

INDIVIDUAL ROADLESS AREA DESCRIPTION

ROADLESS AREA NAME: North Kuiu (241)

ACRES (NFS): 9,544

BIOGEOGRAPHIC PROVINCE: Kuiu Island

ECOLOGICAL SECTION: Kuiu-Prince of Wales Fjordlands

2003 WILDERNESS ATTRIBUTE RATING: 15

I. Overview and Description

(1) Location and Access: The North Kuiu Roadless Area is located near the center of the northern portion of Kuiu Island. Roads surround the area and provide access to Rowan Bay. Petersburg is approximately 40 air miles from the roadless area. Kake, the nearest town, is located approximately 10 air miles away on nearby Kupreanof Island. Petersburg and Kake are served by the Alaska Marine Highway and Petersburg has daily jet service. Access to the roadless area is by chartered floatplane or boat to Kuiu Island, then by land. There are no sites suitable for landing wheeled aircraft. Access into the interior is by foot or helicopter.

(2) History: The area is within the traditional territory of the Kake Tlingit. No known cultural resources have been recorded. The probability of cultural resources being found within this area is low, since no shoreline or other areas of high site probability, such as large anadromous streams, lakes or raw material sources, occur in this area.

(3) Geography and Topography: The predominant landforms of this area are the Rowan Sedimentary Hills, with a few areas of Saginaw Limestone on the eastern portion of the roadless area. Landforms are characterized by rolling terrain, and consist mostly of ridges and upper slopes between Saginaw Bay and Security Bay. Bedrock lithology consists mostly of sedimentary rocks, primarily mudstone, greywacke, turbidites, and calcareous mudstones that are part of the Bay of Pillars formation. These rocks are Silurian in age (400 to 440 million years ago). The bedrock lithology in the karst area is characterized by limestone, dolomite, and chert that form conspicuous cliffs. These carbonate rocks often contain fossils, and are interlayered with siltstone, sandstone and some volcanic rocks. These formations are known primarily as the Pybus formation, Halleck formation, the Kuiu limestone, and the Saginaw Bay formation. These rocks range in age from late Silurian to early Permian (250 to 420 million years ago). The landscape has been drastically altered by glaciation. Thick glacial till covers much of the moderately-sloping areas, especially at lower elevations.

The upper reaches of Saginaw and Straight Creeks are located in this area. Elevations range between 1,000 and 2,000 feet. Generally, slopes are moderate with little relief. Vegetation is almost uniformly spruce-hemlock forest. This area is mapped with 9 acres of rock and no acres of ice, snow or alpine features. The roadless area has no saltwater shoreline.

(4) Ecosystem:

(a) Classification: Biogeographic Province. The area is in the Kuiu Island Biogeographic Province. This province is generally characterized by rolling, subdued topography and extensive muskeg areas, but may have rugged terrain in localized areas.

Ecological Section/Subsection. The North Kuiu Roadless Area is contained entirely within the Kuiu-Prince of Wales Fjordlands Ecological Section (M247F), represented by two ecological subsections (see table below). The Rowan Sediments Ecological Subsection forms approximately three-quarters of the Security Roadless Area. Glacially smoothed hills and broad valleys carved from sedimentary rock on northcentral Kuiu Island support highly productive hemlock or hemlock-spruce forests in this subsection. Valley bottoms contain a variety of wetlands that have developed in poorly drained organic soils. The North Prince

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of Wales-Kuiu Carbonates Ecological Subsection, approximately one-quarter of the roadless area, is composed of limestone and marble karstlands that contain a variety of unique features including conical pits, shafts, cliffs, caves, and networks of groundwater channels resulting from the weathering of karst. Hemlock and hemlock-spruce forests are found on karst soils, which can be highly productive (Nowacki et al., 2001).

