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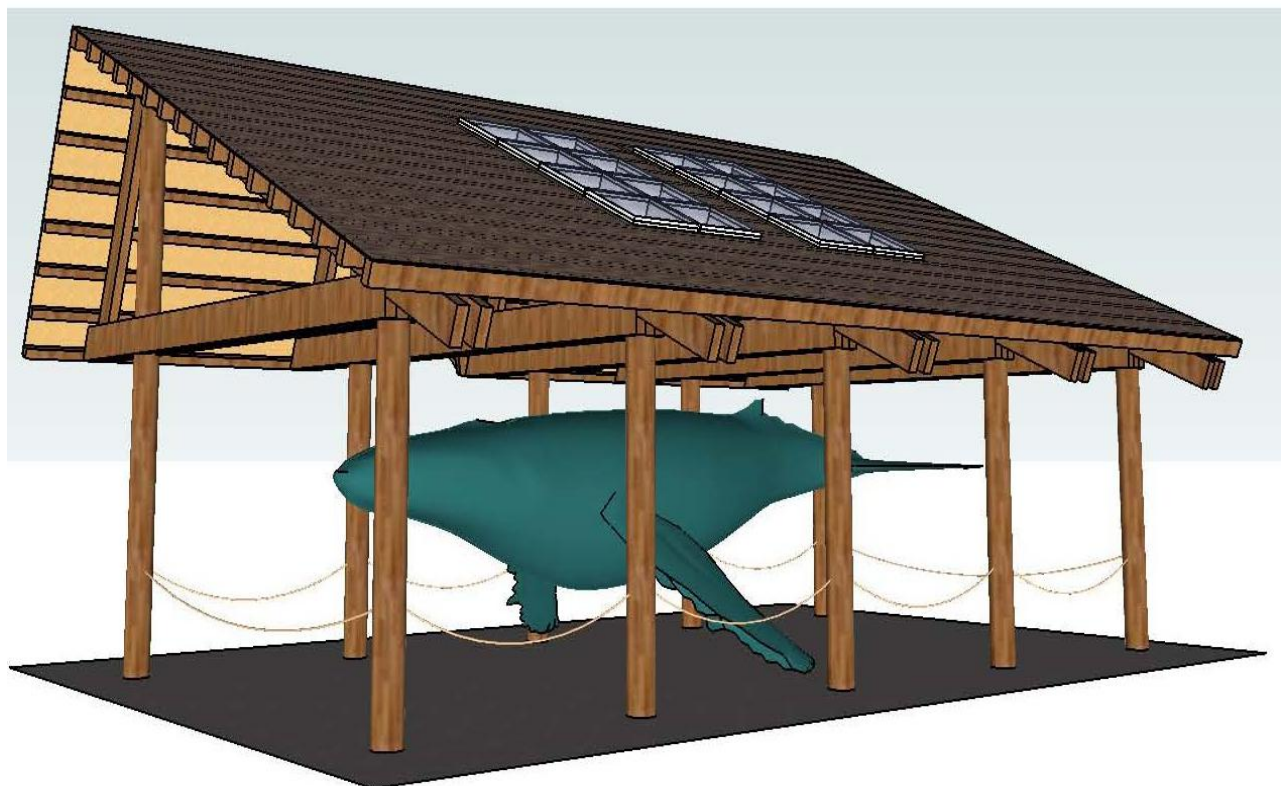
Glacier Bay National Park and Preserve

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## **Whale Skeleton Shelter in the Bartlett Cove Area**

### **Environmental Assessment June 2011**

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### **Note to Reviewers**

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## Table of Contents

Item	Page
CHAPTER 1: PURPOSE AND NEED FOR ACTION.....	1
1.1 Purpose for Action.....	1
1.2 Need for Action .....	1
1.3 Purpose and Significance of the Park .....	2
1.4 Legal Mandates, Regulations, and Policies .....	3
1.5 Relationship to Other Park Planning .....	4
1.6 Issues and Impact Topic .....	4
1.6.1 Issues Considered for Further Evaluation .....	4
1.6.2 Issues Eliminated from Further Consideration.....	4
1.7 Other Permits and Approvals Needed to Complete the Project.....	5
CHAPTER 2: ALTERNATIVES .....	6
2.1 Alternative A No Action .....	6
2.2 Alternative B: Construct a Whale Skeleton Shelter in the Bartlett Cove Area (NPS Preferred Alternative) .....	6
2.3 Mitigation Measures.....	7
2.4 The Environmentally Preferred Alternative .....	8
2.5 Alternatives Considered but Rejected .....	8
CHAPTER 3 AFFECTED ENVIRONMENT .....	9
3.1 Vegetation.....	9
3.2 Wildlife .....	9
3.3 Cultural Resources.....	10
3.4 Visitor Experience:.....	11
CHAPTER 4: ENVIRONMENTAL CONSEQUENCES .....	12
4.1 Impact Criteria.....	12
4.2 Alternative A: No Action .....	12
4.3 Alternative B: Construct a Whale Skeleton Shelter in the Bartlett Cove Area (NPS Preferred Alternative) .....	13
CHAPTER 5: CONSULTATION AND COORDINATION .....	17
5.1 Public Involvement.....	17
5.2 List of Preparers and Consultation .....	17
APPENDIX A: DETERMINATION OF IMPAIRMENT .....	18
APPENDIX B: ANILCA SECTION 810(A) SUMMARY EVALUATION AND FINDINGS .....	19

