INDIVIDUAL ROADLESS AREA DESCRIPTION

ROADLESS AREA NAME: Skagway-Juneau Icefield (301)

ACRES (NFS): 1,201,474

BIOGEOGRAPHIC PROVINCE: Ice Fields, Lynn Canal, and Northern Coast Range

ECOLOGICAL SECTION: Boundary Ranges, Kootznoowoo Fjordlands, and Chilkat River Complex

2003 WILDERNESS ATTRIBUTE RATING: 25 (24, 25)

I. Overview and Description

(1) Location and Access: The area is located on the Juneau mainland and is bordered by the Canadian Border to the east, non-National Forest System lands, including the city of Skagway to the north, the city of Juneau and the Taku-Snettisham Roadless Area (# 302) to the south, and Lynn Canal, and the Juneau Urban Roadless Area (# 305) to the west. The southern boundary is bounded partially by the southern edge of the Juneau Icefield above the Taku Inlet and the Taku River drainage.

Access to this vast area is by a variety of means. Road and railroad access is possible from Skagway, which lies on the north edge of the area. This access extends from Skagway to the north, across the U.S./Canadian border into the Yukon Territory. Helicopters, airplanes, floatplanes, and occasional ski planes are used to access many parts of the area. Boats are used to access those portions of the roadless area bordered by saltwater. Airboats sometimes access the Katzehin River and Berners Bay estuary, and associated river systems. There is a primitive landing strip, which is not maintained by the Forest Service, at a public recreation cabin near the Katzehin River.

Recreationists can also access portions of the area by foot from trails off the Juneau Road System, particularly from above the Mendenhall Glacier and from near the Lemon Creek area by the Juneau Icefield Research Project's Camp 17. Two trails provide access to the backcountry from the White Pass and Yukon Railroad in Skagway.

The area is located adjacent to the cities of Juneau and Skagway and is approximately 3 miles from the city of Haines. The Alaska Marine Highway ferries provide access to the communities of Juneau, Haines, and Skagway, but there are no stops within the roadless area. Lynn Canal is considered a major travel route for both commercial and non-commercial use.

(2) History: Past uses in the Skagway-Juneau Icefield Roadless Area include personal sporting ventures and commercially guided ventures including technical ice and rock climbing, ski touring, photography, and camping. Commercial helicopter landing tours and numerous fixed-wing craft conduct "flightseeing" tours over the Icefield and glaciers. The Oceanographic Division of the U.S. Army has conducted research on the Gilkey Glacier and its tributaries. Dr. Maynard Miller has conducted glacial research through the Foundation of Glacier Research across the entire Icefield for approximately 40 years and research is currently ongoing.

The Berners Bay area has evidence of gold mining activities from the early 1900s including several old farming homesteads. In addition, Goldschmidt and Haas (1946) identified a former native village and smokehouse or cabin in the Berners Bay area. They also identified a former smokehouse or cabin site along the Katzehin River. There are identified cultural sites in Berners Bay, and Lions Head Mountain has cultural significance.

Two mines, the Kensington and Jualin, have current Plans of Operation on file.

There are three cabins and one tent platform in the Berners Bay area that are currently under special use permit. In the Denver Glacier Trail area, there is an old recreation residence cabin that was under special use permit, but is no longer being used.

(3) Geography and Topography: The area is generally characterized by a great variety of geological features with large, massive landforms. Uplands are generally 5,000 to 7,000 feet in elevation. The Juneau Icefield is the predominant landform in this area along with the resultant glaciers. In the Skagway area, the Icefield gives way to dramatic rock mountains with deep, steep-walled, U-shaped valleys. Along Lynn Canal there are several glaciers between precipitous cliffs and mountain walls, which are visible from the saltwater. Hanging glaciers are the source of many beautiful waterfalls. Ice and snow total 508,934 acres, rock covers 266,000 acres, and alpine covers 5,384 of this roadless area. Freshwater lakes comprise 2,876 total acres. There are 159 miles of shoreline on saltwater. This roadless area also includes 339 islands and islets (69 of these are greater than 10 acres) totaling 3,274 acres of land.

Major river systems in the area include the Katzehin River, and the Berners, Lace, Antler, and Gilkey Rivers, which flow into Berners Bay. The Berners Bay area is characterized by these moderately large streams whose deltas form a broad intertidal flat into the shallow, sandy bay. These river systems are all fed by glaciers.

(4) Ecosystem:

(a) Classification: Biogeographic Province. This vast area, over 1.2 million acres, includes three biogeographic provinces (Ice Fields, Lynn Canal, and Northern Coast Range). The majority of the area is located within the Ice Fields Province, which is generally characterized by permanent ice fields, active glaciers, and nunatuks (mountain peaks between glaciers). The lower southwestern portion of the area, which extends along the Lynn Canal, is located within the Lynn Canal Province. The topography in this area is typically rugged and glaciated. Rain shadows and the dominating influence of the continental climate make this the driest and seasonally warmest province in Southeast Alaska. The area located northwest of Taku Inlet is within the Northern Coast Range Province, which is characterized by little maritime influence and rugged and glaciated topography.

Ecological Section/Subsection. The Juneau-Skagway Icefield Roadless Area is contained mostly within the Boundary Ranges Ecological Section (M246B) in addition to the small portions within the Kootznoowoo Fjordlands Ecological Section (M247D) and Chilkat River Complex (M246A). These areas are represented by four ecological subsections (see table below). The Boundary Ranges Icefields Ecological Subsection represents the vast majority of the Juneau-Skagway Icefield Roadless Area. A northwest-southeast trending batholith of resistant granite and granodiorite underlies this portion of the Coast Mountains. It consists of a discontinuous mix of icefields and glaciers separated by river valleys and pierced by nunataks and scree fields. Forests comprise a minor part of the vegetation along coasts and rivers. Of the three lower elevation ecological subsections, the Stephen Passage Glaciomarine Terrace is the most prevalent at 3 percent of the roadless area. This subsection contains glaciomarine terraces that grade into mountain slopes. Estuaries and marshes can be found along the coastal areas of the terraces, while hemlock-spruce forests dominate the mountain slopes (Nowacki et al., 2001).

Ecological Section	Ecological Subsection	Percent of Roadless Area
Boundary Ranges	Boundary Ranges Icefields	97%
	Stikine-Taku River Valleys	<1%
Kootznoowoo Fjordlands	Stephens Passage Glaciomarine Terraces	3%
Chilkat River Complex	Chilkat Complex	<1%

(b) Soils: The bare rock exposed on the east side of Lynn Canal is metamorphic rock-slate, schist, and marble. This rock type is visible from Berners Bay north to Skagway. Soils in the Skagway River area are characterized generally as being shallow to bedrock soils primarily of organic and mineral origin. Soils in the Berners Bay area may range from well-developed, deep, colluvial soils on moderate to steep slopes to poorly drained, mineral and/or organic soils on benches and moderate slopes. Muskeg with reduced productivity occur on these benches. The entire area has been overridden by glaciers. A predominance of glacial materials is found throughout the area, but especially on mid to lower slopes.

(c) Vegetation: Due to icefields much of the area is unvegetated. In areas that have been deglaciated, the land is in various stages of plant colonization. Much of the vegetation occurs in valley bottoms and at lower elevations. In vegetated areas, lush alpine meadows, western hemlock/Sitka spruce forests, cottonwood, birch, and subalpine fir/mountain hemlock forests are typical, depending on elevation. There are 15,946 acres of alpine vegetation mapped within this roadless area. Approximately 881 acres of muskeg are mapped for the area; however, due to their small size and association with forested sites, accurate acreage estimates are difficult.

