

APPENDIX 1

Abbreviations

AAC	Alaska Administrative Code
ADA	Americans with Disabilities Act (wheelchair accessibility)
ADF&G	Alaska Department of Fish and Game
AKSO	Alaska Regional Support Office, National Park Service, Anchorage
ANILCA	Alaska National Interest Lands Conservation Act of 1980
ATV	All-terrain vehicle, four wheel
CFR	Code of Federal Regulations
DEC	Alaska Department of Environmental Conservation
EA	Environmental Assessment
EIS	Environmental Impact Statement
FONSI	Finding of No Significant Impact, the decision document for an EA
GIS	Geographic Information System
GLBA	Glacier Bay National Park and Preserve, National Park Service
GMP	General Management Plan
NEPA	National Environmental Policy Act
NPS	National Park Service, a bureau of the U.S. Department of the Interior
SOF	Statement of Findings, for floodplains
USC	United States Code
USFWS	U.S. Fish and Wildlife Service, a bureau of the U.S. Department of the Interior
VIP	Volunteers-in-Parks, the National Park Service program of volunteer staff
WASO	Washington Office, the NPS national offices in Washington, D.C. (or other city)

APPENDIX 2

Subsistence Evaluation

ANILCA Section 810(a) Summary of Evaluations and Findings

I. Introduction

In compliance with Title VIII, section 810 of the Alaska National Interest Lands Conservation Act (ANILCA), this section evaluates potential subsistence restrictions which could result from the proposed development and operation of National Park Service (NPS) facilities in Glacier Bay National Preserve. This analysis does not evaluate State authorized subsistence use and activities on adjacent private, borough, or state lands.

II. The Evaluation Process

Section 810(a) of ANILCA states:

"In determining whether to withdraw, reserve, lease, or otherwise permit the use, occupancy, or disposition of public lands . . . the head of the Federal agency . . . over such lands . . . shall evaluate the effect of such use, occupancy, or disposition on subsistence uses and needs, the availability of other lands for the purposes sought to be achieved, and other alternatives which would reduce or eliminate the use, occupancy, or disposition of public lands needed for subsistence purposes. No such withdrawal, reservation, lease, permit, or other use, occupancy or disposition of such lands which would significantly restrict subsistence uses shall be effected until the head of such Federal agency:

gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to section 805;

gives notice of, and holds, a hearing in the vicinity of the area involved; and

determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity would involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps would be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

ANILCA created new units and additions to existing units of the national park system in Alaska. More specifically, Section 202 of ANILCA expanded Glacier Bay National Monument by the addition of an area containing approximately five hundred and twenty-three thousand acres. ANILCA re-designated the monument as "Glacier Bay National Park." Along the south

bank of the Alsek River at Dry Bay, Alaska, approximately fifty-seven thousand acres was designated as Glacier Bay National Preserve.

ANILCA and NPS regulations do not authorize subsistence uses on federal public lands in Glacier Bay National Park. However, ANILCA (Sections 1313) and Title 36 Code of Federal Regulations (Section 13.41) authorize subsistence uses on federal lands in Glacier Bay National Preserve.

Glacier Bay National Park and Preserve was established for the following purposes:

“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. Lands, waters and interests therein within the boundary of the park and preserve which were within the boundary of any national forest are hereby excluded from such national forest and the boundary of such national forest is hereby revised accordingly.”

Section 205 of ANILCA directed the Secretary of the Interior to:

“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 . . . finds constitute a significant expansion of the use of park lands beyond the level of such use during 1979.”

The potential for significant restriction must be evaluated for the proposed action's effect on , “. . . subsistence uses and needs, the availability of other lands for the purposes sought to be achieved and other alternatives which would reduce or eliminate the use.” (Section 810(a))

III. Proposed Action on Federal Lands

The NPS is granted broad statutory authority under various acts of Congress to manage and regulate activities in areas of the National Park System, 16 United States Code, (U.S. C.) and 16 U.S.C. 1a-2(h) and 3. The NPS takes a conservative approach to managing use in areas of the National Park System based on consideration of the potential resources impacts, conflicts with other visitors' uses and enjoyment, and safety concerns. The proposed action is consistent with Glacier Bay National Park and Preserve's enabling legislation and overall management objectives.

Alternative A. – “No Action” – Do not Construct any Facilities

Under this alternative, no new structures would be constructed, no structures would be relocated and no existing structures would be reconstructed. NPS operations would continue as they have in recent years with the existing facilities.

The sewage dump station and river runners' take-out point would remain in their existing configuration and location.

Alternative B. – Proposed Action – Relocate Rafter Take-out Point, Reconstruct other Facilities near Existing Locations (*NPS Preferred Alternative*)

Under this alternative, NPS facilities at Dry Bay would be improved and rebuilt, essentially in their existing locations. The river rafters' take-out location and camp area would be relocated approximately 640 feet downstream. Proposed new or reconstructed development and visitor safety improvements would include:

- Public Restroom Facilities
- Sewage Dump Station
- Septic and Leach Field Systems
- Alsek River Boat Launch and Take-out Area
- Alsek River Camp Area
- Airplane Taxiway
- Ranger Station Site Expansion: Construct new buildings to support employee housing, visitor services, administrative, storage and maintenance needs. Demolish and remove seasonal cabins and structures.