## CHAPTER 1: PURPOSE AND NEED FOR ACTION

### 1.1 Purpose for Action

The National Park Service (NPS) is considering the construction of an open-air structure to showcase a 46-foot whale skeleton in Glacier Bay National Park (Figure 1). The structure would be located within the Bartlett Cove Developed Area along the Bartlett Cove coastal trail. Bartlett Cove is designated as a Cultural Landscape and a Traditional Cultural Property (TCP). The display would also be within the boundary of the Glacier Bay Lodge Complex Historic District (Historic District). The structure would be designed to complement the historic architectural design of the lodge with an emphasis on preserving the lodge's view of Bartlett Cove, which is an important element of the original lodge architectural design. The whale interpretive display

would be in an easily accessible and frequently visited location along the coastal trail, which is used on a daily basis by park visitors walking between the lodge, kayak outfitter concession kiosks, Visitor Information Station (VIS), and the public dock. The open-air structure would shelter the second largest rearticulated humpback whale skeleton in the world and draw public attention to the important mission of NPS to preserve natural resources for future generations.



Figure1. Project Area Location and Bartlett Cove

### 1.2 Need for Action

Humpback whales are frequently seen in Glacier Bay and are a main attraction for visitors exploring Glacier Bay National Park. In the summer of 2001, a dead humpback whale was found floating in the mouth of Glacier Bay. The carcass was beached and secured for necropsy. The 46-foot female whale was identified as a periodic visitor to park waters and some of her life history is known. Since 2001, many volunteers from the community, including high school and college students, have worked alongside NPS staff to retrieve, clean and preserve the whale bones.

The proposed action would enable the NPS to display the entire whale skeleton, to tell the story of this whale, and use this opportunity to educate the public about the species' life history and conservation threats to whales in general. The ability to display the humpback skeleton in an open-air setting would not be possible without the shelter and the potential educational value of the skeleton would be diminished. No existing buildings accessible to the public in Bartlett Cove can accommodate the full skeleton.

This environmental assessment (EA) analyzes the impacts of the proposed action and no-action alternative. This EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969, regulations of the Council of Environmental Quality (CEQ) (40 Code of Federal Regulations 1508.9), and the NPS NEPA compliance guidance handbook (Director's Order (DO)-12, *Conservation Planning, Environmental Impact Analysis, and Decision Making*)(NPS, 2001a).

### **1.3 Purpose and Significance of the Park**

Glacier Bay National Monument was created by presidential proclamation in 1925. The monument was expanded and re-designated Glacier Bay National Park and Preserve by the Alaska National Interest Lands Conservation Act (ANILCA) in 1980, which also designated the National Preserve near Dry Bay and Yakutat, Alaska.

The purpose of Glacier Bay National Park and Preserve is to protect a dynamic tidewater glacial landscape and associated natural successional processes for science and discovery in a wilderness setting.

#### **Significance Statements**

- Glacier Bay National Park and Preserve fosters unique opportunities for scientific studies of tidewater glacial landscapes and associated natural successional processes.
- Glacier Bay National Park and Preserve gathers and protects records of exploration, scientific endeavor and human use, and provides for understanding the landscape through the lens of human experience and study.
- Glacier Bay National Park and Preserve protects ecological integrity by preserving a diversity of large, contiguous, intact ecosystems (from the highest peaks of the Fairweather Range to the open Pacific Ocean and sheltered inland fjords) that are strongly dominated by natural processes.
- Glacier Bay National Park and Preserve protects a natural biophysical landscape that is continually changing through large-scale natural disturbance followed by the biological succession of plants and animals, and accompanied by an evolving physical environment.
- Glacier Bay National Park preserves one of the largest units of the national wilderness preservation system, encompassing more than 2.7 million acres of glacially influenced marine, terrestrial, and freshwater ecosystems.



- Glacier Bay National Park preserves one of the largest (nearly 600,000 acres) areas of federally protected marine ecosystems in Alaska (including submerged lands) against which other less protected marine ecosystems can be compared.
- Glacier Bay National Park and Preserve lies within two Tlingit ancestral homelands that are of cultural and spiritual significance to living communities today.
- Glacier Bay National Park provides diverse opportunities for visitors to experience a dynamic tidewater glacial landscape
- Glacier Bay National Park and Preserve protects the remote and wild character of the Alsek River as a significant route of discovery and migration through the coastal mountain range to the Pacific Ocean.

## **1.4 Legal Mandates, Regulations, and Policies**

The following laws and associated regulations provided guidance for the development of this EA, design of the Preferred Alternative, analysis of impacts, and creation of mitigation measures to be implemented as part of the preferred alternative.

### **1.4.1 NPS Organic Act**

The NPS Organic Act (1916) and the General Authorities Act (1970) prohibit impairment of park resources and values. The NPS 2006 Management Policies and Director's Order #55 use the terms "resources and values" to mean the full spectrum of tangible and intangible attributes for which the park was established and is managed, including the Organic Act's fundamental purpose and any additional purposes as stated in the park's establishing legislation. The impairment of park resources and values may not be allowed unless directly and specifically provided by statute. The primary responsibility of the NPS is to ensure that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities to enjoy them.

The evaluation of whether impacts of a preferred alternative would lead to an impairment of park resources and values is included in this EA. Impairment is more likely when there are potential impacts to a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- essential to the natural or cultural integrity of the park or to opportunities for enjoyment of the park; or
- identified as a goal in the park's General Management Plan (GMP) or other relevant NPS planning documents.

The determination of impairment for the preferred alternative is found in Appendix A.

