

National Park Service  
U.S. Department of the Interior

Kenai Fjords National Park  
Alaska



## FINDING OF NO SIGNIFICANT IMPACT FRONTCOUNTRY MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

NPS-106155

Recommended:

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# FINDING OF NO SIGNIFICANT IMPACT

## 1. INTRODUCTION

The National Park Service (NPS) prepared a frontcountry management plan and environmental assessment (plan/EA) for Kenai Fjords National Park in accordance with the National Environmental Policy Act (NEPA) to provide park managers with a comprehensive, long-term approach to manage use day use; address visitor use at the park's most accessible and popular inland destination; and provide visitor access in a way that protects the park's natural and cultural resources, maintains positive visitor experiences, promotes visitor and staff safety, and supports the ability of park staff to maintain facilities and perform daily operations. This plan supplements the guidance in the *General Management Plan for Kenai Fjords National Park* (NPS 1984) and replaces the 2004 *Final Exit Glacier Area Plan/GMP Amendment* (NPS 2004).

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

## 2. SELECTED ALTERNATIVE AND RATIONALE FOR DECISION

The National Park Service analyzed a no-action alternative and one action alternative in detail in the plan/EA. Based on this analysis, the National Park Service selected alternative B as the alternative for implementation because it best meets the purpose of and need for action without causing significant impacts on park resources. The selected alternative is described below.

### 2.1 Selected Alternative

The selected alternative is described on pages 23–42 of the plan/EA. In summary, followed with additional detail below, the selected alternative will do the following:

- Update the frontcountry area's zoning and desired conditions to address visitor use management objectives.
- Adapt visitor messaging, wayfinding, and interpretation to achieve the following:
  - Improve and expand trip planning messaging and outreach regarding parking and congestion considerations during peak visitation periods.
  - Update signage and expand interpretive programs to focus on other natural features and visitor experiences in the area while deemphasizing Exit Glacier.
  - Improve wayfinding and orientation to enhance visitors' safety and preparedness.
- Increase efforts to reduce human-wildlife conflicts and control invasive plant species.
- Diversify recreational opportunities through the promotion of authorized forms of winter use.

- Propose through the rulemaking process changes to regulations that pertain to the Exit Glacier Developed Area to achieve the following:
  - Redefine the geographic extent of the Exit Glacier Developed Area, considering the rapidly changing environmental conditions.
  - Allow nonmotorized fat tire winter snow bikes in the same locations in the Exit Glacier Developed Area where snowmachines are allowed when snow conditions permit.
  - Rescind regulations that no longer apply due to the retreat of Exit Glacier.
- Move some regulations into the annually updated Superintendent’s Compendium to be able to address changing conditions in a timely fashion.
- Identify options and justifications for responding to changing conditions that may impact desired conditions, visitor use and experience, and frontcountry facilities.
- Establish indicators, thresholds, and visitor capacities to monitor and manage visitor use in the frontcountry.

### **Proposed Changes to Zoning and Desired Conditions**

Under the selected alternative, the management zones created in the 2004 Exit Glacier Area Plan are updated. Management zones enable the National Park Service to identify location-specific desired conditions in those areas. Desired conditions are defined as statements of aspiration that describe resource conditions, visitor experiences and opportunities, and facilities and services for a particular area (IVUMC 2016).

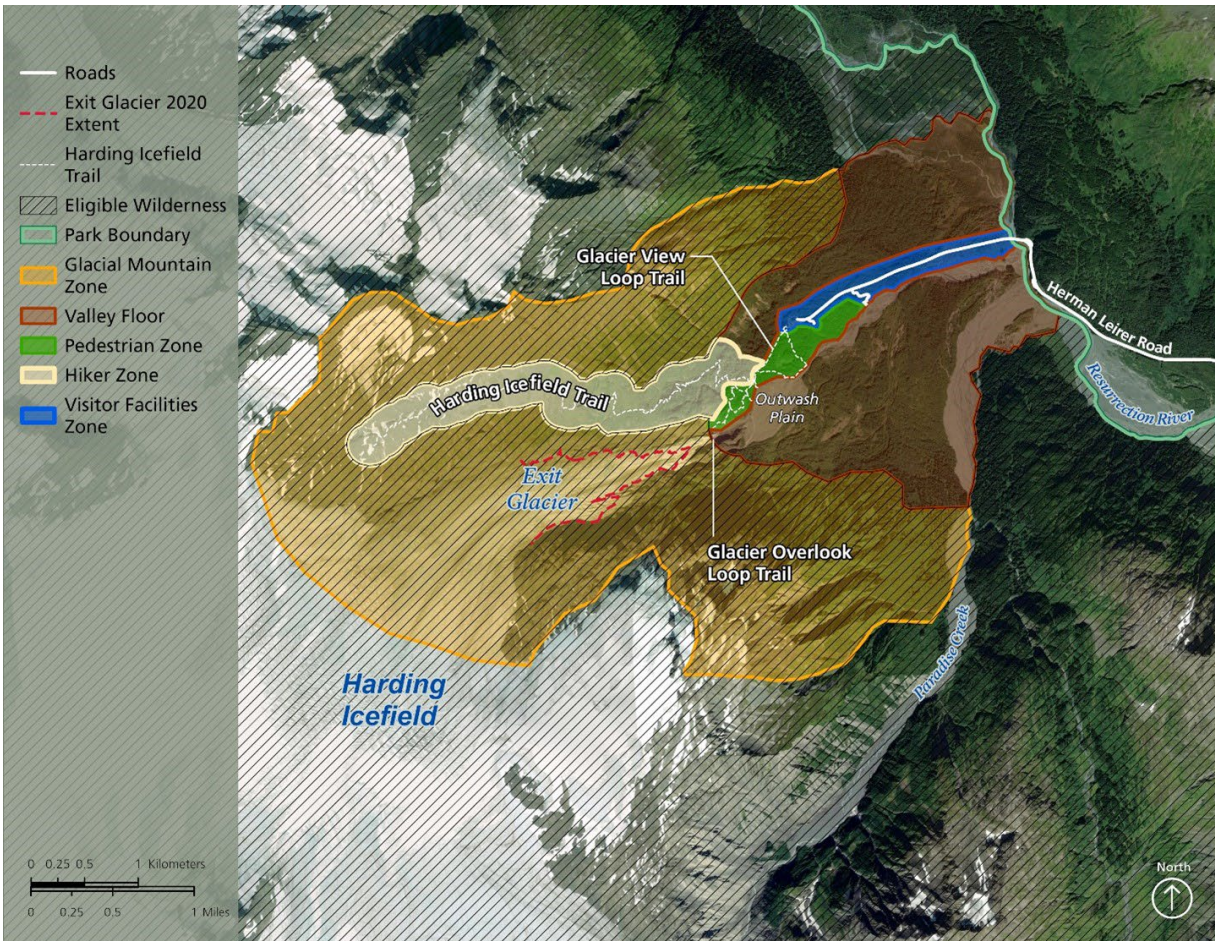
In the 2004 Exit Glacier Area Plan, the zones include two year-round zones (visitor facilities and pedestrian zones) and three summer-only zones (hiker, backcountry semi-primitive, and backcountry primitive zones), in addition to the general management plan natural area zone. The retreat of Exit Glacier since 2004 has rendered some of the central planning considerations of the 2004 plan’s zoning scheme and desired conditions untenable, for example, that visitors can “easily approach a glacier on foot.” This and other considerations spurred park managers to propose zoning changes under the 2024 plan’s selected alternative with updated management strategies to improve and diversify visitor experiences in the frontcountry.

The selected alternative establishes consistent year-round zoning that does not change seasonally as it does under the 2004 Exit Glacier Area Plan. Proposed changes from the 2004 Exit Glacier Area Plan are as follows:

- The area in the backcountry primitive zone is excluded from frontcountry planning and management and reverts to a natural zone designation, as defined in the general management plan (NPS 1984). Therefore, the total area of the Exit Glacier area, as defined in the 2004 Exit Glacier Area Plan, is reduced in the new selected alternative’s zoning scheme.

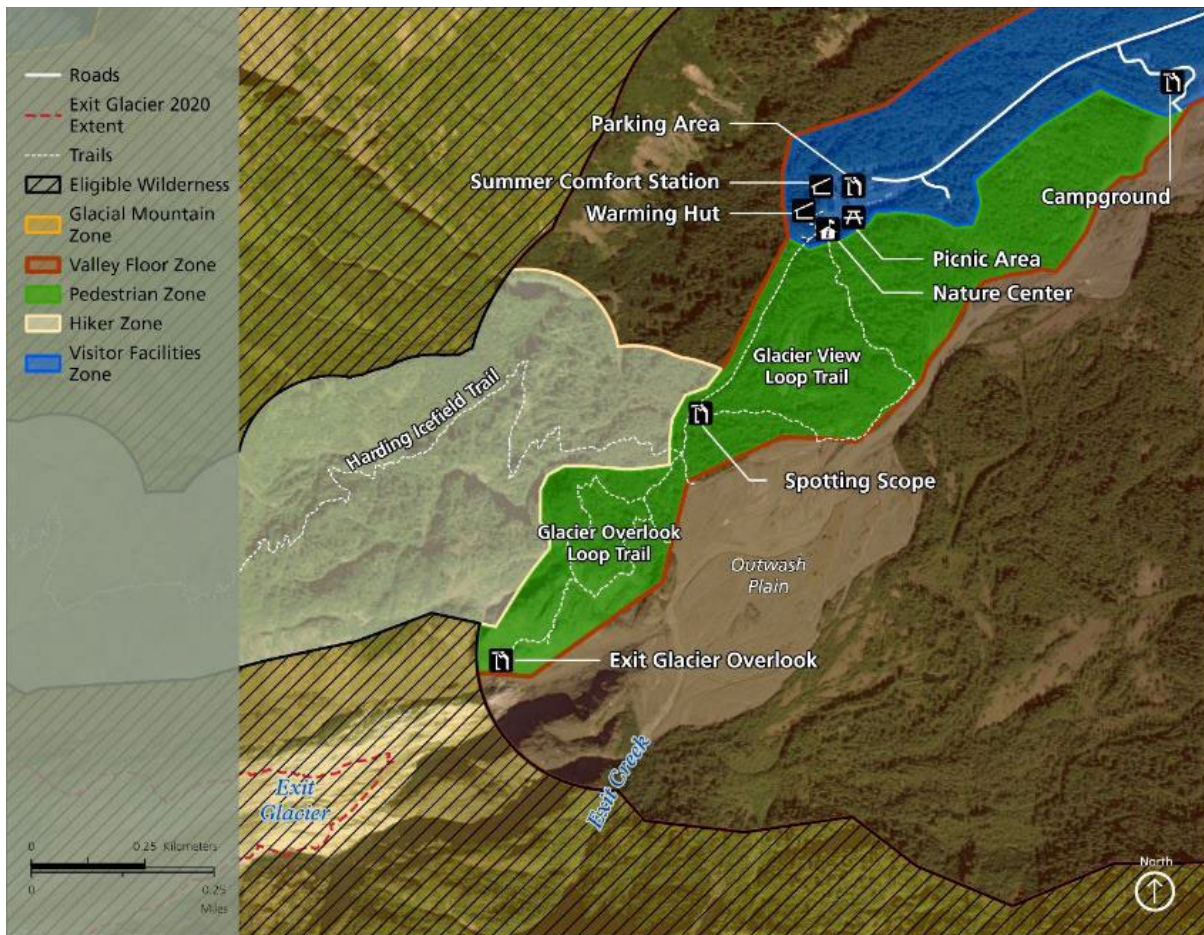
- The names and general concepts of the visitor facilities zone, pedestrian zone, and hiker zone are retained by the selected alternative, but the zone boundaries and desired conditions are modified.
- What was referred to in the 2004 Exit Glacier Area Plan as the “backcountry semi-primitive zone” is divided into two new zones with new desired conditions: the glacial mountain zone in the western upland areas and the valley floor zone in the eastern lowland areas. Also, a former hiking zone corridor from the 2004 Exit Glacier Area Plan summer zoning scheme following the then-proposed Paradise Valley Trail and Unnamed Peak Trail has been absorbed into both zones (see “Management Actions Considered but Dismissed” in the plan/EA for more details).

An overview and zoomed-in view of the new zones for the selected alternative are shown in Figure A and Figure B, respectively. Overviews of the zones’ desired conditions in the selected alternative are described below, while additional details regarding updated desired conditions for the selected alternative’s zones are in appendix B of the plan/EA.



**FIGURE A. MANAGEMENT ZONES FROM THE SELECTED ALTERNATIVE FOR THE FRONTCOUNTRY AREA. NOTE: EXIT GLACIER HAS RECEDED FURTHER SINCE THIS 2016 SATELLITE IMAGE. (SOURCE: PLAN/EA, 2024)**





**FIGURE B. DETAILED VIEW OF UPDATED MANAGEMENT ZONES IDENTIFIED IN THE SELECTED ALTERNATIVE FOR THE FRONTCOUNTRY AREA. NOTE: EXIT GLACIER HAS RECEDED FURTHER SINCE THIS 2016 SATELLITE IMAGE. (SOURCE: PLAN/EA, 2024)**

### *Desired Conditions for Proposed Management Zones Under the Selected Alternative*

Under the selected alternative, the frontcountry area includes zones with more development (visitor facilities and pedestrian zones) and areas with little development and more immersion in the resource (hiker, glacial mountain, and valley floor zones). Desired conditions for each zone are summarized below. See appendix A of the plan/EA for additional details and comparisons regarding desired conditions in each zone. Areawide desired conditions would apply to all zones of the frontcountry area.

#### Areawide Desired Conditions

The frontcountry will be a space where visitors can enter by road to learn about the park, experience its resources, and develop conservation ethics that enabled them to become the next generation of park stewards. The frontcountry will preserve experiences and values that inspire young minds and serve as a link between the past, present, and future of the park. Visitors can transition from the relative “hustle and bustle” of the more developed areas to the undeveloped areas, where they can experience more solitude and contemplative immersion in nature. While not all areas of the frontcountry will be free of development, visitors to the Glacier View Loop Trail and Glacier Overlook Loop Trail of the frontcountry area will experience some sense of

immersion in nature with opportunities for hiking and a limited degree of solitude. Most areas of the frontcountry will be free of signs of human disturbance, although they will still be relatively easy to access. Visitor presence in any area causes impacts, and some low-level impacts will be tolerated, as will concentrated developments near already-developed areas.

