

Appendix C

INDIVIDUAL ROADLESS AREA DESCRIPTION

ROADLESS AREA NAME: E1 Capitan (517)

ACRES (NFS): 30,854

BIOGEOGRAPHIC PROVINCE: North Central Prince of Wales Island

ECOLOGICAL SECTION: Kupreanof Lowlands, Kuiu-Prince of Wales Fjordlands

2003 WILDERNESS ATTRIBUTE RATING: 20

I. Overview and Description

(1) **Location and Access:** The El Capitan Roadless Area is located on the north end of Prince of Wales Island, approximately 48 air miles from Hollis, currently the closest stop on the Alaska Marine Highway. The roadless area is bounded by areas developed for timber production on all sides, making the boundaries of the roadless area easily accessible. One large lake in the roadless area is accessible by floatplane. There are no places suitable for landing wheeled vehicles. Access away from roads and lakes is by foot or helicopter. The Red Lake Trail is the only developed trail in the roadless area. This trail provides access to Red Bay Lake and the Red Bay Lake Cabin.

(2) **History:** Alaska Native people used this area in prehistoric and historic times. While no timber harvest has occurred within the roadless area, several harvest units are planned in this area as part of the Lab Bay project.

(3) **Geography and Topography:** The area is characterized by low elevation but rugged terrain. The maximum elevation is approximately 2,500 feet. Numerous small streams drain into Red Lake (the largest body of water within the roadless area). There are no glaciers and there is no saltwater shoreline. There are approximately 1,199 acres of alpine tundra, 726 acres of rock, and 458 acres of lakes.

(4) **Ecosystem:**

(a) **Classification: Biogeographic Province.** The area is in the North Central Prince of Wales Island Province. This province is characterized by gentle relief in the landscape. All of the forest plant associations in Southeast Alaska, except those that are found only on the mainland, occur in this province. This area typically has high precipitation with karst topography and numerous caves. El Capitan Peak, Perue Peak, Virginia Mountain, and many of the unnamed mountains and ridges are underlain by marble and limestone into which extensive karst systems have developed. This roadless area has more rugged topography than is typical for the province.

Ecological Section/Subsection. The El Capitan Roadless Area is contained within the Kupreanof Lowlands Ecological Section (M247G) and the Kuiu-Prince of Wales Fjordlands Ecological Section (M247F). These areas are represented by four ecological subsections (see table below). The Kuiu-Prince of Wales Granitics Ecological Subsection (39% of roadless area) contains rugged mountaintops of igneous rock that rise above rounded peaks, capturing incoming precipitation which remains as snowpack much of the year. Moderately productive hemlock forests are found below the alpine. The North Prince of Wales-Kuiu Carbonates Ecological Subsection (34% of roadless area) is characterized by low-elevation hills and mountain slopes underlain by limestone and marble karstlands. Hemlock and hemlock-spruce forests are found on karst soils, which can be highly productive. The North Prince of Wales Complex Ecological Subsection (25% of roadless area) is characterized by rolling hills and wide U-shaped valleys underlain by non-carbonate conglomerate and granodioritic rocks. Productive hemlock and hemlock-spruce forests comprise about two thirds of the landscape, and the remainder is low productive mixed-conifer and lodgepole pine forested wetlands (Nowacki et al., 2001).

Ecological Section	Ecological Subsection	Percent of Roadless Area
Kuiu-Prince of Wales Fjordlands	Kuiu-Prince of Wales Granitics	39%
	North Prince of Wales-Kuiu Carbonates	34%
	North Prince of Wales Complex	25%
Kupreanof Lowlands	Central Prince of Wales Till Lowlands	2%

(b) Soils: These highly organic, low clay content soils are generally formed over bedrock and are typically about 40 inches deep. Generally, steeper areas have better-drained soils and flat areas are poorly drained. Some of the soils in the area are derived from limestone.

(c) Vegetation: Vegetation is typical Southeast Alaska coastal temperate rain forest. The forest is primarily western hemlock and Sitka spruce with large components of cedar. Approximately 224 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 1,199 acres of alpine tundra are mapped for the area.

