

**Environmental Assessment  
King Salmon Administrative Site  
Employee Housing and  
Maintenance Facilities Construction**

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**Employee Housing and Maintenance Facility Construction  
KATMAI NATIONAL PARK AND PRESERVE**

**Alaska**

**January 1994**

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## **Purpose and Need for Action**

Beginning in 1994 the National Park Service (NPS) proposes to construct single and multi-family housing and a maintenance facility for Katmai National Park and Preserve (KATM) at the park's administrative site in King Salmon, Alaska. Housing that meets NPS safety and housing standards is needed for park employees now residing in sub-standard and unsafe quarters. The housing and maintenance facilities are essential for the safe and efficient execution of park and visitor needs.

This environmental assessment (EA) has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council on Environmental Quality (40 CFR 1508.9).

## **Background**

Through Presidential Executive Order 10335 and Public Land Order 1861 of May 26, 1959, land (11.43 acres) was set aside for the NPS. The land order (amended by Public Land Order 3784, 8/10/65) specifically states the site is "for use of the National Park Service as an administrative site in connection with the administration of the Katmai National Monument". The NPS administrative site is located within the town of King Salmon. The site is bordered on the south by the Naknek River and on the north by the King Salmon Airforce Station/Airport (see figures 1, 2, & 3).

The approved 1983 Development Concept Plan/Environmental Assessment (DCP/EA) for the King Salmon headquarters recognizes the need for employee housing for both seasonal and permanent employees. Specifically the DCP/EA states, "the King Salmon headquarters development is no longer adequate with regard to office and maintenance space and housing." The DCP/EA further states, "There is insufficient housing for permanent staff and no housing for seasonal staff and future employees."

Since the approval of the 1983 DCP/EA, there have been substantial changes to the administrative site. Visitation to Katmai has increased from 11,182 visitors in 1983 to 46,196 in 1992. The increase in visitation has created a corresponding increase in the number of seasonal and permanent employees needed at the park. With limited housing opportunities available in the small community of King Salmon, it has become urgent that new housing be provided by the NPS for its employees.

The installation of a sewage system in the town of King Salmon, and specifically within the NPS administrative site has made the construction of leachfields at the site unnecessary as described in the 1983 DCP/EA. The placement of a new sewage line precludes the sighting of

one of the housing clusters as shown in the 1983 DCP/EA. One of the proposed seasonal staff duplexes called for in the 1983 DCP/EA has already been built. There are currently no plans to build park administrative or operations facilities on the administrative site as indicated by the 1983 DCP/EA. The preferred alternative in this EA changes the 1983 DCP/EA by locating employee housing away from the proposed FAA access road, separating it from the maintenance area, while providing a southern exposure to the sun for heat gain, and providing a view of the Naknek river.

The Department of Transportation and Public Facilities of the state of Alaska has a King Salmon Airport Master Plan (the plan map is called the Ultimate Terminal Area and Access Plan, dated July 27, 1988) that includes the construction of an access road for the King Salmon Airforce Station/Airport. This new access road would bisect the NPS administrative site as shown on figure 5. The access road would be constructed to help the airport meet Federal Aviation Administration (FAA) guidelines. The need to accommodate the proposed construction of a new access road through the NPS Administrative site has changed the layout of new housing on the NPS site in favor of the alternatives discussed in this EA.

Presently there are NPS employees living in housing leased from the FAA. The FAA housing that NPS employees are using is located in the basement level of apartment complexes. These apartments are unsafe because they have no secondary exit in case of a fire. These apartments do not meet other guidelines as outlined in NPS Guideline 36 and are considered sub-standard. They are not in compliance with FAA housing and airport facility standards and will be removed when the King Salmon Airforce Station/Airport is improved. National Park Service employees vacated U.S. Fish and Wildlife (USFWS) facilities at their request on 11/01/93. There is one NPS employee living in National Weather Service housing.

The FAA is proposing the development of a new housing site. The FAA site would be located approximately 1 and 1/2 miles from the Air Force Station/Airport (see figure 6). There have been discussions between the FAA and the NPS on the possibility of constructing NPS housing on the FAA site. The FAA is receptive to the NPS building on their future housing site; however, it is not certain when the FAA will have funding for the development of their site. Since funding for the FAA site has not been secured, the exact start date for their housing project is considered an unknown.

The NPS conducted a site/facility survey for employee housing and administrative facilities in April of 1993 for the NPS administrative site. There was no environmental compliance document prepared as part of the survey. The survey identified the need for about 20 more housing units for both seasonal and permanent NPS employees. The survey located the proposed single family housing, multi-family housing, and a maintenance facility on the site as shown on the proposed administrative site map (figure 4). Under the 1993 site/facility survey, the new housing units would be located differently on the 11.43 acre site than depicted in the 1983 DCP/EA. Under the preferred alternative (Alternative 1) presented in this EA there would be 10 housing units to be constructed on the NPS administrative site in addition to the

two units already completed under the 1983 DCP/EA, totaling twelve units. Under the approved 1983 DCP/EA there are 9 housing units left to be constructed and two units that have already been built; eleven units in total would be built under the 1983 DCP/EA.

Surveys conducted by USFWS after the 1993 site/facility survey, revealed that the NPS administrative site contained approximately 3 acres of delineated wetland. In accordance with the National Environmental Policy Act and Executive Order 11990 on wetlands, a range of alternatives, including No Action, are evaluated in this environmental assessment. In compliance with the Clean Water Act, a Section 404 permit would be obtained from the Army Corps of Engineers before construction on the delineated wetland would begin.

As required by NEPA, issues related to the proposal have been identified and analyzed for each alternative. The Affected Environment section provides the background on these topics relevant to the proposal and identifies those topics eliminated from further discussion. The impact topics analyzed in the Environmental Consequences section are: wetlands, vegetation and soils, water quality, air quality, and park management.

## **Alternatives**

### **Alternative 1: Build Employee Housing/Maintenance Facility on Administrative Site (Preferred Alternative)**

This alternative proposes ten new housing units, arranged on the site as depicted in the proposed site development map (figure 4). In the long term, additional housing needs beyond these ten units would be located on other sites, preferably on the Federal Aviation Administration site. The units would be a mixture of one, two, and three bedroom units approximately 900 to 1300 square feet each. There would be garages attached to the units used for storage as well as protection for vehicles. The existing duplexes located next to the maintenance building would continue to be used as seasonal employee housing as stated in the 1983 DCP/EA. All trailers would be removed from the site as would the butler storage building, the hardened tent frames, and the existing carpentry shop.

There would be approximately 30 to 35 people living at the site under this alternative during the summer season, and about half that number of people living there year round. The construction of the employee housing and the maintenance shop would disturb approximately 3 acres of the administrative site.

The existing maintenance building was converted primarily to a warehouse facility in 1987. A new maintenance facility would be constructed next to the maintenance building. The new maintenance facility would include a two-bay vehicle work area with lifts, a carpentry shop, a welding cage, a paint booth, and a secured tool storage area. The facility would have 7,200 feet of indoor workshops and space for storage of lumber and metal supplies, paint, and a variety of tools. The facility would have approximately 32,400 square feet of outdoor space for materials storage, vehicle parking, and circulation space for vehicles.

Design considerations would include a southeasterly orientation to take advantage of the solar gain and the view of the Naknek River. The main living spaces would be on the southeast side of each unit for the same reasons. The units would be clustered to create wind blocks and heat pockets to the west, thereby providing sheltered areas for outdoor activities. The housing units would have double entries creating generous spaces that could be used as mud rooms to store boots, coats, snow shovels, etc. The buildings would be heavily insulated, and only a few (if any) windows would be placed on the north and northeast walls. All windows would be double-glazed thermopane units.