While Exit Glacier may continue to recede and lose prominence, evidence of glacial activity remains and will be interpreted for visitors. Visitors to the frontcountry will learn about climate change and how it impacts the park and its glaciers. Preserving wildlife and wildlife habitat, while also providing easy-to-access opportunities for visitors to view wildlife, will be central to the immersive quality of the frontcountry. Visitors who spend time in the frontcountry area can develop an appreciation for the challenges of recreating, even in a relatively accessible area of Alaska—for example, the risks from rapid weather changes; cold, wet weather; and wildlife, including bears and moose. This risk contributes to the richness of outdoor recreational experiences in the frontcountry.

#### Visitor Facilities Zone Desired Conditions

The visitor facilities zone will be the most developed of the five zones, where visitors arrive, get oriented, and interact with visitor facilities. In this zone, visitors will orient themselves to the landscape and transition from vehicle to foot travel. The experience in this zone will be highly social, with few opportunities for solitude. Infrastructure will blend in with and will not dominate the environment. The zone will provide basic visitor services expected at an NPS entrance area and basic infrastructure necessary to accommodate visitors arriving to the area. Visitors arriving by road, often in a motorized vehicle, will transition to walking, orient themselves at the nature center, and quickly immerse themselves in the natural world by moving out of this zone. This zone will have the highest level of NPS management presence. Interpretation will be provided through park staff and self-discovery via maps, signage, and educational media. This zone will offer a spectrum of visitor experiences and values, where typical activities include scenic driving, camping, orientation, learning, picnicking, and taking care of basic needs. Examples of amenities in the visitor facilities zone include the Herman Leirer Road, park entrance sign, campground, employee housing area, parking lot, nature center (including the park store), pavilion, restrooms, picnic area, pumphouse, and warming hut.

#### Pedestrian Zone

In the pedestrian zone, visitors will spend a few hours walking on well-developed trails, some of which are universally accessible and some of which are slightly steeper, and experience vistas, including distant views of the receding glacier and backcountry. This zone will introduce visitors to the experience of being “out in the park” and provide an entry to this beautiful area where social opportunities are plentiful. Some small visitor comforts and structures, such as benches and kiosks, will be available, although they will be fewer and less concentrated than in the visitor facilities zone. Opportunities for visitor education through signs and personal contact will be abundant. This zone will offer a spectrum of visitor experiences and values, where typical activities include walking, hiking, wildlife viewing, photography, and other passive pursuits. Examples of amenities in the pedestrian zone will include the accessible Glacier View Loop Trail, the stone kiosk, the Glacier Overlook Loop Trail, and various trails leading to the outwash plain (see Figure B for locations and names of trails).

### Hiker Zone Desired Conditions

The hiker zone will provide a natural experience with moderate social experiences, increased opportunities for connection with nature, and few visitor comforts. The zone's maintained hiking trails will include the Harding Icefield Trail corridor, which allows visitor access to more remote locations. Trails are steep, narrow, and uneven in places and generally require visitors to be physically well-conditioned and well-prepared. Preservation of the natural systems will be a high priority, but some impacts from trail development and maintenance will be permissible. This zone will offer a spectrum of visitor experiences and values, where typical activities include hiking, wildlife viewing, photography, and enjoying the sounds of nature. Currently, only the Harding Icefield Trail exists in this zone. Should additional trails be constructed in other zones in the frontcountry, their corridors would be redesignated as hiker zone (note that this zone need not be contiguous). The zone is defined roughly by extending out 1/8 mile on either side of a given trail.

### Glacial Mountain Zone Desired Conditions

The glacial mountain zone will offer a thoroughly natural experience in which visitors with the necessary training, expertise, and/or guidance will encounter the power and enormity of the landscape. This zone will encompass the current and former extent of Exit Glacier, giving visitors a sense of natural wonder and adventure in a place shaped by glacial and other geological forces. The zone will facilitate access to the glacier or to places from which the glacier has retreated. Some areas may need to be closed at times to protect public safety, and all areas, whether open or closed, will have the potential for hazardous conditions. Due to environmental hazards, such as avalanches, rockfalls, slippery snow and ice, washouts and flash floods, and crevasses, in this glaciated and mountainous terrain, visitors will have to be able to independently assess the risks of travel and assume those risks, even in areas that are not officially closed. Encounters between visitors will generally be low, and visitor comforts are not supported. This zone will offer a spectrum of visitor experiences and values, where typical activities include hiking, ice hiking, skiing, climbing, and mountaineering. Features in the glacial mountain zone will include Exit Glacier, the canyon formed by Exit Glacier and exposed as it retreats, the small cirque glacier above an emergency hut, and the mountain slopes and ridges north of the Herman Leirer Road, above the Harding Icefield Trail, and south of Exit Glacier.

### Valley Floor Zone Desired Conditions

In the valley floor zone, visitors will witness the dynamic nature of the outwash plain. Geological processes are constantly at work, including substantial sediment aggradation and erosion. The topography of the outwash plain constantly changes as the river roams across the valley floor. The encounter rate between visitors will be low since visitors tend to be dispersed across this vast open area. Because this area is a vast open space, visitors will be able to see others using this zone at a distance. Visitors will not be restricted to trails and will have to be self-reliant to safely enjoy free access across the landscape. Challenging conditions can prevail, so visitors will have to have sufficient experience to assess and assume the risks posed by environmental hazards, such as flash floods and braided stream dynamics. This zone will offer a spectrum of visitor experiences and values, where typical activities include hiking, packrafting, wildlife watching, snowshoeing, cross-country skiing, and snowmachine use (when snow conditions permit). This



valley floor zone boundary will be defined by the entirety of the valley floor in the planning project area, including the outwash plain, that will not otherwise be assigned to the visitor facilities, pedestrian, or hiker zones. The zone is bound by the Resurrection River to the east, Paradise Creek to the southeast and south, visitor facilities and pedestrian zone boundaries to the north, and the steep terrain to the west that rises off the valley floor.

### **Visitor Messaging, Wayfinding, and Interpretation**

Under the selected alternative, park management will use the following strategies and associated actions to improve visitor messaging, wayfinding, and interpretation.

- Improve trip planning messaging and outreach to set appropriate expectations and promote safe experiences.
- Update highway signage, the park website, waysides, and other public information to shift focus from Exit Glacier to other frontcountry resources and experiences.
- Update proactive messaging on the park website during peak visitation periods when potential parking lot congestion is anticipated.
- Provide visitor wayfinding and orientation information so that visitors understand their location and the distances to destinations in the visitor facilities, pedestrian, and hiker zones.
  - Use the best available science and marketing practices to update park signage and educational materials on the need to inform visitors to properly prepare for park outings and be self-aware and self-reliant when venturing beyond the visitor facilities and pedestrian zones.
- Update and publish consistent names on park signs and publications for the Glacier View Loop Trail and Glacier Overlook Loop Trail to set appropriate expectations and improve visitor wayfinding. Change names that refer to views of the glacier to more generic terms to reset expectations (e.g., “Creekside Trail” instead of “Glacier View Loop Trail”).
  - Update signage at trailheads to accurately describe distances, elevation gain, substrate, and typical travel time.
- Update personal and nonpersonal interpretive services to educate visitors about landscape change and climate change.
- Update waysides, interpretive displays, materials, and programs to expand focus beyond Exit Glacier onto the dynamic nature of the larger landscape. Continue to interpret Exit Glacier and add interpretation of other resources and topics related to the cultural and natural history of the frontcountry.
- Update nature center displays and exhibits to emphasize the scenic and educational values of a dynamic, changing landscape, as well as some of the dangers visitors may encounter in it.

- Provide training to commercial operators to ensure that messaging about the park is consistent with an expanded focus on landscape change and not just Exit Glacier.
- Expand the accessibility of ranger programs, including possible audio-described programs in the nature center.
- Increase the use of unadvertised, short-term “pop-up programs” to engage with visitors in unique locations.
- Expand the reach of NPS interpretation by pursuing partnerships with commercial services to provide NPS interpretive programming on a cost-recovery basis.
- Continue to pursue partnership opportunities for youth educational programs with organizations in the greater area, including Kenai Peninsula cities and Anchorage.
- Develop interpretive programs, products, and recordings for the nature center in multiple languages to reach more audiences.
- Consider integrating Alaska Native place names and Indigenous Knowledge into frontcountry features and interpretive messaging to reduce the focus on “Exit Glacier.”
- Consult with Alaska Native groups to determine their interest in collaborating on park interpretive programming to incorporate Indigenous Knowledge and perspectives on climate change, landscape change, and the cultural names and history of the frontcountry.

## **Natural Resource Management**

Under the selected alternative, park management will increase efforts to decrease negative human-wildlife encounters and manage invasive plants. These strategies and associated actions include the following:

- Manage human-wildlife encounters
  - Develop and enhance educational materials about wildlife safety and food storage at targeted visitor use areas, including the park’s nature center, bike racks, trailheads, and along trails.
- Manage invasive plants species
  - Work with partners (e.g., Chugach National Forest, Kenai National Wildlife Refuge) and other groups to develop management strategies for controlling invasive plant populations near park boundaries. Continue to identify and treat known high-priority invasive plant populations while supporting early detection and rapid response to new populations.
  - Develop interpretive products and programming for visitors related to eliminating or minimizing the spread of invasive plants.

## Recreational Opportunities

Under the selected alternative, park management will pursue strategies to increase the diversity of recreational opportunities in the frontcountry area. These strategies and associated actions include the following:

- Expand and promote visitor opportunities in the winter and shoulder seasons (spring, fall) to provide a greater diversity of activities in the visitor facilities, pedestrian, hiker, and valley floor zones.
  - Explore potential partnerships with local stakeholder groups to groom the NPS section of the access road from the Resurrection River bridge (park boundary) to the nature center, extending cross-country ski, snowmobile, and fat tire winter snow bike opportunities in the winter.
- Expand the promotion of winter recreation opportunities on the park website, in publications, and on social media. Explore the potential to collaboratively promote winter public use, cabin-to-cabin adventures in cooperation with the Chugach National Forest and Kenai National Wildlife Refuge.
- Partner with community groups to host organized events on the park access road during winter, spring, and fall when the gate is closed. These events could include cross-country ski races and similar events. These actions may require the additional plowing of the road and partnering to promote public events.
- Through a rulemaking process, allow nonmotorized fat tire winter snow bikes in areas determined appropriate by the superintendent (see “Proposed Regulatory Changes” below).

If budget and staffing shortfalls occur, park managers will continue to prioritize the management of summer operations.

## Proposed Regulatory Changes

Under the selected alternative, the National Park Service will initiate a rulemaking process after the authorization of this FONSI by publishing the proposed changes in the *Federal Register*. The public will have an opportunity to comment via the regulations.gov website. A final rule incorporating substantive public comments would then be published in the *Federal Register*, and the regulation would be implemented. Impacts associated with the proposed rulemaking are analyzed in this environmental assessment as part of the selected alternative. Proposed rulemaking changes under the selected alternative include the following:

- Redefine the current Exit Glacier Developed Area, as defined in 36 Code of Federal Regulations (CFR) Part 13 Subpart P for Kenai Fjords National Park. The updated definition of this “Developed Area” would be based on static, mapped landmarks for the purposes of delineating a single intact area instead of the current definition, which is spatially tied to a moving and retreating glacier terminus that has created a gap where enforcement of laws and regulations is uncertain.

- Allow for additional winter recreational opportunities. Currently, bikes are permitted only on the Herman Leirer Road and parking areas. The National Park Service proposes to update the Code of Federal Regulations to allow the use of nonmotorized fat tire winter snow bikes in the same areas in Exit Glacier Developed Area accessed by snowmachines. The regulations would allow the superintendent to decide when snow cover is adequate to allow this use without resource damage.
- Remove many of the Exit Glacier-specific and frontcountry regulations currently found in subpart P and place these directives into the Superintendent's Compendium. Some regulations in 36 CFR Part 13 Subpart P that no longer apply to existing conditions would be removed completely. Moving certain regulations to the Superintendent's Compendium, which is updated annually, and away from the Code of Federal Regulations, which may be revised every decade or two, enables park managers to proactively address the ever-changing conditions of the glacier- and stream-affected frontcountry area. Together, the Code of Federal Regulations and the Superintendent's Compendium would regulate management of the frontcountry.

### **Management Responses to Changing Conditions**

Under the selected alternative, the National Park Service will implement immediate, near-term potential, and long-term potential management strategies for responding to future, changing conditions that may affect visitor use and experiences, facilities, and desired conditions. These immediate and potential future management strategies under the selected alternative are described in further detail below.

Conditions in the frontcountry area are changing and will continue to do so for the foreseeable future. Visitor use levels have increased over time and will likely continue to do so, and visitor use patterns and preferences will continue to evolve. The climate and physical geography of the frontcountry area are also changing, as evidenced by the rapid retreat of Exit Glacier and outburst flooding events on the outwash plain that are increasing in frequency. Social and fiscal conditions are also likely to change in the foreseeable future, potentially creating opportunities that may not currently be feasible. For example, new funding opportunities may arise, or partner agencies may undertake new initiatives that allow park managers to collaboratively engage in activities that are currently not viable.

The planning team considered conditions that are likely to occur and identified potential management strategies that may be used to ensure that desired conditions are achieved as conditions in the frontcountry change. This "if this, then that" form of planning is intrinsically imprecise due to the unpredictable nature of the future but is appropriate and responsible, particularly in the context of potential impacts of climate change on frontcountry visitor experiences and facilities. A linear "forecast planning" approach only applies to one predicted future and does not apply in these cases. Instead, a "scenario planning" approach, which contemplates multiple potential futures, allows park management to be flexible and nimble in the face of uncertainties (NPS 2021).

Management strategies currently in use may be used more frequently in response to changing conditions. Additionally, there are several straightforward management strategies that could be

implemented to address changing conditions without further planning or compliance due to inclusion in previous planning and compliance or coverage by a categorical exclusion under the National Environmental Policy Act. These strategies are collectively referred to as “immediate management strategies.”