There are approximately 27,362 acres mapped as forest land of which 16,658 acres (61 percent) are mapped as productive old-growth forest. Of the productive old growth, 10,841 acres (65 percent) are mapped as high-volume old-growth forest. The productive old growth includes about 3,808 acres of high-volume, coarse-canopy old growth. There are no acres of second-growth forest where timber harvest has occurred in the past.

(d) Fish Resources: The Anadromous Waters Catalogue (ADF&G, 2000) identifies Buster Creek, Big Creek, Geek Creek, Calder Creek, Flicker Creek, Alder Creek, Red Bay Creek, and Red Lake as the primary fish producing waters in this area. Pink, coho, chum, and sockeye salmon, steelhead and cutthroat trout, and Dolly Varden char inhabit these waters.

(e) Wildlife Resources: Sitka black-tailed deer, black bear, wolves, mink, and bald eagles are the best known species that inhabit the area. Some moose inhabit Prince of Wales Island, but brown bear and mountain goats do not (MacDonald and Cook, 1999).

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

LUD	Acres
Timber Production	14,497
Modified Landscape	3,337
Scenic Viewshed	1,750
Special Interest Area	7,419
Old-growth Habitat	3,851

Approximately 63 percent of this area was allocated to development LUDs, which allow timber harvest and the associated road construction (Timber Production, Modified Landscape, and Scenic Viewshed). The Timber Production LUD was assigned to approximately 47 percent of the roadless area. Approximately 11 percent of the roadless area was allocated to the Modified Landscape LUD, mostly along the northern boundary. Around Red Lake and Red Bay Mountain, approximately 6 percent of the roadless area was allocated to the Scenic Viewshed LUD.

Approximately 37 percent of the roadless area was allocated to a non-development LUD (Special Interest Area and Old-growth Habitat). In and around El Capitan Peak, Perue Peak, and Virginia Mountain, approximately 24 percent of the

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roadless area was allocated to Special Interest Area LUD to recognize the extensive karst systems found there. Approximately 12 percent of the roadless area was allocated to the Old-growth Habitat LUD.

Current recreation use levels are not well documented except for use occurring at the Red Bay Lake Cabin, which totaled 74 visitors in fiscal year 2001. The only developed recreation facilities are the public recreation cabin located on Red Lake and the Red Bay Lake Trail. Fishing in Red Lake, Red Bay Creek, and Red Bay is popular. Floatplanes are sometimes used to transport cabin users to the Red Lake cabin. The cabin is also road accessible via a short trail to the lake edge, where a boat for cabin users is kept. One sightseeing guide operated in the roadless area in 2000 (2 service days). The roadless area is used for subsistence by residents of several communities on the northern half of Prince of Wales Island, especially Point Baker, Port Protection, and Whale Pass. VCU 529 and 532 are rated among the VCUs having the highest community fish and wildlife values.

(6) Appearance (Apparent Naturalness): This area is essentially unmodified and in a natural condition. The only developments are the public recreation cabin on Red Lake and the Red Bay Lake Trail. However, the developments along the boundaries has affected the apparent naturalness of adjacent areas within the roadless area.

(7) Surroundings (External Influences): The adjacent areas in all directions have been developed. Roadless areas lie to the east, south, and west, across roaded and harvested lands. Non-National Forest System lands also lie to the south including the abandoned town of Calder and the Calder Marble Quarry owned and operated by Sealaska Timber Corporation.

(8) Attractions and Features of Special Interest: Red Lake, the Red Lake cabin, and the Red Bay Lake Trail are features of special interest. The unmodified landscape entails the natural integrity of the scenic, old-growth forest. Abundant wildlife is an attraction for wildlife viewing, fishing, hunting, and subsistence activities. The opportunity to study the processes which formed this country are of special interest. El Capitan Roadless Area contains 8 inventoried recreation places, which cover 11,065 acres (36 percent) of the roadless area. There is one improved trail within the area—the Red Bay Lake Trail.

Karst and cave systems have been formed in the limestone and marble formations on the west, east, and south sides of this roadless area may of which are in the Special Interest Area. These caves are nationally and internationally significant, based on previously established significance ratings.