The proposed buildings would be constructed of natural materials, except for the use of metal roofing, which is appropriate for this climate. The existing buildings on the site should receive appropriate facade treatments when remodeled so the entire King Salmon development would have visual continuity.

Included in this alternative as mitigation for the loss of two acres of wetlands, is the restoration of four acres of wetlands in Denali National Park and Preserve. This mitigation is further explained and analyzed in the Environmental Consequences section. Good!

**Alternative 2:            Locate the NPS Employee Housing to the Future FAA Site and Construct the Maintenance Facility on the NPS Site**

This alternative would locate employee housing in the future FAA employee housing area. Under this alternative, no new employee housing would be developed on the NPS site. The maintenance facility would be built on the NPS site as described in the 1983 Katmai/Aniakchak, King Salmon Headquarters DCP/EA. The NPS would develop agreements with the FAA allowing for the construction of NPS housing on the future FAA site. A modified set of designs would have to be completed for grading, utilities, and, sewage if the FAA site were to be utilized for NPS housing. Additional funding for redesign and other related costs would need to be obtained for this alternative to be feasible. The amount of time required to design and obtain additional funding for this alternative would push the start date for the proposed project ahead to at least 1995. No wetlands would be affected under this alternative so a Section 404 permit would not be required

**Alternative 3:            Combination Site (Non-Wetland NPS and FAA Site)**

This alternative would locate the multi-family housing units to non-wetland areas within the NPS administrative site, with the additional single family units and any future housing construction located at the FAA site. There would not be enough room for all of the proposed housing units to be located on the non-wetland portion of the NPS administrative site; therefore, some of the units would be located on the FAA site. This alternative would also allow for the construction of the maintenance facility on the non-wetland portion of the NPS site. The NPS would develop agreements with the FAA allowing for the construction of NPS housing on the FAA future site. A modified set of designs and additional funding for NPS use of the FAA site for housing is needed for this alternative to be feasible. The amount of time required to design and obtain additional funding for this alternative would push the start date for the proposed project ahead to at least 1995. No wetlands would be affected under this alternative so a Section 404 permit would not be required.

**Alternative 4:            No Action**

Development would proceed as in the 1983 Katmai/Aniakchak, King Salmon Headquarters

DCP/EA, in that it is the compliance document approving the construction of housing on the NPS site. This EA addresses changes that have occurred since the approval of the 1983 DCP/EA (see the background section). The No Action alternative would include the construction of nine more employee housing units (one duplex has already been constructed under the 1983 DCP/EA) on the NPS administrative site as approved in the 1983 DCP/EA, plus the new maintenance facility. Removal and redirected use of existing facilities would also proceed as stated in the 1983 DCP/EA. Future additional housing for employees would be located off site.

Table 1  
 Summary of Impacts  
 Employee Housing and Maintenance Facility Construction  
 for Katmai National Park and Preserve

RESOURCES	ALTERNATIVES			
	1 (Preferred)	2	3	4
Wetlands	Would Impact Approximately 2 Acres	No Impact	No Impact	Would Impact Approximately 20 Square Feet
Water Quality	Minor Impact	Minor Impact	Minor Impact	Minor Impact
Floodplains	No Impact	No Impact	No Impact	No Impact
Air Quality	Minor Impact	Minor Impact	Minor Impact	Minor Impact
Coastal Zone Management	Minor Impact	Minor Impact	Minor Impact	Minor Impact
Subsistence	No Impact	No Impact	No Impact	No Impact
Soils and Vegetation	Approximately 3 Acres Would Be Disturbed	Approximately 1.5 Acres Would Be Disturbed	Approximately 2 Acres Would Be Disturbed	Approximately 3 Acres Would Be Disturbed
Threatened and Endangered Species	No Impact	No Impact	No Impact	No Impact
Cultural and Archeological	No Impact	No Impact	No Impact	No Impact

<p><b>Park Management</b></p>	<p>Safe Housing Would be Provided in 1994 at NPS site</p>	<p>Safe Housing Delayed Until FAA Site Becomes Available</p>	<p>Total NPS Housing Needs Would Not Be Met. Safe Housing Delayed Until FAA Site Becomes Available</p>	<p>Total NPS Housing Needs would Not Be Met.</p>
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## **AFFECTED ENVIRONMENT**

### **Park Operations and Management/Location**

The 11.43 acre headquarters site for Katmai National Park and Preserve (KATM) is located within the town of King Salmon. The population is approximately 800 persons including the military personnel stationed at the Air Force base. King Salmon is located on the Alaska Peninsula about fifteen miles from Bristol Bay and three hundred miles southwest of Anchorage. King Salmon is the nearest town to the Park with year-round transportation and necessary amenities. The headquarters/administrative site is located about 7 miles west of the KATM boundary (see figures 1, 2, & 3). Approximately 18 permanent employees and 21 seasonal employees are currently employed for the operation of KATM.

### **Natural Resources**

#### **Climate**

King Salmon is on the Bristol Bay lowlands of the Alaska peninsula in the ecotone between the tundra zone and the boreal spruce forest. The administrative site is on the northern bank of the Naknek River at an elevation of approximately 35 feet.

King Salmon has a subarctic climate, with relatively little diurnal temperature variation. Average high temperatures during the summer are just above 50 degrees Fahrenheit (F). Maximum temperatures reach 70 F during July. Winter temperatures average 12.5 degrees F, with winter minimums reaching -40 F. Overcast skies and fog are common but total annual precipitation is only 24 inches. The prevailing winds are from the east, but during the winter northwest winds occur and sweep areas clear of snow. Strong winds from the east cause the snows to subside and melt. There would be no impact on climate from the alternatives; therefore this topic is not discussed further.

#### **Wetlands and Floodplains**

The NPS administrative site is generally flat, ranging from 11 feet at the Naknek river to 37 feet in elevation. Most of the site is above the water table. However, some of the site is moist enough to support wetlands. Approximately 25 percent of the administrative site is composed of wetland. The wetlands found on the site are located within a mostly developed strip of land along the Naknek River within the town of King Salmon. The type of wetlands found on the NPS administrative site are common to the entire Alaskan Peninsula.

The floodplain in the area is unmapped. There are no indications that NPS administrative site along the Naknek River would be subject to a flood or that flooding has occurred in the recent past. There is also very little chance of a tsunami occurring in the area. (personal contact with

Gary Smillie, NPS, Water Resources Division,).

### **Soils**

The soils in the King Salmon area are glacial, fluvial, and lacustrine in origin. The glaciers of the past have created outwash gravels and moraines that are generally well drained. Other non-glacial soil types in the area are poorly drained and hence there is formation of wetland areas.

### **Vegetation**

The NPS administrative site is covered by small shrubs, native grasses, lichens, and moss. Small clumps of alder, white spruce, and willow also grow on the site. The developed area of the site has been planted with grass.

### **Wildlife/Threatened and Endangered Species**

Because the 11.43 acre site is located within a relatively developed strip along the Naknek river, few animals are found. Brown bears are occasionally sighted in the area, as are fox, hare, weasel, and moose. No species of endangered or threatened animals or plants permanently reside in the King Salmon area. Peregrine Falcons are on the endangered species list and are known to migrate through the area, but the presence of falcons in King Salmon would be transitory and irregular in nature (personal communication with Rick Sinnott at the Alaska Department of Fish and Game, and Brian Anderson U.S. Fish and Wildlife Service). The Naknek River is the major drainage system in the region and is a major spawning area for red, king, chum, and silver salmon. The river also supports populations of northern pike, arctic grayling, rainbow trout, and Dolly Varden. This topic is not discussed further due to the absence of endangered and threatened plants and animals.

### **Water Quality**

At King Salmon the Naknek River is a tidal estuary and the water in the river is classified by the state of Alaska as class A, suitable for a drinking water supply. Surface water is not used for domestic purposes by the NPS. A well on site provides potable water.

