

## Appendix C

### INDIVIDUAL ROADLESS AREA DESCRIPTION

**ROADLESS AREA NAME:** South Revilla (523)

**ACRES (NFS):** 53,559

**BIOGEOGRAPHIC PROVINCE:** Revilla Island/Cleveland Peninsula

**ECOLOGICAL SECTION:** Inside Passage Fjordlands, Dixon Entrance Lowlands

**2003 WILDERNESS ATTRIBUTE RATING:** 20 (19, 20, 22)

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

(1) **Location and Access:** The South Revilla Roadless Area is located on the southwest quarter of Revillagigedo Island (also known as Revilla Island). The area includes parts of three peninsulas and Bold Island, which is located south of the central peninsula. It also includes other smaller islands associated with the roadless area. Misty Fiords National Monument Wilderness borders the area to the east and part of the north. Non-National Forest System lands, saltwater, and timber harvest areas comprise the remainder of the north border. George Inlet borders the area to the west. The three peninsulas are separated by Thorne Arm and Carroll Inlet. Revillagigedo Channel borders the area to the south.

Ketchikan, with regularly scheduled air flights and on the Alaska Marine Highway, is approximately 5 miles west of the area. The city of Saxman is located approximately 4 miles to the west. Metlakatla, also on the Alaska Marine Highway, is located approximately 10 miles to the southwest. Access may be gained to the area from the adjacent road systems or via saltwater. The road system is accessible from Shoal Cove. Forest roads and harvest units extend into the central and east peninsulas. These developments are excluded from the roadless area but provide general access. These roads do not connect to other existing road systems on Revilla Island and are not maintained for passenger vehicles. Access into the interior is by foot or helicopter. There are no places suitable for landing wheeled airplanes. Black Mt. Trail is located within the southwest portion of this roadless area, and there are two trails (Low Lake and Gokachin) located in the north portion of the area. There are also three mooring buoys for public use; One at Icehouse Cove, and two within Thorne Arm at Fish Creek and Sea Level Mine. A hiking trail is located in the north portion of the area in the vicinity of Gokachin and Fish Creeks.

(2) **History:** Prehistoric and historic Alaska Native cultures used this roadless area. A number of prehistoric and historic sites have been identified through archeological surveys, oral histories, and other historical records. Goldschmidt and Haas (1946) identified commercial fish traps along the Revillagigedo Channel shoreline in this area. In more recent history, homesteading occurred in Icehouse Cove and one site is still used as a summer residence. The Thorne Arm area has been prospected for minerals resulting in the Sealevel Mine being patented. This was once occupied by a major community and industrial site, including a railroad. This mine has since been abandoned. In the 1950s, timber harvest was initiated and is continuing to progress into unroaded areas.

(3) **Geography and Topography:** This area is part of the Revilla Island/Cleveland Peninsula Province. This province is characterized by a combination of rugged and gentle terrain. The steep mountain slopes generally rise up to about 2,500 feet with the uppermost elevation being above timberline. Most of the gentle terrain is located at the head end of the Thorne Arm. There are 88 miles of saltwater shoreline and approximately 67 islands and islets (5 of these are greater than 10 acres) totaling 163 acres. The area is covered by 375 acres of alpine tundra, 40 acres of rock, and 574 acres of freshwater lakes.

(4) **Ecosystem:**

(a) **Classification:** Biogeographic Province. This roadless area is in Revilla Island/Cleveland Peninsula Biogeographic Province. The climate in this area is variable with warm and wet conditions

predominating on land nearest the outer coast and much colder conditions near the mainland. Revilla, Gravina, and Annette Islands are influenced by human activities and populations. Revilla Island has many exceptional estuaries.

Ecological Section/Subsection. The South Revilla Roadless Area is contained within the Inside Passage Fjordlands Ecological Section (M247E) and the Dixon Entrance Lowlands Ecological Section (M247J). These areas are represented by three ecological subsections (see table below). The Thorne Arm Granitics Ecological Subsection (80% of the roadless area) is underlain by a granitic batholith with a band of carbonates extending along the upper boundaries of the ecological subsection. The terrain is generally moderately sloped though deeply incised drainages occur within the marbles and limestone. Forested wetlands of the lower slopes and valley comprise almost half of this landscape. The well-drained slopes of the granitic mountains support productive western hemlock forests while the carbonate mountains support highly productive hemlock and spruce forests. The Princess Bay Volcanics Ecological Subsection (13% of the roadless area) is a volcanic landscape of basaltic flows and cinder cones. The soils are generally mineral and support productive hemlock and hemlock-spruce forests on well-drained slopes. Lodgepole pine forested wetlands comprise over half the gently sloped landscape. The Traitors Cove Metasediments Ecological Subsection (7% of the roadless area) is composed mostly of glacially carved sedimentary rock. Steep slopes give way to deeply incised valleys. Productive hemlock and Sitka spruce forests grow on well-drained soils on slopes. Forested wetlands are found in poorly drained soils along the valley floors (Nowacki et al., 2001).