Alternative C. – Move River Take-out, Camp Area and Dump Station to West of Airstrip

Under this alternative, a river rafter's sewage dump station would be constructed near the west end of the airstrip. The surface features of the existing dump station and waste water system would be removed. The sub-surface features would be abandoned in place. The site of the existing dump station would be allowed to naturally revegetate with woody shrubs and trees.

The boat river rafter's take-out point and the camp area would be relocated to a site west of the airstrip.

Ranger Station. The facilities at the ranger station would be demolished, reconstructed and constructed.

East Alsek River Public Use Cabin Toilet. A new pit toilet would be built.

IV. Affected Environment

Subsistence uses, as defined by ANILCA, Section 810, means "The customary and traditional use by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible byproducts of fish and wildlife resources taken for

personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade.” Subsistence activities include hunting, fishing, trapping and collecting berries, edible plants, and wood or other materials. The principal subsistence species harvested within the Dry Bay area include salmon, hooligan, moose and furbearers.

The area maintains a traditional Tlingit culture with influences from the original Eyak Athabascans, as well as Russian, English and American traders and miners. Fishing and subsistence activities are prevalent. Residents of such communities as Yakutat, Gustavus, Hoonah, Elin Cove, Pelican, Excursion Inlet and Sitka engage in subsistence uses near the boundaries of Glacier Bay National Preserve. Community resource gathering activities include such things as hunting, fishing, digging for clams, catching shellfish, gathering firewood and collecting food items from berries to herring eggs. Historical resource utilization patterns, such as fish camps or communal deer hunts, are linked to traditional social and subsistence use patterns. Sharing of resource occurs between communities, as well as within communities throughout the region.

Some of the major resources used for subsistence in these communities are bears (black and brown), deer, goat, moose, furbearers, ptarmigan, waterfowl, marine mammals, salmon, trout, halibut, crab, clams, berries and other edible plants (such as wild celery, ferns, and kelp), alder, spruce, and other wood resources.

ANILCA and NPS regulations authorize subsistence use of resources in all Alaska national parks, monuments and preserves with the exception of Glacier Bay National Park, Katmai National Park, Kenai Fjords National Park, Klondike Gold Rush National Historical Park, “old” Mount McKinley National Park, and Sitka National Historical Park (Codified in 36 CFR part 13, Subparts A, B, and C). ANILCA provides a preference for local rural residents over other consumptive users should a shortage of subsistence resources occur and allocation of harvest becomes necessary.

The NPS recognizes that patterns of subsistence use vary from time to time and from place to place depending on the availability of wildlife and other renewable natural resources. A subsistence harvest in a given year may vary considerably from previous years because of weather, migration patterns and natural population cycles.

V. Subsistence Uses and Needs Evaluation

Potential Impacts to Subsistence Users

To determine the potential impacts on existing subsistence activities for the proposed action, three evaluation criteria were analyzed relative to existing subsistence resources:

the potential to reduce important subsistence fish and wildlife populations by (a) reductions in number, (b) redistribution of subsistence resources, or (c) habitat losses;

what affect the action might have on subsistence angler or hunter access;

the potential for the action to increase angler or hunter competition for subsistence resources.

1. The potential to reduce populations:

(a) Reduction in Numbers:

The proposed action is not expected to significantly reduce wildlife species in the study area. Any population redistribution would be so small that no change would occur to the ongoing regional subsistence pattern. Natural cycles would continue.

(b) Redistribution of Resources:

The proposed action is not expected to significantly redistribute, displace or stress subsistence wildlife resources.

(c) Habitat Loss:

The proposed action is not expected to cause the loss of beneficial or critical habitat for subsistence species such as salmon, hooligan, moose, furbearers and waterfowl. The proposed action would not manipulate subsistence habitats or result in development of a scale that would have any measurable impacts on subsistence resources.

The park superintendent may enact closures or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife population.

2. Restriction of Access:

The proposed action is not expected to significantly change current subsistence use patterns. Access for subsistence uses within NPS areas is granted pursuant to ANILCA, sections 811(a)(b) and 1110(a). ANILCA allows access within Alaska conservation system units by certain specified means, including motorboats, for traditional activities.

3. Increase in Competition:

The proposed action is not anticipated to result in increased competition for subsistence resources on Federal public lands in the study area. Provisions of ANILCA, the Federal Subsistence Board and NPS regulations provide the tools for adequate protection of fish and wildlife populations while ensuring a subsistence priority for local rural residents.

VI. Availability of Other Lands

Other lands outside the national park and preserve have been considered but not incorporated into the proposed action. The proposed action is consistent with NPS mandates.

VII. Alternatives Considered

The evaluation has described and analyzed the alternatives of this environmental assessment, with emphasis on the proposed action.

VIII. Findings

This analysis concludes that the proposed action would not result in a significant restriction of subsistence uses.

STATE OF ALASKA

FRANK H. MURKOWSKI, GOVERNOR

**DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF ENVIRONMENTAL HEALTH
DRINKING WATER PROGRAM
410 WILLOUGHBY AVENUE, SUITE 303
JUNEAU, ALASKA 99801
<http://www.state.ak.us/dec/home.htm>**

Telephone: (907) 465-5317
FAX: (907) 465-5362

April 6, 2004

Mr. Robin Dalton, PE
National Park Service
P.O. Box 140
Gustavus, Alaska 99826

Re: Three Wastewater Systems at Dry Bay/Rafter Wastewater System, Ranger Cabin & Bunkhouse Wastewater System, Public Use Cabin Wastewater System

Dear Mr. Dalton:

Enclosed are three approvals to construct certificates for three wastewater disposal systems at the Dry Bay.