Strategies that do not fit in the “immediate management strategies” category but are likely needed soon (approximately the next five years) in response to changing conditions were analyzed for their potential impacts pursuant to the National Environmental Policy Act (see chapter 3 of the plan/EA). These strategies are referred to as “near-term potential management strategies.”

“Long-term potential management strategies” are potential management strategies that may become necessary later (in more than five years) if immediate management strategies and near-term potential management strategies are unsuccessful at achieving desired conditions. These strategies are not very detailed and were not analyzed for their potential impacts pursuant to the National Environmental Policy Act in the plan/EA. Instead, details of long-term management strategies will be developed when they are needed to ensure that the most effective approach is implemented and the appropriate civic engagement and compliance will be completed before their implementation. Table AError! Reference source not found. compares the three types of management strategies.

**Table A. Comparison of Types of Management Strategies in Terms of Likelihood of Immediate, Near-Term, or Long-Term Potential for Implementation and How Each Type of Strategy Will Be Addressed to Comply with NEPA Requirements\***

| Management Strategy Type                | When Would This Management Strategy Be Implemented?   | Why Would This Management Strategy Be Implemented?   | Is Impact Analysis Included in This EA? | Is Additional Impact Analysis Needed if Implemented in the Future? |
|---|---|--|---|--|
| Immediate management strategy           | Currently in use and possibly used more frequently in the immediate future upon plan implementation | To maintain desired conditions   | No                                      | No, covered by previous compliance or categorical exclusion        |
| Near-term potential management strategy | Likely to be needed in the near future (next 5 years)   | In response to changing conditions when immediate management strategies are insufficient to achieve desired conditions | Yes                                     | No   |



| Management Strategy Type                | When Would This Management Strategy Be Implemented? | Why Would This Management Strategy Be Implemented?   | Is Impact Analysis Included in This EA? | Is Additional Impact Analysis Needed if Implemented in the Future?   |
|---|---|--|---|--|
| Long-term potential management strategy | May be needed in the distant future (5–20 years)    | In response to changing conditions when immediate and near-term potential management strategies are insufficient to achieve desired conditions | No                                      | Yes, details would be developed when the strategy is needed, and impact analysis would be completed at that time |

\* Source: Plan/EA, 2024

The following sections describe changing conditions that could affect visitor use and facilities. Each section includes immediate, near-term potential, and long-term potential management strategies that could be used proactively or in response to these changes from climate change or social and fiscal factors.

#### *Strategies to Address Impacts on Visitor Use and Experience from Climate Change*

Climate change can impact visitor use and experience and park management’s ability to achieve desired conditions for visitor use and experience. For example, glacial retreat will make it harder for visitors to see the glacier or potentially less safe for guided visitors to travel upon it. Less snowfall or shorter winter seasons may limit activities like fat tire winter snow biking or snowmachine use.

The planning team considered potential changes to the frontcountry area due to climate change over the next 20 years; impacts those changes may have on visitor use and experience; the relative importance of that change to achieving desired conditions; immediate, near-term, and long-term potential management strategies that may be taken to address the impact or achieve desired conditions in another way; and what conditions may trigger a change in management. Table B summarizes these considerations and related management strategies.

**Table B. Visitor Use and Experience Management Strategies and Actions That Will Be Implemented as Needed Under the Selected Alternative Based on Climate Change Impacts\***

| Potential Climate Change Impact        | Impact on Visitor Use and Experience   | Relative Importance of Impact  | Management Strategies   | Conditions That Trigger Management Strategies   |
|--|--|--|---|---|
| Retreat of Exit Glacier                | Visitors can no longer see Exit Glacier from easily accessible areas of the frontcountry, including the Glacier Overlook Loop Trail and Glacier View Loop Trail. | Given the historical emphasis on seeing Exit Glacier, the ability to view the glacier is highly important to visitors having a quality experience in this area. A recent visitor survey found that many visitors believe extreme glacier recession is unacceptable, and visitors reported that their desire to visit would decrease because of extreme glacier recession (Moser 2016). | <p><b>Immediate Management Strategies</b></p> <p>Prioritize efforts that deemphasize Exit Glacier as the primary visitor destination, such as improving trip planning messaging to set appropriate expectations as discussed in “Visitor Messaging, Wayfinding, and Interpretation” above.</p> <p>Prioritize shifting park interpretation to focus on how glaciers shape the landscape and how anthropogenic changes impact the glacier. Also shift the focus to other resources, including the surrounding mountains, forests, and creeks. The focus can include updating the nature center displays as discussed in “Visitor Messaging, Wayfinding, and Interpretation” above.</p> <p><b>Long-Term Potential Management Strategies</b></p> <p>Decommission some Exit Glacier-focused facilities (e.g., the Glacier View Loop Trail and Glacier Overlook Loop Trail) if/when they no longer provide a view of the glacier or a discernable visitor destination or experience.</p> <p>Consider extending the Harding Icefield Trail to provide trail access overlooking the Harding Icefield, and highlight the frontcountry area as the gateway to the Harding Icefield.</p> | The view of Exit Glacier reaches the recession view displacement level identified in Moser 2016 (i.e., the glacier is distant and is barely seen from the Glacier Overlook Loop Trail and Glacier View Loop Trail). |
| Less snowfall in fall and early winter | The surface of the outwash plain and other traversable areas is no longer conducive to snowmobiles or fat tire winter snow bikes.                                | Over-snow access is somewhat important to the diversity of visitor opportunities available in the frontcountry area.   | <p><b>Near-Term Potential Management Strategies</b></p> <p>As described in “Recreational Opportunities” above, park management will expand winter recreational opportunities for nonmotorized fat tire winter snow bikes through proposed regulatory changes to 36 CFR Part 13 Subpart P, but the snow level needed to allow for snowmachines and winter biking may shorten the winter use seasons.</p>   | Snow cover is not sufficient to shield plants and other park resources from damage.   |

\* Source: Plan/EA, 2024

### *Strategies to Address Impacts on Facilities from Changing Climate and Physical Geography Conditions*

Due to climate change, the physical geography of the frontcountry area is changing rapidly. These changes impact the frontcountry facilities. In the past, outburst flooding, migration of the outwash plain, erosion, and debris flow events have damaged facilities in the area. These events are expected to continue, with implications for facilities investments and the quality of the visitor experience.

The planning team considered how climate and physical geography-related changes could impact key facilities in the frontcountry area and what might be done in response to impacts that could foreseeably happen to these facilities over the next 20 years. Key facilities under consideration included restrooms (both vault toilets and flush toilets), the campground, nature center, trails, parking lot, and access road (including the Resurrection River bridge). The relative importance of each facility to achieving desired conditions and mission requirements was a factor in considering potential management strategies and adaptations for addressing facility changes or damages. Potential adaptations might include moving the facility, decommissioning it, or rebuilding it more resiliently (see the Resist-Accept-Direct [RAD] Framework in Schuurman et al. 2021). Park management will develop a funding strategy for rebuilding and moving facilities. Lastly, the planning team considered whether it would be best to take action before or in response to impacts occurring. Table C summarizes these considerations and potential adaptations.

**Table C. Considerations for Climate Adaptation and Management Strategies for Facilities Affected by Future Changing Conditions Under the Selected Alternative\***

| Facility                                    | Climate Vulnerabilities   | Relative Importance of Facility  | Potential Adaptations   | Proactive or Reactive?  |
|---|---|--|---|---|
| Restrooms (vault toilets and flush toilets) | Flooding damage, avalanche, landslide, wildfire   | The restrooms are essential to providing quality visitor experience and resource protection. If they were removed, a human waste issue would likely occur in the area.   | <b>Long-Term Potential Management Strategies</b><br>Move restrooms to new location, likely to higher ground.<br>Use temporary restroom facilities that can be removed from the area during the high-risk flood season.  | Due to the importance of these facilities, the cost of removal, and the relatively low likelihood that flooding will occur in the next few years, these actions will only be taken reactively.<br>If conditions indicate a flood is likely to occur imminently, vaults may be pumped proactively to prevent the contamination of surrounding areas. |
| Campground                                  | Flooding damage and outwash plain migration (this facility is the most vulnerable to these risks, and campsites have already been lost) | A very small proportion of visitors camp at the campground, and it is rarely full. However, many of these visitors appreciate the campground and the opportunity it presents for frontcountry camping within the park. Alternative camping options exist in the area. The loss of the facility would have a negative impact on visitor opportunities for the limited number of people interested in camping in the park. | <b>Near-Term Potential Management Strategies</b><br>Decommission individual sites if/when they are lost to flooding or outwash plain migration. If half or more of the sites are lost, the full campground may be decommissioned.<br><b>Long-Term Potential Management Strategies</b><br>Move the campground to a new location if special funding (e.g., disaster response funding) becomes available and demand for camping in the park is high. | These actions will be taken reactively if/when flooding impacts the campground.   |
| Nature center                               | Flooding, fire, avalanche, landslide  | The nature center is essential to providing quality visitor experiences. If the center were removed, visitors would lack a central point of orientation, as described in desired conditions for the visitor facilities zone.   | <b>Immediate Management Strategies</b><br>Redirect water away from the nature center during runoff events.<br>Conduct hazard fuel reduction to reduce fire threat to the nature center.   | Redirecting water in emergency situations will be used reactively as needed. If flooding becomes common, elevating the nature center or using a mobile visitor center can be used proactively.  |

| Facility  | Climate Vulnerabilities   | Relative Importance of Facility   | Potential Adaptations  | Proactive or Reactive?   |
|---|---|---|--|--|
|   |   |   | <b>Long-Term Potential Management Strategies</b><br>Elevate the nature center in its current location.<br>Decommission the current nature center and instead use a mobile visitor center that can be removed during hazardous conditions.  | Hazard fuel reduction can be done proactively.   |
| Harding Icefield Trail  | Flooding, landslides, avalanches  | The Harding Icefield Trail is essential to providing a key park experience and is tied to the park's enabling legislation by providing access to the Harding Icefield. Its existence is essential to all of the desired conditions of the hiker zone. | <b>Immediate Management Strategies</b><br>Reconstruct or reroute portions or sections of the trail around or through hazards, washouts, or landslide debris.   | This action will be done reactively in response to conditions when there is a safety risk.   |
| Glacier View Loop Trail   | Flooding, landslides, (this trail is less vulnerable than other trails due to its location and paved surface) | The Glacier View Loop Trail is essential to providing a key park experience, as it provides access to the Harding Icefield Trail and is universally accessible. The trail's existence is essential to the desired conditions of the pedestrian zone.  | <b>Immediate Management Strategies</b><br>Reconstruct the trail in its current location.<br>Reroute trail.<br><b>Long-Term Potential Management Strategies</b><br>Consider removing the southern portion of the trail so that it becomes an in-and-out trail rather than a loop trail. | Reconstructing and rerouting the trail will be done reactively, based on safety risk.<br>Removing the southern portion of the trail will be a proactive consideration if flooding and landslides are common occurrences. |
| Creekside section of Glacier Overlook Trail and spur trails accessing the outwash plain | Flooding, being truncated by outwash plain migration  | Maintenance of at least one designated access point to the valley floor zone is important to achieving desired conditions for that zone. While having two is convenient for outreach programs, it is not essential to desired condition achievement.  | <b>Immediate Management Strategies</b><br>Rebuild or relocate trails to provide at least one access to the outwash plain.  | Rebuilding or relocating trails will be done reactively, based on safety risk.   |



| Facility                             | Climate Vulnerabilities   | Relative Importance of Facility   | Potential Adaptations   | Proactive or Reactive?  |
|--------------------------------------|---------------------------|---|---|---|
| Access road, bridge, and parking lot | Flooding, bridge washouts | These facilities are essential to providing access to the frontcountry area in general. | <b>Immediate Management Strategies</b><br>Use Jersey barriers to mitigate flooding.<br>Rebuild the bridge as it washes out.<br><b>Long-Term Potential Management Strategies</b><br>Raise road again, as it was raised 5 feet in 2015. | Using Jersey barriers and rebuilding the bridge will be reactive adaptations.<br>Proactively maintaining the bridge may be advised or required by the Federal Highway Administration.<br>Raising the road again may be done proactively if frequent flooding is an issue. |

\* Source: Plan/EA, 2024

## Visitor Use Management

This plan incorporates aspects of the Visitor Use Management Framework to develop strategies for monitoring and managing visitor use in the park (IVUMC 2016). Key aspects of visitor use management incorporated into the selected alternative include the identification of indicators and thresholds, as well as visitor capacities.

### *Indicators and Thresholds*

Monitoring in this plan is accomplished through the establishment of “indicators” and “thresholds.” Indicators are specific resource or experiential attributes that can be measured to track changes in conditions so that progress toward achieving and maintaining desired conditions can be assessed. Thresholds are the minimum acceptable conditions associated with each indicator. Indicators and thresholds provide park managers with monitoring strategies to ensure that desired conditions for resources and visitor experiences are achieved and maintained over time.

The planning team considered many potential indicators but ultimately identified six that are the most important to monitor the effectiveness of the frontcountry management plan. The six topics the indicators monitor include the following:

- invasive plant species
- soundscapes
- trail crowding
- visitor crowding in the visitor facilities zone
- the quality of guided hike participation
- bear-human interactions

See appendix B of the plan/EA for detailed descriptions of the indicators and thresholds, along with rationales and monitoring strategies.

Just as in the “Management Responses to Changing Conditions” section, the planning team identified immediate, near-term, and long-term potential management strategies associated with each indicator. Immediate management strategies will be used to avoid approaching thresholds. Near-term potential management strategies will be implemented if monitoring indicates that thresholds are being approached or exceeded. Long-term potential management strategies will be explored if immediate and near-term potential management strategies are not successful in achieving desired conditions and thresholds continue to be exceeded.

The iterative practice of monitoring, implementing management strategies, and then continuing to monitor their effectiveness allows park managers to maximize benefits for visitors while achieving and maintaining desired conditions for resources and visitor experiences in a dynamic setting like the Kenai Fjords frontcountry.

