

Glacier Bay National Park and Preserve
Frontcountry Management Plan
Part III - Finding of No Significant Impact

June 2019



Part III - FONSI



National Park Service
U.S. Department of the Interior

Glacier Bay National Park & Preserve
Alaska

FINDING OF NO SIGNIFICANT IMPACT
Glacier Bay National Park and Preserve
Frontcountry Management Plan

Recommended:

A handwritten signature in cursive script that reads "Phillip M. Hooge".

Phillip Hooge
Superintendent, Glacier Bay National Park and Preserve

Date

Approved:

A handwritten signature in cursive script that reads "Herbert C. Frost".

Herbert C. Frost
Regional Director, Alaska, National Park Service

13 June 2019

Date

1. INTRODUCTION

In compliance with the National Environmental Policy Act, the National Park Service (NPS) prepared an environmental assessment to examine alternative actions and environmental impacts associated with the development of a frontcountry management plan for Glacier Bay National Park and Preserve. This plan is needed as it has been almost 20 years since the last frontcountry plan was completed and conditions have changed. Changes have occurred in the uses and access to Bartlett Cove, including the introduction of vehicle-transport and passenger ferry services, increased demand for access to Bartlett Cove water resources, and the construction of the new Huna Tribal house. Because of these changes, the park needs updated direction to support and guide management direction in the frontcountry. The frontcountry plan provides guidance intended to extend 15 years or longer. Because a number of implementation actions are dependent on funding, these actions will be carried out when they become feasible.

The statements and conclusions reached in this finding of no significant impact are based on documentation and analysis provided in the environmental assessment and associated decision file. To the extent necessary, relevant sections of the environmental assessment are incorporated by reference below.

2. SELECTED ALTERNATIVE AND RATIONALE FOR THE DECISION

Based on the analysis presented in the environmental assessment, the National Park Service selected Alternative C: Destination Alternative (NPS Preferred Alternative). The following includes brief descriptions of selected alternative actions. For full descriptions, please see the environmental assessment, any changes to which have been noted in the errata located in appendix A.

Under the selected alternative, actions and strategies shall continue historic National Park Service management directions for this area so that the frontcountry becomes a welcoming destination that strengthens visitors' connections to larger park purposes. Development of Bartlett Cove will include expanding facilities, operations, and programs to engage broader audiences in the frontcountry for longer periods. In addition, development will allow more accessible and condensed experiences of park resources and values, as well as continue to provide foundational services to access the backcountry.

Alternative C: Destination Alternative (NPS Preferred Alternative)

The selected alternative is Alternative C: Destination Alternative (NPS Preferred Alternative), which includes the following actions and strategies.

Huna Tlingit Ancestral Homeland

The Huna Tribal House will continue to serve as a gathering place for tribal members and an educational opportunity for visitors to learn about the Huna Tlingit ancestral homeland. Selected alternative actions will manage access to the site and its surroundings, including developing Architectural Barriers Act Accessibility Standard (ABAAS) access. Additionally, actions will be taken to accommodate larger outdoor public gatherings via limited site amendments and the construction of a retractable awning or permanent shelter within the existing disturbed footprint.

Glacier Bay Lodge

Actions related to the Glacier Bay Lodge will focus on restoration and rehabilitation to its period of significance (1965–1975), including the removal of non-historical additions and the restoration of historical and original design configurations, including the construction of a wrap-around deck. Steps will be taken to perform vegetation maintenance tasks that define viewscape intent, restore historic district viewsheds, and protect the integrity of the building’s historic value. Finally, the National Park Service will convert lodge rooms to accommodate diverse user-types to broaden the visitor base and enhance the lodge’s economic viability.

Visitor Experience

The selected alternative will include further development to the frontcountry trail network. Several existing trails will be rerouted or expanded and upgraded to meet sustainable trail standards, using natural modifications and materials. New proposed trails and trail segments will include elevated structures and routes that improve access for limited-mobility users. This upgraded trail system will support the park in ultimately reducing resource impacts to shorelines and vegetation, while providing greater opportunities and access for frontcountry visitors.

Additional visitor experience actions include widening the park entrance road, adding new and improved visitor facilities, including a new ABAAS restroom, new pavilion, covered picnic area, and public mooring. Changes to visitor services will include consolidating, moving, and developing commercial kayaking operations, including the development of up to two visitor shelters for kayaker lodging, developing a drive-in campground with associated facilities, and maximizing the use of disturbed footprints for expanding visitor and staff parking.

Park Operations

To address deferred maintenance and deficiencies, the 1958 park headquarters building will be replaced within the historic disturbance footprint and the existing headquarters building pad will be reconditioned for use as a multi-modal hub with trail amenities. As part of construction, the park headquarters road will be upgraded for safety and to enhance overall circulation, and the surrounding area will be actively managed for stormwater and dust control. Finally, additional housing and

associated facilities will be developed in the seasonal housing area, including a new dormitory or bunkhouse, RV pads, and a new rain shelter for park staff.

3. RATIONALE

Alternative C was selected because it best meets the project goal and purpose for the frontcountry to be a welcoming place where development, operations, and services promote the stewardship of park resources, serve the public, and provide opportunities for all to explore and discover the ever-changing natural and living cultural landscapes of the park.

Purpose and Need. Actions and strategies in this alternative best address the issues described in the need for action. This alternative updates management direction for this area to ensure its addressing current recreational use patterns, provides expanded opportunities to help support the economic viability of the lodge, and creates operational efficiencies for the lodge. This alternative also ensures that the frontcountry becomes a welcoming destination that strengthens visitors' connections to the park purpose and significance (as described in the park's foundation document).

Responsive to Public Comment. During the 2016 public scoping, the public expressed that they would like to see this area of the park be a place that emphasized serene and contemplative experiences with a focus on high quality interpretation of science and the environment. Major themes from the public comment included the desire for this area of the park to have easily accessible recreation for short duration activities in a quiet and rustic atmosphere. The public expressed that they saw this area as both a backcountry launching point and a place where some "creature comforts" could be provided. Some also suggested expanded recreational opportunities to ensure the park continued to provide high-quality visitor experiences. The selected alternative is the alternative that most comprehensively responds to these public comments.

Enhancing Visitor Experiences. The selected alternative provides the greatest opportunity for a diversity of visitor experiences and a diverse audience to experience the park and Bartlett Cove. To strengthen Bartlett Cove's appeal as a day-excursion destination and as a base for multi-day independent stays, this alternative redesigns and expands its frontcountry trail system and adds new amenities that enable visitors to enjoy Bartlett Cove. This alternative allows the National Park Service to continue to provide the foundational services to access the backcountry, while also expanding facilities, operations, and programming to engage broader audiences in the frontcountry for longer periods and to offer more accessible and condensed experiences of park resources and values.

Supporting Economic Viability. The selected alternative supports the economic viability of the lodge by broadening its range of accommodations and hospitality options and by strategic partnerships to support increased occupancy. This alternative supports the park's ability to strengthen local tourism and increase contributions to the local economy through enhanced visitor opportunities.

Protecting and Promoting Natural and Cultural Resources. This alternative provides the greatest opportunity for visitors to learn about and interact with the natural and cultural resources of the park. Many visitors do not have the time or skills needed to experience the backcountry of the park beyond the Bartlett Cove area. The expanded recreational and educational opportunities represented in the selected alternative give visitors the opportunity to connect with be inspired by the features, processes, stories, and attributes associated with the national significance of Glacier Bay—whether or not they are able to explore farther into the backcountry. This includes providing opportunities for the park to connect with a more diverse audience.

4. MITIGATION MEASURES

The National Park Service places a strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. To help ensure the protection of natural and cultural resources, promote biodiversity and ecosystem health, protect the safety of visitors, and help ensure quality experiences for visitors, a series of mitigation measures will be implemented as part of the selected action. These mitigation measures are listed in appendix C of the environmental assessment. Any changes to these mitigation measures as a result of public comment are noted in the errata sheet (see appendix A of this document).

5. OTHER ALTERNATIVES CONSIDERED

Alternative A: No Action Alternative

Under the “no-action alternative,” Bartlett Cove would continue to be managed under its current direction as prescribed in the 1984 General Management Plan and the 1998 Comprehensive Design Plan. Many of the major actions identified in these plans have already been implemented, and the zoning and other management directions defined in those planning documents would continue to guide the future development and management of Bartlett Cove.

Alternative B: Bartlett Cove as a “Gateway”

Actions and strategies in this alternative would purposely change the fundamental National Park Service management direction for the frontcountry area (from a concentrated visitor use and development zone). The frontcountry would instead be managed as a minimalist gateway and launching point for excursions deeper into the park, with a focus on orienting and preparing visitors for meaningful backcountry experiences.

6. PUBLIC INVOLVEMENT/AGENCY CONSULTATION

The National Park Service consulted with various agencies, tribes, organizations, and interested persons in determining the preferred alternative. The process of consultation and coordination is an important part of this project.

Federal Agencies

A letter was sent to the US Fish and Wildlife Service Alaska field office and the National Oceanic and Atmospheric Administration Alaska field office in March 2019, notifying them of the project, requesting their concurrence on the federally listed threatened and endangered species that may occur in the park, and requesting their insights on the planning effort and future steps in consultation.

The National Park Service provided copies of this frontcountry management plan to the US Fish and Wildlife Service and the National Oceanic and Atmospheric Administration to consult under Section 7 of Endangered Species Act regarding the content presented in this plan and environmental assessment. Actions in the plan that require additional compliance and consultations, including compliance with the Endangered Species Act, Marine Mammals Protection Act, and National Environmental Policy Act, will be conducted when park staff are ready to begin implementing site-specific projects.

State Agencies

The park provided the Alaska State Historic Preservation Officer with a copy of the frontcountry plan in March 2016 and invited participation in the planning process pursuant to Section 106 of the National Historic Preservation Act and related consultation. The Alaska State Historic Preservation Office was provided copies of the documents and was invited to attend public meetings or to meet with park staff regarding the plan.