Rafter Wastewater System: This proposed system will be located near the airstrip and rafter haul. It will have two septic tanks in series (1000 gallon + 500 gallon) and a drainfield of 170 square feet. The anticipated flow rate is 204 gallons per day. The soils range from well graded sands (SW) to poorly graded gravel (GP).

Ranger Cabin & Bunkhouse Wastewater System: This proposed system will be located near the Ranger Cabin. It will have a 1000 gallon septic tank and a drainfield of 83 square feet. The anticipated flow rate is 100 gallons per day. The soils range from SW to GP.

Public Use Cabin Wastewater System: This proposed wastewater system (a new pit privy) will serve the Public Use Cabin.

Separation distance issues: Please make sure that all the components of any wastewater system are 100 feet away from the high tide line of a lake, river, stream, or coastal waters. Also, refer to 18 AAC 72.020 for a full understanding of separation distance requirements.

If you have any questions, I can be reached at (907) 465-5317.

Sincerely,

A handwritten signature in black ink that reads "David Khan". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

David Khan, PE
Civil/Environmental Engineer

Enclosure: Three Construction and Operation Certificates/Only Approval to Construct portions are signed.



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONSTRUCTION AND OPERATION CERTIFICATE
FOR

Ranger Cabin
Dry Bay, NPS

DOMESTIC WASTEWATER DISPOSAL SYSTEMS
Ranger Cabin & Bunkhouses

A. APPROVAL TO CONSTRUCT 1000 gallon septic tank + Drainfield (83 SF)

Plans for the construction or modification of Flow = 100 gpd, soils = Poorly graded gravel (GP), Well graded Sand (SW) domestic wastewater disposal system

located in DRY BAY, Glacier Bay National Park, Alaska, submitted in accordance with 18 AAC 72.210

by Robin A. Dalton, PE/CE - 8343 have been reviewed and are

approved.

conditionally approved (see attached conditions).

BY David Khan, PE
DAVID KHAN 1907.465.5317

TITLE Civil Engineer
CE - 9985

DATE 4-6-04

If construction has not started within two years of the approval date, this certificate is void and new plans and specifications must be submitted for review and approval before construction.

B. APPROVED CHANGE ORDERS

Change (contract order number or descriptive reference)

Approved by

Date

Change (contract order number or descriptive reference)	Approved by	Date

C. APPROVAL TO OPERATE

The "APPROVAL TO OPERATE" section must be completed and signed by the Department before this system is made available for use.

The construction of the _____ domestic wastewater disposal system was completed

on _____ (date). The system is hereby granted interim approval to operate for 90 days following the completion date.

BY _____ TITLE _____ DATE _____

As-built/record drawings, submitted to the Department, or an inspection by the Department, has confirmed that the domestic wastewater disposal system was constructed in substantial conformance with the approved plans. The system is hereby granted final approval to operate.

BY _____ TITLE _____ DATE _____

Distribution: 1. Retain original for project file
2. Make copies for distribution



STATE OF ALASKA
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION
 CONSTRUCTION AND OPERATION CERTIFICATE
 FOR

DOMESTIC WASTEWATER DISPOSAL SYSTEMS

Rafter
Dry Bay, NPS

RAFTER Wastewater System @ Dry Bay

A. APPROVAL TO CONSTRUCT 1000 gallon + 500 gallon tanks + Drainfield (170 S.F.)

Plans for the construction or modification of 102 G.P.D. / Soils = Poorly graded gravel (GP) and well graded sand (SW) domestic wastewater disposal system

located in Dry Bay, Glacier Bay National Park, Alaska, submitted in accordance with 18 AAC 72.210

by Robin A. Dalton, PE / CE - 8343 have been reviewed and are

- approved.
- conditionally approved (see attached conditions).

David Khan, PE Civil Engineer 4-6-04
 BY DAVID KHAN / 907.465.5317 TITLE CE-9985 DATE

If construction has not started within two years of the approval date, this certificate is void and new plans and specifications must be submitted for review and approval before construction.

B. APPROVED CHANGE ORDERS

Change (contract order number or descriptive reference)	Approved by	Date

C. APPROVAL TO OPERATE

The "APPROVAL TO OPERATE" section must be completed and signed by the Department before this system is made available for use.

The construction of the _____ domestic wastewater disposal system was completed on _____ (date). The system is hereby granted interim approval to operate for 90 days following the completion date.

BY _____ TITLE _____ DATE _____

As-built/record drawings, submitted to the Department, or an inspection by the Department, has confirmed that the domestic wastewater disposal system was constructed in substantial conformance with the approved plans. The system is hereby granted final approval to operate.

BY _____ TITLE _____ DATE _____

- Distribution:
1. Retain original for project file
 2. Make copies for distribution



STATE OF ALASKA
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
CONSTRUCTION AND OPERATION CERTIFICATE
FOR

DOMESTIC WASTEWATER DISPOSAL SYSTEMS

*Public Use Cabin
Dry Bay, NPS*

Public Use Cabin / New Pit Privy / open at bottom

A. APPROVAL TO CONSTRUCT

Plans for the construction or modification of *Intall a new pit privy, 3'-diameter
Culvert / 4' above water table* domestic wastewater disposal system
located in *DRY BAY, Glacier Bay National Park*, Alaska, submitted in accordance with 18 AAC 72.210
by *Robin A. Dalton, PE / CE-8343* have been reviewed and are

- approved.
 conditionally approved (see attached conditions).