## **1.5 Relationship to Other Park Planning**

Existing plans for Bartlett Cove development include the 1984 General Management Plan (GMP) and the Comprehensive Design Plan EA/FONSI signed in 1998. As the skeleton was retrieved in 2001 neither of these plans include such an exhibit or any structure large enough to house the skeleton. In 2007 the park's Division of Interpretation prepared a proposal to upgrade and expand the park's wayside exhibits in and around Bartlett Cove. A potential exhibit for the whale was added to the proposal.

## **1.6 Issues and Impact Topics**

To focus the analysis of the project's potential environmental impacts, the NPS identified specific issues for further evaluation. Some topics were eliminated from further analysis as impacts to them were unlikely.

### **1.6.1 Issues Considered for Further Evaluation**

*Vegetation:* Vegetation would be disturbed as a result of shelter construction. Shrubs and native vegetation would be cleared from the construction area; however, only secondary growth vegetation is present at the site.

*Wildlife:* Migratory and nesting birds, resident mammals, and amphibians could be disturbed or displaced from the project area during construction. However, movement patterns through the Bartlett Cove area should not be permanently altered by the proposed project.

*Visitor Experience:* During project construction, park visitors using the coastal trail could be affected by the sights and sounds of construction activities. The proposed whale skeleton display could improve the experience of park visitors by increasing educational and interpretive opportunities in the Bartlett Cove area. Ground clearing and construction can be scheduled to avoid peak Lodge and visitor use periods.

*Cultural Resources:* Bartlett Cove has been designated a TCP. General cultural landscape characteristics for this area include natural systems and features, land use, spatial organization, cultural traditions, buildings and structures, and archeological sites. Of these characteristics, the Historic District could be affected by the construction of the whale shelter. The shelter may affect the lodge view of Bartlett Cove, which is an important part of the original architectural design. As a TCP, consideration is given to the possible effects that the project may have on the natural systems and features and how that relates to the Hoonah Tribe's cultural beliefs and traditions associated with the Bartlett Cove area.

### **1.6.2 Issues Eliminated from Further Consideration**

*Soils:* The proposed action would require minimal disturbance to native soils at a site that has been previously disturbed. The overall impact on the soils in the Bartlett Cove Developed Area would be minimal.

*Water Quality:* The project area is not located on any stream drainage systems. Project design and construction would incorporate best design standards to reduce surface runoff into Bartlett Cove.

*Soundscape:* The soundscape of the Bartlett Cove area could be affected by the sounds of project construction. Construction would be of short duration (four weeks) and would occur outside the summer visitor season.

*Wetlands:* The Clean Water Act, Executive Order 1190, and 11988, and NPS policies require examination of impacts to wetlands. There are no wetlands on the proposed site.

*Threatened and Endangered Species:* No Threatened and Endangered Species occur in the project area.

*Wilderness:* The proposed action would not occur within designated or eligible wilderness and therefore would not impact wilderness resources, character, or values.

*Subsistence:* The effects of the proposed action on subsistence uses and needs were dismissed from further analysis because the proposed action would not result in any restrictions to subsistence uses. An ANILCA Section 810(a) summary evaluation and analysis is contained in Appendix (B).

*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 be expected to result in significant changes in the socioeconomic environment of the project area, and therefore would not be expected to have any direct or indirect impacts to minorities or low-income populations or communities.

## **1.7. Other Permits and Approvals Needed to Complete the Project**

The National Marine Fisheries Service (NMFS) has regulatory jurisdiction over the possession of humpback whale parts, under the Marine Mammal Protection Act of 1972 and the Endangered Species Act (1973). NPS collected the entire whale skeleton under the authority of NMFS permits issued for the Alaska marine mammal stranding network. NPS has obtained from NMFS a further permit to retain and display the skeleton.



## CHAPTER 2: ALTERNATIVES

The council on Environmental Quality (CEQ) regulations for implementing NEPA requires that Federal agencies explore and objectively evaluate all reasonable alternatives to the Preferred Alternative and briefly discuss the rationale for eliminating any alternatives that are not considered in detail. This chapter describes the No Action Alternative and the Preferred Alternative.

### 2.1 Alternative A (No Action)

Under the No Action Alternative, no additional structure would be built in the Bartlett Cove area to house the whale skeleton. Selected bones would be incorporated into existing interpretive and educational programs or housed in the Visitor Center in the Lodge. Due to limited space, the entire whale skeleton would not be displayed.

### 2.2 Alternative B: (Construct A Whale Skeleton Shelter in Bartlett Cove) (NPS Preferred Alternative)

Under this alternative, the entire whale skeleton would be articulated and mounted under a 22 foot x 30 foot x 50 foot (height x width x length) open-air, roofed shelter along the coastal trail in Bartlett Cove at the southwest corner of the Historic District (Figure 2). The proposed structure would provide a place to display the skeleton and informational panels, protect it from the weather and offer rain protection for visitors viewing the exhibit. The shelter would be designed with respect to orientation, form, scale, scope, materials and roof shape which characterize the Lodge historic district. To improve viewing light conditions, skylights may be included in the structure design.

The whale skeleton would be mounted from the ground supported by steel bars. The shelter would be built from heavy timber framing and have a dirt/gravel floor.

Native vegetation would be cleared from the construction area (about 1,500 ft<sup>2</sup>). Roof supports would be mounted on concrete pilings embedded 5 to-6 feet deep in the ground. The concrete pilings would prevent rotting of the wooden support structure. Shelter construction would occur outside the May through August summer visitor season while skeleton rearticulation and mounting could occur throughout the summer months. The site would require periodic vegetation pruning or removal to prevent vegetation encroachment.

