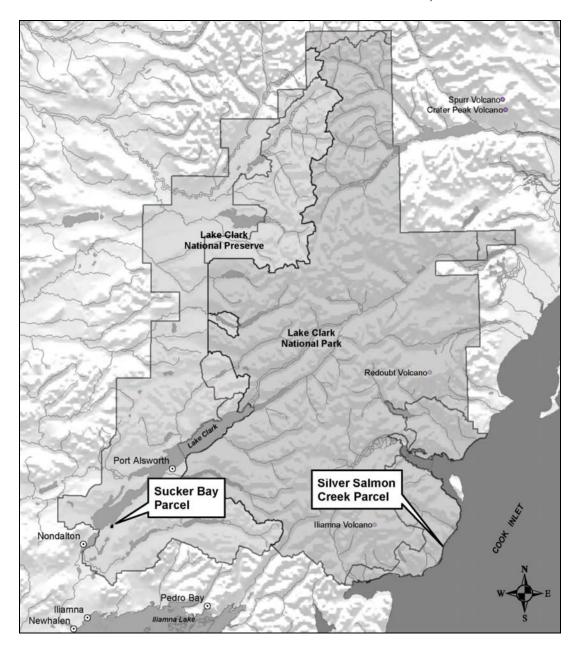
SUCKER BAY/SILVER SALMON CREEK LAND EXCHANGE ENVIRONMENTAL ASSESSMENT

LAKE CLARK NATIONAL PARK AND PRESERVE, ALASKA



UNITES STATES DEPARTMENT OF INTERIOR
NATIONAL PARK SERVICE

January 2007

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ACRONYMS AND ABBREVIATIONS

§ Section

ADFG Alaska Department of Fish and Game

ANILCA Alaska National Interest Lands and Conservation Act of 1980

BIA Bureau of Indian Affairs CAA Clean Air Act of 1977

CEQ Council on Environmental Quality
CFR Code of Federal Regulations
CIRI Cook Inlet Region Incorporated
EA Environmental Assessment

E.O. Executive Order

ESA Endangered Species Act of 1973 GMP General Management Plan

LACL Lake Clark National Park and Preserve
NEPA National Environmental Policy Act of 1969
NHPA National Historic Preservation Act of 1966

NPS National Park Service RF Rasmuson Foundation

RFFAs Reasonably Foreseeable Future Actions

SCF Southcentral Foundation Secretary Secretary of Interior

SHPO State Historic Preservation Office

U.S. United StatesU.S.C. United States Code

USFWS U.S. Fish and Wildlife Service

1.0 PURPOSE AND NEED

1.1 Purpose and Need for Action

The National Park Service (NPS) is considering a land exchange in Lake Clark National Park and Preserve (LACL). The properties are located near Sucker Bay and Silver Salmon Creek (Figure 1, located after page 6-1). The Southcentral Foundation (SCF) owns a 79.98-acre tract located on the southwestern shore of Lake Clark in the preserve at Sucker Bay (Figure 2, located after page 6-1) and wishes to exchange it for a 4.95-acre parcel near Silver Salmon Creek between Tuxedni and Chinitna Bays in the park owned by the NPS (Figure 3, located after page 6-1). Neither of the subject properties for the proposed land exchange is within existing or proposed wilderness areas.

The purpose of this land exchange is to facilitate park management and to resolve status issues. The proposed exchange would provide legal access and usury rights for SCF and their guests approximately 2 miles from the mouth of Silver Salmon Creek within Lake Clark National Park and situated along the west shore of Cook Inlet. The proposed exchange would also enhance fishery habitat management.

This land exchange would legitimize this long-established camp, safeguard the broader national interests for this park, and further the ability of the NPS to meet legislative conservation mandates. In particular, the proposed land exchange would allow the NPS:

- to protect critical sockeye (red) salmon spawning habitat for a genetic population unique to any other in Bristol Bay;
- to pursue the NPS legislatively mandated goal to protect Kvichak River sockeye salmon spawning habitat;
- to protect the majority of the spawning shoreline of Sucker Bay; and
- to pursue the NPS goal that emphasizes conservation objectives for the Lake Clark shoreline specifically.

This Environmental Assessment (EA) analyzes the Proposed and No-Action alternatives and their impacts on the environment. The EA has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and regulations of the Council on Environmental Quality (CEQ) (40 Code of Federal Regulations [CFR] 1508.9).