Based on consultation with the Advisory Council on Historic Preservation and the Alaska State Historic Preservation Office per the National Historic Preservation Act, and with recommendations by the state historic preservation officer, this Frontcountry Management Plan, including the planning vision and environmental assessment are currently not considered an undertaking under Section 106. As specific actions or locations are refined, the National Park Service will complete its efforts to identify and evaluate the potential effects to historic properties and consult with state historic preservation officer to avoid, minimize, or mitigate adverse effects prior to authorizing any final decisions. The Alaska State Historic Preservation Officer's recommendations have been incorporated into "Appendix A: National Historic Preservation Act, Section 106 Considerations and Next Steps" of the environmental assessment.

The Alaska State ANILCA office was provided with the newsletter and invited to provide comments in March 2016. In September of 2016 (in response to the newsletter) and May 2019 (in response to the plan and environmental assessment), the ANILCA program coordinator provided comments that represented the consolidated views of state agencies.

Associated Tribes

The park has notified tribal representatives of the Hoonah Indian Association regarding the frontcountry management plan and has held periodic consultation meetings between 2016 and 2019 to inform them of the plan alternatives and actions that have particular bearing on issues and resources of tribal concern such as the Huna Tribal House. The park will continue to consult with the Hoonah Indian Association and other tribal representatives as the planning process proceeds to ensure that tribal perspectives and issues are adequately addressed. Copies of the document were provided for tribal review and comment in March 2019, prior to the 30-day public review period.

Future Consultation and Compliance

The National Park Service will continue to consult with agencies, tribes, partners, stakeholders, and the public as actions identified in the frontcountry plan advance toward more detailed design development and implementation stages. As site designs are refined and the specific requirements for site development and construction are prepared, the park will complete any additional compliance and permitting requirements, including compliance with Section 106 of the National Historic Preservation Act for specific projects. For additional information, see Appendix A: National Historic Preservation Act, Section 106 Considerations and Next Steps in the environmental assessment.

7. FINDING OF NO SIGNIFICANT IMPACT

As described in the environmental assessment, the selected action has the potential to cause adverse impacts to Sitka spruce/western hemlock forest, coastal meadows and early successional forests, wetlands, salmon and anadromous fish, shorebirds and waterfowl, solitude and unconfined recreation in wilderness, Huna Tlingit Ancestral Homeland, Glacier Bay Lodge and Historic District, and visitor use and experience. However, no significant adverse impacts were identified.

Vegetation and Wetlands

The environmental assessment found no significant adverse impacts to vegetation or wetlands. The action will result in approximately 4 acres of vegetation being cleared in Sitka spruce/hemlock forests and coastal meadows and early successional forests, which will not impact vegetation species at a population level because the species affected are common throughout the 7,120-acre frontcountry area. Trail construction will result in approximately 1.1 acres of wetlands being shaded by boardwalks and 0.07 acres of wetlands ground disturbance through placement of helical piers, which will not noticeably alter overall functions of the wetlands because of the small area of ground disturbance in relation to the total acres of wetlands present in the project area. No Wetlands Statement of Findings is needed because individual boardwalks with fill placement totaling less than 0.1 acres classify for exemption from the Statement of Findings and compensation per NPS Director's Orders #77-1 requirements (Section 5.2.3).

Fish and Wildlife

No significant adverse impacts to fish and wildlife were identified. Vegetation clearing will remove or disturb up to 4 acres of wildlife habitat used by small and large mammals and avian species. Construction and visitor use of boardwalks along the shoreline and wetlands will likewise impact up to 1.3 linear miles of shoreline habitat used by small and large mammals and avian species. Some wildlife may temporarily or permanently relocate to areas outside the project area; however, because there is other similar habitat nearby local population size, survival rates and long-term viability are unlikely to be affected. Rerouting the Bartlett River Trail may potentially result in an increased harvest and mortality of individual fish; however, with implementation of mitigation measures, there will be no impacts to fish species at population levels.

Huna Tlingit Ancestral Homeland

No significant adverse impacts will occur to resources contributing to the Bartlett Cove traditional cultural property or to resources having cultural importance for the Huna Tlingit and the Hoonah Indian Association. As described in the environmental assessment, there are many beneficial impacts to these resources that will result from the implementation of the selected action. Under the selected action, management actions will be taken to promote tribal access and cultural connections to the Bartlett Cove Area.

Glacier Bay Lodge and Historic District

No significant adverse impacts were identified for the Glacier Bay Lodge and Historic District. As described in the environmental assessment, there are many beneficial impacts to these resources that will result from the implementation of the selected action. The National Park Service will undertake several measures to preserve the historical and architectural character of the Glacier Bay Lodge; these actions will be in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. Upgrades to lodge rooms and other functional/use alterations will be carried out in a manner that preserves character-defining architectural features to the extent possible. The National Park Service will continue to consult with the Alaska State Historic Preservation Office during project design development.

Solitude and Unconfined Recreation in Wilderness

No significant adverse impacts to solitude and unconfined recreation in wilderness were identified. The presence of new trails in wilderness detracts from the opportunity for unconfined recreation and will increase noise carrying into the wilderness, further impacting the opportunities for solitude; however, these impacts will affect less than 0.05% of the greater Glacier Bay wilderness in areas directly adjacent to the frontcountry.

Visitor Use and Experience

No significant adverse impacts to visitor use and experience were identified. Under the destination alternative, management actions will provide more opportunities for visitors to understand and experience the resources of the park.

Socioeconomics

The environmental assessment found no significant adverse impacts to the socioeconomic environment. In the selected alternative, considerable capital improvements will be made at Glacier Bay Lodge and frontcountry facilities (trails, campgrounds, and parking lots) to welcome more day and overnight independent visitors and enhance the appeal, profitability, and economic viability of the visitor services and opportunities within the park and surrounding communities. Local businesses as well as the in-park commercial operators that rely on tourism would be expected to receive long-term benefits from longer visits and potential increases in number of visitors.

8. CONCLUSION

There will be no significant impacts on public health, public safety, or unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the NPS selected alternative will not violate any federal, state, or local environmental protection law. The National Park Service has prepared a Non-Impairment Finding that is included as appendix B.

The conclusion of no significant impact is based on the analysis compiled from a combination of scientific data and professional judgment from NPS staff and documented in the environmental assessment. As described previously, the selected alternative does not constitute an action meeting the criteria that normally requires preparation of an environmental impact statement. The selected alternative will not have a significant effect on the human environment in accordance with Section 102(2)(c) of the National Environmental Policy Act.

Appendix A. Responses to Concerns and Errata Sheet Indicating Text Changes to the Environmental Assessment

Responses to Concerns

The Glacier Bay National Park and Preserve Frontcountry Management Plan/Environmental Assessment (plan/EA) was made available for public review during a 30-day period from April 9 through May 8, 2019.

Sixty-seven correspondences were received and documented on the NPS Planning, Environment and Public Comment (PEPC) website from individuals, organizations, federal and state agencies, and gateway communities, including comments recorded by NPS staff during the public meetings.

The following are NPS responses to concerns that were raised by commenters on the environmental assessment. Responses to all substantive comments are included here followed by minor edits to the environmental assessment, where appropriate, including representing some modifications based on review comments.

In addition, some non-substantive comments, identified as being of high importance to the public or needing clarification, are also responded to here. The page numbers referenced are from the April 2019 *Glacier Bay National Park and Preserve Visitor Use Frontcountry Management Plan / Environmental Assessment*.

Finally, as part of the decision record, the National Park Service will publish an updated Frontcountry Management Plan Preface and a refined and finalized Renewed Vision for Bartlett Cove (Part I) with minor narrative changes, clarifications, and additions based on input received during the public review process.

SCOPE, NEED, AND PROPOSED ALTERNATIVES

Comment Topic: Several comments stated that the NPS frontcountry spatial extent was unclear and confusing, affecting their understanding of the planning proposal and the scope of the environmental analyses. Some also expressed concerns about why proposals for wilderness trails and marine excursions outside of the frontcountry boundaries were included in the plan/EA scope.

NPS Response: The NPS clarifies the plan extent and resolves these inconsistencies with the text changes to page II-1 represented below in “minor edits to the environmental assessment” located at the end of Appendix A.

Comment Topic: Commenters questioned the NPS “need for action” (page II-2) rationale of “increased demand for access to Bartlett Cove water access resources (dock, mooring, launches),” both given the lack of data to support this statement, and the presence of data that demonstrates the

opposite in Table 1 (page II-41) in terms of a decline in use from 2012 – 2016 on the Average Daily Number of Private and Commercial Vessels Moored, Anchored, and at the Dock.

NPS Response: The trends in table 1 represent declines, but declines of anchored boats, not boats in the bay or demand for access to Bartlett Cove. Further, the NPS seeks to be responsive to numerous requests to address Bartlett Cove boat access including:

- Requests heard by NPS staff (including during scoping) to make access to Bartlett Cove easier within existing VQOR permit capacities as the portal for private marine vessels initially entering Glacier Bay.
- Requests heard by NPS staff (including during plan scoping) to optimize the logistics and services that enhance a recreational boater’s national park experience. Examples include:
 - More convenient shore access so boaters can easily spend as much time as they want hiking, participating in NPS programs, and eating at the lodge (currently a challenge given limited dock space/time limits and local anchoring conditions that can be challenging for those unfamiliar with Bartlett Cove).
 - Optimizing quick access to the permit center, especially given limited tide launching windows, and addressing parking for private boat trailers.
 - Anticipating the needs of cruising boaters on extended trips and offering some conveniences and easier access to amenities in the frontcountry (sundries, laundry, showers, communications) and in gateway communities, potentially with affordable ground transportation such as a shuttle to access supplies, mail, community businesses/ services/amenities, and cultural and recreational opportunities.
- Requests heard by NPS staff (including during plan scoping) to make accessibility upgrades particularly for visitors in wheelchairs arriving at the dock.

Comment Topic: Several commenters recommended a mid-level development alternative, or a hybrid version combining portions of Alternatives B and C.

NPS Response: The NPS considers the comprehensive package of proposals in the preferred Alternative C as best addressing broad park service planning goals and objectives (page I-14 to I-17).

Comment Topic: A commenter questioned why, in contrast to the 1998 Bartlett Cove Comprehensive Design Plan (CDP), this plan includes no major utilities projects (and whether these activities will be proposed later over the next twenty years).

NPS Response: Ample capacity exists in major utility systems in Bartlett Cove, including the water plant, wastewater treatment plant, and fuel systems to serve the proposed build-out at this time. Over the next 20 years, the NPS anticipates utility related needs as focusing mainly on upgrading and resizing utility distribution systems, efforts to increase energy and operational efficiency (including connecting to the Falls Creek Intertie), and upgrades to address deficiencies in remote communications (phone, internet).