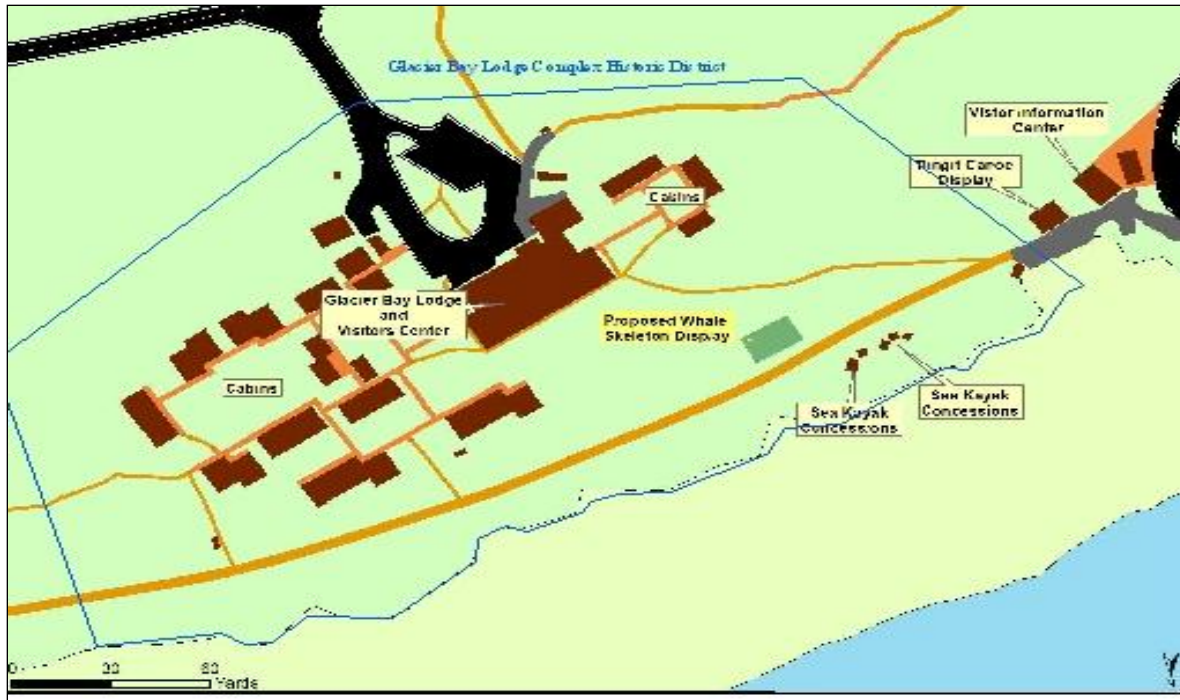


Figure 2. Proposed Project Location.

## 2.3 Mitigation Measures

*Migratory and nesting birds:* Migratory and nesting birds could be disturbed or displaced from the project area during construction. In order to protect migratory birds the NPS will comply with the US Fish and Wildlife Service's Advisory regarding recommended time periods for avoiding vegetation clearing in Alaska. Vegetation clearing, grubbing, and other site preparation activities will not occur from April 15 to July 15. If an active nest is encountered, at *any time*, including before or after the local timing window, leave it in place and protected until young hatch and depart. "Active" is indicated by intact eggs, live chicks, or presence of adult on nest.

*Cultural Resources:* Archeological site clearance would be conducted prior to the commencement to construction of the whale skeleton shelter, as necessary. If archaeological features are encountered during construction, work would cease immediately and the Superintendent and park Cultural Resources Program Manager would be notified. Procedures would be followed, as per Director's Order 28 and found in the guiding regulations in 36 CFR 800.13. No further action would take place until the NPS provides clearance.

## 2.4 Environmentally Preferred Alternative

As stated in Section 2.7 (D) of the NPS DO-12 Handbook, "The environmentally preferred alternative is the alternative that will best promote the national environmental policy expressed in NEPA (Section 101(b))." The environmentally preferred alternative is the alternative that not only results in the least damage to the biological and physical environment, but that also best protects, preserves, and enhances historic, cultural, and natural resources. Alternative A (No

Action) is the environmentally preferred alternative because no new adverse impacts to the environment would occur.

## **2.5 Alternatives Considered But Rejected**

The NPS considered several locations for the whale skeleton shelter along the coastal trail in the Bartlett Cove Developed area. Sites in the direct viewshed of the Lodge were dismissed because the shelter would obstruct and dominate the ocean view from the Lodge deck, which is an important element of the original lodge architectural design. Another site on the coastal trail adjacent to the campground was dismissed because it was not near the high-traffic areas at the VIS and Lodge and because it would expand the Bartlett Cove development footprint.

## CHAPTER 3: AFFECTED ENVIRONMENT

### 3.1. Vegetation

Bartlett Cove is situated on a remnant of a terminal moraine created by the advance and retreat of



the Glacier Bay Icefield following the Little Ice Age. The land is rising about an inch per year as the earth's crust is freed from the weight of glacial ice. As the glaciers receded, plant communities evolved over a period of at least 170 years into an even-aged, high-density, spruce-dominated forest, with mosses, devil's club and blueberries as the primary understory vegetation. Much of the Bartlett Cove area is situated in this moist forest community.

Photo 1. Existing vegetation on the project site.