## *Visitor Capacity*

Visitor capacity is 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 (IVUMC 2016). By establishing visitor capacities and implementing them with appropriate management strategies, the National Park Service can help ensure that resources are protected and that visitors have the opportunity for a range of high-quality experiences.

Pursuant to Director's Order 2: *Park Planning*, a park's planning portfolio is the assemblage of planning documents that guide park management and decision-making and satisfy law and policy. The selected alternative identifies visitor capacities for the Kenai Fjords frontcountry area.

Similar to the indicators and thresholds in the "Management Responses to Changing Conditions" section, the planning team identified immediate, near-term, and long-term potential management strategies associated with the visitor capacity analysis for each zone to ensure use levels are managed within identified visitor capacities. See appendix C of the plan/EA for the visitor capacities that were identified for zones in this plan.

## **2.2 Rationale**

The selected alternative best meets the project purpose to

- diversify visitor opportunities in the only area of the park accessible by road,
- manage resource impacts and safety concerns associated with increasing visitation,
- provide guidance for responsibly managing facilities and infrastructure impacted by rapidly changing conditions driven by climate change, and
- propose through the regulatory process regulation changes necessary to address dynamic conditions while stewarding park resources.

## **3. MITIGATION MEASURES**

The National Park Service places strong emphasis on avoiding, minimizing, and mitigating potentially adverse environmental impacts. Therefore, the National Park Service will implement multiple mitigation measures and best management practices to protect natural, cultural, and wilderness resources and the visitor experience.

Mitigation measures proposed for the actions in this plan are primarily related to invasive plant management under the selected alternative. While increased visitation may cause additional invasive plant infestations along trails, the park's active invasive plant management program would mitigate through increased efforts to control invasive plant species including on the park road.

For the immediate management strategy actions in Table B and Table C, there are no new mitigations for actions already covered by previous compliance. For the near-term potential

management strategies listed in Table B and Table C, there are no mitigations proposed (i.e., for the proposed rulemaking, seasonal closure of motor vehicles, and decommissioning of eroded campgrounds). There are also no proposed mitigations for managing to visitor capacity in the near-term management actions and strategies proposed in the plan/EA’s “Appendix C: Visitor Capacity Analysis” (i.e., prevent crowding by managing overall commercial use authorization [CUA] use levels, manage hiking groups led by park staff, manage traffic congestion in the parking lot management, and increase messaging to time visits differently). For the long-term potential management strategies listed in Table B and Table C, future mitigations may occur with the additional compliance that would be required before implementation.

## **4. PUBLIC INVOLVEMENT / AGENCY CONSULTATION**

### **4.1 Civic Engagement**

Early in 2022, the National Park Service developed a project home page and StoryMap to inform the public about the project and provide opportunities to comment. These platforms provided background on the project, an orientation to the site, and instructions for providing comments; identified key issues; and conveyed some preliminary management strategies. The National Park Service also held a virtual public meeting on February 2, 2022, where park staff discussed the need for the frontcountry management plan, key issues the plan/EA will address, and potential management strategies. The public had opportunities to comment on the project through a comment link on the project planning home page, a comment link on the StoryMap site, traditional mail, and phone and e-mail to the park’s director of resource management. Six questions were presented to the public, along with an open field for additional comments.

The *Kenai Fjords National Park Frontcountry Management Plan and Environmental Assessment* was made available for public review during a 60-day period from August 23 through October 22, 2024. The National Park Service received 18 correspondences, which were documented on the NPS Planning, Environment and Public Comment (PEPC) website from individuals, organizations, federal and state agencies, and gateway communities. One substantive comment was received that resulted in changes to the assessment of impacts and several comments led to an errata. Please refer to attachment A of this document for the response to substantive public comments and attachment B of this document for the errata.

### **4.2 Agency and Tribal Consultation**

#### **Alaska Native Groups**

Park staff mailed letters to seven Alaska Native groups in November 2021 to inform them of this planning process. Throughout the planning process, seven Alaska Native groups were contacted: the Native Village of Nanwalek, the Native Village of Port Graham, Seldovia Village Tribe, English Bay Corporation, Port Graham Corporation, Chugach Alaska Corporation, and Qutekcak Native Tribe. Subsequent consultation rounds were conducted with these groups in December 2023 and July 2024. Following the July outreach, Chugach Alaska Corporation responded, leading to an in-person meeting with park staff in August 2024 to provide updates on the plan. No comments were received from the Tribal groups on the plan.

## **Alaska State Historic Preservation Officer**

Park staff reached out to the Alaska State Historic Preservation Officer via e-mail/letter in December 2023, informing them of this plan. This correspondence included a statement of the National Park Service’s determination that the planning vision is not an undertaking under section 106 of the National Historic Preservation Act, and, therefore, no section 106 review had taken place at that time. The National Park Service further indicated that as specific management actions may be implemented in the future under the guidance of this plan, the service will complete efforts to identify historic properties in the specific project area and evaluate the potential effects on those historic properties in consultation with the Alaska State Historic Preservation Officer to avoid, minimize, or mitigate adverse effects before authorizing any final decisions.

## **US Fish and Wildlife Service**

The National Park Service submitted a technical assistance request in the US Fish and Wildlife Service Information for Planning and Consultation system, requesting a species list for the project area of Kenai Fjords National Park on December 22, 2023. No species or designated critical habitat protected under the Endangered Species Act were identified as present in the project area.

## **5. FINDING OF NO SIGNIFICANT IMPACT**

As described in the plan/EA, the selected alternative has the potential for adverse impacts on soils, water quality, floodplains, wetlands, air quality, soundscape, vegetation, wildlife, visitor use and experience, and wilderness; however, no potential for significant adverse impacts was identified.

### **5.1 Soils**

As discussed in chapter 3 of the plan/EA, the selected alternative would provide a framework with clearly defined thresholds and a more systematic approach for implementing management actions. This could help reduce adverse impacts on soils from visitor use. Updates to park zoning is not anticipated to affect soils. While visitor off-trail use compacts soils, resulting in erosion on steeper slopes, these impacts will be broadly dispersed and will not significantly impact soils. Minor changes, such as updating signage on trails, will result in negligible impacts on soils.

The proposed regulatory authorization of fat tire winter snow bike use across the outwash plain would have little-to-no impact on soils, as fat tire winter snow bike use will only be authorized when snowmachines are authorized, during periods of “adequate snow cover, generally 6–12 inches or more, or a combination of snow and frost depth sufficient to protect the underlying vegetation and soil” (43 CFR 36.11). Other changes in regulations proposed through rulemaking are not expected to have any impact on soils.

Implementing the selected alternative will, therefore, not have significant impacts on soils.



## **5.2 Water Quality**

As discussed in chapter 3 of the plan/EA, the selected alternative would provide a framework with clearly defined thresholds and a more systematic approach for implementing management actions, and this could reduce adverse impacts on water quality from visitor use. Most of the bodies of water in the frontcountry area are located in the glacial mountain and valley floor zones, where visitation is low. With increased visitor use in the frontcountry, the greatest impacts on water quality would occur in the hiker, pedestrian, and visitor facilities zones along the Harding Icefield Trail streams and Paradise Creek due to the likely increase in concentrations of human waste, which will slightly elevate the level of contaminants entering streams and groundwater. Water quality parameters, including dissolved oxygen levels, pH, and temperature are, however, expected to remain within Alaska Department of Environmental Conservation standards.

The amount and frequency of snowmachine use is expected to remain similar to current levels, and if the use of machines with improved technology increases, relative levels of pollutants introduced to water systems is expected to continue to be very low. Allowing for nonmotorized fat tire winter snow bike use and other proposed regulatory changes for the Exit Glacier Developed Area are not expected to adversely impact water quality. Implementing the selected alternative will not have significant impacts on water quality.

## **5.3 Floodplains**

As discussed in chapter 3 of the plan/EA, the selected alternative is not expected to have significant impacts on floodplains because updated management zones would not change floodplain structure or processes, and no new building construction is being proposed. Park infrastructure in the project area is located almost entirely in a floodplain. When campsites are severely eroded or washed out, the NPS response to these changing conditions may include not reestablishing or redeveloping lost campsites, thus decreasing the overall number of facilities in the floodplain.

## **5.4 Wetlands**

As discussed in chapter 3 of the plan/EA, the selected alternative would provide a framework with clearly defined thresholds and a more systematic approach for implementing management actions to reduce adverse impacts on wetlands from visitor use. The western portions of the frontcountry area include approximately 450 acres of wetlands, and small discrete wetland and bog areas are found throughout the frontcountry. Existing management activities near wetlands will continue to impact small, localized areas (totaling less than 1 acre) and cause disturbances such as filling low-lying areas with soils or aggregates and draining wet areas. Updating the park's designated management zones under the selected alternative would protect most wetlands in the study area from high levels of visitor impact. The majority of wetlands in the frontcountry area would be located in the valley floor zone, where many visitors would not be expected. Some impacts may occur on the small percentage of wetlands in the visitor facilities zone, such as trampling and soil compaction at the edges of wetlands closest to visitor facilities, but will not substantially degrade wetland functionality. Allowing for nonmotorized fat tire winter snow bike use, as well as other proposed regulatory changes for the Exit Glacier

Developed Area, are not expected to have any impacts on wetlands. Thus, implementing the selected alternative will not have significant impacts on wetlands.

## **5.5 Air Quality**

As discussed in chapter 3 of the plan/EA, the selected alternative would update the park's designated management zones and help protect air quality and visibility from high levels of impact in most of the study area. Emissions associated with motor vehicles, power tools, burning woodstoves, and campfires would originate predominantly in the visitor facilities zone, which comprises a small percentage of the study area. Emissions associated with motor vehicles, power tools, burning woodstoves, and campfires are negligible even with an increase in visitation, and air quality would not be significantly impacted under the selected alternative. Implementing the selected alternative would not cause significant impacts on air quality.

## **5.6 Soundscape**

As discussed in chapter 3 of the plan/EA, the selected alternative will update management zones that will allow for natural sounds to predominate in the majority of the study area (i.e., the backcountry primitive, backcountry valley floor, and hiker zones). Some noise would be expected in the visitor facilities and pedestrian zones, and increased visitation could cause a corresponding increase in noise in those zones. Current summer noise sources include temporary intrusions produced by the general use of the area such as voices, vehicles, maintenance activities, and the generator, and winter noise sources include voices and snowmachines. The park's promotion of increased winter recreation in the selected alternative may increase snowmachine use and temporary noise. Allowing for nonmotorized fat tire winter snow bike use, as well as other proposed regulatory changes for the Exit Glacier Developed Area, are expected to have negligible impacts on soundscape. Overall, there could be a minor increase in noise if visitation continued to increase in summer and winter, but implementing the selected alternative will not have a significant impact on the soundscapes because generally low noise levels will continue predominate throughout the study area.

## **5.7 Vegetation**

As discussed in chapter 3 of the plan/EA, the selected alternative updates the park's designated management zones and provides indicators and thresholds related to invasive plants to protect and restore native vegetation. The potential for the introduction and/or spread of invasive plants can be expected to increase as visitation increases, and infestations would likely occur along the park road and in areas adjacent to visitor services. The selected alternative includes increased efforts to control invasive plant species, including along the park road. Under this alternative, the park's active invasive plant management program will monitor the change in number of gross acres infested with high-priority invasive plants species. If the number of gross acres infested approaches or exceeds the threshold set in appendix C of the 2024 plan/EA, park staff will implement additional management strategies, including manually removing invasive plants, herbicide, revegetating areas with native seeds, and discouraging off-trail travel.

Under the selected alternative, trampling from visitor activities at the edges of developed areas and trails could compact fragile developing soils and delay normal plant succession in these

locations. Increased trail use may also cause a higher number of social or informal trails, leading to erosion and denuded vegetation. To address these issues, many of these social trails and bare ground would be restored and/or reseeded under the selected alternative. Care would be taken in reseeding efforts to use local seed sources as a means to avoid impacts on genetic stocks in the park and to eliminate the introduction of invasive plant species. Revegetation efforts are expected to have long-term positive impacts by replanting damaged vegetation or restoring impacted areas.

Under the selected alternative, the proposed regulatory changes through rulemaking to authorize fat tire winter snow bike use across the outwash plain would have little-to-no impact on vegetation, as fat tire winter snow bike use would only be authorized when snowmachines are authorized, during periods of “adequate snow cover, generally 6–12 inches or more, or a combination of snow and frost depth sufficient to protect the underlying vegetation and soil” (43 CFR 36.11). Other proposed changes in regulations are not expected to have any impact on vegetation.

The selected alternative is not expected to have a significant impact on vegetation, vegetation communities, or ecosystem functionality.

## **5.8 Wildlife**

As discussed in chapter 3 of the plan/EA, the selected alternative is expected to have limited negative effects on wildlife. The disturbance of wildlife and impacts on wildlife habitat in the summer would be greatest in the visitor facilities, pedestrian, and hiker zones, which comprise just over 10% of the study area, where the majority of visitation and development occurs. Increases in recreational activities, both summer and winter, will likely subject mammal and bird species to periodic disturbance or displacement in those zones. Occurrences of small mammals (e.g., red squirrels, voles, and shrews) and birds (e.g., warblers and thrushes) killed along the park road by vehicles have been documented. None of these impacts are expected to affect wildlife population levels.

Increased winter encounters between humans and moose may result from promoting winter recreational activities. Although moose may be temporarily disturbed by nonmotorized fat tire winter snow bikers, skiers, and other recreationists, the frequency and duration of disturbance is unlikely to be sufficient to impact species population numbers. The increase in human activity during the winter may also impact wolves, wolverine, and lynx, all species which have large home range requirements and a low tolerance for human disturbance. If visitor use increases in the winter, the occurrence of these species in the frontcountry area may become more infrequent during daylight hours, although because most human use would remain concentrated in the developed areas of the frontcountry and during daylight hours. Changes in the behavior of these animals would probably be minor, and these species would be unlikely to be excluded from the area entirely, as these species are known to be active nocturnally. Similarly, allowing for winter nonmotorized fat tire winter snow bike use, as well as other proposed regulatory changes for the Exit Glacier Developed Area, may contribute to very minor impacts on wildlife. However, these impacts are not expected to be significant, as snowmachine use and skiing already occur, and projected increases in use are expected to be small. The

addition of nonmotorized fat tire winter snow bikes when snow is sufficient is not expected to have a significant impact.