(9) Differences between the 1989 and 2003 Roadless Area Boundary: Ongoing developments have isolated this roadless area from Roadless Area 516 to the west and Roadless Area 518 to the east. The boundaries have been adjusted slightly as the result of more accurate mapping. Several smaller areas along developed 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: Due to the size of this roadless area and its rugged terrain, the natural integrity and apparent naturalness within the roadless area is high. Developments are evident along the edge. This “edge effect” will be evident in only a small number of places. The only developments within El Capitan Roadless Area are the Red Lake Cabin and the Red Bay Lake Trail. Neither of these developments noticeably affect the overall natural integrity and apparent naturalness of the area.

(2) Opportunity for Solitude and Serenity, Self-reliance, Adventure, Challenging Experiences, and Primitive Recreation: The opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and primitive recreation in this area is generally high, although the Red Bay Cabin and Trail create less of an opportunity for self-reliance, challenge, and solitude. The caves and steep karst terrain within this unroaded area create extensive opportunity for solitude and serenity, self-reliance, adventure, challenging experiences, and primitive recreation. Floatplanes used to transport people to the Red Lake cabin may occasionally disturb users. Current recreation use levels are not well documented. In 2000, one sightseeing guide operated in this area (2 service days).

The area primarily provides semi-primitive recreation opportunities. Most of these opportunities are located in the Red Lake area, the alpine country around Red Lake, Red Bay Mountain, and El Capitan Peak. The table below lists

the acreage and percent of the various Recreation Opportunity Spectrum (ROS) classes that have been inventoried in the roadless area.

ROS Class	Acres	Percent of Total ROS
Primitive (P)	1,359	4%
Semi-Primitive Non-Motorized (SPNM)	21,374	69%
Roaded Natural (RN)	235	1%
Roaded Modified (RM)	8,154	26%

The area contains eight inventoried recreation places, which cover 11,065 acres (36 percent) of the roadless area.

ROS Class	# of Rec. Places*	Total Acres
P	1	1,359
SPNM	3	8,138
RN	1	113
RM	6	1,455

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

The only developed recreation facilities are the public recreation cabin near Red Lake and the Red Lake Trail.

(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 El Capitan 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, which reflects ongoing developments in the area.

(4) Ecologic and Geologic Values: Limestone and marble karst and cave formations underlying the west, east, and south sides of this roadless area are nationally and internationally significant because of their development, complexity, limited expanse, and the resources they contain. Many of these are in the El Capitan and Perue Peak Special Interest Area. The roadless area is not connected with other roadless areas or wildernesses.

(a) Fish Resources: The Tongass Fish and Wildlife Resource Assessment (ADF&G, 1998) listed VCUs 532 and 533 on the north side as primary sport fish producers and 537.1 as a primary salmon producer. Most of the area is listed as secondary salmon producers (ADF&G, 1998).

The Anadromous Waters Catalogue (ADF&G, 2000) identifies Buster Creek, Big Creek, Geek Creek, Calder Creek, and Red Lake and stream as the primary fish producing waters in this area. Pink, coho, chum, and sockeye salmon, steelhead and cutthroat trout, and Dolly Varden char inhabit these waters. Red Bay Creek receives an estimated peak escapement of 41,800 pink salmon and has good coho production in VCU 533. Big Creek (VCU 538) receives 42,700 pink salmon annually (ADF&G, 1998).

(b) Wildlife Resources: Sitka black-tailed deer, black bear, wolves, mink, and bald eagles are the best known species that inhabit the area. Moose inhabit Prince of Wales Island, but brown bear and mountain goats do not (MacDonald and Cook, 1999).

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(c) Threatened, Endangered, and Sensitive Species: The only federally listed threatened and endangered species in the Tongass are the humpback whale (endangered) and the Steller sea lion (threatened), both marine species. There is no marine habitat available in the Thorne River Roadless Area. 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, nine sensitive plant species are known or suspected to occur in the Thorne Bay Ranger District.

(d) Karst, Cave, and Other Geologic Resources: There is a large area of mostly high vulnerability karst encompassing the area between the west side of Red Lake and El Capitan Peak. A second area of mostly high vulnerability karst extends in a wide swath from Flicker and Alder Creek toward the east side of Calder Bay. Karst resources represent 10,534 acres (34 percent) of the roadless area, most of which is classified as high vulnerability karst. Caves have been located in the limestone formations on the west side of this roadless area. Limestone and marble karst and cave formations underlying the west, east, and south sides of this roadless area are nationally and internationally significant because of their development, complexity, limited expanse, and the resources they contain.