Ecological Section	Ecological Subsection	Percent of Roadless Area
Kuiu-Prince of Wales Fjordlands	Rowan Sediments	74%
	North Prince of Wales- Kuiu Carbonates	26%

(b) Soils: Soils in this area are formed in a wide variety of parent materials, including bedrock and glacial drift. Bedrock generally weathers to a silty or loamy texture, with a high percentage of sharp, angular rock fragments. In general, well-drained or moderately well-drained soils are on moderate to steep mountain slopes with permeable parent materials. These soils are acidic, have cold soil temperatures, and are very high in organic matter. Rooting is largely limited to the surface organic layers and the top few inches of mineral soil. These soils are usually moist, sometimes wet, but are never dry.

Poorly-drained soils developed on less-sloping areas, such as glacial valleys and/or areas with impermeable soil materials. These soils have deep accumulations of organic matter and range from scrubby forested wetlands to open muskeg. Alpine soils, generally above 2,000 feet in elevation, are mostly shallow, very wet organic soils or are extremely shallow and rocky.

Drainage density varies from 3.2 to 3.7 miles/1,000 acres. Watersheds are relatively large, with main channels flowing through broad glacial valleys. In the limestone ridge areas, stream systems are largely controlled by the northwest-southeast orientation of the bedrock strata. Low gradient streams in that area are typically associated with fen wetlands. Some of the area is drained by underground stream systems where karst is well developed.

(c) Vegetation: Vegetation of this roadless area primarily consists of spruce/hemlock forests. Nearly all of the well-drained hill slope positions are occupied by the highly productive western hemlock/blueberry/shield fern plant associations. This plant community forms rather large contiguous forested areas. Alpine ecosystems are rare; however, the hilltops commonly have subalpine (mountain hemlock) plant communities. Muskeg ecosystems and muskeg-scrub forest complexes are extensive in broad glacial valleys. Muskegs occupy low-lying, poorly-drained portions of the area. Wetland fen communities are common on toe slope positions below the limestone ridges. About 20 percent of the area is occupied by wetlands.

There are approximately 9,456 acres mapped as forest land, of which 8,479 acres or 90 percent are mapped as productive old-growth forest. Of the productive old growth, approximately 5,932 acres or 70 percent are mapped as high-volume, old-growth forest. The productive old growth includes about 3,408 acres of high-volume, coarse-canopy old growth. There is no mapped second-growth forest due to timber harvest.

(d) Fish Resources: This roadless area contains primarily the Class III headwaters of Kadake Creek, Strait Creek, Saginaw Creek and Security Creek. No known salmon spawning or rearing areas occur within the roadless area boundary.

(e) Wildlife Resources: Sitka black-tailed deer, moose, beaver, river otter, marten, wolves and black bear inhabit this roadless area. Black bears are especially abundant on the north end of Kuiu Island. Other terrestrial mammals include bats, mink, muskrat, ermine, red squirrel, mice, shrews, and voles. There are occasional sightings of fisher and wolverine, but these are considered incidental species at the edge of their range.

Bird species include bald eagles, red-tailed hawks, sharp-shinned hawks, great horned owls, western screech owls, saw-whet owls, pigmy owls, marbled murrelets, osprey, spruce grouse, ptarmigan, sandhill cranes, trumpeter swans, Canada geese, and great blue herons. Red-throated, Pacific, and common loon all

occur around Kuiu Island. Several plover, yellowlegs, and sandpiper species occur, mainly along the river corridors and in large muskeg systems. Two swift species, one hummingbird species, four woodpecker species, three flycatcher species, and five swallow species are also known on the island. Steller's jay, northwestern crow, and common raven all occur. Chestnut-backed chickadee, red-breasted nuthatch, brown creeper, winter wren, American dipper, golden-crowned kinglet, ruby-crowned kinglet, Swainson's thrush, and hermit thrush occur. American robin, varied thrush, American pipit, cedar waxwing, northern shrike, warbling vireo, and five warbler species occur. Additionally, the northern water thrush, common yellow throat, western tanager, dark-eyed junco, Lapland longspur, snow bunting, red-winged blackbird, rusty blackbird, brown-headed cowbird, eight sparrow species, pine grosbeak, red crossbill, white-winged crossbill, common redpoll, and pine siskin are found.