There are approximately 129,669 acres mapped as forestland, of which 60,528 acres or 47 percent are mapped as productive old-growth forest. Of the productive old growth, 19,855 acres or 33 percent are mapped as high-volume, old-growth forest. The productive old growth includes about 2,626 acres of high-volume, coarse-canopy old growth. There are approximately 32 acres of second-growth forest where beach harvest has occurred in the past.

(d) Fish Resources: Fish resources were rated by the Alaska Department of Fish and Game (ADF&G) in its Forest Habitat Integrity Program (1983), which described the value of individual VCUs for sport fish, commercial fish, and estuaries. Two of the VCUs that make up this area, Berners River (VCU 12) and Gilkey River (VCU 15), were rated as high value for sport fish. Four VCUs, Berners River (VCU 12), Berners Bay (VCU 16), Nuggett Creek (VCU 30), and Boundary Creek (VCU 49), were rated highly for commercial fish. None of the VCUs in this area was inventoried as having highly valued estuaries. The Tongass Fish and Wildlife Resource Assessment (ADFG, 1998) listed VCU 12 as a primary producer of pink salmon and sportfish. VCUs 13, 14, and 15 were also listed as primary salmon producers. The remaining VCUs in the area (VCUs 4, 10, 11, 18, 21, 22 and 30) were identified as non-producers.

Coho, chum, and pink salmon are found in this area, along with Dolly Varden char, steelhead, and cutthroat trout. Major drainages include the Katzehin River and the berners, Lace, Antler, and Gilkey Rivers, which flow into Berners Bay.

(e) Wildlife Resources: Populations of black and brown bear range primarily at the lower elevations and in timbered river drainages. Moose are also present, especially in the Berners Bay and Katzehin drainages. There are mountain goat populations located on the steeper cliffs and mountains throughout the area. Populations of wolf and wolverine also exist in the area. Portions of this roadless area are important for migratory waterfowl. Concentrations of bald eagles occur in Berners Bay in late April through mid-May. Other species found here include red squirrel, marten, river otter, Vancouver Canada goose, and Queen Charlotte goshawk.

(5) Management Direction and Current Uses: The area was allocated to nine Land Use Designations (LUDs) under the 1997 Tongass Land and Resource Management Plan. These nine LUDs are Modified Landscape, Minerals, Transportation and Utility System (TUS), Remote Recreation, Semi-remote Recreation, LUD II, Wild River, Research Natural Area, and Old-growth Habitat. Both the Minerals and TUS LUDs are secondary LUDs, which overlay the other land uses.

LUD	Acres
Modified Landscape	22,469
Minerals*	15,167*
Transportation and Utility System	NA
Remote Recreation	901,552
Semi-remote Recreation	212,718
LUD II	42,921
Wild River	10,176
Research Natural Area	8,012
Old-growth Habitat	3,625

* Note that acres in the Minerals LUD are included in the Modified Landscape and Old-growth LUD acres.

Approximately 2 percent of the roadless area (not including the LUD overlays) was allocated to one development LUD, Modified Landscape. The Modified Landscape LUD was assigned to approximately

2 percent of the roadless area. Lands allocated to this designation are located along the Lynn Canal shoreline north of Berners Bay. In addition, approximately 1 percent of the roadless area was allocated to the Minerals LUD overlay. This LUD overlay is located on the western border of the roadless area between Juneau and Berners Bay. The Transportation and Utility System LUD overly includes potential road and powerline corridor that runs along the Lynn Canal shoreline from Berners Bay north to Skagway.

Most of this roadless area, approximately 98 percent, was allocated to non-development LUDs (Remote Recreation, Semi-remote Recreation, LUD II, Wild River, Research Natural Area, Old-growth Habitat). Approximately 75 percent of this roadless area was allocated to the Remote Recreation LUD. The Semi-remote Recreation LUD was assigned to approximately 18 percent of the roadless area. A broad area of lands located adjacent to Berners Bay, Berners River, and Evelyn Lake was allocated to LUD II, which accounts for approximately 4 percent of the roadless area. Approximately 1 percent of the roadless area was allocated to the Wild River LUD. Two river segments, the Gilkey and Katzehin Rivers, are being managed as Wild Rivers. Approximately 1 percent of the roadless area, located in the northernmost tip of the area in Warm Pass Valley, was allocated to the Research Natural Area LUD. The Warm Pass Research Natural Area was created to recognize the northernmost example of subalpine fir and other locally rare species in the Tongass. A relatively small portion of the area, accounting for less than 1 percent of the roadless area was allocated to the Old-growth Habitat LUD.

The land allocated to the Minerals LUD overlay is known as the Juneau Gold Belt Tract, which contains deposits of gold, silver, lead, zinc, and copper. A smaller area just north of Berners Bay is also allocated to the Minerals LUD and is known as the Berners Bay Tract.

Planning is underway to develop a hydroelectric power plant, referred to as the Otter Creek Hydroelectric Project, 3 miles south of Skagway in the Kasidaya Creek watershed. A Federal Energy Regulatory Commission (FERC) license is being sought and FERC has issued a Draft EA on the project. It could be licensed in 2003. Kasidaya Creek drains into Taiya Inlet.

Goat Lake Hydroelectric plant, on Goat Lake north of Skagway, provides power to Skagway and Haines. The facility consists of a dam, penstock, powerhouse, and transmission lines.

Helicopter landing tours on the Juneau Icefield are very popular, with the number of tours increasing in general proportion with the increase in cruise ship passengers to Juneau over the last 15 years. In 2000, there were a total of 85,531 Juneau Icefield helicopter landing tour passengers. Helicopter-access activities in the roadless area include icefield landing tours, dogsled mushing, hiking, trekking, Nordic skiing tours, and mechanized snow vehicle expeditions. The Forest Service authorized commercial helicopter landing tours on the Juneau Icefield from 2002 through 2006.

Several trails provide direct access into the area. The Laughton Glacier Trail provides access to the Laughton Glacier Recreation Cabin. The Denver Glacier and Sturgills Landing Trails are in the Skagway area. The Lemon Creek, Nugget Creek, and the Heintzleman Ridge Route are trails in the Juneau area. There are two public recreation cabins in this roadless area. These are the Laughton Glacier Cabin accessible by trail from the White Pass Railroad, approximately 17 miles north of Skagway and the Berners Bay Cabin, located about 8 miles north of Echo Cove on the east side of Berners Bay.

The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) indicated that the Skagway-Juneau Icefield Roadless Area is typically not used for subsistence. Brown bear harvest was recorded in the vicinity of Berners Bay (ADF&G, 1998).

Scientific research is conducted on the Juneau Icefield through the Foundation of Glacier Research. Research camp locations include Vaughan Lewis Glacier and Nunatak Chalet. A fish weir is located on the Berners River.

The Cube Cove-Kensington Land Exchange between the Forest Service, Sealaska Corporation, and Shee Atika is in the initial proposal stage. The entities would exchange subsurface and surface rights to the private land located west of the Berners Bay LUD II area around Point Sherman. The exact boundaries of this exchange have not yet been defined.

The Forest Service's 10-Year Action Plan for the Juneau Ranger District identifies the Kensington Timber Sale with an expected decision in September 2007 and an estimated size of 25 million board feet. This sale is planned in the Modified Landscape LUD portion of the roadless area.

(6) Appearance (Apparent Naturalness): The vast majority of the area appears unmodified and pristine, except for the occasional camps of the Juneau Icefield Research Project and the facilities associated with mining activity. The Berners Bay area is essentially unmodified except for the few well-screened cabins and trails in the area. The area is visible from a number of locations including visual priority routes and use areas, which are identified in Section II (6). These include portions of the Alaska Marine Highway, such as Lynn Canal, Taiya Inlet, Chilkoot Inlet, and Favorite Channel, and small boat routes, including Berners, Lace, Antler, and Gilkey Rivers. The area is also visible from a number of Dispersed Recreation Areas, including Katzehin River, Laughton Glacier, and Echo Cove/Sawmill Cove. Many tourists view the spectacular scenery of this roadless area from the White Pass and Yukon Railroad without actually entering the roadless area. Views in most cases are of an unmodified landscape.