David Khan, PE
BY *DAVID KHAN / 907.465.5317*

Civil Engineer
TITLE *CE-9985*

4-6-04
DATE

If construction has not started within two years of the approval date, this certificate is void and new plans and specifications must be submitted for review and approval before construction.

B. APPROVED CHANGE ORDERS

Change (contract order number or descriptive reference)	Approved by	Date

C. APPROVAL TO OPERATE

The "APPROVAL TO OPERATE" section must be completed and signed by the Department before this system is made available for use.

The construction of the _____ domestic wastewater disposal system was completed
on _____ (date). The system is hereby granted ~~interim~~ approval to operate for 90 days following the completion date.

BY _____ TITLE _____ DATE _____

As-built/record drawings, submitted to the Department, or an inspection by the Department, has confirmed that the domestic wastewater disposal system was constructed in substantial conformance with the approved plans. The system is hereby granted final approval to operate.

BY _____ TITLE _____ DATE _____

- Distribution: 1. Retain original for project file
2. Make copies for distribution

APPENDIX 4

Negative Determination for the Dry Bay Facility Improvements Glacier Bay National Park & Preserve

The State of Alaska has an approved coastal zone management program, the Alaska Coastal Management Program (ACMP) which includes regulations in Title 6, Chapter 50 of the Alaska Administrative Code (6 AAC 50). The Alaska Department of Natural Resource's Office of Project Management & Permitting (OPMP) coordinates review of federal consistency determinations as per 6 AAC 50.020. The Alaska Coastal Policy Council promulgates standards in the ACMP in chapter 80 of Title 6 (6ACC 80). Guidelines for District Coastal Management Programs are provided in 6 ACC 85. CZMA Federal Consistency Regulations (15 CFR 930.35(b)) state that negative determinations include an evaluation of the relevant policies set forth in the ACMP and applicable district programs.

The National Park Service (NPS) is proposing improvements to its visitor- and administrative-support facilities in the Dry Bay area of Glacier Bay National Preserve (T. 32. S., R. 41. E.). Dry Bay is located near the mouth of the Alsek River as it meets the Gulf of Alaska on the northwestern corner of GLBA. Lands in the project area fall within the coastal zone of the State of Alaska and the City and Borough of Yakutat Coastal Management District (ACMP "Coastal Zone Boundaries of Alaska" Map #102 for the Yakutat Quadrangle). The project site is federal land managed by the National Park Service and by definition is outside the state's coastal zone.

This project would address NPS facility deficiencies in the Dry Bay ranger station by: (1) rebuilding the bunkhouse cabin, seasonal cabin, and storage shed (2) constructing a fuel storage building, (3) rebuilding the workroom and shower room (including a flush toilet) at the Dry Bay ranger house, and (4) relocating the raft take-out point and camp area

The NPS would also improve sanitary waste facilities in Dry Bay by (1) replacing the existing river rafter wastewater disposal system (2) replacing the outhouse at the Lower Alsek River public use cabin, and (3) constructing a domestic wastewater system for the Dry Bay ranger house and bunkhouse. The NPS has supplied the Alaska Department of Environmental Conservation (ADEC) with design specifications and drawings for each of the above systems. This information was submitted to ADEC on February 19, 2004 in conjunction with a request for plan review and subsequent Certificate-To-Construct approval under 18 AAC 72. The NPS received Approval to Construct Certificates for the three wastewater systems on March 4, 2004.

A detailed project description and specifications for the Dry Bay facility improvements project at Glacier Bay National Preserve are provided in the attached environmental assessment. Alternative B is the proposed action.

The following section details the NPS's Negative Determination analysis by which it was determined that the Dry Bay facility improvements project would not effect any coastal use or resource. In determining effects, the NPS followed 15 CFR 930.33(a)(1) and has included an

evaluation of the relevant enforceable policies of the ACMP and the Yakutat District. State standards included for analysis are coastal development; recreation; fish and seafood processing; subsistence; habitats; air, land, and water quality; and historic, prehistoric, and archaeological resources. The project facilities would be located on lands under federal jurisdiction, which are outside the coastal zone.

6 AAC 80.040. COASTAL DEVELOPMENT.

(a) In planning for and approving development in coastal areas, districts and state agencies shall give in the following order, priority to:

- (1) water-dependent uses and activities;
- (2) water-related uses and activities; and
- (3) uses and activities which are neither water-dependent nor water-related for which there is no feasible and prudent inland alternative to meet the public need for the use or activity.

(b) The placement of structures and the discharge of dredged or fill material into coastal water must, at a minimum, comply with the standards contained in Parts 320-323, Title 33, Code of Federal Regulations (Vol. 42 of the Federal Register, pp. 37133 - 47 (July 19, 1977)). (Eff. 7/18/78, Register 67; am 8/18/79, Register 71)

Analysis: Elements of the project are water-related, supporting the recreational use of the area (the rafter camp area, the sewage dump station for the Alsek River rafters and the outhouse at the camp area). The raft take-out point on the Alsek River in the Dry Bay area is water dependent. All other elements of the project support the NPS administration of the Dry Bay area for which no feasible and prudent inland alternative exists (Dry Bay Ranger Station facilities and Little Alsek River Public Use Cabin outhouse).

