

## INDIVIDUAL ROADLESS AREA DESCRIPTION

**ROADLESS AREA NAME:** Eudora (507)

**ACRES (NFS):** 200,493

**BIOGEOGRAPHIC PROVINCE:** South Prince of Wales Island

**ECOLOGICAL SECTION:** Dixon Entrance Lowlands, Prince of Wales Mountains

**2003 WILDERNESS ATTRIBUTE RATING:** 24 (19, 25)

### **I. Overview and Description**

(1) **Location and Access:** The Eudora Roadless Area is on southeast Prince of Wales Island. The Clarence Strait lies to the east and Dixon Entrance lies to the south. The Cholmondeley Sound lies to the north and across a strip of non-National Forest System land. The South Prince of Wales Wilderness and Roadless Area 531 lie to the west. The roadless area lies approximately 30 air miles southwest of Ketchikan while Hollis, the closest community on the Alaska Marine Highway, is approximately 20 miles to the north. The roads that provide access to the Eudora Roadless Area are: the road on the south side of Kitkun Bay and north of the North Arm of Moira Sound, generally referred to locally as the Lancaster Cove road (along the northeast boundary of the roadless area), the Bokan Mountain Mine Road at the head of Kendrick Bay (near the center of the roadless area), the newly constructed road on the point between the South Arm and West Arm of Cholmondeley Sound, and the road through Sulzer Portage along the south side of West Arm of Cholmondeley. Only the Sulzer Portage road connects to the primary Prince of Wales road system and this is through private lands not open for public use. The only other access to the Eudora Roadless Area is by boat, helicopter, or floatplane. There are no places suitable for landing wheeled aircraft, but there are several lakes large enough for floatplanes to use. Access to upland areas away from these lakes and from saltwater is by foot or helicopter.

(2) **History:** The east coast of Prince of Wales Island has a rich history of prehistoric use by Alaska Native cultures. The area was inhabited by the Tlingit until the Haida displaced them from the southern third of the island in the early 1700s. Surveys covering much of the roadless area have not revealed any archaeological sites. This may be due to the location of the roadless area between the Kasaan Haida and the Tongass Tlingit peoples. The Tongass Tlingit claimed Johnson Cove and Moira Sound while the Kaigani Haida claimed the area to the north. The roadless area has been, and is today, important for subsistence hunting and fishing. The Eudora Roadless Area is considered a remote area on Prince of Wales Island. The many major sounds and bays provide bases for commercial fishing including anchorages, fish processing facilities, boat repair sites, and fish buying stations. There has been interest in the mineral resources since the early 1900s resulting in several patented mining claims and numerous unpatented claims that are currently active. Sulzer Portage, a small boat and foot portage used since the early 1900s, connects the east and west sides of the island through Cholmondeley Sound and Hetta Inlet. All of the land in this area is non-National Forest Service lands. The Forest Service did retain an easement corridor of the historic trail. The State has made a number of selections scattered over the roadless areas entire length.

(3) **Geography and Topography:** The Eudora Roadless Area has a varied topography. The Cholmondeley Sound area has rugged and steep mountains with elevations over 3,000 feet. Headlands, separating the major bays and sounds, have similar topography. The interior of the area has somewhat flat to moderate relief. There are many large lakes in the area. The largest is Kegan Lake. Freshwater covers approximately 4,218 acres of this area. About 10,830 acres is covered by rock and 664 acres is covered by alpine tundra. This area has 380 miles of saltwater shoreline. There are 524 islands and islets (33 of these are greater than 10 acres) totaling 2,251 acres.

(4) **Ecosystem:**

(a) **Classification:** Biogeographic Province. The roadless area is in the South Prince of Wales Island Biogeographic Province. The climate is warm and wet; deep snow is rare or transient at the lower

## Appendix C

elevations. The topography is steep and rugged and the coastline is highly dissected. The vegetation in this province is strongly influenced by southwesterly storms.

Ecological Section/Subsection. The Eudora Roadless Area is contained within the Dixon Entrance Lowlands Ecological Section (M247J) and Prince of Wales Mountains Ecological Section (M247I). These areas are represented by three ecological subsections (see table below). The South Prince of Wales Granitics Ecological Subsection (42% of roadless area) contains granitic outcrops and glacially scoured areas of volcanics and metasediments. The landscape is mostly rolling hills and lowlands spotted with hundreds of lakes and ponds. The well-drained soils on the hillslopes support moderately productive forests and the poorly drained soils of the lowlands support forested and non-forested wetlands that comprise almost half of the landcover in this subsection. The Moira Sound Complex Ecological Subsection (41% of roadless area) is a deeply dissected landscape of sedimentary and volcanic bedrock carved in to fjords and broad valleys. Bogs and wetlands are common on the poorly drained colluvial soils. Hemlock and hemlock-spruce forests are found along the wetland margins. Terrain in the Hetta Inlet Metasediments Ecological Subsection (17% of roadless area) rises from deep fjords to sedimentary and volcanic peaks over 3,000 feet in elevation. Soils in the lowlands, lying over poorly drained glacial till, support wetlands. Productive forests are rare in the Hetta Inlet Metasediments Ecological Subsection (Nowacki et al., 2001).

Ecological Section	Ecological Subsection	Percent of Roadless Area
Dixon Entrance Lowlands	South Prince of Wales Granitics	42%
Prince of Wales Mountains	Moira Sound Complex	41%
	Hetta Inlet Metasediments	17%

**(b) Soils:** Soils are generally highly organic with low clay content. They are formed over bedrock and their typical depth is 40 inches.

