

CHAPTER 1: PURPOSE AND NEED FOR ACTION

1.1 Purpose and Need

The National Park Service (NPS) is considering a permit application for the construction of a new cabin to support commercial fishing activities within Glacier Bay National Preserve. The applicant possesses a valid commercial set gillnet fishing permit for the Preserve. The requested cabin would be located above the mean high water mark adjacent to Dog Salmon Creek in the Dry Bay area of the Preserve (Fig.1.1). The sole purpose for this cabin will be support for operation of his commercial set gill net salmon fishing activities during the fishing season.

The cabin permit applicant's family has been using the Dry Bay area of Glacier Bay National Preserve (GLBA) for commercial fishing for a number of years. The applicant participated in commercial fishing from a family cabin near the proposed site. The requested cabin will replace another structure lost to flooding, but will be located on the opposite bank of Dog Salmon Creek.

This EA analyzes the potential environmental impacts which could result from the proposed action and No Action Alternatives. This EA has been prepared in accordance with the National Environmental Policy Act of 1969 and regulations promulgated by the Council of Environmental Quality in Title 40 of the Code of Federal Regulations (CFR).

1.2 Purpose and Significance of the Park

Glacier Bay National Monument was created by presidential proclamation in 1925 but did not include the Dry Bay area. In 1980 the monument was expanded and redesignated Glacier Bay National Park and Preserve by the Alaska National Interest Lands Conservation Act (ANILCA, Pub. L. 96-487). The 1916 Organic Act directed the Secretary of the Interior and the NPS to manage units of the national park system to:

“...conserve the scenery and the natural and historic objects and the wild life therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.” (16 U.S.C. 1.)

The purposes for which Glacier Bay National Preserve was created are found in ANILCA Section 202(1). Glacier Bay National Preserve is to be managed:

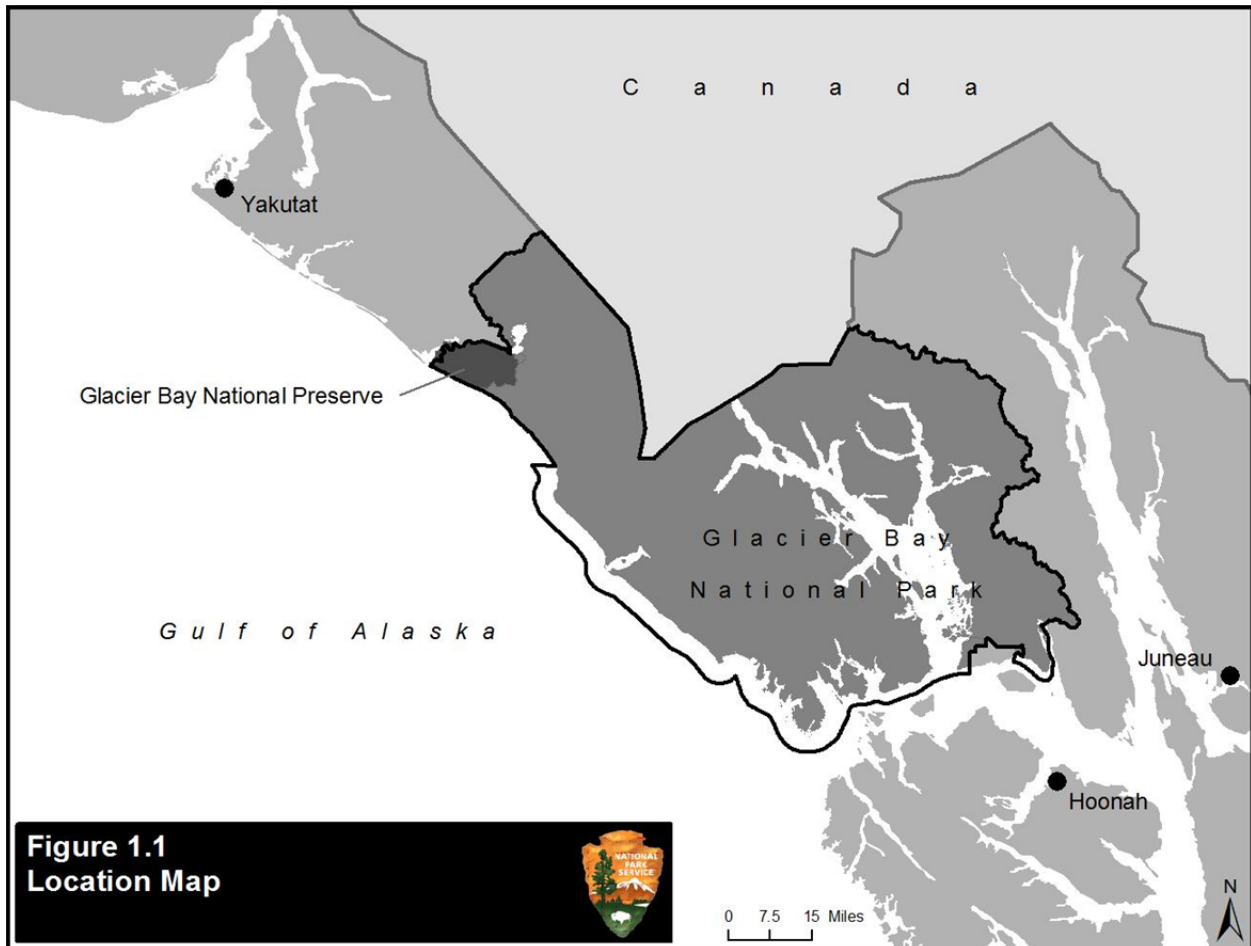
“...to protect a segment of the Alsek River, fish and wildlife habitats and migration routes, and a portion of the Fairweather Range including the northwest slope of Mount Fairweather.”

