



# Crescent Lake Concessions and Land Use Assignment

## *Environmental Assessment*

*September 2023*



As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering the wisest use of our land and water resources, protecting our fish and wildlife, preserving the environmental and cultural values of our national parks and historical places, and providing for enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to assure that their development is in the best interests of all. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.



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If you wish to comment on this document, you may mail comments to:

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You may also comment for this project online at  
<https://parkplanning.nps.gov/CrescentLakeConcessions>.

Before including your address, phone number, e-mail address, or other personal identifying information in your comment, be aware that your entire comment – including your personal identifying information – may be made publicly available at any time. You can ask us to withhold your personal identifying information from public review, but we cannot guarantee that we would be able to do so.

## **ON THE COVER**

Brown bears on the beach with visitors bear-viewing from a boat at Crescent Lake, Lake Clark National Park, Alaska.  
NPS Photo

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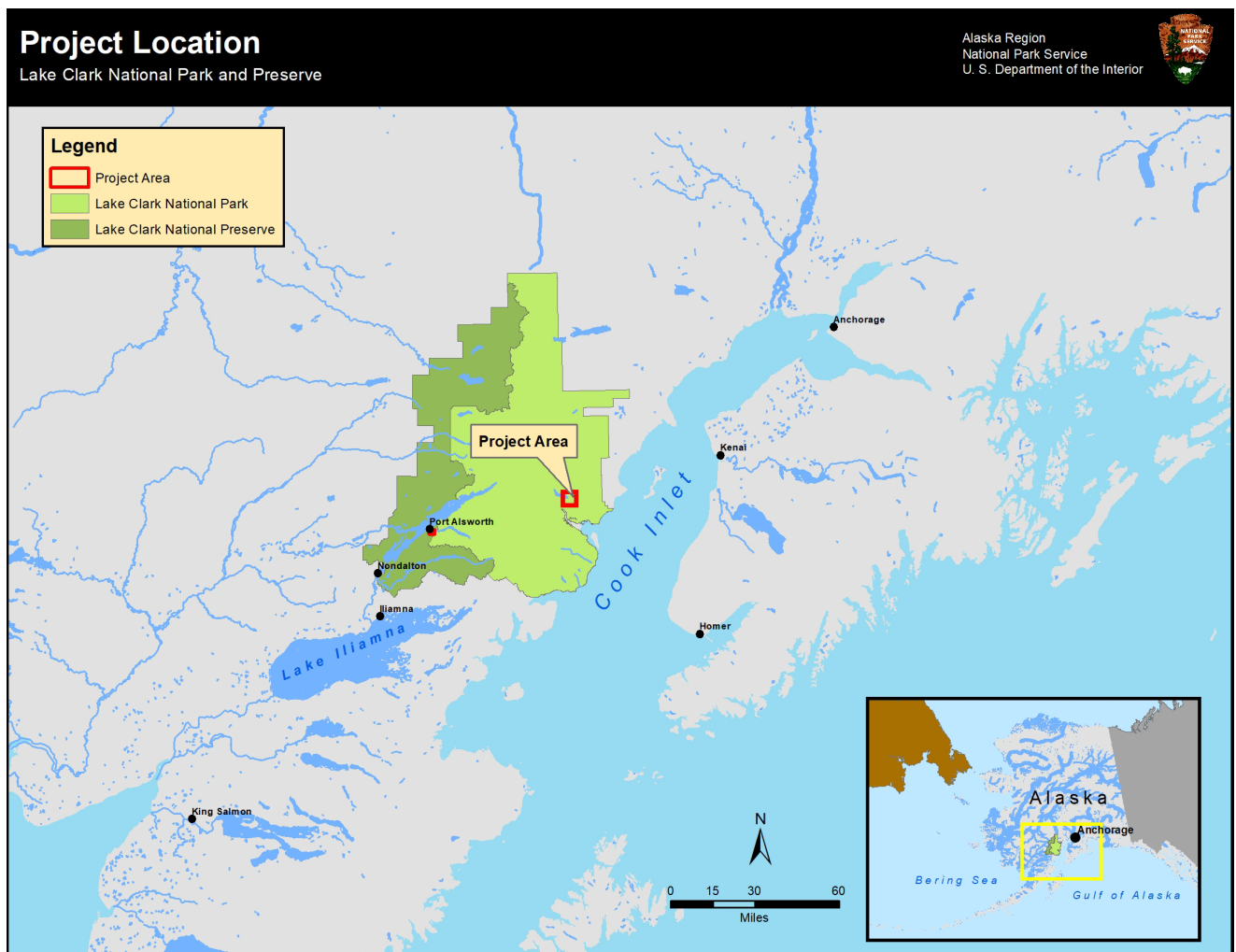
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# 1 Introduction

The Lake Clark National Park and Preserve (LCNPP or the park) is proposing concession contracts and year-round boat storage in the Crescent Lake Concessions and Land Use Assignment Environmental Assessment (EA). The EA includes the required content under the National Environmental Policy Act (NEPA). The EA discloses the purpose and need for action, the current and future condition of the environment if no action is taken, action alternatives, issues, and impacts that may result from the action alternative.

## 2 Project Location

The proposed project is located within the Kenai Peninsula Borough of the State of Alaska. The proposed project occurs on National Park Service (NPS) managed land on the west side of Cook Inlet approximately 60-miles southwest of Kenai, Alaska, adjacent to Crescent Lake, Alaska (Figure 1).



**Figure 1. Location of Lake Clark National Park and Preserve and Project Area Within Alaska.**

### 3 Background

Crescent Lake is located on the west side of Cook Inlet, north of Tuxedni Bay within Lake Clark National Park. The lake supports multiple species of salmon, which attract large numbers of brown bears that feed on the fish returning to the system. This combination of fish and bears draws visitors to the lake to sport fish and bear-view, making it one of the most visited locations in the park, with nearly 3,500 visitor use days (a visitor use day is each day a visitor is at the park engaging in an activity) recorded in 2022. This 2022 visitation represents a significant increase in recent years, increasing from 1,600 reported visitor use days recorded in 2010.