**(c) Vegetation:** Vegetation in this area is that typical of Southeast Alaska coastal temperate rain forests. Mixed conifer and western hemlock-red-cedar plant associations dominate the area. Western hemlock, Sitka spruce, and cedar are the most common trees. Approximately 458 acres of muskeg are mapped for the area; however, due to their small size and association with forested sites, accurate acreage estimates are difficult. Wetland soils play a strong role in vegetation development within the roadless area. Approximately 664 acres of alpine are mapped for the area.

There are approximately 176,297 acres mapped as forest land of which 87,687 acres (50 percent) are mapped as productive old-growth forest. Of the productive old growth, 43,349 acres (49 percent) are mapped as high-volume, old-growth forest. The productive old growth includes about 21,288 acres of high-volume, coarse-canopy old growth. There are also 578 acres of second growth resulting from beach logging.

**(d) Fish Resources:** Primary fish-bearing streams in the area include Portage Creek, Big Creek, Miller Creek, Aiken Creek, Myrtle Creek, Kegan Creek, Kugel Creek, Johnson Cove Creek, Perkins Creek, Hessa Lake and Creek, and Nichols Lake. These waters provide habitat for sockeye, coho, pink, and chum salmon, steelhead trout, and Dolly Varden char.

**(e) Wildlife Resources:** This area supports populations of Sitka black-tailed deer, black bear, wolves, river otter, marten, mink, bald eagles, loons, and common waterfowl. The American peregrine falcon may migrate through the area. Trumpeter swans, marbled murrelets, osprey, and Peale's peregrine falcons, as well as the Queen Charlotte goshawk, may occur in the area (USDA Forest Service, 1998). Moose reportedly inhabit Prince of Wales Island, but they have not been sited here. There are no brown bear or mountain goats in this area (MacDonald and Cook, 1999).

**(5) Management Direction and Current Uses:** This roadless area was allocated to six Land Use Designations (LUDs), under the 1997 Tongass Land and Resource Management Plan. These six LUDs are Timber

Production, Modified Landscape, Minerals, Semi-remote Recreation, Old-growth Habitat, and Wild River. The Minerals LUD is a secondary LUD that overlays the other land uses.

LUD	Acres
Timber Production	70,601
Modified Landscape	9,762
Minerals*	28,756
Semi-remote Recreation	80,388
Old-growth Habitat	34,517
Wild River	5,226

\* Note that acres in the Minerals LUD are included in the Timber Production, Old-growth Habitat, Semi-remote Recreation and Wild River LUD acres.

Approximately 40 percent of this roadless area (not including the Minerals LUD overlay) contains one of two development LUDs (Timber Production, Modified Landscape). About 70,601 acres, or approximately 35 percent of the roadless area, was allocated to the Timber Production LUD. Approximately 5 percent of the roadless area was allocated to the Modified Landscape LUD, primarily located in the northern part of the roadless area. Approximately 14 percent of the roadless area was allocated to the Minerals LUD overlay.

Approximately 60 percent of this area was allocated to one of three non-development LUDs (Semi-remote Recreation, Old-growth Habitat, Wild River). The Semi-remote Recreation LUD was designated to approximately 40 percent of the roadless area. Approximately 17 percent of the roadless area was allocated to the Old-growth Habitat LUD. About 5,226 acres for the Kegan Lakes and Streams was allocated to the Wild River LUD. This LUD covers approximately 3 percent of the roadless area. The Kegan Lakes and Streams were recommended for the wild river designation because of its nationally significant fisheries, recreation, and scenic values.

There are a wide variety of mining and recreation uses that occur within the area. Two mining claims, totaling approximately 300 acres, located near McLean Arm and Niblack are non-National Forest Service land surrounded by National Forest System lands. They are considered part of the roadless area. There are several other patented claims along the boundaries of the roadless area that are outside the roadless area. Several unpatented mining claims are also located within, or adjacent to, the roadless area.

There are public recreation cabins located at Kegan Cove, Kegan Creek, and Josephine Lake. One Forest Service maintained trail connects Kegan Cove to Kegan Lake passing the two recreation cabins (no other Forest Service maintained trails in the area). A mooring buoy is located in Kegan Cove (the only one located in the area). Kegan Cove and Kegan Creek Cabins receive the highest use by visitors on the Craig Ranger District. Kegan Creek is heavily used for subsistence activities. There is also a Forest Service maintained dock and skiff located on Kegan Lake for visitors renting the Kegan Creek Cabin. One outfitter/guide permit was issued in 2000 in the roadless area (total use was 18 service days). This roadless area supports subsistence use, mostly by residents of Metlakatla. There are two special use permits in the area. Both are located in Kendrick Bay. One is for a bunkhouse and road associated with mining claims. The other is for net pens associated with the Southern Southeast Regional Aquaculture Association. There is one floating lodge in Niblack Anchorage that operates seasonally (Gold Coast Lodge). There are no Forest Service Outfitter Guide or Special Use permits associated with this lodge. They rent skiffs to clients who fish and hunt in the area. Other inventoried recreation uses in the area include dispersed camping, viewing scenery, beachcombing, mooring pleasure craft, hunting, and sport fishing.

**(6) Appearance (Apparent Naturalness):** A few small pockets of old logging activity scattered throughout the area are the only exceptions to the natural appearance of the roadless area. The southern portion of the roadless area has had extensive blowdown due to storms coming in from the Pacific Ocean. This is a natural situation but some observers may think that this is due to logging. Large areas of recent harvest on the private lands throughout the eastern half of Cholmondeley Sound have had a significant effect on the highly scenic areas of this water body and the apparent naturalness of the adjacent roadless area.

