

National Park Service
U.S. Department of the Interior



Lake Clark National Park and Preserve
Interior Region 11 – Alaska

Port Alsworth Housing Replacement

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.

NOTE TO REVIEWERS

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

Buck Mangipane
Lake Clark National Park and Preserve
240 W 5th Avenue, Suite 236
Anchorage, Alaska 99501

You may also comment for this project online at <http://parkplanning.nps.gov>. Search for "Port Alsworth Housing" to provide comments electronically.

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 will be able to do so.

ON THE COVER

View of Port Alsworth on Lake Clark
Photo by K. Lewandowski, National Park Service

Contents

	Page
1 Proposed Action	1
2 Purpose and Need.....	2
3 Background and Context.....	3
Indigenous Knowledge.....	4
4 Issues	6
Issues Selected for Detailed Analysis	6
Issues Considered but Dismissed	7
5 Alternatives.....	9
Alternative 1: No Action.....	9
Alternative 2: Construct Housing Units and Associated Facilities (Proposed Action and Preferred Alternative).....	9
Alternatives Considered but Dismissed	10
6 Affected Environment & Environmental Consequences.....	11
First Impact Topic.....	12
Vegetation and Soils - Affected Environment.....	12
Vegetation and Soils - Environmental Consequences.....	12
Wildlife - Affected Environment	14
Wildlife - Environmental Consequences.....	14
7 Consultation and Coordination	16
Tribal and Alaska Native Corporations Consulted	16
Agencies and Organizations Consulted.....	16
8 List of Preparers.....	16
National Park Service.....	16
9 References	16
Appendix A: ANILCA Section 810(A) Subsistence – Summary Evaluation and Findings.....	18
I. Introduction.....	18
II. The Evaluation Process.....	18
III. Proposed Action on Federal Lands	19
A. Alternative 1 – No Action	19
B. Alternative 2 – Construct Housing Units and Associated Facilities	19
(Proposed Action and Preferred Alternative).....	19
IV. Affected Environment.....	20
V. Subsistence Uses and Needs Evaluation	20

A. The potential to reduce populations:	20
B. Restriction of Access:.....	20
C. Increase in Competition:	20
VI. Availability of Other Lands.....	21
VII. Alternatives Considered	21
VIII. Findings.....	21

List of Tables

Table 1. Summary of Alternatives.....	11
Table 2. Summary of Impacts.....	15

List of Figures

Figure 1. Proposed Schematic Design Plan for Port Alsworth Housing.....	1
Figure 2. Proposed Floor Plan of the Triplexes.....	2
Figure 3. Photo of Burned Housing Structures in Port Alsworth.	3
Figure 4. Port Alsworth, the Proposed Project Location, within LCNPP.	5
Figure 5. Proposed Housing Development area in NPS Administrative Area in Port Alsworth, within LCNPP.	6

List of Appendices

Appendix A: ANILCA Section 810(A) Subsistence – Summary Evaluation and Findings

1 Proposed Action

The National Park Service (NPS) proposes to construct two triplexes each 2,919 square feet (SF) for a total of 5,838 SF, install associated utilities (electrical, sewer, and water connections), and construct a gravel driveway in Port Alsworth, Alaska. This project would support housing of staff at Lake Clark National Park and Preserve (LCNPP, the park). The proposed project is in the same geographical area as existing NPS facilities and buildings in Port Alsworth and is on NPS-owned lands. The new structures would be placed to visually screen the housing from visitor use areas and existing NPS housing.

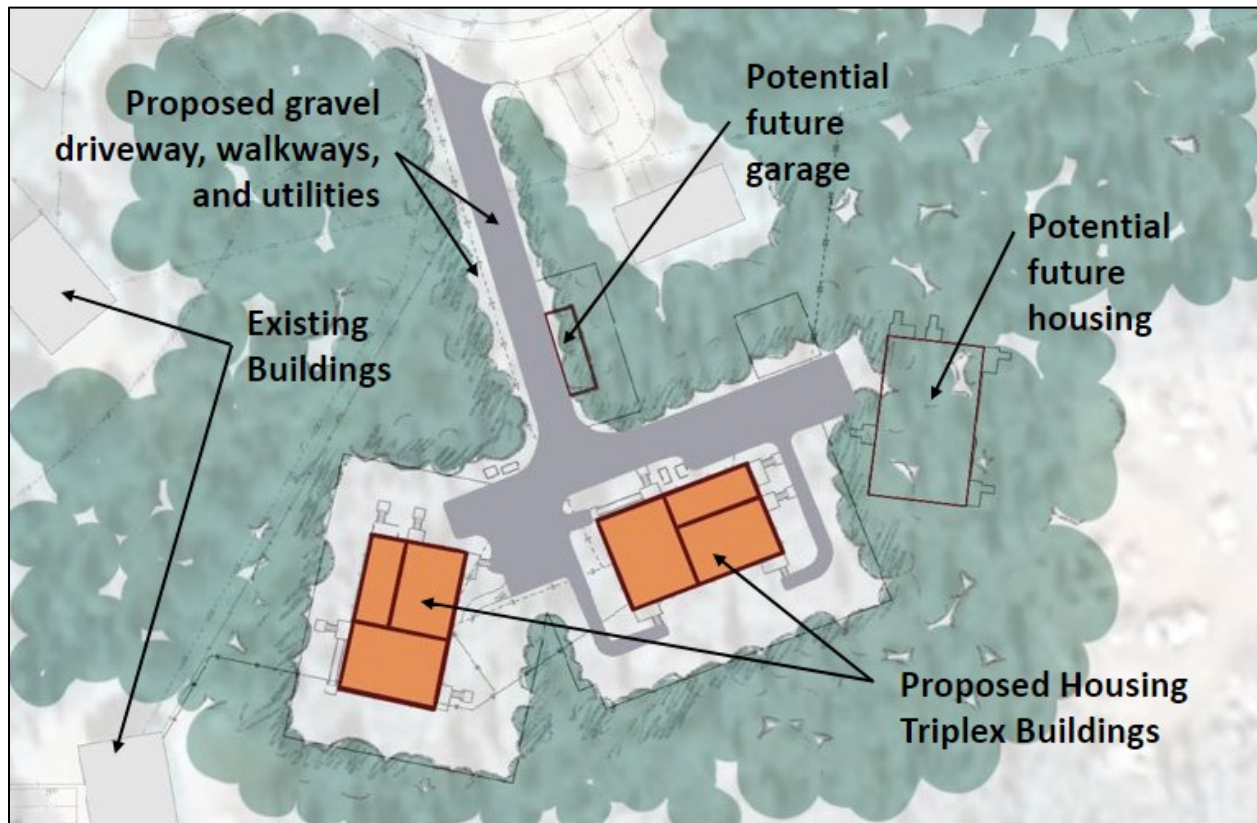


Figure 1. Proposed Schematic Design Plan for Port Alsworth Housing.