<b>Ecological Section</b>	<b>Ecological Subsection</b>	<b>Percent of Roadless Area</b>
Dixon Entrance Lowlands	Thorne Arm Granitics	80%
	Princess Bay Volcanics	13%
Inside Passage Fjordlands	Traitors Cove Metasediments	7%

**(b) Soils:** These highly organic, low clay content soils are generally formed over bedrock and are typically about 40 inches deep.

**(c) Vegetation:** This area is typical Southeast Alaska coastal temperate rain forest. The forest is primarily western hemlock and Sitka spruce with a large cedar component. There are interspersed areas of the muskeg and alpine vegetative types. Approximately 416 acres of muskeg are mapped for the area; however, due to their small size and association with forested sites, accurate acreage estimates are difficult. Approximately 375 acres of alpine vegetation have been mapped for the area.

There are approximately 51,315 acres mapped as forestland, of which 21,858 acres or 43 percent are mapped as productive old-growth forest. Of the productive old growth, 8,841 acres or 40 percent are mapped as high-volume old-growth forest. The productive old growth includes about 300 acres of high-volume, coarse-canopy old growth. The area also includes 286 acres of second growth where beach timber harvest has occurred in the past.

**(d) Fish Resources:** Streams in this area support pink, chum, coho, and sockeye salmon, as well as cutthroat trout, rainbow/steelhead trout, and Dolly Varden char. There are a number of unnamed Class I streams in this area, plus several highly productive streams east of Thorne Arm, including Fish Creek, Sea Level (Gokachin) Creek, and the stream draining into Lucky Cove.

**(e) Wildlife Resources:** This area has populations of Sitka black-tailed deer, black bear, wolves, marten, beaver, mink, loon, and common waterfowl. Trumpeter swans, Canada geese, northern goshawk, and marbled murrelets also inhabit the area.

**(5) Management Direction and Current Uses:** This roadless area was allocated to six different Land Use Designations (LUDs) in the 1997 Tongass Land and Resource Management Plan. These six LUDs are Timber Production, Scenic Viewshed, Modified Landscape, Semi-remote Recreation Old-growth Habitat, and Wild River.

## Appendix C

LUD	Acres
Timber Production	16,499
Scenic Viewshed	4,297
Modified Landscape	2,045
Semi-remote Recreation	22,491
Old-growth Habitat	7,988
Wild River	239

Approximately 43 percent of the roadless area was allocated to a development LUD (Timber Production, Scenic Viewshed, Modified Landscape). Approximately 31 percent of this area was allocated to the Timber Production LUD. Scenic Viewshed LUD was assigned to approximately 8 percent of the area. Approximately 4 percent of the roadless area, along the coasts of Carroll Inlet and Thorne Arm, was allocated to the Modified Landscape LUD.

Most of the roadless area, 57 percent, was allocated to one of three non-development LUDs (Semi-remote Recreation, Old-growth Habitat, Wild River). Approximately 42 percent of this roadless area was allocated to the Semi-remote Recreation LUD. This area includes most of the land between Carroll Inlet and Thorne Bay, the California Head area, and Bold Island. Approximately 15 percent of the land in this area was allocated to the Old-growth Habitat LUD. Less than one percent of the roadless area was allocated to the Wild River LUD around Fish Creek.

This roadless area surrounds private inholdings associated with the Sea Level Mine on the east shore of upper Thorne Arm and another inholding about 2 miles north of Moth Bay.

There is a mooring buoy in Icehouse Cove that is related to the Black Mt. Trail and the buoy at the Sea Level Mine Site. Recreation use in the area includes hiking, hunting, beachcombing, saltwater and stream fishing, boating, canoe/kayaking, camping, and scenic and wildlife viewing. Three outfitter/guides served clients for a total of 56 recreation days in and around this roadless area in 2000. Freshwater fishing and transportation were the main outfitter/guide activities pursued in this area. There is one Public Recreation Cabin (Fish Creek Cabin), a mooring buoy, and a hiking trail located at Fish Creek. Some subsistence use occurs in the area. The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) indicated that seven of the eight VCU's wholly or partially located within this area are subsistence use areas with a high sensitivity to disturbance.