### **Air Quality**

Air quality in the area is class II, a federal classification standard that is generally defined as a generally pollution-free airshed that may have some industrial use in the area (personal communication with Jerry Gay - Alaska Department of Environmental Conservation). Jets and propeller driven aircraft exhaust fumes can sometimes be seen in the area. Smog flumes are sometimes visible from the commercial jets and F-15 fighters taking off and landing at the King Salmon airport.

## **Cultural Resources**

The site has been surveyed during the 1983 DCP/EA effort. There were no archeological or other cultural resources found at the site at that time. Additional site examination has been conducted and a cultural zone clearance for the site has been requested. No new archeological or cultural resources have been discovered on the site, therefore this topic is not discussed further.

## **Coastal Zone Management**

The Alaska Coastal Management Program requires that all proposed projects located in or affecting coastal areas of Alaska be reviewed and approved by various Alaska state agencies as being consistent with Alaska coastal management standards. The NPS will complete all required state coastal management reviews and obtain all necessary state authorizations before starting any proposed project contained in this Environmental Assessment.

## **Subsistence**

A subsistence evaluation for the NPS administrative site has been completed for the NPS administrative site (see the appendix). It was determined there would be no impacts to subsistence uses associated with any of the alternatives, therefore this topic is not discussed further.

## **Environmental Consequences of the Alternatives**

### **Alternative 1: Build Employee Housing/Maintenance Facility on NPS Administrative Site (Preferred Alternative)**

#### **Impacts on Natural Resources**

##### **Wetlands**

The construction of employee housing on the administrative site as shown on the proposed site development map would cause the elimination of approximately 1 acre of wetland vegetation and impact approximately 1 additional acre of wetland surrounding the building site for a total of two acres of wetland impact. As compensation for wetland removed during proposed construction of this project, 4 acres of former wetland area would be reclaimed in Denali National Park and Preserve in the Eureka Creek vicinity.

Eureka Creek originates in tundra south of Quigley Ridge in the Kantishna Hills region of

Denali National Park and Preserve, and flows about four miles through a narrow valley before joining Moose Creek. The creek was last mined extensively during the 1970s using heavy equipment. In this area, the riparian zone has been cleared of vegetation, and the stream channel remains extremely unstable, flowing back and forth across the mined valley floor. The wetland remediation site is located just downstream of the Lucky GI tributary, and covers four acres along a 2,500 foot reach. A hydrologic design would be developed to duplicate the geomorphic characteristics of more stable channel reaches in the area. The channel would be realigned to the design sinuosity, and a functioning floodplain would be reestablished to allow sedimentation during flooding, and access to groundwater for vegetation root systems. Alder brush bars would be installed on the new floodplains to provide protection from flooding during the next five to ten years. Greenhouse-propagated alder seedlings and willow cuttings would be planted along the upper floodplain to help stabilize the new floodplains. The end result would be the re-establishment of four acres of wetlands. This remediation action would satisfy NPS guidelines for a two to one replacement of wetlands removed during the proposed construction of employee housing at the KATM administrative site.

### **Vegetation and Soils**

Approximately three acres of vegetation site would be removed. One acre of the vegetation removed would be wetland vegetation. The vegetation removed would be composed mainly of grasses, shrubs, moss, and lichens some small trees and shrubs.

The top layers of saturated soils located on the construction site would be removed. After wetland soil is removed, the NPS estimates that 5,000 cubic yards of fill material (composed mainly of one to three inch gravel) would be used to create an acceptable base to erect the employee housing and access. The wetland material removed from the site would be stored for reuse as topsoil in a manner consistent with NPS guidelines. There would be an adverse affect on wetland vegetation and soil. Mitigation would be required as stated in the wetlands discussion.

### **Water Quality**

This project would cause a minor effects to the nearby Naknek River due to runoff from housing and maintenance facilities. <sup>Because</sup> Since the water for the project would come from an existing well on the site, surface waters at the site would not be impacted. Any construction runoff that occurred would be controlled in accordance with NPS guidelines. There would be no significant impact to water quality.

### **Air Quality**

Air quality on the site would be temporarily disturbed by the emissions from the tractors and machinery used to construct buildings on the site. The additional facilities located on the site would create a small amount of atmospheric pollution caused by their fuel oil heating systems.

The additional air pollution caused by the construction and use of the new facilities would have a minimal affect on the quality of the air at the site.

### **Park Management**

Construction of employee housing would begin in July of 1994, therefore safe and adequate housing would be provided in the immediate future under this alternative. This alternative would provide for the swiftest method of removing employees from housing that is unsafe and not in compliance with NPS standards for employee housing. This proposal would also provide for the immediate housing needs of new employees that are needed at KATM.

Maintenance and storage facilities located on the NPS administrative site require that NPS employees be present to provide security for NPS equipment and facilities. Improved security on the site would be achieved if NPS housing is constructed at the Administrative Site. Seasonal employees located at King Salmon do not possess their own vehicles and would have to use limited NPS vehicles for transportation. Therefore it would be most efficient for the proposed housing to be located on the NPS administrative site.

**Alternative 2:        Locate the NPS Employee Housing to the Future FAA Site and  
Construct the Maintenance Facility on the NPS Site**

### **Impacts on Natural Resources**

#### **Wetlands**

Under this alternative the NPS would locate housing at the new FAA site. The FAA site is known to be free of wetlands and would allow for the NPS to build necessary employee housing without impacting wetlands located at the NPS site. The maintenance facility would be completed on the non-wetlands portion of the NPS site; therefore there would be no impact to the wetlands under this alternative.

#### **Vegetation and Soils**

Upland vegetation and soils would be impacted if NPS housing were located at the FAA site. The degree of the impact is unknown and is being evaluated by FAA in its EA for the site. Approximately 1.5 acres of vegetation and soils would be impacted by construction of the maintenance facility at the NPS site.

#### **Impacts on Park Management**

*next page? ↓*

*different order than above...*

Under Alternative 2 there would be difficulties providing employee housing within an amount of time and funds now allocated for the project. It is not certain when the FAA would have the funds available to develop its site. NPS employees would continue to live in unsafe and substandard housing for a longer period of time, probably until 1995 or later. Locating NPS housing at the FAA site would require modification of present design for the grading, utilities, and sewage systems. This would require additional design funding and time. The cost of constructing housing at the FAA site is unknown and would be above the amount of funding requested for the project at present. The delay caused by locating to the FAA site would cause further shortage in employee housing resulting in the NPS not being able to hire needed additional employees.

What is status of FAA EA/ Permit?

### Water Quality

This project would cause minor effects to the nearby Naknek River due to runoff from the new maintenance facility. Since the water for the project would come from an existing well on the site surface waters at the site would not be impacted. Any construction runoff that occurred would be controlled in accordance with NPS guidelines. There would be no significant impact to water quality.

### Air Quality

Air quality on the site would be temporarily disturbed by the emissions from the tractors and machinery used to construct the maintenance facility on the site. The maintenance facility located on the site would create a small amount of atmospheric pollution caused by its fuel oil heating systems. The additional air pollution caused by the construction and use of the maintenance facility would have a minimal affect on the quality of the air at the NPS site.

### Alternative 3: Combination Site (Non-Wetland NPS and FAA site)

#### Impacts on Natural Resources

##### Wetlands

Under this alternative, housing and the maintenance facility would be located on the non-wetland areas of the NPS administrative site, with the remainder of the NPS housing being constructed on the FAA site. This alternative would not affect wetland resources on the NPS site. There are no known wetlands at the FAA site.

