UNIT 6 POINT RIOU TO YAKUTAT BAY - TIDELANDS, SUBMERGED LANDS, AND SHORELANDS

Background

Unit 6 is characterized by its remoteness and glacially-influenced topography.

Physical features

Yakutat Bay and Russell Fiord were formed by the scouring forces of glacier advance and subsequent retreat. Russell and Nunatak Fiords are deep marine canyons cut between rock walls. The western shore of Russell Fiord is a mountainous peninsula with peaks rising 3,000 to 4,500 feet and laden with hanging glaciers. The eastern shore rises to still greater heights, reaching 5,000 to 6,000 feet over a few miles, and backed by taller peaks up to 10,000 feet. Malaspina Glacier, the largest glacier in North America, drains through several braided rivers into the Gulf of Alaska and Yakutat Bay. Other prominent features include Turner and Hubbard glaciers, Malaspina Lake, and Sitkagi Bluffs.

The vegetation is in various successional stages depending on the time elapsed since glacial retreat. Recently exposed areas are covered with shrubs such as alder and willow. The forested area in the western part of the unit is the first generation of mature Sitka spruce and hemlock trees since the glaciers retreated. The forest around Russell Fiord is somewhat older.

Land status

State lands in this unit are limited to tidelands, submerged lands, and shorelands beneath navigable rivers and lakes.

The adjoining lands are owned or managed as follows:

Chugach Alaska Corporation (CAC) owns land along the southeast shore of Icy Bay. The National Park Service manages lands from the northeastern shore of Icy Bay to the western shore of Disenchantment Bay, which are within Wrangell-St. Elias National Park and Preserve. The national park includes designated wilderness along the shore of Sitkagi Bluffs and Disenchantment Bay. The U.S. Forest Service manages most lands on the eastern shore of Yakutat Bay and adjacent to Russell Fiord, which are part of Tongass National Forest. Russell Fiord is a designated wilderness area. Yak-Tat Kwaan owns, and Sealaska Corp. has selected, lands near Eleanor Cove.

Access

Access to Unit 6 is primarily limited to wheel plane landings along sandy beaches or at three semi-developed inland landing strips. There are scattered anchorages for boats within Yakutat Bay and Russell Fiord. A foot path connects the head of Russell Fiord to Forest Highway 10. An old seismic line, now overgrown and impassable, connects Grand Wash and Manby Stream.

Marine access from Yakutat Bay to Russell and Nunatak fiords is difficult because of icebergs and glacial calving at the Hubbard Glacier terminus, which can create sudden waves.

Resources and uses

Important fish and wildlife habitat and harvest in Unit 6 include: harbor seal pupping and seal harvest near Disenchantment Bay; a sea lion haulout at Sitkagi Bluffs, and moose, bear, and furbearer harvest on the Malaspina forelands. Commercial set net fishing occurs at many stream mouths on the Malaspina Forelands, including Manby Stream, Spoon River, Sudden Stream, Esker Stream, Yana Stream and Yahtse River. The combined commercial set net harvest on these streams had an average annual value of $384,000 in the late 1980s - early 1990s. Sixty (60) troll permit holders fish commercially in Yakutat Bay and Russell fiord (annual 10-year average effort). The average annual ex-vessel value of this fishery was $330,000 from 1982 to 1991.

Predominant recreational activities include wildlife viewing of puffins, other shorebirds, and seals at Disenchantment Bay, kayaking in Russell Fiord, and flightseeing over the glaciers and shoreline. Cruise ships occasionally enter Yakutat Bay to view Hubbard Glacier. Tourism and scientific research are likely to increase when Hubbard Glacier again blocks Russell Fiord.

Chugach Alaska Corporation plans to harvest timber on its forested lands.

Management considerations

The advance of Hubbard Glacier has drawn national and international attention from the scientific community. Scientists predict the Hubbard Glacier will advance to form a dam at the mouth of Russell Fiord by the year 2000. Freshwater draining into the newly formed Russell Lake behind the dam will eventually overflow into the Situk River, increasing its volume of flow by at least tenfold. A series of temporary glacial dams and subsequent failures is expected before a stable ice dam forms. From that point, the ice dam may last hundreds of years. Overflow into the Situk River is expected between seven and fourteen months after damming. The short-term and long-term physical, social, and economic impacts of this event are not known.

The United Nations Environmental, Scientific and Cultural Organization (UNESCO) has designated this coastal region as a World Heritage Site. This U.N. designation encompasses Wrangell-St. Elias National Park & Preserve, Glacier Bay National Park & Preserve, Kluane National Park (Canada), and Tatshenshini-Alsek Provincial Park (Canada).