The Sea Level Timber Sale FEIS (USDA Forest Service, 1999) selected an alternative that made available approximately 51 million board feet (MMBF) of timber in multiple sales. A portion of the Madder Timber sale (25.9MMBF) and all of the Orion Timber Sale (12.2MMBF), which were cleared by the Sea Level FEIS and are currently under contract, are within the South Revilla Roadless Area. Additional sales include: Mop Point, 91 Knot (NEPA Cleared .7MMBF/sale in 2002), Southside Small sales (.5MMBF 2005), Saw Ridge (14MMBF in 2008), and Beaver (19MMBF in two sales in 2011).

**(6) Appearance (Apparent Naturalness):** Overall, the area displays natural characteristics when viewed from nearby Visual Priority Routes or Use Areas. Exceptions include the evidence of developed areas adjacent to the area on the west and east sides of Thorne Arm, as well as the evidence of developments within the area. Beach logging has occurred in the vicinity of the Sea Level Mine and northeast of Bruno Point on the east shore of Carroll Inlet.

**(7) Surroundings (External Influences):** Developed areas extend into the area's central and east peninsulas. This roadless area surrounds private inholdings associated with the Sea Level Mine on the east shore of upper Thorne Arm and another inholding about two miles north of Moth Bay. The remaining adjacent areas to this roadless area are either non-National Forest System lands, saltwater, or part of Misty Fiords National Monument. The parts of the roadless area bordered by saltwater are subject to the external influence of motorized boats. The sights and sounds of aircraft are apparent at most locations in the area due to the established flight paths of sight-seeing trips traveling to Misty Fiords National Monument.

**(8) Attractions and Features of Special Interest:** The main attraction of the South Revilla Roadless Area is fishing in the streams and lakes at the upper end of the Thorne Arm. One public recreation cabin, three trails, the

Sea Level Mine, and three mooring buoys are attractions also. The area contains 12 inventoried recreation places, which cover 17,550 acres, or 33 percent of the roadless area.

**(9) Differences between the 1989 and 2003 Roadless Area Boundary:** The boundaries of this roadless area changed in three main ways between 1989 and 2003. First, the 1989 area included a stretch of land along the east side of Carroll Inlet north of Gnat Cove. This land is no longer part of the roadless area. Second, the 1989 area included an area of land along the west side of Carroll Inlet north of California Head. This land is also no longer part of the roadless area. In both cases, these areas are separated from the 2003 area either by developed areas or non-National Forest System lands. In addition, a beach logged area (i.e., an area that was logged but not roaded) was the site of the Sea Level Mine and its associated community and industrial activity in the early 20<sup>th</sup> century that was excluded from the 1989 area is included as part of the 2003 area. Third, several smaller areas along developed boundaries have been excluded between the Draft and Final SEIS to improve manageability in those areas.

**II. Capability for Management as Wilderness**

**(1) Natural Integrity and Apparent Naturalness:** The South Revilla Roadless Area is mostly unmodified except for the cabins and trail systems in the Fish Creek and Icehouse Cove area and the relatively small areas where timber harvest has occurred in the past. Evidence of old mining activity exists, particularly the Sea Level Mine on Thorne Arm. The area is bordered by areas that have been developed, but the area still has high natural integrity and apparent naturalness.

**(2) Opportunity for Solitude and Serenity, Self-reliance, Adventure, Challenging Experiences, and Primitive Recreation:** There is moderate opportunity for solitude and high opportunity for primitive recreation within this area. There are, however, sights and sounds of aircraft almost anywhere within the area. In addition, the parts of the roadless area adjacent to saltwater are subject to the external influence of motorized boats.

Good opportunities for primitive recreation exist along the east shore of Thorne Arm and along potential trail corridors, such as Gokachin Creek, which lead into the Misty Fiords National Monument Wilderness. Three outfitter/guides served clients for a total of 56 recreation days in and around this roadless area in 2000. Freshwater fishing and transportation were the main outfitter/guide activities pursued in this area. Many of the area’s recreation opportunities are in the Fish Creek area, and in the saltwater channels and coves of Carroll Inlet and Thorne Arm, which provide a semi-primitive setting. There is one Public Recreation Cabin (Fish Creek Cabin), a mooring buoy, and a hiking trail in the vicinity of Fish Creek. There is a second trail and mooring buoy in Icehouse Cove. A person camping or hiking in the Fish Creek area during the steelhead and salmon fishing seasons is likely to encounter other individuals.