6 AAC 80.060. RECREATION.

(a) Districts shall designate areas for recreational use. Criteria for designation of areas of recreational use are

- (1) the area receives significant use by persons engaging in recreational pursuits or is a major tourist destination; or
- (2) the area has potential for high quality recreational use because of physical, biological, or cultural features.

(b) Districts and state agencies shall give high priority to maintaining and, where appropriate, increasing public access to coastal water. (Eff. 7/18/78, Register 67; am 8/18/79, Register 71)

Analysis: The project area is within Glacier Bay National Park and Preserve. Dry Bay is the final destination for popular Alsek River float trips originating in Canada. The Dry Bay area is also used by recreationists for fishing, hunting and nature appreciation, especially for parties staying at the commercial lodges. The Dry Bay Ranger Station facilities provide support for the NPS staff and volunteers who assist park visitors by dispensing information, enforcing park regulations and providing emergency services.

6 AAC 80.090. FISH AND SEAFOOD PROCESSING.

Districts shall identify and may designate areas of the coast suitable for the location or development of facilities related to commercial fishing and seafood processing. (Eff. 7/18/78, Register 67)

Analysis: The project would not affect commercial fishing uses or facilities in Dry Bay. Commercial fishing and incidental activities are authorized by the park's enabling legislation (ANILCA, 1980). In the project area there is a seafood processing facility (Sitka Sound Seafoods), a fish-buying station (the Ivers building) next to the airstrip, several commercial seasonal fish cabins and a 3,600-foot long airstrip used primarily for flying fresh fish from Dry Bay to market but also used by recreationists visiting or leaving the area. These facilities would not be affected by the proposed project.

Following periods of inclement weather, river raft groups that had been camping and waiting for flights out of Dry Bay have caused congestion near the fish-buying station, affecting the commercial fish operations and causing a safety concern with the nearby aircraft operations. The relocation of the rafter take-out and camp area downstream would eliminate congestion at the fish-buying station.

The Dry Bay Ranger Station facilities provide support for the NPS staff and volunteers who assist commercial fishing operations by managing special use permits for fishing-related facilities, maintaining the airstrip, dispensing information, enforcing park regulations and providing emergency services.

6 AAC 80.120. SUBSISTENCE.

(a) Districts and state agencies shall recognize and assure opportunities for subsistence usage of coastal areas and resources.

(b) Districts shall identify areas in which subsistence is the dominant use of coastal resources.

(c) Districts may, after consultation with appropriate state agencies, Native corporations, and any other persons or groups, designate areas identified under (b) of this section as subsistence zones in which subsistence uses and activities have priority over all nonsubsistence uses and activities.

(d) Before a potentially conflicting use or activity may be authorized within areas designated under (c) of this section, a study of the possible adverse impacts of the proposed potentially conflicting use or activity upon subsistence usage must be conducted and appropriate safeguards to assure subsistence usage must be provided.

(e) Districts sharing migratory fish and game resources must submit compatible plans for habitat management. (Eff. 7/18/78, Register 67)

Analysis: The Dry Bay project area is in Glacier Bay National Preserve and is open to subsistence uses under ANILCA Title VIII. The NPS is responsible for managing subsistence in the Preserve. The NPS has prepared an ANILCA section 810 evaluation and has determined that the proposed facility would not cause a significant restriction of subsistence uses.

6 AAC 80.130. HABITATS.

(a) Habitats in the coastal area which are subject to the Alaska coastal management program include

- (1) offshore areas;
- (2) estuaries;
- (3) wetlands and tideflats;
- (4) rocky islands and seacliffs;

- (5) barrier islands and lagoons;
- (6) exposed high energy coasts;
- (7) rivers, streams, and lakes; and
- (8) important upland habitat.

(b) The habitats contained in (a) of this section must be managed so as to maintain or enhance the biological, physical, and chemical characteristics of the habitat which contribute to its capacity to support living resources,

(c) In addition to the standard contained in (b) of this section, the following standards apply to the management of the following habitats:

(1) offshore areas must be managed as a fisheries conservation zone so as to maintain or enhance the state's sport, commercial, and subsistence fishery;

(2) estuaries must be managed so as to assure adequate water flow, natural circulation patterns, nutrients, and oxygen levels, and avoid the discharge of toxic wastes, silt, and destruction of productive habitat;

(3) wetlands and tideflats must be managed so as to assure adequate water flow, nutrients, and oxygen levels and avoid adverse effects on natural drainage patterns, the destruction of important habitat, and the discharge of toxic substances;

(4) rocky islands and seacliffs must be managed so as to avoid the harassment of wildlife, destruction of important habitat, and the introduction of competing or destructive species and predators;

(5) barrier islands and lagoons must be managed so as to maintain adequate flows of sediments, detritus, and water, avoid the alteration or redirection of wave energy which would lead to the filling in of lagoons or the erosion of barrier islands, and discourage activities which would decrease the use of barrier islands by coastal species, including polar bears and nesting birds;

(6) high energy coasts must be managed by assuring the adequate mix and transport of sediments and nutrients and avoiding redirection of transport processes and wave energy; and

(7) rivers, streams, and lakes must be managed to protect natural vegetation, water quality, important fish or wildlife habitat and natural water flow.