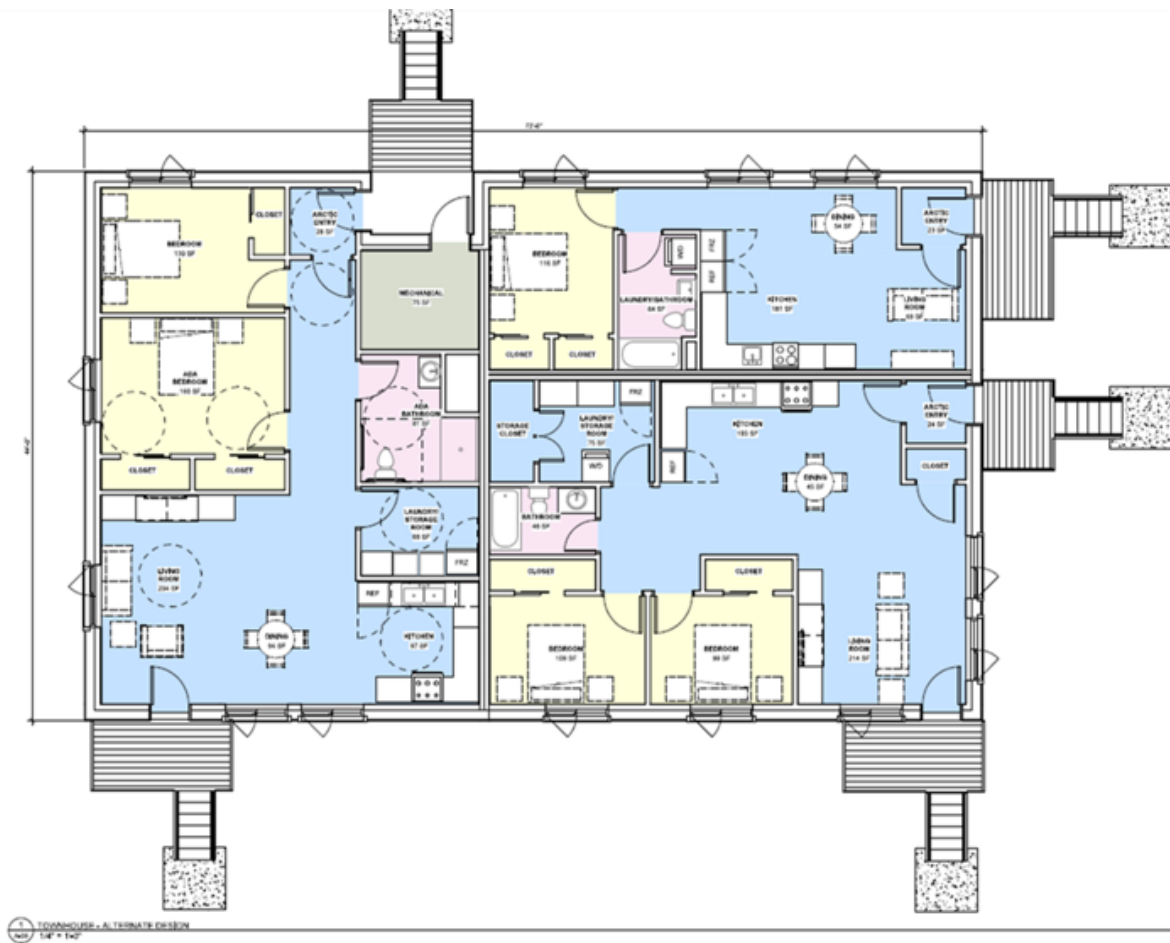


Figure 2. Proposed Floor Plan of the Triplexes.

2 Purpose and Need

The purpose of this project is to provide quality, year-round employee housing in the park field headquarters in Port Alsworth, AK. The park requires key year-round positions in Port Alsworth to support park operations, visitor and resource safety, and visitor and local resident park services. There is limited housing, with no alternative non-governmental rental housing availability or alternative non-governmental rental housing that is in compliance with NPS and General Service Administration (GSA) codes for employee housing. This lack of housing was exacerbated by a fire in November 2020 that destroyed two NPS housing units in Port Alsworth. The total housing available for park staff includes 10 housing units, five of which are duplexes, four are single family units, and one is a bunkhouse. During the 2022 peak season LCNPP had a paid staff in Port Alsworth of 17 permanent, 17 seasonal, and 11 transient employees.

There is a need for more housing in the park as the limited housing has hampered park operations and services in Port Alsworth. Park staff should have access to safe and reliable housing in

compliance with NPS and GSA codes. Without additional hiring, which is limited by available housing, the park cannot hire several necessary permanent positions such as a district ranger, maintenance lead, one additional law enforcement officer, and one additional interpretation staff. The lack of permanent staff results in reduced visitor services, reduced safety, and increased employee stress due to lack of additional staff.

3 Background and Context

Port Alsworth, Alaska is located approximately 165 miles southwest of Anchorage, Alaska and is accessible solely by small aircraft. It lies within Lake Clark National Park and Preserve and sits on the eastern shore of Lake Clark. The headquarters of LCNPP are divided between Port Alsworth and Anchorage. There is a seasonally opened visitor center, and seasonal and year-round staff reside in Port Alsworth. As the field headquarters, Port Alsworth is also where remote field staff are based at the beginning and end of the summer season.