Title II of ANILCA directs the NPS to preserve the natural and cultural resources in the park and preserve for the benefit, use, education, and inspiration of present and future generations.

ANILCA Section 1313 states:

A National Preserve in Alaska shall be administered and managed as a unit of the National Park System in the same manner as a national park except as otherwise provided in this Act and except that the taking of fish and wildlife for sport purposes and subsistence uses, and trapping shall be allowed in a national preserve under applicable State and Federal law and regulation.

ANILCA Section 205 provides for commercial fishing activity in Glacier Bay National Preserve:
The Secretary may take no action to restrict unreasonably the exercise of valid commercial fishing rights or privileges obtained pursuant to existing law, including the



use of public lands for campsites, cabins, motorized vehicles, and aircraft landings on existing airstrips, directly incident to the exercise of such rights or privileges, except that this prohibition shall not apply to activities which the Secretary, after conducting a public hearing in the affected locality, finds constitute a significant expansion of the use of park lands beyond the level of such use during 1979.

ANILCA Section 1303(b)(1) states:

The construction of new cabins is prohibited except as may be authorized pursuant to a nontransferable, five-year special use permit issued by the Secretary. Such special use permits shall only be issued upon a determination that the proposed use, construction, and maintenance of a cabin is compatible with the purposes for which the unit or area was established and that the use of the cabin is either directly related to the administration of

the unit or area or is necessary to provide for a continuation of an ongoing activity or use otherwise allowed within the unit or area where the permit applicant has no reasonable alternative site for constructing a cabin. No special use permit shall be issued to authorize the construction of a cabin for private recreational use.

Coastal Zone Management Act: The federal action analyzed in this EA is the issuance of a permit. Construction and use of the proposed cabin and outbuildings will be done by the permittee. The Alaska Coastal Management Program (ACMP) does not require federal consistency reviews for issuance of permits other than for right-of-ways. Therefore, no consistency review or negative determination will be included as part of this EA.

1.3 Background

Commercial fishing in the Dry Bay area of the National Preserve began in 1901 with the construction of a cannery on the West bank of the Alsek in 1907. The cannery operated intermittently until 1937. In years without an operating cannery the fish was salted and taken by ship to Yakutat or Pelican. Before World War II, the fishery was primarily a drift gillnet fishery on the Alsek River, but shifted to a shore based, set gillnet fishery. After World War II and a switch to tender-based buying of fish, fishermen spread across the Dry Bay area to build camps closer to their net sites.