Sea mammals known to inhabit the waters surrounding Kuiu Island are the Pacific white-sided dolphin, killer whale, harbor porpoise, Dall's porpoise, humpback whale, Steller sea lion and harbor seal. Sea otters occur in the western areas of Sumner Strait off southern Kupreanof Island and on both eastern and western shores of Kuiu Island. They are expanding their range northward into Keku Strait.

Amphibians known to occur on Kuiu Island include rough-skinned newt, western toad, and wood frog. The rough-skinned newt is found primarily in lacustrine, palustrine, hemlock/spruce forests and muskeg bog ecosystems. The western toad is also found primarily in lacustrine, palustrine, hemlock/spruce forests and in clearcuts. Wood frogs are found in most of the ecosystems found in Southeast Alaska except for marine, estuarine and riverine.

(5) Management Direction and Current Uses: The roadless area was allocated to three Land Use Designations (LUDs) under the 1997 Tongass Land and Resource Management Plan. These three LUDs are Timber Production, Recreational River, and Old-growth Habitat.

LUD	Acres
Timber Production	8,810
Recreational River	349
Old-growth Habitat	385

The majority of this roadless area, 92 percent, was allocated to the development LUD, Timber Production.

Approximately 8 percent of the roadless area was allocated to non-development LUDs (Old-growth Habitat, Recreational River). The Old-growth Habitat LUD was assigned to approximately 4 percent of the roadless area. Most of this area is in the north-central part of the roadless area. It is part of a small old-growth habitat reserve, a portion of which is in a roaded area, just south of Saginaw Bay. Approximately 4 percent of the roadless area was allocated to the Recreation River LUD, which is located around north Kadake Creek. Because this portion of the Recreation River LUD adjoins the Timber Production LUD, road construction is allowed and should accommodate passenger car public access.

Road systems and timber management activities surround this roadless area. The Crane Timber Sale recently harvested timber and built a new road in the southeast portion of the roadless area, thus reducing the area. New road construction will probably continue to occur in this area.

There are no developed recreation sites and there were no outfitter/guide permits issued for the area in 2000. Deer hunting is the primary recreational use. Most of this use is concentrated along the road-accessible areas outside of the roadless area. Overall, use levels are low compared to use levels on other areas of the Petersburg Ranger District. There is some subsistence use in the area.

(6) Appearance (Apparent Naturalness): The majority of the area appears unmodified. The area near the boundary has been heavily influenced by adjacent management activities, mainly timber harvest and roads.

(7) Surroundings (External Influences): Timber management developments on National Forest System land occur on all sides of the roadless area. Users may be disturbed by vehicle use and timber sale activity, which occur

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periodically. Most of the roadless area is within one mile of a road. The sight and sound of low-flying aircraft may occasionally be noticed by persons in the area.

(8) Attractions and Features of Special Interest: There are no special attractions or features in this roadless area. The area contains no inventoried recreation places.

(9) Differences between the 1989 and 2003 Roadless Area Boundary: Areas within the 1989 boundary have been roaded and/or harvested since the 1989 analysis. These areas have been dropped from the roadless area. An unroaded area west of the 1989 roadless area boundary has been added. Several small areas were excluded from the area 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 area is unmodified, however its overall appearance is affected by the developments that surround the area. The irregular shape of the area, patterns of adjacent timber management and roads affect the area's natural integrity, making it poorly suitable for wilderness classification.

(2) Opportunity for Solitude and Serenity, Self-reliance, Adventure, Challenging Experiences and Primitive Recreation: There is a low to moderate opportunity for solitude within the area. Vehicle traffic occasionally passes nearby and may be heard and seen by people in this roadless area. Most of the roadless area is within a mile of the boundary. There may also be long periods where no vehicle traffic exists, as traffic is generally a function of adjacent or nearby timber management activities. Overall, recreation use levels are low, being higher along the fringes near roads. Generally, a person camped or traveling inland is unlikely to see others.