(7) Surroundings (External Influences): The Skagway-Juneau Icefields Roadless Area is part of a very extensive mainland roadless area that includes portions of western British Columbia. Much of this roadless area is comprised of the Juneau Icefield, which receives visual and auditory impacts from flightseeing tours, regular aircraft travel routes, and helicopter charters. In 2000, there were a total of 16,583 commercial helicopter landing tours on the Juneau Icefield.

The two active mining claims at Kensington and Jualin, adjacent to this roadless area in the Berners Bay area, also represent a human influence visible from nearby locations. As part of the development of these mines, a proposal has been made to extend Veterans Memorial Highway from Echo Cove to private land at Cascade Point where a ferry and shipping terminal would be constructed. The terminal would be used to supply personnel and equipment to the mines.

Lynn Canal serves as a major travel corridor for flights, ferries, ships, and boats, but much of the immediate area along Lynn Canal is unavailable for human activity because of the steepness of the terrain. The Katzehin public recreation cabin is accessed by wheeled aircraft on a primitive air strip near the Katzehin River. Neither the cabin or air strip are maintained by the Forest Service. The Berners Bay area is used for a variety of human uses, including recreation, mining, boating, fishing, hunting, and subsistence uses.

The roadless area is bordered to the east by the U.S./Canadian border. Glaciers cover the majority of the adjacent land on the Canadian side of the border. Atlin Provincial Park is located across the border from the Chilkoot Range.

The 1997 Juneau Access Draft EIS, prepared by the U.S. Department of Transportation, Federal Highway Administration, and State of Alaska Department of Transportation and Public Utilities, evaluated the possibility of constructing a road from Juneau to Haines/Skagway along the east side of the Lynn Canal. This proposed road would be located west of some parts of the Skagway-Juneau Icefield Roadless Area and within other parts. This project is not actively being pursued as part of Southeast Alaska's immediate transportation planning efforts.

(8) Attractions and Features of Special Interest: The natural features of the area including the extensive icefield, the scenery, and the opportunity to see wildlife and to study the processes that formed this country may all be considered attractions. The Icefield and numerous glaciers offer unparalleled scenery and opportunities for mountaineering, skiing, ice and rock climbing, camping, and scenic viewing. Scientific research is conducted on the Juneau Icefield through the Foundation of Glacier Research.

Fishing opportunities in the streams are a minor attraction. Several trails provide direct access into the area. The Laughton Glacier Trail to the Laughton Glacier Recreation Cabin and the Denver Glacier Trail are in the Skagway area. The Lemon Creek, Nugget Creek, and Heintzleman Ridge Route are trails in the Juneau area. There are two public recreation cabins in this roadless area, including the Laughton Glacier Cabin, accessible by trail from the White Pass Railroad approximately 17 miles north of Skagway, and the Berners Bay Cabin, located about 8 miles north of Echo Cove on the east side of Berners Bay. The area contains 18 inventoried recreation places, which cover 148,243 acres (12 percent) of the roadless area.

(9) Differences between the 1989 and 2003 Roadless Area Boundary: The roadless area boundaries did not change significantly between 1989 and 2003. One exception to this occurs on the north side of Berners Bay, where the boundary of the area has been slightly modified to exclude a short length of mine access road.

II. Capability for Management as Wilderness

(1) Natural Integrity and Apparent Naturalness: The area is generally unmodified and natural; long-term ecological processes are evident. This lack of modification and the area's extensive size generally result in the area being perceived as pristine, natural, and free from disturbances of any kind. Activities on adjacent land near Berners Bay, along with the relatively heavy recreation use, affect the apparent naturalness to some degree. The presence of helicopter tours during the cruise ship season is, however, evidence of human influence. Overall, this area is suitable for wilderness classification.

(2) Opportunity for Solitude and Serenity, Self-reliance, Adventure, Challenging Experiences, and Primitive Recreation: There is a very high opportunity for solitude and primitive recreation at locations away from air routes and landing sites within the area. Solitude is affected by the flight paths of small planes, jets, or helicopters, for short periods of time. The large number of commercial helicopter landing tours on the Juneau Icefield in 2000 (16,583) suggests that this type of air traffic could be intrusive to visitors to the area. Otherwise, the sense of solitude and remoteness can be dramatic for visitors on the Icefield. Along the shoreline of Lynn Canal, one can expect to see frequent air and water traffic, including cruise ships of all sizes, fishing and pleasure vessels, and the Alaska Marine Highway ferries. Within Berners Bay, there is less chance for solitude. Recreational boaters and kayakers frequent the area, and there are two active mining claims on the north side of the bay. In the area north of Skagway, the terrain is such that it offers a high degree of solitude once one leaves the influence of the railroad tracks of the White Pass and Yukon Railroad.

The Katzelin area provides some opportunity for solitude within the river valley. There is some airboat and small plane travel within the Katzelin River valley, generally associated with big game hunting.

Travel within the area can be extremely challenging, requiring a high degree of mountaineering skills and experience. The presence of both black and brown bears also presents a degree of challenge and a need for woods skills and experience.

The area provides primarily primitive recreation opportunities. The table below lists the acreage and percent of the various Recreation Opportunity Spectrum (ROS) classes that have been inventoried in the roadless area.

ROS Class	Acres	Percent of Total ROS
Primitive (P)	1,077,037	90%
Semi-Primitive Non-Motorized (SPNM)	110,719	9%
Semi-Primitive Motorized (SPM)	7,456	1%
Roaded Natural (RN)	3,068	0%
Roaded Modified (RM)	1,795	0%
Urban (U)	22	0%

The area contains 18 inventoried recreation places, which cover 148,243 acres, or 12 percent of the roadless area.

ROS Class	# of Rec. Places*	Total Acres
P	3	92,629
SPNM	9	49,704
SPM	3	4,141
RN	2	965
RM	4	782
U	1	22

* Rec. Places may occur in more than one ROS Class; the sum of this column may exceed the total number of Rec. Places.

This roadless area generally offers many opportunities for dispersed recreation, including viewing spectacular scenery, hiking, mountaineering, ski touring, hunting, and boating. There are two public recreation cabins in the area, including the Laughton Glacier Cabin, accessible by trail from the White Pass Railroad approximately 17 miles north of Skagway, and the Berners Bay Cabin, located about 8 miles north of Echo Cove on the east side of Berners Bay. Outfitter/guide use of the area was recorded at Sawmill Creek, the Katzehin River, and Lower Antler Lake in 1999. Use levels of these areas were very low.

(3) Wilderness Attribute Rating System: In 1977, the Forest Service, along with public interest groups, developed the Wilderness Attribute Rating System (WARS), which was used to inventory the wilderness characteristics of roadless areas during the second Roadless Area Review and Evaluation process (referred to as RARE II). The purpose of WARS was to provide a measure of the area's wilderness quality based on the key attributes of wilderness as defined in the Wilderness Act. It is largely based on the attributes described above in items 1 and 2 of this section (natural integrity, apparent naturalness, outstanding opportunity for solitude, and primitive recreation opportunities).

The inventoried roadless areas of the Tongass National Forest were rated according to this system in 1989 for the Analysis of the Management Situation developed in support of the Forest Plan Revision. At that time, the Skagway-Juneau Icefield Roadless Area was given a rating of 24 out of 28 possible points. The rating was re-evaluated for the updated version of the Analysis of the Management Situation. Based on this re-evaluation, the area was given a rating of 25. This rating reflects the very high potential for solitude and primitive recreation when factored with other large roadless areas adjacent to this area. A separate rating was done for the Berners Bay and the LUD II area associated with this area and received a rating of 24. The lower score represents the ongoing activities within and near the Bay and its effect on the apparent naturalness of the area. When the Berners Bay watersheds are rated separately, they rate the same (25) as the overall roadless area.