Prior to the passage of ANILCA, the preserve was managed by the U.S. Forest Service as part of the Tongass National Forest. Congress recognized the importance of commercial fishing in Dry Bay and through ANILCA authorized the continuation of access and support facilities by special use permits.

From 1945 until 1970, there were 10 to 15 summer resident households in Dry Bay. In 1974, commercial fishing was restricted by the State of Alaska to fishermen who qualified for a permanent permit, also known as limited entry. In the late 1970's, the East Alsek River sockeye salmon population exploded, bringing more fishermen to Dry Bay. By 1990, 110 fishermen fished the East Alsek River. As the East Alsek River sockeye run declined, the number of fishermen dropped to the current level of about 15. The number of commercial fish cabin permits issued by the NPS is capped at 19. Additional fish camps exist in the temporary fish camp zone. Figure 1.2 shows the location of existing cabins, camps, and airstrips in the Dry Bay area.

1.4 Relationship of the Proposal to Other Planning Projects

In 2007 the NPS completed the Glacier Bay National Preserve Off-road Vehicle Use Management Plan/EA. This plan describes the existing network of vehicle trail network used by commercial fishermen, concessioners, and other local residents. The applicant would use the existing trail network during his annual commercial fishing activity.

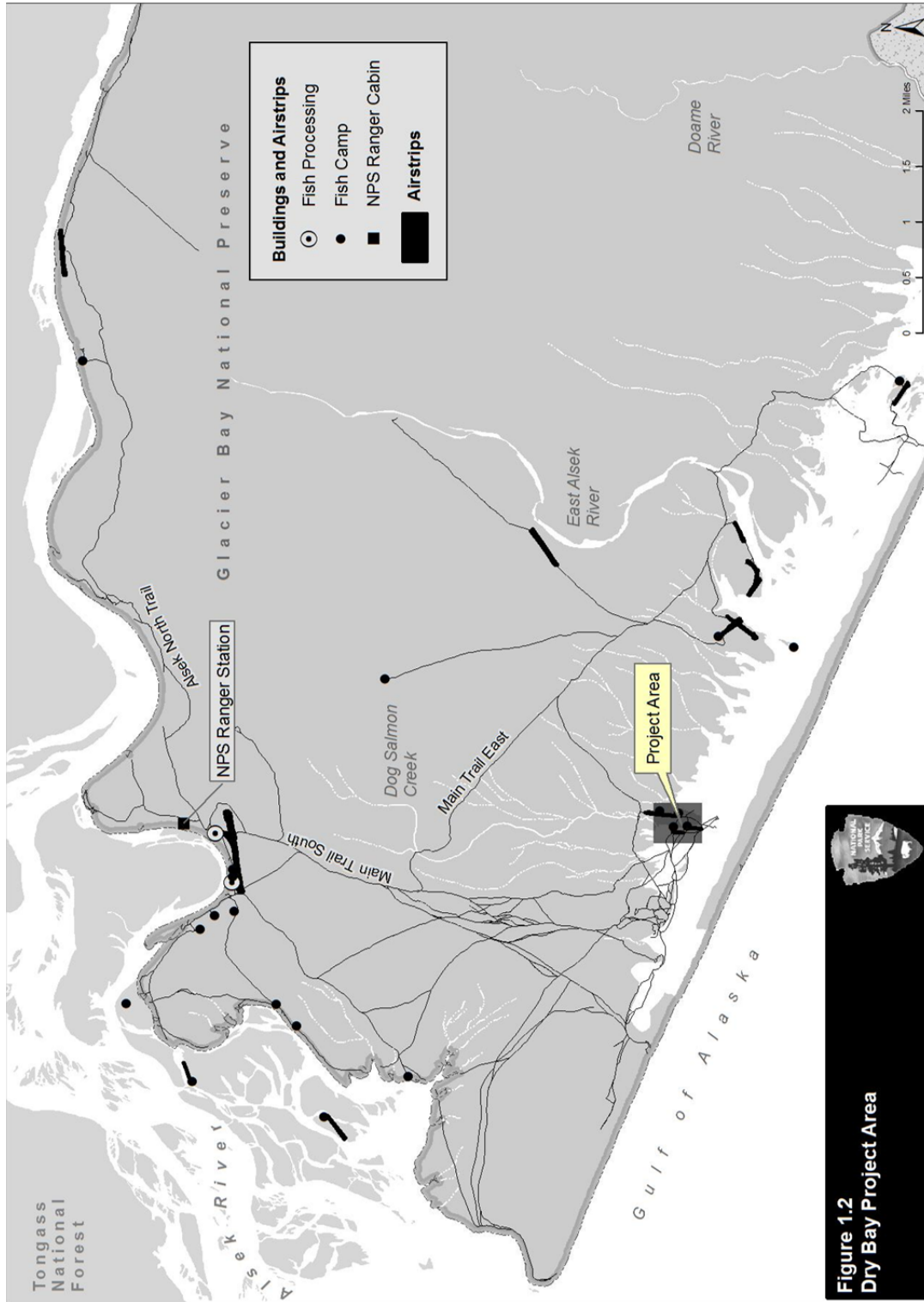


Figure 1.2
Dry Bay Project Area

1.5 Issues and Impact Topics

Issues and impact topics form the basis for environmental analysis in this EA. A brief rationale is provided for each issue or topic that is analyzed in the environmental consequences section of this EA.

1.5.1 Issues Selected for Detailed Analysis

Vegetation: Permitting a new cabin and associated outbuildings will cause the permanent loss of terrestrial vegetation and will also cause disturbance to vegetation within a 0.25 acre parcel adjacent to Dog Salmon Creek.

Wildlife: Development of a new cabin will support commercial fishing activity from May through October each year. The new structures will reduce available habitat for mammals and birds, and the increase in human activity will displace resident wildlife.

1.5.2 Issues Eliminated from Further Consideration