**(7) Surroundings (External Influences):** The western boundary of the Eudora Roadless Area coincides with the South Prince of Wales Wilderness and Roadless Area 531. The eastern and southern boundaries are saltwater. The most significant external factor is the development on the private lands. An irregular northern boundary results

## Appendix C

from the extensive private lands in the area owned by the Kootznoowoo Village Corporation. There are also developed areas on National Forest System lands along the south side of Kitkun Bay and at the head of Kendrick Bay (in the east). The State has made small land selections scattered along the entire coast for the purpose of creating communities sometime in the future.

**(8) Attractions and Features of Special Interest:** The natural features of the area, including the scenery, the saltwater bays and inlets, the extensive karst, the opportunity to see wildlife, and to study the processes that formed this country are attractions. The extensive canoeing and kayaking opportunities within the area are outstanding attractions. Fishing and solitude are also attractions. The area contains 34 inventoried recreation places, which cover 75,055 acres (37 percent) of the roadless area. The cabins are important attractions, especially the cabin at Kegan Cove. It is the most heavily used cabin on the Craig Ranger District.

**(9) Differences between the 1989 and 2003 Roadless Area Boundary:** Areas along the South and West Arms of Cholmondeley Sound that have been harvested but do not contain roads were added to the roadless area. The boundaries have also been adjusted to reflect more accurate mapping. Areas converted to State or private ownership have been removed from the roadless area. The net result has been a reduction in the size of the area by approximately 14 percent. Several smaller areas near developments on the boundaries have been excluded between the Draft and Final SEIS to improve the potential manageability of the roadless area as wilderness.

### II. Capability for Management as Wilderness

**(1) Natural Integrity and Apparent Naturalness:** Except in the north, a few areas on Moira Sound, and Kendrick Bay, the roadless area has well-defined natural boundaries. Management activities on private and some State lands have affected the natural integrity and apparent naturalness of adjacent lands within the roadless areas. The natural integrity and apparent naturalness of the remainder of the roadless area is very high. The mining patents are inclusions within the roadless area, but these areas are small and they do not affect the overall natural integrity. The appearance of the roadless area is consistent with wilderness designation.

**(2) Opportunity for Solitude and Serenity, Self-reliance, Adventure, Challenging Experiences, and Primitive Recreation:** There is very high opportunity for solitude and primitive recreation within the area, except in the northern fringe where the sights and sounds of management activities may be evident. The area is large and remote from human settlements. Floatplanes and boats are used to transport people to the numerous fishing lakes and three recreation cabins within the area. Noise from these craft may disturb visitors.

There are outstanding opportunities for primitive recreation due to the high scenic quality, the vastness of the area, and the wide variety of recreation opportunities. These include saltwater related activities in protected, remote, and scenic bays, opportunities to recreate at inland lakes, and alpine hiking opportunities through extensive areas of relatively open country. The roadless area contains steep, rugged terrain, rising to over 3,000 feet in elevation. The steep nature of portions of the area, its vastness, and the presence of black bears presents a high degree of challenge and the need for woods skills and experience.

This 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.

<b>ROS Class</b>	<b>Acres</b>	<b>Percent of Total ROS</b>
Primitive (P)	178,468	89%
Semi-Primitive Non-Motorized (SPNM)	19,174	10%
Roaded Modified (RM)	2,636	1%

The area contains 34 inventoried recreation places, which cover 75,055 acres (37 percent) of the roadless area.

<b>ROS Class</b>	<b># of Rec. Places*</b>	<b>Total Acres</b>
P	26	70,809
SPNM	7	4,216
RM	2	30

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

Three public recreation cabins, mooring buoys, and trails are located within the area. There is also a Forest Service maintained dock and skiff located on Kegan Lake for visitors renting the Kegan Creek Cabin. There is a trail linking the Kegan Lake cabin with saltwater and one linking Paul Lake with saltwater, however the Paul Lake trail is not Forest Service maintained.

**(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).

In 1979, during the RARE II process, the Tongass National Forest applied WARS for the first time and rated each unroaded VCU on the Tongass. In 1989, the inventoried roadless areas (which generally include more than one VCU) were rated according to this system for the Analysis of the Management Situation (AMS) developed in support of the Forest Plan Revision. This original version of the AMS included both the individual VCU ratings done in 1979 and the composite rating that was done for each roadless area in 1989. The 1989 rating for the Eudora Roadless Area was 23 out of 28 possible points. The 1989 rating was re-evaluated for this updated version of the AMS. Based on this re-evaluation, the area was given a rating of 24. The combination of the area north of the South Arm of Cholmondeley Sound and the area north of the North Arm of Moira Sound was rated separately and received a score of 19. The southern area received a score of 25 when rated separately. These two ratings reflect the much higher influence of developments in adjacent areas in the northern portions of the roadless area.

**(4) Ecologic and Geologic Values:** The roadless area is part of a large unroaded area that includes most of the southern half of Prince of Wales Island.

**(a) Fish Resources:** The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) listed VCUs 674, 679, 682, 692, and 698 as primary salmon producers and the majority of the rest of the roadless area as secondary producers. VCU 684 by Dickman Bay was listed as a primary sportfish producer.

Primary fish-bearing streams in the area include Portage Creek, Big Creek, Miller Creek, Aiken Creek, Myrtle Creek, Kegan Creek, Kugel Creek, Johnson Cove Creek, Perkins Creek, Hessa Lake and Creek, and Nichols Lake. These waters provide habitat for sockeye, coho, pink, and chum salmon, steelhead trout, and Dolly Varden char.