The vegetation on the site proposed for the whale shelter has been previously disturbed by periodic selective clearing to maintain the ocean view from the lodge, installation of underground utilities, and by the old roadbed which became the existing coastal trail (Photo 1). Plant species occurring on the site include Sphagnum species, ferns, beach strawberry, nagoonberry, cow parsnip, ocean spray, *Saxifraga* spp., red baneberry, black currant, high-bush cranberry, fireweed, devils club, elm-leaf goldenrod, speckled alder, Sitka spruce, western hemlock, and willow species.

### 3.2 Wildlife

Many existing developments and public use occurs along the shoreline of Bartlett Cove. Shoreline habitats (beachfront, intertidal and subtidal) are typically rich and fragile communities and serve as important wildlife corridors and foraging areas. Common wildlife species include black bear (*Ursus americanus*), mink (*Mustela vison*), river otter (*Lutra canadensis*), northern flying squirrel (*Glaucomys sabrinus*), porcupine (*Erethizon dorsatum*), red squirrel (*Tamiasciurus hudsonicus*), voles (*Microtus* spp. and *Clethrionomys rutilus*), shrews (*Sorex* spp.), moose (*Alces alces*), little brown bat (*Myotis lucifugus*), big brown bat (*Eptesicus fuscus*) and western toad (*Bufo boreas*).

Over 57 species of birds have been identified in the Bartlett Cove area including bald eagle (*Haliaeetus leucocephalus*), northern saw-whet owl (*Aegolius acadicus*), northwestern crow (*Corvus caurinus*), blue grouse (*Dendragapus obscurus*), varied thrush (*Ixoreus naevius*), dark-



eyed junco (*Junco hyemalis*), chestnut-backed chickadee (*Poecile rufescens*), ruby-crowned kinglet (*Regulus calendula*), rufous hummingbird (*Selasphorus rufus*), American robin (*Turdus migratorius*), winter wren (*Troglodytes troglodytes*), migratory warblers and sparrows.

### 3.3 Cultural Resources

In 1997 NPS began in-depth consultations with HIA regarding non-tangible cultural values associated with the Bartlett Cove landscape. The entire area was evaluated for eligibility as a TCP on the National Register of Historic Places. A cultural landscape study conducted by the NPS Alaska Regional Office (Horton and Curran, 2004) determined that Bartlett Cove does qualify as a TCP and the SHPO concurred with the finding. With all of Bartlett Cove considered part of the TCP the proposed project needs to be inspected for historical artifacts that may be present. NPS has also consulted with HIA to determine what effects the proposed alternative would have on the cultural values Hoonah Tlingit associate with Bartlett Cove. Consultation determined that the project will not affect the overall natural integrity of the area, nor will it diminish aspects of integrity which include location, setting, feeling or association.

Built in 1965-1966 as part of the NPS Mission 66 initiative, Glacier Bay Lodge and the associated cabins are historically significant due to the environmentally sensitive modern and award winning architectural design. The Seattle firm of John Morse and Associates designed it



to be a small village, so each visitor could see and interact with the outdoors. The view of Bartlett Cove was also one of the pinpoints of the original architectural design and retains its importance (Photo 2). The Lodge embraced the modernist movement of the 1960s while retaining sensitivity to the Pacific Coast environment.

Photo 2. View of Bartlett Cove from the Lodge.

The Lodge complex is classified as a Historic District for its architectural, cultural and historical values (Figure 2).

### **3.4 Visitor Experience**

Bartlett Cove is the sole designated development area for Glacier Bay National Park. The area contains numerous facilities and supports a moderately high level of administrative and concessions-related activities. Ongoing maintenance, vehicle and vessel traffic occur throughout. There are some opportunities for natural quiet and solitude on trails and shorelines.

Bartlett Cove is a destination for some visitors and a staging area for others on their way to Glacier Bay and the park backcountry. Local residents, commercial, charter and recreational fishermen, researchers and others use Bartlett Cove facilities year round. Visitor facilities include the concessionaire-operated Lodge, the VIS, a 35-site campground, hiking trails, public support and safety services, and a departure point for boat excursions into Glacier Bay. The Lodge provides 56 overnight guest rooms, restaurant, gift shop, laundry and showers, motor vessel fueling, and an NPS visitor center with publications for sale by Alaska Geographic. The Forest Loop, Bartlett River, Bartlett Lake, and the coastal trail provide short hiking opportunities. The public dock at Bartlett Cove serves tour boats, private boats and float planes, and charter vessels. Kayak rental outfitters are also located along the coastal trail.

The coastal trail provides access to the Lodge, kayak rentals, Tlingit canoe shelter, VIS, public dock and campground. This trail is heavily used by pedestrians as well as maintenance and concession vehicles. The proposed shelter site is near the high-traffic areas at the VIS and Lodge (Figure 2).



## CHAPTER 4: ENVIRONMENTAL CONSEQUENCES

This chapter provides an evaluation of the potential effects or impacts of each of the alternatives on the resources described in the issue statements presented in Chapter 1.

### 4.1 Impact Criteria

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.

### 4.2 Alternative A: No Action

#### Vegetation and Wildlife

The No-Action alternative would have no impact on vegetation or wildlife in the Bartlett Cove Developed Area because a whale skeleton shelter would not be constructed.

*Cumulative Impacts:* The No-Action alternative would not result in additional impacts to Bartlett Cove vegetation communities or wildlife. The project area has been modified in the past due to vegetation clearing and installation of underground utilities. These periodic maintenance activities would continue.

*Conclusion:* The No-Action alternative would have no impact on vegetation and wildlife in the Bartlett Cove Developed Area.

#### Cultural Resources

The No-Action alternative would have no impact on cultural resources in the TCP or the Historic District because the whale skeleton shelter would not be constructed.