Soils: Soil disturbance from the proposed cabin will be minor as no foundations or large excavations would be permitted. A maximum of 576 square feet of structure would be permitted on a 0.25 acre parcel. Access to the cabin would be an unimproved ORV trail segment connecting to an existing trail network. The surface of soils around the cabin would be disturbed by general activity but no excavations other than a driven well point, kitchen sump, and outhouse would occur.

Commercial Fishing: Building an additional cabin for a commercial fishing permittee will have little to no effects on general commercial fishing in Dry Bay. The applicant already fishes the area using an existing cabin site nearby. No additional fishing permits would be issued, no expansion of commercial fishing activity would occur and it would occur in the same areas by the same methods used currently.

Air Quality: The addition of one new cabin flue producing exhaust from heating or cooking would not result in a measurable decrease in Preserve air quality. The operators of this new camp site are already present in the Preserve using another family member's site. This commercial fishing camp is being built to replace a camp destroyed by flooding some years earlier. There would likely be negligible increases in fuel consumption or fishing activities.

Water Quality: Permitted activities associated with the cabin permit do not include any septage release to water bodies, requires no fill or dredging in wetlands. The land parcel contains no streams or wetlands. As the permittee already operates out of an adjacent cabin there would be no net increase in effects to the area's water quality due to vehicle use, commercial fishing activities, or associated travel.

Cultural Resources: The effects of the proposed action on cultural resources were dismissed from further analysis for several reasons. This portion of Dry Bay was unsuitable for human habitation until recently because it is a young and very dynamic landscape. It has evolved from

glacial outwash, estuary, wetland, and shifting river course within the past 200 years. Catastrophic outburst flooding resulting from glacial ice dams upstream at Alsek Lake would have swept away any cultural deposits present. Although several legend sites associated with Raven creation stories occur near the project area (Diyaayi- Looks Like a Whale-Bear Island) they lie inland and east of the project site. The standard mitigation language to protect any archeological sites encountered during construction is included in Section 2.3 Mitigating Measures.