Travel within the area is less challenging than in many other roadless areas in Southeast Alaska because of the relatively gentle topography and the relatively small size of the roadless area. The presence of black bears adds an element of risk to camping or hiking in the area. As with all backcountry areas on the Tongass, the opportunity for challenge and risk in this area is high. The climate, the rugged terrain, the isolation and distance from population centers with medical facilities, the barriers to communication, and the presence of large wild animals all contribute to the need for good preparation and knowledge of backcountry survival skills for anyone using this area. Hypothermia and bear encounters are just two examples of the many risks that must be considered before traveling in the backcountry of Southeast Alaska.

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

<u>ROS Class</u>	<u>Acres</u>	<u>Percent of Total ROS</u>
Roaded Modified (RM)	9,544	100%

No inventoried recreation places are found within this roadless area.

<u>ROS Class</u>	<u># of Rec. Places</u>	<u>Total Acres</u>
RM	0	0

There are no developed recreation opportunities in this area. Outfitter/guide use is low or non-existent. No permits were issued in 2000. The vegetation and the rolling nature of the landform do allow a visitor to feel remote from the sights and sounds of human activity. The area is difficult to access due to the logistics of getting to Kuiu Island, and then having to travel inland.

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

items 1 and 2 of this section (natural integrity, apparent naturalness, outstanding opportunity for solitude, and primitive recreation opportunities).

The inventoried roadless areas of the Tongass National Forest were rated according to this system in 1989 for the original Analysis of the Management Situation Developed in support of the Forest Plan Revision. At that time, the North Kuiu Roadless Area was given a rating of 19 out of 28 possible points. The rating was re-evaluated for this updated version of the Analysis of the Management Situation. Based on this re-evaluation, the area was given a rating of 15. This rating reflects the developments surrounding this relatively small area and their effects on all wilderness attributes.

(4) Ecologic and Geologic Values: There are no unique ecologic or geologic values in the roadless area other than the karst features in the northeast portion of the area.

(a) Fish Resources: The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) listed all three VCUs (399, 400, and 421) as primary salmon producers, and only VCU 421 as a primary sportfish producer as well. Only the headwaters of the streams in these VCUs are within the roadless area boundary

The Class III headwaters of Kadake Creek are included in this roadless area. Kadake Creek is the largest producer of salmon on Kuiu Island, producing cutthroat trout; steelhead; Dolly Varden char; and pink, chum, and coho salmon. The Alaska Department of Fish and Game lists the creek as one of the 19 “high value” watersheds in Southeast Alaska. Most of the stream is accessible for spawning and rearing of coho salmon and steelhead. Pink and chum salmon spawning habitat is limited to the lower portions of the watershed where a lower gradient, floodplain channel is present. According to ADF&G data, average annual peak escapements are 150 chum and 36,500 pink salmon.

(b) Wildlife Resources: A population of Sitka black-tailed deer, wolves, and black bear range over the roadless area. Deer winter habitat is generally found on southern aspects at low to moderate elevations in multi-canopied forests. There is little or no high quality deer winter habitat in this area. Based on data compiled from 1985 to 1994, VCUs 399 and 400 are listed among the top 25 percent of VCUs for black bear harvest. The remaining VCU, 421, is listed among the second 25 percent (ADF&G, 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, 12 sensitive plant species are known or suspected to occur in the Petersburg Ranger District.

(d) Karst, Cave, and other Geologic Resources: There are two bands of low, medium, and high vulnerability karst running north to south and covering approximately 2,270 acres, or 24 percent of this roadless area. Close to half of the karst resources are mapped as high vulnerability.

(5) Scientific and Educational Values: The area contains no known features of special interest other than the two bands of karst.

(6) Scenic Values: The area is unmodified, however, its overall integrity is not pristine. The irregular shape of the area, patterns of adjacent timber management, and roading have affected the natural appearance of the landscape.