From May to October, most Anchorage based staff are needed in Port Alsworth for extended periods, with seasonal staff based in Port Alsworth. This includes several Inventory and Monitoring staff from the Southwest Alaska Inventory and Monitoring Program (SWAN) working in the park.

Much of the past employee housing was built for seasonal use and is unused during the winter. Due to the need for additional year around housing, three of these units have been modified to provide winter housing. These small duplex units were not designed with the intent to house permanent staff and lack the needed space many permanent staff require.

A structural fire in 2020 resulted in the loss of two housing units, a two-bedroom apartment, and a single family home, totaling twelve beds.



Figure 3. Photo of Burned Housing Structures in Port Alsworth.

This project proposes to build two triplexes, associated utilities, and a driveway to address the lack of housing exacerbated by the fire. The lack of housing has resulted in the inability to hire several key positions such as a district ranger, maintenance lead, one additional law enforcement staff, and one additional interpretation staff. The lack of these staff is placing a burden on current staff, impacting employee well-being, visitor and resource safety, and resulting in a lack of employee retention and inability to recruit employees. This is in addition to increasing visitation, which is creating more visitor safety concerns on nearby hiking trails and remote visitor destinations, and the park's ability to respond to Search and Rescue (SAR) operations in the backcountry. Increasing visitation also means that the reduced staff are unable to adequately provide visitor services.

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.

Qizhjah Vena (Lake Clark) is the ancestral homeland of the Dena'ina people. Long before this lake was part of Lake Clark National Park and Preserve, it was known as Qizhjah Vena, 'a place where people gather lake.' For approximately 900 years, Qizhjah (Kijik) village thrived on the western shores of Qizhjah Vena (Lake Clark) approximately eight miles across the lake from modern-day Port Alsworth. Here abundant firewood, strong salmon runs, hunting, and fishing supported the village year-round. The Dena'ina people established strong cultural connections to the land, water, and wildlife.

In Port Alsworth, ancestral Dena'ina archeological sites dating from 4,000 to 1,000 years ago have been located on Hardenburg Bay in the area of the former park housing. There are also several semi-subterranean housepits near Tanalian Point. Indigenous knowledge tells us the area that is now Port Alsworth was used for hunting, fishing and berry picking. The Tanalian Trail route was used by the Dena'ina to reach Kontrashibuna Lake. The area for the new housing units was not a specific destination for Dena'ina use but likely was traversed to reach other parts of the area.

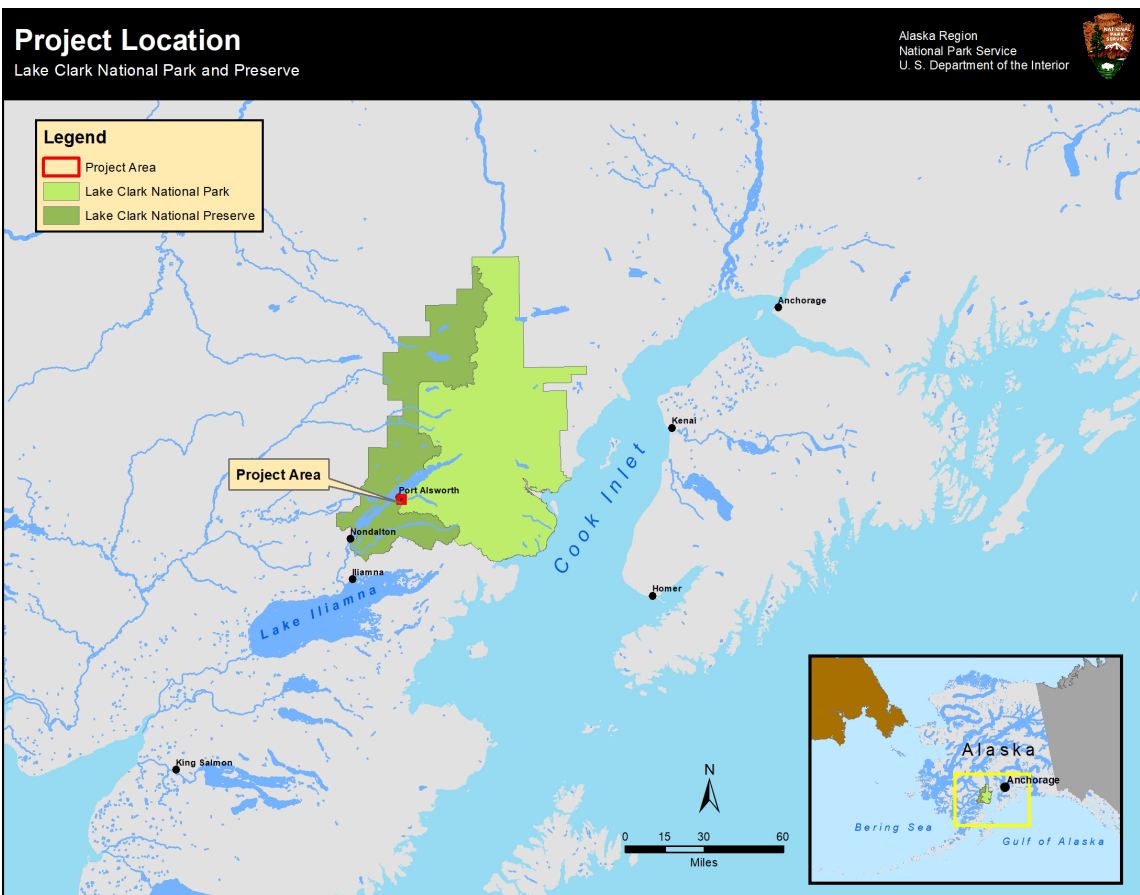


Figure 4. Port Alsworth, the Proposed Project Location, within LCNPP.