Visitor Use and Recreation: Sport fishing, hunting, and trapping account for a majority of the recreational use in this area of the Preserve. Use of the proposed site by visitors other than commercial fishers is rare. Almost all recreational use of the Preserve in the vicinity of the proposed cabin is hunting, angling, or trapping by commercial fishing permittees. The proposed cabin and associated use would not change the existing opportunity for recreation in the Preserve.

Threatened and Endangered Species: The Endangered Species Act requires an analysis of impacts on all federally listed threatened and endangered species. Threatened Steller sea lions occasionally pursue fish into the East Alsek River estuary; however, there are no records of sea lion haulouts along the Dog Salmon Creek shoreline.

Floodplains: The cabin construction for this project has been evaluated as per NPS DO-77-2 with respect to impacts on floodplains. The project 1) has little potential to cause impacts to floodplains in the area, 2) there is no other infrastructure at risk, and 3) there are no human health and/or safety issues associated with the construction and use of this project. Based on these factors, this project is not anticipated to have any effect on floodplains within the Alsek drainage and no Floodplain Statement of Findings will be prepared for this project.

Wilderness values: The Glacier Bay National Preserve is not a designated or proposed wilderness area.

Subsistence: The ANILCA section 810(a) Summary Evaluation and Finding concluded that the proposed action would not result in a significant restriction of subsistence uses in Glacier Bay National Preserve. An ANILCA Section 810(a) Summary Evaluation and Findings is included in Appendix (A).

Natural Soundscape: Cabin construction activities would degrade natural sounds by a negligible amount because most of the actions would be fairly quiet by nature, and be of short duration.

Local Communities/Socioeconomic Resources: Although the cabin would enhance commercial fishing opportunities in the preserve, it would be impossible to attribute any increased monetary value to the area economy to it, or anything other than a negligible impact on socioeconomic resources. The City and Borough of Yakutat collects a small amount of tax revenue based on the value of the structure(s) on the land assignments.

Environmental Justice: Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations*, requires all federal agencies to

identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This project would not result in significant changes in the socioeconomic environment of the area, and therefore is expected to have no direct or indirect impacts to minority or low-income populations or communities.

1.6 Permits and Approvals Needed to Implement the Project

A permit from the GLBA Superintendent to construct and maintain a commercial fishing cabin in GLBA pursuant to 36 CFR 13.118 would be required.

CHAPTER 2: DESCRIPTION OF ALTERNATIVES

2.1 Alternative 1: No Action

No cabin construction permit would be issued. The applicant would make use of a temporary tent platform within the Temporary Commercial Fish Camp Zone. Residential use would be prohibited. Proposed permit stipulations are listed in Appendix (B).

2.2 Alternative 2: Issue a Permit for Cabin Construction (NPS Preferred Alternative)

The applicant would be issued a permit to construct a cabin on a 0.25 acre parcel of land near the estuarine border of Dog Salmon Creek (Figure 2.1).

The permit would authorize construction of up to 576 square feet of structure(s) with an associated driven water well, kitchen sump, and outhouse without permanent foundations, and within ¼ mile of the open commercial fishing area or immediately adjacent to existing permitted sites. The structures would remain at the site year-round. The permittee could develop a short (approximately 500 ft) ORV access trail from the West side of the parcel that connects to existing trails. No roadbed leveling, gravel removal, or other construction would occur. For a complete description of permitted structures and building standards please see Appendix B. Construction could begin immediately. The applicant would plan to use the cabin between May 1 and October 31 each year.

2.3 Mitigation Measures

Migratory bird protection: Tree cutting, shrub clearing, grubbing, and other site preparation activities outside the immediate construction footprint will be minimized between April 15 and July 15. If an active nest is encountered, *at any time*, including before or after the local timing window, it shall be left in place and protected until young hatch and depart. “Active” is indicated by intact eggs, live chicks, or presence of adults on the nest.