Visitor access to Crescent Lake is only by float plane, with visitors primarily seeking opportunities to sport fish and bear view. Currently, Commercial Use Authorization (CUA) operators provide access and guided activities for most of the visitors to the Crescent Lake area. To support sport fishing and bear viewing activities, boats are essential equipment for CUA operators for access and transportation of visitors. Given the access limitations of the area, transporting boats to Crescent Lake is a difficult and costly process, making boat storage onsite a necessity for operating at Crescent Lake. Crescent Lake has seen a dramatic rise in visitation in recent years and in commercially guided services.

The Lake Clark General Management Plan (NPS 1984) states that consistent with the fundamental purposes of the park and preserve, the NPS would authorize some expanded opportunities for commercial services on a case-by-case basis through the competitive process of a limited CUA or concession contracts at Crescent Lake. CUAs are issued for services that are “appropriate” for public use and enjoyment, have minimal impact to park resources, are consistent with the park unit’s enabling legislation, and are complementary to a park’s mission and visitor service objectives. Concession contracts must also meet these criteria and be considered a “necessary” visitor service by the park. Certain circumstances dictate when the NPS may consider issuing concession contracts rather than CUAs or may prompt the NPS to convert an existing CUA to a concession contract, such as when the NPS determines that it needs to manage commercial operations or impacts associated with commercial operations.

Concession contracts have longer terms (typically ten years versus two years for a CUA) and involve a higher level of park oversight on operations. This includes a more stringent operating plan requirement than is required of CUAs, including a submission of a Risk Management Plan, environmental audits, annual inspections, and annual financial and operational reporting. Concession contracts are limited in number and are often focused on a certain area and/or visitor service(s) that have impacts the park is trying to more closely manage due to visitation, safety, and/or resource impact concerns. Concession contracts have a more active management relationship between concessioners and the NPS and give the park more oversight over how visitor services are conducted. At Crescent Lake, transitioning the management of commercial operations providing visitor services from a CUA to concession contracts would enable the NPS to limit numbers, better address visitor safety issues, and address resource concerns.

As visitation, aviation traffic, and the number of commercial operators increased at Crescent Lake, the NPS had concerns related to visitor safety and impacts, visitor experience, reports of bears obtaining food from humans, and proximity of visitors and commercial operators to bears. These concerns led the park to enact a competitive permit application process for boat storage at Crescent Lake in November of 2019. Given the necessity of boats and boat storage to provide visitor services at Crescent Lake, limiting the number of boats stored helped manage visitation levels. The park advertised and issued up to seven boat storage permits, valid from January 1, 2020, through December 31, 2021, which maintained the park's current level of summer-season boat storage use. Those awarded a boat storage permit were required to hold or apply for and obtain a valid CUA for the duration of the boat storage permit. Boat storage permits issued through the competitive application process expired on December 31, 2022. In 2023 and 2024, boat storage permits were issued non-competitively as the park was considering overall changes to management of commercial operations in the area.

### **Indigenous Knowledge**

In response to Secretarial Order (SO) 3403, Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters, the NPS Alaska Region is committed to incorporating indigenous knowledge gathered and shared during tribal consultation and public review into environmental analysis documents. The NPS is charged with the highest trust responsibility to protect Tribal interests and further nation-to-nation relationships with tribes, to pursue an open and collaborative relationship with Indian and Alaska Native Tribes, and to provide access to park resources and places so Indian and Alaska Native Tribes can maintain their cultural and spiritual practices. The NPS also recognizes and respects that some information may be sacred to Tribal interests and should remain confidential.

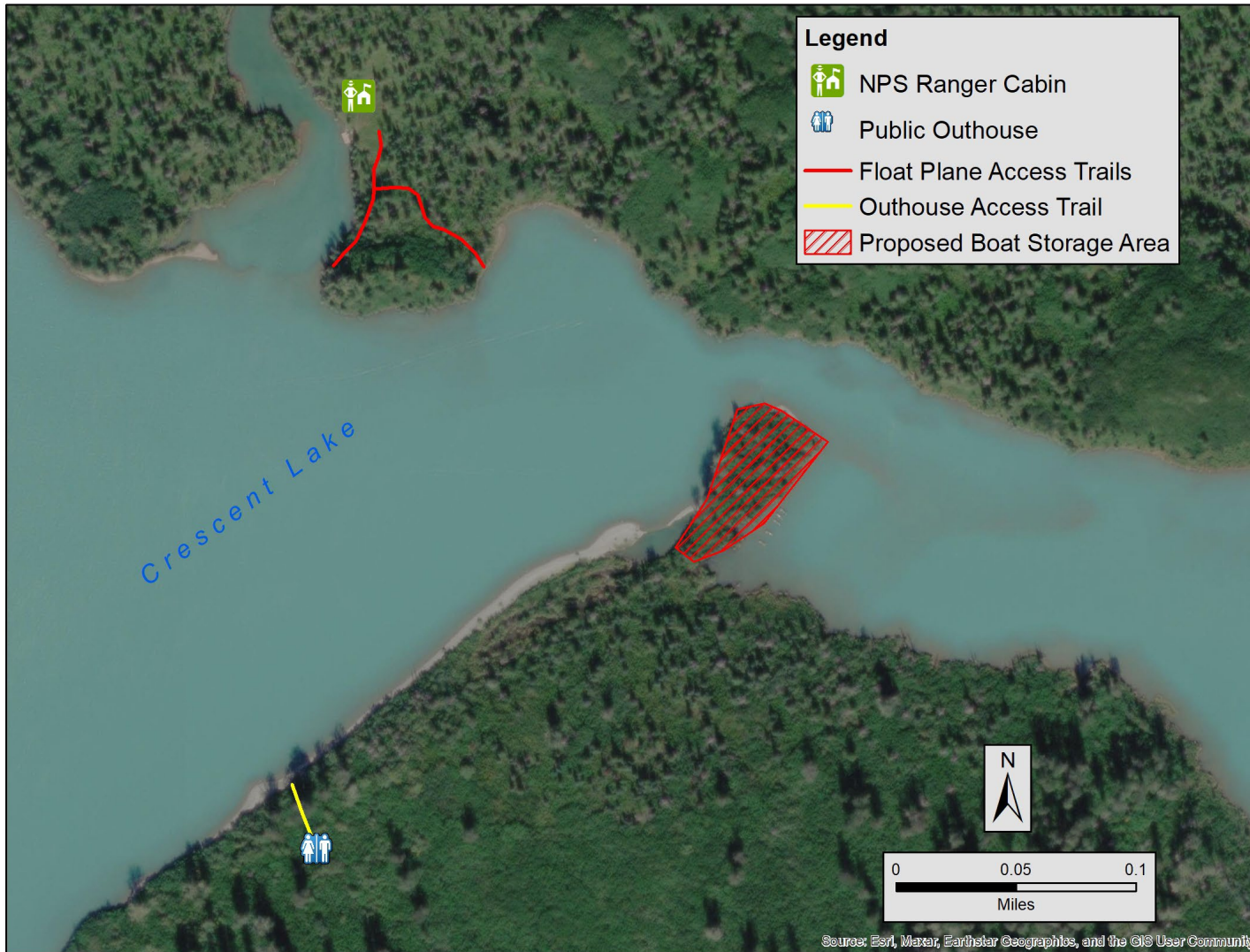
To the park's knowledge, there is little specific information about the traditional use of the Crescent River valley, however there is well-documented use of the mouth of the Crescent River for subsistence fishing and clamming. The Dena'ina name for Crescent Lake is Ch'it'en Bena, which translates as shaded lake. Dena'ina people from the old village of Kustatan and the community of Tyonek clammed at the mouth of Crescent River. A 1981 subsistence harvest study by the Alaska Department of Fish and Game documents at least two clamming trips by Tyonek residents per year to the area where they would harvest razor clams (*Siliqua patula*), butter clams (*Saxidomus gigantea*), and cockles. The village of Tyonek is the closest permanent modern settlement to the Crescent Lake on the west side of Cook Inlet. Former village sites were located at Polly Creek and Kustastan.





