wide expanses of estuaries, marshes, and deltas. The Olympic Mountain Range was once an offshore island and now provides climatic protection for much of the Puget Sound area. Much of the land bordering Puget Sound is densely populated.

Whidbey Island, second in size only to New York's Long Island within the 48 contiguous states, extends south from near the Skagit River delta to just west of Everett, Washington. It is 40 miles long and in most places only a few miles wide. Except where it has been cleared for habitation or cultivation, the island is forested.

#### Climate

Climate influences all outdoor recreation activities, and hiking or trail riding are no exceptions. Rain, snow, heat, cold, and wind individually or collectively affect participation.

The heaviest annual precipitation in the conterminous United States occurs on the western slopes of the Olympic Mountains and the Cascade Range, exceeding 200 inches in the Olympic Mountains. From the crest of the Olympic Mountains, annual precipitation decreases to about 35 inches in the Puget Sound area, then increases again to 100 inches or more along the crest of the Cascade Range. Nearly all precipitation comes with storms moving in from the ocean, and about two-thirds of the year's total falls during the period from October to March. At lower elevations, the precipitation is largely rain, but in the mountains, snow.

East of the Cascade Range in central Washington, precipitation decreases to 10 inches or less in the Columbia Basin. General areawide storms moving in from the west bring the bulk of the precipitation, but late spring and summer storms are sufficiently common to produce significant runoff and occasional floods which impede trail use.

In the Rocky Mountains of Montana, annual precipitation ranges to over 100 inches along the west slope. Intense local storms sometimes occur along the western side of the Continental Divide, occasionally producing flash floods in the smaller tributaries.

West of the Cascades, temperatures in the lower lying areas range from a January average of 36° F. to a July average of 62° F. The frost-free season ranges from 200 to 240 days in length, covering the period April to November. Mountain areas are colder and in the higher mountain passes, frost may occur in every month of the year.

East of the Cascades, temperature patterns are quite different. Average January temperatures range from 20° F. in the mountains to 32° F. in the warmer valley areas, and average July temperatures range from 60° F. to 76° F. At most stations, temperatures well above 100° F. have been recorded in summer, and temperatures of -30° F. are fairly common in winter, with some -50° F. or below having been recorded.

At lower elevations on the western side of the Rocky Mountains, the average annual temperatures is about 50° F. but at the higher elevations, it is less than 40° F. Average January temperatures range from below

20° F. in the mountains to just above freezing in the lower elevations. Average July temperatures range from 60° F. to 75° F. The lowest temperature recorded was -52° F. at the Continental Divide. Temperatures above 115° F. have been recorded in eastern Washington, and over 100° F. at nearly all stations. Generally, the frost-free season extends from mid-May to mid-September, although in the higher mountains frost may occur any month of the year.

Maximum wind velocities of over 100 miles per hour have been recorded all along the Washington coast. This usually occurs in the fall and winter seasons. East of the Cascade Mountains in eastern Washington, the greatest wind movement occurs in the spring, but the winds are generally light. In the northern Rocky Mountains, velocities of over 70 miles per hour sometimes occur for short periods.

#### Socio-Economic

The population density of western Montana, Idaho Panhandle, and eastern Washington counties is extremely low. West of the Cascades, the population density is much higher, except for Jefferson County on the Olympic Peninsula. The percent of urban population also is substantially higher in almost every county in the western portion of the study area. Those counties in the study area's western segment showing higher population density and a higher urban percentage also expect increased population growth within the next 2 to 3 decades. The two western Montana counties also exhibit somewhat similar growth trends. The population of the study area, overall, is expected to almost double between the years 1970 and 2000. Even then, however, population density will remain relatively low. Table 1 summarizes population data for the 13 counties in the study area. The discussion of economic activity following the table is based on information from the various county planning departments.



Table 1. Selected Population Data for Counties in Study Area\*  
(to the nearest thousand)

	<u>Population</u>			<u>Sq.Mi.</u>	1970	1970
	<u>Year</u>				<u>Population</u>	<u>Urban</u>
	<u>1960</u>	<u>1970</u>	<u>2000</u>		<u>Density</u>	<u>Population</u>
					<u>(per sq.mi.)</u>	<u>(percent)</u>
<u>Western Montana</u>						
Flathead	33,000	39,000	95,000	5,280	8	40
Lincoln	13,000	18,000	30,000	3,728	5	18
Subtotal	46,000	57,000	125,000			
<u>Idaho Panhandle</u>						
Bonner	16,000	16,000	16,000	1,910	9	25
Boundary	6,000	6,000	6,000	555	11	45
Subtotal	22,000	22,000	22,000			
<u>Eastern Washington</u>						
Pend Oreille	7,000	6,000	5,000	1,402	5	-0-
Stevens	18,000	17,000	34,000	2,481	7	21
Ferry	4,000	4,000	4,000	2,202	2	-0-
Okanogan	26,000	26,000	26,000	5,301	5	16
Subtotal	55,000	53,000	69,000			
<u>Western Washington</u>						
Whatcom	70,000	70,000	184,000	2,126	33	51
Skagit	51,000	52,000	73,000	1,735	30	46
Island	20,000	27,000	84,000	212	128	34
Subtotal	141,000	149,000	341,000			
<u>Olympic Peninsula</u>						
Clallam	30,000	35,000	55,000	1,753	20	47
Jefferson	10,000	11,000	21,000	1,805	6	50
Subtotal	40,000	46,000	76,000			
<b>Total</b>	<b>304,000</b>	<b>327,000</b>	<b>633,000</b>			

\*1970 Census of Population, Number of Inhabitants, Department of Commerce, Bureau of the Census, for the States of Montana, Idaho, and Washington. Projections of population to the year 2000 were based on county comprehensive plans or estimated from data in 1972 OBERS Projections, Regional Economic Activity in the U. S., U. S. Water Resources Council, Washington, D. C. The boundary of the 13 counties selected for analysis differs slightly from the boundary of the study area. Counties were used because of the availability of data.

### Western Montana

Economic activity in Flathead County is based predominately on agriculture, timber, metals, and the recreation and tourism industry. Lincoln County, on the other hand, relies heavily on timber and forest products with agriculture comprising a very small percentage of total activity. Recreation and tourism are growing, but still remain a relatively minor part of the total county economy.

### Idaho Panhandle

Second only to the timber industry, recreation and tourism is increasing rapidly in Bonner County. Government employment and retail sales are also important activities. Intensive agriculture is relatively insignificant, but there are some large dairy farms within the county. Unlike Bonner, Boundary County is heavily dependent on both timber and agriculture with recreation and tourism contributing little to the economic base.

### Eastern Washington

Pend Oreille County, in the extreme northeast corner of the State, is heavily dependent on the timber industry with recreation and tourism a distant second. There is no extensive agricultural activity but a few small manufacturing plants add to the economic base. Like Pend Oreille, Stevens County, to the west, relies heavily on the timber industry with some metal processing also taking place. Recreation and tourism are relatively minor but have been growing in recent years.

West in Ferry County, timber and wood processing is the number one economic activity followed by cattle raising. There is a metals plant (gold) which, combined with recreation and tourism, accounts for most of the remaining economic activity.

Okanogan County is also heavily reliant on timber; however, unlike the counties to the east, agriculture actually outranks timber and is the number one economic activity in that county. Recreation and tourism are third with government employment closely following. There is little manufacturing activity other than that related to timber processing.

### Western Washington

Unlike the counties to the east, Whatcom County has an extremely diversified economy including heavy industry, chemical processing, a strong agricultural base, and substantial recreation and tourism activity. Skagit County, south of Whatcom, however, exhibits economic activities much like those counties east of the Cascades. Agriculture is the number one pursuit with timber number two. Commercial fishing adds a substantial amount to the economic base. Recreation and tourism are fourth in importance. To the west, Island County is somewhat different from

any of the other counties. There, recreation and tourism lead all activity. Agriculture also is important, as are a number of military bases.

### Olympic Peninsula

West of Puget Sound in Clallam County, economic activities are similar to those east of the Cascades. The two major industries are timber and tourism. The economy of Jefferson County, south of Clallam County, follows a similar pattern. Once again, timber production provides the major economic base while retail trade and services are second and third in importance. Agriculture is of minor importance.

### Transportation

Large portions of the study area are served by Federal, State, County, or forest roads. The exceptions are most of Olympic National Park, large areas in the North Cascades, the Pasayten Wilderness, and much of Glacier National Park. Many of the roads are closed in winter.

Bus and scheduled air service are available to the major cities and towns, and rail service (AMTRAK) is available to the cities of Seattle, Spokane, Yakima, and Pasco, Washington; Sandpoint, Idaho; and Glacier Park, Whitefish, and Libby, Montana.

Map 3 shows major Federal highways and the points reached by rail and air.

### Flora

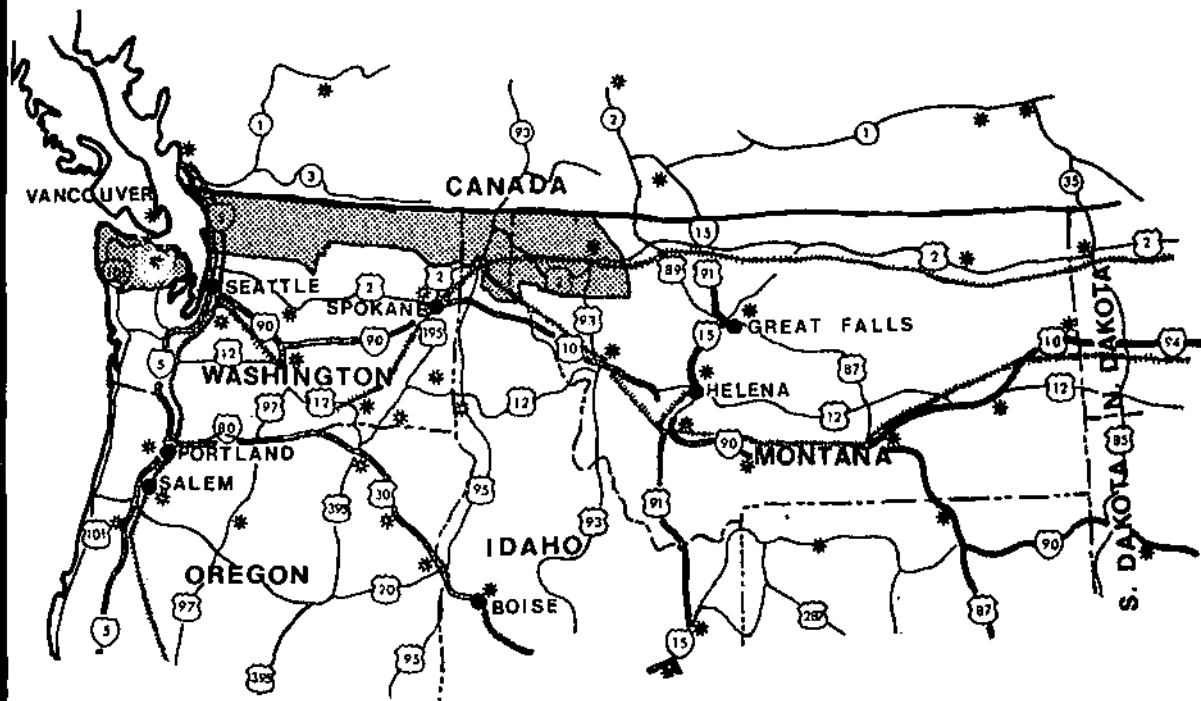
The nature of vegetation in the study area is determined by the pattern of precipitation. With the prevailing westerly winds, air heavily laden with moisture from the ocean dumps 200 inches of precipitation annually on the Olympics, 100 inches on the Cascades, and 70 inches on the Rockies. The areas in between receive substantially less--35 inches on Puget Sound and 10 inches in eastern Washington.

As a result, the western flank of the Olympics supports a lowland temperate rain forest dominated by western hemlock, Sitka spruce, grand fir, and Douglas fir. Beneath is a dense understory of vine maple and bigleaf maple draped with lichens. Ferns and mosses form a lush ground cover.

The central and eastern portion of the Olympic Peninsula contains one of the finest coniferous forests in the world, including Douglas fir, western red cedar, and western hemlock.

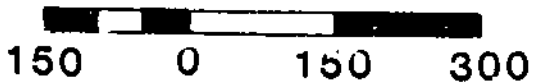
The Puget Sound area has special plant communities in addition to the western red cedar, red alder, western hemlock, Douglas fir, bigleaf maple, Oregon white oak, Oregon ash, and black cottonwood. The special

# MAP 3 REGIONAL TRANSPORTATION



↑  
NORTH

scale in miles



## LEGEND

- Interstate Highway
- Federal Highway
- +--+ Railroad
- \* Airport
- ▨ Study Area

communities include prairie vegetation and stands of lodgepole pine, western white pine, and ponderosa pine. The presence of those diverse plant communities reflects the rain shadow effect of the Olympic Mountains, as well as the different soils of the area.

On the western slope of the Cascades at medium and higher elevations, mountain hemlock and silver fir dominate the forest canopy. Those same species are dominant at the higher elevations on the eastern Cascade slope.

Eastward in the Okanogan, the vegetation includes a mixture of big sagebrush, bluebunch wheatgrass, bitterbrush, and Sandberg's bluegrass. The valley bottoms characteristically contain western yarrow, Idaho fescue, swertia, western hawkweed, rose, and hawthorn, as well as scattered ponderosa pine.

The major tree species through the Idaho Panhandle to the Continental Divide are Douglas fir, subalpine fir, western red cedar, grand fir, western larch, and ponderosa pine. Ponderosa pine is most common on drier sites and at lower elevations. Grasslands occur in the intermountain valleys with bluebunch wheatgrass, sagebrush, needle and thread, and fescue the dominant components. Deciduous trees, primarily cottonwood and willow, line the rivers and streams.

#### Fauna

The study area, because of its large size and many diverse habitats, displays a wide variety of interesting fauna. A number of species are of special significance. The rivers of the Olympic Peninsula and the Cascades support important runs of anadromous fish, including the five kinds of Pacific salmon, steelhead, and searun trout. Hundreds of bald eagles collect along those rivers in the winter to feed on spawned-out carcasses of salmon, especially along the Skagit River. The Olympics are home to the Roosevelt elk, the largest subspecies of that animal. Cougar, black bear, deer, and mountain goat inhabit the Olympics and the Cascades in relative abundance.

In northeastern Washington, whitetail deer and mule deer are abundant. The Panhandle of Idaho and Salmo-Priest area of Washington support a small band of woodland caribou, as well as deer, elk, moose, black bear, grizzly bear, and cougar. Those same species inhabit northwestern Montana, with the grizzly occurring in relative abundance, as well as bighorn sheep and mountain goats in the higher mountains, especially in Glacier National Park.

The upland lakes of the study area are home to the various species of trout--rainbow, cutthroat, brown, brook, golden, and Dolly Varden. Many low elevation streams and many lakes, ponds, and reservoirs support warmwater game fish.

Ocean beaches of Washington supply razor clams. The bays and estuaries provide horse, littleneck, cockle, softshell, butter, geoduck, quahog, and several other clams, as well as Dungeness crab.

The study area supports many species of upland game, some native and some introduced. Those include ring-necked pheasant; Hungarian partridge; chukar; bobwhite, mountain, and valley quail; ruffed, blue, spruce, sharptailed, and sage grouse; ptarmigan; turkey; brush rabbit, snowshoe rabbit; and other rabbits and hares. Fur animals include badger, beaver, bobcat, coyote, fox, fisher, lynx, marten, mink, muskrat, marmot, raccoon, and river otter.

Although the study area provides nesting habitat for large numbers of ducks and lesser numbers of geese and swans, it is primarily important during migration periods. Both the Pacific and Central Flyways extend through the study area. While certain species may be more numerous locally, the mallard is probably the most abundant waterfowl, followed by the Canada goose.

#### Land Ownership

Approximately three-quarters of the study area is in public ownership, primarily national forests, as shown on Map 4 and in Table 2, page 55. The balance is privately owned.

Mountainous areas which occupy much of the study area are administered largely by either the U. S. Forest Service or the National Park Service. U. S. Forest Service lands are divided among eight national forests: Olympic, Mt. Baker-Snoqualmie, Wenatchee, Okanogan, and Colville in the State of Washington; Panhandle in Idaho; and Kootenai and Flathead in Montana. The National Park Service administers four major areas: Olympic National Park, the North Cascades National Park Service complex with components including North Cascades National Park and Ross Lake and Lake Chelan National Recreation Areas, Coulee Dam National Recreation Area, and Glacier National Park.

Most river valleys, lowland forests, and areas adaptable for cultivation or urban development are in private ownership. The west and north flanks of the Olympic Peninsula also are predominantly private, as are the lowlands fronting Puget Sound, Whidbey Island, and the Skagit River valley.

Privately owned lands bracket the Okanogan and Columbia Rivers of northeast Washington and the Kootenai River of northern Idaho. The broad Flathead River valley north of Kalispell, Montana, is mainly privately owned. Much private land is in large ownerships, either timber company holdings or farms.

East of the Okanogan National Forest, Washington, and Priest Lake, Idaho, are State forest lands. There are also scattered tracts administered by

the Bureau of Land Management in eastern Washington and a number of small Indian reservations in western Washington.

Large hydroelectric dams include Montana's Libby Dam on the Kootenai River constructed by the Army Corps of Engineers; Washington's Coulee Dam on the Columbia River constructed by the Bureau of Reclamation; Ross and Diablo Dams on the Skagit River operated by Seattle City Light; and Upper and Lower Baker Dams on the Baker River operated by Puget Sound Power and Light.

#### Recreation Opportunities and Demand

The study area is an important mecca for recreationists, especially those seeking wilderness experiences and fishing and hunting opportunities. See Map 5.

Outdoor recreation opportunities abound in the national parks, national forests, national recreation areas, national wild and scenic rivers, and many State forests, State parks, and State game and wildlife areas. The Ten Lakes Scenic Area in the Kootenai National Forest and the Northwest Peaks Scenic Area in the Kaniksu and Kootenai National Forests are examples of other kinds of recreationally significant lands in the study area. Public boat access facilities are found on most rivers, lakes, and saltwater areas.

Extensive trail systems exist throughout the public lands of the study area, especially the national parks and national forests. From discussions with personnel of the U. S. Forest Service and National Park Service, it was determined that there are about 6,400 miles of all classes and types of trails (see Table 16). Much of that mileage was originally intended for fire access rather than recreation, and may need additional work to be suitable for recreation use and resource protection. Many of the trails are used for winter sports including cross-country skiing, showshoeing, and snowmobiling. There also is winter downhill skiing at Olympic National Park, Mt. Baker, Loup Loup, and Buster Mountain, Washington; Schweitzer Basin, Idaho; and Purcell Mountain and Big Mountain, Montana. While the public lands include abundant trails, few trails are available on private lands within the study area. Although trail use attracts people from throughout the United States and from many foreign countries, 35 percent of the hiking activity originates from the counties within the study area (based on figures compiled by the Regional Recreation Data Program, Pacific Northwest River Basins Commission). An additional 45 percent originates from the adjacent areas of Kootenai County in Idaho; Snohomish, King, and Spokane Counties in Washington; and the Province of British Columbia. Most of the remaining 20 percent of use comes from other areas of Montana, Idaho, and Washington, as well as Oregon and California. Trail users from the rest of the United States and other countries comprise only a small percentage of total use.