##### Other Impacts

Impacts to natural resources on the NPS site would be similar to alternative 1 and 2. The amount of land that would be used on the NPS administrative site for housing would be similar

not not true - less surface area would be used

to alternative 1 except wetlands would not be disturbed. A corresponding decrease on water, soil, vegetative, air, and, water quality impacts would occur from that described in alternative 1. Impacts from moving some housing off the NPS wetland area to the FAA site would be similar to alternative 2.

### **Impacts on Park Management**

Under alternative 3 the amount of time required to obtain additional design and construction funding to locate some housing at the FAA site would be lengthened. The delays would be undesirable because some NPS employees would have to continue to reside in unsafe and sub-standard housing until 1995 or later. The delay in providing total housing needs would also limit the amount of new employees that could be accommodated at KATM until 1995 or later.

### **Alternative 4: No Action**

### **Impacts on Natural Resources**

Under alternative 4 the development of the NPS administrative site would proceed as described in the approved 1983 Katmai/Aniakchak, King Salmon Headquarters DCP/EA. One duplex has already been constructed under the 1983 DCP/EA. Nine additional housing units would be built as described in the 1983 DCP/EA with no additional housing being built on the NPS site. Natural resource impacts would occur as described in the 1983 DCP/EA.

### **Wetlands**

Wetland impacts would be greatly reduced under this alternative. The total amount wetland removed under this alternative would be approximately 20 square feet.

### **Impacts on Park Management**

Under this alternative there would be nine new housing units built. An additional housing unit that is needed would not be built resulting in the KATM housing needs not being met. This alternative would require additional funding for the design and construction of facilities as described in the approved 1983 Katmai/Aniakchak, King Salmon Headquarters DCP/EA. Redesign of the site to match the 1983 Katmai/Aniakchak, King Salmon Headquarters DCP/EA would push the start date for construction of employee housing to spring 1995.

## APPENDIX

### ANILCA SECTION 810 - SUBSISTENCE EVALUATION

King Salmon Housing Project  
Katmai National Park, Alaska

#### I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Interest Land Conservation Act (ANILCA) of 1980. It summarizes the evaluations of potential restrictions to subsistence activities which could result from construction of new housing units on the Katmai National Park Administrative Parcel in King Salmon, Alaska. The purpose of the construction is to provide new housing for a growing staff and replace substandard housing currently in use.

#### II. EVALUATION PROCESS

Section 810(a) states:

"In determining whether to . . . permit the use . . . of public lands . . . the head of the Federal agency having primary jurisdiction over such lands or his designee shall evaluate the effect of such use . . . 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 . . . of public lands needed for subsistence purposes. No such . . . permit or other use . . . 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. . . 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. Katmai National Park was created by ANILCA Section 202(2) for the following purposes (among others): "to protect habitats for, and populations of, fish and wildlife including, but not limited to, high concentrations of brown/grizzly bears and their denning areas; to maintain unimpaired the water habitat for significant salmon populations; and to protect scenic, geological, cultural and recreational features."

A proclamation by President Woodrow Wilson in 1918 created Katmai National Monument from a reservation of approximately 1,700 square miles. Three major purposes of the monument designation were: 1) to preserve an area important to the study of volcanism, 2) to preserve the Valley of Ten Thousand Smokes, and 3) to conserve an area potentially popular with persons seeking unique scenery and for those with scientific interest (ALASKA Travel Publications 1974). Increased in 1931 to include Lake Brooks, Grosvenor Lake, Lake Coville and part of Naknek Lake, in 1942 to include offshore islands within five miles of the monument coastline, and again in 1969 to include the remainder of Naknek Lake, the monument grew to contain 4,361 square miles. The Administrative Parcel was titled in 1959 from land that previously belonged to US Fish and Wildlife Service (since 1939) and the Civil Aeronautics Administration. This land had also been used by the King Salmon Air Force Base for access to the river and to store empty 55 gallon drums.

With the passage of ANILCA in 1980, the designation of 3.7 million acres of the monument was changed to a national park, and an additional 308,000 acres was included as a national preserve. In addition, 3.4 million acres of the park and preserve were designated as wilderness. The taking of fish and wildlife for subsistence uses is allowed by ANILCA within Katmai National Preserve, pursuant to Section 203, however, subsistence activities are not authorized within Katmai National Park.

The Administrative Parcel qualifies as federal public land and is not within the boundary of Katmai National Park, therefore it qualifies for federal subsistence take. However, considerations of public safety and Bristol Bay Borough regulations control hunting activities on the parcel. The parcel is within King Salmon and discharging a firearm on this parcel would be considered reckless endangerment. Additionally, the parcel is within 1/2 mile of the King Salmon airport and no firearms may be discharged in this area. According to regulations, trapping may occur on the parcel. However, the parcel is so small, no significant trapping activities could be supported.

The potential for significant restriction of subsistence uses 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, ANILCA).

### III. PROPOSED ACTION ON FEDERAL PUBLIC LANDS

The National Park Service (NPS) is planning to build a fourplex unit in 1994 and two duplex units in 1995 on land that currently is undeveloped. The 1982 Development Concept Plan/Environmental Assessment identified the need for additional facilities at the park headquarters. This plan was recognized in the approved General Management Plan (1986) for Katmai National Park. A detailed discussion of the project is given in the Environmental Assessment (EA) for the project.

### IV. AFFECTED ENVIRONMENT

A summary of the affected environment as it pertains to subsistence use is presented in this section.

The Administrative parcel is a 9.7 acre area located between the King Salmon airport and the Naknek River. The Alaska Peninsula Highway parallels the airport on the north boundary of the parcel. The development addressed in this document covers less than 2 acres of this parcel. For a comprehensive description of the study area, refer to the EA.

The natural habitat on more than 40% of the parcel has been disturbed by previous NPS development, by the laying of power and sewage lines and by an transportation easement to the river from the Alaska Peninsula Highway. The undisturbed area of the parcel supports white spruce forest, sedge-grass meadow/tundra, and shrub tundra including willow/birch/alder and ericaceous shrubs.

The following species have been sited on the Administrative Parcel: ptarmigan, shorebirds (snipe), moose, brown bears, wolverine, red fox, lynx, porcupine, snowshoe hare, arctic ground squirrel, and red squirrel. It is probable that mink, weasel, river otter, and possibly beaver have been found on the parcel. Caribou have been known to use areas across the river from the parcel. Ducks, geese, and swans, overfly the parcel. It is unlikely that enough habitat exists on the parcel to support individuals of the larger bird or mammal species, however habitat exists to support several individuals of the smaller species.

The parcel abuts the lower Naknek River. The Naknek River provides spawning habitat for salmon and smelt, two anadromous groups of fish and habitat for many species of freshwater fish.

Regional subsistence activities that occur in the local area hunting, trapping, berry picking and plant gathering. Caribou, moose, beaver, snowshoe hare, fox, lynx, mink, wolf, wolverine, river otter, ducks, geese, waterfowl eggs, edible plants and berries,

**Executive Order 11990 (Protection of Wetlands)  
Statement of Findings**

**Employee Housing and Maintenance Facility Construction  
Katmai National Park and Preserve, Alaska**

The Administrative site for Katmai National Park and Preserve (KATM) is located in the town of King Salmon, Alaska. King Salmon is located approximately 300 miles southwest of Anchorage, Alaska on the Alaskan Peninsula. The administrative site is located seven miles outside of KATM and abuts Naknek river. Under Public Land Order 1861 the site was specifically set aside, "for use of the National Park Service as an administrative site in connection with the administration of Katmai National Monument". It is under this guidance that proposed development for the site has proceeded since 1959.