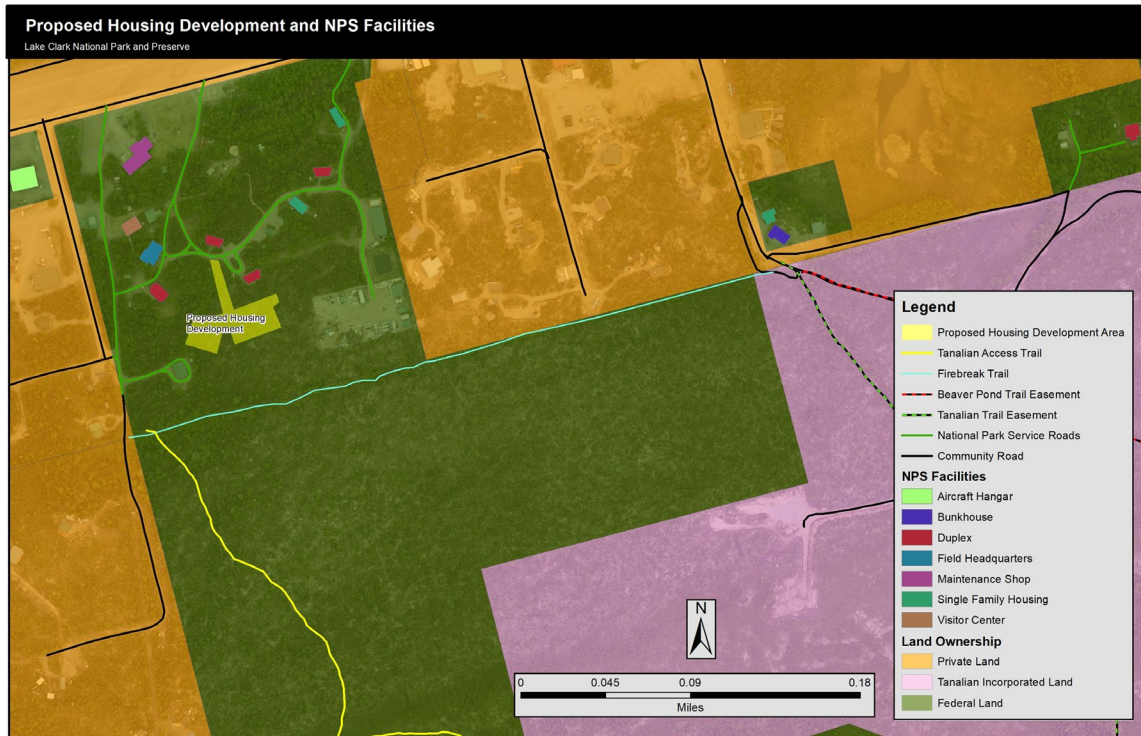


Figure 5. Proposed Housing Development area in NPS Administrative Area in Port Alsworth, within LCNPP.

4 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 proposed alternatives. 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;
- the environmental impacts associated with the issue are a big point of contention among the public or other agencies; or
- there are potentially significant impacts to resources associated with the issue.

The following issues will be evaluated for each alternative:

Vegetation and soils: Construction of the proposed housing units would directly remove approximately 0.6 acres of vegetation in the project area and disturb 0.6 acres of soil. Impacts could

include a reduction in plant cover, simplification of the vegetation structure, compaction and disturbance of soils, introduction of exotic species, and alteration of the habitat for plant growth.

Wildlife: The proposed project area supports a variety of bird species including American robin (*Turdus migratorius*), dark-eyed junco (*Junco hyemalis*), yellow-rumped warbler (*Setophaga coronata*), and other birds common to mixed-spruce forests and small mammals including red fox (*Vulpes vulpes*), North American porcupine (*Erethizon dorsatum*), red squirrel (*Tamiasciurus hudsonicus*), shrews (*Sorex cinereus*) and various species of voles (*Clethrionomys rutilus*, *Microtus pennsylvanicus* and *Myodes rutilus*) that may be permanently displaced from the project area. There is also occasionally larger wildlife, including moose (*Alces alces*), brown bear (*Ursus arctos*), and black bear (*Ursus americanus*) that may be temporarily displaced during construction activities and may avoid the location once the structures are in place.

Issues Considered but Dismissed

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.

Human Health and Safety: The proposed project area is predominately used by NPS employees and is a mix of housing units and administrative and maintenance facilities. It is not ordinarily closed to the public but is rarely accessed by non-NPS entities. During construction the area would be closed to the public. There may be temporary closures of the road to NPS staff during the installation of utilities; however, this would not impact ingress or egress for people or vehicles as there are multiple points of entry to either side of the proposed construction location. Any road closures would not block emergency services, although emergency services may have to detour approximately 0.6 miles at most. There would be clear identification of construction areas and if needed, implementation of necessary fencing and closures during construction activities. The proposed project would adhere to 29 CFR Part 1926 Safety and Health Regulations for Construction (OSHA), and a jobsite specific Accident Prevention Plan would be completed prior to initiating construction outlining each phase of work, associated hazards, and methods proposed to ensure property protection and safety of the public, NPS staff, and contractor employees. Based on adherence to 29 CFR Part 1926, a jobsite specific Accident Prevention Plan, and other mitigations such as closures and signage, construction activities would not adversely affect human health and safety; therefore, this topic was dismissed from detailed analysis.

Soundscape: In accordance with NPS Management Policies (NPS 2006) and Director's Order 47: Sound Preservation and Noise Management (NPS 2000), an important part of the NPS mission is preservation of natural soundscapes associated with national park system units. Natural soundscapes

exist in the absence of human-caused sound. People traveling on the Tanalian Trail may be able to hear noises associated with construction activities; however, construction activities would be prohibited on weekends when visitation is expected to be the highest. Additionally, the proposed project location is in Port Alsworth, which has an existing abundance of human-caused sound. Noise associated with construction activities for this project would be short term, localized, and would cease after construction is complete. If funding is secured concurrently for both triplexes, the construction period would be six months, and if the triplexes are funded at different times, the total construction time would be 12 months. Sound impacts from the completed housing units is not expected to considerably add to the existing human-cause noise. Therefore, this topic was dismissed from detailed analysis.