Much of the demand for trails is from nearby metropolitan areas, including:

<u>Metropolitan Area</u>	<u>1978 Population</u>
Seattle, Washington	1,187,000
Spokane, Washington	320,000
Vancouver, B. C.	1,305,000
Victoria, B. C.	230,000

With respect to the origins of a specific user group, backpackers, the following findings were obtained from overnight hikers as recorded on backcountry use permits in Mount Rainier, Olympic, and North Cascades National Parks. Eighty percent of the use in those parks was by residents of Northern California, Oregon, Idaho, Washington, and southern British Columbia. Of this total, about 72 percent was by Washington residents. The Puget Sound Metropolitan Area by itself accounted for 36 percent. Western Washington accounted for 69 percent of the backcountry users in Mount Rainier, 73 percent in Olympic, and 68 percent in North Cascades. Eastern Washington accounted for 4.7 percent, 2.3 percent, and 8.1 percent, respectively.

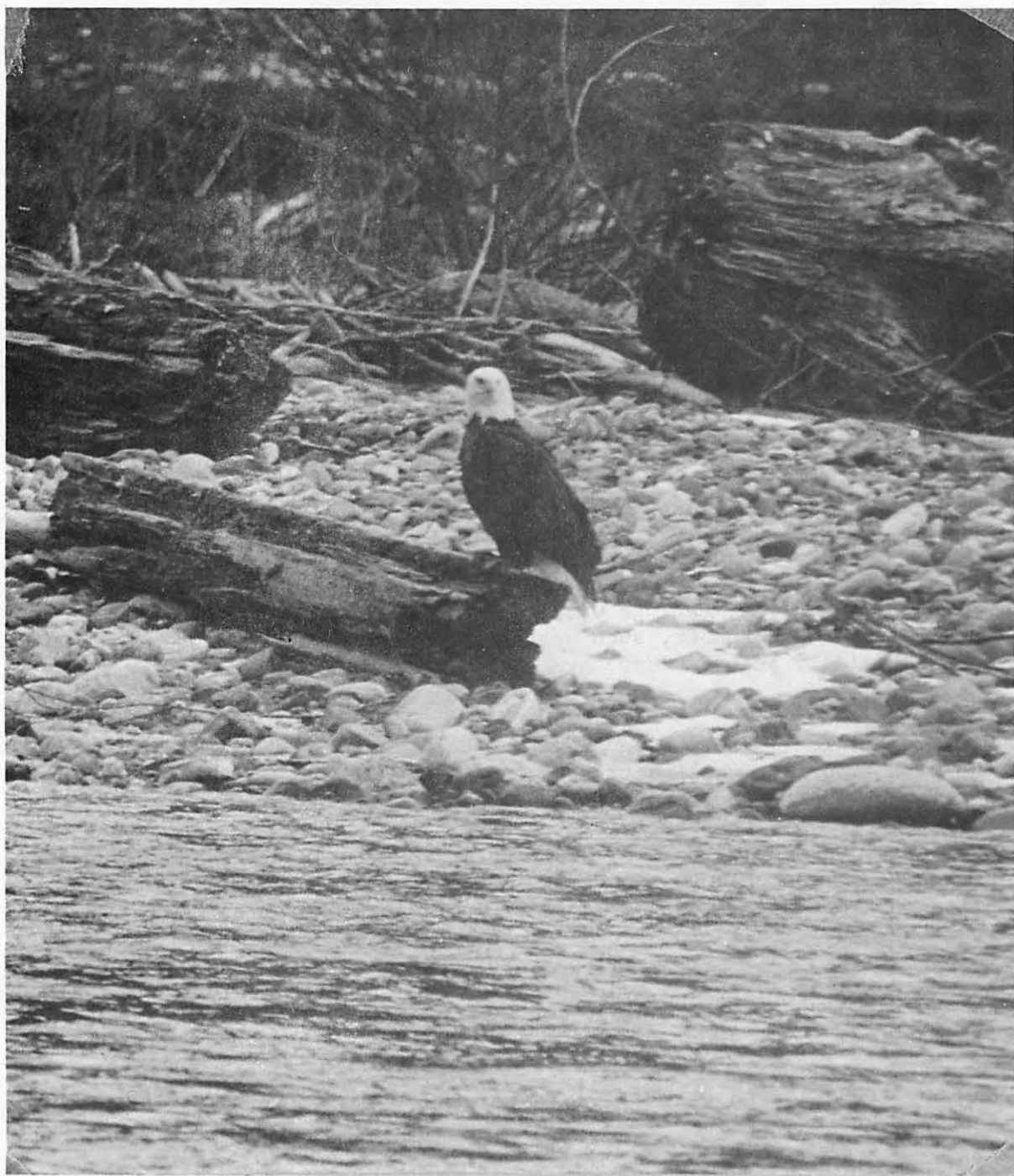
#### Areas of Environmental Concern

The study area encompasses many habitats and sites which are of outstanding natural, scenic, or cultural importance. Of special importance are the fragile alpine or subalpine areas and the critical grizzly bear range. The various areas mentioned during the public participation phase of the study and in meetings with the land managers are identified on Map 6 by name and number, such as (1) for Ozette Village, and are described briefly below. These are special areas vulnerable to the activities of man.

Ozette Village (1) near Cape Alava on the Olympic Peninsula is one of the most important archeological sites in the United States. There, a portion of a prehistoric Indian whaling village was buried by an earthquake 500 years ago, preserving the artifacts in mud. Several houses and their contents have been excavated in the past 9 years and thousands of wood and bone objects recovered. Other cultural and archeological sites in the trail study corridors are not shown on Map 6, however they would be specifically located as a part of a final trail location process. If the trail were developed, it would be situated so as not to harm significant sites. Each State Historic Preservation Officer would be contacted prior to the selection of a detailed construction survey line.

Northwest Washington (4) has a breeding population of bald eagles which ranks among the largest in the contiguous 48 states. About 100 active nests have been found along the marine coastline and shorelines of rivers and lakes. Other concentrations occur in the San Juan Islands.





Bald Eagle  
Found along rivers of the Olympic Peninsula and the Cascade Range.

A large wintering population of bald eagles is found along Washington's Skagit River (8) and (9) attracted there by the carcasses of spawned-out salmon. Other concentrations of wintering eagles are along the coastal strip of Olympic National Park (4), at Lake Crescent (2), Point Partridge (5), Nooksack River (10), the area below Libby Dam in Montana (18), and the Middle Fork and North Fork Flathead River in Montana (19). The North and Middle Forks of the Flathead River are also spring and fall migration routes. As many as 300 to 400 eagles have been observed from October to January in Montana along McDonald Creek and the Flathead River. The bald eagle has been designated a threatened species by the Secretary of the Interior.

The treeless alpine and subalpine areas of Olympic National Park, North Cascades National Park, and Glacier National Park provide spectacular summer flower displays and are important habitat for many wildlife species. Included are mat-forming plant species which form a special micro environment. Soils are generally unstable and even light trampling may kill or displace vegetation and result in bare spots that are open to wind or water erosion. One well-known area in Olympic National Park is the Elk Mountain Tundra (3).

Washington's Pasayten Wilderness has a high park-like character with an abundance of grassland. There, Horseshoe Basin (11) and other similar areas would be susceptible to excessive off-trail use by hikers and horseback riders.

Barney Lake (6) on Washington's Nookachamps River is an important wintering area for trumpeter and whistling swans.

Whidbey Island's Ebey Prairie (7) has important natural, scenic, and historic values. In 1978, Congress recognized the area by designating it a part of Ebey's Landing National Historical Reserve.

Washington's lower Methow Valley (12) near the towns of Winthrop and Twisp, is an important fawning and wintering area for the mule deer herd which summers on the Okanogan. Harassment or interference with the deer during fawning or wintering may adversely affect productivity.

The lands west of Holman Pass (20) in the North Cascades are alpine and fragile in character. They can be damaged by excessive use of backpackers and horsemen.

The Inland Empire Big Game Council of Spokane, Washington, has identified a prime hunting area for black bear (13) northwest of Metaline Falls. While the black bear is found throughout the Colville National Forest, this site is special because of the large concentration of bear and lack of accessibility by road or trail.

A small number of mountain goats are found in the Selkirks on Linton Mountain (14) and bighorn sheep on Hall Mountain (15) near Metaline



Grizzly Bear - A wilderness animal with limited tolerance of man.

Falls, Washington. Their survival is precarious because of their small numbers and the limited size of their range.

A band of about 30 woodland caribou frequent the Selkirk Mountains (17) of extreme northern Idaho and Washington.

Much of the study area from the Idaho Panhandle eastward (16) is habitat for the grizzly bear. The grizzly is a wilderness animal with only limited tolerance of man. Although grizzly bear and man can coexist, as human use increases, confrontations with the bear are inevitable and all too frequently it is killed or driven from its range. Studies are continuing in an effort to gain more knowledge about the location and importance of critical grizzly bear range, as well as about the effects of interaction between bear and man.



**alternatives**

## IV. ALTERNATIVES

### Selection of Alternative Routes

Because no specific location for a Pacific Northwest Trail was contained in Public Law 90-543, as amended, it was necessary for the study team to seek help in identifying the various places where the route might be located within the broad area defined in the Act. Route suggestions were requested at the public meetings held in May 1978 and in the 1,500 brochures that were mailed to interested organizations and individuals. Possible routes were also identified in discussions with the various land managing jurisdictions within the study area, including the individual counties, national forests, and national parks. Of the routes suggested, only those which fall within the study area were chosen for evaluation, as depicted on Map 7. Noted on Map 7 are the agencies, organizations, and individuals who suggested routes for consideration in the study. Some contributors who suggested locations for segments of the trail did not necessarily support the trail in principle.

Because it was infeasible during the study to identify the precise location of suggested routes, corridors 6-miles wide encompassing the suggested routes were used. If Congress later authorizes establishment of a Pacific Northwest Trail, that authorization would be based on the corridor concept and surveys would be necessary following authorization to pinpoint the right-of-way location within the 6-mile-wide corridor. Where possible, at that time, the right-of-way would be located so as to utilize existing trail locations.

For purposes of analysis and comparison of the suggested routes, detailed information was sought about each route corridor. This information included the scenic qualities; land ownership; costs of acquisition, development, and operation and maintenance; the identification of fragile alpine or other environmental or culturally sensitive areas; and areas inhabited by threatened or endangered species. To facilitate evaluation and comparison, all of that information has been depicted on maps.

Map 8 shows the scenic qualities of each of the suggested route corridors, based on the advice of land managers and other individuals familiar with those corridors. The scenery along each corridor is rated either distinctive, common, or minimal, as defined below and described in Appendix 2.

#### Scenic Quality Variety Class\*

Distinctive - Refers to those areas where features of landform, vegetative patterns, water forms, and rock formations are of unusual or outstanding visual quality.

Common - Refers to those areas where features contain variety in form, line, color, and texture, or combinations thereof,

but which tend to be common throughout the character type and are not of outstanding visual quality.

Minimal - Refers to those areas whose features have little change in form, line, color, or texture.

\*Agriculture Handbook No. 462, "National Forest Landscape Management".

Map 9 provides a breakdown of costs, segment by segment, which would have to be met (1978 dollars) if a trail were developed. Included is the cost of land acquisition for both a variable width averaging 1,000 feet and a variable width averaging 500 feet. Depending upon the situation, the width could be much narrower than 1,000 feet or 500 feet, or exceed those widths. Also included are the costs of construction and of annual operation and maintenance.

In computing the cost of land acquisition, the following assumptions were made:

1. Land acquisition costs would be incurred only where privately owned lands are involved.

2. A corridor averaging 125 acres per mile (an average of 1,000 feet wide) would be acquired, with a strip averaging 50 feet wide acquired in fee and the balance of 950 feet acquired in easement at 75 percent of the cost of fee. The average of 125 acres per mile is the minimum Congress has determined may be needed for National Scenic and National Historic Trails to provide sufficient buffer on both sides of the right-of-way to adequately protect the trail environment and quality of trail experience. The land acquisition cost for a trail averaging 500 feet in width has also been computed. A trail of lesser width, while reducing costs, would also result in a trail of lower standard.

3. In determining a specific trail location within a corridor 6 miles wide, the objective would be to avoid the higher priced land wherever possible.

4. The trail would not be located within road rights-of-way, except in cases of bridges at major river crossings and through associated urban areas. Thus, the trail would not follow on county or other roads.

5. Where privately owned lands are included within other already authorized Federal projects, land acquisition costs would be attributable to those projects.

Land acquisition cost figures cited in this report are based on the percentage of land in each major use and the average value of land in each such use. Land values were obtained from county assessors and local

real estate offices. From past Forest Service and National Park Service experience, overhead costs were calculated to be 50 percent of the total of all other acquisition costs.

In computing the costs of constructing the trail, the assumption was made that it would be built to the multi-mode horse-hiker standard, as defined by Region 6, U. S. Forest Service, with a 24-inch tread suitable for both hiker and horseback rider use. In actual practice, if the trail were to become a reality, the standard could be expected to vary somewhat depending upon the terrain and the kinds of use which would be expected to occur along particular segments. Where the trail would traverse the more fragile areas, the type of use could be limited to foot travel, thereby permitting variance in the standard. In those cases, the potential for an alternate horse travel route would have to be considered. The need for a variable trail standard and taking care not to overbuild were revealed to be major issues at the public meetings and in correspondence.

In calculating construction costs, the following elements were used for each mile of trail.

Trail Construction Cost Elements Per Mile

1. Planning, public contacts, environmental analysis, etc. . . . .	\$ 100
2. Preconstruction:	
Route reconnaissance . . . . .	520
Route selection (flag) . . . . .	120
Design, staking, and project costs contract prep. . . . .	100
Advertising and contract award . . . . .	70
3. Trail construction:	
Light . . . . .	5,000
Medium . . . . .	8,000
Heavy . . . . .	12,000
4. Trail reconstruction . . . . .	4,500
5. Contract administration . . . . .	1,500

Note: Trail construction costs are based on machine construction methods (trailblazer, trail belly-dump carryall, rock drill, and power saw). If hand tool construction is required, costs will increase 25 to 35 percent and the annual maintenance costs will increase substantially (25 percent).



Note: Size of contracts affects costs. This estimate is based on 8 - 10 mile sections per contract for construction and 15 - 20 miles per contract for reconstruction.

Note: Trail heads: One trailhead for every 2-1/2 to 3 days travel (25 - 30 miles) at \$20,000 each. Major bridges: 10 at \$20,000 each. Trail camps: 100 at \$1,000 each.

The annual cost of operation and maintenance was estimated by Region 6, U. S. Forest Service, to be \$100 per mile. To the extent that volunteers could be used in helping to maintain the trail, this cost would be reduced. Because most of a Pacific Northwest Trail would be located long distances from population centers, savings resulting from volunteer help would likely not be significant.

During the public meetings and in several other contacts during the preparation of the study, an issue concerning the possible effect of funding a Pacific Northwest Trail on the current trail program funding was raised. The concern was that no reduction in the current trail construction and maintenance programs be permitted if a new national scenic trail is to be constructed. Such assurance cannot be given. Priority has been given to the Pacific Crest National Scenic Trail by the Forest Service to seek project completion.

Map 6 identifies areas which may be vulnerable to trail construction and use, including critical grizzly bear range, other areas inhabited by threatened or endangered species, and areas or sites which are fragile or are vulnerable for environmental or cultural reasons.

#### Alternative Routes Selected

By analyzing the data shown on the maps, it was possible to identify alternative corridors having various predominant characteristics. In this way, three possible alternative routes were finally selected for purposes of comparison. One, the route which matched up the segments rated as being most scenic. Two, the route which matched up the segments determined to involve the lowest cost for land acquisition and trail construction. And three, the route which matched up the segments resulting in the minimum environmental impact. A fourth alternative, that of no trail, was also identified for consideration. Each of the four alternatives is discussed in the following section. See Map 10.

#### Analysis of Alternative Routes

##### Alternative One, Most Scenic Route (Map 11)

This route combines those segments which were rated as having the most outstanding visual qualities. Much of the route corresponds with the

route suggested by the Pacific Northwest Trail Association. It is 1,119 miles in length and includes 560 miles which were rated as being visually "distinctive." By comparison, the least costly route included 351 miles rated distinctive, while the minimum environmental impact route included 179 miles rated distinctive. See Table 12.

#### Corridor Followed

The most scenic route, in most places, follows the most northerly of the suggested corridors and stays at high elevations much of the way. Its eastern terminus is at Logan Pass on the Continental Divide in Montana's Glacier National Park. Logan Pass is accessible by road as well as having parking and a visitor center.

After crossing the North Fork Flathead River, the route leads through the Flathead National Forest, crosses Iuna Pass into the Kootenai National Forest, runs through the Ten Lakes Scenic Area, spans the bridge across Lake Koocanusa, and proceeds through the Northwest Peaks Scenic Area before entering Idaho's Panhandle National Forest.

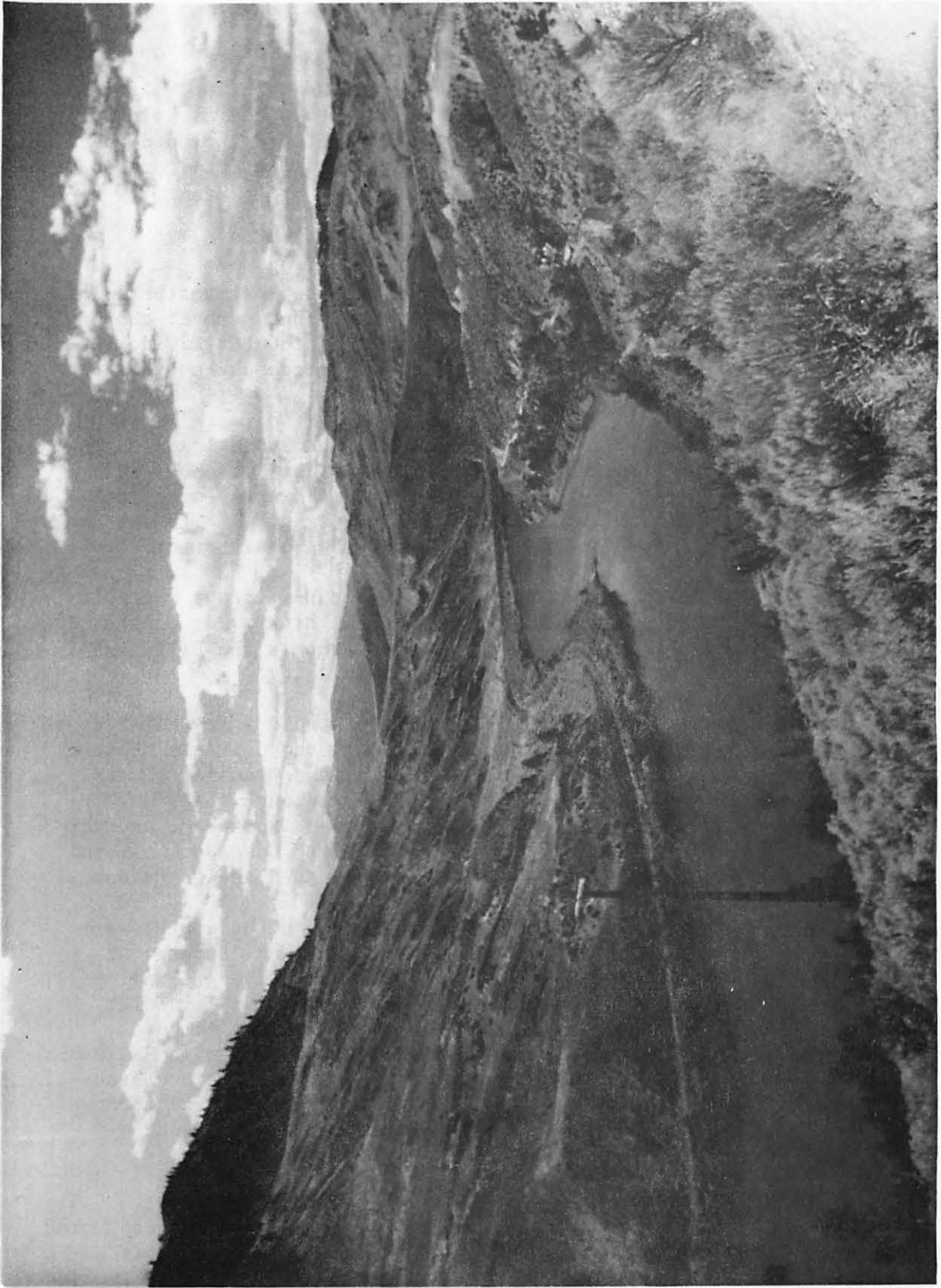
In Idaho, the route continues high in the mountains except where it drops to cross the Moyie River and the Kootenai River. It passes through the Upper Priest Lake Scenic Area and enters the Colville National Forest in extreme northeastern Washington.