*Cumulative Impacts:* The No-Action alternative would not result in additional impacts to the TCP or Historic District.

*Conclusion:* The No-Action alternative would have no impact on the TCP or the Historic District.

### **Visitor Experience**

While the No-Action alternative would not change the experience a visitor would have while in the Bartlett Cove area, the NPS would miss an opportunity to offer visitors the chance to experience a fully articulated, complete humpback whale skeleton. The NPS could incorporate selected bones into existing interpretive and educational programs to tell the whales story and allow visitor some contact with the skeleton. Due to space limitations in the Bartlett Cove area it is unlikely that the whole whale skeleton could be displayed in any existing structure.

*Cumulative Impacts:* No additional impacts to visitor experience in the Bartlett Cove area would result from the No-Action alternative.

*Conclusion:* The No-Action alternative would have no impact on visitor experience in the Bartlett Cove area. The NPS would lose the opportunity to exhibit and interpret a fully articulated humpback whale skeleton.

## **4.3 Alternative B: Construct A Whale Skeleton Shelter in Bartlett Cove (NPS Preferred Alternative)**

### **Vegetation**

Approximately 0.04 acre (about 1,500 ft<sup>2</sup>) of vegetation, including a few larger spruce trees, would be cleared to provide space for shelter construction. Plant species occurring on the site are common to the Bartlett Cove area (See Chapter 3). After construction is completed some annual and perennial vegetation may re-establish around the shelter and require periodic pruning or removal to inhibit encroachment on the exhibit. This alternative would have low level, long-term negative impacts to vegetation in the Bartlett Cove area.

*Cumulative Impacts:* Existing facilities in the Bartlett Cove area cover about 31 acres of land resulting in the loss of mature spruce/hemlock forest and near shore perennial shrub communities. Construction and maintenance of existing buildings, roads, and trails has created disturbed soil areas that promote establishment or expansion of invasive non-native plants such as dandelion (*Taraxacum officinale*) or reed canary grass (*Phalaris arundinacea*). This alternative would contribute minor adverse impacts to vegetation in the Bartlett Cove area due to the small acreage of vegetation proposed for removal.

*Conclusion:* Alternative B would have minor impacts on vegetation in the Bartlett Cove area.

## **Wildlife**

Under Alternative B, wildlife would be affected by construction activities and the long-term loss of habitat.

Wildlife would be temporarily disturbed during site preparation and shelter construction activity that may occur during their migration or breeding season. Disturbance due to construction would last no more than two weeks during fall or spring. Near shore habitats provide important wildlife corridors and foraging areas for moose, bears, passerine birds, raptors and resident species such as blue grouse. Construction activities (approximately four weeks) could result in short-term avoidance of the project area but would not affect long-term wildlife movements along the Bartlett Cove coast.

The exposed whale bones may attract bears and porcupines. Gnawing animals may damage the skeleton over time, and the presence of bears could raise public safety concerns.

Compliance with the US Fish and Wildlife Service's Migratory Bird Advisory would limit disturbance and displacement impacts to migratory and nesting birds during project construction. Vegetation clearing, grubbing, and other site preparation activities would not occur from April 15 to July 15.

Alternative B would result in a permanent loss of 0.04 acre of primarily understory habitat. This loss is likely to affect a small number of individual animals but is not expected to alter regional populations because many acres of similar habitat exist throughout the Bartlett Cove area.

*Cumulative Impacts:* Past activity in Bartlett Cove has removed about 31 acres of mature forest and near shore upland habitats by converting it into building sites, roads and pedestrian walkways. Species that prefer frequently-disturbed mixed stand plant communities may be displaced initially, but will continue to use the project area plant community. Migratory and nesting birds have been affected over the long term by the removal of forest canopy during construction of the existing buildings and by recurring human disturbance during migration and nesting seasons. The loss of ground cover, native plants and associated seed, fruit and insect foods also reduces habitat for small mammals and amphibians native to mature spruce/hemlock forest. The increase in shrubby second growth habitat replacing mature spruce hemlock canopy habitat may have altered the wildlife community profile in Bartlett Cove over the past 50 years. This alternative would contribute minor adverse impacts to wildlife in the Bartlett Cove area due to the small loss of native vegetation (0.04 acres).

*Conclusion:* Alternative B would have minor impacts on wildlife in the Bartlett Cove area.

## **Cultural Resources**

The whale skeleton shelter would be located within the boundary of Historic District. The shelter, occupying about 0.04 acre, would be designed with respect to orientation, form, scale, scope, materials and roof shape, which characterize the Historic District. An important element of the original lodge architectural design was preservation of the view of Bartlett Cove. The

proposed shelter would be slightly visible from the lodge deck but would not obstruct the view of Bartlett Cove. Only a small portion of the eastern end of the structure would be visible from the lodge (Photo 3). The natural appearance of the shelter and regrowth of foliage would in time, help the structure blend into the natural scenery.

The roof of the structure would be visible from the westernmost cabins in the Lodge complex. However, the view of the Cove would not be obstructed since the shelter would be visible in the lower foreground on the viewshed. Vegetation clearing may improve the viewshed allowing a broader view of the Cove although the scene would be less natural in appearance.

Cultural surveys have not detected any archeological materials or culturally modified trees at the proposed project site. As Bartlett Cove qualifies as a Traditional Cultural Property and is eligible for visual the National Register of Historic Places, it is necessary to evaluate the project for its effect on this historic property. Through consultation with the Hoonah Tribe, it was determined



that the project will not affect the overall natural integrity of the area, nor will it diminish aspects of integrity, which include location, setting, feeling, or association.