(4) Ecologic and Geologic Values: This area is part of a very extensive mainland roadless area that includes portions of western British Columbia. As such, it contributes to one of the largest areas of North America that has essentially only been affected by ecologic and geologic processes.

There is no vegetation in much of the area because of the icefield. Areas of old-growth forest tend to occur in valley bottoms and at lower elevations.

(a) Fish Resources: The Tongass Fish and Wildlife Resource Assessment listed VCUs 12, 13, 14, 15, and 46 around Berners Bay and Taku Inlet as primary salmon producers. Of the remaining VCUs in the area, approximately half were identified as secondary producers and half were identified as non-producers. VCUs 12, 12-1, 25, 25-1, and 46, located around Berners Bay and Taku Inlet, were identified as primary sport fish producers (ADF&G, 1998).

Coho, chum, and pink salmon are found in this area, along with Dolly Varden char, steelhead, and cutthroat trout. Major drainages include the Katzehin River, and the Berners, Lace, Antler, and Gilkey Rivers, which flow into Berners Bay.

The Katzehin River contains a productive run of chum salmon. Berners River has several connected streams and lakes that offer excellent anadromous fish habitat, and are considered exceptionally productive for salmonids. This river has an estimated annual peak escapement of 8,800 pink salmon and very good

coho smolt production capability (ADF&G, 1998). The Lace River has an estimated annual peak escapement of 4,400 pink salmon and very good coho smolt production capability.

The 1997 Tongass Land Management Plan recommended portions of the Gilkey and Katzehin Rivers for Wild designation in the National Wild and Scenic Rivers Program.

Fishery values in the Gilkey River drainage are considered moderate. Antler Lake, which feeds the Gilkey, contains the only known naturally reproducing population of arctic greyling in northern Southeast Alaska. The Antler River has an estimated annual peak escapement of 4,400 pink salmon and very good coho smolt production capability.

(b) Wildlife Resources: Populations of black and brown bear range primarily at the lower elevations and in timbered river drainages. Based on harvest data compiled from 1985 to 1995, VCUs 12, 13, and 16-1, around Berners Bay were ranked in the second 25 percent of brown bear harvest areas on the Tongass (ADF&G, 1998).

Moose are also present, especially in the Berners Bay and Katzehin drainages. Moose also occur near the foot of the Taku and Norris glaciers. Good mountain goat habitat and goat populations exist on the steeper cliffs and mountains throughout the area. Populations of Sitka black-tailed deer, wolf, and wolverine also exist in the area. Portions of this roadless area are important for migratory waterfowl.

Other species that occur here include red squirrel, marten, river otter, Vancouver Canada goose, and Queen Charlotte goshawk. U.S. Fish and Wildlife Service surveys have located 308 bald eagle nest trees within the Juneau Icefield area.

Whales and other marine mammals concentrate in Berners Bay in early May to feed on spawning eulachon. Harbor seal concentrations greater than 500 occur in Berners Bay in late April through mid-May. Reefs, sand and gravel beaches, sand and mud bars, and glacial and sea ice are commonly used for hauling sites. Seals come ashore in Berners Bay during July and August to molt.

(c) Threatened, Endangered, and Sensitive Species: The only federally listed threatened or endangered species likely to occur within or adjacent to the roadless area are the humpback whale (endangered) and the Steller sea lion (threatened). Both of these species are found in adjacent marine waters, including Berners Bay. Three Forest Service Region 10 Sensitive Species are suspected or known to occur within the area: the trumpeter swan, Peale's peregrine falcon, and the Queen Charlotte goshawk. Trumpeter swans nest and rear young from April through September in the wetlands of the Antler, Lace, and Berners River drainages that flow into Berners Bay. Peale's peregrine falcons nest on cliff faces and islands and feed primarily on seabirds. Inhabitants of late seral forests, Queen Charlotte goshawks are closely associated with productive old growth. In addition, eight sensitive plant species are known or suspected to occur in the Juneau Ranger District.

(d) Karst, Cave, and Other Geologic Resources: There is a small area of karst in the southwest corner of this roadless area, along the toe of the Ptarmigan and Lemon Creek Glaciers. The mapped karst resources encompass 1,438 acres (less than 1 percent) of the area. Most of the karst, approximatley 90 percent, is classified as high vulnerability. There are numerous glaciers in this area, including the Taku, Nugget Creek, Mendenhall, Hades Highway, Demorest, Matthes, Gilkey, Echo, Bucher, Thiel, Eagle, Herbert, Antler, Meade, Denver, and Laughton glaciers. Several of these glaciers are relatively unique. The Taku and Norris glaciers are tidewater glaciers; the Mendenhall empties into Mendenhall Lake on the outskirts of Juneau and the Meade Glacier produces a major braided river, the Katzehin River.

(5) Scientific and Educational Values: There are opportunities to observe and study fish and wildlife and the various forces that formed this landscape. The glaciers and icefield are the most significant features. Four potential Research Natural Areas (RNAs) were identified in the 1997 Tongass Land and Resource Management Plan Revision. These areas were Warm Pass, Dayebas Creek, Berners-Lace River, and Katzehin Meadows. Only the potential Warm Pass RNA was designated as an RNA in the 1997 Tongass Land and Resource Management Plan

Record of Decision. Warm Pass includes the northernmost example of subalpine fir in Alaska, which is an uncommon species in this area due to the unusual climate of Southeast Alaska.

(6) Scenic Values: This roadless area is basically unmodified, offers spectacular scenery, and is vast. The area is perceived to be pristine, natural, and free from disturbances of any kind. The few recreation facilities in this area serve to focus use in their immediate vicinity. Overall, the unmodified landscape dominates views from all visual priority routes and use areas. The visual character type of this roadless area is Coast Range. The scale of landforms is generally large and massive, and gives an impression of great bulk. Uplands are generally 5,000 to 7,000 feet in elevation dissected by deep, steep-walled, U-shaped valleys. Mountain ridges are generally rounded summits but are surmounted, at times, by aretes and horns rising 8,000 to 9,000 feet.

There are numerous visual priority routes and use areas identified by the Forest Plan within or adjacent to the area. These include the following travel routes: Lynn Canal (Alaska Marine Highway, Tour Ship Route, and Saltwater Use Area); Berners Bay (Small Boat Route and Saltwater Use Area); Taiya Inlet, Chilkoot Inlet, and Favorite Channel (Alaska Marine Highway); and Favorite Channel and Berners, Lace, Antler, and Gilkey Rivers (Small Boat Routes). There are also a number of visual priority use areas including Sullivan Island and Chilikat Island (State Marine Parks); Katzehin River, Laughton Glacier, Echo Cove/Sawmill Cove, and Berners Bay Head Water System (Lace, Antler, and Gilkey Rivers) (Dispersed Recreation Areas), Laughton Glacier and Berners Bay (Public Recreation Cabins); Katzehin and Glikey Rivers (Recommended Wild, Scenic and Recreational Rivers); and Denver Glacier Trail #465 (Hiking Trail). Many tourists view the spectacular scenery of this roadless area from the White Pass and Yukon Railroad without actually entering the roadless area.

Approximately 51 percent of this roadless area was inventoried in Variety Class A (possessing landscape diversity that is unique for the character type) with 40 percent in Variety Class B (possessing landscape diversity that is common for the character type). Approximately 8 percent of the area was not inventoried.

Approximately 92 percent of this area is in Existing Visual Condition (EVC) I; these areas appear to be untouched by human activity. Approximately 8 percent of the area was not inventoried.