Within Washington, the route runs generally westward a few miles south of the Canadian border through the mountains of the Colville National Forest, and across the Pend Orielle, Columbia, and Okanogan Rivers. It enters the Okanogan National Forest, climbs through the Pasayten Wilderness, swings south around Ross Lake, crosses Ross Dam, ascends Big Beaver Valley into the high mountains of North Cascades National Park, and continues westward by way of Whatcom and Hannegan Passes.

Within the Mount Baker National Forest, the route turns south, west of Mount Baker, descends to the town of Sedro Woolley, turns west to Fidalgo Island, and crosses Deception Pass to Whidbey Island. After running south on Whidbey Island, it crosses Admiralty Inlet to Port Townsend on the Olympic Peninsula. From there, it moves southwest into the Olympic National Forest, and into Olympic National Park where it ascends to Deer Park and Hurricane Ridge before crossing Appleton Pass, Seven Lakes Basin, and follows the Hoh River downstream to the Pacific Ocean.

#### Visual Qualities

The most scenic route stays at high elevations and crosses areas noted for their natural beauty and the long vistas they provide. In addition to 560 miles (50 percent) which is visually "distinctive," there are 403 miles (36 percent) that are "common," and 156 miles (14 percent) "minimal."



Similkameen River, a tributary of the Okanogan River, west of the Town of Oroville.

## Land Ownership and Use

Most of the most scenic route, 803 miles (72 percent), is in Federal ownership, as summarized in Table 2. Two hundred and fifty four miles (23 percent) are in private ownership, and 62 miles (5 percent) are in State or local ownership.

Table 2. Land Ownership - Most Scenic Alternative

	<u>USFS</u>		<u>NPS</u>		<u>BLM</u>		<u>State</u>		<u>Private</u>		<u>Total Miles</u>
	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	
Washington	347	46	136	18	3	N	49	7	219	29	754
Idaho	74	75	---	---	-	-	13	14	10	11	97
Montana	180	67	63	23	-	-	--	--	25	10	268
Total	601	54	199	18	3	N	62	5	254	23	1,119

N = less than 1 percent

The 803 miles in Federal ownership are available for public recreation. Timber production and grazing are other principal uses on lands administered by the U. S. Forest Service and Bureau of Land Management.

The bulk of the 254 miles in private ownership is devoted either to timber production (127 miles or 50 percent), livestock range (96 miles or 38 percent), or cultivation (13 miles or 5 percent).

Virtually all of the 62 miles in State or local ownership comprise State forest or range lands.

### Costs

The costs of acquiring the necessary right-of-way across private lands, and of constructing a continuous trail, are summarized in Tables 3 and 4. The total cost of acquiring a right-of-way averaging 1,000 feet and constructing a trail would be approximately \$86 million. Acquisition of a narrower right-of-way averaging 500 feet and construction of a trail would be about \$51 million. There are 428 miles (38 percent) of existing trail of varying standards along the route.

Table 3. Land Acquisition Cost - Most Scenic Alternative (1,000-foot Corridor)

Land Use	Privately Owned Acres			Average Cost/Acre		Total Cost		
	Fee	Easement	Total	Fee	Easement	Fee	Easement	Total
<u>Washington:</u>								
Forest	682.6	12,974	13,656.6	\$1,700	\$1,275	\$1,160,420	\$16,541,850	\$17,702,270
Agriculture	593.4	11,280	11,873.4	2,215	1,610	1,314,381	18,160,800	19,475,181
Residential	74.2	1,393	1,467.2	4,205	3,150	312,011	4,387,950	4,699,961
Other (Scab Land)	23.7	450	473.7	300	225	7,110	101,250	108,360
Subtotal	1,373.9	26,097	27,470.9			\$2,793,922	\$39,191,850	\$41,985,772
<u>Idaho:</u>								
Forest	36.5	687	723.5	\$1,915	\$1,440	\$ 69,898	\$ 989,280	\$1,059,178
Agriculture	22.0	418	440.0	2,500	1,875	55,000	783,750	838,750
Residential	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Subtotal	58.5	1,105	1,163.5			\$124,898	\$1,773,030	\$1,897,928
<u>Montana:</u>								
Forest	97.4	1,850	1,947.4	\$2,040	\$1,535	\$198,696	\$2,839,750	\$3,038,446
Agriculture	60.0	1,140	1,200.0	1,605	1,204	96,300	1,373,700	1,470,000
Residential	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-
Subtotal	157.4	2,990	3,147.4			\$294,996	\$4,213,450	\$4,508,446
<u>Total:</u>								
Forest	816.5	15,511	16,327.5			\$1,429,014	\$20,370,880	\$21,799,894
Agriculture	675.4	12,838	13,513.4			1,465,681	20,318,250	21,783,931
Residential	74.2	1,393	1,467.2			312,011	4,387,950	4,699,961
Other	23.7	450	473.7			7,110	101,250	108,360
Total	1,589.8	30,192	31,781.8			\$3,213,816	\$45,178,330	\$48,392,146
Administration (50 percent)								24,196,073
Total Land Acquisition Cost								\$72,588,219

Table 4. Trail Development Costs - Most Scenic Alternative

Planning	\$ 111,930
Reconnaissance	582,036
Route Selection	134,316
Design, Staking, Contract Preparation	111,930
Contract Award	78,351
Construction (691 miles)	
Light	889,635
Medium	2,442,606
Heavy	4,468,929
Reconstruction (428 miles)	1,926,000
Contract Administration	1,678,950
Trail Heads	800,000
Bridges	200,000
Trail Camps	100,000
Total Development Costs	\$13,524,683

The annual cost of operating and maintaining the trail, based on a cost of \$100 per mile as estimated by Region 6, U. S. Forest Service, would be \$111,900.

#### Environmental Consequences

The most scenic route is the one which would have the greatest adverse impact on environmental values.

In order to accomplish the purpose of optimizing visual quality, the route stays at a high elevation wherever possible and, in so doing, crosses many miles of fragile high elevation meadows, balds, and ridge lines. Specific areas crossed which include large acreages of alpine or subalpine lands are in Glacier National Park, Ten Lakes Scenic Area, Northwest Peaks Scenic Area, Pasayten Wilderness, North Cascades National Park, and Olympic National Park. There would be 92 miles of alpine or subalpine trail along the route; much of it is already constructed.

Throughout most of the distance in Montana and to a lesser degree in Idaho, the route crosses grizzly range. Much of the range is rated by Dr. Charles Jonkel, head of the Border Grizzly Project at the University of Montana, as being critical to the bears' survival. Dr. Jonkel has determined that of 365 miles in Montana and Idaho, 280 miles are in critical grizzly range.

In the extreme northern portion of Idaho and northeast Washington, the route crosses through an area that is used part of the year by a small band of caribou. Since use by the caribou is mainly in late winter, at which time they move into the area from Canada, and since most of the trail use would occur during other seasons, the impact likely would not be significant.

While most of this route would be located on Federal lands, 254 miles would cross lands in private ownerships, mainly private timber lands and lands in cultivation or livestock range. If a strip averaging 1,000 feet wide were acquired across privately owned lands, 31,782 acres would be purchased either in fee or easement for trail purposes. This would result in limitations being placed on the use of those lands and would impose management constraints on land ownership operations. If a strip averaging 500 feet wide were acquired, more than 15,000 acres would be affected.

Minor local economic benefit would accrue if a trail were located along the most scenic route. Nearby residents would be employed to help construct the trail and also to maintain and operate it. Local guide services would be utilized. In addition, a small amount of goods and services would be purchased locally by recreationists using the trail. Most trail users could be expected to bring their food and equipment with them, rather than relying on local suppliers.

#### Alternative Two, Least Costly Route (Map 12)

The 1,112-mile least costly route comprises the suggested segments which would require the smallest expenditure for land acquisition and trail construction. As compared with an expenditure of \$64 million for this route, the most scenic route would cost \$86 million and the minimum environmental impact route would cost \$106 million.

#### Corridor Followed

The least costly route begins at Browns Pass (6,255 feet) on the Continental Divide in Glacier National Park and follows existing trails while in the park. Upon leaving the park, the route heads west through the Flathead National Forest and then the Kootenai National Forest in Montana, but at intermediate elevations south of the most scenic route. It avoids the Ten Lakes and the Northwest Peak Scenic Areas in Montana.

Upon entering the Panhandle National Forest in Idaho, it joins the most scenic route and continues along that same route until the Kootenai River is crossed, where it separates and heads northwesterly.

The route merges again with the most scenic route 6 miles after entering the Colville National Forest in northeastern Washington. The two routes are the same until well into Okanogan County. At that point, the least costly route veers left, passes south of the Pasayten Wilderness, east and south of the town of Winthrop, heads northwesterly across Cascade Pass to Marblemount, and then westerly down the Skagit River valley to Sedro Woolley where it again merges with the most scenic route. The two routes are the same along Whidbey Island, across to Port Townsend, and into Olympic National Park. There, the least costly route follows a southerly route through the park by way of Anderson and O'Neal Passes, and finally down the Queets River valley to the Pacific Ocean.

## Visual Qualities

The least costly route includes less mileage rated "distinctive" than the most scenic route, but more than the minimum environmental impact route (see Table 12 for a comparison). There are 351 miles (32 percent) which are "distinctive," 593 miles (53 percent) "common," and 168 miles (15 percent) "minimal."

## Land Ownership and Use

Along the 1,112-mile length of the Alternative Two route, 882 miles (79 percent) are in Federal ownership, 189 miles (17 percent) are privately owned, and 41 miles (4 percent) State owned, as summarized in Table 5.

Table 5. Land Ownership - Least Costly Alternative

	<u>USFS</u>		<u>NPS</u>		<u>BLM</u>		<u>State</u>		<u>Private</u>		<u>Total Miles</u>
	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	
Washington	367	47	212	27	3	N	37	5	162	21	781
Idaho	102	91	---	---	-	-	4	3	7	6	113
Montana	175	80	23	11	-	-	---	---	20	9	218
Total	644	58	235	21	3	N	41	4	189	17	1,112

N = less than 1 percent

The 189 miles in private ownership are used primarily for timber production (87 miles or 46 percent). Among other uses are livestock range (60 miles or 32 percent) and cultivation (30 miles or 16 percent).

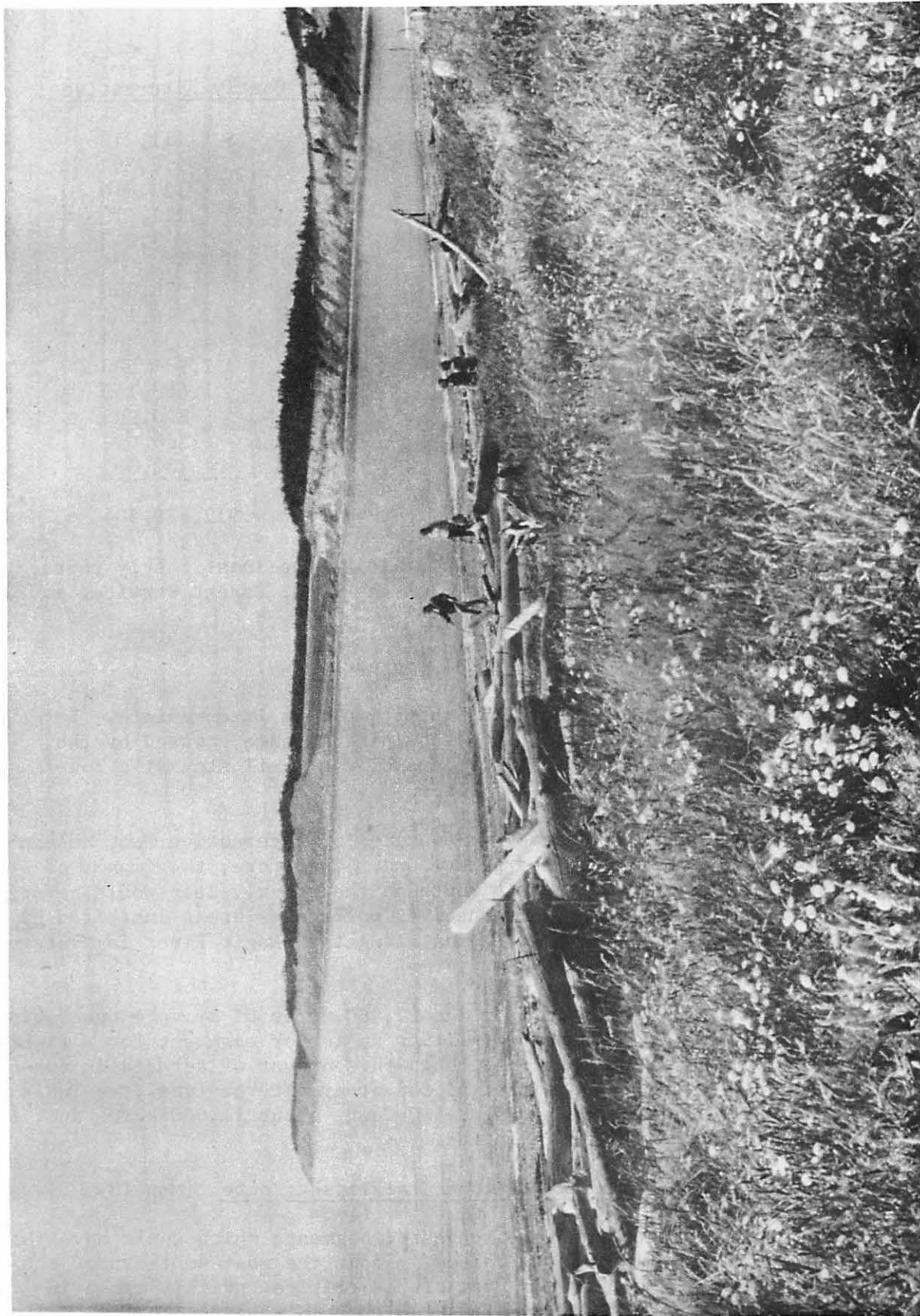
## Costs

The costs of acquiring the necessary right-of-way across private lands and constructing the trail are summarized in Tables 6 and 7. The total cost of acquiring lands and developing the trail within a right-of-way averaging 1,000 feet is \$64 million, or \$39 million for a corridor averaging 500 feet. There are 441 miles (or 40 percent) of trail already in existence to varying standards along this route.



Table 6. Land Acquisition Cost - Least Costly Alternative (1,000-foot Corridor)

Land Use	Privately Owned Acres			Average Cost/Acre		Total Cost			
	Fee	Easement	Total	Fee	Easement	Fee	Easement	Total	
<u>Washington:</u>									
Forest	369	7,007	7,376	1,637	1,227	604,053	8,597,589	9,201,642	
Agriculture	526	10,002	10,528	2,045	1,535	1,075,670	15,353,070	16,428,740	
Residential	71	1,336	1,407	4,232	3,167	300,472	4,231,112	4,531,584	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Subtotal	966	18,345	19,311			1,980,195	28,181,771	30,161,966	
<u>Idaho:</u>									
Forest	33	617	650	\$1,970	\$1,500	\$ 65,010	\$ 925,500	\$ 990,510	
Agriculture	22	418	440	2,500	1,875	55,000	783,750	838,750	
Residential	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Subtotal	55	1,035	1,090			\$120,010	\$1,709,250	\$1,829,260	
<u>Montana:</u>									
Forest	128	2,432	2,560	\$1,000	\$750	\$128,000	\$1,824,000	\$1,952,000	
Agriculture	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Residential	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Subtotal	128	2,432	2,560			\$128,000	\$1,824,000	\$1,952,000	
<u>Total:</u>									
Forest	530	10,056	10,586			\$ 797,063	\$11,347,089	\$12,144,152	
Agriculture	548	10,420	10,968			1,130,670	16,136,820	17,267,490	
Residential	71	1,336	1,407			300,472	4,231,112	4,531,584	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Total	1,149	22,961	22,961			\$2,228,205	\$31,715,021	\$33,943,226	
Administration (50 percent)									16,971,613
Total Land Acquisition Cost									\$50,914,839



Beaches and bluffs of Whidbey Island.

Table 7. Trail Development Costs - Least Costly Alternative

Planning	\$ 111,210
Reconnaissance	578,292
Route Selection	133,416
Design, Staking, Contract Preparation	111,210
Contract Award	77,847
Construction (671 miles)	
Light	1,088,840
Medium	2,116,176
Heavy	4,808,863
Reconstruction (441 miles)	1,984,500
Contract Administration	1,668,150
Trail Heads	800,000
Bridges	200,000
Trail Camps	<u>100,000</u>
Total Development Costs	\$12,678,504

The annual cost of operating and maintaining the least costly route, based on the experience of Region 6 of the U. S. Forest Service, would be \$111,210.

#### Environmental Consequences

The environmental impacts of this route would be intermediate. It would avoid some of the alpine or subalpine mileage crossed by the Alternative One route because portions of the trail stay at a lower elevation.

Grizzly bear range is crossed by 184 miles of Alternative Two, as compared with 280 miles for Alternative One. Therefore, the impact of the trail with the least costly route on the grizzly bear would be significantly less. However, Alternative Two crosses areas inhabited by winter concentrations of bald eagles along the Skagit River in western Washington.

A major impact would result from the 22,960 acres of private ownership which would have to be acquired, either in fee or easement for a right-of-way averaging 1,000 feet. Although this amount of acreage is substantial, it is less than either of the other alternatives (see Table 12). If the right-of-way averaged 500 feet, about 11,000 acres in private ownership would be affected.

#### Alternative Three, Minimum Environmental Impact Route (Map 13)

Alternative Three combines the suggested segments which would have the least impact on environmental values. It is the most southern of the three alternatives and avoids most of the critical grizzly range in

Montana and Idaho and many of the vulnerable high alpine or subalpine areas.

#### Corridor Followed

The route begins at Marias Pass (5,280 feet) on the Continental Divide in Glacier National Park, follows the Middle Fork Flathead River westward, and enters the Flathead National Forest. It crosses the Stillwater River valley, bends northwest and enters the Kootenai National Forest, and continues into the Panhandle National Forest in Idaho.

In Idaho, the route converges with the other two routes at the Copeland crossing of the Kootenai River. Diverging, it swings southwest around Priest Lake, and turns again northwest before entering the Colville National Forest in Washington.