The United States Fish and Wildlife Service (USFWS) has delineated wetlands on the National Park Service (NPS) administrative site. The proposed action, to build 10 employee housing units in a wetland area, will require permanently removing approximately 1 acre of wetland vegetation and soil on the site. The remaining wetland adjacent to the housing site (approximately one additional acre) will also be subject to degradation as a result of human activities associated with the new housing. In accordance with Section 404 of the Clean Water Act, a permit will be obtained from the Army Corps of Engineers approving any proposed construction on the NPS site involving discharge of fill material in wetlands.

National Park Service wetlands guidelines emphasize exploring all practicable alternatives to building on or otherwise impacting wetlands. If it is not considered "practicable" to build on an alternate site that contains no wetlands, then NPS guidelines call for reducing impacts to wetlands as much as possible and providing for direct compensation of wetland resources by restoring degraded or destroyed wetlands on other NPS properties. Executive Order 11990 directs all federal agencies to avoid wetland impacts wherever practicable, and NPS wetlands guidelines require a "Statement of Findings" to be written giving the justification of why the NPS has no practicable alternative to locating facilities in or otherwise impacting wetlands.

Approximately 25 percent or 3 acres of the Administrative site is classified as wetland. The attached site map shows the extent of wetland habitat and the area that would be affected by the proposed construction (approximately two acres). The wetland area is divided into four different subtypes. The subtype labeled PSS1/EM1B (palustrine scrub-shrub/emergent saturated wetland) is the most common variety of wetland found around the King Salmon area. The other wetland types labeled PEM1C (palustrine emergent seasonally flooded), PSS1C (palustrine scrub-shrub seasonally flooded) and PEM1/SS1C (palustrine emergent/scrub-shrub seasonally flooded) are also common in the area but in a more limited quantity. Dominant shrubs on the site include bog blueberry (*Vaccinium uliginosum*), Dwarf birch (*Betula nana*), narrow-leaf Labrador-tea (*Ledum decumbens*), diamond leaf willow (*Salix planifolia*) and bog

cranberry (*Vaccinium vitis-idaea*). Common emergent plant species include Bigelow's sedge (*Carex bigelowii*), bluejoint grass (*Calamagrostis canadensis*), and Russet's cottongrass (*Eriophorum russeolum*). Sphagnum moss, feather moss, and lichens such as Cladina and Cetraria were also present.

The administrative site is bordered on the south by the Naknek river and on the other three sides by development within the town of King Salmon. General human use of the area and soil tests completed before the wetland was recognized have disturbed the area. The site has vehicle tracks, test holes, and small piles of soil located randomly across the site. The National Park Service (NPS) has determined that the wetlands located on the site of the proposed construction are locally common, low in quality primarily due to disturbance, and have limited environmental significance for the area.

Alternatives to building on the wetland included the following:

1. Locating NPS housing on a site the Federal Aviation Administration (FAA) is proposing for their employee housing (it is free of wetlands).
2. Using a combination of the non-wetland portion of the NPS site and the FAA site.
3. The "No-Action" alternative (plan approved in the 1983 Development Concept Plan/Environmental Assessment (DCP/EA) for the NPS administrative site). Since the amount of additional housing that is still to be constructed under the 1983 DCP/EA is less than the proposed alternative (by one unit) there would be less of an impact to the wetlands on the NPS administrative site. The orientation of the employee housing under the 1983 DCP/EA keeps the housing largely out of the wetland areas on the NPS administrative site. However, the 1983 DCP does not take in account the need to relocate the employee housing because of the proposed airport access road through the NPS Administrative site. The preferred alternative also recognizes the need for an additional housing unit on the NPS administrative site that the 1983 DCP/EA does not. The area of wetland impacted under the No Action alternative (the 1983 DCP/EA) would be approximately 20 square feet.

The possibility of no new housing being constructed at the NPS Administrative site was not included as an alternative in the EA <sup>because</sup> as it was not considered a reasonable alternative.

The housing that NPS employees are now living in is unsafe (there are no secondary escapes in case of fire) and do not meet NPS standards. Employees are living in facilities not owned by the NPS (FAA and National Weather Service) and they can be asked to leave at anytime. National Park Service employees vacated USFWS housing at the request of USFWS on 11/1/93. Visitation to KATM has increased from 11,182 visitors in 1983 to 46,196 visitors in

1992. This increase in visitation has caused a need for more employees at the park. The resulting shortage of housing in the limited housing market of King Salmon is limiting the amount of new employees that can be employed at the park. This will ultimately result in KATM being operated in an unsafe and inefficient manner.

Moving to the FAA site is not considered practical because it is not certain when the FAA will be able to develop their site. When the FAA does develop their site it would take until 1994 if not longer for them to complete utilities and access roads at their site resulting in housing construction not starting until at least 1995. Waiting until at least 1995 for new housing for NPS employees is an undesirable amount of time to have NPS employees living in unsafe and substandard housing. The cost of moving to the FAA site is unknown and is beyond the current budget for the project. Obtaining additional funding for the project would probably also take an undesirable amount of time, if additional funding can be procured at all.

Using the non-wetland portion of the NPS site and the FAA site in combination poses the same type of time and budget problems as the previous alternative.

The proposed activity will use the wetland on the NPS property and there is no practical way to minimize the impact to the wetland on the site short of abandoning the site or substantially reducing the amount of housing constructed. This is due to the proposed construction of an airport access road through the non-wetland portion of the NPS site. Due to the urgent need of housing for the employees at KATM the aforementioned abandonment or reduction in housing built are not recommended.

A site along Eureka Creek in Denali National Park and Preserve will be restored to riverine and palustrine wetland and associated riparian habitat as compensation for impacts on wetlands at the NPS administrative site if the proposed alternative is approved. A total of 4 acres of former wetland/riparian area will be reclaimed. This mitigation action is effectively a two-for-one wetlands restoration and fulfills NPS wetland guideline requirements for compensation for impacted wetlands.

Eureka Creek originates in tundra south of Quigley Ridge in the Kantishna Hills region of Denali National Park and Preserve, and flows about 4 miles through a narrow valley before joining Moose Creek. The creek was last mined extensively during the 1970's using heavy equipment. In this area, the riparian zone has been cleared of vegetation, and the stream channel remains extremely unstable, flowing back and forth across the mined valley floor. The wetland compensation site is located just downstream of the Lucky GI tributary, and covers 4 acres along a 2500 foot reach. A hydrologic design would be developed to duplicate the geomorphic characteristics of more stable channel reaches in the area. The channel would be realigned to the design sinuosity, and a functioning floodplain and wetland/riparian zone would be reestablished to allow sedimentation during flooding, and access to groundwater for vegetation root systems. Alder brush bars would be installed on the new floodplains to provide protection from flooding during the next 5-10 years. Greenhouse-propagated alder

seedlings and willow cuttings would be planted along the upper floodplain to help stabilize the new floodplains. The end result would be the re-establishment of four acres of wetland/riparian habitat.

A map showing the proposed housing construction site area and wetlands area is attached.

Recommended: \_\_\_\_\_  
Regional Director, Alaska Region                      Date

Approved: \_\_\_\_\_  
Director, National Park Service                      Date

## **References**

### **National Park Service, U.S. Department of the Interior**

1983 Katmai/Aniakchak, King Salmon Headquarters Development Concept Plan and Environmental Assessment.

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FAA ??