Portage Creek, which lies in the northwest corner of this roadless area and provides habitat for coho, pink, and chum salmon, has an estimated peak escapement of 159,400 pink salmon and good coho salmon production (ADF&G, 1998; ADF&G, 2000). Big Creek flows through VCU 674 into the West Arm of Cholmondeley Sound. This free flowing system is an important producer of coho, chum, and pink salmon, as well as steelhead (ADF&G, 2000). Miller Creek, which drains into North Arm, provides habitat for coho, pink, and sockeye salmon, steelhead trout and Dolly Varden char (ADF&G, 2000). This stream receives an estimated peak escapement of 40,800 pink salmon (ADF&G, 1998).

Myrtle and Niblack Lakes contain Dolly Varden char.

Kegan Lake and Stream flow into the north side of Moira Sound within VCU 684. The system includes two major lakes, several small lakes, and streams. Kegan Lake and streams are known for recreational and subsistence fishing of sockeye, coho, and pink salmon, steelhead, and rainbow trout. Dolly Varden char are

## Appendix C

also present (TLMP, 1997; ADF&G, 2000). ADF&G lists this system among the 65 “most important” watersheds in Southeast Alaska for fisheries values. Kegan Creek receives an estimated peak escapement of 30,900 pink salmon (ADF&G, 1998).

The upper portions of the Hunter Bay system lie within this roadless area west of the South Prince of Wales Wilderness. The area is regionally popular for fishing and recreation. Fishing is excellent for pink, chum, sockeye, and coho salmon, as well as cutthroat trout and Dolly Varden char. Disappearance Creek, off the south arm of Cholmondeley Sound, is a spring fed stream with high fisheries productivity.

Johnson Lake and Perkins Creek are areas of high quality fish habitat of regional significance. The extensive floodplain in the Johnson Lake area contains large spawning areas and the lake is a major producer of sockeye salmon. Chum, coho, and pink salmon are also present in the system. Johnson Cove Creek receives an estimated peak escapement of 53,500 pink salmon and has very good coho salmon production (ADF&G, 1998).

**(b) Wildlife Resources:** This area supports populations of Sitka black-tailed deer, black bear, wolves, river otter, marten, mink, bald eagles, loons, and common waterfowl. The American peregrine falcon may migrate through the area. Trumpeter swans, osprey, and Peale’s peregrine falcons as well as the Queen Charlotte goshawks may, or do, occur in the area. Marbled murrelet nests have been located on south Prince of Wales Island. Eggshells were found just east of Lancaster Cove and in the Port Johnson area. One unconfirmed report indicates that goshawks were sighted at the mouth of Cannery Creek (USDA Forest Service, 1998). Moose reportedly inhabit Prince of Wales Island, but they have not been reported here. Brown bear and mountain goats do not inhabit this area (MacDonald and Cook, 1999).

The main dispersal corridors throughout the area are thought to be the beach fringe and saddles between mountains. Currently, the old-growth blocks that consist of Port Johnson, Kitkun Bay, and Lancaster are all connected by beach fringe and inland old-growth forest. This is an important wildlife corridor. The west side of South Arm is an important corridor because it provides the best link for animals in southern Prince of Wales Island to migrate north along the coast to Sulzer Portage. There are two 800-foot elevation saddles that connect South Arm to Moira Sound and Klakas Inlet (USFS, 1998).

**(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. 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 in the lowlands on small lakes and along large rivers and winter in ice-free areas throughout the Tongass. 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, nine sensitive plant species are known or suspected to occur in the Craig Ranger District.

**(d) Karst, Cave, and Other Geologic Resources:** There are extensive karst resources in this roadless area, primarily in the north. The exceptions are two small bands of low vulnerability karst at the head of Nichols Bay and a small area near the peak above Ingraham Bay. There are also two areas of high vulnerability karst near Eudora Mountain and several low vulnerability areas around Chomly; vulnerability increasing at higher elevations and a large area of mostly mid-vulnerability karst surrounding Green Monster Mountain and Billie Mountain. The karst resources represent 4,419 acres (2 percent) of the roadless area. Approximately 70 percent of these karst resources are mapped as high vulnerability karst. There are no glaciers or other unique geologic features known in this area.

**(5) Scientific and Educational Values:** The area offers opportunities to study fish, wildlife, forests, karst systems, and geologic processes; however, the remoteness of the area makes access for study difficult.

**(6) Scenic Values:** The Eudora Roadless Area is part of the Coastal Hills Character Type, which consists of moderately-steep landforms, predominantly rounded summits, elevations up to 4,500 feet, and flat-floored, U-shaped valleys. This large area exhibits almost the full range of landscape characteristics of this character type from

the rugged, diverse terrain of the West Arm of Cholmondeley Sound and the Eudora Mountain to the rugged coastline along Clarence Strait to the many island groups throughout the area.

The developments on private and some State land have affected the natural integrity of adjacent areas, but these have not severely reduced the overall integrity of the roadless area. Operations on mining related private lands have affected the natural integrity of adjacent areas to some degree. Most of the developments in adjacent areas around Cholmondeley Sound can be seen from the surrounding waterways. When viewing this roadless area from the priority routes listed in the Forest Plan, which includes most of Eudora, an unmodified landscape dominates the view. Also, once in the roadless area, the landscape remains scenic and unmodified.

Visual Priority Routes and Use Areas identified by the Forest Plan, that are within or adjacent to the area, include: Moira Sound, Niblack Bay, North Arm to Aiken Cove, South Arm of Cholmondeley Sound, Johnson Cove and Lake, and the mouth of Moira Sound West and South Arms (saltwater use areas), the Kegan Lake and Kegan Cove public recreation cabins; Kegan Lake and streams, Niblack Lake and streams, Nichols Bay, the head of McLean Arm, Kendrick Bay, Dickman Bay, and the mouth of West and South Moira Sound (boat anchorages).