This project is also located within the boundaries of Historic District.

Preliminary consultation with the SHPO resulted in reaching a finding of no adverse effect through use of design, materials, site location and partial vegetative screening. By minimizing the project's effect, the district maintains its integrity of

Photo 3. Lodge viewshed with simulated whale shelter.

setting, association, location, design, materials, and feeling.

*Cumulative Impacts:* Past construction activities have not impacted any archaeological resources in the project area. The new shelter would have a minimal affect on the Bartlett Cove TCP designation or the Historic District.

*Conclusion:* This alternative would have minor impacts on the Historic District and Traditional Cultural Property.

## **Visitor Experience**

Park visitors at the lodge, dock area or walking on the coastal trail may be inconvenienced by the sights and sounds of construction, heavy equipment and material transfer. These activities could diminish a visitors experience since they would be expecting a more quite natural experience. These impacts would be temporary, lasting approximately one summer season. The project schedule would be planned to minimize disturbance to park visitors to the Bartlett Cove area.

The proposed Whale Skeleton Shelter would have long-term positive benefits by increasing education and interpretation opportunities in the Bartlett Cove area. Bartlett Cove visitors would have the opportunity to experience a fully articulated, complete humpback whale skeleton.

Park visitors who do not come through Bartlett Cove will continue to receive information about humpback whales as they do now...through interpretive programs, videos, vessel trips in Glacier Bay, and through printed or web materials.

*Cumulative Impacts:* Positive cumulative effects on the visitor experience would be due to additional interpretive opportunity in the Bartlett Cove area of the park.

*Conclusion:* This alternative would result in minor, short term negative impacts to Bartlett Cove visitors during a portion of one summer season. In the long term, park visitors would benefit from the opportunity to experience a fully articulated, complete humpback whale skeleton in the Bartlett Cove area.

## **CHAPTER 5: CONSULTATION AND COORDINATION**

### **5.1 Public Involvement**

The park released a public scoping letter and request for comments in January 2008. A scoping meeting took place in February 2008. Twelve comments generally in favor of the skeleton exhibit were received. Consultations with the Hoonah Indian Association took place in 2008.

NPS consulted with Hoonah Indian Association (HIA), the associated federally recognized tribe, in February, 2010, concerning the whale shelter. The tribe expressed no concerns with the design or site location of the proposed project.

In November 2010, NPS consulted with the State Historic Preservation Officer (SHPO) on reaching a finding of no adverse effect on the Historic District through use of design, materials, site location and partial vegetative screening. By minimizing the project's effect, the district maintains its integrity of setting, association, location, design, materials, and feeling. As the introduction of a non-historic element into a historic district does not qualify for streamlined review under the 2008 Service wide Programmatic Agreement, the park will continue consultation with the SHPO and seek a formal written concurrence.

This environmental assessment is available for public review and comment for 30 days. It is available online at the National Park Service Planning, Environment, and Public Comment (PEPC) website. Go the <http://parkplanning.nps.gov> to access the PEPC site. Public comments on this environmental assessment can also be provided on the PEPC website.

### **5.2 List of Preparers and Consultants**

U.S. Department of the Interior, National Park Service:

#### Glacier Bay National Park and Preserve

Allison Banks, Environmental Protection Specialist  
Ken Hutchinson, Project Manager, Chief of Maintenance  
Chris Gabriele, Wildlife Biologist  
Michele Jespersen, Cultural Resource Program Manager

#### Alaska Regional Office

Glen Yankus, Environmental Protection Specialist  
Daniela Pulgretova, Biological Science Technician



## **APPENDIX A: DETERMINATION OF IMPAIRMENT**

A determination of impairment is made for each of the resource impact topics carried forward and analyzed in the environmental impact statement for the preferred alternative. The description of park significance in Chapter 1 was used as a basis for determining if a resource is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, or
- key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or
- identified in the park's general management plan or other relevant NPS planning documents as being of significance.

Impairment determinations are not necessary for visitor experience because impairment findings relate to park resources and values. This impact area is not generally considered to be park resources or values according to the Organic Act, and cannot be impaired the same way that an action can impair park resources and values.

### **NATURAL RESOURCE TOPICS**

#### **Vegetation and Wildlife**

Approximately 0.04 acre of vegetation and wildlife habitat in the Bartlett Cove Developed area of the park would be altered. The loss of habitat is likely to affect a small number of individual animals but is not expected to alter the overall populations in the region. Because impacts to vegetation and wildlife would be minor, the preferred alternative would not result in impairment.

#### **Cultural Landscapes**

Because impacts on the Historic District and the Bartlett Cove Traditional Cultural Property would be minor, the preferred alternative would not result in impairment.

### **SUMMARY**

As described above, adverse impacts anticipated as a result of implementing the preferred alternative on a resource or value whose conservation is necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park, key to the natural or cultural integrity of the park or to opportunities for enjoyment of the park, or identified as significant in the park's general management plan or other relevant NPS planning documents, would not rise to levels that would constitute impairment.

## **APPENDIX B: ANILCA SECTION 810(A) SUMMARY EVALUATION 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 should the National Park Service (NPS) construct a shelter to house a rearticulated humpback whale skeleton in Glacier Bay National Park. 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 affected 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."*

Presidential proclamation of 1925 and 1939 established and expanded Glacier Bay National Monument. In 1980, Title II of 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 was 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 Section 202(1), created Glacier Bay National Park and Preserve 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.”*

Federal law and regulations prohibit ANILCA Title VIII subsistence uses on federal public lands 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.