The area primarily provides semi-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)	11,159	21%
Semi-Primitive Non-Motorized (SPNM)	6,123	11%
Semi-Primitive Motorized (SPM)	30,756	57%
Roaded Motorized (RM)	5,489	10%

The area contains 12 inventoried recreation places, which cover 17,550 acres, or 33 percent of the roadless area.

ROS Class	# of Rec. Places*	Total Acres
P	5	8,780
SPNM	0	0
SPM	6	8,389
RM	3	381

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

## Appendix C

A public recreation cabin is available around Alava Bay, in the Misty Fiords National Monument Wilderness Area just east of this area.

**(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 (RARE II) process. 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 South Revilla Roadless Area was 21 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 20. The difference in ratings reflects changes in the size of the roadless area and the increase in activities that affect potential solitude. When rated separately, the California Head peninsula received a score of 19, the Black Mountain peninsula rated 20, and the eastern peninsula between Cone Point and Notch Mountain rated 22.

**(4) Ecologic and Geologic Values:** The South Revilla Roadless Area is located on the southwest quarter of Revilla Island. The area includes parts of three eastern peninsulas. It is not part of a larger roadless area but it is bordered to the east and part of the north by the Misty Fiords National Monument Wilderness.

**(a) Fish Resources:** The Tongass Fish and Wildlife Resource Assessment listed VCU 753 along Carroll Inlet as a primary salmon producer. VCUs in the area were not identified as primary sport fish producers (ADF&G, 1998).

Streams in this area support pink, chum, coho, and sockeye salmon, as well as cutthroat trout, rainbow/steelhead trout, and Dolly Varden char. The Anadromous Waters Catalogue (ADF&G, 2000) indicates that the two unnamed streams near California Head provide habitat for pink salmon. The peninsula between Carroll Inlet and Thorne Arm has a number of short Class I streams inhabited by coho, pink, and chum salmon, and steelhead trout.

Productive streams on the peninsula east of Thorne Arm include Fish Creek, Sea Level, Gokachin Creek, and the stream draining into Lucky Cove. Fishing is excellent in Fish Creek for coho, pink, and chum salmon, steelhead, and Dolly Varden char. Fish Creek is well known for its steelhead fishery, with an annual run of approximately 500 adult fish. Information from ADF&G (1998) indicates that Sea Level Creek had an annual average peak escapement of 1,400 pink salmon for the years 1992 through 2001. The stream draining into Lucky Cove provides several miles of anadromous fish habitat and has runs of coho, sockeye, pink, and chum salmon, as well as steelhead trout.

**(b) Wildlife Resources:** This area has populations of Sitka black-tailed deer, black bear, wolves, marten, beaver, mink, loon, and common waterfowl. Based on data compiled from 1985 to 1994, VCU 753 along Carroll Inlet is listed among the top 25 percent of VCUs for black bear harvest (ADF&G, 1998). Trumpeter swans use the major saltwater inlets and freshwater lakes as resting areas during their migrations. Mountain goats and moose inhabit Revilla Island, but have not been reported here. Brown bears are not known to inhabit this area (MacDonald and Cook, 1999). Old-growth forests also provide habitat for, northern goshawk, and marbled murrelet.

The main migration or dispersal corridors in the area are most likely along major creeks such as Fish Creek, Gokachin, and Sea Level Creeks, and near the beach. Black bear, bald eagle, marten, Sitka black-tailed deer, and Vancouver Canada geese concentrate their activities in the beach fringe during some seasons.

Based on harvest data compiled from 1985 to 1995, two of the VCUs partially located in this area (VCUs 748 and 753) were ranked in the top 25 percent of black bear harvest areas on the Tongass by VCU (ADF&G, 1998). Another VCU entirely within the area (VCU 758) was ranked in the second 25 percent of black bear harvest areas on the Tongass by VCU.

**(c) Threatened, Endangered, and Sensitive Species:** The only federally listed threatened and 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. Four Forest Service Region 10 Sensitive Species are suspected or known to occur within the area: the trumpeter swan, osprey, Peale's peregrine falcon, and the Queen Charlotte goshawk. Trumpeter swans nest in the lowlands on small lakes and along major rivers and winter in ice-free areas throughout the Tongass. Present from April through September, ospreys are rare in southeast Alaska where they reach the northern extent of their nesting range. Feeding almost exclusively on fish, ospreys typically nest in large snags near lakes or the coast where fish are abundant. 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 Ketchikan Ranger District.