The route continues northwest and meets the other two routes where they cross the Columbia River at Northport. The three routes coincide for the next 55 miles before Route Three bends southwest to south of the town of Winthrop, northwesterly up the Methow River valley to the south end of Ross Lake, and down the Skagit River valley to the town of Sedro Woolley where it again joins the other two routes to the Olympic National Forest. There, it meanders southwest near the southern boundary of Olympic National Park, enters the park, and merges with the least costly route down the Queets River valley to the Pacific Ocean.

#### Visual Qualities

In avoiding environmentally sensitive areas, the route also misses many of the more scenic portions of the study area. It would be the least scenic of the three alternatives with only 179 miles (16 percent) rated as visually "distinctive," while 671 miles (60 percent) are "common," and 269 miles (24 percent) "minimal."

#### Land Ownership and Use

Alternative Three would be the most costly route, mainly because it crosses more lands in private ownership than either of the other alternative routes. Its costs would be increased because it includes only 293 miles (26 percent) of existing trail, and reduced because a greater share of the terrain crossed is level or only moderately steep, entailing only relatively low cost construction. Although most of the mileage along this route, 761 miles (68 percent) is in Federal ownership, the route crosses more privately owned lands (292 miles or 26 percent) than the other routes. Land ownership is summarized in Table 8.

Table 8. Land Ownership - Minimum Environmental Impact Alternative

	<u>USFS</u>		<u>NPS</u>		<u>BLM</u>		<u>State</u>		<u>Private</u>		<u>Total Miles</u>
	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	<u>Miles</u>	<u>%</u>	
Washington	436	57	123	16	3	N	29	4	173	23	764
Idaho	60	44	---	---	-	-	33	24	44	32	137
Montana	91	42	48	22	-	-	4	2	75	34	218
Total	587	52	171	15	3	N	66	6	292	26	1,119

N = less than 1 percent

The principal uses of privately owned lands are the same as with the other two routes, with 158 miles (57 percent) in timber production, 75 miles (27 percent) in livestock range, and 25 miles (9 percent) in cultivation.

#### Costs

The cost of acquiring the necessary lands and constructing a trail along the minimum environmental impact route would be substantially greater than either of the other two routes. See Table 12 for a comparison. There is more land in private ownership which would have to be acquired, and more miles of trail needing to be constructed. In addition, this route is somewhat longer than the least costly route. There are 293 miles (26 percent) of existing trail of varying standard, substantially less than the other two routes. The costs are estimated to total \$106 million for a trail with a right-of-way averaging 1,000 feet, as detailed in Tables 9 and 10, or \$60 million for a trail having for a trail having a corridor averaging 500 feet in width.

Table 9. Land Acquisition Cost - Minimum Environmental Impact Alternative (1,000-foot Corridor)

Land Use	Privately Owned Acres			Average Cost/Acre		Total Cost			
	Fee	Easement	Total	Fee	Easement	Fee	Easement	Total	
<u>Washington:</u>									
Forest	475	8,964	9,439	\$1,555	\$1,168	\$ 738,625	\$10,469,952	\$11,208,577	
Agriculture	592	11,230	11,822	1,959	1,471	1,159,973	16,519,330	17,679,303	
Residential	71	1,336	1,407	4,239	3,173	300,969	4,239,128	4,540,097	
Other	38	737	775	2,309	1,699	87,742	1,252,163	1,339,905	
Subtotal	1,176	22,267	23,443			\$2,287,309	\$32,480,573	\$34,767,882	
<u>Idaho:</u>									
Forest	123	2,321	2,444	\$2,724	\$2,051	\$335,052	\$4,760,371	\$ 5,095,423	
Agriculture	30	568	598	2,828	2,119	84,840	1,203,592	12,884,432	
Residential	48	910	958	5,000	3,750	240,000	3,412,500	3,652,500	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Subtotal	201	3,799	4,000			\$659,892	\$9,376,463	\$10,036,355	
<u>Montana:</u>									
Forest	367	6,976	7,343	\$1,850	\$2,137	\$1,045,950	\$14,907,712	\$15,953,662	
Agriculture	29	553	584	3,730	2,798	108,170	15,472,294	16,554,464	
Residential	2	34	36	2,000	1,500	4,000	51,000	55,000	
Other	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	
Subtotal	398	7,565	7,963			\$1,158,120	\$16,506,006	\$17,664,126	
<u>Total</u>									
Forest	965	18,261	19,226			\$2,119,627	\$30,138,035	\$32,257,662	
Agriculture	651	12,353	13,004			1,352,983	19,270,216	20,623,199	
Residential	121	2,280	2,401			544,969	7,702,628	8,247,597	
Other	38	737	775			87,742	1,252,163	1,339,905	
Total	1,775	35,406	35,406			\$4,105,321	\$58,363,042	\$62,468,363	
Administration (50 percent)									31,234,181
Total Land Acquisition Cost									\$93,702,544

Table 10.  
Trail Development Costs - Minimum Environmental Impact Alternative

Planning	\$ 111,940
Reconnaissance	582,088
Route Selection	134,328
Design, Staking, Contract Preparation	111,940
Contract Award	78,358
Construction (800 miles)	
Light	1,301,315
Medium	2,303,267
Heavy	4,629,688
Reconstruction (293 miles)	1,317,600
Contract Administration	1,679,100
Trail Heads	800,000
Bridges	200,000
Trail Camps	<u>100,000</u>
 Total Development Costs	 \$12,249,624

Annual operating and maintenance costs would be \$111,940.

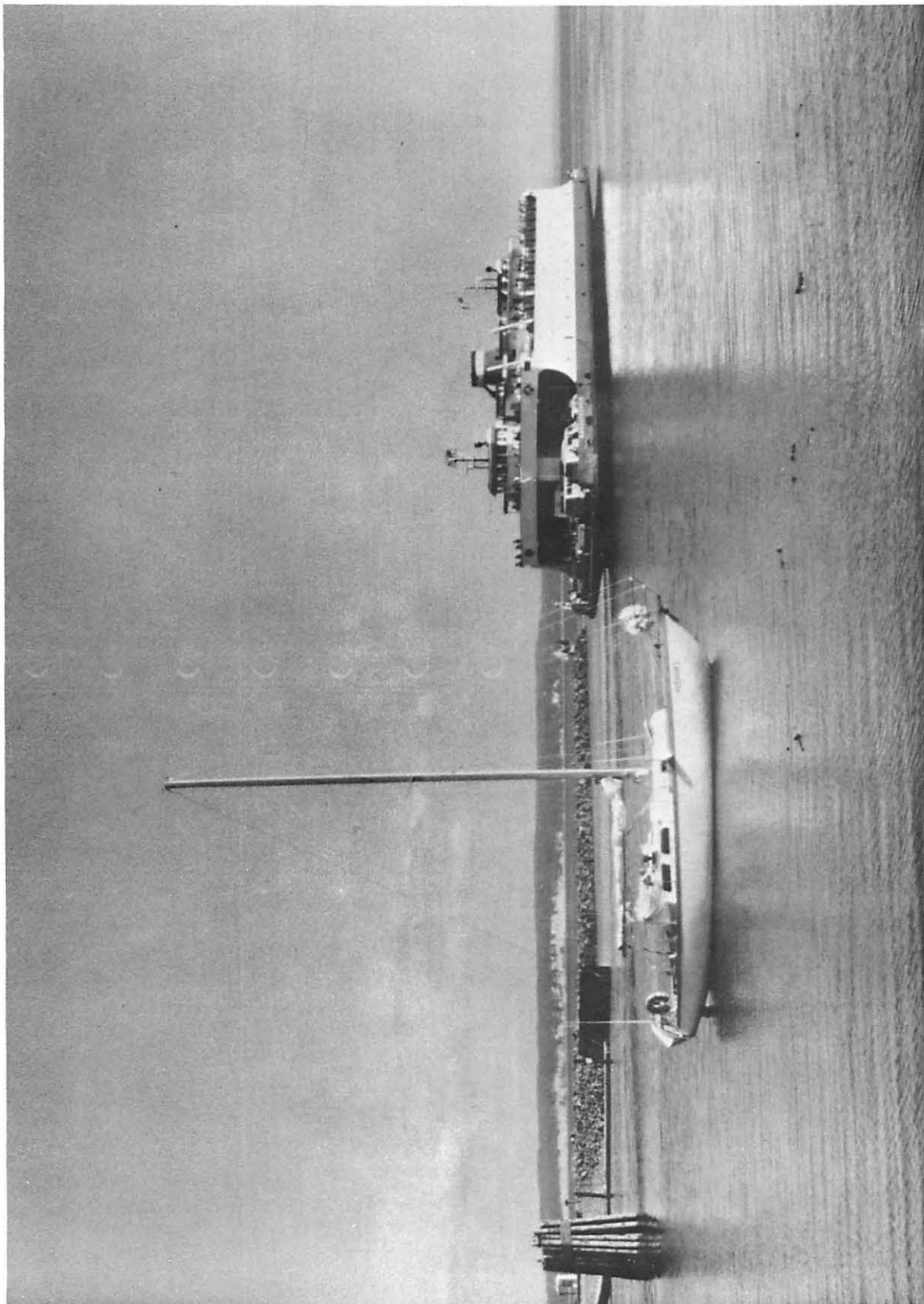
#### Environmental Consequences

The most significant impact of this route would be the 35,406 acres of privately owned lands which would have to be acquired either in fee or easement along a corridor averaging 1,000 feet, or the 17,000 acres along a corridor averaging 500 feet, more than either of the other alternatives.

Otherwise, the environmental impacts of a trail along this route would be the least. Much less grizzly range is crossed (85 miles) than along the other routes, and less alpine country is affected (64 miles) (see Table 12). The route would, however, come near more bald eagle areas, including most of the important wintering area along the middle and lower Skagit River in Washington. Unless the trail was located some distance from those areas, disturbance of the birds may result. The bald eagle has demonstrated some capability of altering its behavior, however, to adapt to the presence of man.

#### Alternative Four, No Action

Under this alternative, no Pacific Northwest Trail would be developed and existing management and use trends within the study area would continue. Most of the demand for trails within the study area would continue to be met by the extensive networks of trails already available in the most scenic portions of the region, mainly the national parks, national forests, and wildernesses. Map 14 identifies within the study area the areas having moderate trail density (.0003 to .0005 miles of trail per acre) and high trail density (.0006 to .001 miles



Ferry crossing Admiralty Inlet.



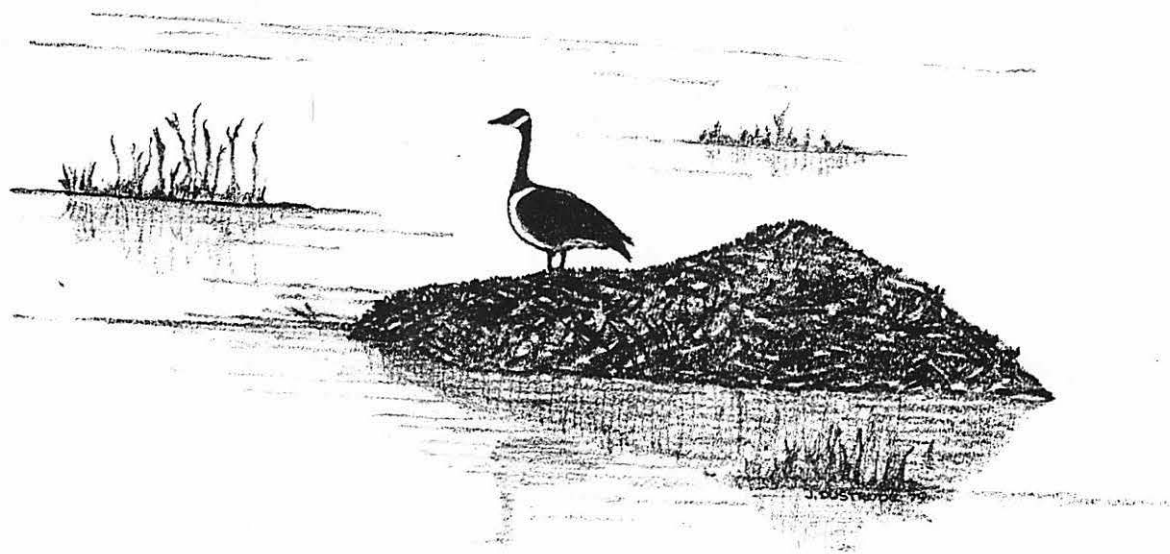
of trail per acre). Trail use in many of those areas is already substantial, although many trails need to be improved as well as be maintained to a higher standard. By not developing a Pacific Northwest Trail, the additional adverse impacts on alpine areas and on the grizzly bear, bald eagle, and other wildlife species brought on by increased numbers of trail users attracted to the area would be avoided.

On the other hand, the opportunity to hike the entire distance from the Continental Divide in Glacier National Park to the Pacific Ocean on the Olympic Peninsula along an established and maintained trail would not be available. The trek could still be made, but along substantial segments, travelers would either have to bushwhack, travel along county roads, or plan a route to follow existing trails. Other benefits that will be foregone if the trail fails to become a reality are some opportunities for education and interpretation related to natural history, land use patterns, and wildlife management. Also, the trail could help to preserve islands of wilderness, such as Mount Henry, the Salmo-Priest, and the Kettle Range by generating support for those areas among trail users.

The cost of developing a continuous Pacific Northwest Trail, estimated from \$64 million to \$106 million for land acquisition and trail construction along a corridor averaging 1,000 feet and \$39 million to \$60 million along a corridor averaging 500 feet, would not be incurred under the No Action Alternative. Therefore, existing trail construction or maintenance programs would not be jeopardized.

Although under this alternative, no continuous Pacific Northwest Trail would be developed, there are a number of places within the study area which lack trails where shorter trails would benefit nearby urban populations. Examples are a trail running the length of Whidbey Island, a trail extending along the Skagit River, and a trail along the foothills south of Port Angeles.

The possibility of establishing a low elevation trail which would be open to use more of the year, rather than being snowbound for long periods, was suggested by horseback riding groups. Map 15 identifies for each of the suggested routes the segments that can be expected to be open for 12, 9, 6, and 3 months and could serve as a basis for locating trails which have a long season of use and are adaptable to horseback riders.



**findings and  
recommendations**

## V. FINDINGS AND RECOMMENDATIONS

### Findings

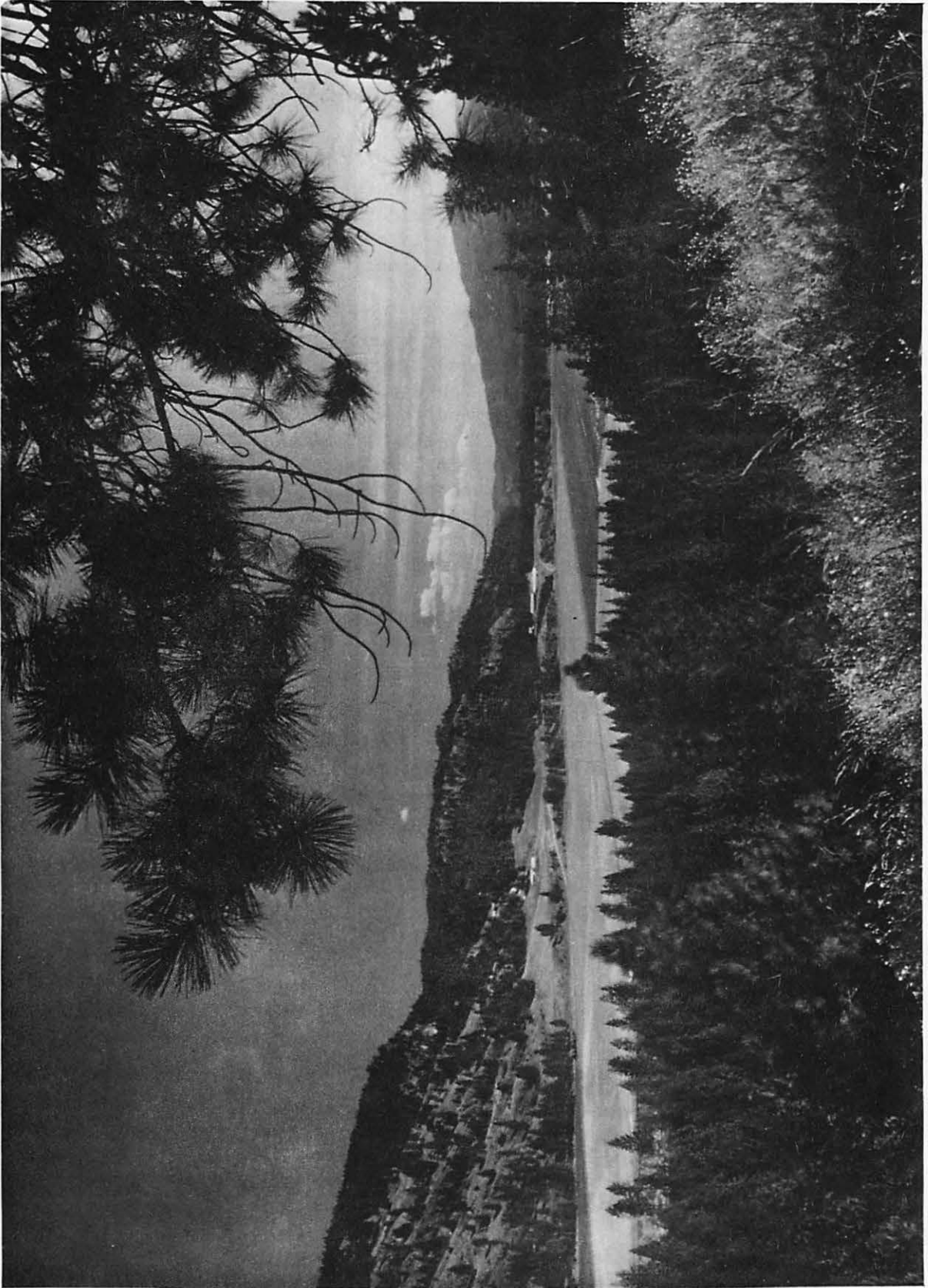
The findings of the study are that while a trail extending between the Continental Divide and Pacific Ocean would cross some of America's most breathtaking and varied landscapes, it is overwhelmingly evident that development of the trail as a continuous entity is neither feasible nor desirable.

There is no question that a Pacific Northwest Trail stretching more than 1,000 miles in length and crossing majestic mountain ranges, major river valleys, a large island, the Puget Sound estuary, a rain forest, and ocean beaches qualifies scenically and recreationally for designation as a National Scenic Trail. However, the arguments against the trail are so compelling that no other finding can be reached than that it should not be designated or constructed. Much of the area is already served by trails. The cost of land acquisition and development would be excessive and development of the trail would be at the expense of meeting other higher priority trail needs. The trail is of low priority. Important environmental impacts would be incurred. Many miles in eastern Washington cross lands of marginal recreational and scenic appeal.

Most of the spectacular high elevation areas crossed by the trail are already served by extensive trail systems. Existing trail opportunities within the study area appear to be sufficient to meet the demand now and during the foreseeable future. There are presently about 6,400 miles of trail on Federal lands within the study area, including all classes and types of trails. Based on data contained in the report "Regional Recreation Data Programs for the Northwest" prepared by the Recreation Data Subcommittee of the Pacific Northwest River Basins Commission, and on information in the State Comprehensive Outdoor Recreation Plans for the States of Montana, Idaho, and Washington, the 6,400 miles of trail available appear to be more than adequate now and in the foreseeable future (see Appendix 3).