Unit 6 - tidelands, submerged lands, and shorelands from Point Riou to Yakutat Bay resource allocation summary

Forestry

The state owns no forest land in this unit.

Fish and wildlife harvest

All of Unit 6 (consisting of tidelands and submerged lands) is designated for fish and wildlife harvest. The HV1 designation applies to sites used for shore fisheries, while HV2 protects commercial fisheries and community harvest over extensive areas.

Fish and wildlife habitat

All of Unit 6 (consisting of tidelands and submerged lands) is designated for fish and wildlife habitat. Several subunits within Yakutat Bay, Russell Fiord and Nunatak Fiord are H2 because DNR intends to manage for both habitat protection and potential demand for dispersed recreation and tourism. Other subunits are H1 to give higher protection to habitat. The plan prohibits commercial recreation leasing at the sea lion haul out along Sitkagi Bluffs.

Minerals development

All state lands in this unit are open to mineral entry.

Recreation and tourism

Yakutat Bay and its fiords are designated for dispersed recreation and tourism (RD1). The plan prohibits commercial recreation leasing on state tidelands at Russell and Nunatak Fiords to protect the natural setting for dispersed recreation. This appears compatible with the federal management of the uplands as wilderness.

Settlement

There are no state uplands in this unit.

Transportation

Tideland access for hunting, fishing, and recreation is protected by HV and RD designations.

Waterfront development

Waterfront development was judged unlikely and therefore is not a designated use. Along the exposed outer coast and the west shore of Yakutat Bay, physical conditions inhibit tideland development. On inland waters, the adjoining federal uplands are managed primarily for habitat or primitive recreation.

Subunit 6a-1 - tidelands and submerged lands between Point Riou and Alder Stream - most areas

■ Designation

Habitat and harvest (H1, HV2)

■ Management intent

Protect or enhance conditions for fish and wildlife habitat, particularly for fish and shellfish. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to these habitat resources.

Maintain conditions for fish and wildlife harvest consistent with the habitat resources listed above. All activities will minimize significant adverse impacts to harvest activities.

■ **Guidelines:** None. There are no guidelines specific to this subunit.

■ General information

The set net effort is concentrated along Manby shore and at Manby Stream, which attracted an annual average of 25 permit holders between 1981 and 1991. The average annual value of the Manby shore fishery in that 11-year period was $89,000 for sockeyes and $46,000 for cohos, for a total value of $135,000 per year. The Manby Stream fishery was based primarily on coho (53,000 annually), valued at $58,000.

Subunit 6a-2 - tidelands and submerged lands at Yahtse River

■ Designation

Habitat and harvest (H1, HV1)

■ Management intent

Protect or enhance fish and wildlife habitat, particularly anadromous fish, waterfowl, shorebird spring and fall concentration areas, and seabird nesting colonies.

Protect or enhance conditions for fish and wildlife harvest, particularly for set net salmon harvest, commercial Dungeness crab harvest, and community harvest of fish and waterfowl.

All activities will, to the extent feasible and prudent, avoid significant adverse impacts to the habitat resources and harvest activities listed above.

■ **Guidelines:** None. There are no guidelines specific to this subunit.

■ General information

The mouth of the Yahtse River has shifted nearly one mile in the past decade. Set net harvest areas shift accordingly. The location of the river mouth may need to be confirmed when applications for use of state tidelands and submerged lands are submitted.

The set net fishing effort averages ten permit holders per year (based on 1981-1991 data). The average catch in that period was 54,000 coho, with a commercial value of $58,000.

The tidelands provide access for moose hunting along the Yahtse River.

Subunit 6a-3 - tidelands and submerged lands at Yana Stream

■ Designation

Habitat and harvest (H1, HV1)

■ Management intent

Protect or enhance fish and wildlife habitat, particularly waterfowl and shorebird spring and fall concentration areas. Protect or enhance conditions for fish and wildlife harvest, particularly for set net salmon harvest, commercial Dungeness crab harvest, and community harvest of waterfowl.

All activities will, to the extent feasible and prudent, avoid significant adverse impacts to the habitat resources and harvest activities listed above.

■ Guidelines: None. There are no guidelines specific to this subunit.

■ General information

See the table at the end of this subunit.

Subunit 6a-4 - tidelands and submerged lands at Sitkagi Bluffs

■ Designation

Habitat and harvest (H1, HV2)

■ Management intent

Protect or enhance fish and wildlife habitat, particularly for sea lions, waterfowl, and shorebirds. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to these habitat resources.