(d) Uses and activities in the coastal area which will not conform to the standards contained in (b) and (c) of this section may be allowed by the district or appropriate state agency if the following are established:

(1) there is a significant public need for the proposed use or activity;

(2) there is no feasible prudent alternative to meet the public need for the proposed use or activity which would conform to the standards contained in (b) and (c) of this section; and

(3) all feasible and prudent steps to maximize conformance with the standards contained in (b) and (c) of this section will be taken.

(e) In applying this section, districts and state agencies may use appropriate expertise, including regional programs referred to in 6 AAC 80.030(b). (Eff. 7/18/78, Register 67)

Analysis: The Dry Bay project would not affect coastal habitat resources. The proposed project would have negligible to minor environmental effects. There will be temporary noise and disturbance of the project area during construction, and some clearing of natural vegetation with long-term occupancy of the land for the facilities, but these impacts will have minor effects on habitats which would not extend beyond the federal property boundary.

The designs of the one pit toilet and the two wastewater systems were approved by the Alaska Department of Environmental Conservation on March 6, 2004. These facilities would not affect rivers, wetlands, water quality, fish or wildlife habitat.

6 AAC 80.140. AIR, LAND, AND WATER QUALITY.

Notwithstanding any other provision of this chapter, the statutes pertaining to and the regulations and procedures of the Alaska Department of Environmental Conservation with respect to the protection of air, land, and water quality, in effect on August 18, 1992, are incorporated into the Alaska coastal management program and, as administered by that agency, constitute the components of the coastal management program with respect to those purposes. (Eff. 7/18/78, Register 67; am 5/20/93, Register 126)

Analysis: Applicable water quality standards in 18 AAC 70 were analyzed under this policy. Construction of the two wastewater systems and one pit toilet were approved by the Alaska Department of Environmental Conservation on March 6, 2004. These facilities will not discharge effluent into coastal zone waters. The project activities, both short-term and long-term, will not violate water quality standards.

All construction would occur on land under federal ownership which is outside the coastal zone. No other lands would be affected. Facility construction and operation would not affect air quality at the site or in the surrounding area.

6 AAC 80.150. HISTORIC, PREHISTORIC, AND ARCHAEOLOGICAL RESOURCES

Districts and appropriate state agencies shall identify areas of the coast which are important to the study, understanding, or illustration of national, state, or local history or prehistory. (Eff. 7/18/78, Register 67)

Analysis: There are no known cultural resources in the project area. If any cultural resources would be discovered during construction activities, the site would be protected and the activities would cease until the park archeologist can be notified and has the opportunity to evaluate the site.

Enforceable Policies of the City and Borough of Yakutat CMP that apply to the Dry Bay project are described below.

Coastal Development Policies

2.1 Waterbody Development

In planning for and approving uses and activities in waterfront areas, the following order of priority shall be used:

- a. First, to water-dependent uses and activities;
- b. Second, to water-related uses and activities; and
- c. Finally, to obtain approval to site a use or activity that is not water dependent nor water-related in the coastal area, the applicant must demonstrate:

- There is a public need for the proposed use or activity;
- There are no feasible and prudent inland alternatives that would meet the public need and allow siting away from the coastal area; and
- All significant adverse impacts on coastal resources will be minimized.

Analysis: See analysis of COASTAL DEVELOPMENT (6 AAC 80.040).

Recreation Policies

4.1 Development Impacts to Recreational Use Areas

To the extent feasible and prudent, subject uses shall avoid significant adverse impacts to recreational use areas. Where the reviewing agency determines it is not feasible or prudent to avoid significant adverse impacts to recreational use areas, subject uses shall be planned, located, operated, and maintained to minimize impacts on recreational uses and to accommodate recreational activities in the recreation use areas.

Analysis: See analysis of RECREATION (6 AAC 80.060)

Subsistence Policies

10.1 Development of Subject Uses in Subsistence Use Areas

Subject uses shall avoid significant adverse impact on subsistence resources, use of those resources, and subsistence use areas.

10.2 Access

Traditional and customary access for subsistence use within subsistence use areas on public land shall be accommodated unless reasonable alternative access is provided.

Analysis: See analysis of SUBSISTENCE (6 AAC 80.120).

Fish and Wildlife and Habitats Policies

11.1 Development Planning

To the extent feasible and prudent, all subject uses shall be conducted to avoid significant adverse impacts on fish, shellfish and wildlife, and their habitats.

Analysis: See analysis of HABITATS (6 AAC 80.130).

11.4 Threatened and Endangered Species

Subject uses shall be developed such that habitat important to the continued existence of threatened and endangered species (plants and animals), is protected.

Analysis: There are no known endangered or threatened species or species of concern in the project area and it does not contain critical habitat for any endangered or threatened species or species of special concern. Therefore there is “no effect” from the project under the Endangered Species Act, Section 7

Air, Land, and Water Quality Policies

12.1 Discharge and Runoff to Waterbodies

a. To the extent feasible and prudent, water contaminants shall be removed, reduced, or treated on-site before being discharged to waterbodies. Techniques include treatment by vegetation and soils, proper disposal of oil, and diversion of impervious surface runoff through grassy swales.

Analysis: See analysis of AIR, LAND, AND WATER QUALITY (6 AAC 80.140).