Comment Topic: A few comments were received that the NPS should have highlighted in the public process that Alternative A included actions not yet implemented from the 1998 CDP. Comments also requested that and the NPS be specific about how the previous plan's decisions will be amended by this planning effort.

NPS Response: Pages I-3 and II-2 specify the NPS intent for the updated plan/EA to amend and fully replace 1998 Bartlett Cove Comprehensive Design Plan. Any actions carried forward (such as the new visitor Discovery Center project) from previous planning decisions are expressly identified in the plan/EA.

Comment Topic: A number of commenters proposed an alternative where the NPS would carry forward the 1998 CDP proposal to minimize, limit, or remove development from the Bartlett Cove shoreline edge east of the moraine due to environmental and visitor experience considerations.

NPS Response: During an internal planning workshop in 2017, the NPS considered removing and limiting shoreline development in Bartlett Cove. The NPS decided instead to retain the typical southeast Alaska settlement pattern of compact shoreline development at a walkable scale, and featuring scenic water and mountain views that reinforce connections with the marine environment for both visitors and park managers. At the same time, the NPS will seek to implement a high quality of design to stringent park service development standards to address commenters' coastal environment concerns, and will explore the feasibility of using alternative and active transportation modes that can help the NPS to minimize vehicular traffic and the footprint of vehicular parking in Bartlett Cove and along the shoreline.

HUNA TLINGIT HOMELAND

Comment Topic: Frank Wright, Hoonah Indian Association (HIA) Tribal Council President, proposed that in continued tribal consultation with the HIA, the NPS update frontcountry park entrance signs both within the park and in the Gustavus community to communicate to the visiting public that this area is the ancestral homeland for the Huna Tlingit people.

NPS Response: The NPS will incorporate this proposal into the planning vision (pages I-20 to I-21) as follows: “Update frontcountry park entrance signs to communicate to the visiting public that this area is the ancestral homeland for the Huna Tlingit people.”

GLACIER BAY LODGE

Comment Topic: Several commenters proposed that the NPS not include hot tubs as they are not necessary to a national park experience.

NPS Response: The NPS acknowledges this sentiment and will remove the hot tub proposal from the planning vision.

VISITOR EXPERIENCE

Comment Topic: Several commenters proposed that the NPS develop one consolidated visitor facility in Bartlett Cove, instead of upgrading both the existing Visitor Information Station facility plus constructing a new Discovery Center (each containing auditoriums and other elements that duplicate functions).

NPS Response: Two competing NPS proposals were included in the plan/EA to give managers the flexibility to phase implementation and/or respond to different funding scenarios. If at all feasible, however, the NPS prefers to construct one new consolidated Discovery Center and remove the existing Visitor Information Station. The NPS therefore has decided to eliminate the non-preferred proposal at this time (to invest in a modest Visitor Information Station upgrade, and then later build the Discovery Center as a phased addition or a replacement facility). This change to page II-7 is represented below in “minor edits to the environmental assessment.”

Comment Topic: A number of commenters suggested modifications to the NPS frontcountry proposals for new trails, relocated trails, and trail closures:

- Retain the existing Bartlett River Trail route as a shorter hike to sport fishing and berry picking destinations.
- Create a new loop trail by retaining the existing Bartlett River Trail while also building the new proposed route around the cut.
- Remove or reduce the extent of proposed coastline trails to reduce wildlife impacts along the shoreline and inside the tidal cut (to migratory shorebirds, mussels and intertidal life, and harbor seals who sometimes use sandy shoreline areas at the mouth of the Beardslee Island’s Cut to haul out).

- Remove proposed new trails along the Beardslee Island's Cut to reduce impacts to wilderness character (remove the sights and sounds of recreational hikers and constructed boardwalks for paddlers entering designated Wilderness).
- Retain the Bartlett Lake trail route (because of the decades of work invested, because users enjoy the existing system including loop hikes connecting with the Towers Trail, and to not preclude backcountry planning discussions about developing a campground at Bartlett Lake).
- Instead of closing any trails right now, explore strategies to address current NPS trail maintenance challenges (use TREX or other technologies, reduce maintenance and retain as a Trail Class 1, and wait on any decision until after the new trails are built and study use).
- Work with adjacent landowners, or on park land, to provide a dedicated public parking area to serve the Towers Trail.
- Remove the looping aspect of the Cooper's Notch proposal (end the trail at a destination point in the notch, and do not construct the moraine crest hiking segment)
- Locate and sign trails appropriately to avoid conflicts between different user types (national park visitors, Dude Creek Critical Habitat Area hunters, visitors and NPS operational areas).

NPS Response: The Bartlett River Trail route has been adjusted (as a shorter coastal and forest route); the Bartlett Lake Trail closure was reconsidered for now (and an overnight backcountry campsite proposal carried forward for backcountry planning consideration), and the coastal trail from Alder Creek to the northern edge of the Inner Lagoon was adapted to accommodate wheelchairs and to end at a new proposed 12-person overlook destination just outside the designated Wilderness boundary. Adjustments are represented in "minor edits to the environmental assessment:" Bartlett River Trail (pages II-10 and II-21), Bartlett Lake Trail (page II-10), and Inner Lagoon Trail (pages II-10 and II-21).

Comment Topic: Commenters proposed modifications to the NPS bike path proposal such as:

- Bikes should use the existing road with no new trail given existing low traffic levels.
- Install a bike trail just off the road shoulder, in the cleared zone, and over ground impacted by the electrical intertie.
- Build a short trail connection alongside the road shoulder to the existing Tlingit Trail (to avoid an Inner Lagoon bridge).

NPS Response: An upcoming NPS Multi-Modal Transportation Study will evaluate biking and vehicular traffic needs along the park entrance road and consider how to best prioritize NPS funding to meet active transportation and safety objectives. While the NPS considered a separate bike/pedestrian trail, based on maintenance and other objectives, it determined an

on-grade bike and pedestrian area along the road is preferable. Finally, the Inner Lagoon bridge route is preferred by the NPS to strengthen first-time visitor wayfinding, reduce the multi-use safety conflicts (primarily when larger hiking groups, bikes, and vehicles are all present), and to provide a high quality, accessible recreational and scenic experience for national park visitors.

Comment Topic: A number of commenters proposed a range of alternative actions to reduce diesel fuel uses associated with frontcountry operations (electric vehicles, electric vehicle plug ins, facility upgrades using green building technologies, shift away from burning garbage, and other sustainability measures).

NPS Response: The NPS will incorporate more detailed sustainability goals into the planning vision under Energy and Operational Efficiency (page I-34) as follows: "Explore opportunities to replace the park fleet and to operate visitor services (including the lodge dayboat) using electrical vehicles that maximize the use of local renewable energy sources and spread peak demand by taking advantage of night time low-energy use within the community. Also explore opportunities for electrical vehicle plug-in stations consistent with NPS policy."

Comment Topic: Commenters proposed that the NPS under-represented the magnitude of the potential parking proposed by using asterisks in the planning vision concept (pages I-39 to I-41).

NPS Response: An upcoming multi-modal study will help the NPS consider alternative transportation options that may reduce or eliminate the need for any parking beyond that analyzed in the environmental assessment. In the event that additional parking is warranted (as indicated by the asterisks), the NPS will complete tiered environmental analyses with new consultation and public review opportunities.

Comment Topic: One commenter proposed that Phase I public visitor parking remain in the current Visitor Information Station (VIS) lot area, configured around the new visitor facility, and that only overflow, overnight, and employee parking be shifted to the wastewater treatment plant pad within the existing paved footprint (which may not accommodate as many as 58 vehicles). Another commenter proposed eliminating active visitor uses like parking and RV camping proximate to the generator building, fuel storage, and solid waste management areas for security reasons, and to reduce the risk of damage to vital park infrastructure.

NPS Response: The NPS prefers to shift the bulk of public parking away from the existing VIS lot to support the construction of a new Discovery Center within the existing disturbance footprint, to reduce circulation congestion, and to enhance the visitor arrival experience and aesthetics. While most communities throughout Southeast Alaska concentrate sensitive utilities in nearshore areas accessible to the public and experience limited malicious damage, the NPS acknowledges the potential for risks to vital park infrastructure, and will consider

the level of security risk, and potential risk mitigating actions and policies prior to finalizing public parking designs near the generator building and other critical infrastructure.

Comment Topic: A few commenters proposed alternatives managing marine-access public uses (launch and trailer parking). These included not removing launch ramp sediment but instead rebuilding the facility deeper and steeper (recognizing that it was improperly installed), adding a parallel dock to the launch ramp for ease of launch and retrieval, and locating boat trailer parking near the dock (not in NPS operational areas) including perhaps by the generator building.

NPS Response: The NPS planning team considered each of these alternatives. Regarding an upgraded launch and parallel dock, the NPS instead has selected to retain the existing facility and offer only basic services that enhance local boater recreational visits. Additionally, the NPS is not seeking to compete with fee-based community and commercial marine facilities outside the park in gateway communities, but rather to retain the public dock area's primary focus of serving national park visitors arriving by water and road. Edits to the text (page II-8) represented below clarify this NPS intent.

Comment Topic: A number of commenters proposed an alternative to encourage car camping and RV overnight services outside the national park, in the gateway community of Gustavus—particularly given current Alaska Marine Highway System (AMHS) budget uncertainties that may disrupt service to Gustavus. Others questioned the NPS planning development without information such as projections for future motor vehicle numbers, and taxpayer investment risk.

NPS Response: Right now there are modest demands in Bartlett Cove for van/camper/RV overnight use that are not currently being met by businesses in the community (as indicated by attempts to park overnight in the VIS parking lot and requests for this service at the VIS). While the NPS is seeking to meet this existing need, it supports future expansions outside the park (as clarified by text edits to page II-11, below in “minor edits to the environmental assessment.” Regarding ferry service uncertainties, the NPS has not studied any projections associated with how any changes might alter visitation patterns and visitor numbers. As a contributing partner on the new AMHS ferry dock, the NPS views ferry service to Gustavus as being essential to the NPS meeting its mission, and more broadly, to the continuation of Southeast Alaskan communities. Therefore, the NPS is planning for its continued service over a longer timeframe, despite the current short term budget uncertainty and acknowledges that investment. Finally the targeted investments in development that serve only this population of visitors are modest, and lend themselves to being re-allocated and adapted for other visitor or NPS uses.