(5) Scientific and Educational Values: The El Capitan Roadless Area is located on the north end of Prince of Wales Island, approximately 48 air miles from Hollis, currently the closest stop on the Alaska Marine Highway. The roadless area is bounded by areas developed for timber production on all sides, making the boundaries of the roadless area easily accessible.

The level of karst development along the southern and western portions of this roadless area is similar to that found around El Capitan Cave. Extensive areas of limestone and marble are exposed from sea level to the ridge tops in these glaciated valleys. Karst development is extensive. Many caves have been inventoried here and a few have produced significant paleontological finds. Subalpine fir can be found on the ridge crests in protected alcoves. The karst systems found here extend from the alpine to the sea providing increased productivity for the plant, animal, and aquatic communities found on the karst lands.

(6) Scenic Values: This area is within the Kupreanof Lowlands character type, which is characterized by predominantly low, rolling relief, with elevations seldom greater than 1,500 feet. Numerous island groups are also common in this character type. This area generally possesses somewhat greater landform relief than is found in the character type. The outstanding scenic features in this area are the rugged terrain and rock faces to the east of Mount Calder, and the rugged landscapes at the head of the Red Lake valley. Once in the roadless area, visitors may see a landscape of developed areas or the untouched scenic landscape, depending on the visitor's location.

Visual Priority Routes and Use Areas identified by the Forest Plan that are within or adjacent to the area include: Sumner Strait, a tour ship route; the Shakan Strait, El Capital Pass and Dry Pass saltwater use areas; the Red Bay dispersed recreation use areas; the community of Point Baker; Red Lake public recreation cabin; and the Red Lake and El Capitan Cave hiking trails.

Approximately 9 percent of this area is in Variety Class A, which displays landscape diversity unique for the character type. El Capitan Mountain and Red Bay Mountain are some of the Variety Class A areas. About 91 percent of this area is inventoried as Variety Class B, which possesses landscape characteristics common for the character type.

Much of this area, about 60 percent, is inventoried in the Type I Existing Visual Condition (EVC), where the natural landscape has remained unaltered by human activity. About one percent of the area has an EVC II, where changes in the landscape are not noticeable to the average visitor unless pointed out. Another 2 percent of the area has an EVC III, where the average person notices changes in the landscape, but it does not dominate the landscape. Land

with an EVC IV is found in about 9 percent of this roadless area, in which alterations to the landscape are obvious but tend to blend with natural landscape features. Due to the extensive development along the edge of this area, about 29 percent of the area has a Type V EVC, in which changes to the landscape are obvious to the average visitor.

(7) **Social, Cultural, and Historical Values:** The area was used by prehistoric and historic cultures. The roadless area is used for subsistence by residents of several communities on the northern half of Prince of Wales Island, especially Point Baker, Port Protection, and Whale Pass. Demand exceeds supply for deer and bear. VCU 529 on Summer Strait is rated among the VCUs having the highest community use values. All the VCUs are listed among the VCUs with the highest sensitivity to disturbance of subsistence use areas (ADF&G, 1998). The extensive karst development and caves within the roadless area elevate it to high sensitivity for cultural resources. Caves elsewhere in Southeast Alaska have contained highly significant archaeological resources.

(8) **Manageability as Wilderness and Boundary Conditions/Changes:** Areas developed for timber management define most of the boundaries for this roadless area rather than well-defined topographic features, creating an irregular shape. The influences of ongoing development (audio and visual) and general vehicle traffic quickly dissipate within a short distance into the roadless area. Feasibility of management in a roadless condition is moderate.