**Figure 2. Overview of Proposed Boat Storage Land Use Assignment Area in Lake Clark National Park and Preserve.**





**Figure 3. Detailed View of Proposed Boat Storage Land Use Assignment Area at Crescent Lake in Lake Clark National Park and Preserve.**





**Figure 4. Photo of Proposed Boat Storage Land Use Assignment Area at Crescent Lake in Lake Clark National Park and Preserve.**



## 4 Purpose and Need

The purpose of this project is to apply the appropriate authorizing tool, through concession contracts, to manage current and future visitor services and to protect park resources. There is a need for longer term management options and authorizing tools to help manage and protect resources and the visitor experience. Concession contracts and associated land assignments are the preferred authorizing instrument for providing these necessary and appropriate visitor services at Crescent Lake. Concession contracts and associated land assignments for boat storage allow for increased NPS control of operations, decreased operator burden of transporting boats, and better management of conflict between aircraft and boats.

## 5 Proposed Action

The NPS proposes to transition Crescent Lake sport fishing and bear viewing visitor services from being managed through CUAs to concession contracts. The NPS proposes issuing up to eight concession contracts total for guided sport fishing and guided bear-viewing through a competitive bidding process with each contract having an associated land assignment for year-round boat storage. The concession contracts would be issued on a 10-year cycle. The land assignment for boat storage would be cleared of vegetation in an uplands area large enough to accommodate up to eight boats that measure up to 20-feet in length and 95-inches in width each. Up to eight boat anchors would be installed in the uplands along the eastern lake edge of the storage area. The entire boat storage area would be cleared of vegetation while the boat anchors would be installed on an as-needed basis. The vessels would be stored above the ordinary high-water mark to protect them from ice damage in the winter, typically from late September through May.

## 6 Public Involvement

LCNPP is seeking public review and input for a 30-day public comment period, beginning on September 18, 2023. The EA can be accessed via the NPS Planning, Environment & Public Comment (PEPC) site at <https://parkplanning.nps.gov/CrescentLakeConcessions>. A news release announcing the availability of the EA will be sent via email to local social media channels: Nondalton List, Port Alsworth's List, and Iliamna Lake Bulletin. CUA operators operating in LCNPP will also be notified by email. The news release will provide details on accessing the EA electronically and provide instructions for how comments may be submitted.

## 7 Issues

### Issues Selected for Detailed Analysis

Issues selected for detailed analysis identify resources that could be affected, either beneficially or adversely, by implementing any of the alternatives described in this EA. The NPS used an interdisciplinary review process, existing studies, and data to determine which resources would likely

be affected by this project. Issues were retained for detailed analysis in this EA if they met one or more of the following criteria:

- the environmental impacts associated with the issue are central to the proposal or of critical importance;
- a detailed analysis of environmental impacts related to the issue is necessary to make a reasoned choice between alternatives;
- there are potentially significant impacts to resources associated with the issue.

The following issues are analyzed in detail for each alternative:

**Recreation and Visitor Use:** Currently, CUA operators are transporting and guiding most visitors at Crescent Lake. A transition to concession contracts would provide for longer terms (typically ten years), a higher level of park oversight on operations, and more stringent operational safety requirements for commercial operators.

**Vegetation and Soils:** Construction of the boat storage area would directly remove approximately 0.05-acres of above-ground vegetation. Impacts could include a reduction in plant cover, simplification of the vegetation structure, compaction of soils, and alteration of the habitat for plant growth.

**Wildlife:** The proposed project area supports both brown and black bears, with brown bears frequently using the area when salmon are present. Impacts to bears could be disturbance during construction and alteration of movements from habitat alteration. Other mammals, avian species, and arthropods could also be disturbed and displaced by the clearing required for the boat storage area construction.

### **Issues Considered but Dismissed from Detailed Analysis**

The following issues were identified, considered, and dismissed from further analysis for the following reasons:

- It was determined that the environmental impacts were not of critical importance; and
- the potential impacts to these resources were not significant; and
- a detailed analysis of these impacts was not necessary to make a reasoned choice between alternatives.

**Air Quality, Climate Change, Subsistence, Water Resources, Wilderness, Viewshed (Natural, Aesthetic, and Scenic Values), and Natural Soundscape:** The proposed action would not result in substantial changes to these resources. The proposed project area that would be disturbed is under 0.05-acres, and the transition to concession contracts would not increase use so would not generate emissions to degrade air quality or contribute to climate change. No known subsistence use of the area occurs, so no effects would be anticipated. Refer to Appendix A for a detailed analysis on Section 810(a) subsistence. Water resources would not be affected by the proposed project, as the retention of ground cover would minimize the creation and movement of sediments and limit



potential impacts to water quality. The project area is ineligible<sup>1</sup> for wilderness designation, so would not impact wilderness. The shrub understory would be retained around the boat storage area outside of the cleared vegetation area, which would limit potential impacts to the viewshed. Clearing vegetation would require chainsaw use, and drilling for the anchors would require motorized tools, both of which would result in temporary noise impacts to the natural soundscape during the one-month construction period. Otherwise, there is no expected increase in visitor use in the area due to the proposed action, and additional impacts to the natural soundscape are not expected. There are no designated wild and scenic rivers, ecologically critical areas, wetlands, or floodplains in the project area.