(7) Social, Cultural, and Historical Values: Past uses on the Juneau Icefield include personal sporting ventures and commercially guided ventures including technical ice and rock climbing, ski touring, photography, and camping. Commercial helicopter landing tours and numerous fixed-wing craft conduct “flightseeing” tours over the Icefield and glaciers. The Oceanographic Division of the U.S. Army has conducted research on the Gilkey Glacier and its tributaries. Dr. Maynard Miller has conducted glacial research through the Foundation of Glacier Research across the entire Icefield for approximately 40 years and is currently ongoing. The Berners Bay area has evidence of gold mining activities from the early 1900s, including several old farming homesteads. In addition, Goldschmidt and Haas (1946) identified a former village and smokehouse or cabin in the Berners Bay area. Two mines, the Kensington and Jualin, have recently reopened in the Berners Bay area adjacent to the west boundary of the roadless area. Goldschmidt and Haas (1946) also identified a former smokehouse or cabin site along the Katzehin River.

This extensive roadless area, which encompasses 1.2 million acres, stretches the length of Lynn Canal and is located adjacent to the cities of Juneau and Skagway, as well as being just 3 miles from the city of Haines. The area is, therefore, relatively accessible to the residents of these cities.

The Juneau Icefield is a popular tourist destination. There were a total of 16,583 commercial helicopter landing tours on the Juneau Icefield in 2000 with an estimated 85,000 participants. The number of tours has increased in general proportion with the increase in cruise ship passengers to Juneau over the last 15 years. Helicopter-access activities in the roadless area include icefield landing tours, dogsled mushing, hiking, trekking, Nordic skiing tours, and mechanized snow vehicle expeditions.

This roadless area generally offers unparalleled opportunity for dispersed recreation, including viewing spectacular scenery, hiking, mountaineering, ski touring, hunting, and boating. There are two public recreation cabins in the area: the Laughton Glacier Cabin, accessible by trail from the White Pass Railroad approximately 17 miles north of Skagway, and the Berners Bay Cabin, located about 8 miles north of Echo Cove on the east side of Berners Bay. Outfitter/guide use of the area was recorded at Sawmill Creek, the Katzehin River, and Lower Antler Lake in 1999. Use levels of these areas are very low.

The Tongass Fish and Wildlife Resource Assessment indicated that the Skagway-Juneau Icefield Roadless Area is typically not used for subsistence. No VCUs in this roadless area were listed among the VCUs with the highest, second, or third most important community fish and wildlife values. No VCUs were listed among those VCUs with the highest sensitivity to disturbance of subsistence use areas (ADF&G, 1998). Brown bear harvest was recorded in the vicinity of Berners Bay (ADF&G, 1998). The VCUs in this area were not included among those with the highest community fish and wildlife values, as identified by ADF&G in their comments on the Tongass Land and Resource Management Plan EIS (1996).

(8) Manageability as Wilderness and Boundary Conditions/Changes: The Canadian border forms the eastern boundary of the area. Most of the western boundary is Lynn Canal. The remainder of the western boundary is formed by the White Pass and Yukon Railroad, the Juneau Urban Roadless Area (# 305), and the city of Juneau and adjacent areas. The Taku-Snettisham Roadless Area (# 302) forms the southern boundary. The boundaries of the area tend to follow the outline of the Icefield and other natural landforms, with the exception of the Canadian border, which is essentially a series of straight lines. The boundaries of the Berners Bay and associated drainages are well defined, but overall management as wilderness would be influenced by ongoing uses, activities, and developments in the lower watersheds and on adjacent land.

LUD designations adjacent to the west and south sides of the area include Semi-remote Recreation, Scenic Viewshed, Old-growth Habitat, and Special Interest Area. Areas north and east of the city of Juneau and adjacent to the southern portion of the Skagway-Juneau Icefields Roadless Area were allocated to the Minerals LUD.

III. Availability for Management as Wilderness (including effects of wilderness designation on adjacent areas)

(1) Recreation, Including Tourism Potential: The unique terrain, scenery, and wildlife populations of this area provide unlimited recreation potential. Interest has been expressed for heli-hiking opportunities. In 1996, the Alaska Visitors Association (AVA) proposed a number of recreation facilities within the Skagway-Juneau Icefield Roadless Area. In North Side Berners Bay, Point St. Mary, and Slate Cove, they proposed a day-use recreation facility with capacity for 150 or more people, and a leased proprietary camp.

In the Upper Berners Bay drainages/Juneau Icefield area, the AVA proposed a backcountry recreation lodge with a 50-to 100-person capacity; hut-to-hut hiking, skiing, rafting, kayaking, canoeing with a 25 person/day capacity; heli-hiking/skiing for 10 to 30 person/day; a leased proprietary camp; a 500-to 1,000-square-foot equipment storage facility; flight-seeing landings for 10 to 100 persons/day; and boardwalks, paths and trails.

In the Katzehin River and Meade Glacier area, the AVA proposed flight-seeing landings for 25 persons/day; hut-to-hut hiking, rafting, skiing for 25 persons/day; a leased proprietary camp; a backcountry recreation lodge with a 50 person/day capacity; heli-hiking/ skiing for 10 to 30 person per day; and a 500-to 1,000-square-foot equipment storage facility.

The area currently receives extensive use from commercial helicopter tours, with a total of 16,583 landings recorded in 2000. Recreation use requirements under the Wilderness LUD involve limiting helicopter access to specific helicopter access areas. The proposed action presently being evaluated in the Helicopter Landing Tours on the Juneau Icefield 2003-2007 EIS (USDA Forest Service, 2001) would involve one or more special use permits for a total maximum allocation of 19,039 landings per year.

(2) Subsistence Uses: The existing patterns of subsistence activities in the area would not be affected by wilderness designation or management in an unroaded condition.

(3) Fish Resources: No fisheries habitat improvement opportunities are currently identified in the this area.

(4) Wildlife Resources: No wildlife habitat improvement projects are planned for this area.

(5) Timber Resources: There are approximately 60,528 acres mapped as productive old growth and 32 acres mapped as second growth due to harvest in the roadless area. Of these acres, 22,609 acres are categorized as tentatively suitable for timber production. Based on the Forest Plan LUDs assigned to this area (and estimated

falldown and scheduling reduction factors), 1,722 acres or less than 1 percent of this roadless area, are estimated to be suitable for timber production. Approximately 309 of the suitable acres are mapped as high-volume old growth; of these acres, 70 are mapped as high-volume, coarse-canopy old growth. The potential for managing timber in this roadless area is limited, and extremely localized, as the majority of this area is icefields and glaciers.

The Forest Service's 10-Year Action Plan for the Juneau Ranger District identifies the Kensington Timber Sale with an expected decision in September 2007 and an estimated size of 25 million board feet. This sale is planned in the Modified Landscape LUD portion of the roadless area. Designating this area wilderness would not be likely to affect potential timber harvest activities in nearby areas because it would not block potential access into adjacent areas.

(6) Fire, Insects, and Disease: The area has no significant fire history, although fires have occurred in the Skagway vicinity. Endemic tree diseases common to Southeast Alaska are present. There are no known epidemic disease occurrences in the area.

(7) Minerals: The overall area generally has a low minerals rating but much of the area between Juneau and Berners Bay was allocated to the Minerals LUD. This band is known as the Juneau Gold Belt Tract, which contains deposits of gold, silver, lead, zinc, and copper, with a gross value of $388 million. A smaller area just north of Berners Bay is also allocated to the Minerals LUD and is known as the Berners Bay Tract. This area is estimated to contain $918 million in gold deposits. The Kensington and Jualin Mines, north of Berners Bay, have current Operating Plans on file. There are several other mining claims near the mouth of Berners River. The remaining part of the river has no mining claims and is not within an area of high mineral development potential. The mouth of the Lace River has several mineral claims. Designating the entire Juneau-Skagway Roadless Area as wilderness could affect potential mining activities in the Berners Bay area by limiting mining facility development and road construction in areas that are not accessible by existing roads.