Comment Topic: One commenter proposed not adding new public use huts to the walk-in campground, and instead concentrating this new development in an already developed area such as adjacent to the RV area.

NPS Response: The NPS planning team considered locating the public use huts in several areas, including proximate to the RV sites. Because anticipated users are predominantly launching and returning from a backcountry sea kayak expedition, the NPS decided to propose locating the huts near the group sites in the campground to enhance the ease of water arrival, and make it convenient to participate in the non-motorized camping experience, including cooking in the intertidal zone and fire pit social uses.

Comment Topic: One commenter proposed the NPS not introduce food aromas and meal preparation along the shoreline with new pavilions, cooking shelters, huts, and RV sites as a nuisance that can habituate bears and other wildlife to human food. Instead, the commenter suggested to construct a hard-sided bunkhouse with a kitchen inside the forested canopy.

NPS Response: Proposed NPS pavilion/cooking shelter locations are specifically in the upper intertidal zone, with an elevated design so that food crumbs will fall through floor gratings and smells will be removed with changing tides. Cooking in new dry bunk/huts would be allowed indoors (within hard-sided structures) inside the forest canopy using camp stoves or a wood stove. These huts would also specifically include greywater systems to reduce the incidence of introduced smells from human food particles associated with dishwashing by visitors. Further, prior to deciding whether picnic tables or fire pits are appropriate to serve RVs and car campers, the NPS will consider updates to the Bear Management Plan to define prevention strategies for minimizing bear habituation and reducing human-bear conflicts.

PARK OPERATIONS

Comment Topic: A few commenters proposed not maintaining or using the Lagoon Island Cabin, and instead continuing benign neglect or removing the structure. Reasons include operational challenges for residents (tidal access, water, fuel, sewage disposal), deteriorating cabin conditions, the existence of similar representative WWII structures, and bear use of the island, particularly for access to strawberry patches.

NPS Response: For a few decades, NPS decisions about this cabin were based on a land status map error that identified Lagoon Island as being within designated Wilderness and subject to the GMP benign neglect policies for historical structures. Since the error was discovered, the NPS has been considering both its management responsibilities and the cabin's potential future uses. A historic structures report is currently under development, and recommendations are anticipated to emphasize adaptive reuse rather than full historical restoration, more practical "off-grid" utility systems, and NPS use of the structure more as a quiet retreat than as a standard housing unit (for example, featuring users like artists in parks who have the time and inclination to appreciate the natural and cultural values of the site).

Comment Topic: Some commenters proposed removing NPS park operations from the Inner Lagoon Area and repurposing the area for visitor use, including adapting the parking lot for RVs so they can enjoy the coastal views in an already disturbed location.

NPS Response: During an internal planning workshop in 2017, the NPS considered removing park operations from the Inner Lagoon area. The NPS decided instead to continue the NPS presence in this area (established in the 1950s) with its strong connections to the scenic coastal environment given that Glacier Bay manages one of the few marine parks in the national system.

Comment Topic: A few commenters proposed an alternative location for a new NPS park headquarters, east of the Bartlett Cove moraine (including near the existing NPS maintenance facility), because of concerns that the proposed location of the headquarters building may be within a tsunami/flood hazard area, citing Suleimani, E.N., Nicolsky, D.J., and Koehler, R.D., 2015, Tsunami inundation maps of Elfin Cove, Gustavus, and Hoonah, Alaska: Report of Investigation RI 2015-1, Alaska Division of Geological & Geophysical Surveys, Fairbanks, Alaska, United States. One commenter also raised concerns that the proposed location is located on fill that may not be stable during an earthquake.

NPS Response: The proposed location of the new headquarters building is at 22 feet elevation. Suleimani et al. (2015) computed that the extent of inundation and flow depth from hypothetical tsunamis was 2.5m (~8ft) in Bartlett Cove, which is below the elevation of the new headquarters building. Prior to construction of the new headquarters building, the NPS would perform a geotechnical investigation of the site of the proposed headquarters relocation to investigate the subsurface soil conditions and determine applicable foundation types as well as earthwork related recommendations, and detailed surveys will be conducted to confirm the proposed site elevation and mean low water benchmarks to ensure applicability of the 2015 geohazard modeling.

Comment Topic: One commenter proposed decommissioning the Inner Lagoon dock to reduce creosote pollution (while leaving a few floats for skiffs) and boat-related noise, and also recognizing its diminishing accessibility due to isostatic rebound at the Lagoon Island cut. Another requested private boat use of Inner Lagoon dock as a more protected and currently underutilized area.

NPS Response: The NPS planning team considered each of these alternatives. Case studies indicate that the act of decommissioning the Inner Lagoon Dock may add more creosote pollution than leaving it in place. Regarding isostatic rebound, the timing and duration of motorized noise from boats is likely to be limited during the life of this plan by short time windows when the tidal cut supports access. Further, the NPS views the Inner Lagoon Dock, with its limitations, as appropriate for staff and some administrative uses. Finally, the NPS acknowledges there may be special cases where public and concessions uses are consistent

with park mission (with explicit recognition of the inherent safety and equipment damage risks given tidal access limitations). However, the park is not seeking to compete with fee-based community and commercial marine facilities outside the park in gateway communities.

Comment Topic: One commenter proposed a new alternative for an NPS staff housing recreational and gathering area, carrying forward aspects of the 1998 Bartlett Cove Development Plan (CDP) and adding equipment and functions from the inner lagoon fitness facility with warm, indoor space and enhanced noise control.

NPS Response: NPS planning in 1998 (CDP) proposed a 2,000 square foot multi-use recreational facility for NPS staff in Bartlett Cove. For two decades this facility concept has not scored well within NPS funding parameters. Meanwhile, an existing visitor campground fire pit has attracted NPS staff seeking outdoor recreation experiences. This plan/EA proposes meeting this existing demand at a modest scale using an outdoor recreational feature. Finally, this proposal does not preclude design options that feature moveable walls and/or chimneys that allow users greater protection from the elements and reduce outdoor sound.

ENVIRONMENTAL ASSESSMENT

Comment Topic: Commenters questioned the methodology and findings of the environmental assessment because the document:

- Described disturbed areas relative to the entire park's acreage rather than the more limited frontcountry acreage.
- Did not analyze the potential for greater ecosystem disruptions if construction is simultaneous, rather than phased.

NPS Response: The EA "Chapter 3: Affected Environment and Environmental Consequences" discusses impact topics for each alternative that were assessed in terms of context, intensity, and duration to meet National Environmental Policy Act (NEPA) requirements for addressing direct, indirect, and cumulative impacts (as described NPS Council on Environmental Quality regulations, 40 CFR 1502.16).

Comment Topic: Concerns were raised that impacts to wetlands could be greater than those disclosed in the Environmental Assessment. One commenter suggested that the wetlands analysis should include impacts on species that use such habitat.

NPS Response: The "Wetlands" section of "Chapter 3: Affected Environment and Environmental Consequences" was based on National Wetlands Inventory data, the park land-cover type classification, and site-specific wetlands assessments and delineations for the Bartlett Cove developed area, including the suitability analysis for the 1998 Bartlett Cove

Comprehensive Design Plan. The National Park Service has determined that these sources are sufficient to analyze potential impacts to wetlands from the proposed action. The EA has been updated to say that wetlands delineations in the park are currently limited to a few project-specific areas. As noted in the EA, wetland conditions are still evolving because of isostatic rebound; as uplift occurs, some wetland areas are reorganizing into more developed stream systems, reducing the overall wetland area. Recognizing that wetland areas might shift over time, the NPS has included several mitigation measures related to inventorying wetlands and employing standard avoidance, minimization, and mitigation strategies. All facilities, excluding trails, would be sited to avoid wetlands or, if that were not feasible, to otherwise comply with Executive Order 11990, the Clean Water Act, and Director's Order #77-1.

This impact topic only includes an analysis of impacts to wetlands. Discussion of impacts to wildlife, including birds, from the proposed action are discussed under the 'Wildlife' discussion topic and 'Shorebirds and Waterfowl' impact analysis of "Chapter 3: Affected Environment and Environmental Consequences."

Comment Topic: Several commenters raised concern that construction, maintenance, and use of boardwalks along the lagoon and tidal cut would repeatedly disturb the wildlife, including shorebirds and waterfowl that rest, feed, and nest there. Commenters suggested alternate trail designs, including rerouting new trails away from shorelines, or not building new trails. One commenter suggested that the NPS should conduct an analysis of alternate suitable habitat for shorebirds and waterfowl. The same commenter also suggested that the NPS should include in the measurement of impact area the changes in habitat use that would result from increased visitor presence and acoustic disruption. Another commenter noted that the dates which the NPS would not conduct vegetation removal activities in order to avoid impacts to nesting birds, as noted in the plan, were inconsistent with US Fish and Wildlife Service recommendations for the region.

NPS Response: The NPS acknowledges these concerns. The EA acknowledges that facility construction and use could result in increased disturbance to wildlife, potentially leading to temporary displacement of individuals from the project area. These impacts are identified in the 'Wildlife' section and 'Shorebirds and Waterfowl' impact analysis in "Chapter 3: Affected Environment and Environmental Consequences." To reduce the level of impact to wildlife using the shoreline, the NPS has rerouted the Bartlett River Trail away from the mouth of the tidal cut and portions of the shoreline.

Where feasible, the National Park Service calculated total acreages of impacts, such as for vegetation clearing related to development. The responses of wildlife to these disturbance are variable, even within species, and related to a number of factors (i.e., disturbance type, intensity and duration, terrain, disturbance history, group size, age/sex, reproductive status, wind direction, loudness, distance between animals and disturbance, distance from

disturbance to secure cover, relative elevation, season, etc.), therefore it would not be feasible to calculate total disturbance areas.

While no formal studies have been conducted on the extent of suitable habitat for shorebirds and waterfowl throughout Glacier Bay, studies have been conducted to understand the distribution of ground-nesting marine birds along shorelines in Glacier Bay and have demonstrated that these species are found nesting throughout Glacier Bay proper, including the Beardslee Islands. The impact analysis has been revised to reflect this.