**Cultural Resources:** LCNPP archeologists conducted Phase 1 archeological testing of the area in July 2022 and consulted with the State Historic Preservation Office (SHPO), per 54 U.S.C. 306108 (formerly known as Section 106 of the National Historic Preservation Act) and its implementing regulation, 36 CFR 800, by letter on December 21, 2022. No evidence of cultural materials was uncovered during the excavation or the pedestrian reconnaissance. It is unlikely that cultural resources would be disturbed by the creation of a boat storage area. Concurrence of “No Historic Properties Affected” for this project was received from the SHPO on January 27, 2023. During project implementation, if work exposes cultural resources, work would be stopped, the park archeologist would be notified immediately, and archeological testing would be conducted.

**Floodplains and Wetlands:** The proposed boat storage is in the uplands and would occur outside areas identified as wetlands or floodplains by the US Fish and Wildlife Service (USFWS) National Wetland Inventory data. This assessment was confirmed through site visits.

**Threatened and Endangered Species:** No federally designated threatened or endangered species are known to occur within the project area.

## 8 Alternatives

This section describes a No Action alternative and the action alternative.

### Alternative 1: No Action

Under the No Action alternative, the NPS would not transition Crescent Lake sport fishing and bear viewing visitor services from being managed through CUAs to concession contracts. No land use assignment for year-round boat storage and no boat anchors would be established and the 0.05-acre

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<sup>1</sup> The 1984 Lake Clark General Management Plan included a Wilderness Review per Alaska National Interest Lands Conservation Act (ANILCA) Section 1317(a) that applied criteria to all lands within the unit to determine if they were suitable or not for wilderness designation. That assessment found the majority of lands to be suitable (now called eligible) for wilderness designation and determined the rest of the lands as unsuitable (now called ineligible) for wilderness designation based on criteria like land status and level of existing developments and resource impacts. The Alaska Region uses the categories of designated, eligible, and ineligible to describe the status of park/wilderness lands

area would not be cleared. CUA operators would continue to bring visitors to Crescent Lake. Operators would be required to remove boats from Crescent Lake after the season or arrange for storage on private lands in the area. Any concerns related to visitor safety and resource protection would be managed through CUA stipulations and limiting the number of CUAs. However, these tools would continue to not provide sufficient control for the NPS to appropriately address visitor safety and resource impacts.

### **Alternative 2: Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative)**

Under Alternative 2, the NPS would issue up to eight concession contracts for guided sport fishing and bear-viewing at Crescent Lake. The concession contracts would be for a 10-year period. As part of the contracts, the NPS would issue a land assignment for year-round storage and install anchors in the uplands for attaching one boat per contract on NPS lands (Figure 4).

The area designated for boat storage would be approximately 0.05-acres in size and capable of accommodating up to eight boats that measure up to 20-feet in length and 95-inches in width each. The boat storage area would be northeast of the public outhouse location, screened within the willow-alder shrub community. The vegetation would be cleared through brushing, trimming, and cutting to ground level which will not require any soil disturbing tread work. Shrubs would be retained on the perimeter of the storage area to provide a natural screening to protect the viewshed. Regular brushing and trimming with hand tools once a year during the summer would be required to maintain this open area. The boat anchors would be driven into the ground approximately two feet below the surface in the uplands along the eastern lake edge of storage area using a hammer and steel driving rod.

NPS staff would complete all work to construct the boat storage area. A combination of power and hand tools would be used for the brushing the storage area and installing the boat anchors. Chainsaws may be used to complete the initial brushing. Work would take place in late summer over a one-month period and the total area for all work would be approximately 0.05-acres. Noise from tool use would temporary, during the period of construction and installation. If any work presents a hazard to visitors, the area would be closed until the work is completed. During project implementation, if any brushing or trimming work exposes cultural resources, work would be stopped, the park archeologist would be notified immediately, and additional archeological testing would be conducted.

## **9 Affected Environment**

### **Recreation and Visitor Use**

Crescent Lake is located approximately 60-miles southwest of Kenai, Alaska and is inland from the Cook Inlet coastline, which makes the area accessible only via floatplane. It is one of the most popular locations for visitation in LCNPP, with visitors primarily accessing the site via CUA operators that provide aviation services and guided recreation opportunities. One lodge, Redoubt Mountain Lodge, occupies an inholding near the lake outlet and provides lodging and guided

recreational opportunities. The primary recreational activities at Crescent Lake are sport fishing and bear viewing, which combined account for approximately 80% of the visitor activity in the Crescent Lake area. The remaining 20% of visitor activity in the Crescent Lake area is primarily hiking, kayaking, and photography. All recorded visitation at Crescent Lake occurs during the summer, between June and September, with the highest levels of visitation occurring most years in July and August. Most fishing and bear viewing activity occurs near the lake outlet where salmon are targeted by anglers as they are moving into the lake and its headwaters to spawn. The concentration of salmon also attracts brown bears seeking to feed on this high-quality food source. As such, most of the fishing and bear viewing visitation occurs in this relatively concentrated area near the lake outlet in a relatively short timeframe (June to September). To support this high level of visitation, boat and aircraft use is high and creates conflict and safety concerns as they commonly operate in the same locations. The high visitation combined with the high seasonal bear density makes human-bear interactions common. This has led to reports of bears obtaining food from humans, and visitors and commercial operators closely approaching bears. The Crescent Lake basin is densely vegetated, extending down to the shoreline in most areas. This makes navigating the shoreline on foot extremely challenging and makes boats a necessity to support most visitor activities. There is currently no authorized boat storage on NPS lands. NPS infrastructure is limited at Crescent Lake, including a public outhouse with an associated access trail and an administrative use only ranger cabin that provides lodging for park staff in support of operations that include visitor contacts and responding to safety incidents.