1.2 Background

1.2.1 History of the Sites

Silver Salmon Creek Parcel

Since early in the 1980s, but after establishment of LACL, Cook Inlet Region Incorporated (CIRI) established and has occupied a parcel of land approximately 2 miles southwest of the mouth Silver Salmon Creek within Lake Clark National Park. Small, rustic facilities have been either constructed or imported and the site has been occupied for over two decades. However, there are accounts of the land being used since the late 1970s.

The NPS allowed the camp to become established and be used because there was an on-going legal dispute arising from the Deficiency Conveyance Agreement with the federal government

concerning this and other parcels that were the focus of Native lands selections in court documents. CIRI represented the Native village corporation who believed it had rightfully selected and was entitled to conveyance of the land encompassing this parcel. In 2004, the Ninth Circuit Court of Appeals affirmed a lower court's ruling that decided the village was not entitled to conveyance of these lands.

Soon after the decision, NPS contacted CIRI to understand their intentions for the camp operation. SCF, a non-profit organization formed under CIRI, organized support and presented a formal land exchange proposal to legitimize and continue the camp and its non-profit activities.

Sucker Bay Parcel

The Sucker Bay parcel consists of 79.98 acres. The parcel was purchased by SCF in August 2006 to exchange with the NPS for the Silver Salmon Creek parcel. The parcel is presently vacant, and public use is restricted without permission of the landowner (currently SCF). The parcel has been minimally impacted by human use.

1.2.2 Park Purpose and Significance

The Alaska National Interest Lands and Conservation Act (ANILCA) of 1980 established LACL. Title I of ANILCA directs the NPS to preserve the natural and cultural resources in these conservation system units for the benefit, use, education, and inspiration of present and future generations. ANILCA Section (§) 201(7)(a) states:

"[LACL] shall be managed for the following purposes, among others: To protect the watershed necessary for perpetuation of the red salmon fishery in Bristol Bay; to maintain unimpaired the scenic beauty and quality of portions of the Alaska Range and the Aleutian Range, including active volcanoes, glaciers, wild rivers, lakes, waterfalls, and alpine meadows in their natural state; and to protect habitat for and populations of fish and wildlife including but not limited to caribou, Dall sheep, brown/grizzly bears, bald eagles, and peregrine falcons."

1.2.3 Laws, Regulations, and Policies

NPS Organic Act and General Authorities Act

The NPS Organic Act of 1916 directed the Secretary of the Interior (Secretary) and the NPS to manage national parks and monuments to:

"...conserve the scenery and the natural and historic objects and the wild life [sic] therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations" (16 United States Code [U.S.C.] 1).

The NPS Organic Act also granted the Secretary the authority to implement "rules and regulations as he may deem necessary or proper for the use and management of the parks, monuments, and reservations under the jurisdiction of the National Park Service" (16 U.S.C. 3).

The General Authorities Act of 1970 and amendments passed in 1978 to the NPS Organic Act expressly articulated the role of the national park system in ecosystem protection. The amendments further reinforce the primary mandate of preservation by stating:

"The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in light of the high public value and integrity

of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided for by Congress" (16 U.S.C. 1-a1).

Further, the NPS Organic Act and General Authorities Act prohibit the impairment of park resources and values. The 2001 NPS Management Policies use the terms "resources and values" to mean the full spectrum of tangible and intangible attributes for which the park is established and managed, including the NPS Organic Act's fundamental purpose and any additional purposes as stated in the park's establishing legislation. The park resources and values will continue to exist in a condition that will allow the American people to have present and future opportunities for enjoyment of them.

Alaska National Interest Lands and Conservation Act

ANILCA §1302(a) authorizes the Secretary to acquire (by purchase, donation, exchange, or otherwise) any lands or interests in lands within the boundaries of a conservation unit system. ANILCA §1302(h) specifically authorizes the Secretary to exchange lands or interests with regional native corporations. An exchange would need to be based on "equal value," with the option of using cash to equalize values as needed. However, if the parties agree and the exchange is in the public interest, the exchange could be made for other than equal value.

General Management Plan

The 1984 General Management Plan (GMP) for LACL is a broad planning document, setting general management direction for the park. The GMP indicates, "On the … shoreline of Lake Clark the National Park Service will examine a full range of options for protection, management, and use of existing nonfederal lands. Exchange will be given highest priority for native allotment lands if suitable exchange lands can be found."