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

(1) **Recreation, including Tourism Potential:** The recreation and tourism potential of this area is high. Wildlife viewing, camping, hiking, caving, and exploring have the potential to increase as tourism and recreation increase throughout Alaska. Tourism potential is a major part of Alaska's economy. The industry attracts over 1.1 million visitors annually. There has been a growing recognition that tourism depends on scenic quality, wildlife, and wilderness (Behnke, 1999). The roadless area is approximately 100 road miles from Hollis, currently the closest stop on the Alaska Marine Highway. Good road access may contribute to recreation use of the roadless area. The area has good potential for low density, primitive recreation experiences. There is potential for trail construction to the alpine peaks at El Capitan and Red Mountain. Karst and cave development in the roadless area provide a unique opportunity to develop destination recreation facilities in association with interpretation and viewing of these features and topography. In 1996, the Alaska Visitors Association (AVA) proposed developing more trails and cabins at Red Bay. Agreements between the Thorne Bay Ranger District and the Community of Port Protection to construct a trail into the Perue Lake Basin have been developed.

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

(3) **Fish Resources:** No fish habitat enhancement projects are currently planned within the roadless area.

(4) **Wildlife Resources:** No wildlife enhancement projects are currently planned within the roadless area.

(5) **Timber Resources:** There are 16,658 acres of productive old-growth forest and no acres of second-growth forest due to harvest mapped in the roadless area. Of this, approximately 5,769 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), 3,046 acres or 10 percent of this roadless area are estimated to be suitable for timber production. Approximately 2,154 of the suitable acres are mapped as high-volume old growth; of these acres, 1,091 are mapped as high-volume, coarse-canopy old growth.

Managing timber in most of the roadless area would require extending the existing road system into the roadless area. This could easily be done since the existing peripheral area has an extensive road network and the necessary sites for transferring logs to saltwater. The Lab Bay project approved harvest units and the roads needed to access them. The Big Bob Sale and the Ridge Sale is under contract but not implemented; additional sales are NEPA approved and planned to be offered for sale.

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(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 may be of potential importance because of the known, but undeveloped, deposits of marble. This area contains 8,024 acres of land identified as a mineral activity tract having a high potential for experiencing mineral exploration and development of locatable minerals (Coldwell, 1990; USDA Forest Service, 1991). In addition, this area contains 14,511 acres of undiscovered locatable mineral resources (Brew et al., 1990; USDA Forest Service, 1991). All of these acres are considered to have moderate potential for development.

The Calder Marble Quarry, owned and operated by Sealaska Corporation, is currently being operated adjacent to this roadless area. Several historic small mines and prospects are found along the southern boundary of the area. Mineralization associated with the placement of the Red Bay Batholith can be found throughout the eastern half of the roadless area.

(8) **Transportation and Utilities:** There are no transportation or utility projects proposed for this area. There is a major road corridor along the eastern and northern boundaries of the roadless area, linking the north end of Prince of Wales Island with Hollis and other communities.

(9) **Water Availability and Use:** The Red Bay Lake cabin, a local lodge, and homesites on private land along the north shore of El Capitan Passage use water that comes from this area. There are no existing or planned hydroelectric or domestic water projects within the roadless area.

(10) **Areas of Scientific Interest:** Karst and cave formation in the limestone and marbles underlying the west, east, and south side of this roadless area, particularly in the Special Interest Area, may be of national significance because of their development, complexity, limited expanse, and the resources they contain. Management as wilderness may restrict research activities in the area. The mapped karst resources encompass approximately 10,534 acres or 34 percent of the roadless area.

(11) **Land Use Authorizations:** Outfitter guide permitting is ongoing.

(12) **Land Status:** This entire area is National Forest System land.

IV. Wilderness Evaluation (Need for Wilderness)

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

(a) **Interest Expressed by Local Users and Residents:** Local residents are primarily concerned with maintaining the area for recreation and subsistence use.

(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 roadless area was not one of these areas. In 2001, HR 2908 proposed managing the entire roadless area as LUD II in an unroaded condition.

(c) **Public Input During Forest Plan Revision and Appeals:** The Southeast Alaska Conservation Council stated that the area merited special protection for its outstanding wildlife, fisheries, hunting, subsistence, recreation, and tourism values. Pt. Baker and Pt. Protection residents and the Sumner Strait Fish and Game Advisory Board requested that the area be dedicated to subsistence use. The Alaska Forest Association, the Alaska Miners Association, and the AVA recommended that no new wilderness be designated on the Tongass National Forest. Others stated that all unroaded areas should be designated wilderness. Timber industry representatives recommended managing all areas not designated as wilderness for timber. In 1996, the AVA proposed developing additional trails and cabins at Red Bay.