Park Operations: The proposed project location is within an NPS administrative area in Port Alsworth. Construction activities and life-cycle maintenance of the housing units could temporarily disrupt park operations by blocking access to facilities and creating a temporary cessation of operations. However, there are multiple access points on the roads that may be closed or impacted, leaving opportunities for alternative routes. Emergency services are not expected to be impacted due to construction activities. Long term impacts to park operations would be positive. Additional staff would be housed with the capacity for year-long housing, which would increase park efficiencies. Therefore, this topic was dismissed from detailed analysis.

Visitor Experience: The proposed project area is in an administrative area, which is not publicly advertised to non-NPS staff, and is not adjacent to any NPS owned lands open to visitors. There is a possibility that visitors, especially those traveling on the Tanalian Trail, would be able to hear noise during construction activities; however, construction activities would be prohibited on weekends when visitor use is expected to be the highest. In addition, if visitors hear construction noises, it would be limited to the front country area, near Port Alsworth where sounds from humans are common and expected. Therefore, this topic was dismissed from detailed analysis.

Visual Resources: The design of the proposed housing units is in accordance with NPS Design Guidelines and are NPS prototype #9 buildings. NPS Management Policies (NPS 2006) state that the design for “park facilities [...] will be harmonious with and integrated into the park environment, [with] sensitivity to cultural, regional, esthetic, and environmental factors.” The design of the housing units would be to lessen the impact to existing visual resources. The project location would not be within a historic district, cultural landscape, or other culturally or historically significant district. Additionally, the project location would be within Port Alsworth and the addition of the buildings would not look out of place in the context of existing buildings and infrastructure. There would be additional screening of the housing units by trees and shrubs, further reducing any visual impacts. Therefore, this topic was dismissed from detailed analysis.

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 on August 19, 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 construction of the housing or associated infrastructure. Concurrence of “No Historic Properties Affected” for this project was received from the SHPO on September 15, 2022. During project implementation, if cultural resources are exposed, construction would stop, the park archeologist would be notified immediately, and archeological testing would be conducted. Given the cultural resource protocols in place, this topic was dismissed from detailed analysis.

Other Resources: The proposed project site does not include and would not affect floodplains, wetlands, threatened and endangered species, or wilderness. Construction activities could generate noise, dust, and equipment exhaust during the construction period; impacts to acoustic resources and air quality are expected to be at low levels and localized in the vicinity of the project site during the construction period. If funding is secured concurrently for both triplexes, the construction period would be six months, and if the triplexes are funded at different times, the total construction time would be 12 months. A detailed analysis of impacts to these resources is not necessary to make a reasoned choice between alternatives.

5 Alternatives

Alternative 1: No Action

Under the No Action alternative, no new housing facilities would be constructed. NPS would not remove 0.6 acres of vegetation and construct two triplexes. Existing conditions and uses would continue as in the past. Housing shortages would continue and there would continue to be a lack of staff in Port Alsworth.

Alternative 2: Construct Housing Units and Associated Facilities (Proposed Action and Preferred Alternative)

Under Alternative 2 the NPS would clear a total of 0.6 acres of vegetation and disturb a total of 0.6 acres of soil in preparation for construction activities. The NPS would construct two triplexes, which would be 2,919 SF each, with two units consisting of 1,000 SF and two bed, two baths, and the final unit would be 490 SF consisting of one bed and one bath. The total square footage for the two triplex buildings would be 5,838 SF. The units would be constructed for arctic conditions with an arctic entry and raised foundations. The units and access to them would be designed to follow all accessibility standards and guidelines, including the Architectural Barriers Act Accessibility Standard (ABAAS). The NPS would install and connect associated utilities including electrical, sewer, and water connections to existing systems. Arctic pipe would be utilized to reduce the depth and width of the trench. The trench for the electrical system would be 2 feet wide and approximately 3-4 feet deep. The sewer would vary from 3 feet to 12 feet deep at the deepest areas (connecting to the existing sewer line with a width of 3 feet to 8 feet. The water line will be approximately 6 feet deep and would require a trench 3 feet wide. Additionally, the NPS would construct a driveway and parking area, to be connected to an existing road. The driveway would have a tread 14 feet wide, with 5 feet of brushing on each side of the tread. Approximately 0.6 acres of soil would be removed and of that total, 0.45 replaced with a combination of suitable soil, geotextile, and stone to create a durable tread. The remaining 0.15 acres would be where the triplexes are located. All soil and stone

would be locally sourced, and any heavy equipment used would be cleaned to minimize the risk of introducing exotic plant species. Staging, storage, and parking would occur on hardened surfaces. 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.

Proposed infrastructure would be designed and constructed to retain as many trees and as much vegetation as possible. It would also be designed so existing vegetation could act as a screen to reduce visual impacts to existing NPS infrastructure and the Tanalian Trail.

Any closures would be communicated to the public.

All ground work, utilities installation and fabrication would be completed through contract. The triplex units would be constructed onsite.

Alternatives Considered but Dismissed

There were no additional alternatives considered but dismissed.