1.2.4 Relationship of Proposal to Other Planning Projects

There is no known relationship between this project and other plans or projects.

1.3 Issues

To focus this EA, specific issues were selected for further analysis and eliminated others from evaluation. The issues in this EA are evaluated in Section 4.0, Environmental Consequences.

1.3.1 Issues Selected for Detailed Analysis

Water Resources and Fish

A primary purpose of LACL is the protection of fish and their habitat. The Sucker Bay property is located in an area that is used by spawning sockeye salmon. Human activities on the property could impact water resources and fish.

The Silver Salmon Creek property camp is located about 1/3 mile from Silver Salmon Creek and about 2 miles from its mouth. The parcels distance from the creek precludes any impact to the creeks water resources and fish.

Wildlife Habitat

The proposed land exchange would add about 80 additional acres of wildlife habitat to the Lake Clark National Preserve in the Sucker Bay area. Human use indirectly resulting from the

proposed land exchange could lead to habitat degradation and human-bear interactions in the Silver Salmon Creek area.

Land Use and Status

Exchanging the two parcels would change the land use and status. The Sucker Bay parcel, currently a private inholding, requires landowner permission for access. The exchange would open the parcel to area residents and park visitors for recreation, sport hunting, and sport fishing, and to resident zone communities for subsistence activities. The Silver Salmon Creek parcel is currently federally owned and located within the park; therefore, public access is permitted. This access would change if the land were transferred to SCF, a private entity.

Visual Resources/Aesthetics

The proposed land exchange would convey federal land to SCF, a private entity. Although SCF would manage the land in accordance with the land management plan, new development could occur that could impact the current viewshed.

Visitor Use

Although located within the boundaries of the preserve, the Sucker Bay parcel is a private inholding; hence public use is restricted unless authorized by the landowner. Recreation activities could be affected on the Sucker Bay property if the land exchange is completed because the parcel would become public land. Conversely, the Silver Salmon Creek parcel is federally owned land open to public use regardless of the current occupation by SCF, or their guests. In this case, the land exchange would impact visitor use because the parcel would become a private inholding.

1.3.2 Issues Dismissed from Further Analysis

NEPA regulations emphasize the importance of adjusting the scope of each EA to the particulars of the project and its setting, and focusing on the specific potential impacts of the project. There is no need, according to the regulations, to include information on resources that would not be affected by the project. The following impact topics were considered but dismissed from detailed analysis and are therefore not addressed further in this EA.

Environmental Justice

Executive Order (E.O.) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, requires all federal agencies to identify and address disproportionately high and adverse human health or environmental effects of their programs and policies on minorities and low-income populations and communities. This project would not result in significant changes in the socioeconomic environment of the area; therefore, the proposed land exchange is expected to have no direct or secondary impacts to minority or low-income populations or communities.

Subsistence

The ANILCA §810(a) Summary Evaluation and Finding concluded that the proposed action would not result in a significant restriction of subsistence uses at Silver Salmon Creek and would

open private land at Sucker Bay to subsistence uses. An ANILCA §810(a) Summary Evaluation and Findings is included in Appendix A.

<u>Threatened and Endangered Species</u>

The Endangered Species Act (ESA) requires an analysis of impacts on all federally listed threatened and endangered species, as well as species of special concern listed by the state of Alaska. In compliance with ESA §7, the United States Fish and Wildlife Service (USFWS) have been consulted. Steller's eiders (*Polysticta stelleri*), a threatened species, are known to winter along the coast near the boundaries of LACL. However, no federally designated threatened or endangered species are known to occur within the park, and none are anticipated to be affected by this plan. On November 1, 2006, USFWS concurred with this assessment (Appendix B).

Coastal Zone

The Proposed Action, the act of exchanging titles of two properties, does not include uses or activities that would require a consistency review of applicable Alaska and district coastal management enforceable policies. Therefore, this topic was dismissed from further analysis in this EA.

Wilderness

The proposed land exchange is not within an existing or proposed wilderness area; therefore, this topic was dismissed from further analysis in this EA.

Soundscape

No activities associated with the proposed land exchange would affect the soundscape in the area of potential effect; therefore, this topic was dismissed from further analysis in this EA.

Park Management

The parcels that would be exchanged do not include substantial amounts of land that would impact park management. While gaining ownership of the Sucker Bay property would provide the NPS resource managers the ability to regulate land use and other activities on the Sucker Bay parcel that would protect water resources necessary for the conservation of the Sucker Bay sockeye salmon stock, park management would not be impacted.