About 24 percent of this area is inventoried as Variety Class A, possessing a high degree of landscape diversity relative to the character type. High scenic quality landscapes include the areas south of the West Arm of Cholmondeley Sound around Dora Bay, the Eudora Mountain area, and the complex of diverse lake basins and intricate saltwater shoreline to the south and east of this peak. Approximately 74 percent of the roadless area is inventoried as Variety Class B, possessing landscape characteristics common to the character type. About 1 percent of the area is uninventoried.

Virtually all (approximately 97 percent) of this roadless area was inventoried as Existing Visual Condition (EVC) Type I. This means the natural landscape has remained unaltered by human activity. Approximately 1 percent was inventoried as EVC Type III, in which the average person notices changes in the landscape, but they do not significantly distract. Another 1 percent was inventoried as EVC Type V, where changes in the landscape are obvious to the average person, and appear to be major disturbances.

**(7) Social, Cultural, and Historical Values:** The east coast of Prince of Wales Island has a rich history of prehistoric use by Native cultures. The area was inhabited by the Tlingit until the Haida displaced them from the southern third of the island in the early 1700s. Surveys covering much of the roadless area have not revealed any archaeological sites. This may be due to the location of the roadless area between the Kasaan Haida and the Tongass Tlingit peoples. The Tongass Tlingit claimed Johnson Cove and Moira Sound while the Kaigani Haida claimed the area to the north. The roadless area has been, and is today, important for subsistence hunting and fishing. The Eudora Roadless Area is considered a remote area on Prince of Wales Island. The many major sounds and bays provide bases for commercial fishing including anchorages, fish processing facilities, boat repair sites, and fish buying stations. There has been interest in the mineral resources since the early 1900s resulting in several patented mining claims and numerous unpatented claims that are currently active. Sulzer Portage, a small boat and foot portage used since the early 1900s, connects the east and west sides of the island through Cholmondeley Sound and Hetta Inlet. All of the land in this area is non-National Forest Service land. The Forest Service did retain an easement corridor of the historic trail. The State has made a number of selections scattered over the roadless areas entire length. The area receives some subsistence use, mostly from Metlakatla. VCUs 674 and 679 (by Cholmondeley Sound), and 692 (by South Arm Moira Sound) are listed among the VCUs with the highest community fish and wildlife values. No VCUs are listed among the VCUs with the highest sensitivity to disturbance of subsistence use areas (ADF&G, 1998).

**(8) Manageability as Wilderness and Boundary Conditions/Changes:** There are several places where the private lands associated with mineral patents and other areas where valid mining claims, especially in Minerals LUD areas, may affect the ability to manage the immediate surrounding area in a roadless condition. Despite this, the area, as a whole, can be easily managed in the roadless condition. Almost all of the State and private lands have been excluded from the boundary of the roadless area. Management as a wilderness would be improved if the northern boundary were moved south to a well-defined topographic feature and away from developments on private lands and related to the South Arm Timber Sale.

## Appendix C

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

(1) **Recreation, Including Tourism Potential:** Tourism has been increasing in Southeast Alaska and is expected to continue to increase. Cruise ships regularly stop in Ketchikan. There is the potential for some of these tourists to be drawn to fishing, hunting, and camping in the roadless area. There is a potential for outfitter/guide permits to increase. There is an opportunity to manage this area for primitive and semi-primitive recreation. There is some opportunity to increase developed recreation facilities with additional cabins and new trails. This area has poor road access to its northern boundary, but it does have good boat access from the Ketchikan area (weather permitting). Additional recreation and tourism potential include additional mooring buoys, trails, sea kayaking, cross-country hiking, wildlife viewing, dispersed camping, sea kayaking, beachcombing, improved access to sport fishing and hunting opportunities, viewing scenery (from private and commercial marine craft), and viewing wildlife.

In 1996, the Alaska Visitor Association (AVA) proposed hut-to-hut hiking for 25 persons/day and a day-use boat dock for 50 persons/day in the Kegan Lake area.

(2) **Subsistence Uses:** Management as a wilderness would not conflict with current subsistence uses.

(3) **Fish Resources:** The recently completed fish habitat inventory indicates that there is potential for salmon enhancement projects such as constructing fish passes on several of the streams within the area.

(4) **Wildlife Resources:** There are no wildlife habitat improvement projects currently planned within the roadless area.

(5) **Timber Resources:** There are 87,687 acres inventoried as productive old-growth forest in the roadless area and 578 acres of second growth resulting from beach logging. Of this, approximately 56,626 acres are categorized as tentatively suitable for timber harvest. Based on the Forest Plan LUDs assigned to this area (and estimated falldown and scheduling reduction factors), 11,572 acres or 6 percent of this roadless area are estimated to be suitable for timber production. Approximately 5,251 of the suitable acres are mapped as high-volume old growth; of these acres, 2,361 are mapped as high-volume, coarse-canopy old growth. The potential for managing timber in this roadless is dependent on the development of a road system and log transfer facilities. The rugged terrain over much of the area limits the opportunity for management of its resources, particularly the timber. Timber harvest is currently being considered for an area near Moira Sound.

(6) **Fire, Insects, and Disease:** The area has no significant fire history. Endemic tree diseases common to Southeast Alaska are present.