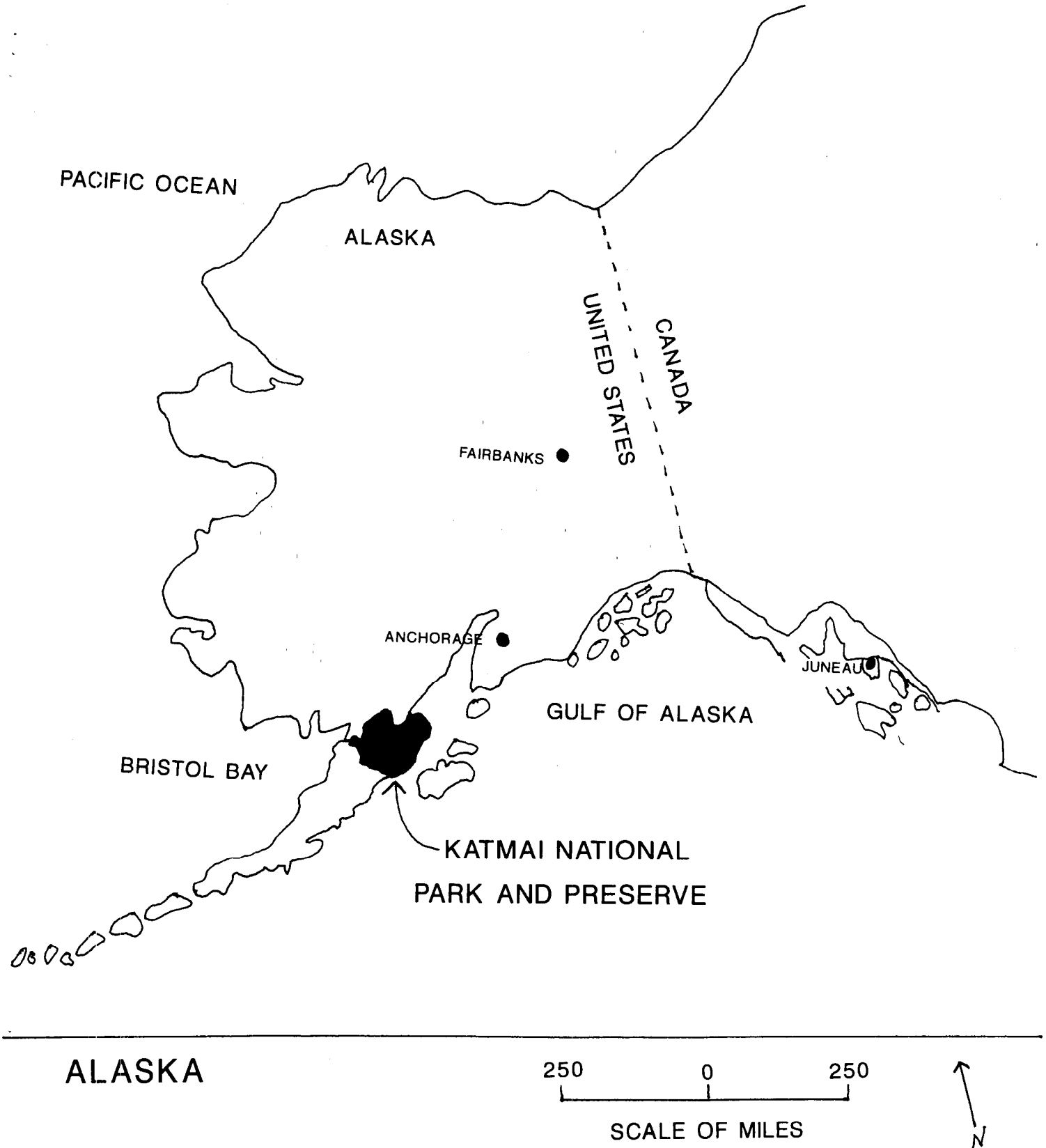
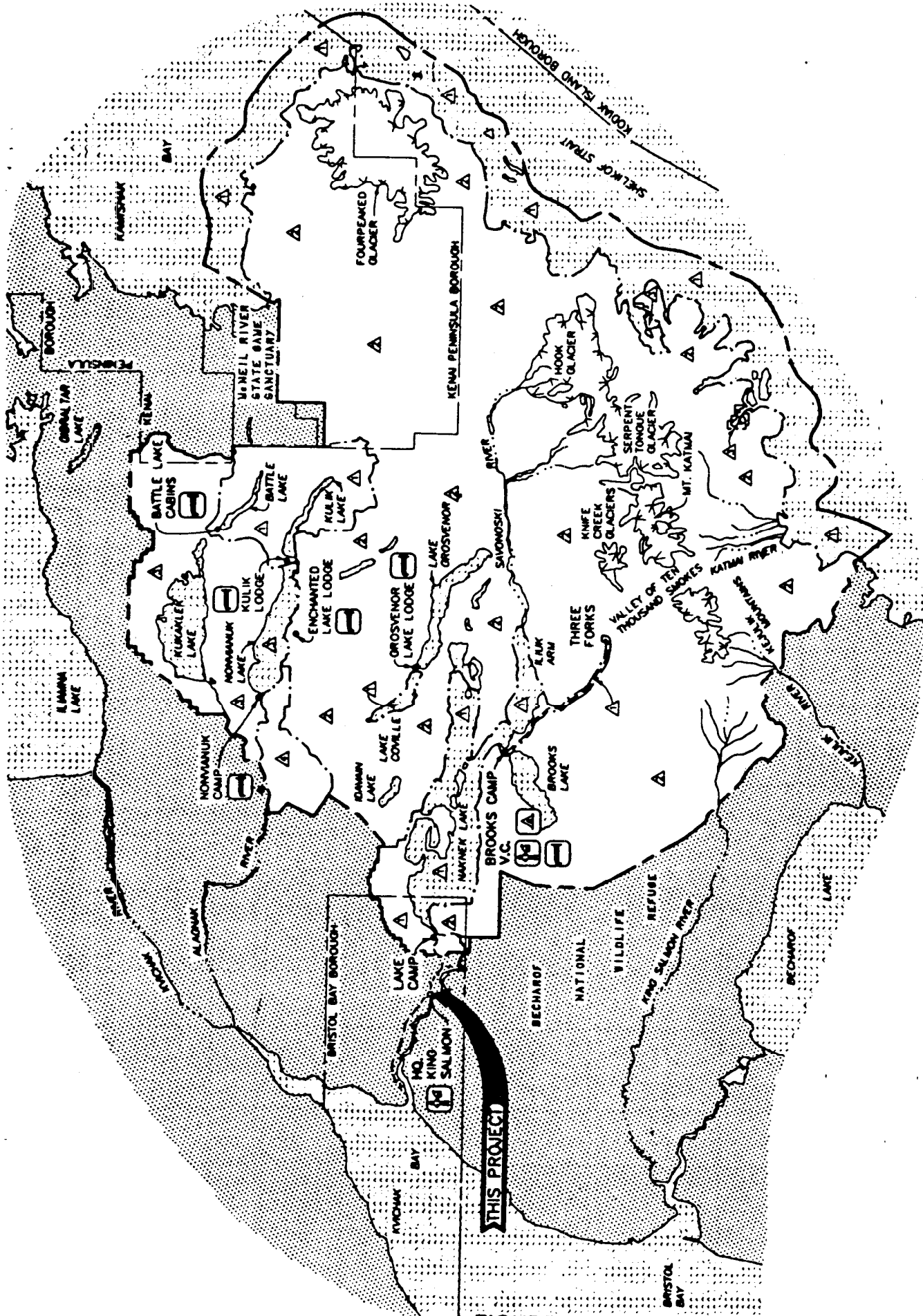