**(d) Karst, Cave, and Other Geologic Resources:** There is a swath of karst that partially enters this roadless area. The band begins at Brunn Point, running southeast and encountering the roadless area again in the hills southeast of Elf Point. This represents 1,046 acres or 2 percent of the roadless area. About 10 percent of the karst is mapped as high vulnerability karst. There are no glaciers or unique geologic features in this area.

**(5) Scientific and Educational Values:** There are no known special features within the area. There are no Research Natural Areas located in this area.

**(6) Scenic Values:** This roadless area is part of the Coastal Hills visual character type, which consists of moderately steep landforms, predominantly rounded summits, elevations to 4,500 feet, and flat-floored, U-shaped valleys. Numerous island groups are also common in this character type. The landscapes of this area range from very flat to gently rolling or moderately rugged. The highest elevations are just over 2,100 feet.

Overall, the area displays natural characteristics when viewed from nearby Visual Priority Routes or Use Areas. Exceptions include the evidence of timber harvest and road building adjacent to the area on the west and east sides of Thorne Arm, as well as the evidence of beach logging within the area. Beach logging has occurred in the vicinity of the Sea Level Mine and northeast of Bruno Point on the east shore of Carroll Inlet. Visual Priority Routes and Use Areas identified by the Forest Plan that are within or adjacent to the area include: Revillagigedo Channel (Alaska Marine Highway and Tour Ship Route); Carroll Inlet, Thorne Bay, George Inlet, and Moth Bay (Saltwater Use Areas); Fish Creek, including around the buoy (Public Recreation Cabin); and the Fish Creek-Low Lake and Gokachin Lake trails (Hiking Trails).

About 91 percent of the area was inventoried as Variety Class B (possessing landscape diversity that is common in the character type). Another 8 percent was rated as Variety Class C (possessing minimal landscape diversity relative to the character type). Although much of this area has low to very average scenic quality, there are some specific areas that are notable. These include the Fish Creek-Low Lake drainage at the head of Thorne Arm and the cluster of lakes near the summit of Black Mountain.

About 94 percent of the area is in a Type I Existing Visual Condition where the natural landscape has remained unaltered by human activity. The rest of the area is primarily Type IV (1 percent), in which changes to the landscape are easily noticed, or Type V (4 percent) where changes to the landscape are obvious.

**(7) Social, Cultural, and Historical Values:** Prehistoric and historic Alaska Native cultures used this roadless area. A number of prehistoric and historic sites have been identified through archeological surveys, oral histories and other historical records. Goldschmidt and Haas (1946) identified commercial fish traps along the Revillagigedo Channel shoreline in this area. In more recent history, homesteading occurred in Icehouse Cove and one site is still used as a summer residence. The Thorne Arm area has been prospected for minerals resulting in the

## Appendix C

Sealevel Mine being patented. This was once occupied by a major community and industrial site, including a railroad. This mine has since been abandoned. In the 1950s, timber harvest was initiated and is continuing to progress into unroaded areas

Based on harvest data compiled from 1985 to 1995, two of the VCUs partially located in this area (VCUs 748 and 753) were ranked in the top 25 percent of black bear harvest areas on the Tongass by VCU (ADF&G, 1998). Another VCU entirely within the area (VCU 758) was ranked in the second 25 percent of black bear harvest areas on the Tongass by VCU.

Subsistence use occurs in the area. The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) indicated that seven of the eight VCUs wholly or partially located within this area are subsistence use areas with a high sensitivity to disturbance. One of the VCUs partially in this area (VCU 753 along Carroll Inlet) was included among the highest value community use areas and none were listed in the second and third most important groups (ADF&G, 1998).

**(8) Manageability as Wilderness and Boundary Conditions/Changes:** The boundaries of the South Revilla Roadless Area consist mostly of Misty Fjords National Monument Wilderness and saltwater, providing manageable roadless area boundaries in these areas. However, developed areas extend into the area's central and east peninsulas and the west peninsula is bordered by non-National Forest System lands. Ridgelines along the northern boundary could be used to separate the roadless from the developed areas. The area itself would be manageable as a roadless area.

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

**(1) Recreation, including Tourism Potential:** There is potential for additional recreation cabins and trails within the Thorne Arm part of this roadless area. One potential trail corridor would lead into the Gokachin Lakes area in Misty Fjords National Monument. This lake system has been recognized as an outstanding canoeing opportunity. The potential for primitive dispersed recreation in this area is good.