Vegetation and Soils

Soil surfaces and vegetation would not be impacted by the proposed land exchange; therefore, this topic was dismissed from further analysis in this EA.

Cultural Resources

Consideration of cultural resources is required under the National Historic Preservation Act (NHPA) of 1966 and NEPA. There are no known cultural or archeological resources present on the Sucker Bay or Silver Salmon Creek properties. Documentation is included in Appendix C.

Wetlands

E.O. 11990, *Protection of Wetlands*, requires all federal agencies to minimize the destruction, loss, or degradation of wetlands; and preserve and enhance the natural beneficial values of wetlands in the conduct of the agency's responsibilities for: 1) acquiring, managing, and disposing of federal lands and facilities; 2) providing federally undertaken, financed, or assisted construction and improvements; and 3) conducting federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. The proposed land exchange would not have an impact on wetlands or wetland values in the project areas; therefore, this topic was dismissed from further analysis in this EA and a statement of findings is not required.

Floodplains

E.O. 11988, *Floodplain Management*, requires all federal agencies to take action to reduce the risk of flood loss, to restore and preserve the natural beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. The proposed land exchange would not likely have any measurable impact on floodplains or floodplain values in the project areas; therefore, this topic was dismissed from further analysis in this EA.

Air Quality

No activities would occur in association with the proposed land exchange that would impact air quality within LACL; therefore, topic was dismissed from further analysis in this EA.

1.4 Permits and Approvals Needed to Implement the Project

Alaska National Interest Lands and Conservation Act Section 810 Analysis: ANILCA §810 requires the analysis of impacts on subsistence resources and lifestyles resulting from federal actions. Analysis of subsistence resources is provided in Appendix A, ANILCA §810(a) Summary Evaluation and Findings.

2.0 DESCRIPTION OF ALTERNATIVES

2.1 Introduction

This chapter includes a description of the alternatives and a table summarizing the impacts of the alternatives. The No Action Alternative and the Proposed Action (pursue a land exchange) are described here. Table 1 summarizes the impacts of each alternative.

2.2 Alternative 1 – No Action

Under the No Action Alternative, the NPS and SCF would not complete a land exchange. The NPS would retain the 4.95-acre parcel located near Silver Salmon Creek and SCF would retain the 79.98-acre parcel located at Sucker Bay on Lake Clark (Figure 2). The NPS would not authorize SCF use of the Silver Salmon Creek site. The No Action Alternative Alternative describes the status quo and provided a baseline against which to measure the impacts of the Proposed Action.

2.3 Alternative 2 – Proposed Action (the NPS Preferred Alternative)

The NPS would exchange a 4.95-acre parcel located near Silver Salmon Creek, which includes the Silver Salmon Creek camp, for a 79.98-acre parcel located along the southeast shore of Lake Clark at Sucker Bay owned by SCF (U.S. Survey No. 8481). The Silver Salmon Creek parcel is located in Lake Clark National Park. The Sucker Bay property is a private inholding located within the Lake Clark National Preserve. The following stipulations would apply to the land exchange:

- Costs associated with the land exchange would be paid by SCF. Such costs would
 include the survey and appraisal costs for the properties.
- The NPS would continue to permit SCF to use the Silver Salmon Creek parcel, pursuant to the existing agreement, until the land exchange is final.
- SCF would develop a formal land use plan outlining how SCF would use the
 exchanged lands and conduct activities on adjacent park lands, including off-road
 vehicle use and fishing activities.
- Commercial uses on the Silver Salmon Creek parcel would be prohibited and the NPS would have the right of first refusal in the event that SCF sells the parcel in the future.

2.4 Environmentally Preferred Alternative

The Environmentally Preferred Alternative is the alternative that will promote the national environmental policy expressed in NEPA §101(b) of the NPS DO-12 Handbook and Director's Order. The Proposed Action results in the least damage to the biological resources and environment while protecting, preserving, and enhancing the historic, cultural, and natural resources. Alternative 2 (NPS Preferred Alternative) is the environmentally preferred alternative because this alternative would result in a net gain of 79.98 acres of wildlife habitat and shoreline at Sucker Bay in Lake Clark National Preserve. Water quality and fish resources would be maintained by protection of the shoreline at Sucker Bay because the parcel would become part of the Lake Clark Preserve. The Lake Clark watershed provides habitat for one of the most

economically important salmon runs in Bristol Bay. Protection of this watershed is mandated in ANILCA §201(7)(a) as previously outlined in Section 1.2.2 of this document. This alternative would further the conservation goals of the NPS by protection of the Lake Clark watershed as well as the protection of the shoreline of Sucker Bay and adjacent spawning habitat for a genetically distinct population of sockeye salmon. Moreover, NPS ownership and management of the Sucker Bay parcel would maintain the unimpaired visual resources and aesthetics of the parcel, as well as permit visitor use to a previously restricted area.