Overall, implementing the selected alternative will not have a significant impact on wildlife.

## **5.9 Visitor Use and Experience**

As discussed in chapter 3 of the plan/EA, the selected alternative will have a beneficial impact on visitor use and experience by updating zoning and desired conditions for the frontcountry area to better align with current conditions and to guide management of visitor opportunities in each zone. The selected alternative identified indicators, thresholds (appendix B of the plan/EA), and visitor capacities (appendix C of the plan/EA) to monitor resource conditions and visitor experiences. If thresholds are consistently exceeded and desired conditions are not being met, the National Park Service will implement management actions to modify amounts and types of use to achieve desired conditions.

The actions described in the selected alternative enhance the visitor experience and improve visitor safety, especially related to increasing visitation and unprepared visitors attempting to access the glacier. Park staff would take action to reduce vehicle congestion in the parking lot. Park staff would also manage human-wildlife encounters and develop and enhance educational materials and food storage. The vulnerability and long-term sustainability of facilities impacted by flooding, erosion, and sedimentation will be assessed to determine whether these assets can be responsibly maintained or should be relocated or decommissioned while still providing safe access and accommodating high-quality visitor experiences.

Expanded visitor opportunities in the winter and shoulder seasons under the selected alternative will provide a greater diversity of opportunities and experiences in the visitor facilities, pedestrian, hiker, and valley floor zones during nonpeak times of the year. Allowing nonmotorized fat tire winter snow bikes to access the outwash plain would provide additional recreational opportunities.

Overall, the selected alternative will broaden visitor opportunities and help manage visitor expectations for their visit to the park, and implementing the selected alternative will not have significant impacts on visitor use and experience.

## **5.10 Wilderness**

As discussed in chapter 3 of the plan/EA, the selected alternative will likely have a minor negative impact on eligible wilderness near the park's frontcountry area. The selected alternative updates the frontcountry zoning with the glacial mountain zone that overlays eligible wilderness (the other updated zones are outside of wilderness, see Figure A). Per bureau policy, the National Park Service preserves wilderness character on eligible wilderness lands.

Under the selected alternative, uses occurring in eligible wilderness that will impact wilderness character include human sounds from hiking and mountaineering activities (including CUA-guided hikes) that start from the Harding Icefield Trail (hiker zone) or the valley floor zone. The proposed regulatory changes through rulemaking are not expected to affect wilderness character, as the changes focus primarily on the Exit Glacier Developed Area, which is not in

wilderness. Allowing for nonmotorized fat tire winter snow bike use in the outwash plain area will also not impact wilderness, as the outwash plain area is also located outside of wilderness. Thus, the selected alternative will not have significant adverse impacts on wilderness.

### **5.11 Summary**

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 effects, or elements of precedence were identified. Implementing the NPS selected alternative will not violate any federal, state, or local environmental protection law.

## **6. CONCLUSION**

Based on the information contained in the Plan/EA, I have determined that the selected action does not constitute a major federal action having a significant effect on the human environment. Therefore, an Environmental Impact Statement (EIS) will not be prepared.

This finding is based on consideration of the Council of Environmental Quality and NPS guidance on the criteria for significance, regarding the potentially affected environment and degrees of effects of the impacts described in the EA (which is hereby incorporated by reference) and as summarized above.

# ATTACHMENT A: PUBLIC COMMENT RESPONSE REPORT FOR THE FRONTCOUNTRY MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

## INTRODUCTION

The *Kenai Fjords National Park Frontcountry Management Plan and Environmental Assessment* was made available for public review during a 60-day period from August 23 through October 22, 2024.

The National Park Service received 18 correspondences, which were documented on the NPS PEPC website, from individuals, organizations, federal and state agencies, and gateway communities.

Below are NPS responses to concerns that were raised by commenters on the plan and/or environmental assessment. Responses to all substantive comments are included here. Substantive comments are those that

- question, with reasonable basis, the accuracy of the information in the NEPA document;
- question, with reasonable basis, the adequacy of the environmental analysis;
- present reasonable alternatives other than those presented in the NEPA document; or
- cause changes or revisions in the proposal.

## CORRESPONDENCE ANALYSIS

The following tables were produced by the NPS PEPC database and provide information about the correspondences by state and numbers of comments organized by code.

The National Park Service reviewed each correspondence and identified individual comments, with the possibility that each correspondence could have multiple comments. A total of 68 unique individual comments were derived from the 18 correspondences received.

**Table FONSI A-1. Correspondences by State**

| State      | Correspondences |
|------------|-----------------|
| Alaska     | 14              |
| California | 1               |
| Colorado   | 1               |
| Utah       | 1               |
| Virginia   | 1               |

**Table FONSI A-2. Comment Distribution by Code**

| Code   | Code Name   | Comments |
|--------|---|----------|
| CC1000 | Consultation and Coordination                                 | 3        |
| CD1000 | Considered but Dismissed                                      | 2        |
| DC1000 | Desired Conditions  | 1        |
| GN1000 | General Locations   | 1        |
| IN1000 | Indicators and Thresholds                                     | 4        |
| IS1000 | Issues  | 4        |
| IT1000 | Impact Topics   | 1        |
| IT2000 | Impact Analysis-Soils   | 0        |
| IT3000 | Impact Analysis-Water Quality                                 | 0        |
| IT3100 | Impact Analysis-Floodplains                                   | 0        |
| IT3200 | Impact Analysis-Wetlands                                      | 0        |
| IT4000 | Impact Analysis-Air Quality                                   | 0        |
| IT5000 | Impact Analysis-Soundscapes                                   | 0        |
| IT6000 | Impact Analysis-Vegetation                                    | 1        |
| IT7000 | Impact Analysis-Wildlife                                      | 0        |
| IT8000 | Impact Analysis-Visitor Use and Experience                    | 4        |
| IT9000 | Impact Analysis-Wilderness                                    | 2        |
| PN1000 | Purpose and Need  | 0        |
| ST1000 | Strategies- Other   | 19       |
| ST2000 | Strategies- Visitor Messaging, Wayfinding, and Interpretation | 5        |
| ST3000 | Strategies-Natural Resource Management                        | 0        |
| ST4000 | Strategies- Winter Recreational Opportunities                 | 10       |
| ST5000 | Strategies- Regulatory Changes                                | 1        |
| ST6000 | Strategies-Adaptations, Changing, Conditions, and Facilities  | 4        |
| VC1000 | Visitor Capacity  | 6        |
| ZN1000 | Zoning  | 1        |

## DEFINITION OF TERMS

The following definitions are used for the associated terms in this document.

**Correspondence.** A correspondence is the entire document received from a commenter. It can be in the form of a letter, written comment form, note card, or other written communication on the plan/EA to the park.

**Comment.** A comment is a portion of the text in a correspondence that addresses a single subject or issue. It could include such information as an expression of support or opposition to the use of draft strategy, a suggestion for a potential management strategy, or additional data regarding existing conditions or key issues.

**Comment Summary.** A description of a group of comments that are focused on a common subject. Comment summaries combine similar comments.

## **COMMENT SUMMARY**

### **Consultation and Coordination**

Commenters do not believe the public meetings and public commenting period were effectively advertised or announced. Commenters express that the feedback the park received is not a complete representation since they believe the public was not adequately informed about the plan/EA and commenting period.

**NPS Response:** The National Park Service implemented a communication plan that included distributing a press release to local newspapers, soliciting comments on [parkplanning.nps.gov](http://parkplanning.nps.gov), notifying the public through social media, and conducting a public meeting. To provide ample opportunity for public review and input, park staff extended the public comment period by one month, from September 22 to October 22, and rescheduled the September 12 public information session to October 8.

### **Considered but Dismissed**

A commenter is disappointed that an action to develop a Paradise Creek Trail ultimately was not included in alternative B (preferred alternative). The commenter notes that the public has requested more trails and further explained that the plan's purposes is to "diversify visitor opportunities in the only area of the park accessible by road," which is what they believe Paradise Creek Trail would do.

**NPS Response:** As stated in the plan, "This action was dismissed due to the highly dynamic nature of Exit Creek (as well as Paradise Creek), visitor safety concerns, and the challenges of building infrastructure in an active floodplain." Park staff have noted the public's desire for this trail expansion, and it was even proposed in the 2004 Exit Glacier Area Plan. However, in the 20 years since that plan was finalized, expanding the trail system south of Exit Creek and into the Paradise Creek area has proven unfeasible. For that reason, along with concerns about public safety, a trail to Paradise Creek was considered but dismissed.

A commenter also notes that alternative B is lacking in breadth of actionable items. The commenter encourages the National Park Service to revisit the "Management Actions Considered But Dismissed" section of the plan/EA for ideas to add to alternative B. They noted that even though it was determined to be a "high cost" to construct trails, the National Park Service should add to alternative B the trail plan for the Herman Leirer Road, with the condition that it will be funded if the money becomes available.



**NPS Response:** Actions “considered but dismissed” in this plan/EA may still be revisited in future planning efforts. As stated in this plan, “. . . should conditions change over the next 20 years [i.e., the lifetime of the new plan], these strategies could be reconsidered.” This strategy includes the proposed Herman Leirer Road multimodal trail. One condition that could potentially change is the availability of funding.

## **Desired Conditions**

A commenter believes the discussion regarding the desired conditions for the glacial mountain and valley floor zones do not meet the common understanding of a frontcountry experience and should be rewritten. The full comment recommends that park staff consider the possibility of future trails, educational signs, and other amenities in both zones.

**NPS Response:** Park staff acknowledge this perspective but note that these zones are defined by geographic conditions that are not compatible with the addition of substantial infrastructure or amenities. Many options were considered but dismissed due to the challenges posed by these environments, such as the dynamic nature of Exit Creek and the Exit Glacier outwash plain, the glacier itself, and the steep slopes of the glacial mountain zone. For these reasons, available amenities in these zones may not meet the typical expectations of a frontcountry experience. However, these zones are still considered frontcountry because they are located near major infrastructure and can be accessed by nearby trails and the park road. Visitors can access many parts of the glacial mountain and valley floor zones with relatively little additional effort or planning, offering opportunities to experience these unique landscapes in close proximity to established facilities.

## **General Locations**

A commenter notes that the plan/EA does not mention widening the park road for bike lanes in and out of the gate at Herman Leir Road. They further note that the only safe way to access the park is via vehicles, and they would like to see that changed.

**NPS Response:** The National Park Service manages only the final 1.5 miles of the Herman Leirer Road, from the park boundary at the Resurrection River bridge to the Exit Glacier parking lot. The first 7 miles are maintained by the State of Alaska Department of Transportation. Within the park boundary, the road passes through wetlands and crosses streams, requiring a significant rise in elevation to expand the road for features like a bike lane or wider shoulders. Although the addition of a bike lane or bike path was discussed during planning for the Exit Glacier multimodal trail, such modifications to the existing road are cost-prohibitive, especially since the preceding 7 miles do not include a bike lane.

## **Indicators and Thresholds**

Regarding trails, one commenter mentions that there is no plan for monitoring or mitigating overcrowding in the recreation corridor other than controlling the number of participants in guided activities. They further note that if the southern loop of the Glacier View Trail is closed

and it becomes an out-and-back trail, it would greatly increase congestion from unguided visitors.

**NPS Response:** Adjusting CUA stipulations on commercial users (i.e., placing limits on commercial group size) is one potential tool for addressing congestion on the Lower Trail System. Other actions, such as requiring permits, were determined to be unnecessary given current and projected use levels, in conflict with the park’s enabling legislation, or inconsistent with other Alaska parks.

A commenter also notes that if the Overlook Trail is closed and the only way to see the glacier is to hike a portion of the Harding Icefield Trail to get to the new overlook, it will greatly increase traffic on the Harding Icefield Trail. They further mention that if thresholds are being met on the Harding Icefield Trail because of this change and a permit system of some kind is implemented as a result, far fewer people will have the opportunity to experience the wilderness and solitude of the upper Harding Icefield Trail.

**NPS Response:** The National Park Service has no plans to close the Overlook Trail. Furthermore, park staff believe that there is no safe or feasible way to expand the Overlook Trail beyond its current footprint. Regardless, if the glacier continues to recede, it will require more effort for visitors to view the glacier. In alternative B, no “new overlook” on the Harding Icefield Trail has been proposed given the dynamic nature of the glacier. Park staff recognize that given current visitor use levels on the Harding Icefield Trail, expectations for solitude are already unrealistic there, and the trail itself is outside of eligible wilderness. As park staff are not planning a new Harding Icefield Trail overlook, requiring permits for the Harding Icefield Trail was determined to be unnecessary at this time given current and projected use levels.

A commenter notes that the plan/EA identifies a threshold for visitation in the glacial mountain zone and recognizes that the space available on the ice is shrinking. The commenter states that both of these issues are exacerbated by commercial operators that regularly and simultaneously bring in large groups and notes that private parties visiting the glacial mountain zone are smaller and more dispersed and generally spend less time transiting through the hiker zone. The commenter believes that steps taken to reduce visitation to the hiker zone or glacial mountain zone should focus entirely on commercial, for-profit operators. They further suggest that changes to overall CUA use levels, CUA group size, timing of CUA use, or locations of CUA use be considered as near-term management strategies.

**NPS Response:** The commenter correctly notes that CUA holders are the primary entity driving visitation numbers towards the established threshold and that placing stipulations on them is one of the easier and more effective ways to manage congestion, group sizes, access, and other issues.

The plan/EA sets visitor capacity in the glacial mountain zone at a level only slightly greater than its current use (90 visitors per day) (page C-7 of the plan/EA). To prevent this threshold from being exceeded, park staff identified several actions categorized as “long term” in the “Potential Management Strategies” section (page C-7). One of these strategies is “Manage overall CUA use levels, CUA group size, timing of CUA use, or locations of CUA use to prevent crowding at certain times or places through changes in

CUA permit conditions.” However, based on this commenter’s remarks, park staff will shift this strategy from “long term” to “near term” since it makes sense to address CUA management first before implementing other visitor capacity management strategies that could impact smaller private parties (see attachment B, errata). Moving this strategy from “long term” to “near term” did not trigger a revised environmental analysis.