Most of the foothill areas, river valleys, and Whidbey Island, over which more than 200 miles of the new trail would have to be constructed, are in private ownership. The costs of acquiring the necessary right-of-way across those private lands and of constructing the trail would be substantial. Those costs are estimated to range from \$64 million to \$106 million for a trail corridor averaging 1,000 feet in width, and from \$39 million to \$60 million for a trail corridor averaging 500 feet in width. To the extent that lands were donated and volunteer help was available for construction and maintenance, costs would be reduced.

The cost of acquiring lands and constructing the trail would almost unavoidably reduce the amount of money available for other trails or trail systems. This was an issue expressed at the public meetings. The intense competition for the Federal dollar virtually mandates that other trail



Kettle River ranch country near Orient, Washington.

programs would suffer if a Pacific Northwest Trail were funded. Many of those other trail programs are in or near urban areas or involve trail networks that are already in place and heavily used but under-maintained because of lack of sufficient funds. For example, there is an unmet need to reconstruct 421 miles of 1,061 miles of trail within the Mount Baker-Snoqualmie National Forest at a cost of \$2.2 million. In the scale of national recreation priorities, therefore, the study concluded that a Pacific Northwest Trail is of low priority in comparison with most other trail needs that are funded from the Federal dollar.

The study found that development of a Pacific Northwest Trail would likely have a major adverse impact on the endangered grizzly bear and on the many fragile high elevation areas the trail would cross. If the trail was routed to avoid those areas, then it would miss some of the study area's most scenic portions. If the most scenic route was followed, but the trail managed so that the amount and kinds of use permitted were consistent with protecting the grizzly bear and the fragile high areas, then use of portions of the trail would have to be sharply limited. For example, in Glacier National Park, trails are closed to use when grizzly are observed in the vicinity. In Olympic National Park, overnight use is not permitted in fragile high elevation areas that are eroding because of overuse.

While a Pacific Northwest Trail would cross many areas of outstanding scenic and recreational value, many miles in eastern Washington cover lands on which a system has not been constructed in the past due to a lack of recreational values or priorities.

Based on a comparison of the amount of trail use presently occurring along the Pacific Crest Trail in Washington and Oregon, the study estimates that there would be approximately 100,000 recreation days use made of a Pacific Northwest Trail during the first year of full operation, increasing to approximately 200,000 recreation days use 40 years after the trail became operational. However, most of that opportunity is already available in the trail networks presently existing in the national parks and national forests which occupy more than 70 percent of the study area. The amount of new trail opportunity which would be provided, therefore, would be only a small fraction (estimated to be 25 percent) of the projected use. True, there would be opportunity for trail users to travel from one end to the other, an opportunity not now conveniently available. However, the number of people who could be expected to avail themselves of the opportunity to travel the full length of the trail, based on estimates of such use of the Appalachian Trail and the Pacific Crest Trail, would be insignificant in comparison with the total regional trail use.

In order to compare the value in benefits which would result with the costs which would be required, a benefit-cost analysis was prepared for each of the three routes (most scenic, least costly, and minimum environmental impact), assuming corridor widths averaging 1,000 feet and 500 feet. The method used in the analysis is described in Appendix 4. The analysis is based on the following assumptions:

1. A recreation day value of \$40.
2. Realization of 25,000 recreation days new use annually by year one, 37,500 by year 20, and 50,000 by year 40.
3. A project life of 100 years.
4. An interest (discount) rate of 7-1/8 percent.

The results of the analysis, as summarized in Table 11, show the dollar value of benefits realized for each dollar of costs incurred. For example, in the case of the most scenic route with a width averaging 500 feet, for each dollar expended for land acquisition, trail development, facilities construction, and operation and maintenance, \$.80 is returned in the form of recreation benefits.

Table 11. Value of Recreation Benefits Received for each Dollar of Costs

<u>Route</u>	<u>Corridor averaging 1,000' in width</u>	<u>Corridor averaging 500' in width</u>
Most scenic	\$0.48	\$0.80
Least costly	\$0.64	\$1.03
Minimum environmental impact	\$0.39	\$0.68

From Table 11, it is evident that all of the alternative routes but one have an unfavorable ratio of benefits to costs. Only the least costly route having a 500-foot average width produced a favorable ratio and that by the barest amount.

#### Recommendations

In evaluating the various alternatives available for consideration, four alternatives were selected for analysis. They were: (1) a trail following the most scenic of the routes suggested; (2) a trail following the route which would require the least amount of money for land acquisition and trail construction; (3) the trail following the route of minimum environmental impact; and (4) no trail.

The study recommends alternative four, that the Pacific Northwest Trail not be designated and developed. Instead, the recommendation is made that existing trails be upgraded and that new trails be developed close to population centers where there is an identified need for trails. Three such areas are Whidbey Island, the Skagit River valley, and the foothills near Port Angeles. The possibility of establishing a series of low elevation, long season-of-use trails suited to horseback rider and hiker use also merits attention.

Table 12. Comparison of Alternative Routes

	<u>Alternative #1</u> <u>Most Scenic</u> <u>Route</u>	<u>Alternative #2</u> <u>Least Costly</u> <u>Route</u>	<u>Alternative #3</u> <u>Minimum</u> <u>Environmental</u> <u>Impact Route</u>
<u>Scenic Quality:</u>			
Distinctive	560 miles (50%)	351 miles (32%)	179 miles (16%)
Common	403 miles (36%)	593 miles (53%)	671 miles (60%)
Minimal	<u>156 miles (14%)</u>	<u>168 miles (15%)</u>	<u>269 miles (24%)</u>
Total	1,119 miles	1,112 miles	1,119 miles
<u>Costs:</u>			
Acquisition (1,000')	\$72,588,219	\$50,914,839	\$93,702,544
Construction	<u>13,524,683</u>	<u>12,678,504</u>	<u>12,249,624</u>
Total <sup>1/</sup>	\$86,112,902	\$63,593,343	\$105,952,168
Annual O & M	\$111,900	\$111,210	\$111,940
<u>Existing Trail:</u>	428 miles (38%)	441 miles (40%)	293 miles (26%)
<u>Special Impacts:</u>			
Private Lands	31,782 acres 254 miles (23%)	22,961 acres 189 miles (17%)	35,406 acres 292 miles (26%)
Alpine/Subalpine Areas Crossed	92 miles (8%)	88 miles (8%)	64 miles (6%)
Grizzly Range Crossed	280 miles (25%)	184 miles (17%)	85 miles (8%)

<sup>1/</sup> Totals for a trail having a width averaging 500 feet are:

- Alternative #1 - \$51 million
- Alternative #2 - \$39 million
- Alternative #3 - \$60 million

**appendix**



## APPENDIX 1

### Public Involvement

In May 1978, public meetings were held in Seattle, Port Angeles, Mount Vernon, Okanogan, and Spokane, Washington; Bonners Ferry, Idaho; and Kalispell, Montana, for the purpose of informing residents living in the vicinity of the proposed trail about the study and inviting their suggestions on whether they thought a trail should be developed, and, if so, where they preferred it to be located. In advance of the meetings, media announcements were made and 1,500 brochures were mailed to agencies, groups, and individuals inviting their participation and views, either through attendance at the meetings or in mailed responses.

The greatest support for the Pacific Northwest Trail, 85 to 100 percent, occurred at the meetings in Spokane, Mount Vernon, Okanogan, and Bonners Ferry (Table 13). The greatest opposition was at the meetings in Seattle (80 percent) and Port Angeles (50 percent), as well as in Kalispell (100 percent) where disturbance of the grizzly bear habitat was the main reason given for opposition.

Written responses from those unable to attend the public hearings, as summarized in Table 14, showed the most opposition to be in Montana (65 percent), and the most support to be in Idaho (80 percent) and other states (81 percent).

Frequently expressed views submitted by the 70 organizations and 250 individuals attending the public meetings and in the 160 written responses were:

1. Fragile areas, where soil and vegetation would be damaged by overuse, should be excluded from the Pacific Northwest Trail route.
2. The standard of construction of the Pacific Northwest Trail should be lower than that on the Pacific Crest Trail.
3. Horseback riders advocated routing the Pacific Northwest Trail at lower elevations to permit use for more months of the year.
4. The habitat of the grizzly bear in Montana and caribou in the Salmo-Priest area should not be traversed by the Pacific Northwest Trail.
5. Excessively large sums of money should not be spent on the Pacific Northwest Trail.
6. Funding for construction and maintenance of the Pacific Northwest Trail must not be diverted from where they would normally be used on other trails.

Table 13.  
Views on Pacific Northwest Trail Expressed at Public Meetings

<u>Location of Public Meetings</u>	<u>Dates 1978</u>	<u>Total Attendance</u>	<u>Percent of Speakers Favoring a PNW Trail</u>	<u>Percent of Speakers Opposing a PNW Trail</u>
Seattle, Washington	May 1	75	20	80
Port Angeles, Washington	May 2	35	50	50
Mt. Vernon, Washington	May 3	60	85	15
Okanogan, Washington	May 9	25	100	0
Spokane, Washington	May 10	65	100	0
Bonnars Ferry, Idaho	May 11	20	100	0
Kalispell, Montana	May 13	35	0	100

Table 14.  
Views on Pacific Northwest Trail Expressed in Written Responses

<u>State</u>	<u>Percent Favoring a PNW Trail</u>	<u>Percent Opposing a PNW Trail</u>	<u>Percent Neutral on a PNW Trail</u>
Washington	57	30	13
Idaho	80	10	10
Montana	24	65	11
Other States	81	12	7

Organizations, Agencies, and Industries attending Public Hearings

Conservation and Outdoor Organizations:

- 1 Federation of Western Outdoor Clubs
- 2 Hobnailers
- 3 Kettle Range Conservation Group
- 4 Klahhane Club
- 5 The Mountaineers
- 6 National Parks and Conservation Association
- 7 North Cascades Conservation Council (N.C.C.C.)
- 8 Olympic Conservation Council
- 9 Olympic Peninsula Audubon Society
- 10 Olympic Park Associates
- 11 Sierra Club
- 12 Skagit Environmental Council
- 13 Washington Environmental Council
- 14 Washington Native Plant Society
- 15 Washington Wildlife Study Council

Trail Organizations:

- 1 Clallam County Trail Advisory Committee
- 2 National Trails Council
- 3 Pacific Northwest Trail Association
- 4 Washington State Trails Council
- 5 Western Trail Builders Association

Horse Riding Organizations:

- 1 Alger Riding Club
- 2 Alger Trail Blazers
- 3 American Horse Council
- 4 Backcountry Horsemen of Washington
- 5 Eastern Washington Arabian Horse Association
- 5 Joyce Horsetorians Saddle Club
- 7 Lost Mountain Ranch
- 8 Mt. Jo Riders
- 9 North Idaho Arabian Club
- 10 Northwest Ladies Trailriders
- 11 Olympic Saddle Club
- 12 Omak Ghost Riders Club
- 13 Prairie Riders Inc.
- 14 P. O. County Sheriff's Possee
- 15 Traildusters Riding Club

Washington State Horsemen:

- 16 Northeastern Zone
- 17 North West Border Zone
- 18 Olympic Park Zone

Snowmobile Organizations:

- 1 Methow Valley Snowmobile Club
- 2 Spokane County Snowmobile Club
- 3 Washington State Snowmobile Association
- 4 Winter Knights Snowmobile Club

Industry:

- 1 Burlington Northern
- 2 Industrial Forestry Association
- 3 Light Horse Industry
- 4 Scott Paper Company

Public Agencies:

- 1 Governor of Washington, Dixy Lee Ray
- 2 Flathead County Parks and Recreation Department
- 3 Idaho Department of Parks and Recreation
- 4 Island County Planning Department
- 5 Lincoln County Commissioners
- 6 Montana Fish and Game Department
- 7 Skagit County Board of Commissioners
- 8 Skagit County Park Department
- 9 Skagit County Planning Department
- 10 Spokane County Parks Department
- 11 Washington State Parks Department
- 12 U. S. Forest Service
- 13 Bureau of Land Management
- 14 Corps of Engineers
- 15 Office of the Secretary of the Interior

Miscellaneous:

- 1 Border Grizzly Project
- 2 Boy Scouts of America
- 3 North Okanogan Sportsman Council
- 4 Olympic Y.A.C.C.
- 5 P.I.E.
- 6 Port Angeles Business and Professional Women
- 7 Y.M.C.A. Wilderness Program

Variety Classes of Scenic Quality

## Variety Classes

Variety Classes are obtained by classifying the landscape into different degrees of variety. This determines those landscapes which are most important and those which are of lesser value from the standpoint of scenic quality.

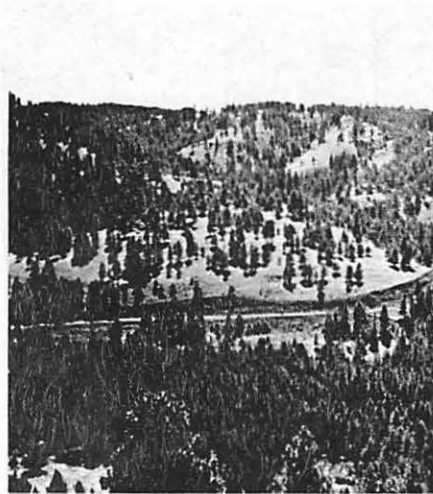
The classification is based on the premise that all landscapes have some value, but those with the most variety or diversity have the greatest potential for high scenic value.

There are three variety classes which identify the scenic quality of the natural landscape:

- Class A - Distinctive**
- Class B - Common**
- Class C - Minimal**



**Class A - Distinctive**  
Refers to those areas where features of landform, vegetative patterns, water forms and rock formations are of unusual or outstanding visual quality. They are usually not common in the character type.



**Class B - Common**  
Refers to those areas where features contain variety in form, line, color, and texture or combinations thereof but which tend to be common throughout the character type and are not outstanding in visual quality.



**Class C - Minimal**  
Refers to those areas whose features have little change in form, line, color, or texture. Includes all areas not found under Classes A and B.

## Process

A frame of reference must be developed by which to judge the physical features of an area as distinctive, common, or minimal (Class A, B, or C). This is derived from the character type or subtype. (See pages 5 and 6.) Features such as landforms, water forms, rock formations, and vegetative patterns are compared singularly or in combination with those commonly found in the character type. Through this comparison, an area's overall degree of scenic quality and resultant variety class rating may be determined.

Ranking the Class B features within the area should be done first as a means of establishing a benchmark from which distinctive and minimal can be judged. The exceptions are those subtypes in which the features common to the character type are outstanding in quality and/or known nationally for their scenic importance. These features should be ranked Class A even though they are common to the character type.

Class A is the ranking given to those areas with features more distinctive or unusual than those defined in the Class B benchmark established above. Class A features usually exhibit a great deal of variety in form, line, color, and texture. Landform, rock, water and vegetation stand out as being unusual and/or outstanding in visual quality compared to those found common in the character type.

Class C features have very little variety, if any, in form, line, color, and texture. Water forms, because of their high attractiveness to people, should not generally fall into this category. Exceptions will depend on the character type but might be very small stagnant ponds, intermittent streams, etc. There will be character types which have very little, if any, of the land and its features that fall into Class C.

# Map Preparation for Variety Class



Preceding pages have identified variety classes and briefly outlined the procedure for determining them. The classes must now be mapped in order to provide the data base for development of visual quality objectives.

1. Identify the character type and develop a written description of it and the subtype of the area.

This oblique photo illustrates the steep mountain slope subtype within the Western Cascades character type. The written description of this subtype would contain a discussion of the visual aspects of physical geology and plant communities.

	CLASS A	CLASS B	CLASS C
	DISTINCTIVE	COMMON	MINIMAL
Landform	Over 60 percent slopes which are dissected, uneven, sharp exposed ridges or large dominant features.	30-60 percent slopes which are moderately dissected or rolling.	0-30 percent slopes which have little variety. No dissection and no dominant features.
Rock Form	Features stand out on landform. Unusual or outstanding, avalanche chutes, talus slopes, outcrops, etc., in size, shape, and location.	Features obvious but do not stand out. Common but not outstanding avalanche chutes, talus slopes, boulders and rock outcrops.	Small to nonexistent features. No avalanche chutes, talus slopes, boulders and rock outcrops.
Vegetation	High degree of patterns in vegetation. Large old-growth timber. Unusual or outstanding diversity in plant species.	Continuous vegetative cover with interspersed patterns. Mature but not outstanding old-growth. Common diversity in plant species.	Continuous vegetative cover with little or no pattern. No understory, overstory or ground cover.
Water Forms, Lakes	50 acres or larger. Those smaller than 50 acres with one or more of the following: (1) Unusual or outstanding shoreline configuration, (2) reflects major features, (3) islands, (4) Class A shoreline vegetation or rock forms.	5 to 50 acres. Some shoreline irregularity. Minor reflections only. Class B shoreline vegetation.	Less than 5 acres. No irregularity or reflection.
Water Forms, Streams	Drainage with numerous or unusual changing flow characteristics, falls, rapids, pools and meanders or large volume.	Drainage, with common meandering and flow characteristics.	Intermittent streams or small perennial streams with little or no fluctuation in flow or falls, rapids, or meandering.

2. Prepare a chart (or list) of landscape features within the character type or subtype and describe each feature for Variety Class A, B, and C.

This chart represents a variety class breakdown of the steep mountain slope subtype shown in the photo. A chart of this kind should be compared to the written description of the character type to determine what features are distinctive, common or minimal (Class A, B, or C). This chart is appropriate for this subtype only since descriptions for other character types or subtypes may vary according to the characteristics of the land.

## APPENDIX 3

### Trail Demand, Supply, and Needs

#### Demand

The most useful demand information for the 13 counties within the study area is contained in the Regional Recreation Data Program of the Pacific Northwest River Basins Commission (PNRBC). The data was developed for use in the Washington, Oregon, and Idaho outdoor recreation plans (SCORPS) and also for use in the PNRBC Coordinated Joint Plan (CCJP). Existing and projected participation was determined for a number of activities through the year 2000. Table 15 shows the participation in hiking and horseback riding in the 13-county study area for the years 1980 and 2000. The unit of measurement is the "activity occasion" and is defined as a standard unit of recreation use consisting of one individual participating in one recreation activity during any reasonable portion or all of one day.

#### Demand Expressed as Total Trail Requirements

The following steps were used to convert hiking and horseback riding demand to total trail requirements. The methodology upon which the computations are based was taken from the Washington Statewide Outdoor Recreation Plan, 1979 (SCORP), prepared by the Interagency Committee for Outdoor Recreation. The year 1980 data was used to illustrate the procedure.

(1) Total annual hiking and horseback riding occasions in the study area were 2,900,000 for the year 1980.

(2) Step two is to derive the use which could be expected on the average weekend day during the peak month of the recreation season. This is defined as the design load day. Studies have shown that the use on the design load day as a percentage of annual use varies depending on the activity being analyzed. However, regardless of the activity, that use is generally accepted as the level at which facilities will be developed. For this analysis, 1 percent was used to derive the number of hikers expected on the design load day. Multiplying this by the total annual hiking occasions results in a figure of 29,000 hikers and horseback riders on the design load day.

(3) The third step is to determine the number of hikers and horseback riders on the design load day who want to use designated trails. For purposes of this analysis, it is assumed that 90 percent of the participants, or 26,100, will use designated trails.