## **Vegetation and Soils**

The Crescent Lake area is composed primarily of open mixed forest and closed alder (NPS 1998). The project area consists of a combination of open mixed forest and willow shrub (NPS 1998). Open mixed forest stands have a crown closure of 25-60% and are comprised of a mix of deciduous and conifer species. In this area, the primary tree species include paper birch (*Betula papyrifera*) and balsam poplar (*Populus balsamifera*). Willows (*Salix spp.*) and alder (*Alnus spp.*) are the primary shrub species in understory of this forest type. Ground cover in open mixed forests in the Crescent Lake area consist mostly of sparse grass, forb, and litter ground cover.

Willow shrub communities are comprised of willows growing 1 to 2 meters high. Alder is found scattered in this community and the ground cover is primarily rock and leaf litter from willow and alder.

The area's physiography is primarily classified as upland and riverine (NPS 2011a). Soil texture in that area is classified is rocky (NPS 2011b).

## **Wildlife**

The forest and shrub communities in the project area support a variety of bird species. Surveys conducted in similar habitat within the lower Crescent River drainage found Olive-sided flycatcher (*Contopus cooperi*), common raven (*Corvus corax*), Black-billed magpie (*Pica hudsonia*), Hermit thrush (*Catharus guttatus*), American robin (*Turdus migratorius*), varied thrush, Orange-crowned warbler (*Oreothlypis celata*), Yellow warbler (*Setophaga petechia*), Yellow-rumped warbler

(*Setophaga coronata*), Wilson's warbler (*Cardellina pusilla*), Fox sparrow (*Passerella iliaca*), Golden-crowned sparrow (*Zonotrichia atricapilla*), and redpoll species (Ruthrauff et al 2007). The Lake Fork of the Crescent River has two known bald eagle (*Haliaeetus leucocephalus*) nests, (NPS unpublished data) which are protected under the Bald and Gold Eagle Protection Act. The nearest nest is located approximately 0.3-miles from the proposed boat storage location. This distance exceeds the USFWS's recommended nest buffer of 660-feet and does not require the NPS to acquire an incidental take permit (USFWS 2007).

Both brown bears (*Ursus arctos*) and black bears (*Ursus americanus*) are found throughout the Crescent River drainage. Both sockeye salmon (*Oncorhynchus nerka*) and coho salmon (*Oncorhynchus kisutch*) are present in the lower Crescent River and Lake and attract bears to the project area from mid-June through September. While numbers of bears specifically using the Crescent River drainage are unknown, coastal LCNPP, which includes the Crescent River, supports densities of both bear species typical of productive coastal systems. Aerial surveys conducted in 2003, 2010, and 2019 provided estimate of 38.6, 37.7, and 54.0 adult brown bears/1000 km<sup>2</sup>, respectively (Schmidt et al. 2022). Coastal habitats with salt marsh systems and seasonally available salmon can support high bear densities. Other wildlife that may inhabit the project area include wolves (*Canis lupus*), wolverine (*Gulo gulo*), red fox (*Vulpes vulpes*) and various small mammals including porcupine (*Erethizon dorsatum*), various shrews, and various voles (Cook et al. 2007).

There are no known threatened or endangered species in the project area.

## **10 Impact Analysis**

### **Alternative 1: No Action**

#### **Effects on Recreation and Visitor Use**

Recreation and visitor use management would remain unchanged with CUA operators providing services to visitors accessing the Crescent Lake area. Under this alternative, the higher level of NPS oversight and the requirement for more stringent operational planning would not occur as commercial services would continue to be managed as CUAs. The land use assignment for boat storage would not be made and no year-round boat storage would be allowed on NPS lands. Operators would need to fly boats out of Crescent Lake at the end of the season or plan to store them on private lands. The visitor safety issues, boat and aircraft conflicts, bears obtaining food from visitors, and commercial operators being in close proximity to bears would remain.

#### **Effects on Vegetation and Soils**

Vegetation and soils would not be impacted under this alternative. No boat storage area would be developed, leaving the area naturally vegetated with no soil disturbance.



## **Effect on Wildlife**

No boat storage area would be developed, so construction activities would not disturb bears, avian species, or other wildlife that may inhabit the project area. Bears would be likely to continue to obtain food from visitors increasing the likelihood of negative bear-human interactions.

## **Cumulative Impacts on Recreation and Visitor Use, Vegetation and Soils, and Wildlife**

With few direct or indirect impacts to recreation and visitor use, vegetation and soils, and wildlife, Alternative 1 would have little contribution to cumulative effects on these resources.

The CUA operators would continue to bring visitors to Crescent Lake. The upward trend in visitation over the past 10 years would likely continue as there are no indications this trend will change in the future. Management of commercial activities would continue to be via CUA permits, so NPS oversight and the requirement for more stringent operational planning by operators would not occur. Increased visitation would result in more boat and aircraft traffic, potentially leading to more conflicts between them. The potential for issues surrounding visitor safety, bears obtaining food from visitors, and commercial operators being in close proximity to bears would remain and could increase with unchecked growth in the number of operators and visitors in this area.

## **Alternative 2: Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative)**

### **Effects on Recreation and Visitor Use**

The creation of up to eight concession contracts for guided sport fishing and bear-viewing at Crescent Lake would transition the management of visitor services from CUA operators. The concession contracts would be 10-years in length, providing a longer-term contract for the contract holders. Park oversight on operations would increase over that of CUAs and result in more rigorous operational planning, thorough risk management planning, environmental audits, annual inspections, and annual financial and operational reporting for the concession contract holders. These changes would lessen the potential for issues surrounding visitor safety, bears obtaining food from visitors, and commercial operators being near bears.

The land assignment associated with each contract would provide for year-round boat storage and provide anchors in the uplands for attaching one boat on NPS lands during the summer period of operation. This would lessen the burden on operators to remove boats from the area during the winter and provide a safe and accessible way of securing a boat during the summer.