(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: No project-level comments on this roadless area have been identified.

(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 this area be designated as LUD II. The Alaska Rainforest Campaign (a coalition of national and Alaska conservation groups) recommended Roadless Area 517 for permanent protection as LUD II.

A number of cave/karst experts and other individuals stated that the North Central Prince of Wales Biogeographic Province contains the most celebrated and explored caves and karstlands in the Tongass. Calder and El Capitan Roadless Areas and adjacent developed lands contain internationally significant caves, including the deepest limestone pit in the United States, and spectacular karstlands that have been the site of important paleontological and archaeological discoveries. The commenters indicated that these Roadless Areas, 515, 516, and 517, together with contiguous karstlands in Roadless Area 518, could be combined to create a karst reserve/wilderness that would be renowned throughout the world.

One individual wanted protection for the 17,000 acres of ridges and alpine that link Red Mountain to Peru Peak.

(2) Nearby Roadless and Wilderness Areas and Uses: The El Capitan Roadless Area is separated from other roadless areas by developed areas. The Kosciusko Roadless Area (515) lies approximately 2 miles to the south on Kosciusko Island. The Calder Roadless Area (516) lies less than a mile to the west. The Salmon Bay Roadless Area (518) lies 1 to 2 miles to the east. The closest wilderness is the Kuiu Wilderness, which is approximately 10 miles to the northwest on Kuiu Island. Recreation and subsistence are the major uses for these areas. The use levels for these areas are not well documented.

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

Community	Air Miles	Water Miles
Ketchikan (Pop. 14,070)	85	130
Wrangell (Pop. 2,308)	45	25
Petersburg (Pop. 3,324)	40	45
Juneau (Pop. 30,711)	145	160

Hollis, approximately 48 air miles to the south on the Prince of Wales Island, is the nearest stop on the Alaska Marine Highway.

(4) Relative Contribution to the National Wilderness Preservation System: The El Capitan Roadless Area is located on the north end of Prince of Wales Island. The roadless area is bounded by areas that were developed for timber management on all sides. The area is characterized by low elevation but rugged terrain. The maximum elevation is 2,500 feet. Numerous small streams drain into Red Lake, the largest body of water within the area.

The El Capitan Roadless Area is unmodified and natural appearing; however, it is influenced by the developments that form all of its borders. The natural integrity and apparent naturalness is high. The opportunity for solitude and primitive recreation is also high in the area.

The area has moderate scenic qualities; approximately 9 percent of the landscape is considered distinctive from a scenery standpoint. Limestone and marble karst and cave formations underlying the west, east, and south sides of

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this roadless area are nationally and internationally significant because of their development, complexity, limited expanse, and the resources they contain. Many of these are in the El Capitan and Perue Peak Special Interest Areas.

The roadless area includes about 10,841 acres of high-volume, old-growth forest. Of these acres, approximately 3,808 are mapped as high-volume, coarse-canopy old growth.

The El Capitan Roadless Area is classified as being in the North Central Prince of Wales Island Biogeographic Province and makes up about 2 percent of the province. It is one of 15 inventoried roadless areas found within the province which make up about 44 percent of the province. The Karta River Wilderness makes up about 3 percent of the province, and three designated LUD II areas (Mt. Calder-Mt. Holbrook, Pt. Baker-Pt. Protection, and Salmon Bay) make up about 5 percent of the province.

The El Capitan Roadless Area lies within two ecological sections; it represents 3 percent of the Kuiu-Prince of Wales Fjordlands Ecological Section and 0.1 percent of the Kupreanof Lowlands Ecological Section. Both of these ecological sections contain relatively small areas in existing wilderness (13 and 1 percent, respectively) and existing LUD II (8 and 1 percent, respectively), but are well represented by other existing non-development LUDs (33 percent each).