Table 1 Summary of Alternatives

Action	Alternative 1: No Action	Alternative 2: (Preferred Alternative)
Clear project area	None of the project area would be cleared. Vegetation and soils would remain undisturbed. Existing conditions, including lack of staffing, would continue.	The project area would be cleared of 0.6 acres of vegetation, and 0.6 acres of soil disturbed total.
Construct two triplexes	None of the components detailed under Alternative 2 would be constructed. Existing conditions, including lack of staffing, would continue.	Two triplexes would be constructed. Each triplex would be 2,919 SF, for a total of 5,838 SF.
Install associated utilities	None of the utility installations detailed under Alternative 2 would be constructed. No construction would leave the soil and vegetation undisturbed. Existing conditions, including lack of staffing, would continue.	Trenches would be dug to install and connect utilities to existing utility systems. Ground disturbance and trenching for the electrical system would be 2 feet wide and approximately 3-4 feet deep. The sewer would vary from 3 feet to 12 feet deep at the deepest areas (connecting to the existing sewer line) with a width of 3 feet to 8 feet. The water line will be approximately 6 feet deep and would require a trench 3 feet wide.
Install a driveway and parking area	The driveway and parking area detailed under Alternative 2 would not be constructed. No construction would leave the soil and vegetation undisturbed. Existing conditions, including lack of staffing, would continue.	Vegetation would be removed, and soil disturbed as part of clearing the project area. In addition, the ground would be leveled, and gravel and similar substrate would be deposited.
Other project details	Existing conditions, including lack of staffing, would continue.	<ul style="list-style-type: none"> Up to 0.6 acres of vegetation would be removed and 0.6 acres of soil disturbed, with good faith effort on part of NPS and designers to minimize acreage of disturbance and impacts. Proposed infrastructure would be designed and constructed to retain as many trees and as much vegetation as possible. All imported fill and equipment must be clean, free of soil and/or seeds, and inspected prior to storage or use on park lands to prevent the introduction of invasive species. Staging, storage, and parking must occur on hardened surfaces. Any closures must be communicated to the public.

6 Affected Environment & Environmental Consequences

The affected environment describes the existing condition of resources that could be impacted by implementing any of the alternatives. Resource impacts would result from the actions described in the alternatives as well as from other projects underway or planned in the Port Alsworth area. These other projects informed the planning of the proposed project and provide the context in which the Proposed Action and its environmental consequences would occur. These other projects in the Port Alsworth area include:

- There is one future planned action that could contribute to impacts on these resources in the planning area. Construction of an unattached garage and additional housing unit are proposed in the same project area as the current proposed project. This would have an impact on soils and vegetation and would result in noise impacts from the additional construction activity. Compliance will be completed prior to implementation of the future planned action.
- The Visitor Contact Station to Tanalian Trail System Pedestrian Access Trail EA and Finding of No Significant Impact (FONSI) was completed in August 2022. Construction of the trail began in the summer of 2023. Once the trail is complete, it may attract more visitors to the general area. The Tanalian Trail is not visible from the project location, but construction activities from this project may be audible from the Tanalian Trail. Construction will be limited to weekdays to prevent additional noise on weekends when most visitation is expected.
- Figure 1 depicts the proposed additional housing unit and separate garage, and Figure 5 depicts the start of the Tanalian Trail. Both figures depict other past, present, and reasonably foreseeable future projects in Port Alsworth. Any environmental consequences or resource impacts from the Proposed Action and alternatives described in this EA would be in addition to the impacts from these other past, present, and reasonably foreseeable future projects in the Port Alsworth area. The totality of these impacts is analyzed in the cumulative impacts sections for each impact topic analyzed below.

First Impact Topic

Vegetation and Soils - Affected Environment

The proposed project area is composed primarily of mixed-spruce forest and birch-ericaceous shrub (NPS 2011a). Over 60 percent of the area is classified as forested, with the remainder classified as birch-ericaceous shrub (NPS 2011a). The primary tree species in the mixed forest include white spruce (*Picea glauca*), black spruce (*Picea mariana*), and paper birch (*Betula papyrifera*). Willows (*Salix spp.*) are the primary shrub species in the area. The understory consists of dwarf birch (*Betula nana*) and Labrador tea (*Rhododendron tomentosum*). Ground cover is dominated by tundra matting, forest/leaf litter with scattered grass, forbs, and mosses. Soil texture is uniform in the area and classified as ashy-loamy-rocky (NPS 2011b). The project area is classified as lowland (NPS 2011c) and predominantly flat with a maximum slope of 4.6 degrees. There are no wetlands in the proposed project area.

Vegetation and Soils - Environmental Consequences

1. Alternative 1 - No Action

Direct and Indirect Impacts

Vegetation and soils would not be impacted under this alternative. If no housing units, associated utilities, and a driveway were constructed and installed, existing conditions of vegetation and soils would continue.

Cumulative Impacts

If no housing units, associated utilities, and a driveway were constructed and installed, existing conditions of vegetation and soils would continue.

2. Alternative 2 – Construct Housing Units and Associated Facilities (Proposed Action)

Direct and Indirect Impacts

Constructing housing units, associated utilities, and a driveway would have direct impacts to 0.6 acres of soil and 0.6 acres of vegetation.

Construction of the housing facility and associated utilities, and driveway would remove up to 0.6 acres of vegetation, resulting in loss of ground cover, understory species, and mature trees, thus altering vegetation communities and potentially introducing and spreading invasive species. The project would disturb 0.6 acres of soil.

Both the soil types and vegetation are typical of the area. In general, the vegetative community and soils within LCNPP would continue to function as in the past. The expected impact on 0.6 acres of mixed-spruce forest would contribute to, but would not substantially change, the composition and function of the vegetation community. Therefore, the removal of up to 0.6 acres of vegetation would not be expected to impact plant species at a population level as the disturbance would be localized to the construction site and the species affected are common throughout the Port Alsworth vicinity. Soil would be removed, compacted, and hardened through construction. The ashy-loamy-rocky soil type is ubiquitous in the area and the altering of 0.6 acres would have localized, small scale effects. Soil function would not expect to be altered beyond the boundaries of the project.

In accordance with Best Management Practices (BMPs) outlined in the Alaska Region Invasive Plant Management Plan EA (NPS 2008), any equipment and materials stored by the NPS and its contractor/s must be clean, free of dirt and/or seeds, and inspected prior to storage or use on park lands to prevent the introduction of invasive species.

Cumulative Impacts

Construction of the Tanalian Trail removed approximately 0.3 acres of vegetation and disturbed 0.3 acres of soil.