The construction of the boat storage area and installation of the anchors would take place in the late summer of 2024. The total estimated duration of the work would be one month. The boat storage would clear an area approximately 0.05-acres in size capable of accommodating up to eight boats. The willow-alder shrub vegetation would be brushed and trimmed to ground level, but no soil disturbing tread work would occur. Vegetation brushing and trimming would require use of both hand and power tools. Noise from equipment would be heard in the lake outlet area during vegetation

clearing. This noise would add to the existing noise created by aircraft and boats used to support visitation to the area. The shrub understory would be retained around the boat storage area outside of the cleared vegetation area, which would limit potential impacts to the viewshed. Construction activities would not impact visitor access in the Crescent Lake area. Visitor use of the proposed boat storage area is limited so would not displace visitors.

### **Effects on Vegetation and Soils**

Boat storage area construction would require the brushing and trimming of vegetation. Small trees and shrubs would be trimmed to ground level to provide a cleared area to store up to eight boats. Overall, approximately 0.05-acres of vegetation would be affected by the project. The existing ground cover is sparse and predominantly rocky, but any ground cover present would remain in place. Shrubs trimmed would include primarily alder and willow. The shrub understory would be retained around the boat storage area outside of the cleared vegetation area, which would limit potential impacts to the viewshed. No soil compaction or disturbance would be expected occur due to the type of tools (chainsaw, hand tool) proposed for brushing and trimming work. Ground disturbance would be limited to installing the boat anchors, which would be driven approximately two feet into the ground. Due to the rocky nature of the area, soils would not be disturbed by the installation of the anchors.

### **Effect on Wildlife**

The development of the boat storage area would permanently remove approximately 0.05-acres of wildlife habitat. The wildlife habitat types to be removed are among the most common found in the Crescent Lake drainage. Construction activities would be conducted in accordance with the requirements of the International Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. Vegetation removal would be prioritized outside the designated nesting season (April 15 to July 15); however, nesting bird surveys would be conducted by a biologist with knowledge and practical experience in identifying birds found in this region of Alaska by sight and sound, and bird behaviors indicative of nesting and brood rearing to determine if any nesting birds occur in or near the project area prior to vegetation removal. If it is determined that no nesting birds occur in or near the project area, work may commence during the designated nesting season. If surveys indicate there are nesting birds during the designated nesting season, then vegetation clearing may not occur until the young have left the nest and the nest is no longer occupied or utilized. The project area would then be resurveyed to determine that the nest is no longer being used before commencing with work. Alternately, if work could only be completed during the designated nesting season, the NPS would coordinate with the USFWS to determine if a “take” permit would be necessary and discuss options to minimize impacts to nesting birds. The nearest known bald eagle nest in the project area is approximately 0.3-miles (1320 feet) from the nearest proposed construction activity. This distance exceeds the USFWS’s recommended nest buffer of 660-foot and does not require the NPS to acquire an incidental take permit (USFWS 2007).

Bear use of the area would not be expected to change dramatically with the construction of the boat storage area. Noise and activity during the one-month construction period may temporarily displace

bears and other wildlife from the immediate area but would not be expected to continue beyond the end of construction. Bear use is concentrated along the shoreline as it provides efficient travel and direct access to salmon which concentrate bear use in the area. The boat storage area would open an area facilitating bear movement, so some limited bear use would be expected. The transition to concession contracts would improve NPS oversight and strengthen the operational and safety planning requirements of contract holders by leading to improvements in visitor safety, reductions in the potential of bears and other wildlife obtaining food from visitors, and adherence to best bear viewing. Other small animals and insects using the project area may also be impacted by the construction activity by the removal of habitat for boat storage.

### **Cumulative Impacts on Recreation and Visitor Use, Vegetation and Soils, and Wildlife**

With the conversion to concession contracts and associated land assignment for boat storage at Crescent Lake, visitor services would be exclusively provided by the holders of these contracts. NPS oversight of contract holders would increase, and contract requirements would entail operating plan requirements, risk management planning, environmental audits, annual inspections, and annual financial and operational reporting. The closely managed contracts would improve visitor safety and lessen the potential for resource impacts, including those to the bears and other wildlife inhabiting the area. The construction of the 0.05-acre boat storage area would allow for year-round boat storage for those awarded concession contracts. This would alleviate the need to remove boats seasonally by aircraft. Installed boat anchors would improve boat security and accessibility in the summer season, when variable water conditions complicate boat mooring. Impacts to vegetation are 0.05-acres and confined to species and habitat types common in the Crescent Lake basin. The late summer work timing would lessen the probability that pre-construction surveys would find nesting birds. Improved oversight and operational planning would lessen potential bear impacts from close approaches to bears and limiting opportunities to obtain human food items. The direct impact on 0.05-acres of vegetation to create the boat storage area would have a small effect as the vegetation types of the area are among the most common in the Crescent Lake basin, which comprises 13,225 acres. The Crescent Lake Visitor Improvements EA and Finding of No Significant Impact (FONSI) was completed in August 2023. Construction of the two trails and installation of the outhouse began in the late summer of 2023. That project will remove up to 0.1 acres of vegetation. Considering both projects, the cumulative impact of vegetation removal and related habitat loss would be 0.15 acres.

As with trails in the area, the need to periodically brush the constructed boat storage area would temporarily increase the presence of LCNPP staff at Crescent Lake. There are currently no additional future planned actions that could contribute to impacts on these resources in the planning area.

**Table 1. Summary of Direct Impacts**

<b>Impact Topic</b>	<b>Alternative 1: No Action</b>	<b>Alternative 2: Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative)</b>
<b>Recreation and Visitor Use</b>	Recreation and visitor use would remain unchanged with CUA operators providing services to visitors accessing Crescent Lake. There would be reduced park oversight on operations and there may continue to be visitor safety concerns, bears may continue to obtain food from visitors, and operators may not comply with the best bear viewing practices.	Park oversight on operations would increase and would improve visitor safety, reduce the chance of bears obtaining food from visitors, and comply with best bear viewing practices.
<b>Vegetation and Soils</b>	Vegetation and soils would not be impacted under this alternative.	<p>0.05-acres of vegetation would be brushed and trimmed to construct the boat storage area resulting in permanent removal of the vegetation. Noise associated with power tools would be temporary during construction. Vegetation would be trimmed regularly to maintain a cleared area. Regular maintenance is not expected to have measurable impacts.</p> <p>Up to eight boat anchors would be permanently installed up to two feet deep into the ground. Noise associated with the installation would be temporary during construction.</p>
<b>Wildlife</b>	No boat storage area would be developed, and wildlife would continue to inhabit the proposed boat storage location. Bears may continue to obtain food from humans, increasing the likelihood of negative bear-human interactions.	The development of the boat storage area would permanently remove approximately 0.05-acres of common regional wildlife habitat, which may permanently displace small animals and insects. Bears may be temporarily displaced during construction activities but may also use the boat storage area as a travel corridor once the area would be cleared of vegetation. The NPS would have more management control which could reduce the potential of bears and other wildlife obtaining food from visitors.