Visual Priority Routes and Use Areas identified by the Forest Plan, within or near the roadless area, include Kadake Bay, a saltwater use area; and the community of Kake.

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Approximately 48 percent of this roadless area was inventoried in Variety Class B (possessing landscape diversity that is common for the character type). The remaining 52 percent was inventoried in Variety Class C (possessing a low degree of landscape diversity).

Much of the roadless area, 66 percent, was inventoried in Existing Visual Condition (EVC) I; these areas appear to be untouched by human activity. EVC IV accounts for 3 percent of the roadless area, where changes in the landscape are easily noticed by the average person and may attract some attention, but it resembles natural patterns. The remaining 32 percent of the area is in EVC V, where changes to the landscape are obvious to the average person, and appear to be major disturbances.

(7) **Social, Cultural, and Historic Values:** The area is within the traditional territory of the Kake Tlingit. There are no known cultural resource sites in the area. There are no developed recreation sites and there was no outfitter/guide use in 2000. Some subsistence hunting probably occurs in the area via access by existing roads that surround the roadless boundary. All three VCUs were listed among the VCUs with the highest community use value and none of them were 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 no well defined topographical boundaries. The area is bounded on all sides by roads and timber management activities. Some of the harvest units have affected parts of the core of the roadless setting. There are few topographic breaks or other natural features to define the area. Feasibility of management in a wilderness is low, due to the amount of timber harvest activity adjacent to this roadless area, and its relatively small size and irregular shape.

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. The area is relatively close to Kake, which has Alaska Marine Highway service. A very small portion of Kadake Creek, a Recreational River, is in the northeast portion of this roadless area. There is little potential for outfitter and guide permits given the difficulty in accessing the area and the habitat conditions.

(2) **Subsistence Uses:** Management of the area as a wilderness or in an unroaded condition would not affect current use patterns.

(3) **Fish Resource:** There are no fisheries enhancement activities proposed for this roadless area.

(4) **Wildlife Resource:** No wildlife habitat improvement projects are currently planned.

(5) **Timber Resource:** There are approximately 8,479 acres of productive old growth and no second growth due to harvest mapped in the roadless area. Of this, approximately 5,665 acres are classified as tentatively suitable for harvest. Based on the Forest Plan LUDs assigned to this area (and estimated falldown and scheduling reduction factors), 3,538 acres or 37 percent of this roadless area are estimated to be suitable for timber production. Approximately 2,710 of the suitable acres are mapped as high-volume old growth; of these acres, 1,545 are mapped as high-volume, coarse-canopy old growth.

The potential for managing timber in this roadless area is dependent on market values. A road system and/or logging systems capable of harvesting the area would be necessary. Nearby roads could be extended to accomplish much of this. The Crane Timber Sale has harvested timber and built a new road that has reduced the southeast portion of the roadless area.

(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 in the roadless area.

(7) **Minerals:** The roadless area contains an estimated 9,544 acres of undiscovered locatable mineral resources (Brew et al., 1990; USDA Forest Service, 1991). Approximately 5,084 of these acres are considered to have moderate potential for development.

- (8) **Transportation and Utilities:** There are no transportation or utility corridors identified in this roadless area. The existing road system that surrounds the area could be extended into the area to access timber resources in the area.
- (9) **Water Availability and Use:** There are no developed recreation cabins or other facilities to 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 2,270 acres or 24 percent of the roadless area. The area does not include any Potential Research Natural Areas or been identified for any other scientific purpose.
- (11) **Land Use Authorizations:** Currently, there are no special use permits that have been issued for this area.
- (12) **Land Status:** The roadless area is entirely National Forest Systems lands.

IV. Wilderness Evaluation (Need for Wilderness)

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

(a) **Interest Expressed by Local Users and Residents:** Local users and residents have not expressed interest in this area specifically.