**(2) Subsistence Uses:** The existing patterns of subsistence activities in the area would not be affected by wilderness designation.

**(3) Fish Resources:** There are no fish enhancement projects planned for this area.

**(4) Wildlife Resources:** There are no wildlife enhancement projects planned for this area.

**(5) Timber Resources:** There are 21,858 acres mapped as productive old growth and 286 acres mapped as second growth due to harvest in the roadless area. Of these acres, 10,884 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), 1,598 acres or 3 percent of this roadless area are estimated to be suitable for timber production. Approximately 650 of the suitable acres are mapped as high-volume old growth; of these acres, 14 are mapped as high-volume, coarse-canopy old growth.

The Sea Level Timber Sale FEIS (USDA Forest Service, 1999) selected an alternative that made available approximately 51 million board feet (MMBF) of timber in multiple sales. A portion of the Madder Timber sale (25.9MMBF), and all of the Orion Timber Sale (12.2MMBF) which were cleared by the Sea Level FEIS and are currently under contract are within the South Revilla Roadless Area. Additional sales include: Mop Point, 91 Knot (NEPA cleared .7MMBF /sale in 2002), Southside Small sales (.5MMBF 2005), Saw Ridge (14MMBF in 2008), and Beaver (19MMBF in two sales in 2011).

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

(7) **Minerals:** Although no active mining is occurring at this time, there is interest in the mineral potential of the Black Mountain and Moth Bay areas. There are active claimants, however, doing hand prospecting. Information from the Sea Level Timber Sale FEIS (USDA Forest Service, 1999) indicates that there are historic mines located near the mouth of Sea Level Creek. The potential for location and development of locatable minerals in the area appears to be low but there may be minor deposits of copper and zinc (USDA Forest Service, 1999; USGS, 2001).

This area contains an estimated 5,385 acres of land identified as a mineral activity tract. Of this acreage, 4,462 are identified as having a high potential for experiencing mineral exploration and development of locatable minerals (Coldwell, 1990; USDA Forest Service, 1991). In addition, this area contains an estimated 52,213 acres of undiscovered locatable mineral resources (Brew et al., 1990; USDA Forest Service, 1991) that are considered to have very low potential for development.

(8) **Transportation and Utilities:** There are no transportation or utility projects proposed for this area.

(9) **Water Availability and Use:** The Fish Creek Public Recreation Cabin is the only facility in the area that creates a demand for water. There are no existing or planned hydroelectric or domestic water projects within the roadless area.

(10) **Areas of Scientific Interest:** There are no areas of scientific interest in this area.

(11) **Land Use Authorizations:** There are no land authorizations in this area.

(12) **Land Status:** All of the land within this roadless area is part of the National Forest System. The area surrounds a few private inholdings including some associated with the Sea Level Mine on the east shore of upper Thorne Arm and one about two miles north of Moth Bay. Much of the western part of this roadless area is encumbered land, specifically around Carroll Inlet and Thorne Bay.

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

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

(a) **Interest Expressed by Local Users and Residents:** Sockeye salmon are harvested in the Thorne Arm area by local residents authorized for subsistence and personal use. Some trapping occurs within this roadless area. Sportfishing in the streams and lakes of the area is done primarily by local residents.

(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 South Revilla Roadless Area. In 2001, HR 2908 identified the area as a proposed LUD II addition. It also proposed that the areas surrounding Fish and Gokachin Creeks be protected as Wild and Scenic Rivers. The adjacent areas that have been developed were identified as “roaded areas available for logging.”

(c) **Public Input During Forest Plan Revision and Appeals:** This area was specifically addressed in public input received during the Forest Plan revision. Several representatives of Environmental Groups asked for the protection of natural values, especially roadless recreation in several areas including Carroll and George Inlets. Others felt that better road systems on Revilla Island would benefit Ketchikan residents by creating more recreation opportunities. A petition signed by over 700 Ketchikan residents recommended that existing recreation opportunities on lands near Ketchikan be increased by expanding the existing road system to connect with existing roads in George Inlet, Carroll Inlet, and Thorne Arm. A few other commenters opposed expansion of the road system. Timber industry representatives wanted timber harvest emphasized in certain areas or throughout the island.

The appeal filed by the City of Wrangell et al. protested the recommendation of Gokachin Creek as a wild river.