Invasive plant management: Care will be taken to minimize the extent and severity of soil disturbance and avoid the loss of desirable native vegetation. Disturbed ground at the cabin site will be monitored after project completion to ensure that invasive plants are quickly found and removed. Care will be taken to avoid working or moving equipment through weed infested areas. Before bringing building materials into the Preserve, weeds, seeds, and other plant parts shall be removed to avoid introduction or spread of invasive plants.

Cultural resources: Prior to cabin construction, the NPS would complete a cultural resource survey and clearance as per Section 106 of the National Historic Preservation Act (NHPA). If cultural resources are discovered, the site would be protected and the activities would stop until the park archeologist can be notified and has the opportunity to evaluate the site. If something significant is found, the cabin site may need to be relocated.

Human waste disposal: The applicant would be required to meet the State of Alaska Department



of Environmental Conservation requirements for human waste disposal. The applicant would be required to dispose of human waste at least 100 feet from the normal high water mark and at least 4 feet above water level at the normal high water mark of Dog Salmon Creek. The applicant would also be required to develop a plan to prevent human waste from entering the Dog Salmon Creek estuary during floods.

Pursuant to 36 CFR 13.118 when constructing, maintaining or repairing the cabin or tent platform, the applicant must use materials and methods that blend with and are compatible with the immediate and surrounding area. In this case, materials would be colored to blend with the surroundings.

2.4 Environmentally Preferred Alternative

The Environmentally Preferred Alternative is the alternative that will promote the national environmental policy expressed in the NEPA section 101(b) of the NPS DO-12 Handbook and Director's Order (NPS, 2005a). The Environmentally Preferred Alternative is the action which results in the least damage to the biological resources and environment while protecting, preserving, and enhancing the historic, cultural, and natural resources. Alternative 1 would be considered the Environmentally Preferred Alternative. In this case, the difference in impacts between alternatives is small because the actions proposed in the alternatives are similar and the area of impact is a small site within in a 57,000 acre Preserve.

2.5 Alternatives Considered but Dismissed

Locate a Cabin Outside of the Preserve. Locating the cabin outside of the National Preserve would prevent additional development impacts to the area; however, this alternative was dismissed because the applicant has requested a permit to construct a cabin to support his commercial fishing activities in Dry Bay. A cabin located outside of the Preserve would not be near fishing sites and would not meet the applicant's needs.

CHAPTER 3: ENVIRONMENTAL CONSEQUENCES

3.1 Impact Criteria and Assessment

Impacts identified for each issue are based on the intensity, duration, and extent of the impact. Summary impact levels are characterized as negligible, minor, moderate, or major. Impact level thresholds are defined in Table 3.1.

Table 3.1. Impact Levels

Negligible	Minor	Moderate	Major
Effects would tend to be low intensity, temporary, & would not affect unique resources.	Effects would tend to be low intensity & short duration, but common resources may sustain medium intensity & long-term effects.	Effects on common resources would tend to be medium to high intensity & long-term, while important & unique resources would tend to be affected by medium to low intensity & short-term to temporary impacts, respectively.	Effects would tend to be medium to high intensity, long-term to permanent, & affect important to unique resources.

An analysis for impairment of park resources can be found in Appendix (C).

3.2 Assumptions for the Cumulative Effects Analysis

This analysis assumes that in Alternative 1 the applicant would continue to use other permitted cabins in the same general area or establish a seasonal temporary fishing camp. It assumes that in Alternative 2 all permit and construction stipulations would be followed in order to mitigate impacts.

It is assumed that in Alternative 2 the applicant would access the cabin using the designated trail system or by motorized skiff. It is assumed that materials for a cabin/tent platform would be brought to the site via small aircraft or motorboat from Yakutat, AK. This one-time event would have a negligible impact on park resources. Seasonal commercial fishing activity based from the cabin would also have a negligible impact on park resources.