(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. The Bill did not include this area. In 2001, HR 2908 did not propose this area for wilderness but it did propose a portion of this area to be classified as a Congressionally Designated LUD II area and managed in an unroaded condition.

(c) **Public Input During Forest Plan Revision and Appeals:** There were no specific comments on this area. The City of Kupreanof commented that the general area (North Kuiu Island) should be preserved as a wilderness because of its subsistence value. The Narrows Conservation Coalition wanted the general area managed as Primitive Recreation. The Point Baker Community Council and the Sitka Conservation Society also opposed logging on North Kuiu Island because of the effects on primitive recreation, scenic quality, subsistence uses, fish and wildlife, salmon, and landslide-prone areas. Other comments supported managing the forests on North Kuiu as old growth and prohibiting logging because of the possible adverse effects on major subsistence streams, archaeological sites, commercial fishing, Alaska Natives, and on private property. However, the timber industry felt that all areas not designated as wilderness or as LUD II should be managed for timber production.

(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. Others supported continued development on the Tongass.

(e) **Public Input Expressed for Project-level EISs and Other Input:** Public input was received on the Crane and Rowan Mountain Timber Sale EIS. The Southeast Alaska Conservation Council stated that no decision should be made until the roadless issue is decided at the national level. The City of Kake commented that subsistence use would be adversely affected by timber harvest, including the cultural and spiritual value of participating in traditional subsistence harvests in the old-growth forests used by the residents of Kake for countless generations. The concern expressed was that logging and road building in places regarded as sacred would permanently and irreparably degrade an important cultural experience. They stated that courts have recognized that ANILCA protects this value. This position was supported by the Southeast Alaska Conservation Council, the Earthjustice Legal Defense Fund, and other commenters. The Alaska Forest Association supported roads and timber harvest.

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(f) Public Input Expressed During Supplemental EIS Process: The city of Petersburg said they were opposed to designation of this area as wilderness because of the potential long-term economic impacts on the city.

SEACC recommended the remaining unlogged portions of northern Kuiu Island should be protected by LUD II designation. The Alaska Rainforest Campaign (a coalition of national and Alaska conservation groups) recommended Roadless Area 241 for permanent protection as LUD II.

A number of cave/karst experts and other individuals stated that this area contains moderately to highly developed karst that should be protected along with their drainage basins.

Some individuals recommended protection of Threemile Arm and Port Camden.

(2) Nearby Roadless and Wilderness Areas and Uses: This roadless area does not border any other roadless area. The nearest roadless areas are Keku, Security, Camden, and Bay of Pillars. All are within eight miles of this roadless area. The Tebenkof Bay Wilderness is also located on Kuiu Island, about 15 miles to the south of the North Kuiu Roadless Area. The Kuiu Wilderness is adjacent to the Tebenkof Bay Wilderness.

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

Community	Air Miles	Water Miles
Juneau (Pop. 30,711)	105	110
Ketchikan (Pop. 14,070)	135	150
Wrangell (Pop. 2,308)	70	110
Petersburg (Pop. 3,324)	40	90

Kake is the nearest stop on the Alaska Marine Highway.

(4) Relative Contribution to the National Wilderness Preservation System: The North Kuiu Roadless Area is located near the center of the northern portion of Kuiu Island. Developed lands surround the area and provide access to Rowan Bay. The roadless area is characterized by rolling terrain with drainages in all directions. The area consists mostly of the ridges and upper reaches of these drainages. Elevations range between 1,000 and 2,000 feet. Generally, slopes are gentle with little relief. The roadless area does not connect with saltwater.

The roadless area is heavily influenced by surrounding developed areas and associated activities. The natural integrity and apparent naturalness is moderate. The opportunity for solitude is low and the opportunity for primitive recreation is moderate.

The roadless area contains no landscapes considered distinctive for the character type from a scenery perspective. The area has zones of karst. There are no other known significant or unique features or values in this roadless area.