This roadless area contains 22,817 acres of land identified as a mineral activity tract having a high potential for expanding mineral exploration or development of locatable minerals (Coldwell, 1990; USDA Forest Service, 1991). A total of 15,167 of these acres is allocated to the Minerals LUD. The Minerals LUD is intended to encourage the prospecting, exploration, development, mining, and processing of locatable minerals in areas with the highest potential for minerals development. The Minerals LUD is also intended to ensure that minerals are developed in an environmentally sensitive manner, and that other high-valued resources are considered when minerals development occurs. In addition, this roadless area contains an estimated 277,692 acres of undiscovered locatable mineral resources (Brew et al., 1990; USDA Forest Service, 1991); 46,743 of these acres are considered to have moderate potential for development.

(8) Transportation and Utilities: The 1997 Juneau Access Draft EIS prepared by the U.S. Department of Transportation, Federal Highway Administration, and State of Alaska Department of Transportation and Public Utilities evaluated the possibility of constructing a road from Juneau to Haines/Skagway along the east side of the Lynn Canal. This proposed road would be located west of some parts of the Juneau-Skagway Icefield Roadless Area and within other parts. This project is currently being pursued as part of Southeast Alaska's transportation planning efforts. The Forest Plan retains a proposed state road corridor and a powerline corridor along this area. The Forest Service has given the state a RS-2477 right-of-way for the road from Slate Cove in Berners Bay to the Jualin Mine.

(9) Water Availability and Use: Recreation, research, and mining facilities create water demand within this roadless area. The Dewey Lakes, Goat Lake, and Lemon Creek hydroelectric power plants are located within the area and an additional hydropower plant, the Otter Creek development, in the Kasidaya Creek watershed located about 3 miles south of Skagway, is seeking a FERC license. A Draft EA has been issued by the FERC for the Otter Creek project. It could be licensed in 2003.

(10) Areas of Scientific Interest: The Warm Pass RNA provides the opportunity to study vegetation that is rare in the area due to an unusual climate for Southeastern Alaska. Management as wilderness may restrict research activities. There are karst resources mapped in the area that encompass approximately 1,438 acres or less than 1 percent of the roadless area.

Scientific research is conducted on the Juneau Icefield through the Foundation of Glacier Research. Research camp locations include Vaughan Lewis Glacier and Nunatak Chalet.

(11) Land Use Authorizations: There are three cabins and one tent platform in the Berners Bay area that are currently authorized with special use permits. As noted above, a road along the east side of the Lynn Canal has been considered in the past.

(12) Land Status: All of the land within the roadless area is a part of the National Forest System. Near Berners Bay, a small portion of this roadless area is encumbered.

The Cube Cove-Kensington Land Exchange between the Forest Service, Sealaska Corporation, and Shee Atika is in the initial proposal stage. The entities would exchange subsurface and surface rights to the private land located west of the Berners Bay LUD II area around Point Sherman. The exact boundaries of this exchange have not yet been defined.

IV. Wilderness Evaluation (Need for Wilderness)

(1) Public and Congressional Interest:

(a) Interest Expressed by Local Users and Residents: Use of the area is divided into at least three separate factions. Use in the Berners Bay area is relatively high because of its proximity to Juneau and the end of the Juneau Road System at Echo Cove. Boating and kayaking occur frequently in the bay.

In the portion of the roadless area that is accessed from Skagway, local users are primarily hunters and recreationists. Many tourists view the spectacular scenery of this roadless area from the White Pass and Yukon Railroad without actually entering the roadless area.

Interest is very high in viewing the icefields as thousands of visitors have viewed the Icefield using flightseeing or helicopter landing tours. The permitted number of commercial helicopter landings was in excess of 18,000 in 2000. This level of use generated over 100,000 recreation visitor days (RVDs) for 2000. The proposed action currently being evaluated in the Helicopter Landing Tours on the Juneau Icefield 2003-2007 EIS (USDA Forest Service, 2001) would involve one or more special use permits for a total maximum allocation of 19,039 landings per year. Use at this level would be inconsistent with wilderness designation.

Some individuals, and outfitters and guides with small groups have traversed the Icefield from Atlin, British Columbia to Juneau.

(b) Congressional Interest: In 1989, U.S. House of Representatives Bill HR 987 proposed to designate 23 areas as wilderness on the Tongass National Forest. This bill did not include the Juneau-Skagway Icefields Roadless Area. In 2001, HR 2908 identified the area surrounding Berners Bay as a Proposed Wilderness addition. This bill also proposed that the Berners, Lace, Antler, and Gilkey Rivers that flow into Berners Bay be designated as Wild and Scenic Rivers. It also proposed that the Katzehin River, Dayehas Creek, and Yeldagalga Creek receive Wild and Scenic River designation. The bill proposed that the remainder of the area be classified as a Congressionally Designated LUD II area and managed in an unroaded condition.

(c) Public Input During Forest Plan Revisions and Appeals: Berners Bay, Cowee Creek, Katzehin River, Point St. Mary, and Slate Cove were specifically addressed in public input during the Forest Plan revision and appeal. The Alaska Visitor Association proposed a number of recreation facilities in these areas. In North Side Berners Bay, Point St. Mary, and Slate Cove, they proposed a day-use recreation facility and a leased proprietary camp. In the Upper Berners Bay drainages/Juneau Icefield area, they proposed a backcountry recreation lodge; hut-to-hut hiking, skiing, rafting, kayaking, canoeing, and heli-hiking/skiing; a leased proprietary camp; an equipment storage facility; flight-seeing landings; and boardwalks, paths, and trails. In the Katzehin River and Meade Glacier area, they proposed flight-seeing landings; hut-to-hut hiking,

rafting, and skiing; a leased proprietary camp; a backcountry recreation lodge; heli-hiking/skiing; and an equipment storage facility.

The Southeast Alaska Conservation Council (SEACC) identified the Katzehin River area as an area "meriting special management protection" for its outstanding wildlife, fisheries, hunting, subsistence, recreation, and tourism values. Northwest Berners Bay was identified by another commenter as an area that should be allocated to LUD II or a similar type of protection. In addition, one commenter stated that Cowee Creek should be removed from the Mineral LUD because of the negative effects of mineral development on the area's recreation value.

Northwestern Berners Bay (VCU 20 and part of VCU 16) was identified in the October 12, 1997 appeal filed by SEACC as a "SEACC Special Area" that should be protected from development. SEACC noted in this appeal that while parts of the shoreline are protected, most of the area is still open to moderate development.

The Katzehin River, St. Mary/Point Sherman area, and the ridge between Sweeney Creek and Lynn Canal were identified in the September 24, 1997 appeal filed by Lynn Canal Conservation, Inc. (LCC). LCC proposed that the Katzehin River be identified as a Wild River under the Wild and Scenic River Act because it is used by numerous local residents and visitors, including hunters, climbers, campers, and fishermen. In addition, they noted that the Katzehin and its tributaries contain productive chum and coho salmon grounds, moose, black and brown bear, and numerous waterfowl. LCC proposed that mineral and logging development not be permitted in the St. Mary/Point Sherman area north of Berners Bay because of its importance for commercial and subsistence fishing and recreation, as well as its high value for wildlife. Mountain goat winter range on the ridge between Sweeney Creek and Lynn Canal was identified as particularly vulnerable to projects being considered in the Point Sherman area.

(d) Public Input During Roadless Area Conservation Rule and Road Management Policy Review: This area was not specifically identified in the comments received on the Roadless Area Conservation Rule or Road Management Policy Review. However, some commenters wanted all unroaded lands in the Tongass to be protected from development.