Historical and Archeological Resources Policies

13.1 Protection for Cultural Resources

Prior to the development of a subject use, the developer, in consultation with the City and Borough of Yakutat coastal coordinator and the State Historic Preservation Officer (SHPO), shall do the following:

1. To determine if any known resources are located within a project area, review local, state, and federal inventories.

Analysis: See analysis of HISTORIC, PREHISTORIC, AND ARCHAEOLOGICAL RESOURCES (6 AAC 80.150).

CONSISTENCY DETERMINATION: Based on the above information the National Park Service finds that the Dry Bay Facility Improvements in Glacier Bay National Park and Preserve would not have any effects on land or water resources in the coastal zone. The negligible to minor impacts associated with the project would be confined to federal lands.

APPENDIX 5

STATEMENT OF FINDINGS
REGARDING FLOODPLAIN

Glacier Bay National Park and Preserve

Dry Bay Facility Improvements

Recommended: _____
Superintendent, Glacier Bay National Park and Preserve Date

Recommended: _____
Chief, Water Resources Division National Park Service Date

Approved: _____
Acting Regional Director, Alaska Region NPS Date

**STATEMENT OF FINDINGS
REGARDING FLOODPLAINS
Glacier Bay National Park and Preserve
Dry Bay Facility Improvements**

April 2004

Introduction

The existing National Park Service (NPS) facilities at the Dry Bay area of Glacier Bay National Preserve (GLBA), Alaska, need repair or replacement due to wood rot and moss damage. The area of potential effect is in a lightly developed seasonal commercial fishing area along the southeast bank of the Alsek River. It is about 50 miles southeast of Yakutat (nearest town) and about 110 miles northwest of Gustavus (park headquarters). The area is also within the Yakutat Borough. The NPS does not have flood hazard maps for Dry Bay; based on the history of the locality, however, it is believed that the entire area is well within the 100-year floodplain.

The NPS proposes to demolish, reconstruct, construct or improve several facilities:

Visitor Facilities:

- relocate the river rafters' takeout point
- relocate the river rafters' camp area
- demolish the existing sewage dump station and septic tank
- construct a new sewage dump station with septic tank and leach field
- construct an outhouse over the septic tank
- demolish and fill the existing pit toilet
- reconstruct an airplane taxiway

Public Use Cabin:

- demolish and fill the existing pit toilet
- construct a new pit toilet

Ranger Station:

- reconstruct a storage shed and add a workshop
- reconstruct the shower room, add a toilet and demolish the workshop
- construct an open, three-sided storage shed
- reconstruct the volunteer cabin
- reconstruct the bunkhouse cabin
- construct a fuel storage building
- construct a wastewater system with septic tank and leach field

Justification for Use of the Floodplain

Executive Order #11988, as implemented by the NPS through Director's Order 77-2, requires the agency to evaluate impacts of actions in floodplains. The order states, in part, that actions should avoid impacts to floodplains to the extent practicable and avoid new construction in floodplains

where a practicable alternative is available. The NPS prepared an environmental assessment in which the preferred alternative describes the construction of NPS facilities in the existing development area of Dry Bay in the 100-year floodplain.

The NPS would clear and develop about one additional acre of land for the project. The existing facilities in the project area cover about 20 acres of developed or cleared land – an air strip, ATV trails, ranger station, commercial fishing cabins, fish processing building and river rafters' camp area. Natural drainage patterns would not be altered. No flood control or stream channel structures or devices are now in place.

Construction of the proposed facilities in a location besides the floodplain would be impractical since the entire area is a coastal gravel outwash plain of recent origin. Moving the NPS visitor service facilities and administrative support facilities to another location, out of the area, would not accomplish the purposes of the project.

The project site is located within 1,000 feet of a side channel of the Alsek River. This side channel has historically been unstable because it is part of the gravel outwash plain of the Alsek River. This flat coastal outwash plain is about 10 miles wide and 10 miles long. The project area is at about 25 feet to 30 feet elevation and is four miles inland from the Gulf of Alaska. High ground is limited in the Dry Bay area. There is no higher ground near the project area in a location suitable for building.

Site-Specific Flood Risk

The project area is at risk from glacial outburst flooding. Glacial ice or moraine dams block portions of the Alsek River or its tributaries and create lakes. These lakes are about 20 miles to 100 miles upstream from the project area. When the ice or moraine dams fail, sudden glacial outburst floods can result. A large glacial outburst flood would inundate the entire preserve with the exception of the Bear Island area and the Deception Hills. Tlingit oral history records three such events in the area in the last 400 years.