Maintain conditions for fish and wildlife harvest consistent with the habitat resources listed above. All activities will minimize significant adverse impacts to the habitat resources listed above.

■ Guidelines:

Commercial recreation leasing	Commercial recreation leasing is prohibited to avoid disturbance of sea lions at the haul out.

■ General information

The boulder-strewn shore at Sitkagi Bluffs is a sea lion haul out.

Subunit 6b - tidelands and submerged lands at Yakutat Bay

■ Designation

Dispersed recreation, habitat and harvest (RD1, H1, HV2)

■ Management intent

Protect or enhance conditions for dispersed recreation, particularly for sport fishing, recreational boating, wildlife viewing, and scenic enjoyment. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to these recreation activities.

Protect or enhance fish and wildlife habitat, particularly for murrelets, nesting seabirds, and migratory waterfowl; and bears (along tidelands); crab molting, mating and rearing areas; seal and otter concentration areas; and herring spawning areas. All uses will, to the extent feasible and prudent, avoid significant adverse impacts to these habitat resources.

Maintain conditions for fish and wildlife harvest. All activities will minimize significant adverse impacts to habitat and harvest.

■ Guidelines:

Access Maintain the capacity of, and public access to, anchorages at Kame Stream, Grand Wash River, Sudden Stream, and Haenke Island.

■ General information

Fish and wildlife habitat and harvest areas are widespread south of Disenchantment Bay. Marine access to upper Disenchantment Bay is sometimes constrained by icebergs and the dangers of calving ice.

Subunit 6c - shorelands and tidelands at Malaspina Lake and outlet streams

■ Designation

Dispersed recreation, habitat, and harvest (RD1, H1, HV1)

■ Management intent

Protect or enhance conditions for dispersed recreation, particularly recreation access to Malaspina Lake, Glacier, and forelands. All activities will, to the extent feasible and prudent, avoid significant adverse impacts on the recreation uses listed above.

Protect or enhance fish and wildlife habitat, particularly for murrelets, nesting seabirds, and migratory waterfowl; and bears (along tidelands). All uses will, to the extent feasible and prudent, avoid significant adverse impacts to these habitat resources.

Protect or enhance conditions for fish and wildlife harvest, particularly for community harvest of fish and waterfowl.

■ Guidelines: None. There are no guidelines specific to this subunit.

■ General information

See the table at the end of this unit.

Subunit 6d - tidelands and submerged lands at Russell and Nunatak fiords

■ Designation

Dispersed recreation, habitat, and harvest (RD1, H2, HV2)

■ Management intent

Protect or enhance conditions for dispersed recreation, particularly kayaking, wildlife viewing, wilderness recreation, access, natural scenic values, scientific study, and natural history interpretation. All activities will, to the extent feasible and prudent, avoid significant adverse impacts to the recreation uses and values listed above.

Maintain fish and wildlife habitat and harvest consistent with conditions for dispersed recreation uses and values listed above. All activities will minimize significant adverse impacts to habitat resources and harvest activities.

■ Guidelines:

Commercial recreation leasing — Prohibit commercial recreation leasing on state tidelands to protect opportunities for dispersed recreation in a natural setting, consistent with the federal wilderness designation.

■ General information

Approximately 50 kayakers on commercial tours and an unknown number of independent travelers visit Russell Fiord each year. The unique characteristics of the fiords include evidence of the water level fluctuations from 1986 when Hubbard Glacier created an ice dam and temporary lake in Russell Fiord. Fresh water and salt water form layers in the bay because the bay receives a high volume of fresh water run-off and there is limited marine flushing through the constricted opening of the bay.

There is commercial fishing for king crab in Russell Fiord.

Prior to the federal wilderness designation of adjoining uplands, the U.S. Geological Survey found no indications of economically important mineralization.

The dynamic activity of the Hubbard Glacier is described under *Management Considerations* at the beginning of this unit.