However, the National Park Service does not think it appropriate to focus its management strategies entirely on commercial, for-profit operators, as the commenter recommends, since CUA holders may not always be the only significant drivers of high visitation. For example, if private party use of the glacier for ice climbing became far more common in the future, it could become a primary driver of visitation towards capacity.

A commenter also notes that restrictively managing soundscapes is inappropriate for frontcountry areas, and they suggest soundscapes be deleted as a management indicator.

**NPS Response:** While it is true that expectations for pristine natural sounds may be unrealistic in the frontcountry due to high levels of human activity, soundscapes remain an important consideration for areas within eligible wilderness, which include several of the proposed zones. Additionally, soundscapes provide a valuable means of assessing overall visitor impacts in a noninvasive and cost-effective manner.

## Issues

A commenter notes that on page B-16 of the plan/EA, if park staff determine it is necessary to close a trail for a period that meets the definition of a temporary or permanent closure under 36 CFR 13.50 and 43 CFR 36.11(h), the appropriate Alaska specific closure process must be followed. The commenter suggests adding a reference to those closure procedures in this section.

**NPS Response:** The park superintendent has the authority to implement a closure if there is a public safety concern and/or threat to resources. Longer-term closure would require a compendium update.

A commenter suggests that on page 4, the National Park Service should add the following language to the description of the project area, where the boundary of the Resurrection River is discussed: “The Alaska Department of Natural Resources (DNR) ‘has management authority for state lands (including the land, water, tidelands, and shorelands of navigable waters within the State). This authority includes management of navigable waters, tidelands, and shorelands within and adjacent to the boundaries of federal lands. DNR manages use of these lands through Generally Allowed Uses (11 AAC 96.020 subject to 11 AAC 96.025) and through commercial and recreational land use authorizations.’” The commenter notes that the Resurrection River is navigable for title purposes, and the State of Alaska should be consulted for management actions that include the submerged lands below Resurrection River or its water. Further, they suggest limitations on access should exclude the waters and submerged lands of the creek, and the plan/EA should make that clear to the public and future resource managers.

**NPS Response:** Resurrection River in the park is of undetermined navigability, and management authority (federal or state) over the river in the park is unclear.

On pages 1–2, a commenter requests this section use the language from the Alaska National Interest Lands Conservation Act (ANILCA) to identify park actions. And on page 1, item 2, a commenter requests the deletion of the term “wild” from the sentence. They note that the park has not been designated as wilderness by Congress and using the term “wild” to describe the fjords will confuse the public.

**NPS Response:** NPS policy is that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA section 1317(b) has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

On page 2, item 4, a commenter requests deleting “a rich diversity of terrestrial” and replacing it with the language from ANILCA, which directs the National Park Service to “protect marine mammals and other birds in their natural state, free of human activity which is disruptive to their natural processes.”

**NPS Response:** The language in the plan/EA is taken from the park’s foundation statement (NPS 2013), which is derived from the park’s enabling legislation (ANILCA), as well as from “knowledge acquired since the park was originally established” (NPS 2013). Because park staff consulted ANILCA, among other sources, in developing the purpose and significance statements in its foundation statement and since the current plan draws its language from the foundation statement, park staff see no need to make the suggested change.

On page 2, item 5, a commenter suggests deleting the term “wild values” as it will easily lead people to associate the park with designated wilderness.

**NPS Response:** NPS policy states that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA, section 1317(b), has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

A commenter also suggests deleting the following sentence on page 11 of the plan/EA: “Higher frequencies of visitor encounters along the more arduous and remote trail can decrease the quality of the visitor experience.” They note that the majority of NPS lands in Alaska are inaccessible to most visitors. They further mention that Congress recognized that Kenai Fjords

National Park was road accessible and included special provisions to allow park staff to enhance visitor experience.

**NPS Response:** This comment relates to visitor capacity. The National Park Service is required to identify capacities for park areas per the National Parks and Recreation Act of 1978. Consistent with NPS *Management Policies 2006*, chapter 2, and Director's Order 2: *Park Planning*, a park's planning portfolio should be reviewed every 10 to 15 years, or as necessary, to ensure that the following four statutory requirements for general management plans, as identified in the National Parks and Recreation Act of 1978 (54 USC 100502), are addressed and up-to-date:

1. measures for the preservation of the area's resources;
2. indications of types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
3. *identification of and implementation commitments for visitor carrying capacities for all areas of the park; and*
4. indications of potential modifications to the external boundaries of the park, and the reasons for the modifications.

On page 25, figure 10, a commenter suggests removing the eligible wilderness symbology.

**NPS Response:** NPS policy states that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA, section 1317(b), has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

In appendix A, table A-1a, page A-2, a commenter suggests in the Hiker Zone column, General Description row, to remove the reference to "eligible wilderness." They mention that without further direction from Congress, the National Park Service should not manage non-designated lands as wilderness.

**NPS Response:** NPS policy states that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA section 1317(b) has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

In appendix B, a commenter notes that the section has interesting solutions to visitor congestion, specifically parking. They suggest that those solutions should be explicitly called out in alternative B rather than mentioned in general terms.

**NPS Response:** The plan/EA addresses parking pertaining to visitor congestion so as to recognize the current reality in the frontcountry, in which areas are highly congested during peak seasons, days, and times. However, parking is not an issue most days. Since parking and visitor congestion do not exceed current threshold levels, no action is needed at this time. This comment demonstrates the need for indicators and monitoring, which this plan establishes, to guide frontcountry management. The indicators and monitoring for visitor congestion in this area are based on the visitor comment card system.

## Impact Topics

A commenter notes that the “Impacts on Natural Resources” section focuses on possible impacts and suggests that the plan/EA should instead focus only on currently known impacts. They also suggest including a monitoring program that will identify the impact indicators and baselines and when management actions are needed.

**NPS Response:** This plan was written with the intention of guiding park management of the frontcountry area for the next 20 years. So, while it is important to address current issues accordingly, the National Park Service also feels it is necessary to be proactive in preparing for unforeseen issues that will inevitably arise.

The commenter further notes that the plan/EA should explain how the creation of the glacial mountain and valley floor management zones will minimize or reduce impacts. Further, they suggest identifying what impacts the park is seeing on frontcountry areas that warrant establishing visitor capacities.

**NPS Response:** This comment relates to visitor capacity. The National Park Service is required to identify capacities for park areas per the National Parks and Recreation Act of 1978. Consistent with *NPS Management Policies 2006*, chapter 2, and Director’s Order 2: *Park Planning*, a park’s planning portfolio should be reviewed every 10 to 15 years, or as necessary, to ensure that the following four statutory requirements for general management plans, as identified in the National Parks and Recreation Act of 1978 (54 USC 100502), are addressed and up-to-date:

1. measures for the preservation of the area’s resources;
2. indications of types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
3. identification of and implementation commitments for visitor carrying capacities for all areas of the park; and

4. indications of potential modifications to the external boundaries of the park, and the reasons for the modifications.

### **Impact Analysis – Vegetation**

A commenter suggests the National Park Service should expand on their strategy for invasive species management. The commenter suggests park staff adopt more rigorous preventive measures like boot-cleaning stations and educational materials.

**NPS Response:** The park currently has both boot-cleaning stations and educational materials to help prevent the spread of invasive species. The park has one of the more robust and long-running invasive plant management teams in the region. The region is planning a new regional integrated pest and plant management plan environmental impact statement, and these concerns will be addressed in that effort.

### **Impact Analysis – Visitor Use and Experience**

A commenter disagrees with the characterization of camping not being critical to the park experience (page 38 of the plan/EA, table 3, under “Campground”). They note that frontcountry camping in a national park in Alaska is a rare opportunity and is only possible in Kenai Fjords National Park and Denali National Park.

**NPS Response:** Camping is not considered a critical desired condition because of the typically low number of users at the Exit Glacier Campground. The plan/EA does not propose the permanent removal of camping from the frontcountry area. Based on this comment, however, park staff will adjust the language in table 3 (see attachment B, errata).

A commenter notes that the plan/EA identifies a higher frequency of encounters as detrimental to the visitor experience and questions this, recommending that the National Park Service conduct new socioeconomic studies to understand expectations from the public when it comes to visiting national parks in Alaska. They note that data from Alaska studies on younger members of the public show that their experience is not degraded by encounters but, rather, they place more value in facilities and frontcountry developed areas. The commenter suggests this speaks to outdated policies of managing for experience and solitude and may not be what the younger public values anymore. Further, the commenter suggests park staff should seek ways to enhance visitor opportunities.

**NPS Response:** Park staff appreciate this comment and would request a citation for the report referencing the preferences of younger visitors. However, the frontcountry is managed to serve a diverse range of people, not just a specific demographic. Park staff are managing for a variety of experiences, not solely for solitude. Solitude can mean different things to different visitors, which is why park staff manage the frontcountry by zone to accommodate these varying expectations. Furthermore, the park planning documents reflect a commitment to providing diverse experiences for all visitors, rather than catering exclusively to one demographic.

Another commenter notes the high visitor numbers to the visitor facilities zone, the relatively short season within which those visits occur, and the current pressure on parking, and they suggest creating a more realistic threshold for negative visitor complaint cards received (on page B-11, the plan/EA sets the threshold at five complaints). The commenter commends the park for prioritizing a positive visitor experience but feels that five negative complaints over an entire season is very low and may quickly trigger action by park staff that may ultimately not be the best use of staff time or resources. Instead, the commenter suggests adopting a small percentage of monthly or seasonal visitors rather than setting the limit at five. The commenter believes this will continue to show a priority on positive visitor experience while allowing staff time to be allocated efficiently.

**NPS Response:** After reviewing this comment, park staff decided to adjust the threshold for negative visitor complaint cards to a percentage rather than a fixed count. Specifically, the threshold will now be set at over 10% of received cards containing negative comments related to crowding. Additionally, if this threshold is exceeded, park staff will assess other relevant metrics, such as traffic counters and CUA data, to determine the best course of action. The management team believes that the most significant crowding issues currently stem from commercial use authorizations, and this adjustment allows for a more comprehensive and data-informed approach to managing visitor experiences.

## **Impact Analysis – Wilderness**

A commenter requests the deletion of the sections on wilderness effects (pages 17 and 78–80 of the plan/EA) since no land areas have been designated as wilderness when the Kenai Fjords National Park was created through the passage of ANILCA in 1980. They note that the proposed plan mentions a wilderness suitability study completed during the 1984 planning process, but this study was in accordance with ANILCA, section 1317. They further mention that the section provided limited authority for the National Park Service to study all lands within the unit boundaries not already designated by the ANILCA. The commenter mentions that since Congress has not acted on the study, the time has passed for lands with wilderness characteristics within Kenai Fjords National Park to be designated as wilderness. The commenter does not support this plan, including any direction to preserve either wilderness or wilderness character.

**NPS Response:** NPS policy is that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA, section 1317(b), has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

On pages 26–27 and in the appendixes, a commenter requests the deletion of the discussion of solitude. They note that opportunities for solitude are specifically identified as a characteristic



of designated wilderness under the Wilderness Act, and its use in planning documents should be restricted to management plans for designated wilderness.

**NPS Response:** NPS policy is that eligible wilderness is managed as though it were designated wilderness. The wilderness review process required under ANILCA, section 1317(b), has not been completed. The act does not specify that there is only a one-time opportunity to conduct wilderness suitability reviews and recommendations. It required the National Park Service to complete its suitability reviews and recommendations within a specified period of time. Park general management plans remain the basis for identifying eligible wilderness until a new wilderness study or an eligibility assessment is completed.

The commenter also mentions that the plan/EA is concerned with managing the frontcountry, where the designation of areas for solitude is inappropriate. Furthermore, the commenter states that frontcountry areas should provide general amenities, have no limits on the number of visitors, and should not identify noise as an issue of concern.

**NPS Response:** See the previous comments on the NPS management of wilderness. In the park frontcountry area, there are zones that are both within and outside of eligible wilderness. Some desired conditions, such as solitude and an experience free from modern amenities, apply in frontcountry zones that are managed as wilderness but may not apply in other frontcountry zones. Consistent with *NPS Management Policies 2006*, chapter 2, and Director's Order 2: *Park Planning*, a park's planning portfolio should be reviewed every 10 to 15 years, or as necessary, to ensure that the following four statutory requirements for general management plans, as identified in the National Parks and Recreation Act of 1978 (54 USC 100502), are addressed and up-to-date:

1. measures for the preservation of the area's resources;
2. indications of types and general intensities of development (including visitor circulation and transportation patterns, systems, and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
3. *identification of and implementation commitments for visitor carrying capacities for all areas of the park; and*
4. indications of potential modifications to the external boundaries of the park, and the reasons for the modifications.

## Strategies – Other

### Campgrounds

A commenter suggests keeping the campground open even if over half of the designated sites are washed away. They believe that more sites could be created for a small amount of investment.

**NPS Response:** Current use numbers of the Exit Glacier Campground are relatively low. If numbers increase and additional sites are lost to erosion, park staff will consider

adding more sites in a different location as a long-term management strategy if special funding (e.g., disaster response funding) becomes available.

Another commenter would like the plan/EA to further reflect on the rare opportunity the area presents to Alaska visitors for frontcountry camping in a national park.

**NPS Response:** The value of the campground is not lost on park staff. However, use of the Exit Glacier Campground remains relatively low.

### **Harding Ice Field Trail**

A commenter suggests a trail be established on the top of the ridge just north of the visitor's center to view Harding Ice Field. This would reduce crowding on the Harding Ice Field Trail.

**NPS Response:** Several proposals for building new trails were considered but dismissed when drafting this plan. Like many of the suggestions park staff received, this proposal, which was not discussed thoroughly in the plan, would be dismissed. Such a trail would be infeasible given current funding levels and, if constructed, would be unlikely to significantly reduce congestion on the Harding Ice Field Trail since it would not afford scenic views of the Harding Icefield.

Another commenter suggests only allowing those with experience and permits on the Harding Ice Field.