The mitigation measures have been updated and made consistent with US Fish and Wildlife Service recommendations for the region to state that vegetation removal would not be conducted during nesting times (April 15 to July 15). As stated in the mitigation measures, the National Park Service would also conduct surveys prior to vegetation removal to ensure that species of concern are not present.

Comment Topic: Concerns were raised over disturbances or displacements by visitor foot traffic to harbor seals that haul out on the sandy beach near the mouth of the tidal cut from rerouting the Bartlett River Trail.

NPS Response: The National Park Service annually reviews aerial photographic surveys conducted in June and August to count harbor seals; no harbor seal haul-out sites were observed in Bartlett Cove on a consistent basis. The NPS did observe harbor seals occasionally in the fall using an island north of the tidal cut, but the seals did not consistently use this site. The Bartlett River Trail has been rerouted to avoid the mouth of the tidal cut area closest to Lagoon Island, which should minimize possible disturbances to any harbor seals hauling out in that area. The NPS will continue to provide education to visitors on best practices for observing wildlife, including approach distance regulations and recommendations.

Comment Topic: Some commenters were concerned about potential off-site indirect environmental impacts from the construction of new trails (including to areas outside the Frontcountry area in designated Wilderness). These include the potential for construction spills/materials contamination; erosion, turbidity, and other water run-off impacts (especially to fish and drinking water); and concern about damage to mussels and intertidal organisms due to foot traffic into tidepools at low tide.

NPS Response. The NPS acknowledges these concerns. The EA acknowledges that the action alternatives would be anticipated to have impacts on water quality and seafloor resources outside the trail footprint, however these topics were not carried forward because they did not reach a threshold of impact concern. The NPS also proposes measures to reduce and mitigate these impacts in "Appendix D: Mitigation Measures and Best Management Practices." Further, the Bartlett River Trail has been rerouted to reduce the extent of public

access within the cut, and proposed boardwalks to provide access along a portion of the cut may discourage foot traffic into tidepools at low tide by providing alternative and easier footing. Finally, the NPS sees regular foot traffic in the Inner Lagoon Tidal Cut and populations of mussels and intertidal organisms there remain healthy. As a result, the NPS expects foot traffic damage within the Beardslee Islands Cut to be limited.

Comment Topic: Several commenters were concerned about wilderness character impacts from an increase in visitor activities proximate to the proposed Point Gustavus Route, and the entrance of the Beardslee Islands Tidal Cut Wilderness and marine Wilderness. The concern is that additional visitor demand from day trips will diminish wilderness character (the addition of kayakers on 2-5 hour kayak excursions through the time-limited tidal cut, the re-routing of the Bartlett River Trail that that enables hikers to access the cut, and due to increased noise from non-wilderness visitor activities).

NPS Response: The NPS acknowledges these concerns. The NPS decision to enhance opportunities for day-use trips from Bartlett Cove into adjacent designated Wilderness is targeted to those who may not otherwise be able to access this experience (e.g., due to physical conditions or the lack of equipment, time, or backcountry skill). These new use patterns will affect the experience of more traditional wilderness users who are embarking on extended backcountry trips into the wilderness, particularly during high tides when kayaking becomes more concentrated near the Beardslee Islands Tidal Cut. While the frontcountry does not encompass any designated Wilderness, it supports the park as one of the largest units in the wilderness preservation system, encompassing more than 2.7 million acres—including around 53,000 acres of marine wilderness. The NPS sees day use hiking and kayaking as being consistent with the purposes of Wilderness, and proposes measures to reduce and mitigate social impacts to wilderness character, including specific to encounter rates in "Appendix D: Mitigation Measures and Best Management Practices." Therefore, this topic was not carried forward for detailed analysis in "Chapter 3: Affected Environment and Environmental Consequences."

Comment Topic: Several commenters were concerned about wilderness character impacts as a result of NPS trail construction, especially in the vicinity of the Bartlett River Trail and along the Point Gustavus Route. Some commenters also were concerned about wilderness character impacts associated with the new Cooper's Notch Trail (however none of this proposed route crosses into any designated Wilderness areas).

NPS Response: The NPS acknowledges these concerns and proposes measures to reduce and mitigate these impacts to wilderness character in "Appendix D: Mitigation Measures and Best Management Practices." Further, consistent with the Wilderness Act, the NPS is proposing trail construction only to the extent necessary to retain the natural quality of wilderness by mitigating trail tread damage, soil erosion and compaction, unsustainable routing and drainage impacts, and reducing the degradation of environmental conditions in

localized and sensitive areas. Thus, limited or no modifications are anticipated to be needed to accommodate public access on the Point Gustavus Route (it already meets Class 1 trail standards). Conversely, more extensive reroutes, upgrades, boardwalks, and spot modifications are anticipated to be needed to maintain the Bartlett River Trail as a Class 3 trail in designated Wilderness for public use due to its currently degraded condition, the challenges of maintaining trails in a succession landscape. Finally, the scale of this change to the undeveloped quality of wilderness is small (compared to the context of the Glacier Bay Wilderness) and all Bartlett River Trail installations will be designed to be movable or removable, which means these impacts to this character of wilderness may not be permanent (and could be removed at any time). Additionally, the majority of these trail actions that involve boardwalks are relocations, where existing trails and their associated installations (mostly planks) are being removed from locations in wilderness where they have ongoing maintenance requirements.

Comment Topic: Several commenters expressed concern that installing 40 permanent moorings would increase the risk of marine mammal entanglement. One commenter noted that 40 moorings is four times the average number of boats usually present (10-13) in Bartlett Cove. Another commenter noted that if whales became entangled with a mooring, they might drown because the mooring is permanently fixed to the seafloor.

NPS Response: Potential impacts to the two federally listed threatened and endangered species are discussed on page II-52. The National Park Service consulted with the National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) on potential impacts to threatened and endangered marine species from installation of permanent moorings in Bartlett Cove. NMFS concurred with the NPS conclusion that the proposed action is not likely to adversely affect Mexico Distinct Population Segment humpback whales (*Megaptera novaeangliae*) or Western Distinct Population Segment Steller sea lions (*Eumetopias jubatus*). A concurrence of “not likely to adversely affect” requires that all effects are beneficial, insignificant, or discountable. Insignificant effects include those effects that are undetectable, not measurable, or cannot be evaluated. Discountable effects are those extremely unlikely to occur. Entanglement would be a minimal concern as installation would occur in shallow water with adequate tension to allow the cable to resist forming loops and contour to the seafloor. Mooring lines would be pulled taut during installation, minimizing risks of entanglement.

If take of listed species occurs, or new information reveals that the action may affect listed species in a manner or to an extent not previously considered, NPS would re-initiate consultation with NOAA NMFS.

Comment Topic: Commenters raised concerns about impacts from increased marine vessel traffic (due to increased levels of activity generally, related to a tribal transportation ferry (page I-21), and

in response to the planning vision proposal (page I-33) to “utilize the flexibility afforded the superintendent in current law and regulation to optimize private vessel marine entries to the frontcountry . . . consistent with the park’s 2003 Vessel Quotas and Operating Requirement (VQOR) EIS ROD”). Impact concerns include potential vessel collisions with whales, greater underwater acoustic noise disturbances affecting marine wildlife, and engine noise as a detraction from the visitor and wilderness experience enjoyment. Commenters also proposed a range of mitigating actions to reduce motor vessel impacts (use of electric and quieter marine vessels, instituting a 13-knot speed limit for all vessels at all times in the lower portion of the bay as a scientific link has been shown between reduced vessel speeds and reduced chance of collisions, and installing a seasonal buoy 1 mile from shore off Lester Point to help boaters ascertain the legal distance for whale waters to help them avoid sensitive shelf feeding areas).

NPS Response: The NPS acknowledges that marine vessel traffic has effects on marine mammals in park waters, including collision and mortality risks for federally listed threatened and endangered species (discussed on page II-52), and broad acoustic noise disturbance effects to wildlife. The Frontcountry Management Plan is consistent with the 2003 Vessel Quotas and Operating Requirements (VQOR) EIS Record of Decision, therefore limiting the risks such as collision and underwater acoustic disturbances to sensitive marine mammals within acceptable, non-impairment thresholds. Further, the NPS proposed action does not intentionally increase the number of marine vessels in Bartlett Cove. Some visitors may find the increased amenities, services, and opportunities within the frontcountry appealing and may extend their stay in Bartlett Cove, while other visitors may find that the increased amenities, services, and opportunities detract from the remote Alaskan setting and spend less time. Finally, due to mitigation measures already in place in the park (existing VQOR quotas, operating requirements, and whale waters regulations), the interdisciplinary planning team did not identify the level of impacts to wildlife, visitor experience, and wilderness from these potential inadvertent changes in marine vessel use patterns as being such that it was pivotal for the overall process or of critical importance to the decision maker. Other impacts associated with greater levels of human activity in the frontcountry (noise, temporary displacement, etc.) are addressed in the portions of "Chapter 3: Affected Environment and Environmental Consequences" that address wildlife and visitor experience.

Comment Topic: Concerns were raised over the impacts to seafloor resources and other wildlife from installation of 40 eco-moorings. One commenter pointed out that no formal studies had been conducted regarding resource degradation in Bartlett Cove, nor had pilot moorings been placed to see how they perform for the long term and what maintenance will be required. Another commenter pointed out that impacts to benthic resources could have impacts further up the food chain.

NPS Response: While no formal studies have been conducted regarding the impacts of boat anchors in Bartlett Cove, a wide body of research has demonstrated that seafloor resources suffer from mechanical damage caused by boat anchoring, particularly in coastal areas

subjected to intense recreational activity. Park staff have observed boat anchors dragging in Bartlett Cove, particularly large boats anchored further from the shoreline that are subject to westerlies. In addition, park staff have observed boaters using batteries or other inappropriate materials as anchors, which could potentially leak contaminants into Bartlett Cove.

Environmentally sensitive moorings are widely used around the world and have become a generally accepted tool for managing anchoring impacts. The interdisciplinary planning team did not identify the level of impacts from permanent moorings as rising to the level of significance requiring a greater level of analysis.