# 11 Consultation and Coordination

## Tribal and Alaska Native Corporations Consulted

For consultation with tribes and Alaska Native Corporations on the proposed project, the NPS sent letters and email correspondence to Cook Inlet Region Incorporated (CIRI), Native Village of Tyonek, Seldovia Village Tribe, Salamatof Tribal Council, and Kenaitze Indian Tribe on August 2<sup>nd</sup>, 2023. CIRI responded and indicated they did not want to consult at this time. No other responses were received from other tribes or Alaska Native Corporations. The NPS will continue to provide project updates and will provide the EA during the public comment period to the identified tribes and Alaska Native Corporations.

## Agencies and Organizations Consulted

Informal consultation with the USFWS through the Information for Planning and Consultation Online System was initiated August 4, 2023, to determine if threatened and endangered species occur within the proposed project area. No listed species were identified, therefore no adverse effects to listed species or critical habitat would be result from the project.

LCNPP archeologists consulted with the State Historic Preservation Office (SHPO), per 54 U.S.C. 306108 (formerly known as Section 106 of the National Historic Preservation Act) and its implementing regulation, 36 CFR 800 by letter on December 21, 2023. No evidence of cultural materials was uncovered during the excavation or the pedestrian reconnaissance. It is unlikely that cultural resources would be disturbed by the creation of a boat storage area. Concurrence of “No Historic Properties Affected” for this project was received from the SHPO on January 27, 2023.

# 12 List of Preparers

## Preparer

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## Persons Consulted

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# Appendix A: ANILCA Section 810(A) Subsistence – Summary Evaluation and Findings Crescent Lake Visitor Improvements Lake Clark National Park and Preserve

## I. INTRODUCTION

This evaluation was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluation of potential restrictions to subsistence uses that could result from issuing up to eight concession contracts total for guided sport fishing and guided bear-viewing through a competitive bidding process with each contract having an associated land assignment for year-round boat storage. The concession contracts would be issued on a 10-year cycle. The land assignment for boat storage would be cleared of vegetation in an uplands area large enough to accommodate up to eight boats that measure up to 20-feet in length and 95-inches in width each. Up to eight boat anchors would be installed in the uplands along the eastern lake edge of the storage area. The vessels would be stored above the ordinary high-water mark to protect them from ice damage in the winter.

## II. THE EVALUATION PROCESS

Section 810(a) of ANILCA states:

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

- 1. gives notice to the appropriate State agency and the appropriate local committees and regional councils established pursuant to Section 805;*
- 2. gives notice of, and holds, a hearing in the vicinity of the area involved; and*
- 3. determines that (A) such a significant restriction of subsistence uses is necessary, consistent with sound management principles for the utilization of the public lands, (B) the proposed activity would involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps would be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions.”*

ANILCA created new units and additions to existing units of the National Park System in Alaska. Lake Clark National Park and Preserve was created by ANILCA Section 201(7)(b) for the following purposes:

"The park additions and preserve shall be managed for the following purposes, among others: To protect and interpret the entire mountain massif, and additional scenic mountain peaks and formations; and to protect habitat for, and populations of, fish and wildlife, including, but not limited to, brown/grizzly bears, moose, caribou, Dall sheep, wolves, swans and other waterfowl; and to provide continued opportunities, including reasonable access, for mountain climbing, mountaineering, and other wilderness recreational activities."

ANILCA Section 201(7)(b) also states: "Subsistence uses by local residents shall be permitted in the park where such uses are traditional in accordance with the provisions in Title VIII.

Title I of ANILCA established national parks for the following purposes:

*"... to preserve unrivaled scenic and geological values associated with natural landscapes; to provide for the maintenance of sound populations of, and habitat for, wildlife species of inestimable value to the citizens of Alaska and the Nation, including those species dependent on vast relatively undeveloped areas; to preserve in their natural state extensive unaltered arctic tundra, boreal forest, and coastal rainforest ecosystems to protect the resources related to subsistence needs; to protect and preserve historic and archeological sites, rivers, and lands, and to preserve wilderness resource values and related recreational opportunities including but not limited to hiking, canoeing, fishing, and sport hunting, within large arctic and subarctic wildlands and on free-flowing rivers; and to maintain opportunities for scientific research and undisturbed ecosystems.*

*"... consistent with management of fish and wildlife in accordance with recognized scientific principles and the purposes for which each conservation system unit is established, designated, or expanded by or pursuant to this Act, to provide the opportunity for rural residents engaged in a subsistence way of life to continue to do so."*

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

### **III. PROPOSED ACTION ON FEDERAL LAND**

The National Park Service (NPS) proposes issuing up to eight concession contracts for sport fishing and guided bear-viewing through a competitive bidding process with each contract having an associated land assignment for year-round boat storage. The concession contracts would be issued on a 10-year cycle. The land assignment for boat storage would clear vegetation in the area large enough to accommodate up to eight boats that measure up to 20-feet in length and 95-inches in width and provide anchors within the uplands to attached moored boats during the summer season. The boat storage area would require the removal of approximately 0.05-acres of vegetation. The *Description of Alternatives* section of the EA describes each alternative being considered in detail. The following is a brief summary:

Under the *No Action Alternative*, the NPS would not transition CUA's to concession contracts. No land use assignment for year-round boat storage and boat anchors would be established and the 0.05-acre area would not be cleared. CUA operators would continue to bring visitors to Crescent Lake. Operators would be required to remove boats from Crescent Lake after the season or plan to store them on private lands in the area.



Under *Alternative 2: Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative)*, the NPS would issue up to eight concession contracts for guided sport fishing and bear-viewing at Crescent Lake. The concession contracts would be for a 10-year period. As part of the contracts, the NPS would issue a land assignment for year-round storage and install anchors in the uplands for attaching one boat per contract on NPS lands. The area designated for boat storage would clear an area approximately 0.05-acres in size capable of accommodating up to eight boats that measure up to 20-feet in length and 95-inches in width. The boat anchors would be driven into the ground approximately two feet below the surface in the uplands along the lake edge of storage area.