(4) The next step is to compute the number of miles of trail required for hikers and riders on the design load day. Since the supply side of this analysis deals primarily with rural, wilderness,

Table 15. Hiking and Horseback Riding Demand

County	Activity Occasions					
	1980		2000		Total	
	Hiking	Horseback Riding	Hiking	Horseback Riding	Hiking & Horseback Riding	Hiking & Horseback Riding
<u>Montana</u>						
Flathead	49,000	23,000	68,000	31,000	72,000	99,000
Lincoln	20,000	10,000	40,000	14,000	30,000	54,000
<u>Idaho</u>						
Boundary	88,000	98,000	137,000	145,000	186,000	282,000
Bonner	121,000	157,000	199,000	263,000	278,000	462,000
<u>Washington</u>						
Pend Oreille	208,000	30,000	326,000	46,000	238,000	372,000
Stevens	105,000	26,000	147,000	31,000	131,000	178,000
Ferry	73,000	14,000	102,000	18,000	87,000	120,000
Okanogan	87,000	19,000	116,000	23,000	106,000	139,000
Whatcom	507,000	294,000	700,000	376,000	801,000	1,076,000
Skagit	240,000	96,000	324,000	119,000	336,000	443,000
Island	240,000	74,000	322,000	95,000	314,000	417,000
Jefferson	121,000	23,000	160,000	29,000	144,000	189,000
Clallam	<u>143,000</u>	<u>34,000</u>	<u>187,000</u>	<u>43,000</u>	<u>177,000</u>	<u>230,000</u>
Totals	2,002,000	898,000	2,828,000	1,233,000	2,900,000	4,061,000



and backcountry trails, it is assumed that an average level of use for this type of experience would be four persons per mile for day use and about three persons per mile for backcountry overnight use. It is assumed, based on present trail opportunities, about 55 percent of the use would be overnight backpacking and the remainder, or about 45 percent, would be day hiking. Thus, about 55 percent of the design load day use (26,100) or 14,300 could be accommodated on about 4,800 miles of trail assuming an instant capacity of three occasions per mile. The remaining users, or 11,800, using four activities per mile, would require about 2,900 miles of trail at any one time on the design load day.

(5) The last computation to derive actual trail miles required for the design load day is to determine the turnover rate during the day. It is obvious that one mile of trail over the period of a day can accommodate considerably more use than its "instant capacity." The Washington State plan assumes no turnover rate for backpacking use. Thus, the 4,800 miles of trail for this type of hiking and horseback riding would remain as computed in (4) above. However, day use activities are assumed to have a turnover rate of 3 which would result in trail miles of 2,900 instant capacity divided by three or about 1,000 miles. Total requirements for both types of use would then be about 5,800 miles of trail within the study area.

Using the same steps for the year 2000, total trail requirements for hiking and horseback riding would be about 8,000 miles.

#### Supply and Needs

From discussions with National Park Service and Forest Service personnel, it was determined that there are about 6,400 miles of trail in the 13 counties inventoried. This supply includes all classes and types of trails used by hikers. Table 16 summarizes total trail miles.

A comparison of the total requirements for the year 1980 (5,800 miles) with the present supply shows an excess of trail opportunities of about 600 miles. It should be pointed out, of course, that these are gross totals and do not reflect the quality of the hiking or riding experience. However, even with this qualification, it appears that there are sufficient trail opportunities to meet present demands within the study area. However, within 20 years, or by the year 2000, additional opportunities in the area would be needed.

#### Findings of the Montana, Idaho, and Washington Outdoor Recreation Plans (SCORPS)

Montana - The Montana SCORP indicates that its trails are unevenly distributed. West of the Continental Divide, Montana is abundantly supplied with non-motorized trails for such activities as backpacking and horseback riding; such opportunities are noticeably lacking in

Table 16. Existing Trail Miles on Federal Lands  
within Study Area

<u>National Parks</u>	<u>Miles</u>
Olympic	500
North Cascades	324
Glacier	450
<u>National Forests</u>	
Olympic	170
Mt. Baker-Snoqualmie	406
Okanogan	1,508
Colville	280
Idaho Panhandle	635
Kootenai	1,306
Flathead	<u>800</u>
Total	6,400 (rounded)

the eastern two-thirds of the state. State policy highlights the development of additional recreational trails, bridle paths, and walkways in and near Montana's cities and towns. The Montana SCORP has also quantified trail needs. In Region 1, which includes Flathead and Lincoln Counties, priority for future trail development for backpacking is relatively low (number 5 with only two regions having lower priority). However, in that region, horseback riding trails have top priority based on the relative need indicators used.

Idaho - Planning Region 1 contains five counties in northern Idaho, two of which are Boundary and Bonner. The Plan concludes that the needs of hiking and backpacking are currently being satisfied in the planning region.

Washington - The current (1979) Washington State outdoor recreation plan has identified needs for walking and hiking trails by planning district within the state. The following summarizes the findings of the plan in those planning districts which encompass the Pacific Northwest Trail study area.

Planning District 1 - This district is composed of Clallam and Jefferson Counties. The plan shows no need for additional trail opportunities in these two counties until the year 1990.

Planning District 3 - This district is comprised of Whatcom and Skagit Counties. The Washington SCORP shows a small need by the year 1980 for additional trail opportunities.

Planning District 7 - This district is comprised of three counties including Okanogan and Skagit. The Washington plan shows no need through the year 2000 for additional trails for walking and hiking.

Planning District 11 - This district is comprised of Ferry, Stevens, and Pend Oreille Counties. The plan shows no need through the year 2000 for additional hiking and walking trails.

For horseback riding opportunities, District 1 shows no need through the year 2000; District 3 shows a small need at present which would about double by the year 2000; and District 7 shows no need through the year 2000, which is also the case for District 11.

## APPENDIX 4

### Benefit-Cost Analysis

Benefit-cost analysis has long been associated with water resource development projects and, in most cases, has not been used for other types of recreational areas. Although this is still the case today, it appears that there is precedence to apply the traditional approaches to areas other than water resource projects. Specifically, Supplement No. 1 to Senate Document 97, entitled "Evaluation Standards for Primary Outdoor Recreation Benefits" dated June 4, 1964, and prepared by the Water Resources Council, mentions big game hunting and wilderness pack trips in the "specialized" category of activities to be evaluated. This document since has been supplemented by the "Principles and Standards for Planning Water and Related Land Resources" effective October 25, 1973. Though Principles and Standards goes into less detail than Supplement No. 1, there is some reason to believe that about the same general and specialized activities are included for evaluation purposes. Also, Principles and Standards specifically includes Wild and Scenic River studies. Thus, it was concluded that the procedures applicable to water-related recreation could also be applied to other recreation areas and activities.

The unit day value method was used to estimate recreation benefits. This is the approach outlined in Principles and Standards that relies on informed judgment to approximate the "willingness to pay" by users. It was determined that users are paying an average of about \$40 per day to guide/outfitters for similar types of recreation experiences and so this value was used as a proxy for price.

Total use of the trail route was estimated to be 100,000 recreation days annually initially, based on use figures along the Washington-Oregon portion of the Pacific Crest National Scenic Trail. This use would grow to about 150,000 within 20 years, and to 200,000 within 40 years. However, to arrive at actual benefits, it is necessary to deduct that use which would have occurred without the trail proposal. Conservatively, it is estimated that only about 25 percent of the use would be in addition to that which would occur without the proposal. This is based on the fact that almost 75 percent of the study area is in Federal ownership and already has extensive trail systems. As a result, the recreation days attributable to the trail would be 25,000 initially, growing to 37,500 at 20 years and 50,000 at 40 years. Benefit calculations are based on those figures.

As benefits and costs are unevenly distributed over time, dollar values must be put on a comparable basis. Thus, future benefits and costs were discounted back to a present worth equivalent. Then both benefits and costs were amortized over the assumed 100-year useful life of the project and a benefit-cost ratio determined.

The method used in arriving at benefit-cost ratio of 0.48-1 for the most scenic route with a corridor width averaging 1,000 feet is provided below. The same method was used in computing the ratio of benefits-costs for each of the route alternatives summarized in Table 11 of the report.

The following steps describe the method by which benefits and costs were converted to an average annual equivalent basis:

- (1) Initial Benefits--since these occur each year over the assumed useful life of the project (100 years), it is necessary to compute the present value of a series of payments of 1 per year for 100 years. Once the present value is determined, then to arrive at an average annual value, the present worth must be spread over the 100-year period. This is done by use of the interest or amortization factor which is the payment necessary to pay off a loan of \$1 over a 100-year period at an interest rate of 7-1/8 percent. By combining these two steps, the average annual equivalent value of the initial increment of benefits is derived.
- (2) Deferred Benefits--Years 1-20. This step is somewhat complicated by the fact that it involves two calculations:
  - (a) the value of the increased increment of use between years initial and 20, and
  - (b) the computation of that increment of value from project years 20-100.

In both cases, the present worth must be computed and amortized over the 100-year life of the project.

- (3) Deferred Benefits--Years 20-40. Since once again, there is an increase in the recreation value by year 40, this increase must also be converted to its average annual equivalent. This is again done in two steps:
  - (a) The present value of the increased increment must be found and, in this case, discounted back to year one from year 20. In turn, this increment is spread over the 100-year period, and
  - (b) The second part of the analysis covers the increment between years 40-100, brings it back to a present worth value, and then spreads it over the 100-year life of the project by use of the amortization factor.
- (4) Initial Costs--as these costs by definition are at the "present," it is simply necessary to spread them over the 100-year

life of the project. This is done by applying the same interest and amortization factor used for the benefit calculation.

- (5) Year 20 Costs--The computation is somewhat complicated because these costs occur in the future. However, it is simply necessary to discount these back to a present worth value and then amortize them over a 100-year period.
- (6) Year 40 Costs--The identical same procedure is used as in Step (5) except the present value of an amount 40 years in the future must be determined. This value is then amortized over the 100-year life of the project.
- (7) Operation and Maintenance Costs--These costs exhibit the exact same characteristics as initial recreation benefits and are treated in exactly the same manner as discussed under (1) above.

Alternative One, Most Scenic Route  
1,000-foot Corridor - Computation of Average Annual  
Equivalent (A/A/E) Benefits and Costs\*

Step 1. Computation of A/A/E Benefits:

Initial: \$1,000,000 X present value of  
 an annuity of 1 per year for 100 years  
 (14.0207) X interest and amortization  
 factor (.0713) = \$1,000,000

Deferred Average Increment (Years 1-20):

Average yearly increment (\$25,000) X present  
 value of an increasing series of 1 per year  
 for 20 years (86.8817) X interest and  
 amortization factor (.0713) = 154,866

Deferred Increment (Years 20-100):

Increment of (\$500,000) X present value of  
 1 per year for 80 years (13.9781) X present  
 value of 1, 20 years hence (.2525) x interest  
 and amortization factor (.0713) = 125,825

Deferred Average Increment (Years 20-40):

Average yearly increment (\$25,000) X present  
 value of an increasing series of 1 per year  
 for 20 years (86.8817) X present value of 1,  
 20 years hence (.2525) X interest and  
 amortization factor (.0713) = 39,104

Deferred Increment (Years 40-100):

Increment of (\$500,000) X present value of  
 1 per year for 60 years (13.8093) X present  
 value of 1, 40 years hence (.0637) X interest  
 and amortization factor (.0713) = 31,360

Total A/A/E Benefits (rounded) \$1,351,000

\*This is an example of the computation used in calculating benefits and costs. See Table 11 for the benefit-cost ratio of all alternatives.

Step 2. Computation of A/A/E Costs (Most Scenic Route):

Total Costs:

Land acquisition (including easements)	\$72,588,219
Development	<u>13,524,683</u>
Total	\$86,112,902

Assuming these costs would be incurred over about a 40-year period, total costs were divided evenly in three time frames-- initial, 20 years hence, and 40 years hence. The cost for each time period is shown as follows:

Initial	\$28,704,300
20 years hence	28,704,301
40 years hence	28,704,301

Operation and maintenance (annual) \$111,900

Investment costs (acquisition and development):

Initial - (\$28,704,301) X interest and amortization factor (.0713) = \$2,046,617

Year 20 - (\$28,704,301) X present value of 1, 20 years hence (.2525) X interest and amortization factor (.0713) = 516,771

Year 40 - (28,704,301) X present value of 1, 40 years hence (.0637) X interest and amortization factor (.0713) = 130,369

Total A.A.E Investment Costs \$2,693,687

Operation and Maintenance Costs:

(\$111,900) X present value of an annuity of 1 per year for 100 years (14.0207) X interest and amortization factor (.0713) = \$ 111,900

Total A.A.E. Costs (rounded) \$2,806,000

Benefit-Cost Ratio:  $\frac{\$1,351,000}{2,806,000} = 0.48-1$



## APPENDIX 5

### Review Comments

Approximately 200 copies of the draft study report were forwarded for review purposes to the various public and private interests having the most direct involvement in the proposed trail. Copies of the draft were also available for review at the national parks and national forests located in the study area.

Review comments received from Federal and State agencies and offices, as well as those from private organizations, are reproduced in this appendix. The comments of individuals are not reproduced. Of individuals commenting, 44 expressed their support for the trail, while 5 stated opposition.

The principal issues contained in the review comments are identified in the following paragraphs:

1. The route recommended by the Pacific Northwest Trail Association (PNTA) was not considered in the study.

The route suggested by the PNTA was considered in the study as indicated on Map 7. While it was not one of the four alternative routes analyzed, it is very close to or in the corridor for the most scenic alternative between Glacier National Park and Ross Lake National Recreation Area. It is also represented along the Skagit River to the eastern part of Olympic National Park. The method used in selecting those four alternatives is described in Chapter IV, ALTERNATIVES.

2. A fifth alternative should have been considered, that of a route where superb scenery might be bypassed on occasion to achieve lower costs or avoid serious environmental impacts.

Additional alternatives were considered during study formulation; however none appeared useful in determining trail feasibility. Alternatives displayed provided insight on tradeoffs where cost, scenic beauty, or environmentally sensitive areas have been given individual consideration or emphasis. None of the alternative routes are entirely pure as to the emphasis given a primary factor since all contain combinations of cost, scenic value, or environmental impact due to practical routing constraints such as major river crossings and works of man. The report is structured to provide information on the major factors by segment. The basic information about cost, scenic value, and environmental impact for each segment with other information contained in the study report can provide a basis for decision in the event Congress elects to authorize the creation of a Pacific Northwest National Scenic Trail.

3. In order to reduce costs, only those segments across public lands should be designated.

This would be, at best, only a temporary expedient. Sooner or later, rights to a corridor across privately owned lands would have to be acquired in fee or easement in order to provide a continuous route and to bring the trail up to the high standard of other National Scenic Trails. A trail with gaps across privately owned lands would invite trespass, especially through lands not traversed by public roads, and create conflicts with landowners.

4. The study team should have evaluated the various suggested routes on the ground by walking them.

This would have been infeasible and it is unnecessary. This was infeasible because of the excessive cost and time which would have been required for the study team to cover several thousand miles of route considered in the alternatives, much of which is presently without an existing trail right-of-way. Unnecessary because the level of detail required for analysis in a feasibility study does not require the kind of information which would result from walking each possible route. If a trail were authorized, a major task would entail on-the-ground trail location, design, and costing. While some of the trail area was visited by team members, much of the information utilized in evaluating the suggested route segments was obtained by drawing on the knowledge of people familiar with different parts of the study area. This includes staffs of the several national forests and national parks traversed by the trail, as well as members of the public and the ad hoc steering committee.

5. The costs were misrepresented since development of the trail would occur over a long period of time and, therefore, payments could be deferred.

The acquisition of lands and the construction of the trail could, and no doubt would, be a long-term proposition. Therefore, the full cost would not have to be met immediately. However, commitment by Congress to such development means that eventually the full cost would have to be met and, therefore, Congress needs to know the total cost of the commitment it must decide. Analysis of benefits and costs in the report (Appendix 4) utilizes a standard method of developing and accounting initial and deferred values as they occur in time over the projected (100 years) life of the trail project.

6. The Nation needs additional National Scenic Trails and a Pacific Northwest Trail represents an outstanding opportunity.

There is no question that a Pacific Northwest Trail, as envisioned, would be a worthy addition to the National Trails System. Whether the trail is needed is a matter of priority and public demand. A recent study of trail needs in the Pacific Northwest by the Heritage Conservation and Recreation Service found long-distance back-country trails to be in ample supply in response to projected demand. The most serious needs are for

more trails close to population centers and to upgrade and maintain existing trails to assure that the demand for quality trail opportunity which these provide now and will provide in the future is satisfied.

7. The cost estimates failed to take into account savings from the donation of privately owned lands and from volunteer help in constructing and maintaining the trail.

To the extent lands were donated and volunteer help was forthcoming, costs would be reduced. Based on experience with existing National Scenic Trails, some land donations could be expected, but they likely would not occur in any significant amount. Unlike the Appalachian Trail, most of the Pacific Northwest Trail route would be situated long distances from sources of volunteer help. This fact and its relation to the projected long-term energy shortage makes it doubtful, at best, whether any level of a volunteer program approaching that experienced along the Appalachian Trail could be expected.

8. Not enough effort was made by the study team to obtain citizen input.

Every reasonable effort was made to involve the public and to obtain the views of the various public and private interests as the study progressed. The steps taken in doing this are outlined on pages 5 and 6.

9. A thorough environmental analysis of the trail route should have been made.

An environmental statement was determined not to be necessary since no significant Federal action is being proposed. For each of the alternative routes considered, the major environmental effects are described, particularly with respect to what the impacts would be on fragile environments; i.e., alpine and subalpine areas and range of the grizzly bear. In addition, the impact the trail would have on privately owned property is addressed.

10. The trail should be established to preserve wilderness.

The purpose of a National Scenic Trail is to promote public access to, travel within, and enjoyment of the open air, outdoor areas of the nation. Emphasis is on providing maximum outdoor recreation potential and for the conservation and enjoyment of the nationally significant scenic, historic, natural, or cultural quality of the areas through which the trail passes. The trail corridors studied pass through a number of areas containing wilderness. These include several national parks and national forests as well as national recreation areas. Since wilderness concerns are primarily being considered as a separate program, trail establishment would be expected to have little effect on the designation of additional wilderness. The possible adverse effect of the trail on wilderness values was a concern expressed by some responses received during the study.

130

# IDAHO DEPARTMENT of PARKS & RECREATION

Statehouse Mail

2177 Warm Springs Ave.

Boise

Idaho

83720

(208) 384-2154

Dale R. Christiansen, Director  
R. P. Peterson, Deputy Director



John V. Evans, Governor  
File Ref. No: TR 557.5

March 31, 1980

*Notes  
in my a/cance  
following on*

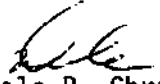
Mr. Robert L. Herbst  
Assistant Secretary  
Fish, Wildlife & Parks  
Department of the Interior  
Washington, D.C. 20240

Dear Mr. <sup>Bl</sup>Herbst:

Thank you for the opportunity to review the draft study for the proposed Pacific Northwest Trail. Members of my staff participated in the steering committee for the study.

We are in general agreement with the recommendations of the study team (i.e., that the trail not be designated and constructed). Our opinion is based upon our belief that funds for the PNWT would come only at the expense of funding for local trail maintenance. We believe that short term backpacking opportunities are in greater demand than are the long distance opportunities to be provided by the PNWT.