Comment Topic: A commenter suggested that Bartlett Cove is a river estuary with a soft bottom, and that the regular deposition of mud from the Bartlett river and the high level of glacial silt in the waters of the bay make the sea floor a resilient environment, so that mitigations to protect the seafloor are not warranted (even with regular seafloor disturbances).

NPS Response: The NPS agrees that the soft Bartlett Cove seafloor is less prone to permanent damage from anchors as compared with substrates supporting rich biogenic habitat. While understanding that it might appear that Bartlett Cove is a main river estuary for silt deposits (isostatic rebound makes the sea floor consistently shallower and shifting marine sediment covers the floor), the NPS does not agree with this characterization based on Bartlett River flow patterns and other indicators. Further, the NPS often seeks to mitigate anthropogenic impacts in high use areas, even when habitats are more resilient or typical, and achieves multiple objectives through this action (e.g., reduce debris and pollution associated with inappropriate private mooring systems, enhance visitor safety and reduce the risks of oil spills and property damage from anchor failures, reduce multi-use conflicts such as between boats and float planes by concentrating the extent of the area used by small and medium boats).

Comment Topic: A commenter suggested that the mooring proposal will limit opportunities for arriving non-local visiting marine vessels by compressing the total area available for their use, by increasing competition during periods of peak demand, and by charging cost recovery fees (compared with opportunities to anchor at no cost).

NPS Response: The NPS believes that the proposal will increase opportunities in the most protected areas of Bartlett Cove through more efficient and concentrated use (and otherwise discourage anchoring for small and medium boats in the area). The management strategy is also expected to accommodate and more efficiently enable arriving park visitors to tie up. With adaptive capacity levels of up to 40 total moorings, the NPS anticipates ample opportunities, and acceptable cost-recovery charges as described following:

- 26 moorings (corresponding to VQOR marine vessel daily quotas) are the maximum capacity considered necessary for arriving non-local park visitors who previously would have been expected to use a private anchor. The cost recovery fees for these visitors who typically want

to few spend hours, or at the most a few days in the frontcountry, are anticipated to be nominal.

- 14 moorings for park visitors, including regional boat owners, park partners, and incidental NPS uses (based on the 2012 – 2016 demand levels in Table 1 of the plan/EA). Given the typical timeframes of a recreational park visit by a boat owner originating from nearby communities, cost recovery fees are anticipated to be nominal. At the same time, the NPS charging a fee by the day will serve as a disincentive to indefinite and derelict boat storage (activities more appropriately served by communities and private interests outside a national park).

Comment Topic: A commenter suggested that empty moorings will negatively impact the character of Bartlett Cove.

NPS Response: The NPS acknowledges this concern, however will seek to adaptively optimize the number of moorings provided (in terms of the number, location, design, and any seasonal adjustments).

Comment Topic: Some commenters were concerned about impacts to bears in Bartlett Cove due to shifts in visitor patterns that encourage food preparation and consumption in areas outside the intertidal zone (RV campground/picnic tables, huts, pavilions).

NPS Response: The NPS acknowledges these concerns and describes why this topic was not carried forward for detailed analysis in “Chapter 3: Affected Environment and Environmental Consequences.” Further, the NPS proposes measures to reduce and mitigate these impacts to bears in "Appendix D: Mitigation Measures and Best Management Practices."

Comment Topic: Concern was raised that increased road and vehicle traffic could result in an increased chance for vehicle collisions with wildlife, in addition to increased disturbance from traffic noise, and greater levels of human activity in the frontcountry.

NPS Response: The National Park Service does not currently regulate the number of vehicles in the frontcountry area, and the proposed action does not intentionally increase the number of small vehicles in Bartlett Cove. Some visitors may find the increased amenities, services, and opportunities within the frontcountry appealing and may extend their stay in Bartlett Cove, while other visitors may find that the increased amenities, services, and opportunities detract from the remote Alaskan setting. The interdisciplinary planning team did not identify the level of impacts to wildlife from potential vehicle collisions as being such that it was pivotal for the overall process or of critical importance to the decision maker. Other impacts associated with greater levels of human activity in the frontcountry (noise, temporary displacement, etc.) are addressed in the portions of "Chapter 3: Affected Environment and Environmental Consequences" that address wildlife.

Comment Topic: Concerns were raised that the Environmental Assessment characterization of light pollution does not adequately acknowledge the impacts from NPS facilities in Bartlett Cove.

NPS Response: The NPS acknowledges this concern in "Chapter 3: Affected Environment and Environmental Consequences" which states that sources of light pollution include "park facilities that may be directly or indirectly visible from some areas of the frontcountry." Further, the NPS has developed a project to perform a night skies audit of Bartlett Cove and develop comprehensive recommendations to improve the visitor enjoyment of night skies and the aurora, while still meeting safety and other lighting requirements.

Comment Topic: Concerns were raised that the Environmental Assessment did not analyze or recognize impacts to visitor experiences in designated Wilderness, or when participating in frontcountry interpretive experiences, from the sights and sounds of cell phone use.

NPS Response: The NPS acknowledges that increases in cell service and other modern communication tools in the park may create sights and sounds that detract from the visitor experiences and the remote Alaskan setting. The NPS does not have jurisdiction over airwaves, and independent communications interests may provide cell service within park airspace without consulting the NPS. Therefore decision-makers at the park decided to propose a pro-active approach that gives the NPS a greater role in defining how and where this use is appropriate, based on balanced public and conservation objectives.

Comment Topic: Concerns were raised that the Environmental Assessment did not analyze or recognize impacts to mobility challenged users' visitor experience from increased human-generated noise and activity in currently accessible areas (campground, Blackwater Pond, Tlingit Trail, etc.), and the resulting loss of accessible bird viewing areas.

NPS Response: The NPS acknowledges that increased frontcountry visitation may affect the experience of all visitors seeking a rustic, secluded, and contemplative experience in the frontcountry. The Environmental Assessment generally discusses this topic within the Visitor Use and Experience conclusions in "Chapter 3: Affected Environment and Environmental Consequences." Further, while the NPS proposals may alter the location of accessible bird viewing opportunities, the many ABAAS-related proposals in the plan (e.g., new trails, parking, facility upgrades, wayfinding and signage) are expected to substantially expand opportunities for accessibility-challenged visitors.

Comment Topic: Concerns were raised that the Environmental Assessment did not consider the impact of its proposals on independent visitors from adding and expanding the diversity of users to the frontcountry.

NPS Response: While the plan/EA seeks to increase visitor diversity and welcome new types of visitors (e.g., independent car/RV campers, Alaska residents, tribe-operated cultural

tourism visitors based from Hoonah), the NPS preferred alternative is specifically oriented to strengthening Bartlett Cove's appeal as a day-excursion destination and as a base for multi-day independent stays. Further, the Economic Impacts portion of "Chapter 3: Affected Environment and Environmental Consequences" anticipates that the NPS preferred alternative will "enhance the appeal, profitability, and economic viability of the lodging and food services operations," and enhance the economic viability of Bartlett Cove and gateway community based businesses that serve the independent visitor.

Comment Topic: Commenters asked how the park will protect park resources in the face of climate change, ocean acidification in Park waters, the loss of tidewater glaciers, ecosystem disruption from rainfall changes, the potential for spruce bark beetles due to warmer winter temperatures, biodiversity loss, and sea level changes.

NPS Response: The potential impacts of climate change and the dynamism of the Glacier Bay environment are well known by members of the planning team and were taken into account during this effort (to the limited extent that they have any bearing on specific NPS proposals).

Comment Topic: Concerns were raised that the Environmental Assessment did not analyze impacts to recreational berry picking (blueberries primarily) in Bartlett Cove or to Huna Tlingit gull egg harvest opportunities within their Ancestral Homeland.

NPS Response: The NPS does not see any potential for significant reduced opportunities for berry picking associated or in any mechanism by which these actions could affect gull egg harvests.

Comment Topic: Concerns were raised that the Environmental Assessment did not consider the impact of its proposals on resident hunting (moose and waterfowl) and sport fishing harvests.

NPS Response. In Appendix B of the plan/EA, the NPS analyzed potential regional subsistence impacts such as hunting on public lands outside park boundaries, as required under the Alaska National Interest Lands Conservation Act (ANILCA), section 810. The State of Alaska concurred with this analysis and EA wildlife related conclusions in "Chapter 3: Affected Environment and Environmental Consequences." A comment letter of May 8, 2019 prepared by Susan Magee, ANILCA Program Coordinator states: "We concur that these impacts [Wildlife and Hunting] will be minimal even in their cumulative effects and with the extensive habitat available to these species in the area." The NPS also acknowledges that residents in the region, including from the community of Gustavus, expressed concerns about new route longer trail distances to access the Bartlett River in order to participate in sport fishing harvests. This concern has been eliminated by NPS changes to the Bartlett River Trail proposal below (see edits for Page II-10 in the section below).

Comment Topic: Commenters are concerned that economic benefits associated with the preferred alternative will bypass Gustavus entirely because visitors' time is focused in Bartlett Cove, because the NPS will provide competing visitor services (RV campground, food, lodging, transportation) that take business away from local proprietors, and because lodge staff composition rarely includes any local residents. Commenters questioned why no projections are included on visitors and/or visitation days to gateway communities, and questioned why the socioeconomic analysis did not determine an adverse economic consequence for gateway communities.

NPS Response. The NPS acknowledges these concerns. Many visitors arriving by jet or ferry may be transported to the park without stopping or spending money in gateway communities. The NPS, business, and partners may offer visitor services or goods that compete with gateway community offerings, and may choose to hire individuals from outside the community rather than local residents. However, the NPS believes that even with no projections on visitation levels and/or visitation days to gateway communities in "Chapter 3: Affected Environment and Environmental Consequences," the level of economic impacts and visitor experience analyses are sufficient to determine a net long-term economic benefit to gateway communities that would result from the Glacier Bay Lodge being more operationally sustainable, and Bartlett Cove enhancements supporting increased day-excursions and multiday visits. Finally, the NPS plan/EA explores opportunities to engage regional residents, communities, and businesses in a higher degree of economic partnership actions, and multi-modal options to better integrate Bartlett Cove and Gustavus.

VISITOR CAPACITY

Comment Topic: Concerns were raised regarding the increase in visitor capacity identified in appendix C.