(7) **Minerals:** Mineral development potential is high. The number of existing mineral patents, located claims, and the expressed interest in the mineralized geology of the area indicate that mineral exploration and development is likely. Explorations in 1988-89 are reported to indicate the presence of a variety of rare earth elements such as yttrium. The Hunter Bay area, outside of the South Prince of Wales Wilderness, and the Kegan Lakes and streams are identified by the U.S. Bureau of Land Management as having high potential for mineral development. Adjacent to Hunter Bay are 121 unpatented mining claims. The Kegan Lakes and streams are in a Class II tract of estimated mineral potential. There are mining claims on the east side of Lake Luelia. The US Geologic Survey classifies the region around Bokan Mountain and the south end of the Johnson River corridor as a Class I tract of minerals. A uranium deposit was located at Bokan Mountain in the late 1970s and partially worked at that time. Although buffered outside the actual roadless area, mapped shot-rock roads that serviced the mine were developed from local rock and reportedly exhibit significant radioactivity. Significant natural radioactivity is also reportedly present around the mountain, which would be in the roadless area. The mine is considered abandoned and efforts to locate the owners to discuss clean-up issues have not been successful. The area near Johnson Cove is a Class II tract. The Niblack area has high mineral potential for precious metals and strategic minerals. Numerous active mining claims have been located, and there is currently active mineral exploration taking place. There are 25 patented and 246 unpatented mining claims between Myrtle Lake and the Niblack Anchorage area (TLMP, 1997; USFS, 1998).

This area contains 50,008 acres of land identified as a mineral activity tract with 31,507 acres having a high to moderate potential for experiencing economic mineral exploration or development (Coldwell 1990; USDA Forest Service, 1991). A total of 28,756 of these acres are 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 mineral development. This is to ensure that minerals are developed in an environmentally sensitive manner, and that other high-valued resources are considered when minerals developments occur.

In addition, this area contains an estimated 149,713 acres of undiscovered locatable mineral resources (Brew et al. 1990; USDA Forest Service, 1991); 128,191 of these acres are considered to have moderate to high potential for development.

**(8) Transportation and Utilities:** There are no existing or planned transportation or utility corridors in the roadless area.

**(9) Water Availability and Use:** Three public recreation cabins and a private residence create a water demand. There are no existing or planned hydroelectric or domestic water projects within the roadless area.

**(10) Areas of Scientific Interest:** The mapped karst resources encompass approximately 4,419 acres or 2 percent of the roadless area.

**(11) Land Use Authorizations:** There is a private residence permit and many mining claims.

**(12) Land Status:** There are a number of mining patents within the boundary of this area. These inclusions total approximately 300 acres. A portion of the roadless area in the north has encumbrances. This encumbered land is adjacent to land owned by the Kootznوو Native Corporation. The State has made small land selections scattered along the entire coast for the purpose of creating communities sometime in the future. There is additional land that may be conveyed to the State south of Moira Sound on Clarence Strait.

#### **IV. Wilderness Evaluation (Need for Wilderness)**

##### **(1) Public and Congressional Interest:**

**(a) Interest Expressed by Local Users and Residents:** The area receives local use for subsistence and recreation activity. Existing recreation uses include viewing scenery, viewing wildlife, dispersed camping, public recreation cabin use, cross-country hiking, and beachcombing.

**(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 included a portion of the Eudora Roadless Area, approximately 24,655 acres near Kegan Lake. In 2001, HR 2908 proposed that the southern two-thirds of the roadless area (the portion that drains into Moira Sound south to Cape Chacon) be designated a wilderness. The bill proposed managing the northern portion as LUD II in an unroaded condition.

**(c) Public Input During Forest Plan Revision and Appeals:** The Southeast Alaska Conservation Council (SACC) and others recommended against road building and logging. They stated that the Moira Sound area merited special protection for its outstanding wildlife, fisheries, hunting, subsistence, recreation, and tourism values. The US Geologic Survey recommended that Cape Chacon (the southern-most portion of the roadless area) be managed as Modified Landscape LUD rather than a more restrictive LUD based on the mineral potential of the area. Letters written in response to an “alert” put out by the SACC recommended that the Kegan Lake area be given the strongest protection possible. Several people attending public hearings held in Southeast Alaska also recommended no roading or logging in the Kegan Lake area. The Alaska Forest Association, the Alaska Miners Association, and the Alaska Visitors Association (AVA) recommended that no new wilderness be designated. Others stated that all unroaded areas should be designated wilderness. Timber industry representatives recommended managing areas not designated as wilderness for timber. In 1996, the AVA proposed hut-to-hut hiking for 25 persons per day and a day use boat dock for 50 persons per day in the Kegan Lake area.

## Appendix C

**(d) Public Input During Roadless Area Conservation Rule and Road Management Policy**

**Review:** This area was not specifically identified in the public comments received during the Roadless Area Conservation Rule or Road Management Policy Review. However, some commenters wanted all unroaded lands on the Tongass to be protected from development.

**(e) Public Input Expressed for Project-level EISs and Other Input:** Comments were received as part of scoping for the Moira Timber Sale EIS in 1999/2000. The City of Saxman recommended no road building or logging in the area between Point Johnson, Moira Sound, and North Arm because it would compromise an important anchorage in Moira Sound by removing vegetation that provides a screen against the wind.