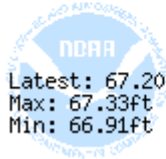
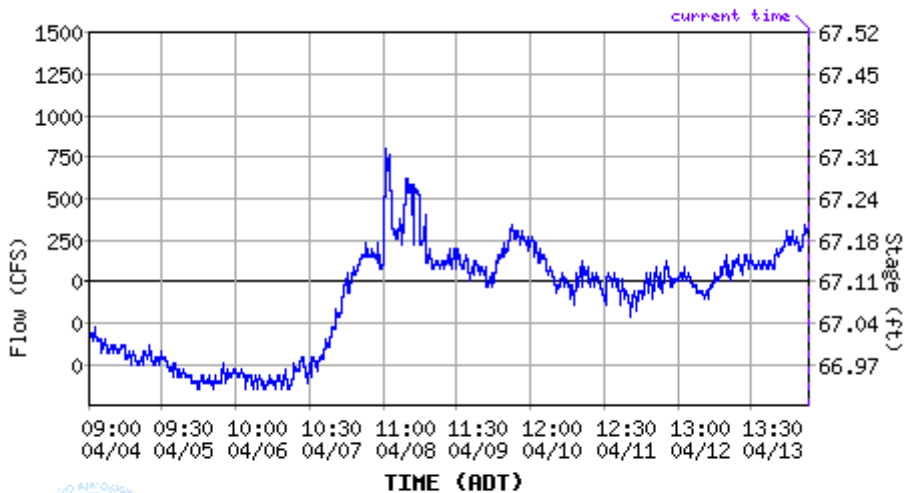
The region is subject to heavy rainfall, primarily during the months of August through November. Heavy regional rains or snowmelt could result in surge-release flood flows. These normal seasonal floods occur at a pace slow enough that people and property could be evacuated. In 1986, a change in the channel of the Alsek River eroded the former ranger station site and the station (made up of tent frames) was moved.

The project area was inundated frequently in the 1900s, and as late as 1975 the vegetation was no taller than three feet. Today alder and spruce trees are taller than 40 feet. The Dry Bay area is experiencing broad elevation uplift due to isostatic rebound (the rise of land from recent loss of the bearing weight of glaciers) and from tectonic movement. The rate of uplift is about one foot per decade. This uplift may be the primary cause of the recent changes in vegetation cover and may decrease flood risk and increase natural river channel stabilization.

The National Weather Service monitors the Alsek River flow and publishes the data on its website, <http://aprfc.arh.noaa.gov/cgi-bin/ahps.cgi?pajk&alka2#contents>. The gauging station is not far above the project area. Flow rates of 130,000 CFS do not reach flood stage. Flood stage is at 88 feet and was passed in 2002 and 1997. These two most recent floods did not reach the proposed project sites.

Alsek River at Walker Glacier
Observations courtesy of the US Geological Survey.
Flood Stage: 88.00 Feet
Latest Stage: 67.20 Feet at 08:30 ADT 04/14/04

ALSEK RIVER AT ALSEK RIVER NR YAKUTAT
 (ALKA2, USGS 15129000) Gauge Datum = 250.00ft (NGVD29)



Latest: 67.20 ft 340 CFS (0% of flood flow) [08:30 04/14]
 Max: 67.33ft (808 CFS) Max Fcst: NONE
 Min: 66.91ft (0 CFS) Min Fcst: NONE

**Tabular
Data**

Top 4 Historical Crests:

Stage	Flow	Date	Remarks
89.72 Ft	181000 CFS	08/13/2002	
89.30 Ft	175000 CFS	08/14/1997	Minor flooding reported along developed areas US from mouth at Dry Bay.
85.93 Ft	130000 CFS	08/06/2000	
85.74 Ft	132000 CFS	07/04/1992	

The National Weather Service also has a tsunami warning system in place that could give a few hours warning to the NPS staff at Dry Bay. The warnings are published on their website <http://wcatwc.arh.noaa.gov/message.shtml>.

Flood Mitigation Plans

In order to minimize damage from a flood, all structures would be situated on high ground, five feet to eight feet above the seasonal high groundwater table. Structural designs would be consistent with criteria of the National Flood Insurance Program (44 CFR Part 60). Facility design would provide temporary protection from catastrophic loss by surface sheet flow from a

gradually rising water table. Buildings would be constructed on skids so they could be moved if the river changes course or floods. Facilities would not be designed to withstand a shift in the channel of the Alsek River or a high velocity erosive flow through the project area.

The facilities would be evacuated in the event of extreme local flood hazard such as abnormally high precipitation. Evacuation would also occur if the National Weather Service issued a major flood warning, a tsunami warning, or if another agency such as the Department of Homeland Security or the Alaska Division of Emergency Services ordered an evacuation.

Transportation to and from the Dry Bay area is by NPS patrol plane or air taxi. During inclement weather, these small aircraft often cannot safely fly to Dry Bay and are unable to support an evacuation.

The NPS boat and the commercial fishing boats in the Dry Bay area are primarily used for travel on the Alsek River and East Alsek River and are not oceangoing vessels. These riverboats would likely be ineffective in the event of an evacuation, especially during inclement weather.

Normally evacuation would be accomplished by aircraft. If time or weather conditions did not allow for evacuation by aircraft, however, and if the flood hazard were significant and imminent (e.g., from a glacial outburst flood or a tsunami), then higher ground would be sought.

The NPS staff has four-wheel ATVs for regular local transportation at Dry Bay. These would be used to travel 6.4 miles by ATV trail to high ground at Bear Island and its 215-foot elevation prominence.

The other evacuation mode would be by riverboat, eight miles to the coast in the event of a river flood, or upstream in the event of a tsunami.

These evacuation measures are in the standard operating procedures of the Dry Bay Operation Manual, GLBA, NPS.

Mitigation measures taken in this project provide the same level of protection as has been present in the Dry Bay developed area in the past. Additional flood mitigation measures may be utilized in the future as knowledge of flood hazard conditions improve.

Summary

With the above mitigation measures in place, GLBA determines that the natural floodplain values would be protected and potentially hazardous conditions associated with floods would be minimized to the extent practicable.