NPS Response. The updated social carrying capacity for the frontcountry (1000 people per day) is a maximum; the typical sustained level of visitation is substantially lower. As stated in the environmental assessment, visitor capacity is a component of visitor use management defined as the maximum amount and types of visitor use that an area can accommodate, while sustaining desired resource conditions and visitor experiences consistent with the purpose for which the area was established. The selected alternative includes many actions that would provide additional opportunities for visitors within the frontcountry and support multi-day stays. The environmental assessment notes that "Overall, with more opportunities for overnight lodging, there would be more visitors visiting the park, and the more time each visitor spends in the frontcountry would result in more visitor hours in the park (See chapter 4 of visitor use)." Further, Appendix C includes indicators and thresholds that would be used by the National Park Service to monitor desired resource and visitor experience conditions. Specifically, indicators for "encounter rates on trails" and "the number of times a boat is observed independently anchoring" will be monitored. This will alert park staff to changing

visitor experience conditions within the frontcountry at which time adaptive management actions could be implemented. In regards to staffing levels, operational issues are not required as part of a NEPA analysis. The environmental assessment acknowledges there is a need for increased staffing levels by providing increased staff housing.

Concern Statement: Commenters described concerns that the frontcountry becoming an off-vessel destination for cruise ship passengers is a reasonably foreseeable action that has not been taken into account (enabled by a tribal ferry from Hoonah to Bartlett Cove connected to tourism operations at Icy Strait Point) and that this new segment of visitors, given the scale of use typical in the cruise circuit in Southeast Alaska, would create unacceptable higher density social conditions in the park frontcountry.

NPS Response. Nothing in this plan provides services at a scale that can enable Bartlett Cove to regularly serve visitors delivered by cruise ships or expedition-class marine vessels with more than 400 passengers. Further, as currently proposed, the Hoonah Indian Association Tribal Transportation ferry has a capacity of under 100 passengers (a portion of whom would likely include tribal members and Hoonah residents). Beyond these routes of entry, any additional individual cruise ship passengers choosing to visit Bartlett Cove would be expected to rely on existing private or public regional transportation modes with timing or capacity constraints (such as small plane or boat charters or the Alaska State Ferry) so that their trip would become more consistent in scale and pattern with visitors in the independent visitor market. For these reasons, the NPS believes that the capacity description (Appendix C) characterizes an appropriate level of use for the frontcountry, and that environmental assessment cumulative analyses have addressed the reasonably foreseeable action.

MINOR EDITS TO THE ENVIRONMENTAL ASSESSMENT

This section includes minor edits and technical revisions to the environmental assessment that resulted as a response to comments received from general commenters and consultants during the public review period. Page numbers referenced pertain to the 2018 *Glacier Bay National Park and Preserve Frontcountry Management Plan/Environmental Assessment* (plan/EA). The edits and technical revisions did not result in any substantive modifications being incorporated into the selected action, and it has been determined that the revisions do not require additional environmental analysis.

This Errata, when combined with the April 2019 Environmental Assessment and its supporting appendices, comprises the only amendment deemed necessary for the purposes of completing the plan/EA. The FONSI and errata will be released as a final decision record that also includes:

- The previously released April 2019 Environmental Assessment and its supporting appendices (as amended by this errata).

- A June 2019 Preface and Part I of the Frontcountry Management Plan that are revised to incorporate minor edits, and to update non-substantive text and narratives. These fully replace their April 2019 draft versions. While these changes are not detailed in the errata, some changes of interest to the public are highlighted in the responses to concerns section above.

In reference to the FMP/EA, the page number and topic heading are provided. Original text from the FMP/EA is identified to allow for comparison to the text change. Removed text is shown in ~~strikethroughs~~ and new text is shown in underlines.

Change. Page II-1. “This environmental assessment (EA) informs the National Park Service (NPS) decision to update the visitor experience and management vision for the frontcountry area (see figure ~~16~~ 17 from part I) of Glacier Bay National Park (park), and consider visitor day-use excursions originating from Bartlett Cove (including into adjacent designated wilderness).”

Remove. Page II-7. “~~Combine Visitor Center and Visitor Information Station activities to within a ~2,900 square foot, multi-story facility in the current VIS area, to include a 40-person capacity auditorium. The facility would serve as a hub to orient visitors and introduce park themes, in addition to supporting backcountry use, trip planning, and leave-no-trace principles. Parking efficiency enhancements would be included within existing disturbance and pavement footprints.~~”

Remove. Page II-8. “~~Enhance the functional tidal range and usability of the public boat launch ramp by removing accumulated sediment; minimally invasive suction would be used to relocate sediment to a nearby seafloor location so it minimizes suspension in the water column.~~”

Replace. Page II-8. “Remove accumulated sediment from the public boat launch ramp to enhance the functional tidal range and usability for small recreational vessels (recognizing that gateway communities support this function for commercial and larger vessels). Use minimally invasive suction to maintain the ramp to its original constructed condition by relocating sediment to a nearby seafloor location while minimizing its suspension in the water column.”

Change. Page II-10. Action has been changed to reduce the extent of trail along the shoreline. “Bartlett River Trail: Approximately ~~1.4 miles~~ one mile of new route would be built on the shoreline and along the tidal cut (some portions in designated Wilderness), as a Class 3 ABAAS and narrower rustic boardwalk (up to 36” wide) on helical piers or other elevated structures that can be periodically shifted toward the water to maintain the shoreline experience as isostatic rebound occurs. This would include the minimum required site modifications (based on wilderness analysis during pre-design). The ABAAS boardwalk at a new 12-person overlook destination would be located just outside the designated Wilderness boundary in the northeastern Inner Lagoon. Approximately .6 miles of new and existing route within rainforest would be upgraded to meet sustainable trail standards as a durable soft-tread trail using native materials. The closed trail segment would no longer be

maintained and about ~~.75~~ 0.70 miles would be spot revegetated to discourage public access. All inner lagoon kayak operations (racks and launching) would be consolidated to a site at the end of an expanded park headquarters parking area with a connecting path to the boardwalk that enables launching and consolidates foot traffic to reduce shoreline vegetation impacts. A short spur connection (up to 300 feet) from the new Bartlett River Trail would be upgraded to support Bartlett Lake Trail use. After the new trails in this plan are constructed, consider closing this and the entire Bartlett Lake Trail (weighing maintenance costs and trail use levels) using minimal vegetation rehabilitation and large rock placement to deter use."

Change. Page II-10. *Inner Lagoon Trail*—It would be built as an ABAAS rustic boardwalk (~~up to 36" wide~~) on helical piers or other elevated structures that can be periodically shifted toward the water to maintain the shoreline experience as isostatic rebound occurs.

Addition/Clarification. II-11. "A small, drive-in campground would be developed that includes between four and six rustic, no-frills sites that could accommodate up to 30-foot-long RVs as well as other vehicles. Expanded future need for RV camping would be encouraged to occur in Gustavus by private enterprise or local government that could better provide for enhanced services such as hookups."

Addition/Clarification. II-11. The 1958 park headquarters building would be replaced to address its deferred maintenance and substantial deficiencies. ~~A replacement of up to 6,000 square feet would be constructed nearby within the historic disturbance footprint, while keeping with the original aesthetics and character/feel of the area.~~ A replacement would be constructed nearby within the historic disturbance footprint, while keeping with the original aesthetics and character/feel of the area. The facility would be built to replace in-kind administrative space (~6,000 square feet) scaled up as required to meet current NPS facility standards (ABAAS, telecommunications, utilities, etc.).

Addition/Clarification. Page II-12 "Public commenters requested access into designated Wilderness originating from non-NPS lands (including the Bartlett Lake/Towers Trail and Falls Creek areas in Gustavus) or backcountry areas of the park. Trails that originate within the frontcountry area for this plan (regardless of their destination), were included in this plan. Trails that originate in backcountry areas of the park will be addressed in a future backcountry planning effort. Additionally, because some of these trails ~~Because these~~ pose more complex jurisdictional, parking/vehicular access, and maintenance questions, the National Park Service decided to not include those actions in this plan and to wait to address them in the future backcountry planning effort. ~~Additionally, actions related to the Park's backcountry are outside the scope of this plan.~~"

Addition. Page II-16. Constructing 0.6 miles of trail in forest for the Bartlett River Trail would require clearing 36" to 60" of vegetation along the path (up to 0.4 acres).

Addition. Page II-16. Hazard and windthrow risk trees would be removed in a half-acre area above the cut bank south of employee housing and north of the park entrance road.

Change. Page II-16. In total, ~~3 and 4~~ up to 4 acres of Sitka spruce/hemlock forest would be removed under the destination alternative because of vegetation clearing.

Addition. Page II-17. Construction of the Discovery Center would require clearing up to 22,000 square feet of vegetation on the southeast edge of the current visitor information station parking lot.

Change. Page II-19. ~~Several site-specific wetland assessments and delineations have been conducted for infrastructure-related projects in the Park. However, detailed wetland mapping of the proposed project area is currently limited.~~ National Wetlands Inventory mapping was completed by the US Fish and Wildlife Service and is available for the entire project area (USFWS 2018b). Additionally, the most recent park land-cover type classification (Boggs et al. 2007), which includes locations of vegetative cover types typical of wetlands in the project area, contributed to a preliminary assessment of wetland impacts. Wetlands delineations in the park are limited to a few project-specific assessments.

Change. Page II-21. *Bartlett River Trail*—The new route would cross through between ~~3,250 and 3,580~~ 1,410 and 1,550 linear feet of freshwater emergent wetland and between ~~7,280 and 8,020~~ 3,860 and 4,250 feet of estuarine intertidal wetland. The use of helical piers to support the boardwalk and overlook would affect between ~~0.08 and 0.09~~ 0.4 and 0.5 acres of soil. The total surface of the boardwalk and overlook would be ~~approximately 0.80~~ between 0.7 and 0.9 acres.

Change. Page II-21. *Inner Lagoon Trail*—The trail would cross through approximately 780 linear feet of estuarine intertidal wetlands and 440 linear feet of freshwater forested/shrub wetland. The use of helical piers to support the boardwalk would affect ~~428 to 470 square feet (0.01 acres)~~ less than 0.02 acres of soil. The total surface area of the boardwalk would be approximately 0.1 acres.