## Appendix C

**(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:** Part of the South Revilla Roadless Area is located within the project area for the Sea Level FEIS Timber Sales (Buckdance, Orion, and Madder). A total of 15 public comments were received on the Sea Level Timber Sale Draft EIS (USDA Forest Service, 1999). Comments that pertained to the potential effects of road building included the following. Road building and logging will affect the Misty Fiords National Monument Wilderness. Road construction linking Ketchikan and Sea Level would increase access for hunters. The issue of the Bradfield Road Transportation link and additional road building should be addressed. The long-term effects of roads on wildlife need to be addressed in detail.

**(f) Public Input Expressed During Supplemental EIS Process:** The Alaska Department of Fish and Game rated the South Revilla roadless area as the fourth highest priority for protection in the Ketchikan Area (outside of POW Island). 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 this area for LUD II designation. The Tongass Conservation Society recommended North and South Revilla roadless area for long-term protection from logging and development. The Alaska Rainforest Campaign (a coalition of national and Alaska conservation groups) recommended Roadless Area 523 for permanent protection as LUD II.

A number of cave/karst experts and other individuals stated both the North Revilla and South Revilla Roadless Areas contain significant karstlands. They indicated that significant karstlands, approximately 900 acres, are adjacent to heavily logged areas in North Revilla Roadless Area; the karstlands, together with karstlands in the adjacent roaded areas, should be protected.

**(2) Nearby Roadless and Wilderness Areas and Uses:** The Misty Fiords National Monument Wilderness borders the area to the east and part of the north. The South Prince of Wales Wilderness is located approximately 36 miles to the west. The Revilla Roadless Area (#524) is located directly west across George Inlet from the area. Other roadless areas in the general vicinity include North Revilla (#526) and Carroll (#535) to the north, Gravina (#522) to the west, and Duke (#521) to the south.

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

<b>Community</b>	<b>Air Miles</b>	<b>Water Miles</b>
Juneau (Pop. 30,711)	230	260
Ketchikan (Pop. 14,070)	5	10
Wrangell (Pop. 2,308)	80	110
Petersburg (Pop. 3,324)	115	140

**(4) Relative Contribution to the National Wilderness Preservation System:** The South Revilla Roadless Area is located on the southwest quarter of Revillagigedo Island (also known as Revilla Island). The area includes parts of three peninsulas and Bold Island, which is located south of the central peninsula. It also includes other smaller islands associated with the roadless area. Misty Fiords National Monument Wilderness borders the area to the east and part of the north. Non-National Forest System lands, saltwater, and timber harvest areas comprise the remainder of the north border. George Inlet borders the area to the west. The three peninsulas are separated by Thorne Arm and Carroll Inlet. Revillagigedo Channel borders the area to the south. The area is characterized by a combination of rugged and gentle terrain. The steep mountain slopes generally rise up to about 2,500 feet with the uppermost elevation being above timberline. Most of the gentle terrain is located at the head end of the Thorne Arm.

Most of the area is natural appearing, however it is influenced by developments on adjacent lands. The area has very high natural integrity and high apparent naturalness. The California Head peninsula has high natural integrity and apparent naturalness. The central peninsula with Black Mountain has very high natural integrity and high apparent naturalness. The eastern peninsula between Cone Point and Notch Mountain has outstanding natural integrity and very high apparent naturalness. The opportunity for solitude is marginal and the opportunity for primitive recreation is relatively high.

None of the area is considered distinctive for the character type from a scenery standpoint. The area has some localized karst. The roadless area has cultural and historic values. There are no other known special features in this area.

The roadless area includes about 8,841 acres of high-volume, old-growth forest. Of these acres, approximately 300 are mapped as high-volume, coarse-canopy old growth.

The South Revilla Roadless Area is classified as being in the Revilla Island/Cleveland Peninsula Biogeographic Province and makes up about 4 percent of the province. It is one of 12 inventoried roadless areas found within the province which make up about 60 percent of the province. Part of the Misty Fiords National Monument Wilderness is located in this province and makes up about 18 percent of the province. The province also includes two Congressionally designated LUD II areas (Naha and Anan) which make up about 5 percent of the province.

The South Revilla Roadless Area lies within two ecological sections; it represents 0.1 percent of the Inside Passage Fjordlands Ecological Section and 10 percent of the Dixon Entrance Lowlands Ecological Section. Both of these ecological sections are well represented by existing wilderness (20 and 56 percent, respectively) and by other existing non-development LUDs (32 and 28 percent, including 2 percent in LUD II within the Inside Passage Fjordlands Ecological Section).