Yours truly,

  
Dale R. Christiansen  
Director

TG/cv



STATE OF  
WASHINGTON

Dixy Lee Ray  
Governor

OFFICE OF THE GOVERNOR  
Legislative Building, Olympia, Washington 98504

April 17, 1980

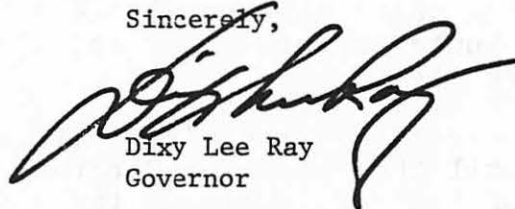
Mr. Robert L. Herbst  
Assistant Secretary for Fish  
and Wildlife and Parks  
U.S. Department of the Interior  
Office of the Secretary  
Washington, D.C. 20240

Dear Mr. Herbst:

I have reviewed the draft report and environmental assessment on the proposed Pacific Northwest National Scenic Trail and am pleased with the recommendation that the trail not be designated.

As the report clearly portrays, designation and construction of a Pacific Northwest National Scenic Trail would not substantially increase the available trail opportunities in this part of the country. This, coupled with the high cost estimates, means this trail would not be a good investment in outdoor recreation opportunity. We would rather see trail dollars spent on opportunities closer to the urban areas where the majority of people live. In this regard, we concur with the "no trail" recommendation made in your report.

Sincerely,



Dixy Lee Ray  
Governor

# PACIFIC NORTHWEST TRAIL ASSOCIATION

BOX 1048 SEATTLE, WASHINGTON 98111

206 323-7669

Dr. M. Rupert Cutler  
Asst. Secretary  
Department of Agriculture  
Wash., D.C. 20250

626261  
26-02  
                    

Dear Rupert Cutler:

When I visited you at your office in December you suggested that you would like to show new leadership in Forest Service trails policy just as you have done in range management, etc.

FS  
A9:28

An opportunity has arisen.

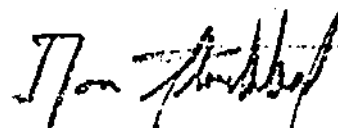
Your Portland Office in conjunction with the Park Service's Northwest office in Seattle has just released the Pacific Northwest Trail Study Report. This Report is extremely inadequate and requires major changes.

Rather than detail its inadequacies here I'll just mention that our primary concern (as the citizen group which obtained the study bill in 1976) is that the intent of Congress has been ignored. Our PNWT is a de facto trail like the Appalachian Trail which like the AT requires protection from various kinds of environmental degradation. The study issue has always been: should the PNWT be included in the National Trails System to protect it for all Americans? If not, what would the environmental and recreational impact be over the next 10, 20, or 50 years?

We conceive of this protection as being a phased-in protection which would necessarily come in gradual stages through our volunteers working in cooperation with land managers (as on the AT).

I urge you to defer transmittal of this badly-done Study to Congress until the intent of Congress concerning the desirability of protecting the de facto PNWT has been met.

Sincerely,



Ronald G. Strickland, Ph.D.

FROM THE CONTINENTAL DIVIDE TO THE PACIFIC OCEAN



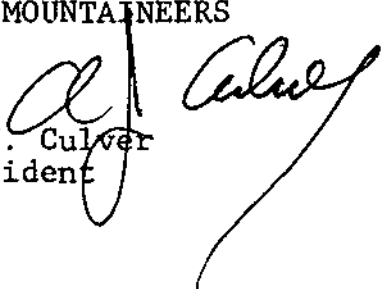
Mr. Russell E. Dickinson  
Page Two  
May 13, 1980

the trail and that the report correctly points out that funds could better be used to improve and maintain the existing trail system.

Thank you again for the opportunity to give you our comments.

Very truly yours,

THE MOUNTAINEERS

  
A. J. Culver  
President

AJC/ms





# THE WILDERNESS SOCIETY

FOUNDED IN 1935

June 3, 1980

DEPT. OF THE INTERIOR  
JUN 5 2 21 PM '80  
OFFICE OF THE SECRETARY  
WASHINGTON, D.C.

0616

Secretary Cecil D. Andrus  
Department of the Interior  
C Street between 18th & 19th Streets, N.W.  
Washington, D.C. 20240

Dear Secretary Andrus:

The Wilderness Society would like to comment on the joint draft report of the National Park Service and the U.S. Forest Service concerning the proposed Pacific Northwest Trail. I realize the deadline for comments has expired; however, I just received a copy of the report very recently, because it is not generally available in Washington, D.C. and I had to make a special request for it. Please consider my comments.

I cannot remember a report of this type prepared by either agency with which I personally disagreed more strenuously. The key finding of the study that "it is overwhelmingly evident that development of the trail is neither feasible nor desirable" is both erroneous and unsupported by the data contained in the report itself. Statements like this and "The trail is of low priority" and "Important environmental impacts would be incurred" indicate a clear bias by the study team against the proposed trail, since none of these statements are supported by the report itself.

It is our belief that a 1,000 mile-long Pacific Northwest Trail would have major benefits to hikers and horseback riders across the country. The designation of this Trail as a National Scenic Trail and its ultimate construction and corridor protection would result in a high quality, long-distance hiking route rivalling the famed Appalachian Trail. And, contrary to the study team's assertions, the Trail would provide a broad variety of hiking experiences from long distance use to shorter week-end and day trips. As a useful comparison, the Appalachian Trail receives an estimated 4 million hiker use days annually.

There are undoubtedly potential resource protection problems in establishing the Pacific Northwest National Scenic Trail. The appropriate proximity of the Trail to known grizzly habitat would have to be carefully considered; land acquisition should be prioritized over an extended

period of time; and deciding the best route for the Trail that provides for high scenic values and yet avoids areas where environmental damage is likely to occur would not be an easy task. None of these are reasons for not designating a Pacific Northwest National Scenic Trail, however.

There are several particularly serious deficiencies in the analysis presented in the report.

- \* The study team estimates there would be only 100,000 recreation days use made of the Trail during the first full year of operation, with this figure doubling after 40 years. I believe the use would increase much faster than that given the National Scenic Trails designation and the completed Trail route.
- \* If this is true, the results of the study team's cost/benefit analysis must be revised, because the benefits of most of the alternative routes and corridor acquisition widths would outweigh the costs. As one who is experienced with cost/benefit analysis of environmental protection programs, I am dubious of its validity as anything more than a very rough approximation of numerical values.
- \* While I agree to some extent with the study team that in some places there could be significant adverse environmental impacts on the grizzly bear and on fragile ecosystems, these effects could be avoided and/or mitigated by sensitive trail routing.
- \* The costs of potential Trail construction and management are almost certainly overstated, because there appears to be no analysis of the possibility of using volunteers for these purposes. Given the efforts of the Pacific Northwest Trail Association during the past decade to identify and protect a trail corridor, there is reason to believe that substantial volunteer assistance would be available. This type of public/private partnership has worked exceedingly well along the Appalachian Trail, and should be implemented elsewhere.

In summary, the Report does not provide an adequate record or basis for the strong recommendation it makes against establishment of the Pacific Northwest Trail. The public hearings held and public comments received during the study indicate there is strong support for the Trail in Washington, Idaho, and other states around the country. It is also clear that there is some opposition and there are some valid

Secretary Cecil D. Andrus  
June 3, 1980  
Page Three

concerns that have been raised.

We urge you to direct the study team to prepare a final report which adequately addresses these concerns and seriously considers the route proposed by the Pacific Northwest Trail Association. Both our Montana field representative and our former Northwest representative support the Pacific Northwest Trail. It would be a serious injustice to not establish this Trail for those who have long dreamed of the completion of a Pacific Northwest Trail linking two of our grandest national parks, and providing access to some of America's wildest and most beautiful country.

Sincerely yours,



Ron Tipton  
National Parks Specialist

RT:wm

cc: Rep. Phillip Burton, Chairman  
House National Parks Subcommittee



# HISTORIC LOOKOUT RESEARCH PROJECT

RAY KRESEK, FOUNDER  
W. 123 WESTVIEW  
SPOKANE, WA 99218  
(509) 466-9171

June 25, 1980

RE: Pacific NW Trail (proposed)

Stan Young, Regional Director  
National Park Service  
4th & Pike Building  
Seattle, WA 98104

Dear Mr. Young:

I was recently brought to my attention that the NPS has issued a determination that the proposed Pacific Northwest Trail should not be routed through the North Cascades National Park.

I would like to commend your staff for their good judgement. Since its earliest inception, the plan to me indicated political overtones, lack of consideration toward fragile ecological communities along its route, and impractical due to large stretches of farming development in the region between the Pend Oreille River and the Okanogan Valley.

The proposed route through the nation's only mountain caribou domain (Salmo-Priest area) would be a probable detriment to the future of the animal.

The portions that would cross the Pasayten Wilderness would be in violation of the wilderness Act's intent as interpreted in the Pacific Northwest Region.

Finally, any additional routing of foot travel, which may be expected to equal the man-day usage of the Pacific Crest Trail, would exceed the camper impact carrying capability of the watersheds selected within the NCNP unless developed campgrounds are provided along the way. Such accommodations are neither within the budget nor the best interest of the Park, as I see it.

I hope these observations will help to bolster your opposition toward the proposed Pacific NW Trail.

Sincerely,

RAY KRESEK



SIERRA CLUB  

---

Cascade Chapter

c/o 343 Northwest 46th Seattle, Washington 98107

June 25, 1980

Charles Odegaard  
Acting Regional Director  
National Park Service  
4th & Pike Building  
Seattle, Washington 98101

Dear Mr. Odegaard,

We have reviewed the draft National Scenic Trails Study for the proposed Pacific Northwest Trail, dated January 1980. The study adequately identifies the trail opportunities in the study area as well as the potential impacts and costs of such a trail.

We support the National Park Service position that the proposed trail is neither feasible nor desirable.

The need for such a trail is questionable as much of the popular areas it would traverse, already have extensive trail systems. The other areas are primarily large areas of private property which would have exorbitant right of way and construction costs. Present trail budgets could not afford siphoning of construction and maintenance funds for such a project. The impact on fragile areas, special wildlife habitat, and presently overused areas would be severe with a "name trail" bringing additional users.

We support a comprehensive and well designed trail system with both wilderness and urban components, and a reasonable budget to achieve that goal. Unfortunately, the proposed Pacific Northwest Trail does not contribute to those objectives, and for the reasons noted above we feel establishment of such a National Scenic Trail is unwarranted.

Sincerely,

119

Charles C. Raines

Conservation Committee



## WASHINGTON ENVIRONMENTAL COUNCIL

107 South Main Street / Seattle, Washington 98104 / (206) 623-1483

June 26, 1980

AAUW — Lake Washington Branch  
AAUW — Washington State Division  
Air Quality Coalition  
Alpine Roamers  
Alpine Lakes Protection Society  
American Institute of Planners —  
Washington Chapter  
American Society of Landscape Architects  
Black Hills Audubon Society  
Blue Mountain Audubon Society  
Cascade Wilderness Club  
Chuckanut District of Garden Clubs  
Citizens for Better Government  
Citizens for the Improvement of  
Nursing Homes  
Coalition Against Oil Pollution  
Colville Valley Environmental Council  
Concerned About Trident  
Cougar Lakes Wilderness Alliance  
Earth Care Organization  
Environmental Education Forum  
of Washington  
Everett Garden Club  
Floating Homes Association  
Greenpeace — Seattle  
Hood Canal Environmental Council  
Intermountain Alpine Club  
Izaak Walton League of America  
Kettle River Conservation Group  
Kitsap Audubon Society  
Laebugton Salmon Chapter,  
Northwest Steelhead and Salmon  
Council of Trout Unltd.  
Lake Stickney Garden Club  
Lower Columbia Basin Audubon Society  
Marine Technology Society,  
Puget Sound Section  
Mercer Island Environmental Council  
Montlake Community Club  
Nisqually Delta Association  
No Oil Port  
North Cascades Audubon Society  
North Cascades Conservation Council  
North Central Washington Audubon Society  
North University Garden Club  
Northwest Fly Anglers  
Northwest Steelheaders Council  
Northwest Steelhead Salmon Council  
of Trout Unlimited  
Oak Harbor Garden Club  
Okanogan Citizens Against Toxic Sprays  
Olympic Park Associates  
Olympic Peninsula Audubon Society  
Pacific County Environmental Council  
Pillchuck Audubon Society  
Protect the Peninsula's Future  
Queen Anne Garden Club  
Recreational Equipment, Inc.  
Save A Valuable Environment  
Save Cypress Island Committee  
Seattle Audubon Society  
Seattle Garden Club  
Seattle Recycling, Inc.  
Sierra Club — Cascade Chapter  
Sierra Club — Columbia Group  
Skagit Alpine Club  
Skagit Environmental Council  
Skagitians Concerned About  
Nuclear Plants  
Skagit River League  
Snoqualmie District, Washington State  
Federation of Garden Clubs  
Southwest Washington Environmental  
Team  
Spokane Mountaineers, Inc.  
Spokane Audubon Society  
Steelhead Trout Club of Washington  
Tacoma Mountaineers  
Tahoma Audubon Society  
The Mountaineers  
The Ptarmigans  
The Town Forum, Inc.  
Thurston Action Committee  
Trailblazers  
Vancouver Audubon Society  
Washington Fly Fishing Club  
Washington Kayak Club  
Washington Roadside Council  
Washington State Environmental  
Health Association  
Willapa Hills Audubon Society  
Yakima Valley Audubon Society  
Zero Population Growth — Seattle

Mr. Stan Young  
PNW Regional Office  
National Park Service  
Fourth & Pike Building  
Seattle, WA 98101

RE: Draft National Scenic Trail Study, January 1980  
Subject: Pacific Northwest Trail

Dear Mr. Young:

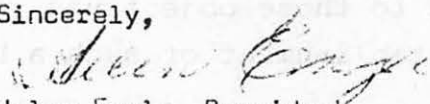
This letter is to express the support of the Washington Environmental Council for the joint position of the National Park Service and U.S. Forest Service in their conclusion that the PNW Trail construction is not feasible nor desirable.

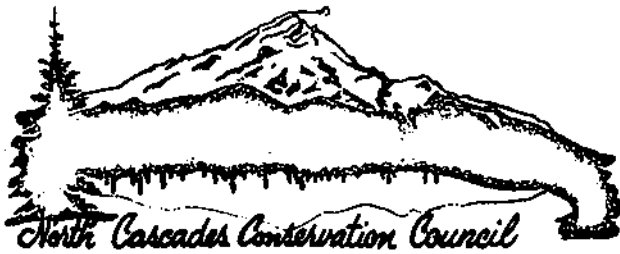
The WEC commented at the public hearing discussing the PNW Trail in Seattle May 1, 1978. We spoke at that time of our sense of urgency for trail corridors providing access to our superb, but disappearing, shorelines; low elevation forest corridors; and marvelous streamside trail potentials along the rivers of the state. The frustration for trail systems, close to the high population densities, and serving a relatively high percent of lower income people, accessible by public transportation, is more intense than it was then. We favor consideration of these higher priority issues, and therefore commend the study team's conclusions regarding the PNW Trail.

Washington's federal lands hold infinite recreation resources for citizens of all the states. They also contain some of the most fragile ecosystems, habitat of threatened species of creatures, and archeological potentials yet unknown. In their stewardship of these public lands the Park Service and Forest Service are wise to hold off on intensive development of additional high volume trails at this time.

Thank you for the opportunity to comment on the Draft Study of the PNW Trail.

Sincerely,

  
Helen Engle, President  
Washington Environmental Council



Founded in 1957

## North Cascades Conservation Council

2514 Crestmont Place West  
Seattle, Washington 98199  
July 1, 1980

### DIRECTORS, 1972-1973

*Presidents*  
Patrick D. Goldsworthy  
Seattle, Washington

*First Vice President*  
Charles D. Hessey, Jr.  
Naches, Washington

*Second Vice Presidents*  
R. D. Watson  
Seattle, Washington

*Corresponding Secretary*  
Thomas H. S. Brucker  
Bellevue, Washington

*Recording Secretary*  
Mrs. John A. Dyer  
Seattle, Washington

*Treasurer*  
Joseph W. Miller  
Bellevue, Washington

William Asplund  
Wenatchee, Washington

Theodore R. Beck  
Seattle, Washington

Richard J. Brooks  
Seattle, Washington

David R. Brower  
Berkeley, California

Irving Clark, Jr.  
Seattle, Washington

M. Brock Evans  
Washington, D.C.

Kenneth G. Farquharson  
Vancouver, B.C., Canada

Frank Fickeisen  
Bellevue, Washington

David Fluharty  
Bozelli, Washington

Hal Foss  
Olympia, Washington

Mrs. Neil Haig  
Seattle, Washington

Walter Halperin  
Seattle, Washington

James F. Henriot  
Tacoma, Washington

Dale R. Jones  
Seattle, Washington

Ray Kresck  
Spokane, Washington

Harvey H. Manning  
Issaquah, Washington

J. Michael McCloskey  
San Francisco, California

Grant McConnell  
Chicago, Illinois

Mrs. Margaret Miller  
Bellevue, Washington

William A. Nordstrom  
Portland, Oregon

Miss Eileen Ryan  
Seattle, Washington

Benjamin A. Shaine  
Santa Cruz, California

Lawrence F. Williams  
Milwaukie, Oregon

Phillip H. Zalesky  
Everett, Washington

Stan Young, National Park Service, Pacific Northwest Region  
Don Warman, U.S. Forest Service, Pacific Northwest Region  
Pacific Northwest Trail Study Team  
National Park Service  
Pacific Northwest Region  
Fourth and Pike Building  
Seattle, Washington 98101

The North Cascades Conservation Council unequivocally endorses the January 1980 Draft National Scenic Trail Study of a proposed Pacific Northwest Trail, in which it is "concluded that its (the Trail) construction was neither feasible nor desirable" and which recommended "the no trail alternative".

The Council concurs with the National Park Service-U.S. Forest Service Study Team's selection of the four alternatives in the Study (ie "most scenic route", "least costly route", "route of minimal adverse environmental impact", and "no trail") as the most desirable approach to evaluating the full range of possibilities within the Study Area shown of maps 2-15. This approach was both sufficient and necessary in objectively arriving at the Study's conclusion and recommendation and was far more reasonable than a separate study of each of the eighteen suggested trails shown on map 7.

The quality and quantity of pertinent data collected and their subsequent analysis, following assumptions and guidelines agreed upon by the Steering Committee, reflects the competence of the Study Team staff in developing a sound and logical Study that is adequately documented in the Draft National Scenic Trail Study of January 1980.

The Council is in complete and emphatic agreement with the conclusion that Alternative 1 ("most scenic route") is the one which would have the greatest environmental impact on the fragile alpine areas in the Cascades and Olympics, west of the Okanogan River (we are not acquainted with the Study Area east of this point). Consequently, we would be adamantly opposed to the designation of Alternative 1 as the Proposed Alternative. Many portions of Alternatives 2 and 3 would also have severe adverse environmental impacts in the Cascades and Olympics.

The Council agrees with endorses the following additional findings of the Study, having itself independently reached the same conclusions:

1. Most of the spectacular high elevation areas which would be crossed by the Trail are already served by an extensive trail system. There are already available trail networks, existing within the national parks and national forests, which occupy more than seventy percent of the Study Area. The amount of new trail opportunity which would be provided by the Trail would be a very small increment.

2. The increased use that would be attracted by the nationally designated Trail would concentrate damaging impacts on fragile alpine areas in excess of their capacity to withstand such use. Both the National Park Service and the U.S. Forest Service are already rationing back-country use permits in order to protect the natural resources of the National Parks and Wildernesses within the Study Area

3. Most of the low-elevation lands over which the Trail would be located are in private ownership and consist also of lands where no trails have been constructed, due to low recreational values and priorities. Furthermore, costs of acquiring these lands today for the Trail would be excessive. Thus, the Trail is of low priority in competition with most other federally funded trails that cost less per mile to construct and to maintain.