**NPS Response:** The implementation of a permit system is proposed and discussed numerous times throughout the plan. However, visitation levels are not currently above the established thresholds that would necessitate the implementation of a permit system. On page B-11, the plan/EA states that the National Park Service will "Consider actions to manage the pace and flow of use along the Harding Icefield Trail, including requiring visitors to obtain a limited quantity of permits for hiking the trail during peak season or implement a first come, first served quota system." However, the thresholds that trigger these management actions have not been reached.

Another commenter believes there should not be restrictions placed on private parties seeking to access the glacier or surrounding mountainsides.

**NPS Response:** Park staff do not believe that limiting public, noncommercial access to the glacier and surrounding mountainsides is necessary at this time. These areas have no built infrastructure (i.e., trails), and so even if there were a significant increase in visitation to the frontcountry, park staff believe it is highly unlikely that there would be a dramatic increase in use of the glacial mountain and valley floor zones. As previously noted, if visitation levels rose above the established thresholds, this could necessitate the implementation of a permit system in the future following additional compliance. On page B-11, the plan/EA states that the National Park Service will "Consider actions to manage the pace and flow of use along the Harding Icefield Trail, including requiring visitors to obtain a limited quantity of permits for hiking the trail during peak season or implement a first come, first served quota system."

## Other Trails

A commenter suggests that the National Park Service work with Chugach National Forest to restore the Resurrection Trail.

**NPS Response:** If the US Forest Service were interested in pursuing this, park managers would likely be interested in partnering. However, the Forest Service has not indicated interest when the National Park Service has inquired about this in the past. Without Forest Service interest, this proposal is unfeasible.

Another commenter suggests developing a trail along the mountain base from the nature center up towards Redman or Cottonwood Creeks. They further note that if the slope angles allow, the trail could climb into alpine areas along the ridge before Redman or near Cottonwood Creeks. They believe this would provide an alternative adventure for those not wanting the social experience of the Harding Icefield Trail.

**NPS Response:** This idea was discussed during internal park meetings, and it was considered but dismissed. The dynamic nature of the shifting, braided Resurrection River makes construction of additional infrastructure unfeasible. The National Park Service had maintained an historic cabin there, but the cabin area was flooded by the river and is now buried in sediment.

A commenter also suggests making a hiking/nature trail on the west side of Resurrection Road to disperse trail users. (Note: Park staff believe the commenter meant to refer to the north side of the Herman Leirer Road or the west side of Resurrection River. The west side of the road is the end of the road where all the infrastructure currently exists.)

**NPS Response:** Trail system expansion was considered but dismissed for multiple areas around the Herman Leirer Road and the Resurrection River. Small trail expansions in these areas are not explicitly stated in the plan, as they were grouped with multimodal trail proposals. With regard to the Resurrection River, the dynamic nature of the shifting, braided Resurrection River makes construction of additional infrastructure unfeasible.

## Visitation

A commenter suggests park staff consider using Recreation.gov so visitors can make a reservation for camping and have confidence in their trip planning. They note that visitors from out of state would appreciate having the park's information available on Recreation.gov. The commenter further suggests park staff manage reservations for the campgrounds in a manner similar to how Haleakalā National Park staff manage reservations for the park's oceanside campground.

**NPS Response:** This comment is part of the larger campground discussion. Park staff have weighed the pros and cons of requiring reservations for campground sites and decided against any changes at this time. The current first-come-first-serve walk-in system is deemed appropriate because the campground is rarely at capacity.

## Buses/Cruise Ships

A commenter suggests park staff consider charging tour buses and their occupants as a way to limit their impact on the park's resources. They also suggest park staff become involved in efforts to limit cruise ship traffic in the area due to their excessive load on the system.

**NPS Response:** Impacts caused by increased visitor use from all sources, including tour buses and cruise ships, were considered throughout this plan. The park currently does have mechanisms to regulate commercial use in the frontcountry, such as limiting or placing stipulations on commercial use agreements, and tour buses are a commercial activity. This suggestion could possibly be implemented in the future. Park staff have used CUA stipulations to manage group sizes on the Harding Icefield Trail and in coastal backcountry areas where the maximum group size is 14 people.

One commenter notes that the number of visitors on the Harding Ice Field Trail has increased substantially, which they believe is due, in part, to commercial outfits dropping off visitors and visitors from cruise ships. The commenter recommends responding to this increased visitation not by expanding parking but by limiting the number of large commercial buses allowed in the park. They also suggest that local businesses should be limited to 12 or fewer clients in a guided hiking or walking tour and that there be a limit on the number of tours they are allowed to conduct per day.

**NPS Response:** CUA group size for the Harding Icefield Trail and backcountry areas in the park is currently limited to 14 individuals, which includes guides. The developed area currently has no group size limit.

Increasing the size of the parking lot is an action that was considered but dismissed because it was duplicative of other actions considered to address parking lot congestion. In addition, these other activities would be less expensive and present fewer environmental impacts.

Some have suggested letting more buses and shuttles in to mitigate parking lot congestion. Others have suggested limiting buses and shuttles to decrease congestion on trails and infrastructure. Park staff will remain nimble in its management of the area to address congestion issues.

Another commenter does not want parking expanded but instead suggested a shuttle system for visitors that offloads from the cruise ships.

**NPS Response:** Increasing the size of the parking lot was considered but dismissed because it is duplicative of other actions considered to address parking lot congestion, and these other actions would be less expensive and present fewer environmental impacts. A shuttle system can pose other issues, such as increasing the number of people on trails (where the parking lot is no longer the main factor controlling the number of people in the frontcountry), which is why this is considered a long-term strategy that could be implemented following additional compliance.

## Other

A commenter suggests park staff consider the possibility of additional future trails, educational signs, and other amenities in the glacial mountain and valley floor zones.

**NPS Response:** Additional trails were considered but dismissed, primarily due to each proposal being infeasible.

A commenter suggests the National Park Service make a bike path to support nonmotorized travel out to the glacier.

**NPS Response:** This strategy was considered but dismissed as part of a multimodal trail.

Another commenter suggests park managers partner with community groups to host organized events on the park access road during winter, spring, and fall when the gate is closed. They suggest these events could include cross-country ski races and similar events.

**NPS Response:** This commenter's language was taken directly from the text of the plan/EA (page 31). The preferred alternative (alternative B) proposes the park diversify recreational opportunities through the promotion of authorized forms of winter use.

Another suggestion from a commenter is to increase the time park employees work seasonally to include the shoulder seasons to support visitors over a longer period.

**NPS Response:** The preferred alternative suggests park managers pursue shoulder season activities, and this implies appropriate staffing to support this. However, if budget and staffing shortfalls occur, park managers would continue to prioritize the management of summer operations.

A commenter suggested the park support local conservation groups in addressing sustainable tourism in the Seward area.

**NPS Response:** The park would like to support these groups, but it would require sufficient budget and capacity to do so.

A commenter recommends park staff reach out to the State of Alaska on approaches to manage human-wildlife encounters and wildlife safety. The commenter notes that the plan/EA should accurately reflect the cooperative management between the National Park Service and State of Alaska on the protection of habitats and populations of fish and wildlife with the park.

**NPS Response:** The state does not manage the wildlife in the park, but collaborative management is always beneficial. In many ways, park staff already collaborate with the state and other partners on matters related to human-wildlife encounters.

## Strategies – Visitor Messaging, Wayfinding, and Interpretation

A commenter notes that if park staff create more frontcountry hiking opportunities, it would help prevent less-experienced hikers from attempting a hike that is more strenuous and dangerous than they can handle.

**NPS Response:** Park staff considered several different proposals for expanding the current trail system but each was determined to be unfeasible (see the “Management Actions Considered but Dismissed” section of the 2024 plan/EA). To address the problem, park staff propose using effective and updated messaging for visitors to select trails based on their self-assessed ability.

Another commenter suggests adding signage at the start of the Harding Icefield Trail, stating why it is important to stay on the designated trail.

**NPS Response:** The impact of social trails on natural resources is noted in the plan/EA. Signage is one of the actions considered to help prevent the creation of additional social trails.

One commenter encourages the National Park Service to develop additional interpretative materials and education opportunities, as noted in the alternative B goals listed on page 29 and identified in public comments in appendix D.

**NPS Response:** This is one of the actions proposed in the preferred alternative.

A commenter would like park staff to add information about the other glaciers that flow from the same icefield in future educational displays. They believe these displays could be used more broadly to talk about the relationships between the ice field, glaciers, and fjords.

**NPS Response:** When updating interpretive exhibits and programs, park staff will consider including displays discussing a larger landscape context. The frontcountry area, along with other park visitor centers (i.e., Harbor Visitor Center in Seward), effectively tell the story of the entire park and how different areas relate to one another.

Another commenter agrees with the shift in visitor messaging to deemphasize Exit Glacier as the focal point but recommends that park staff further leverage the glacier’s retreat as an educational tool. They suggest making interpretive materials, signage, and ranger-led programs focusing on the historical extent of Exit Glacier and its current condition.

**NPS Response:** Park staff agree and have emphasized doing this in several sections of the plan.

A commenter suggests park staff should consider developing interactive tools, such as augmented reality apps, to show visitors where the glacier once stood and how it has receded over time.

**NPS Response:** This idea is interesting but is at a level of detail outside the scope of the plan.

## **Strategies – Winter Recreational Opportunities**

### **Bikes**

A commenter notes that the park will have to require 4-stroke snowmachines, especially for commercial use authorizations, if the Herman Leirer Road is open to the Resurrection River bridge. They mention that there will be more users in general there, and most will be using the

road corridor to access the park. The commenter states that 2-stroke snowmachines diminish the soundscape and emit a considerable amount of pollution, which will diminish other users' experiences. The commenter asks if park staff have a plan for expanded parking if the Herman Leirer Road is open to the Resurrection River Bridge since those parking areas now need to accommodate snowmachine trailers.

**NPS Response:** The Herman Leirer Road remains closed in the winter and is under Alaska Department of Transportation & Public Facilities jurisdiction until the road enters the park at the Resurrection River bridge. Park staff do not anticipate the road remaining open in the winter beyond the location of the first gate at Old Exit Glacier Road. However, if current road closure practices changed, there are adequate areas for some trailering at both the Forest Service gate (large pullout area along the outwash plain) and near the NPS gate (Resurrection River Trailhead parking).

The plan/EA does not differentiate between 2-stroke and 4-stroke snowmachines. Given the current levels of snowmachine use in the park, park staff will not be prohibiting 2-stroke snowmachines at this time.

The commenter also questions why the plan/EA specifically allows nonmotorized fat tire bikes but does not specify e-bikes. A couple of other commenters mention that the plan/EA should include motorized fat tire bikes.

**NPS Response:** Park staff do not have the discretion to allow e-bikes in specified areas. Per 36 CFR 4.30(i), e-bikes are only allowed on park roads, parking areas, and administrative roads and trails otherwise open to bicycles.

## Road Grooming

A commenter suggests park staff consider partnering with the Seward Nordic Ski Club to help groom the road to the parking area since, at present, they note the grooming is limited to the Forest Service gate. Another commenter also suggests park staff explore potential partnerships with local stakeholder groups to groom the NPS section of the access road from the Resurrection River bridge to the nature center. One commenter suggests the park allow grooming on the outwash plain. They note that the plan/EA only states grooming on the road to the visitor center and that if grooming is limited to that area, it further limits skiers into one corridor and decreases their opportunities for quiet and solitude in the park.

**NPS Response:** Under alternative B, the National Park Service will “Explore potential partnerships with local stakeholder groups to groom the NPS section of the access road from the Resurrection River bridge (park boundary) to the nature center, extending cross-country ski, snowmobile, and fat tire winter snow bike opportunities in the winter.” Grooming on the outwash plain is not currently prohibited if done by a snowmachine with a grooming attachment.

A commenter suggests park staff should promote winter recreation opportunities on the park website, in publications, and on social media.

**NPS Response:** Park staff agree with this idea.

## Road Closures

A local commenter notes that having the road closed in the winter is a bonus for the locals to enjoy the road without traffic.

**NPS Response:** This was recognized by park staff during internal discussions and was noted in the plan/EA (page 36).

## Strategies- Regulatory Changes

A commenter suggests airplane and helicopter tours be prohibited over the park. They note that the planes and helicopters overhead are a nuisance and can make the park less enjoyable.

**NPS Response:** Park staff do not control airspace.

## Strategies – Adaptations, Changing, Conditions, and Facilities

One commenter suggests park staff build a primitive outhouse in the Marmot Meadows area since it is warranted based on the number of hikers there and beyond. Another commenter suggests providing a pit toilet midway up the Harding Icefield Trail since many people traverse the trail.

**NPS Response:** Park staff discussed restroom facilities along the Harding Icefield Trail, but they were unintentionally not included the plan/EA. This omission has been remedied in attachment B of this FONSI (errata) for page 50 of the plan/EA. While visitation on the Harding Icefield Trail is significant, with approximately 15,000 visitors annually, this level of use is not high enough, and park staff have not observed enough issues related to human waste along the trail to justify adding a toilet facility. Additionally, while visitation to Exit Glacier has increased overall, this trend has not necessarily translated into higher use of the Harding Icefield Trail specifically.

The trailhead currently has restroom facilities, which most visitors are expected to use before beginning their hike. Building and maintaining additional facilities along the trail would pose significant logistical challenges, including cleaning and servicing them in a remote and rugged environment. At this time, park staff will continue to monitor conditions and address any emerging resource issues reactively, should they arise.

A commenter encourages park staff to consider green infrastructure solutions where feasible, such as permeable surfaces for parking lots and trails that could reduce erosion and stormwater runoff. They also suggest incorporating natural flood barriers and vegetative buffers to provide long-term benefits in mitigating the impacts of glacial outbursts and erosion.

**NPS Response:** Park staff will continue to incorporate green infrastructure solutions opportunistically. The Herman Leirer Road was previously improved, and this included raising the road to prevent/mitigate erosion and installing large culverts for water channels to pass through between wetlands.

Another commenter notes that the Herman Leirer Road is dangerous for pedestrians and bicyclists. They suggest constructing a primitive trail or single track using the outwash plain and



improving existing bridges and paths to allow hikers and bikers a safer, more natural way to access to the park. The commenter further notes that such a trail could help ease parking.