The roadless area includes about 5,932 acres of high-volume, old-growth forest. Of these acres, 3,408 are mapped as high-volume, coarse-canopy old growth.

The North Kuiu Roadless Area is classified as being in the Kuiu Island Biogeographic Province and makes about 2 percent of the province. It is one of eight inventoried roadless areas found within the province that collectively make up about 53 percent of the province. The Tebenkof Bay and the Kuiu Wildernesses are located in this province and make up about 26 percent of the province. The province also includes the Sumner, Conclusion, and associated islands LUD II area, which make up about 1 percent of the province.

The North Kuiu Roadless Area lies completely within the Kuiu-Prince of Wales Fjordlands Ecological Section and represents 1 percent of the ecological section. Approximately 13 percent of the Kuiu-Prince of Wales Fjordlands Ecological Section is in existing wilderness, 8 percent is in existing LUD II, and an additional 33 percent is protected by other existing non-development LUDs.

The majority (74 percent) of the roadless area is in the Rowan Sediments Ecological Subsection; this portion of the roadless area represents 5 percent of the entire ecological subsection, 27 percent of which is protected in existing wilderness and 27 percent in other existing non-development LUDs. The remaining 26 percent of the roadless area is in the North Prince of Wales-Kuiu Carbonates Ecological Subsection; this portion of the roadless area represents 1 percent of the entire ecological subsection, 2 percent of which is protected in LUD II and 25 percent in other existing non-development LUDs.

The North Kuiu Roadless Area was rated 15 out of a possible 28 points under the Wilderness Attribute Rating System (WARS). As such, its WARS rating is ranked 103rd from the highest (along with 3 other roadless areas) among the 109 Tongass inventoried roadless areas.

There is some support for managing this area in an unroaded condition, and little support for designating it as wilderness. Designation would create a relatively small wilderness that is heavily influenced by developments and activities on adjacent lands. The roadless area does have a relatively high amount of contiguous old growth in contrast with the surrounding lands where timber harvest has heavily fragmented the stands of old growth. Overall, the factors identified here indicate that the relative contribution of this area to the National Wilderness Preservation System would be very low.

V. Environmental Consequences

The North Kuiu Roadless Area would be managed under the existing Forest Plan if Alternative 1, 2, 3, 4, 5, or 7 is implemented. Approximately 8 percent of the roadless area would be managed under non-development LUDs. Timber harvest and road development could occur in the remaining 92 percent. The land in the development LUDs provides an estimated 3,538 acres that are suitable for timber production (2 percent of the suitable acres on the Petersburg Ranger District). Approximately 1,545 of the suitable acres are classified as high-volume, coarse-canopy old growth. The roadless area contains an estimated 9,544 acres of undiscovered locatable mineral resources; approximately 5,084 of the acres are considered to have moderate potential for development. The timber sales, 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 by the Forest Plan. Karst resources in the roadless area are protected by the Forest Plan.

Under Alternative 6, the entire area would be converted to Recommended LUD II. The ongoing recreation, minerals, and special use 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 karst resources and old growth, would be provided long-term protection if designated LUD II.

Under Alternative 8, the entire roadless area would be converted to Recommended Wilderness. No timber harvest would be allowed and the recreation, minerals, and special uses programs 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 karst resources and old growth, would be provided long-term protection if designated wilderness.

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Land Use Designation Allocations and Suitable Timber Lands by Alternative for Roadless Area 241 (in acres)								
Land Use Designation	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Recommended Wilderness								9,544
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	385	385	385	385	385		385	
Semi-remote Recreation								
Recommended LUD II						9,544		
LUD II								
Wild, Scenic, Recreational River	349	349	349	349	349		349	
Experimental Forest								
Scenic Viewshed								
Modified Landscape								
Timber Production	8,810	8,810	8,810	8,810	8,810		8,810	
TOTAL	9,544	9,544	9,544	9,544	9,544	9,544	9,544	9,544
Suitable Timber Lands	3,538	3,538	3,538	3,538	3,538	0	3,538	0