3.3 ALTERNATIVE 1: NO ACTION

3.3.1 Effects on Vegetation (including wetlands)

Terrestrial vegetation within the project area includes cow parsnip, annual forbs and grasses, alder, and scattered Sitka spruce approximately 35 years in age. There is no developed wetland vegetation present in the area. Under this alternative no cabin would be constructed so the

existing vegetation would not be altered. No access trail exists currently and none would be expected to form in future as ORVs are not permitted off designated trails.

Cumulative Effects

Existing facilities cover about 62.55 acres (temporary fish camps: 11 acres, commercial fish camps: 5 acres, seafood processing facility: 1 acre, NPS facilities: 2.45 acres, commercial lodges: 4.3 acres, and airstrips: 38.8 acres) of the National Preserve. Another 50 acres of native vegetation has probably been lost to invasive plants and other effects. Native vegetation has been entirely displaced on approximately 40 of these acres and has been disturbed on the remaining areas. Essentially all these facilities are located in upland vegetation types similar to that of the proposed cabin site. Combined with an estimated continuing 81.6 acres of impacts from designated ORV trails, about 133 acres of native vegetation would continue to be displaced from human activity under the no action alternative (NPS, 2007). As the proposed cabin would not be built, the no-action alternative would not result in any additional impacts to vegetation in the Preserve.

Conclusion: There would be no measurable impacts to vegetation under the no-action alternative.

3.3.2 Effects on Wildlife

The project area is within the Estuary/Delta habitat region as described in the 2007 Glacier Bay National Preserve Off-Road Vehicle Use Plan. Estuaries and deltas are extremely important for wildlife, and species diversity is high (Petersen, et al. 1981). Large numbers of migratory and breeding shorebirds, colonial waterbirds, migrating and breeding waterfowl, bear, wolf, wolverine, mink, river otter, bald eagle, northern harrier, short-eared owl, and raven range along Dog Salmon Creek to the West of the project site. Passerine bird species that may also occur here include ground foraging thrushes, pine grosbeak, fox sparrow, dark-eye junco and yellow warbler.

Under the no action alternative no cabin site would be developed. Wildlife habitat would not be altered or reduced. Long term developed cabin sites exist on either side of the project area that probably affect how wildlife uses this area of the Dog Salmon Creek, but this would not change.

Cumulative Effects

About 180 acres of wildlife habitat has been converted to trails, airstrips, cabin sites and temporary campsites. Disturbance and displacement of wildlife sensitive to human activity would have been most significant as each new development was established. As use patterns stabilized and became more predictable some wildlife such as moose, bear, and woodland passerines taking advantage of trail corridors or became tolerant of human activity. Existing cabin sites have been relatively stable for a number of years. There would be no added effects due to Alternative 1.

Conclusion: As human use would occur in the same basic locations and at the same level, impacts to wildlife under the no action alternative would not occur.

3.4 ISSUE PERMIT FOR CABIN CONSTRUCTION (NPS Preferred Alternative)

The applicant would be issued a permit to construct a cabin on a 0.25 acre parcel of land near the estuarine border of Dog Salmon Creek. The permit would authorize construction of up to 576 square feet of structure(s) with an associated driven water well, kitchen sump, and outhouse without permanent foundations, and within ¼ mile of the open commercial fishing area or immediately adjacent to existing permitted sites. The structures would remain at the site year-round.

3.4.1 Effects on Vegetation

Terrestrial vegetation within the project area includes cow parsnip, annual forbs and grasses, alder, and scattered Sitka spruce approximately 35 years in age. There is no developed wetland vegetation present in the area most likely affected by construction (NPS 2007). Under this alternative the cabin, potential storage sheds, and trails could displace up to 0.25 acres of existing vegetation. Eventually, perennial vegetation along the cabin access trail will be replaced by resistant grasses and forbs. Each year during seasonal commercial fishing activity some soil surface disturbance could promote invasive plant species or introduce these species from other affected areas. Invasive plant species documented within a 2 mile radius of the project site are listed in Table 3.2.