**(f) Public Input Expressed During Supplemental EIS Process:** The U.S. Department of the Interior identified this roadless area as one of 13 roadless areas considered to have outstanding fish and wildlife values. They indicated that the area they recommend for protection contains a mix of productive habitats, and would dramatically increase the long-term functional value of the existing, adjacent South Prince of Wales Wilderness. The area has great connectivity to the South Prince of Wales Wilderness Area. They stated that Eudora is one of the most pristine roadless areas left on Prince of Wales Island. They indicated that the important wildlife values provided by this area warrant management that ensures the long-term integrity of its habitats, ecosystem processes, and ecological functions

The Alaska Department of Fish and Game rated the Eudora roadless area (VCUs 682, 683, 684, 691, 692, 693, 694, 695, 699, 700, 701, 702, 703, and 704) as the fourth highest priority for protection on Prince of Wales Island and Adjacent Islands. This rating is based on the VCUs with the highest value fish and wildlife resources needing additional protection. VCUs are prioritized for their very high productivity, essential role in connectivity, and/or very high value as community use areas.

SEACC recommended the Eudora area as Wilderness to be added to the South Prince of Wales Wilderness, which would create a contiguous Wilderness of approximately 300,000 acres. The Alaska Rainforest Campaign (a coalition of national and Alaska conservation groups) identified Roadless Areas 507 and 531 as adjacent to the existing South Prince of Wales Wilderness and recommended them for permanent protection as wilderness. They indicated that this combination would create a contiguous wilderness area of approximately 350,000 acres.

A number of cave/karst experts and other individuals stated that this area contains extensive karst, especially in the northern portions. They indicated that known karst areas around Eudora Mountain and Cholmondeley, as well as those near Green Monster and Billie Mountain should be protected along with adjacent developed karstlands. This would amount to about 4,500 acres of karst.

An individual thought that Moira Sound had valuable low elevation forest that should be protected. A number of individuals identified Moira Sound and Johnson Lake as areas in need of protection. Some individuals recommended the entire area for permanent protection as wilderness and some for LUD II.

**(2) Nearby Roadless and Wilderness Areas and Uses:** This roadless area is part of a larger contiguous unroaded area consisting of the South Prince of Wales Wilderness, Nutkwa Roadless Area (531), and McKenzie Roadless Area (519). A portion of the Nutkwa Roadless Area is LUD II. These areas are used primarily for recreation, and subsistence hunting and fishing. The use levels for most of these areas are low.

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

Community	Air Miles	Water Miles
Juneau (Pop. 30,711)	220	250
Ketchikan (Pop. 14,070)	30	35
Wrangell (Pop. 2,308)	85	100
Petersburg (Pop. 3,324)	110	135

Hollis, approximately 20 miles north of the Cholmondeley Sound, Prince of Wales Island, is the nearest stop on the Alaska Marine Highway.

**(4) Relative Contribution to the National Wilderness Preservation System:** The Eudora Roadless Area is on southeast Prince of Wales Island. The Clarence Strait lies to the east and Dixon Entrance lies to the south. The Cholmondeley Sound lies to the north, across a strip of non-National Forest System land. The South Prince of Wales Wilderness and Roadless Area 531 lie to the west. The Eudora Roadless Area has a varied topography. The Cholmondeley Sound area has rugged and steep mountains with elevations over 3,000 feet. Headlands, separating the major bays and sounds, have similar topography. The interior of the area has somewhat flat to moderate relief. There are many large lakes in the area. The largest lake in the area is Kegan Lake.

The Eudora Roadless Area generally appears natural and unmodified, although it is influenced at various places along its boundaries by ongoing timber and mineral developments and associated activities. The area has very high natural integrity and apparent naturalness. When rated separately, the combination of the areas north of the South Arm of Cholmondely Sound and north of the North Arm of Moira Sound have moderate natural integrity and low apparent naturalness. The southern portion of the roadless area has outstanding natural integrity and very high apparent naturalness. The opportunity for solitude and primitive recreation is very high.

Approximately 24 percent of the landscape is considered distinctive from a scenery standpoint. There are extensive areas of karst within the roadless area and several areas of relatively high mineralization.

The roadless area includes about 43,349 acres of high-volume, old-growth forest. Of these acres, approximately 21,288 are mapped as high-volume, coarse-canopy old growth. It ranks among the top five Tongass roadless areas in terms of acres of high-volume, coarse-canopy old growth; the majority of this old growth is contained within non-development LUDs.

The Eudora Roadless Area is classified as being in the South Prince of Wales Island Biogeographic Province and makes up about 51 percent of the province. It is one of three inventoried roadless areas found within the province, which makes up about 66 percent of the province. The South Prince of Wales Wilderness is also in the province and makes up about 22 percent of the province. Additionally, about 5 percent of the province is located within the Nutkwa LUD II area.

The Eudora Roadless Area lies within two ecological sections; it represents 16 percent of the Dixon Entrance Lowlands Ecological Section and 14 percent of Prince of Wales Mountains Ecological Section. A relatively small area of Prince of Wales Mountains Ecological Section is in existing wilderness (8 percent) or existing LUD II (3 percent), but 22 percent is protected by other existing non-development LUDs. Existing wilderness is well represented (56 percent) in the Dixon Entrance Lowlands Ecological Section and an additional 28 percent is protected by other existing non-development LUDs.

Forty-two percent of the roadless area is in the South Prince of Wales Granitics Ecological Subsection; this portion of the roadless area represents 59 percent of the ecological subsection. Existing wilderness and existing non-development LUDs (40 and 48 percent of the subsection, respectively) are well represented. The Moira Sound Complex Ecological Subsection accounts for 41 percent of the roadless area; this portion of the roadless area represents 67 percent of the entire ecological subsection, 23 percent of which is protected in existing wilderness and 36 percent in existing non-development LUDs, including 0.4 percent in existing LUD II. The remaining 17 percent of the roadless area lies in the Hetta Inlet Metasediments Ecological Subsection; this portion of the roadless area represents 15 percent of the entire ecological subsection, 2 percent of which is in existing wilderness, 9 percent in existing LUD II, and 14 percent is protected by other existing non-development LUDs.