The future garage and additional housing unit will require additional ground disturbance and vegetation removal. Approximately 0.4 acres would be disturbed in construction of the garage and additional housing unit. Including the impacts from the Tanalian Trail (0.3 acres), the future garage and additional housing unit (0.4 acres), and the proposed project (0.6 acres), a cumulative 1.3 acres of vegetation would be removed, and 1.3 acres of soil disturbed. The vegetation and soil types are

both common in the Lake Clark Basin, which is 2,224,779 acres, and therefore the 1.3 acres of disturbance each will have a minor impact in the area.

Overall, the cumulative impact to vegetation and soils from the Proposed Action when considered in concert with other past, present, and reasonably foreseeable future projects would be similar in nature to the direct and indirect impacts described above. However, these cumulative impacts would be greater in magnitude and geographic extent than the impacts from the Proposed Action considered alone.

Wildlife - Affected Environment

The forest and shrub communities in the project area support a variety of bird species. These species include common species such as American robin, dark-eyed junco, and yellow-rumped warbler. Other wildlife that may inhabit the project area include red fox and various small mammals including porcupine, shrews, and voles (Cook et al. 2005). There is also occasionally larger wildlife, including moose, brown bear, black bear, and wolves (*Canis lupus*) that travel through the area but do not permanently inhabit the area. Observations and several cases of radio collar data for wolves and brown bears supports the conclusion that larger mammals do not habitually inhabit this area.

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 US Fish and Wildlife Service to determine if a “take” permit would be necessary and discuss options to minimize impacts to nesting birds.

Wildlife - Environmental Consequences

1. Alternative 1 - No Action

Direct and Indirect Impacts

Wildlife would not be impacted under this alternative. If no housing units, associated utilities, and a driveway were constructed and installed, wildlife species would continue to exist as they do currently.

Cumulative Impacts

If NPS did not construct housing units, associated utilities, and a driveway there would be no additional cumulative impacts. Wildlife species would continue to exist as they do currently.

2. Alternative 2 – Construct Housing Units and Associated Facilities (Proposed Action)

Direct and Indirect Impacts

Constructing housing units, associated utilities, and a driveway would have direct impacts to 0.6 acres of soil and 0.6 acres of vegetation. The forest and shrub communities support a variety of species, and this would result in habitat loss and permanent displacement for birds, such as American robin, dark-eyed junco, and yellow-rumped warbler and small mammals, such as northern red-backed vole and red squirrel, among others. This could result in permanent displacement of individual small animals and insects. This would not impact population levels. Noise and activity from the construction may also temporarily displace birds and mammals, as well as larger, more transient mammals such as moose, brown bear, and black bear.

Cumulative Impacts

Construction of the Tanalian Trail removed approximately 0.3 acres of vegetation and disturbed 0.3 acres of soil, which could have impacted and transected potential wildlife habitat. The future garage and additional housing unit will also remove 0.4 acres of vegetation and 0.4 acres of soil will be removed or disturbed. The combination of these projects with the current proposed project will permanently alter 1.3 acres of vegetation and soil found around Port Alsworth, which is habitat for a variety of wildlife species. Although the Lake Clark Basin is 2,224,779 acres and there is much comparable habitat within the basin, the displaced animals may have difficulty relocating.

Overall, the cumulative impact to wildlife from the Proposed Action when considered in concert with other past, present, and reasonably foreseeable future projects would be similar in nature to the direct and indirect impacts described above. However, these cumulative impacts would be greater in magnitude and geographic extent than the impacts from the Proposed Action considered alone.

Table 2 Summary of Impacts

Issue	Alternative 1: No Action	Alternative 2: Construct Housing Units and Associated Facilities (Proposed Action and Preferred Alternative)
<u>Impact Topic 1:</u> Vegetation and Soils:	Vegetation and soils would not be impacted under this alternative. No developments would leave the area naturally vegetated with no soil disturbance.	0.6 acre of vegetation would be cleared, and 0.6 acres of soil would be disturbed for construction activities. No additional ground disturbance would occur. Newly disturbed soils could result in the establishment of invasive plant species.
<u>Impact Topic 2:</u> Wildlife	Wildlife would not be impacted under this alternative. No developments would leave habitat intact and there would not be temporary noise from construction activities.	0.6 acres of vegetation would be cleared, permanently impacting habitat for small birds and mammals. Larger mammals may avoid the area during construction activities.

7 Consultation and Coordination

Tribal and Alaska Native Corporations Consulted

For consultation with tribes and Alaska Native Corporations on the proposed project, the NPS sent email correspondence to Nondalton Tribal Council, Lime Village, Village of Iliamna, Newhalen Village, Pedro Bay Village, and Kijik Corporation on August 26, 2022. The NPS received no interest in consulting responses from Lime Village, Village of Iliamna, and Kijik corporation. 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

No evidence of cultural materials was uncovered during the excavation or the pedestrian reconnaissance. It is unlikely that cultural resources would be disturbed during construction and ground disturbing activities associated with this project. The NPS contacted the Alaska 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, on August 19, 2022, by letter. Concurrence of “No Historic Properties Affected” for this project was received from the SHPO on September 15, 2022. 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.

8 List of Preparers

National Park Service

Brenna McGown, Alaska Regional Office

Buck Mangipane, Lake Clark National Park and Preserve

Susanne Fleek-Green, Lake Clark National Park and Preserve Superintendent

Kevin Downs, Lake Clark National Park and Preserve Chief of Facility Management

Liza Rupp, Lake Clark National Park and Preserve Cultural Resources Program Manager and Subsistence Coordinator

9 References

Cook, J. A., and S. O. MacDonald. 2005. Mammal inventory of Alaska’s National Parks and Preserves: Southwest Alaska Network: Kenai Fjords National Park, Lake Clark National Park and Preserve, and Katmai National Park and Preserve. National Park Service Alaska Region, Inventory and Monitoring Program Final Report. 57 pages + appendices.

Department of the Interior and U.S. Department of Agriculture. 2021. Secretarial Order (SO) 3403, Joint Secretarial Order on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters. Department of the Interior and U.S. Department of Agriculture. Washington, D.C.

National Park Service. 2000. Director's Order 47: Sound Preservation and Noise Management. National Park Service. Washington, D.C.