The majority (80 percent) of the roadless area is in the Thorne Arm Granitics Ecological Subsection; this portion of the roadless area represents 68 percent of the ecological subsection within Tongass NF. Approximately 19 percent of this ecological subsection is protected in existing wilderness and 40 percent in other existing non-development LUDs. Thirteen percent of the roadless area is in the Princess Bay Volcanics Ecological Subsection; this portion of the roadless area represents 12 percent of the entire ecological subsection. Approximately 62 percent of this ecological subsection is protected in existing wilderness and 8 percent in other existing non-development LUDs. The balance (7 percent) of the roadless area is in the Traitors Cove Metasediments Ecological Subsection; this portion of the roadless area represents 1 percent of the entire ecological subsection, 10 percent of which is protected in existing LUD II and 26 percent in other existing non-development LUDs.

The South Revilla Roadless Area was rated 20 out of a possible 28 points under the Wilderness Attribute Rating System (WARS). As such, its WARS rating is ranked 53<sup>rd</sup> from the highest (along with 16 other roadless areas) among the 109 Tongass inventoried roadless areas. When portions of the roadless area were rated separately, the California Head peninsula rated 19, the Black Mountain peninsula rated 20, and the eastern peninsula between Cone Point and Notch Mountain rated 22.

There is both local and national support for managing this area in an unroaded condition, but little support for designation of this area as wilderness. Designation would create a wilderness with some localized karst, some cultural and historic values, but no other areas of significance. Overall, the factors identified here indicate that the relative contribution of this area to the National Wilderness Preservation System would be low for the area as a whole, or for one or more of the peninsulas.

### **V. Environmental Consequences**

The South Revilla Roadless Area would be managed under the existing Forest Plan if Alternative 1, 2, 3, 4, 5, or 7 is implemented. Approximately 57 percent of the roadless area would be managed under non-development LUDs. Timber harvest and road development could occur within the remaining 43 percent of the roadless area. The land in the development LUDs includes an estimated 1,598 acres that are suitable for timber production (3 percent of the suitable acres on the Ketchikan/Misty Fiords Ranger District). Approximately 14 of the suitable acres are classified as high-volume, coarse-canopy old growth. A portion of the Madder Timber sale (25.9MMBF), and all of the Orion

## Appendix C

Timber Sale (12.2MMBF ) were cleared by the Sea Level FEIS and are currently under contract are within the South Revilla Roadless Area. Additional sales include: Mop Point, 91 Knot (NEPA cleared, 0.7MMBF/sale in 2002), Southside Small sales (0.5MMBF in 2005), Saw Ridge (14MMBF in 2008), and Beaver (19MMBF in two sales in 2011). This area contains an estimated 5,385 acres of land identified as a mineral activity tract. Of this acreage, 4,462 are identified as having a high potential for experiencing mineral exploration and development of locatable minerals. In addition, this area contains an estimated 52,213 acres of undiscovered locatable mineral resources that are considered to have very low potential for development. The timber sale, recreation, minerals, and special use programs would continue. The values associated with the natural settings of the roadless area could be affected by ongoing developments in the area allowed under the Forest Plan. The cultural, historic, and karst values are protected by the Forest Plan.

Under Alternative 6, the entire area would be converted to Recommended LUD II. The ongoing recreation, special uses, and minerals programs would continue similar to current conditions. No timber harvest would be allowed. The values associated with the natural settings of the roadless area, including the cultural, historic, and karst values, would be provided long-term protection if designated LUD II.

Under Alternative 8, the entire roadless area would be converted to Recommended Wilderness LUD. No timber harvest would be allowed. The potential for other development, including recreational use, special uses, and mineral management would 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 the cultural, historic, and karst values, would be provided long-term protection if designated wilderness.

Land Use Designation Allocations and Suitable Timber Lands by Alternative for Roadless Area 523 (in acres)								
Land Use Designation	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Recommended Wilderness								53,559
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	7,988	7,988	7,988	7,988	7,988		7,988	
Semi-remote Recreation	22,491	22,491	22,491	22,491	22,491		22,491	
Recommended LUD II						53,559		
LUD II								
Wild, Scenic, Recreational River	239	239	239	239	239		239	
Experimental Forest								
Scenic Viewshed	4,297	4,297	4,297	4,297	4,297		4,297	
Modified Landscape	2,045	2,045	2,045	2,045	2,045		2,045	
Timber production	16,499	16,499	16,499	16,499	16,499		16,499	
<b>TOTAL</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>	<b>53,559</b>
Suitable Timber Lands	1,598	1,598	1,598	1,598	1,598	0	1,598	0