Table 3.2 Documented Invasive Plant Species

<u>Taxon</u>	<u>Common name</u>
<i>Cerastium fontanum</i>	Mouse-ear chickweed
<i>Leucanthemum vulgare</i>	Oxeye daisy
<i>Lupinus polyphyllus</i>	Large leaf lupine
<i>Matricaria discoidea</i>	Pineapple weed
<i>Plantago major</i>	Common plantain
<i>Ranunculus repens</i>	Creeping buttercup
<i>Symphytum officinale</i>	Common comfrey
<i>Taraxacum officinale ssp. officinale</i>	Common dandelion
<i>Trifolium pratense</i>	Red clover

Cumulative Effects

Existing facilities cover about 62.55 acres (temporary fish camps: 11 acres, commercial fish camps: 5 acres, seafood processing facility: 1 acre, NPS facilities: 2.45 acres, commercial lodges: 4.3 acres, and airstrips: 38.8 acres) of the National Preserve. Another 50 acres of native vegetation has probably been lost to invasive plants and other effects. Native vegetation has been entirely displaced on approximately 40 of these acres and has been disturbed on the remaining areas. Essentially all these facilities are located in upland vegetation types similar to that of the proposed cabin site. Combined with an estimated continuing 81.6 acres of impacts from designated ORV trails, about 133 acres of native vegetation would continue to be displaced from human activity under the no action alternative (NPS, 2007). With construction of the proposed cabin an additional 576 square feet of vegetation could be permanently displaced.

Conclusion: Alternative 2 would have a minor negative long-term impact on native vegetation.

3.4.2 Effects on Wildlife

The project area is within the Estuary/Delta habitat region as described in the 2007 Glacier Bay National Preserve Off-Road Vehicle Use Plan. Estuaries and deltas are extremely important for wildlife, and species diversity is high. Large numbers of migratory and breeding shorebirds, colonial waterbirds, migrating and breeding waterfowl, bear, wolf, wolverine, mink, river otter, bald eagle, northern harrier, short-eared owl, and raven range along Dog Salmon Creek to the West of the project site. Passerine bird species that may also occur here include ground foraging thrushes, pine grosbeak, fox sparrow, dark-eye junco and yellow warbler.

Under the action alternative the cabin site would be developed. Wildlife habitat on the 0.25 acre parcel would be altered by human activity. Browse for moose and nest sites for passerine birds would be reduced. Small mammals could be killed by vehicles, or nest sites destroyed. Vehicle passage along the Dog Salmon Creek shore would disturb shorebirds and waterfowl from May through October each year. Some less tolerant wildlife species such as wolves or wolverine would be displaced permanently by development of this additional cabin site. However, long term developed cabin sites exist on either side of the project area and have probably already affected how wildlife uses this area of Dog Salmon Creek.

Cumulative Effects

About 180 acres of wildlife habitat has been converted to trails, airstrips, cabin sites and temporary campsites. Disturbance and displacement of wildlife sensitive to human activity would have been most significant as each new development was established. Bears may be attracted to the smell of fish at the fish camp during the commercial fishing season. Black or brown bears could be shot in defense of life or property. As use patterns stabilized and became more predictable some wildlife such as moose, bear, and woodland passerines taking advantage of trail corridors or became tolerant of human activity. Existing cabin sites have been relatively stable for a number of years. There would be 0.25 acres of additional effects due to the action alternative.

Conclusion: Alternative 2 would have minor negative impacts on wildlife.

CHAPTER 4: CONSULTATION AND COORDINATION

Jacqueline Ashwell, District Ranger, Glacier Bay/Wrangell St. Elias National Park and Preserve

Carrie Bohan, Alaska Coastal Management Program, Department of Natural Resources, State of Alaska, Douglas, Alaska

Jim Capra, Dry Bay Area Ranger, Glacier Bay National Park and Preserve

Bill Eichenlaub, Data Manager, Glacier Bay National Park and Preserve

Wayne Howell, Management Assistant, Glacier Bay National Park and Preserve

Craig Murdoch, Fisheries Biologist, Glacier Bay National Park and Preserve

Chad Soiseth, Fisheries Biologist, Glacier Bay National Park and Preserve

CHAPTER 5: LITERATURE CITED

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