**NPS Response:** See the previous NPS responses regarding multimodal trails and jurisdiction over the Herman Leirer Road.

## **Visitor Capacity**

Commenters suggest a limit on the number of visitors so that overcrowding and parking issues do not become more of an issue. A commenter suggests limiting group sizes and encouraging the spacing of commercial groups using the Harding Ice Field Trail. Another commenter notes that if commercial operators were able to disperse more widely across the glacier mountain zone in the coming years, they would support an increase to the visitor capacity for this zone.

**NPS Response:** See the previous comments on visitor capacity and placing limitations on commercial use agreements.

A commenter notes that alternative B proposes the use of indicators and thresholds to monitor visitor impacts, but the plan/EA does not specify whether there will be a cap on the number of visitors allowed in certain areas during peak seasons. The commenter recommends that park staff institute a reservation or permit system during the busiest months to limit the number of visitors at one time. They believe this system would reduce pressure on the park's infrastructure, help preserve the natural environment, and enhance the visitor experience by preventing overcrowding.

**NPS Response:** The plan/EA specifies this in appendix C.

Another commenter disagrees with adding new trails even though it may disperse visitors since they believe the park would still require additional parking and maintenance to manage the number of visitors.

**NPS Response:** Park staff considered but dismissed the construction of additional trails.

A commenter says they have noticed that each year, visitors to the Seward area and Exit Glacier are growing, and it is more of a challenge to find parking.

**NPS Response:** Parking concerns are addressed throughout the plan/EA.

## **Zoning**

A commenter responds to zoning references in the plan/EA by stating they believe zoning is a management tool with inherent inconsistencies since it often seeks to limit uses without demonstrating negative impacts on resources. The commenter questions the need for a glacial mountain zone and a valley floor zone since they are unlikely to experience overuse during the life of the plan. The commenter requests that the plan/EA clarify the management issues anticipated to be addressed by the glacial mountain and valley floor management zones.

**NPS Response:** Park staff created the glacial mountain and valley floor management zones because different desired conditions were identified for the areas that these separate zones now comprise.



## ATTACHMENT B: ERRATA INDICATING TEXT CHANGES TO THE FRONTCOUNTRY MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT

### INTRODUCTION

This errata documents changes (corrections and minor revisions) to the text of the plan/EA as a result of comments received on the plan/EA during the public review process, as well as other corrections.

Page numbers referenced pertain to the draft plan/EA released to the public for review in August 2024. Original text from the plan/EA is included to provide context and to allow for comparison to the text change. Additions to text are underlined, and deleted text is shown by strikeout.

### ERRATA FOR THE PLAN AND ENVIRONMENTAL ASSESSMENT

#### Page 4

The Resurrection River flanks the eastern boundary of park and frontcountry area, and the 300-square mile Harding Icefield rises above the frontcountry area to the west. The southern (or southeastern) boundary of the frontcountry area follows the lower reaches of Paradise Creek, and the high, steep ridgelines north of the road and Harding Icefield Trail create the boundary separating the frontcountry area from the neighboring valley to the north. While most of the icefield is excluded from the project area, Exit Glacier is a prominent feature in the frontcountry area, descending from the icefield to a wide river valley where the glacier's melt waters feed into Exit Creek and run down to a large outwash plain and valley floor. Because the navigability of the Resurrection River remains undetermined, the management authority of the Resurrection River and the surrounding area is currently unclear.

#### Page 12

##### Impacts on Natural Resources

Increased visitation during the typical summer season and now into the shoulder seasons (spring and fall) has the potential to impact natural resources in the frontcountry area. Social trails (undesignated side trails) ~~created by visitors wanting to get closer to the glacier can~~ result in soil compaction, vegetation trampling, and the introduction and establishment of invasive plants. Trash left behind on trails, along roads, and in parking areas can attract wildlife, including bears, and, therefore, increase the potential for human-wildlife encounters. ~~Potential increases in winter~~ Winter recreation, especially noise from snowmachine use, ~~may~~ has been shown to disturb wildlife.

Executive Order 12898 was rescinded by the President's January 2025 Executive Order 14173. Evaluation of environmental justice is not legally required or necessary to make a reasoned decision. The strikethrough text below is removed from the EA.

~~**Socially or Economically Disadvantaged Populations:** Executive Order 12898 “Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations” requires federal agencies to identify and address any high and adverse human health or environmental effects of their actions on minorities and low income populations and communities. No actions identified in the alternatives result in adverse impacts on minority or low income populations or communities.~~

**Table 3. Considerations for Climate Adaptation and Management Strategies for Facilities Affected by Future Changing Conditions under Alternative B\***

| Facility   | Climate Vulnerabilities   | Relative Importance of Facility  | Potential Adaptations  | Proactive or Reactive?   |
|------------|---|--|--|--|
| Campground | Flooding damage and outwash plain migration (this facility is the most vulnerable to these risks, and campsites have already been lost) | <del>The campground is not critical to achieving desired conditions or mission success.</del><br>A very small proportion of visitors camp here, and at the campground, and it is rarely full. <u>However, many of these visitors appreciate the campground and the opportunity it presents for frontcountry camping in the park.</u> Alternative camping options exist in the area. The loss of the facility would have a <del>negligible</del> <u>negligible negative</u> impact on visitor opportunities for the limited number of people interested in camping in the park. | <p><b>Near-Term Potential Management Strategies</b></p> <p>Decommission individual sites if/when they are lost to flooding or outwash plain migration. If half or more of the sites are lost, the full campground may be decommissioned.</p> <p><b>Long-Term Potential Management Strategies</b></p> <p>Move the campground to a new location if special funding (e.g., disaster response funding) becomes available and demand for camping in the park is high.</p> | These actions would be taken reactively if/when flooding impacts the campground. |

## Page 42

Pursuant to Director's Order 2: *Park Planning*, a park's planning portfolio is the assemblage of planning documents that guide park management and decision-making and satisfy law and policy. Implementation-level plans such as this one can contribute to the statutory planning requirement to identify visitor capacities for specific areas of the park. Kenai Fjords National Park's frontcountry has no prior identification of visitor capacity.

## Page 47

- Develop a trail west of the Resurrection River along the mountain base from the nature center up towards Placer Creek, with a potential ascent into alpine areas.

This action was dismissed after internal discussions determined that the dynamic nature of the braided Resurrection River makes the construction and maintenance of infrastructure in this area unfeasible. Historical attempts to maintain structures in the area, such as a cabin, were ultimately unsuccessful due to flooding. While the idea provides an alternative experience to the Harding Icefield Trail, safety, resource protection, and practicality outweigh the potential benefits of developing this trail.

- Create a designated GPS route (untrailed) to access alpine areas and nunataks on Harding Icefield.

## Page 50

### Infrastructure

- Manage the Exit Creek to prevent flooding and washouts, potentially with berms or a levy. This action was dismissed because it presents too great an environmental impact or is duplicative with other, less-damaging alternatives. Lessons learned across the National Park Service advise against constructing infrastructure on unstable or dynamic landscapes. In managing the park's frontcountry, accepting the dynamic nature of the outwash plain is safer than attempting to resist it.
- Construct a primitive outhouse at Marmot Meadows or a pit toilet midway along the Harding Icefield Trail.

This action was dismissed, as current visitation levels and observed conditions along the Harding Icefield Trail do not warrant additional restroom facilities. While the trail sees approximately 15,000 visitors annually, park staff have not identified significant issues related to human waste that would justify constructing such infrastructure. Furthermore, restroom facilities are available at the trailhead, and most visitors are expected to use these before beginning their hike. Building and maintaining additional facilities along the trail would present considerable logistical challenges, including servicing and cleaning in a remote and rugged environment.

## Page 74

When the incremental impacts of alternative B are combined with the impacts of past, ongoing, and reasonably foreseeable planned actions described in the affected environment section, the

overall cumulative impacts on the wildlife in the frontcountry ~~vegetation~~ would be adverse. The incremental impacts of the alternative B would contribute slightly to, but would not substantially change, the impacts that are already occurring. The additional contribution of negligible impacts from this alternative would have slight impacts but not adversely impact wildlife in the study area.

## Page 76

Increased visitor use can lead to bears accessing human food, which often leads to trail closures as a safety precaution. If Kenai Fjords National Park staff determine it is necessary to close a trail for a period that meets the definition of a temporary or permanent closure, applicable policy will be followed (cf. 36 CFR 13.50 and 43 CFR 36.11(h)).

## Page B-11

### Threshold

~~Five complaints or negative comments in a summer season (May to September)~~ Ten percent of received comment cards in a summer season (May to September) include negative feedback pertaining to crowding in the visitor facility zone. Further, if this threshold is exceeded, park staff will assess other relevant metrics, such as traffic counters and CUA data, to determine the best course of action.

## Page B-12

### Rationale

Currently, the park receives very few, if any, complaints that would count toward this indicator. Therefore, a relatively low threshold (ten percent of received comment cards having negative feedback) was identified, as it could indicate a profound shift in conditions in the visitor facilities zone that visitors are finding unacceptable. ~~The park receives comment cards (mostly positive) from a very small fraction of overall visitors, so a total of five comment cards would represent a much larger population having a negative experience.~~

## Page B-16

### Immediate Management Strategies

- Continue to use trail closures to protect wildlife and ensure visitor safety. Closures will be consistent with applicable law and policy (cf. 36 CFR 13.50 and 43 CFR 36.11(h)).

## Page C-7

### *Near Term*

If monitoring determines that conditions are trending away from desired conditions (related thresholds are exceeded or visitor capacity is approached if information is available), one or more of the following management strategies or actions may be implemented:

- ~~None identified~~ Manage overall CUA use levels, CUA group size, timing of CUA use, or locations of CUA use to prevent crowding at certain times or places through changes in CUA permit conditions.

## Pages C-7 and C-8

### *Long Term*

The following future management strategies would be considered if previously attempted current and near-term potential management strategies are not effective in maintaining desired conditions, staying within established related thresholds, or managing within visitor capacity (if information is available). These actions may require that additional compliance be completed before implementing the management strategies or actions.

- ~~Manage overall CUA use levels, CUA group size, timing of CUA use, or locations of CUA use to prevent crowding at certain times or places through changes in CUA permit conditions.~~



## ATTACHMENT C: DETERMINATION OF NON-IMPAIRMENT

### INTRODUCTION

The NPS Organic Act of 1916 directs the National Park Service to “conserve the scenery, natural, and historic objects, and wildlife in the System units and to provide for the enjoyment of the scenery, natural and historic objects, and wildlife in such manner and by such means as will leave them unimpaired for the enjoyment of future generations” (54 USC 100101). National Park Service *Management Policies 2006*, section 1.4.4, explains the prohibition on impairment of park resources and values:

*While Congress has given the Service the management discretion to allow impacts within parks, that discretion is limited by the statutory requirement (generally enforceable by the federal courts) that the Park Service must leave park resources and values unimpaired unless a particular law directly and specifically provides otherwise. This, the cornerstone of the Organic Act, establishes the primary responsibility of the NPS. It ensures that park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.*

An action constitutes impairment when its impacts “harm the integrity of park resources or values, including the opportunities that otherwise will be present for the enjoyment of those resources or values” (NPS 2006, section 1.4.5). To determine impairment, the National Park Service must evaluate the “particular resources and values that will be affected; the severity, duration, and timing of the impact; the effects of the impact in question and other impacts. An impact on any park resource or value may constitute impairment, but an impact would be more likely to constitute an 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 to opportunities for enjoyment of the park; or
- identified in the park’s general management plan or other relevant NPS planning documents as being of significance.” (NPS 2006, section 1.4.5)

### DETERMINATION OF NON-IMPAIRMENT

Resources carried forward for detailed analysis in the plan/EA and for which a non-impairment determination has been made include soils, water quality, floodplains, wetlands, air quality, soundscape, vegetation, and wildlife. A non-impairment determination is not necessary for visitor use and experience nor wilderness because these impact topics are not generally considered a park resource or value subject to the non-impairment standard (see NPS 2006, section 1.4.6).

## **Soils**

Implementing new management zones, management responses to changing conditions, indicators and thresholds, and visitor capacities will help protect soils within the project scope. While visitor off-trail use compacts soils, resulting in erosion on steeper slopes, these impacts will be broadly dispersed. No impairment of soils will occur because the area of permanent impacts on soils under the selected alternative will be concentrated and small relative to soils in the park.

## **Water Quality**

Implementing new management zones and the capacity framework will help improve the existing water quality. Potential increases to visitation are not anticipated to impact water quality in a meaningful or measurable way. As a result, no impairment of water quality will occur.

## **Floodplains**

Implementing new management zones will not change floodplain structure or processes, and no new building construction is being proposed. No impairment of floodplains will occur because there are no direct impacts on floodplains, and indirect impacts are negligible.

## **Wetlands**

Implementing the selected alternative will not have a substantial impact on wetland functionality. While increased visitation may occur within the project scope, wetlands are primarily in areas where visitation will remain low. No impairment of wetlands will occur because there are no direct impacts on wetlands and indirect impacts are negligible.

## **Air Quality**

Implementing the selected alternative will result in negligible impacts on air quality. As a result, no impairment of air quality will occur.

## **Soundscape**

Implementing the selected alternative will result in negligible impacts on soundscape. As a result, no impairment of soundscape will occur.

## **Vegetation**

No new trails or buildings are proposed, and the proposed actions in the selected alternative will not result in substantial impacts on native vegetation. Increased visitation may cause additional invasive plant infestations along trails but would be mitigated through the park's active invasive plant management program. As a result, no impairment of vegetation would occur.

## **Wildlife**

The selected alternative has actions such as increased winter and summer recreation visitation that may affect wildlife negatively to a small degree. 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 of the park's wildlife.

## **SUMMARY**

The National Park Service has determined that implementing the selected alternative will not constitute impairment of the resources of the park. This conclusion is based on the consideration of the park's purpose and significance, a thorough analysis of the environmental impacts described in the environmental assessment, comments provided by the public and others, and the professional judgment of the decision-maker guided by the direction in NPS *Management Policies 2006*.