## Appendix C

The Eudora Roadless Area was rated 24 out of a possible 28 points under the Wilderness Attribute Rating System (WARS). As such, its WARS rating is ranked 25th from the highest (along with 4 other roadless areas) among the 109 Tongass inventoried roadless areas. The combination of the areas north of the South Arm of Cholmondeley Sound and north of the North Arm of Moira Sound was rated separately and received a score of 19. The southern portion of the roadless area received a score of 25 when rated separately.

There is both local and national support for designating the southern two-thirds of the roadless area as wilderness and for managing the remainder in an unroaded condition. Designation of the total area would create a large wilderness along with the South Prince of Wales Wilderness. Areas with karst and mineralization would be included. The degree of timber harvest in adjacent lands in the northern portion of the roadless area adds importance to the old growth within the roadless area. The roadless area contains one of the highest acreages of high-volume, coarse-canopy old growth among Tongass roadless areas. Overall, the factors identified here indicate that the relative contribution of this area to the National Wilderness Preservation System would be moderate to high.

### **V. Environmental Consequences**

The Eudora Roadless Area would be managed under the existing Forest Plan if Alternative 1, 2, 3, or 4 is implemented. Approximately 60 percent of the roadless area would be managed under non-development LUDs. Timber harvest and road development could occur within the remaining 40 percent of the roadless area. The land in the development LUDs includes an estimated 11,572 acres that are suitable for timber production (18 percent of the suitable acres on the Craig Ranger District). Approximately 2,361 of the suitable acres are classified as high-volume, coarse-canopy old growth. The South Arm Timber Sale and other sales authorized by the Chasina FEIS would continue. This area contains 50,008 acres of land identified as a mineral activity tract having a high to moderate potential for experiencing economic mineral exploration or development. In addition, it contains over 149,713 acres of undiscovered locatable minerals, of which 128,191 are considered to have medium to high development potential. The very heavy minerals, recreation and special use programs would continue. The values associated with the natural settings of the roadless area could be affected by timber management activities allowed by the Forest Plan and ongoing minerals exploration and development. The karst and most old growth and scenic values are protected by the Forest Plan.

Under Alternative 5, a 24,437-acre portion of the Semi-remote Recreation and Wild River LUDs would be converted to Recommended Wilderness LUD. This would not affect timber management because this area is currently allocated to a non-development LUD. The area suitable for timber management would not change from Alternative 1. The ongoing recreational use, special uses, and mineral management that occur within the Recommended Wilderness LUD area could be restricted. Mineral prospecting would be allowed in the Recommended Wilderness LUD up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the Dickman Bay, Kegan and Niblack drainages portion of the roadless area would be provided long-term protection if designated wilderness.

Under Alternative 6, 50,035 acres would be converted to Recommended LUD II, and all remaining acres converted to Recommended Wilderness LUD. Timber harvest would not be allowed. The ongoing recreational use, special uses, and mineral management that occurs could continue within the Recommended LUD II area, but may be restricted in the Recommended Wilderness LUD area. Mineral prospecting would be allowed in the Recommended Wilderness LUD up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the roadless area, including scenic, old growth, and karst values, would be provided long-term protection if designated LUD II or wilderness.

Under Alternatives 7, a 150,459-acre portion of the roadless area in Semi-remote Recreation, Old-growth Habitat, Wild River, and Timber Production LUDs would be converted to Recommended Wilderness LUD. Timber harvest would not be allowed in the Recommended Wilderness LUD and the total area suitable for timber harvest would be reduced to 3,467 acres. The ongoing recreational use, special uses, and mineral management could be restricted. Mineral prospecting would be allowed in the Recommended Wilderness LUD up to the time that the area is actually designated as wilderness by Congress. The values associated with the natural settings of the majority of the roadless area, including scenic, old growth, and karst values, would be provided long-term protection if designated wilderness.

## Appendix C

Under Alternative 8, the entire roadless area would be converted to Recommended Wilderness LUD. Timber harvest would not be allowed. The ongoing recreational use, special uses, and mineral management could be restricted. Mineral prospecting 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 roadless area, including scenic, old growth, and karst values, would be provided long-term protection if designated wilderness.

<b>Land Use Designation Allocations and Suitable Timber Lands by Alternative for Roadless Area 507 (in acres)</b>								
<b>Land Use Designation</b>	<b>Alt 1</b>	<b>Alt 2</b>	<b>Alt 3</b>	<b>Alt 4</b>	<b>Alt 5</b>	<b>Alt 6</b>	<b>Alt 7</b>	<b>Alt 8</b>
Recommended Wilderness					24,437	150,458	150,459	200,493
Wilderness								
Recommended Wilderness Nat. Mon.								
Wilderness National Monument								
Non-wilderness National Monument								
Research Natural Area								
Special Interest Area								
Remote Recreation								
Enacted Municipal Watershed								
Old-growth Habitat	34,517	34,517	34,517	34,517	34,515		16,310	
Semi-remote Recreation	80,388	80,388	80,388	80,388	61,013		302	
Recommended LUD II						50,035		
LUD II								
Wild, Scenic, Recreational River	5,226	5,226	5,226	5,226	168		60	
Experimental Forest								
Scenic Viewshed								
Modified Landscape	9,762	9,762	9,762	9,762	9,760		9,760	
Timber production	70,601	70,601	70,601	70,601	70,600		23,602	
<b>TOTAL</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>	<b>200,493</b>
Suitable Timber Lands	11,572	11,572	11,572	11,572	11,572	0	3,467	0