ANILCA 816 (a) states:

*“All national parks and park monuments in Alaska shall be closed to the taking of wildlife except for subsistence uses to the extent specifically permitted by this Act. Subsistence uses and sport fishing shall be authorized in such areas by the Secretary and carried out in accordance with the requirements of this title and other applicable laws of the United States and the State of Alaska.”*

With regards to Glacier Bay National Preserve, Section 1313 of ANILCA 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. Consistent with the provisions of Section 816, within national preserves the Secretary may designate zones where and periods when no hunting, fishing, trapping, or entry may be permitted for reasons of public safety, administration, floral and faunal protection, or public use and enjoyment. Except in emergencies, any regulations prescribing such restrictions relating to hunting, fishing, or trapping shall be put into effect only after consultation with the appropriate State agency having responsibility over hunting, fishing, and trapping activities.”*

ANILCA Sections 1314 (c) states:

*“The taking of fish and wildlife in all conservation system units; and in national conservation areas, national recreation areas, and national forests, shall be carried out in accordance with the provisions of this Act and other applicable State and Federal law. Those areas designated as national parks or national park system monuments in the State shall be closed to the taking of fish and wildlife, except that--*

*(1) notwithstanding any other provision of this Act, the Secretary shall administer those units of the National Park System and those additions to existing units, established by this Act and which permit subsistence uses, to provide an opportunity for the continuance of such uses by local rural residents; and*

*(2) fishing shall be permitted by the Secretary in accordance with the provisions of this Act and other applicable State and Federal law."*

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 that would reduced or eliminate the use."

### III. Proposed Action on Federal Lands

The Description of Alternatives section of the EA describes each alternative considered in detail. The follow is a brief summary of each alternative.

#### Alternative A "No Action"

Under the no-action alternative the whale skeleton shelter would not be built. Selected whale bones would be incorporated into existing displays in the park Visitor Center or used in interpretive and educational programs.

#### Alternative B Construct the Whale Skeleton Shelter in Bartlett Cove

Under this alternative, the entire whale skeleton would be articulated and mounted under a 22 foot x 30 foot x 50 foot (height x width x length) open-air, roofed shelter along the coastal trail in Bartlett Cove at the southwest corner of the Glacier Bay Lodge Complex Historic District. The proposed structure would provide a place to display the skeleton and informational panels, protect it from the weather and offer rain protection for visitors viewing the exhibit. The shelter would be designed with respect to orientation, form, scale, scope, materials and roof shape which characterize the Lodge historic district. To improve viewing light conditions, skylights may be included in the structure design.

### 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.

Other important subsistence use areas within the region include Icy Strait, Excursion Inlet, Cross Sound, Port Frederick, and Tongass National Forest. Most of the rural communities of southeastern Alaska rely on renewable natural resources for at least a portion of their subsistence

needs. About one-third of the rural communities of the region take at least half of their meat and fish by hunting and fishing (Holleman and Kruse, 1992).

Residents of such communities as Gustavus (429), Hoonah (860), Elfin Cove (32), Pelican (163), Excursion Inlet (10), Sitka (8,835) and Yakutat (680) engage in subsistence uses near the boundaries of Glacier Bay National Park. (Population figures are 2000 estimates from the U.S. Census Bureau.) Community subsistence resource activities include hunting; fishing; and gathering gull eggs, shellfish, firewood, wild plants and berries. Historical resource utilization patterns, such as gull egg gathering, fish camps or communal marine mammal and 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.

ANILCA and National Park Service 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.

Some of the major resources used for subsistence in these communities are bears (black and brown), deer, goat, moose, furbearers, spruce grouse, 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 (Kruse and Muth, 1990).

ANILCA and NPS regulations authorize subsistence use of resources in Glacier Bay National Preserve and prohibit subsistence uses in Glacier Bay National Park (Codified in 36 CFR, part 13). Current US Fish and Wildlife Service regulations allow residents of Hoonah and Yakutat harvest to gather glaucous-winged gull eggs on National Forest lands in Icy Strait and Cross Sound, including Middle Pass Rock near the Inian Islands, Table Rock in Cross Sound, and other traditional locations on Yakobi Island between May 15 and June 30. The land and waters of Glacier Bay National Park remain closed to all subsistence harvesting

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 impact on existing subsistence activities of the preferred alternative as outlined in the EA, the following three criteria were analyzed relative to existing subsistence uses:

- 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 effect the action might have on subsistence fisherman or hunter access; and
- the potential for the action to increase fisherman or hunter competition for subsistence resources;

1. The potential to reduce populations:

The proposed action is not anticipated to cause a significant decline of wildlife species in the affected area.

2. Restriction of Access:

The proposed action is not expected to restrict current Title VIII subsistence use patterns on Federal Public lands within the region. Glacier Bay National Park is closed to ANILCA Title VIII subsistence uses.

3. Increase in Competition:

The proposed action is not expected to significantly restrict or increase competition for ANILCA Title VIII subsistence resources on Federal public lands within the region.

VI. Availability of Other Lands

Subsistence uses are allowed pursuant to Federal regulations on adjacent National Forest Service lands and in Glacier Bay National Preserve.

VII. Alternatives Considered

The EA and this evaluation have described and analyzed the proposed alternatives. The proposed actions are consistent with NPS mandates, ANILCA, and the General Management Plan for the park and preserve. No other alternatives that would reduce or eliminate the use of public lands needed for subsistence purposes were identified.

VIII: Findings

This analysis concludes that the proposed action will not result in a significant restriction of ANILCA Title VIII subsistence uses.