(e) Public Input Expressed for Project-level EISs and Other Input: Comments on the July 2001 Helicopter Landing Tours on the Juneau Icefield 2002-2006 DEIS are currently being analyzed.

(f) Public Input Expressed During Supplemental EIS Process: The U.S. Department of the Interior identified this roadless area as having important fish and wildlife habitat and populations; although not a top priority for protection, it ranked in their top third among all roadless areas. They indicated that the Berner's Bay watershed is one of the most important fish and wildlife habitats in this roadless area. Berners Bay is also the most vulnerable to development. Although linked peripherally to the Juneau road system, most of Berners Bay is only accessible by boat. The head of the bay is very shallow because of the silt load that has been deposited by three glacial river systems, and thus is only accessible by kayak, jet or airboat. They commented that Berners Bay still has a great deal of wilderness character because of this limited access. They indicated that they do not think the LUD II status for this high value habitat would protect the many important fish, wildlife, and wilderness values of this area.

The city of Pelican passed a resolution stating that the important watersheds identified as areas of special interest in the 1999 ROD and HR 987 should given long-term protection.

The Alaska Rainforest Campaign (a coalition of national and Alaska conservation groups) identified Roadless Areas 301, 302, 305, and 313 as a contiguous complex of roadless areas that should be considered one roadless area and recommended it for permanent protection in a combination of wilderness and LUD II, as described in Alternative 6.

SEACC recommended that Roadless Areas 301, 302, 305, and 313, which are largely contiguous, should be treated as one roadless area and should be recommended for wilderness and LUD II protection, as

described in Alternative 6. They commented that the area surrounding the population center should be protected by LUD II, as these are important for recreation, subsistence, and tourism.

A Juneau Area Assemblyman recommended Berners Bay for designation as wilderness.

One individual commented that there was a sawmill and mining in Berners Bay and portions of the area have been logged and these disturbances were relatively indiscernible now. However, many individuals recommended that Berners Bay be designated wilderness.

Another individual commented that the Katzehin River watershed should be considered for wilderness protection; there are no other wildernesses that are readily accessible to Haines and Skagway.

An individual of the Auk Kwaans commented that the land around Berners Bay contain sites that are important to the Auk Kwaans for food, medicine, and a burial site. The individual requested that the land be protected as wilderness.

Many individuals called for protection of Berners Bay and others commented that the area around Berners Bay should be protected from mining. Some wanted the north side of the bay, from Point St. Mary's to Johnson Creek to be protected from timber harvesting (they are partially open now).

A few individuals commented that the entire area was deserving of long-term protection. Some recommended it because of world-class scenery, abundant wildlife and habitat, and almost unilateral support for wilderness protection.

(2) Nearby Roadless and Wilderness Areas and Uses: The Skagway-Juneau Icefield is part of a larger mainland unroaded landmass that runs from the international border north of Skagway to Misty Fiords National Monument Wilderness and the international border to the south. The Taku-Snettisham and Juneau Urban Roadless Areas are located south and west of the area, respectively. The Sullivan and Chilkat-West Lynn Canal Roadless Areas are located west across Lynn Canal from the area. The Endicott River Wilderness, located west across Lynn Canal, is the closest wilderness.

(3) Distance From Population Centers (Accessibility): Approximate distances from population centers are as follows:

Community	Air Miles	Water Miles
Juneau (Pop. 30,711)	0	35
Stika (Pop. 8,835)	95	100
Hoonah (Pop. 860	40	60
Angoon (Pop. 572)	60	90

The nearest stops on the Alaska Marine Highway to this area are Juneau, Skagway, and Haines.

(4) Relative Contribution to the National Wilderness Preservation System: The Skagway-Juneau Icefields Roadless Area is located on the Juneau mainland and is bordered by the Canadian Border to the east, non-National Forest System land, including the city of Skagway to the north, the city of Juneau and the Taku-Snettisham Roadless Area (# 302) to the south, and Lynn Canal, and the Juneau Urban Roadless Area (# 305) to the west. The southern boundary is bounded partially by the southern edge of the Juneau Icefield above the Taku Inlet and the Taku River drainage. The area is generally characterized by a great variety of geological features with large, massive landforms. Uplands are generally 5,000 to 7,000 feet in elevation. The Juneau Icefield is the predominant landform in this area along with the resultant glaciers. In the Skagway area, the Icefield gives way to dramatic rock mountains with deep, steep-walled, U-shaped valleys. Along Taku Inlet and Lynn Canal, several tidewater glaciers, or near-tidewater glaciers, tumble down to saltwater or close to it, between precipitous cliffs and mountain walls. Hanging glaciers are the source of many beautiful waterfalls. Major river systems in the area include the Katzehin River, and the Berners, Lace, Antler, and Gilkey Rivers, which flow into Berners Bay. The Berners Bay area is characterized by these moderately large streams whose deltas form a broad intertidal flat and flow into the shallow, sandy bay.

The area is mostly unmodified and in a natural appearing condition. The natural integrity and apparent naturalness for the area is rated as very high. The apparent naturalness is lowered to high when the Berners Bay vicinity and associated LUD II area are rated separately. The total watershed area of Berners Bay has very high natural integrity and apparent naturalness. The opportunity for solitude is very high and the opportunity for primitive recreation is outstanding.

The area has very high scenic quality; approximately 51 percent of the landscape is considered distinctive for the character type from a scenery standpoint. There are numerous glaciers in this area, with several being relatively unique. The Taku and Norris glaciers are tidewater glaciers; the Mendenhall empties into Mendenhall Lake on the outskirts of Juneau; and the Meade Glacier produces a major braided river, the Katzehin River. Scientific research is ongoing on the Juneau Icefield. The outstanding scenery, coupled with the interest in the glaciers and icefields, make portions of the roadless area a significant tourism attraction.

The roadless area includes about 19,855 acres of high-volume, old-growth forest. Of these acres, 2,626 are mapped as high-volume, coarse-canopy old growth.

The Skagway-Juneau Roadless Area lies partially within the Ice Fields, Lynn Canal, and Northern Coast Range Biogeographic Provinces. Approximately 80 percent of the roadless area is within the Ice Fields province and makes up about 32 percent of that province. It is 1 of 9 inventoried roadless areas found in the province that collectively make up about 66 percent of the province. Portions of the Tracy Arm-Fords Terror, Stikine-LeConte, and Misty Fiords National Monument Wilderness lie within the Ice Fields Province and make up about 33 percent of the province. Another 19 percent of the roadless area lies within the Lynn Canal Province and makes up about 34 percent of the province. It is one of four inventoried roadless areas that collectively make up about 77 percent of the province. The Endicot River Wilderness makes up about 15 percent of the Lynn Canal province, and the Berners Bay LUD II area makes up another 6 percent of the province. The last 1 percent of the Skagway-Juneau Roadless Area is located within the Northern Coast Range province and makes up about 2 percent of the province. The roadless area is 1 of 6 inventoried roadless areas found in the province that collectively make up about 66 percent of the province. Portions of the Chuck River and Tracy Arm-Fords Terror Wildernesses are within the province and make up about 23 percent of the province.

The Skagway-Juneau Icefield Roadless Area lies within three ecological sections; it represents 28 percent of the Boundary Ranges Ecological Section, less than 2 percent of the Kootznoowoo Fjordlands Ecological Section, and 68 percent of the Chilkat River Complex Ecological Section within the Tongass National Forest boundary. Both the Boundary Ranges and Kootznoowoo Ecological Sections are well represented by existing wilderness (33 and 78 percent, respectively) and by other existing non-development LUDs (61 and 11 percent respectively, including 1 percent each of LUD II). The Chilkat River Complex Section does not have any land in existing wilderness; however, 95 percent is protected in other non-development LUDs with no land in LUD II.