#### **IV. THE AFFECTED ENVIRONMENT RELATIVE TO SUBSISTENCE USE**

Traditionally the west side of Cook Inlet has been the home of the Cook Inlet Dena'ina. Although they lived in winter villages, the Cook Inlet Dena'ina used a series of seasonal camps in other locations for specific resource harvests during their annual seasonal round. In support of subsistence activities, they established trails and trade routes, named landmarks, and built settlements, camps, and shelters within the territory of their regional band. The Dena'ina used all the river systems in all major bays along west Cook Inlet such as Chinitna, Iliamna, Ursus, Redoubt, and Trading bays. Trails connecting the Cook Inlet shoreline and eastern slopes of the Chigmit Mountains with the Lake Iliamna and Lake Clark drainages supported active trade and social interactions between the Cook Inlet and Inland groups of Dena'ina. Some of the best evidence of Dena'ina knowledge of travel routes and hunting, fishing, and gathering areas is preserved in the intricate system of Dena'ina place names (Stanek, et al. 2007). The village of Tyonek is the closest permanent modern settlement to the Crescent Lake on the west side of Cook Inlet. The Kenai Peninsula communities of Kenai, Ninilchik, Anchor Point and Soldotna are the closest on the east side of the Inlet.

In accordance with regulations in 36 CFR Part 13, residents of the NPS designated resident zone communities of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay, and Port Alsworth and people who reside inside the boundaries of the park are qualified to engage in subsistence activities in Lake Clark National Park and Preserve under the Federal Subsistence Program. Local rural residents who do not live in these communities but who have customarily and traditionally engaged in subsistence activities within the park may continue to do so with a subsistence use permit issued by the park superintendent. Currently there are only two active firewood harvest permits for rural residents in the Cook Inlet region of the park and no active permits for hunting or other subsistence activities.

Current subsistence use in the area around Crescent Lake is very low, with nearest known activity being wood cutting activity conducted by residents living at Silver Salmon Lakes approximately 26-miles to the southeast. The proposed project area is near the outlet of Crescent Lake which is approximately 15-miles inland from the Cook Inlet coastline. The area is composed of forests, shrublands, and wetlands within the river valley and is not accessible from any of the park's designated resident zone communities without using aircraft which is prohibited by 43 CFR § 36.11(f)(1) for purposes of taking fish and wildlife for subsistence uses.

#### **V. SUBSISTENCE USES AND NEEDS EVALUATION**

To determine the potential impacts on subsistence activities from issuing the concession contracts and clearing vegetation for the boat storage, three evaluation criteria were analyzed relative to existing subsistence resources:

1. The potential to reduce subsistence fish and wildlife populations by (a) reductions in number, (b) redistribution of subsistence resources, or (c) habitat losses;
2. The potential effect on subsistence fisher or hunter access;
3. The potential to increase fisher or hunter competition for subsistence resources.

### **A. The potential to reduce populations**

In all the alternatives considered in this analysis, there is minimal potential to reduce numbers of or redistribute fish and wildlife populations or reduce habitat for subsistence fish and wildlife populations. Converting from CUAs to concession contracts would not impact fish and wildlife populations. The proposed creation of the boat storage area would destroy some vegetation that provide habitat for small mammals, birds, and insects. The total loss of habitat would be approximately 0.05-acres. Bear use of the area is not expected to change with the development. Bears may use the boat storage area at times but are not expected to alter their use of the area as it primarily related to salmon in the area which will not be impacted by the project. Overall, the development is not expected to reduce or redistribute wildlife populations in the project area.

### **B. Restriction of Access**

*Alternative 1 (No Action Alternative).* The NPS would not transition CUAs to concession contracts. No land use assignment for year-round boat storage and boat anchors would be established. Alternative 1 would not alter access for subsistence users.

*Alternative 2 Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative).* The NPS would transition CUAs to concession contracts and would provide a land use assignment for year-round boat storage and boat anchors for seasonal use. Access to subsistence resources would continue to be limited due to the remoteness of the location.

### **C. Increase in Competition**

*Alternative 1 (No Action Alternative).* The no action alternative will preserve the status quo and not change current commercial services management or infrastructure. Alternative 1 will not result in any increase in competition between subsistence and other users for subsistence resources.

*Alternative 2 Issue up to eight concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage (Proposed Action and Preferred Alternative).* The transition to concession contracts from CUAs and land assignment and development of year-round boat storage proposed in Alternative 2 are unlikely to increase competition between subsistence users and people recreating at Crescent Lake. The project is not expected to add to the already high visitation Crescent Lake receives during the summer and early fall. Given the difficulty of access without aircraft, subsistence use is exceedingly limited at Crescent Lake making competition with visitors a non-issue.

Additionally, provisions in ANILCA Section 802(2) and NPS regulations mandate that if and when it is necessary to restrict the taking of fish or wildlife on NPS lands, subsistence users will have priority over other user groups. Implementation of this subsistence preference would reduce or eliminate any increased competition that might result from increased visitation by recreationists, sport hunters or anglers. In addition, the superintendent may enact closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife population. Alternative 2 will not result in any increase in competition between subsistence and other users for subsistence resources.

## **VI. AVAILABILITY OF OTHER LANDS**

Lands managed by the Bureau of Land Management share common boundaries with LCNPP and are the closest federal public lands to the proposal area where Title VIII subsistence occurs. There are other lands inside and outside LCNPP boundaries where local rural residents may harvest subsistence resources including state, tribal and private lands and lands belonging to Alaska Native Claims Settlement Act (ANCSA) corporations.

## **VII. ALTERNATIVES CONSIDERED**

This analysis has evaluated two alternatives: Alternative 1, to maintain the status quo, or a no action alternative, and Alternative 2, the proposed action and preferred Issue up to eight Concession contracts for guided sport fishing and bear-viewing with an associated lands assignment for year-round boat storage.

## **VII. FINDINGS**

This analysis concludes that the proposed action described in Alternative 2 would not result in a significant restriction of subsistence uses.

## **REFERENCES**

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