FIGURE - 1



# KATMAI NATIONAL PARK AND PRESERVE

FIGURE - 2

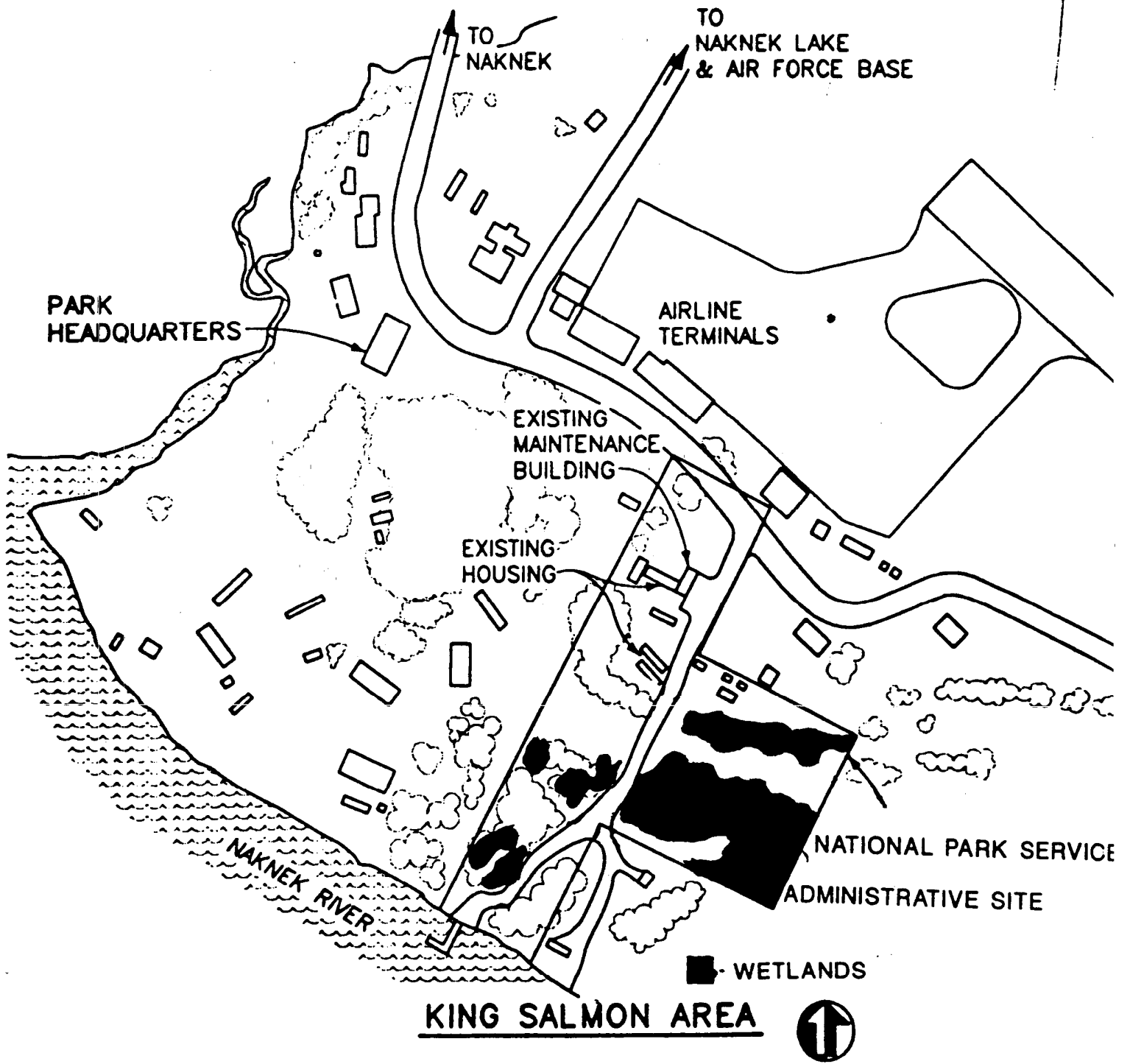
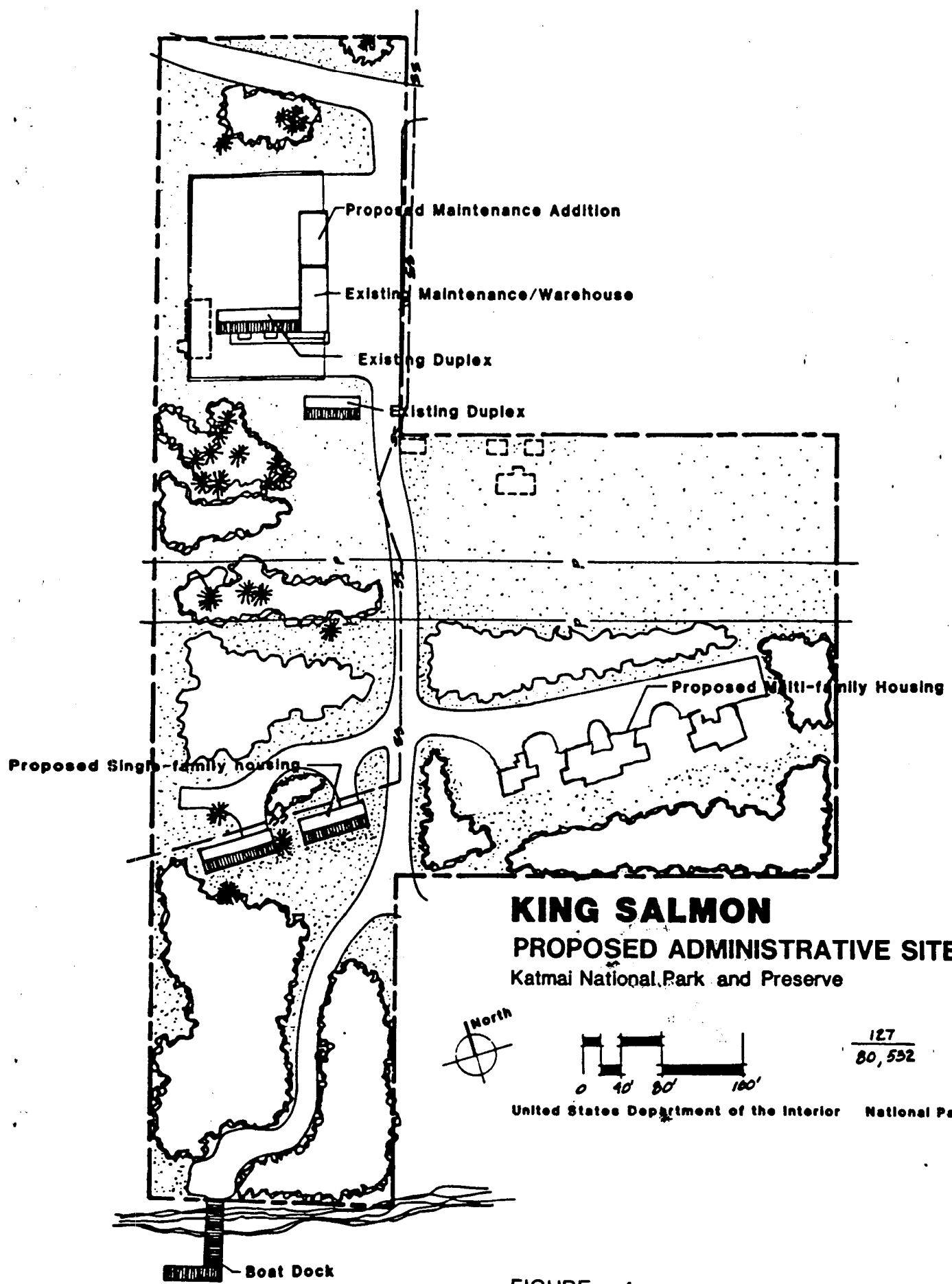
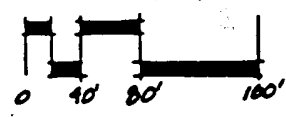