Unit 6 - Point Riou to Yakutat Bay - tidelands, submerged lands & shorelands

Area # & name	Desig-nation	Resource or Use (See the resource reports and maps for more complete information.)	Background
6a-1 tidelands & submerged lands between Point Riou & Alder Stream -most areas	H1 HV2	■marbled and Kittlitz's murrelets from Point Riou to Yahtse River ■brown bear spring feeding area ■bear summer/fall feeding area adjoining the tidelands ■Dungeness crab molting, mating, and juvenile rearing areas in water more than 5 fathoms deep ■commercial Dungeness and tanner crab harvest ■commercial salmon troll fishery ■commercial herring harvest ■community harvest: waterfowl	■Uplands from Pt. Riou to Yana Stream are owned primarily by Chugach Alaska Corporation. There are also a few Native allotments. ■Uplands from Yana Stream to Alder Stream are mostly designated wilderness within Wrangell-St. Elias National Park and Preserve.
6a-2 tidelands & submerged lands at Yahtse River	H1 HV1	■marbled and Kittlitz's murrelets from Point Riou to Yahtse River ■bear spring/summer/fall feeding area adjoining the tidelands ■commercial Dungeness crab fishery ■commercial set net fishery ■waterfowl and shorebirds spring and fall concentration area ■seabird nesting colony ■community harvest: fish, waterfowl	■Adjacent uplands are owned by Chugach Alaska Corporation.
6a-3 tidelands & submerged lands at Yana Stream	H1 HV1	■harbor seal concentration (Sudden Stream) ■commercial set net fishery (Sudden Stream) ■bear spring feeding adjacent to tidelands ■commercial Dungeness crab harvest ■commercial set net fishery at mouth of Yana Stream ■waterfowl and shorebirds spring and fall concentration area ■community harvest: waterfowl	■Adjacent uplands are owned by Chugach Alaska Corporation.
6a-4 tidelands & submerged lands at Sitkagi Bluffs	H1 HV2	■sea lion haul-out ■waterfowl and shorebirds spring and fall concentration area ■commercial Dungeness and tanner crab harvest ■commercial salmon trolling ■commercial herring harvest	■Adjacent uplands are within Wrangell-St. Elias National Park designated wilderness.

Unit 6 - Point Riou to Yakutat Bay - tidelands, submerged lands, & shorelands

Area # & name	Desig-nation	Resource or Use (See the resource reports and maps for more complete information.)	Background
6b tidelands & submerged lands at Yakutat Bay	RD1 H1 HV2	■murrelet concentration area near shore near outlets of Alder Stream, Manby Stream, and Osar Stream ■waterfowl migratory staging/stopover area ■bear spring/summer/fall feeding adjoining the tidelands ■Dungeness crab molting, mating, and juvenile rearing beyond 5 fathoms deep and in intertidal zone in estuarine areas ■king crab molting, mating, and juvenile rearing ■herring spawning in vicinity of Point Manby along western shore ■shrimp rearing in middle of bay ■harbor seals concentration in Disenchantment Bay ■recreation: boating, cruise ships, & kayaking wildlife viewing photography scenic enjoyment sea otter concentration areas guided and sport fishing seabird nesting colonies ■community harvest: seals, fish, waterfowl, intertidal gathering ■commercial shrimp, Dungeness and king crab, salmon trolling, herring fishing	■Note: the tidelands and submerged lands near the City of Yakutat and nearby islands are part of Unit 8. ■Placer mining on beaches in the early 1900s; fine-grained gold was difficult to recover. ■Cruise ships sail into Yakutat Bay occasionally. ■Docking facilities at the town aren't designed to handle cruise ship stops.
6c shorelands & tidelands at Malaspina Lake & outlet streams	RD1 H1 HV1	■moose winter habitat near lake ■bear summer/fall feeding near lake ■hunting and fishing access ■seabird nesting colonies ■trumpeter swan nesting and brooding ■goose molting ■community harvest: waterfowl	■Adjacent uplands are within Wrangell-St. Elias National Preserve.

Unit 6 - Point Riou to Yakutat Bay - tidelands, submerged lands, & shorelands

Area # & name	Desig-nation	Resource or Use (See the resource reports and maps for more complete information.)	Background
6d tidelands & submerged lands at Russell & Nunatak fiords	RD1 H2 HV2	■bear spring/summer/fall feeding adjacent to tidelands ■herring schooling concentration areas ■king crab molting, mating, and juvenile rearing ■king crab spawning/molting ■waterfowl and shorebirds spring and fall concentrations ■seabird nesting colonies ■harbor seal concentrations ■herring ■commercial king crab harvest ■Sea kayaking - kayak put-in at trailhead in southwest Russell Fiord. Commercial outfitters run guided trips. ■wildlife viewing ■scenic viewing of geologic and hydrologic features ■community harvest: seals, intertidal gathering ■anchorages at southwest end of Russell Fiord, Seal Bay, and the upper end of Nunatak Fiord	■Uplands are designated wilderness within Tongass National Forest. ■Unique geological area. Hubbard Glacier has, and may again, block outlet to Russell Fiord, creating an inland sea and causing massive flooding. ■Gold and copper prospecting occurred on adjoining uplands in the early 1900s. Prior to the federal wilderness designation of the uplands, the U.S. Geological Survey indicated there were no signs of mineralization with economic importance.