National Park Service. 2006. Management Policies 2006. U.S. Department of the Interior. Washington, D.C.

National Park Service. 2008. Alaska Region Invasive Plant Management Plan EA. National Park Service. Anchorage, Alaska.

National Park Service. 2011a. LACL Soils 2011 – Map Ecotypes. Viewed in ArcGIS 10.5.1 for Desktop. National Park Service. Anchorage, Alaska.

National Park Service. 2011b. LACL Soils 2011 - Generalized Soil Texture. Raster Geospatial Data. Viewed in ArcGIS 10.5.1 for Desktop. National Park Service. Anchorage, Alaska.

National Park Service. 2011c. LACL Soils 2011 - Physiography. Raster Geospatial Data. Viewed in ArcGIS 10.5.1 for Desktop. National Park Service. Anchorage, Alaska.

Appendix A: ANILCA Section 810(A) Subsistence – Summary Evaluation and Findings

I. Introduction

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Lands Conservation Act (ANILCA). It summarizes the evaluations of potential restrictions to subsistence activities which could result from the proposed project activities.

II. The Evaluation Process

Section 810(a) states:

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

- 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 will involve the minimal amount of public lands necessary to accomplish the purposes of such use, occupancy, or other disposition, and (C) reasonable steps will 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 Lands

A. Alternative 1 – No Action

Under the No Action alternative, no new housing facilities would be constructed. The National Park Service (NPS) would not remove 0.6 acres of vegetation, disturb 0.6 acres of soil, and construct two triplexes. Existing conditions and uses would continue as in the past. Housing shortages would continue and there would continue to be a lack of staff in Port Alsworth.

B. Alternative 2 – Construct Housing Units and Associated Facilities

(Proposed Action and Preferred Alternative)

Under Alternative 2 the NPS would clear a total of 0.6 acres of vegetation and disturb a total of 0.6 acres of soil in preparation for construction activities. NPS would construct two triplexes, which would be 2,919 square feet (SF) each, with two units consisting of 1,000 SF and two bed, two baths, and the final unit would be 490 SF consisting of one bed and one bath. The total square footage for the two triplex buildings would be 5,838 SF. The units would be constructed for arctic conditions with an arctic entry and raised foundations. The units and access to them would be designed to follow all accessibility standards and guidelines, including the Architectural Barriers Act Accessibility Standard (ABAAS). The NPS would install and connect associated utilities including electrical, sewer, and water connections to existing systems. Arctic pipe would be utilized to reduce the depth and width of the trench. The trench for the electrical system would be 2 feet wide and approximately 3-4 feet deep. The sewer would vary from 3 feet to 12 feet deep at the deepest areas (connecting to the existing sewer line with a width of 3 feet to 8 feet. The water line will be approximately 6 feet deep and would require a trench 3 feet wide. Additionally, NPS would construct a driveway and parking area, to be connected to an existing road. The driveway would have a tread 14 feet

wide, with 5 feet of brushing on each side of the tread. Approximately 0.6 acres of soil would be removed and of that total, 0.45 replaced with a combination of suitable soil, geotextile, and stone to create a durable tread. The remaining 0.15 acres would be where the triplexes are located. All soil and stone would be locally sourced, and any heavy equipment used would be cleaned to minimize the risk of introducing exotic plant species. Staging, storage, and parking would occur on hardened surfaces. 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.

IV. Affected Environment

Subsistence uses within Lake Clark National Park and Preserve are permitted in accordance with Titles II and VIII of ANILCA. Section 201(7)(b) of ANILCA allows local residents to engage in subsistence uses, where such uses are traditional in accordance with the provisions in Title VIII.

V. Subsistence Uses and Needs Evaluation

To determine the potential impact on existing subsistence activities, three evaluation criteria were analyzed relative to existing subsistence resources that could be impacted. The evaluation criteria are:

1. the potential to reduce important subsistence fish and wildlife populations by (a) reductions in abundance; (b) redistribution of subsistence resources; or (c) habitat losses;
2. the effect the action might have on subsistence fishermen or hunter access;
3. the potential for the action to increase fisherman or hunter competition for subsistence resources.

A. The potential to reduce populations:

In the proposed alternative there is minimal potential to reduce numbers of or redistribute fish and wildlife populations or reduce habitat for subsistence fish and wildlife populations. The proposed creation of the housing area would destroy some vegetation that provide habitat for small mammals, birds, and insects. The total loss of habitat would be approximately 0.6 acres. Additionally, provisions of ANILCA and Federal and State regulations provide protection for fish and wildlife populations within Lake Clark National Park and Preserve. Overall, the development is not expected to reduce or redistribute wildlife populations in the project area.

B. Restriction of Access:

Section 811 of ANILCA addresses “Access” for subsistence as follows: “The Secretary shall ensure that rural residents engaged in subsistence uses shall have reasonable access to subsistence resources on public lands.”

As such, none of the alternatives are expected to significantly restrict traditional subsistence use patterns or access on federal public lands within the region.

C. Increase in Competition:

The proposed alternative is not expected to significantly increase competition for subsistence resources on federal public lands within the region, and the proposed alternatives do not restrict in any way the taking of subsistence resources or allow other users to take subsistence resources. Provisions of ANILCA and NPS

regulations mandate that when it is necessary to restrict the taking of fish or wildlife, subsistence users will have priority over other user groups.

VI. Availability of Other Lands

The proposed project is site-specific to lands within Lake Clark National Park and Preserve, because the proposed actions involve staff facilities within the park. It is determined that no other federally managed lands would be suitable for this project. The proposed action is consistent with the mandates of ANILCA, including Title VIII, and the NPS Organic Act.

VII. Alternatives Considered

Two alternatives were analyzed for this project and are described in detail in the Environmental Assessment. The alternatives occur within the same area of Lake Clark National Park and Preserve, where Title VIII subsistence uses are not authorized. None of the alternatives proposed would significantly restrict subsistence uses on other adjacent federally managed lands.

VIII. Findings

This analysis concludes that the proposed action and considered alternative will not result in a significant restriction of subsistence uses.