Change. Page II-24. If there were a noticeable change in angler harvest and associated catch rates, which may be predictive of harvest concerns and population viability, park staff would ~~consider implementing~~ consult with Alaska Department of Fish and Game (ADF&G) to determine whether there is a conservation concern and, if necessary, consider proposals to the Board of Fisheries to implement additional management strategies to reduce pressures on fish populations from recreational fishing, such as reducing daily bag limits, limiting gear types, or implementing temporary spatial or temporal closures.

The State of Alaska maintains management authority of fisheries resources. Under all alternatives, ADF&G would use its authority through an Emergency Closure or through the Board of Fisheries process to change sport fishing regulations if a conservation concern was present. Additionally, under the Master Memorandum of Understanding between the NPS and ADF&G, the NPS commits to using the State's regulatory process to the maximum extent allowed by Federal law in proposing changes in existing State regulations.

Change. Page II-26. Bird species are not expected to be affected at population levels because approximately ~~4.6~~ 5.0 miles of shoreline habitat in Bartlett Cove would remain undisturbed.

The impacts would be even less noticeable parkwide, since more than 700 miles of shoreline in Glacier Bay proper would remain free of development. ~~However, As~~ shoreline habitat in Glacier Bay varies in complexity and substrate type (Sharman et al. 2005) and habitat used for nesting varies by species (Arimitsu et al. 2007), not all undisturbed shoreline throughout the park would provide suitable habitat for the species found in Bartlett Cove. However, Arimitsu et al. 2007 surveyed the shoreline of Glacier Bay proper to locate ground-nesting marine birds and their nesting areas, including species seen in Bartlett Cove such as Black Oystercaster, Mew Gull, Glaucous-winged Gull, Red-throated Loon, Canada Goose, and Spotted Sandpiper, and demonstrated that these species are found nesting throughout many areas of Glacier Bay proper.

Change. Page II-27. The impacts would be even less noticeable parkwide, since more than 700 miles of shoreline in Glacier Bay proper would remain free of development. ~~However, As~~ shoreline habitat in Glacier Bay varies in complexity and substrate type (Sharman et al. 2005) and habitat used for nesting varies by species (Arimitsu et al. 2007), not all undisturbed shoreline throughout the park would provide suitable habitat for the species found in Bartlett Cove. However, Arimitsu et al. 2007 surveyed the shoreline of Glacier Bay proper to locate ground-nesting marine birds and their nesting areas, including species seen in Bartlett Cove such as Black Oystercatcher, Mew Gull, Glaucous-winged Gull, Red-throated Loon, Canada Goose, and Spotted Sandpiper, and demonstrated that these species are found nesting throughout many areas of Glacier Bay proper.

Remove “~~the combined VIS/VC~~” on page II-44. This action has been removed from this plan; however, there remain facility improvements and therefore the remaining sentence is still accurate.

Remove “~~1.4 miles of~~” on page II-45. The mileage of the trail has changed; however, the trail will still be a new route therefore the remaining paragraph is consistent with the change to trail mileage.

Correction. Page II-47. “\$113,804 million” should be “113.8 million”

Change. Page II-52. The plan would increase the number of moorings present in the bay; however, installation would occur in shallow water with adequate tension to allow the cable to resist forming loops and contour to the seafloor. Mooring lines would be pulled taut during installation, minimizing risks of entanglement. ~~the moorings~~ Moorings would be located in a consistent area over time, thus some animals may learn to avoid the area (NPS staff, pers. comm., 4/3/17).

Addition Page II-57. “Alaska State ANILCA office was provided with a copy of newsletter and was invited to provide comments. In September 2016, the ANILCA program coordinator provided comments that represented the consolidated views of state agencies.”

Remove. Page D-1 and D-3. ~~“Mooring buoys would be removed during the winter to protect character of adjacent wilderness and cultural resources (viewshed from the tribal house).”~~

Change. Page D-7. All ~~pathway construction facilities, excluding trails,~~ would be sited to avoid wetlands, or if that were not feasible, to otherwise comply with EO 11990, the Clean Water Act, and Director’s Order #77-1.

Addition. Page D-8. “Use quiet hours to manage visitor-created noise to reduce its impacts on other visitors.”

Appendix B: Non-Impairment Determination

The NPS Organic Act of 1916 and the General Authorities Act of 1970 prohibit impairment of park resources and values. The NPS *Management Policies 2006* use the terms “resources and values” to mean the full spectrum of tangible and intangible attributes for which the park is established and 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 National Park Service is to ensure that park resources and values will continue to exist in an unimpaired condition that will allow people to have present and future opportunities to enjoy them.

A determination of impairment is made for each of the resource impact topics carried forward and analyzed in the environmental assessment. Impairment is an impact that, in the professional judgement of the responsible NPS manager, would harm the integrity of park resources or values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact would be more likely to constitute impairment to the extent that it affects 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
- identified as a goal in the park’s general management plan or other relevant NPS planning documents.

An impact would be less likely to constitute an impairment if it is an unavoidable result of an action necessary to pursue or restore the integrity of park resources or values and it cannot be further mitigated.

Impairment findings are not necessary for visitor use and experience, socioeconomics, and solitude and unconfined recreation because impairment findings relate back to park resources and values. These impact areas are not generally considered park resources or values according to the Organic Act and cannot be impaired in the same way that an action can impair park resources and values. After dismissing the above topics, the topics remaining to be evaluated for impairment include: Sitka spruce/western hemlock forest, coastal meadows and early successional forest, wetlands, salmon and anadromous trout, shorebirds and waterfowl, Glacier Bay Lodge and Historic District, and Tlingit Ancestral Homeland.

VEGETATION

Vegetation is a component of the fundamental resources and values of Glacier Bay National Park and Preserve. In the selected alternative, up to 4 acres of Sitka spruce/hemlock forest will be removed

because of development of new facilities, including trails, buildings and structures, and parking lots. However, the actions proposed will not impact forest species at a population level because the disturbance will be localized to the construction sites, and the species affected are common throughout the 7,000-acre Bartlett Cove frontcountry area. Overall, the selected alternative will not result in impairment to this resource.

Less than 0.1 acres of coastal meadows and early successional forest will be cleared for construction of a Class 5 ABAAS trail and two, day use pavilions. The proposed actions represent an incremental addition to the existing development footprint and therefore will not impact native plant species at a population level through habitat loss. Additionally, the implementation of mitigation measures during and after construction activities will help reduce the establishment of spread and invasive species. Overall, the selected alternative will not result in impairment to the park's coastal meadows and early successional forests.

WETLANDS

Wetlands are a component of the fundamental resources and values of Glacier Bay National Park and Preserve. Construction of new facilities will primarily occur on well-drained glacial outwash. Before any construction occurs, a soil investigation will be conducted to confirm soil-bearing capacity and drainage characteristics. If such an investigation reveals soil conditions indicative of wetlands, alternative locations will be assessed. Using a minimally invasive suction device to relocate sediment from the boat ramp to a nearby seafloor location is not likely to noticeably alter overall functions of shoreline wetlands because of the small area affected. Trail construction will result in approximately 1.1 acres of wetlands being shaded by boardwalks and 0.07 acres of ground disturbance through placement of helical piers, which will not noticeably alter overall functions of the wetlands because of the small area of ground disturbance in relation to the total acres of wetlands present in the project area. Overall, the selected alternative will not result in impairment to the park's wetlands.

FISH AND WILDLIFE

Fish and wildlife are a component of the fundamental resources and values of Glacier Bay National Park and Preserve. Rerouting the Bartlett River Trail may potentially result in an increased harvest and mortality of individual fish; however, with implementation of mitigation measures, there will be no impacts to fish species at population levels. However, anglers will continue to be subject to State of Alaska daily recreational harvest limits. Overall, the selected alternative will not result in impairment to the park's salmon and anadromous trout.

Actions under the selected alternative will result in vegetation removal/alteration, permanent habitat loss, and visual and acoustic disturbances to and displacement of shorebirds and waterfowl; some individuals may temporarily or permanently relocate to areas outside the project area. Best management practices described in the environmental assessment will be used to reduce impacts to

the extent possible. Because there is other similar habitat nearby, survival rates, local population size, and long-term viability of these species are unlikely to be affected. The impacts will be even less noticeable parkwide. Overall, the selected alternative will not result in impairment to the park's shorebirds and waterfowl.

GLACIER BAY LODGE AND HISTORIC DISTRICT

This resource is considered a fundamental resource of the park and is a component of the historic sites that contribute to the significance of the park unit. The National Park Service will undertake several measures to preserve the historical and architectural character of the Glacier Bay Lodge, an historic property eligible for the National Register of Historic Places. Actions will be in accordance with the Secretary of the Interior's Standards for the Treatment of Historic Properties and a recently completed historic structure report for the Mission 66 lodge building. No significant adverse impacts are anticipated by project undertakings that include completion of deferred maintenance and other measures (e.g., restoration of the interior catwalk to its originally designed function, and removal of non-historic additions) to preserve the building's historic architectural character. Restoration of historic district viewsheds and preservation of other contributing features of the district's cultural landscape will assist efforts to preserve the district's historic setting.

Upgrades to some lodge rooms and other functional/use alterations will be sensitively carried out to minimize or avoid adverse impacts, although some actions may result in limited or moderately severe adverse impacts on the historic and architectural character of the lodge and district if these actions resulted in the loss or disturbance of historic building fabric and contributing architectural elements. Overall, the selected alternative will not result in impairment of the park's cultural landscapes and historic structures.

TLINGIT ANCESTRAL HOMELAND

This ethnographic resource is integral to the legislated purpose of this national park unit and its significance. It is considered fundamental resources and values of the park unit. Under the selected alternative, no significant adverse impacts will occur to resources contributing to the Bartlett Cove traditional cultural property, or to resources having cultural importance for the Huna Tlingit and the Hoonah Indian Association. Beneficial impacts will result from NPS efforts to undertake proposed facility development and other actions in a sensitive manner that strengthens tribal and NPS relations, ensures culturally important resources are appropriately preserved and protected, and maintains tribal access to traditionally important resources and places. Through a variety of means (e.g., interpreting Tlingit history and culture), the park will work with the Hoonah Indian Association to recognize and perpetuate the enduring cultural connections that the Huna Tlingit have for their ancestral homeland in the Bartlett Cove area. Overall, the selected alternative will not result in impairment of the park's ethnographic resources and cultural landscape.