Thirty-nine percent of the roadless area is in the Kuiu-Prince of Wales Granitics Ecological Subsection; this portion of the roadless area represents 8 percent of the entire ecological subsection, 19 percent of which is protected in existing wilderness, 23 percent in existing LUD II, and 36 percent in other existing non-development LUDs. One-third (34 percent) of the roadless area is in the North Prince of Wales-Kuiu Carbonates Ecological Subsection; this portion of the roadless area represents 4 percent of the entire ecological subsection, 2 percent of which is in existing LUD II and 25 percent is protected by other existing non-development LUDs. One-quarter (25 percent) of the roadless area is in the North Prince of Wales Complex Ecological Subsection; this portion of the roadless area represents 9 percent of the entire ecological subsection, 28 percent of which is in existing LUD II and 18 percent is protected by existing non-development LUDs. The remainder (2 percent) of the roadless area is in the Central Prince of Wales Till Lowlands Ecological Subsection; this portion of the roadless area represents 0.2 percent of the entire ecological subsection. None of this ecological subsection is in existing wilderness, but 3 percent is in LUD II, and an additional 42 percent is protected by other existing non-development LUDs.

The El Capitan 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 53rd from the highest (along with 16 other roadless areas) among the 109 Tongass inventoried roadless areas.

There is both local and national support for managing the roadless area in an unroaded condition, and some support for designating the area as a wilderness. Designation would create a wilderness that would contain areas of well-developed karst that also included important paleontological and cultural information, and where extensive investigation and research is ongoing. The degree of timber harvest in adjacent lands adds importance to the old growth within the roadless area. Overall, the factors identified here indicate that the relative contribution of this area to the National Wilderness Preservation System would be moderate.

V. Environmental Consequences

The El Capitan Roadless Area would be managed under the existing Forest Plan if Alternative 1, 2, 3, 4, 5, or 7 is implemented. Approximately 36 percent of the roadless area would be managed under non-development LUDs. Timber harvest and road development could occur within the remaining 64 percent of the roadless area. The land in the development LUDs includes an estimated 3,046 acres that are suitable for timber production (2 percent of the suitable acres on the Thorne Bay Ranger District). Approximately 1,091 of the suitable acres are classified as high-volume, coarse-canopy old growth. Mineral development may be of potential importance because of the known, but undeveloped, deposits of marble. This area contains 8,024 acres of land identified as a mineral activity tract having a high potential for experiencing mineral exploration and development of locatable minerals. In addition, this area contains an estimated 14,511 acres of undiscovered locatable mineral resources that are considered to have moderate potential for development. Timber sales, most of which are under contract, authorized under the Lab Bay FEIS, would continue. Karst and cultural resource investigation and research activities would continue. The minerals, recreation, and special use programs would continue. The values associated with the natural settings of the roadless

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area could be affected by ongoing developments allowed by the Forest Plan. The high karst and cultural values, and most old-growth values, are protected by the Forest Plan.

Under Alternative 6, the entire area would be converted to Recommended LUD II. Ongoing karst, cultural resource, recreation, special uses, and minerals programs would continue with little restriction. No timber harvest would be allowed. The values associated with the natural settings of the roadless area, including the cultural, scenic, old-growth, 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. Ongoing karst, cultural resource, recreation, special use, and minerals programs 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 roadless area, including the cultural, scenic, old growth, 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 517 (in acres)								
Land Use Designation	Alt 1	Alt 2	Alt 3	Alt 4	Alt 5	Alt 6	Alt 7	Alt 8
Recommended Wilderness								30,854
Wilderness								
Recommended Wilderness Nat. Mon.								
Wilderness National Monument								
Non-wilderness National Monument								
Research Natural Area								
Special Interest Area	7,419	7,419	7,419	7,419	7,419		7,419	
Remote Recreation								
Enacted Municipal Watershed								
Old-growth Habitat	3,851	3,851	3,851	3,851	3,851		3,851	
Semi-remote Recreation								
Recommended LUD II						30,854		
LUD II								
Wild, Scenic, Recreational River								
Experimental Forest								
Scenic Viewshed	1,750	1,750	1,750	1,750	1,750		1,750	
Modified Landscape	3,337	3,337	3,337	3,337	3,337		3,337	
Timber production	14,497	14,497	14,497	14,497	14,497		14,497	
TOTAL	30,854	30,854	30,854	30,854	30,854	30,854	30,854	30,854
Suitable Timber Lands	3,046	3,046	3,046	3,046	3,046	0	3,046	0