FIGURE - 3



**KING SALMON**  
**PROPOSED ADMINISTRATIVE SITE**  
 Katmai National Park and Preserve



127  
 80,532

United States Department of the Interior National Park Service

FIGURE - 4

KING SALMON AIRPORT  
PROPOSED ACCESS ROAD LAYOUT

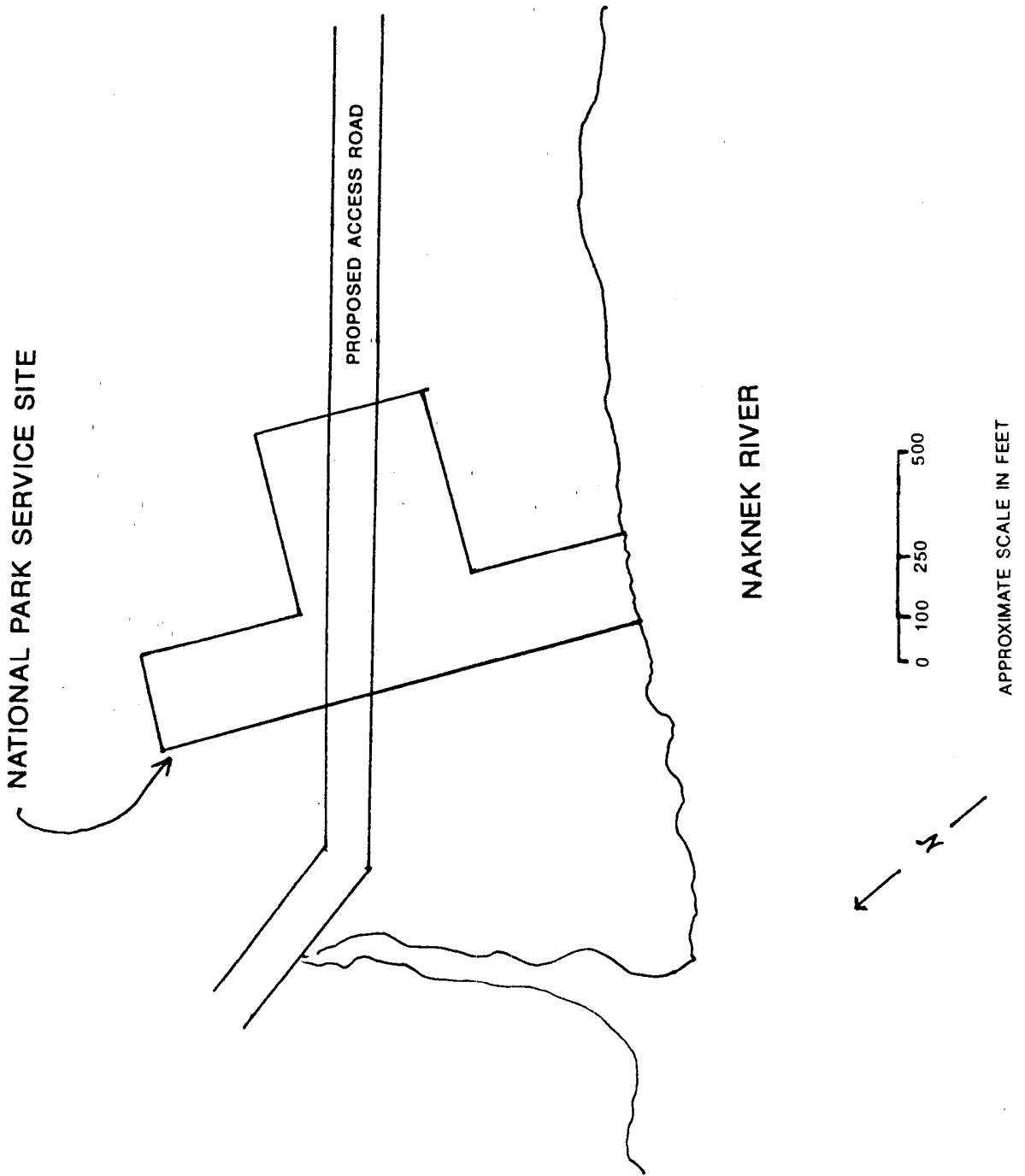


FIGURE 5

# KING SALMON AREA MAP

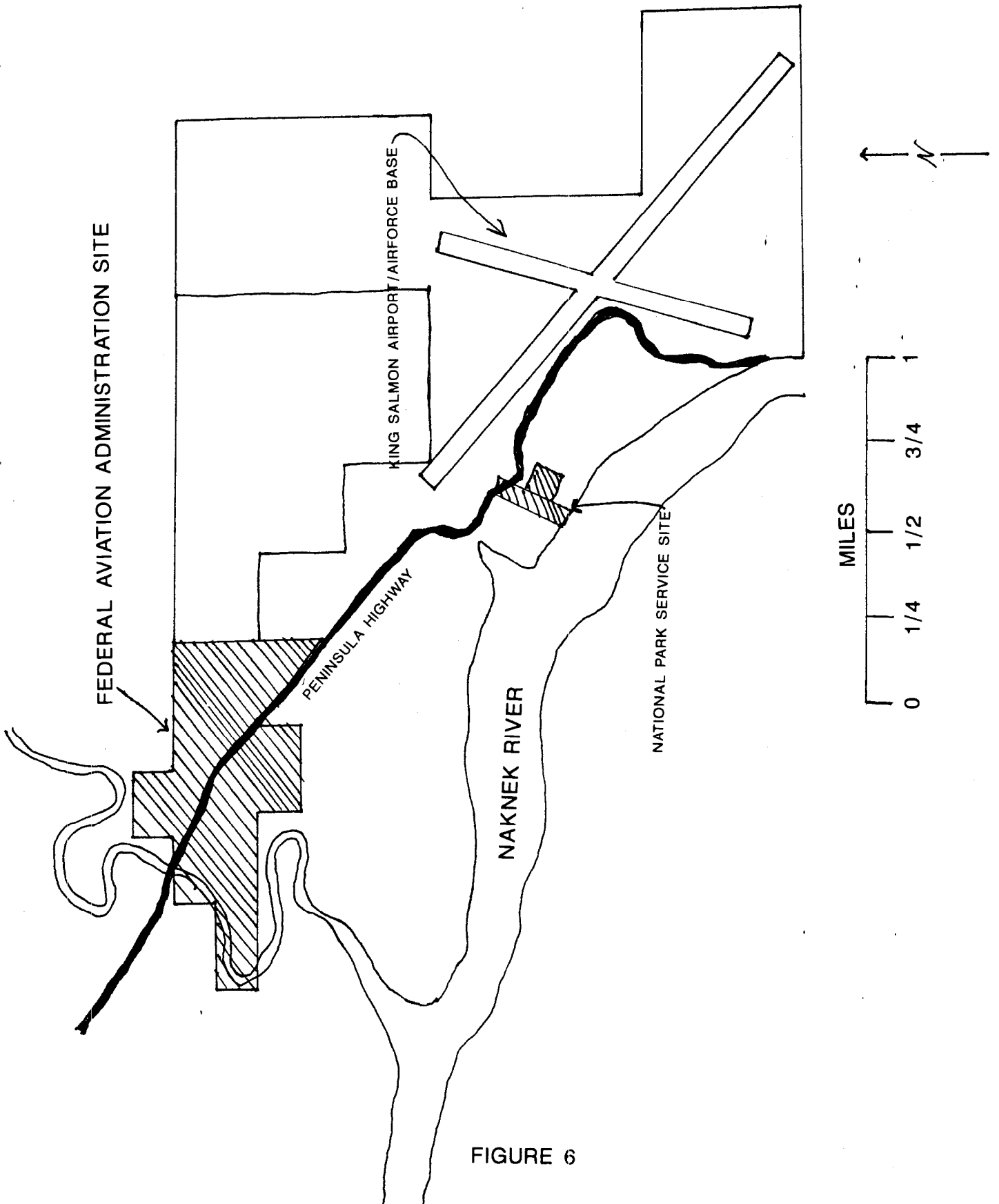


FIGURE 6