4. There exists a demonstratable demand for trails closer to the population centers, available for use all year around, by greater numbers of people, and within minimal driving range. By contrast, the proposed Trail would be remote and closed during the winter months. Thus, the Trail is also of low priority compared to local trail needs.

The Council considers itself qualified to provide the above comments upon the Draft Study due to its carefully acquired knowledge of a major portion of the Study Area (ie Puget Sound to the Okanogan as well as to the Pacific Ocean). Since 1957 the North Cascades Conservation Council has been intimately involved with its own detailed studies of and management proposals (national park, Wilderness, national recreation area) pertaining to lands currently administered by the North Cascades National Park, Mt. Baker-Snoqualmie, Wenatchee, and Okanogan National Forests. We appreciate this opportunity to apply our expertise to an evaluation of the commendable Pacific Northwest National Scenic Trail Draft Study.

Yours most sincerely,

  
Patrick D. Goldsworthy, President

cc: Senator Jackson  
Congressman Pritchard





## Olympic Park Associates

13245 40th Ave., N.E., Seattle, Washington 98125

July 1, 1980

Mr. Charles Odegaard  
Acting Regional Director  
Pacific Northwest Region  
National Park Service  
Fourth and Pike Building  
Seattle, WA 98101

Mr. Richard Worthington  
Regional Forester  
Region VI, Pacific Northwest  
U. S. Forest Service  
Box 3623  
Portland, OR 97208

Attn: Mr. Stan Young

Attn: Mr. Don Warman

Dear Mr. Young:

Dear Mr. Warman:

On behalf of the Olympic Park Associates thank you and your colleagues for the thorough, comprehensive study and evaluation of the feasibility and desirability to identify and possibly designate a Pacific Northwest Scenic Trail.

After examining and reviewing the findings, evaluations, and recommendations in the Draft National Scenic Trail Study, January 1980, for a possible trail through the northern portions of Washington, Idaho, and Montana, we concur in your study team's recommendations that such a trail "not be designated and developed", and that "...trails be developed close to population centers where there is an identified need for trails", plus the consideration of a series of low elevation, long season-of-use trails..."

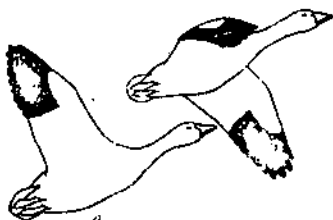
I regret that this response was delayed. Should you wish to have specific comments on the document, we will be glad to furnish these to you.

Sincerely yours,

Polly Dyer  
President

cc: Russell Dickinson, Director  
National Park Service

Max Peterson, Chief  
U. S. Forest Service



**Pilchuck Audubon Society**

P.O. Box 1818, Everett, Washington 98208

July 5, 1980

Ken Young  
Regional Director  
Pacific Northwest Region  
National Park Service  
Fourth and Pike  
Seattle, Wash 98101

Dear Mr. Young:

The members of the Board of Pilchuck Audubon Society question the advisability of the proposed National Scenic Trail.

We would rather see the money spent in our local region, close to high density population areas, serving a relatively high percent of low income people. If the trails were developed to provide access to our shorelines or rivers in areas that could be reached by public transportation, we feel that this would be far more beneficial.

Let's protect Whidbey Island, The  
Boulder Keys  
Nisqually Delta, the Issaquah Alps,  
and provide public access to them.

Sincerely,

Garry J. van Niel  
Conservation Chair

# FEDERATION OF WESTERN OUTDOOR CLUBS

Established for Mutual Service and for the Promotion of the Proper Use, Enjoyment and Protection of America's Scenic, Wilderness and Outdoor Recreation Resources

1979-1980



6541 17th N.E.  
Seattle, WA 98115  
July 10, 1980

## MEMBER CLUBS

Admiralty Audubon Society  
Port Townsend, Washington  
Alpine Roamers  
Wenatchee, Washington  
Angora Hiking Club  
Astoria, Oregon  
Berkeley Hiking Club  
Berkeley, California  
Boeing Employees Alpine Society  
Seattle, Washington  
California Alpine Club  
San Francisco, California  
Cascade Wilderness Club  
Bellingham, Washington  
Cascadians  
Yakima, Washington  
Chemeketans  
Salem, Oregon  
Contra Costa Hills Club  
Oakland, California  
Crag Rats  
Hood River, Oregon  
Desomount Club  
Los Angeles, California  
Hobnailers  
Spokane, Washington  
Idaho Alpine Club  
Idaho Falls, Idaho  
Inter-Mountain Alpine Club  
Richland, Washington  
Klahhane Club  
Port Angeles, Washington  
Montana Wilderness Association  
Bozeman, Montana  
Mountaineering Club of Alaska  
Anchorage, Alaska  
Mountaineers  
Seattle, Washington  
Mt. Baker Club  
Bellingham, Washington  
Mt. St. Helens Club  
Longview, Washington  
Obsidians, Inc.  
Eugene, Oregon  
Olympians, Inc.  
Hoquiam, Washington  
Olympic Peninsula Audubon Society  
Sequim, Washington  
Palouse Audubon Society  
Moscow, Idaho  
Ptarmigans  
Vancouver, Washington  
Reed College Outing Club  
Portland, Oregon  
Regional Parks Association  
Berkeley, California  
Rimrock Mountaineers  
Coulee Dam, Washington  
Roamer Hiking Club  
Inglewood, California  
Rocky Mountaineers  
Missoula, Montana  
Santiam Alpine Club, Inc.  
Salem, Oregon  
Seattle Audubon Society  
Seattle, Washington  
Sierra Club  
San Francisco, California  
Skagit Alpine Club  
Mount Vernon, Washington  
Snake River Audubon Society  
Idaho Falls, Idaho  
Southeastern Alaska  
Mountaineering Association  
Ketchikan, Alaska  
Spokane Mountaineers, Inc.  
Spokane, Washington  
Summit Alpine Club  
Tacoma, Washington  
Tahoma Audubon Society  
Tacoma, Washington  
Tamalpais Conservation Club  
San Francisco, California  
Trails Club of Oregon  
Portland, Oregon  
Wanderers  
Olympia, Washington  
Washington Alpine Club  
Seattle, Washington  
Washington Kayak Club  
Seattle, Washington

Mr. Stan Young  
National Park Service  
14th & Pike Building  
Seattle, WA 98101

Dear Mr. Young:

I am writing in response to the draft National Scenic Trails Study for the proposed Pacific Northwest Trail. I hope these comments are timely enough to be of some use.

We concur with the conclusion of the study that the development of the trail is neither feasible nor desirable. We are in full support of the National Park Service on this matter.

A comprehensive and well designed trail system should be the recipient of any trail funding, not a single, long trail which would concentrate use and impact.

Thank you for this opportunity to comment.

Sincerely,

Kenneth Gersten  
Western Washington Vice President

President: Winchell T. Hayward  
208 Willard No., San Francisco, Ca. 94118

Vice President: Florence Baldwin  
PO Box 548, Bozeman, Mont. 59715

Secretary: Virginia Danke  
E. 1103 14th, Spokane, Wa. 99202

Treasurer: Blythe O. Edwards  
4549 E. 53rd, Maywood, Ca. 90270

State Vice Presidents:  
Ginny Wood, Dixie Baade, Alaska  
Dan Luten, Martin Litton, California  
Cyril Slansky, Idaho  
Kenneth Baldwin, Bill Bishop, Montana  
Amy Mazza, Nevada  
Cornelius Lofgren, Oregon  
Ken Gersten, Dean Fischer, Washington

Editor: OUTDOORS WEST  
Hazel A. Wolf  
512 Boylston Ave. E., #106  
Seattle, Wa. 98102

Washington, D.C., Representative:  
Brock Evans  
330 Pennsylvania Ave. S.E.  
Washington, D.C. 20003

Northwest Representative:  
Douglas Scott  
4534 1/2 University Way N.E.  
Seattle, Wa. 98105



OFFICE OF THE SECRETARY OF TRANSPORTATION

WASHINGTON, D.C. 20590

4 APR 1980

Mr. Robert Herbst  
Assistant Secretary for Fish  
and Wildlife and Parks  
Department of the Interior  
Office of the Secretary  
Washington, D.C. 20240

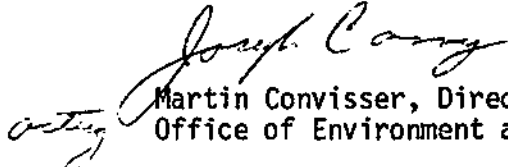
Dear Mr. Herbst:

This is in response to your letter of March 24, requesting our comments on your draft report and draft environmental assessment of the Pacific Northwest National Scenic Trail.

We have no comments to offer. However, we are forwarding your report to the Secretary's Regional Representative in Seattle for further review. Any comments the Regional Representative may have will be sent directly to you.

Thank you for the opportunity to review your report.

Sincerely,

  
Martin Convisser, Director  
Office of Environment and Safety

cc:  
Sec Rep/Seattle



It's a law we  
can live with.



DEPARTMENT OF THE ARMY  
OFFICE OF THE ASSISTANT SECRETARY  
WASHINGTON, D.C. 20310

REPLY TO  
ATTENTION OF

28 APR 1980

Honorable Robert L. Herbst  
Assistant Secretary for Fish and  
Wildlife and Parks  
Department of the Interior  
Washington, D.C. 20240

*W. Mansley*  
*St. Francis*

Dear Mr. Herbst:

I am responding to your letter of March 24, 1980 to the Secretary of the Army, Mr. Clifford L. Alexander, Jr., requesting comments and views on the draft report and draft environmental assessment on the Pacific Northwest National Scenic Trail. We have no objection to the study team's conclusions and recommendation of the "no trail" alternative.

I appreciate the opportunity to review the report and provide comments.

Sincerely,

*Michael Blumenfeld*

Michael Blumenfeld  
Assistant Secretary of the Army  
(Civil Works)



# United States Department of the Interior

BUREAU OF MINES  
2401 E STREET, NW.  
WASHINGTON, D.C. 20241

May 2, 1980

Memorandum

To: Director, National Park Service

Through: Assistant Secretary-Energy and Minerals

*[Handwritten signature]*  
MAY 6 1980

From: Director, Bureau of Mines

Subject: Draft national scenic trail study, Pacific Northwest Trail, Washington, Idaho, and Montana

Thank you for the opportunity to review the draft study for the proposed Pacific Northwest National Scenic Trail. Our brief comments are confined to geology and mineral resources.

Although flora, fauna, and other fundamental components of the environment have been discussed in considerable detail, the draft study affords no mention of geology and mineral resources. This apparent lack of attention to important, nonrenewable resources could lead to development of "corridor protection" along proposed trail routes, with consequent impediments to mineral entry on Federal lands. If, contrary to the "no trail" recommendation, the project receives further consideration, we urge your office and other involved agencies to use the information contained in the computer data files of the Bureau of Mines Mineral Industry Location System (MILS). Conflict with active or potential mineral areas might then be avoided at the outset of trail route planning.

*[Handwritten signature: Rue W. Harris]*

Assistant Director



ADDRESS ONLY THE DIRECTOR,  
FISH AND WILDLIFE SERVICE


# United States Department of the Interior

FISH AND WILDLIFE SERVICE  
WASHINGTON, D.C. 20240

In Reply Refer To:  
FWS/ES/AwP

MAY 9 1980

## Memorandum

To: Director, National Park Service  
Attn: Dave Wright, Chief, Office of Park Planning and  
Environmental Quality 

From: **Associate**  
Director, Fish and Wildlife Service

Subject: Review of Draft Pacific Northwest National Trail Study

The three trail alignments examined in the study report all pass through grizzly bear and woodland caribou habitat in Montana and Idaho. The minimum environmental impact alternative also passes through portions of the Flathead River Valley which are used extensively by bald eagles. Due to the potential conflicts with these species, we concur with the recommendation that no trail be built.





# United States Department of the Interior

GEOLOGICAL SURVEY  
RESTON, VA. 22092

In Reply Refer To:  
EGS-Mail Stop 441

May 14, 1980

## Memorandum

To: David G. Wright, National Park Service

From: Thomas J. Buchanan, Assistant Chief Hydrologist for Operations,  
Water Resources Division

Subject: Draft National Scenic Trail Study--PACIFIC NORTHWEST TRAIL

As requested, we have received the draft trail study, "Pacific Northwest Trail", and have no problems with it. It is suggested, however, that consideration be given to identifying clearly on the cover and title page of the final version the agencies responsible for preparing the report.

Thanks for giving us the opportunity to comment on this draft.

Thomas J. Buchanan





# United States Department of the Interior

WATER AND POWER RESOURCES SERVICE

WASHINGTON, D.C. 20240

IN REPLY  
REFER TO: 420  
715.

27 MAY 1980

## Memorandum

To: Director, National Park Service  
Acting Assistant  
From: Commissioner

Subject: Comments on the Pacific Northwest National Scenic Trail Study

We have reviewed the subject study and concur with the findings and recommendations of the National Park Service and U.S. Forest Service. The excessive costs of land acquisition and trail construction, the lack of new recreation opportunity afforded by the trail, and anticipated adverse impacts on the endangered grizzly bear and fragile high elevation areas render the proposed project infeasible and undesirable.

*Aldon V. Nielson*

U.S. ENVIRONMENTAL PROTECTION AGENCY

REGION X

1200 SIXTH AVENUE  
SEATTLE, WASHINGTON 98101



REPLY TO MS 443  
ATTN OF:

MAY 29 1980

Stanford Young, Chief  
Division of River, Trails, and Water Project Studies  
National Park Service  
Fourth & Pike Building  
Seattle, Washington 98101

Dear Mr. Young:

Thank you for sending a copy of the draft Pacific Northwest National Scenic Trail Study, and providing the Environmental Protection Agency with an opportunity to submit comments on the study. We have completed our review and have the following comments.

We strongly agree with your desire to avoid increased adverse impacts to sensitive high elevation ecosystems and endangered or threatened species such as grizzly bear. The draft Study is somewhat confusing in predicting the likelihood of such impacts. Although predictions of increased impact seem to assume increased use of existing trails in critical portions of the study area, it is also stated, for example on page 81, that existing trails can meet projected recreational demand, implying that scenic trail designation itself would not lead to increased use. If there is some assumed relationship between designation and changes in demand patterns, this should be explicitly explained in the final Study.

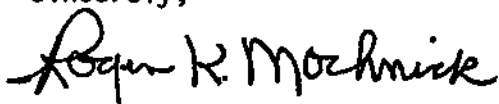
In addition, the discussion of environmental impacts in the no action alternative should include potential impacts on critical areas from resource development. This should be contrasted with development likely to take place if a trail were designated. In other words, any potential value of trail designation in helping prevent important impacts from resource development should be considered in evaluating alternatives. We recognize that most critical areas are already protected by land use designation.

We strongly agree with the concept of allocating Federal funds to create and improve trail systems in priority areas where demand is highest.

In summary, while we do not disagree with the draft Study conclusion that no national scenic trail should be designated, we believe certain improvements could be made in the final Study to compare the impacts on important environmental resources resulting from trail designation with impacts from other likely land management activities.

Thank you for the opportunity to submit these comments. If you have any questions please contact me, or Craig Partridge of my staff at 442-4011, FTS 399-4011.

Sincerely,



Roger K. Mochnick, Acting Chief  
Environmental Evaluation Branch

cc: Ronald C. Strickland, Pacific Northwest Trail Association



Department of Energy  
Washington, D.C. 20585

*Handwritten:*  
W. Stanley  
Wardle  
*[Signature]*  
JUN 18 1980

Mr. Robert L. Herbst  
Assistant Secretary for  
Fish and Wildlife and Parks  
U.S. Department of the Interior  
Washington, D.C. 20240

Dear Mr. Herbst:

This is in response to your March 24, 1980, request for comments on the Pacific Northwest Scenic Trail. We have reviewed the draft report and draft environmental assessment prepared pursuant to the National Trails System Act and the National Environmental Policy Act.

The recommended alternative of not constructing the Pacific Northwest National Trail would not have implications on possible energy resources in the vicinity of the trail. Accordingly, the Department of Energy offers no comment on this proposal.

Sincerely,

*R. J. Stern*

Robert J. Stern  
Acting Director  
NEPA Affairs Division



# United States Department of the Interior

HERITAGE CONSERVATION AND RECREATION SERVICE  
WASHINGTON, D.C. 20240

IN REPLY REFER TO:

## Memorandum

To: Chief, Office of Park Planning and Environmental Quality-NPS

Attention: Robert Eastman

From: Chief, Division of Natural Resource Systems Planning-HCRS

Subject: Draft Report, Pacific Northwest Trail Study-Comments

We appreciated the opportunity to review the subject report, prepared jointly by the National Park Service and the Forest Service, and offer the following comments for your consideration. Additional comments appear in red in the accompanying copy of the report.

Although the trail corridor has been very thoroughly researched, as is evidenced by the information and maps contained in the report, we have two major concerns about the alternatives and assumptions upon which the recommendations are based. As indicated on page 44 of the report, four alternatives are suggested:

- o the most scenic trail
- o the lowest cost trail
- o the route with minimum environmental impact
- o no trail

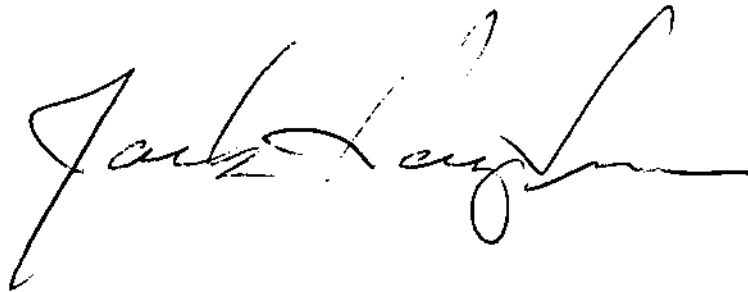
Each represents an optimal or extreme condition, in effect saying that route selected must be either the most scenic, or the lowest cost, or the one with the least environmental impact or there can be no trail at all. We feel that dealing only in these extremes was not a fair or judicious means of arriving at a recommendation. We feel that a fifth alternative should have been considered, for example, one where superb scenery might be by-passed on occasion to achieve lower cost or avoid serious environmental impacts. In other words, make a few compromises with the extremes and be somewhat more flexible in locating the route.

The second concern is the apparent belief by the study team that only a continuous trail can be considered and that a segmented approach, using only existing public lands, is not a valid alternative. The recommendation for "no trail" appears to be based principally on the excessive cost of the suggested routes. The high cost figures in the report are due in large measure to the substantial funds required for acquisition of private lands. Using the continuous trail approach unnecessarily distorts the costs, since for each of the suggested routes, less than 30% is in private ownership and a substantial amount of trail opportunity could be provided on existing public lands alone.

We feel that if consideration were given to both the compromise route and the segmented approach, an economically feasible route recommendation could be made. It could provide for a trail which (1) would still have many outstanding scenic and recreation characteristics, (2) could be made available at a reasonable cost, (3) would keep environmental impacts manageable, and (4) would not be detrimental to other trail programs.

The above suggestions and the comments in the accompanying copy of the report are offered in the hope that they will be of assistance in arriving at a more positive recommendation than the "no trail" position currently recommended.

Enclosures

A handwritten signature in black ink, appearing to read "Jack Layton". The signature is written in a cursive style with a long, sweeping underline.