Almost all of this roadless area (97 percent) is within the Boundary Ranges Icefields Ecological Subsection; this portion of the roadless area represents 28 percent of the entire ecological subsection. Approximately 32 percent of this ecological subsection is in existing wilderness, an additional 1 percent is in existing LUD II, and an additional 61 percent is protected by other existing non-development LUDs. The remaining area of this roadless area is within three ecological subsections, of which the Stephens Passage Glaciomarine Terraces Ecological Subsection is most prevalent. The Stephens Passage Glaciomarine Terraces Ecological Subsection represents 3 percent of the roadless area. This portion of the roadless area represents 11 percent of the entire ecological subsection, which is well represented in existing wilderness and non-development LUDs (36 and 31 percent, respectively) with an additional portion in existing LUD II (5 percent). The Stikine-Taku River Valleys Ecological Subsection represents less than 1 percent of the Juneau-Skagway Roadless Area. This portion of the roadless area represents less than 1 percent of the entire ecological subsection. Approximately 43 percent of this ecological subsection is in existing wilderness and an additional 53 percent is protected by other existing non-development LUDs. The Chilkat Complex Ecological Subsection represents less than 1 percent of the Juneau-Skagway Roadless Area. This portion of the roadless area contains 68 percent of the entire ecological subsection within the Tongass National Forest boundary. None of this subsection is in existing wilderness or LUD II; however, 95 percent is within other existing non-development LUDs.

The Skagway-Juneau Roadless Area was rated 25 out of a possible 28 points under the WARS. As such, its WARS rating is ranked 12th from the highest (along with 12 other roadless areas) among the 109 Tongass inventoried roadless areas. The Berners Bay and vicinity, including the LUD II area, was rated separately and received a score of 24. The total watershed area of Berners Bay rated 25.

There is considerable local and national support for management of the area in an unroaded condition, and some national support for wilderness designation of one portion of this area. Designation would create a very large wilderness that would connect with the Tracy Arm-Fords Terror Wilderness on the south. Designation of the area would add Congressional protection to about 68 percent of the small Chilkat Complex Ecological Subsection that is not currently represented in wilderness or LUD II. Portions of the area receive significant use by large numbers of visitors to the Juneau area and this level of use would likely not be consistent with wilderness objectives in those areas. Mineral activities in places like Berners Bay may also be inconsistent with wilderness objectives. The area contains potential road and power transmission corridors that could connect Juneau with Skagway and the Canadian road system. Other potential road corridors follow the Taku Inlet east into Canada. Overall, the factors identified here indicate that the relative contribution to the National Wilderness Preservation System for this area would be high.

V. Environmental Consequences

The Skagway-Juneau Roadless Area would be managed under the existing Forest Plan if Alternative 1, 3, or 4 is implemented. Approximately 98 percent of the roadless area would be managed under non-development LUDs. Timber harvest and road development could occur in the remaining 2 percent. The land in the development LUDs provides an estimated 1,722 acres that are suitable for timber production (4 percent of the suitable land on the Juneau Ranger District). Approximately 70 of the suitable acres are classified as high-volume, coarse-canopy old growth. This roadless area contains 22,817 acres of land identified as a mineral activity tract having a high potential for expanding mineral exploration or development of locatable minerals. In addition, this roadless area contains an estimated 277,692 acres of undiscovered locatable mineral resources; 46,743 of the acres are considered to have moderate potential for development. Recreation and special uses would continue, including the very high tourism-related uses. The values associated with the natural settings of the roadless area, including the high scenic and geologic values, are mostly protected by the Forest Plan. The area in the vicinity of Berners Bay would allow timber management under the Forest Plan, which could affect the natural setting values in that area.

Under Alternative 2, the 42,921-acre portion of the roadless area currently allocated to LUD II would be converted to Recommended Wilderness. This would not affect timber sale projects because this area is currently protected under LUD II designation. The total area suitable for timber production would not change from Alternative 1. The potential for other uses and development, including recreation, some special uses, the potential road and powerline, and minerals, could be restricted in the Recommended Wilderness area. Mineral prospecting and development would be allowed up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the LUD II portion (Berners Bay) of the roadless area, including the scenic and geologic values, would continue to be provided long-term protection if designated wilderness.

Under Alternative 5, 42,024 acres of the roadless area currently allocated to LUD II would be converted to Recommended Wilderness. This would not affect timber sale projects because this area is currently protected under LUD II designation. The total area suitable for timber production would not change from Alternative 1. The potential for other uses and development, including recreation, some special uses, the potential road and powerline, and minerals, could be restricted in the Recommended Wilderness area. Mineral prospecting and development would be allowed up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the Berners Bay portion of the roadless area, including the scenic and geologic values, would continue to be provided long-term protection if designated wilderness.

Under Alternative 6, most of the roadless area would be converted to Recommended LUD II and the remainder would be converted to Recommended Wilderness. No timber harvest would be allowed. The potential for other uses and development, including recreation, some special uses, the potential road and powerline, and minerals, could be restricted in the Recommended Wilderness area. Mineral prospecting and development would be allowed up to the time that the area is actually designated as wilderness by Congress. Designation of the area would add Congressional protection to about 68 percent of the small Chilkat Complex Ecological Subsection that is not

currently represented in wilderness or LUD II. The values associated with the natural settings of the roadless area, including the scenic and geologic values, would be provided long-term protection if designated LUD II or wilderness.

Under Alternative 7, a 248,433-acre portion of the roadless area currently allocated to Remote Recreation, Semi-remote Recreation, LUD II, Wild/Scenic/Recreation River, Old-growth Habitat, and Modified Landscape would be converted to Recommended Wilderness. No timber harvest would be allowed in the Recommended Wilderness area; there would be no lands suitable for timber production in the roadless area. The potential for other uses and development, including recreation, some special uses, the potential road and powerline, and minerals, could be restricted in the Recommended Wilderness area. Mineral prospecting and development would be allowed up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the Berners Bay drainage part of the roadless area, including the scenic and geologic values, would be provided long-term protection if designated wilderness.

With Alternative 8, the entire roadless area would be converted to Recommended Wilderness. No timber harvest would be allowed. The potential for other uses and development, including recreation, some special uses, the potential road and powerline, and minerals, could be restricted. Mineral prospecting and development would be allowed up to the time that the area is actually designated as wilderness by Congress. Designation of the area would add Congressional protection to about 68 percent of the small Chilkat Complex Ecological Subsection that is not currently represented in wilderness or LUD II. The values associated with the natural settings of the roadless area, including the scenic and geologic values, would be provided long-term protection if designated wilderness.

Land Use Designation Allocations and Suitable Timber Lands by Alternative for Roadless Area 301 (in acres)

Land Use Designation	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Recommended Wilderness		42,921			42,024	248,438	248,433	1,201,474
Wilderness								
Recommended Wilderness Nat. Mon.								
Wilderness National Monument								
Non-wilderness National Monument								
Research Natural Area	8,012	8,012	8,012	8,012	8,012		8,012	
Special Interest Area								
Remote Recreation	901,552	901,552	901,552	901,552	901,535		728,347	
Enacted Municipal Watershed								
Old-growth Habitat	3,625	3,625	3,625	3,625	3,625			
Semi-remote Recreation	212,718	212,718	212,718	212,718	212,688		210,833	
Recommended LUD II						953,035		
LUD II	42,921		42,921	42,921	944			
Wild, Scenic, Recreational River	10,176	10,176	10,176	10,176	10,176		5,850	
Experimental Forest								
Scenic Viewshed								
Modified Landscape	22,469	22,469	22,469	22,469	22,469			
Timber Production								
TOTAL	**1,201,474**	**1,201,474**	**1,201,474**	**1,201,474**	**1,201,474**	**1,201,474**	**1,201,474**	**1,201,474**
Suitable Timber Lands	1,722	1,722	1,722	1,722	1,722	0	0	0