2.5 Mitigating Measures

2.5.1 Land Use

The land exchange would include guidelines outlined in a formal land use plan for the Silver Salmon Creek parcel developed by SCF (Appendix D).

Table 1. Impact Comparison

Impact Topic	Alt. 1 – No Action Alternative	Alt. 2 – Proposed Action (Preferred Alternative)	
Water Resources and Fish	The No Action Alternative could result in negligible temporary impacts in the Sucker Bay area that would impact a genetically distinct population of sockeye salmon within the one of the world's most productive sockeye salmon habitats. Impacts in the Silver Salmon Creek area could result from soil compaction and run-off from existing activities.	The Proposed Action would provide protection to the shoreline of Sucker Bay as it would become part of the preserve. Impacts resulting from this protection of shoreline would help maintain the quality of water resources & fish in the Sucker Bay area. Negligible impacts in the Silver Salmon Creek area would result from soil compaction & run-off from existing activities.	
Wildlife Habitat	Wildlife habitat impacts in the Sucker Bay area would be negligible, stemming from continued limited existing use of the parcel due to its remote location. Impacts to wildlife habitat in the Silver Salmon Creek area from the No Action Alternative would result from human disturbance from existing activities which would be considered negligible.	The Proposed Action would result in a net gain of 79.98 acres of wildlife habitat into protected status and potentially small increases in hunting and subsistence activities on the Sucker Bay parcel. Under this alternative, 4.95 acres would be lost from protected park status, & slight increases in human use and disturbance could occur resulting in negligible impacts.	
Land Use and Status	Land use and status would remain unchanged under the No Action Alternative for the Sucker Bay and Silver Salmon Creek parcels.	Long-term minor impacts to land use and status on the Sucker Bay parcel would occur. Impacts would include a change in ownership from private to federally owned & changes in land use would be consistent with other federally owned and NPS managed parts of the park. Minor long-term impacts to land status (i.e., federally owned to privately owned) & negligible impacts to land use would be expected to occur on the Silver Salmon Creek parcel	
Visual Resources/Aesthetics	The No Action Alternative would not contribute any impacts to visual resources in the Sucker Bay area. In the Silver Salmon Creek area, minor impacts to visual resources would result from existing structures on the parcel.	The Proposed Action would contribute long-term but minor impacts to visual resources/aesthetics in the Sucker Bay area because no development would be permitted on the Sucker Bay property as part of the preserve. In the Silver Salmon Creek project area, negligible impacts to visual resources/aesthetics could result from this alternative.	
Visitor Use	Maintaining the Sucker Bay parcel in private ownership would continue to restrict dispersed or remote visitor use activities, thus contributing a negligible impact to visitor use. Negligible impacts to visitor use could occur because visitation could increase in the Silver Salmon Creek area.	The Proposed Action would make 79.98 acres available for public visitor use in the preserve and would also result in a loss of 4.95 acres available for visitor use in the park. Overall, these impacts would be negligible because of the size of LACL & other areas available for public visitor use.	

Notes: LACL = Lake Clark National Park and Preserve

3.0 AFFECTED ENVIRONMENT

This chapter describes the existing conditions at the project site and vicinity.

3.1 Project Area

LACL encompasses approximately 4,030,000 acres in southcentral Alaska approximately 100 miles southwest of Anchorage at the convergence of the Alaska and Aleutian mountain ranges. This proposed land exchange includes two areas approximately 70 miles apart.

The Sucker Bay parcel is located on the southeast shore of Lake Clark on Sucker Bay within the southwestern reaches of the preserve. U.S. Survey 8481 includes 79.98 acres that are currently owned by SCF. It is situated approximately 16.5 miles southwest of Port Alsworth, and approximately 7.5 miles northwest of Nondalton.

The project area that includes the Silver Salmon Creek parcel is approximately 1.5 miles from the Silver Salmon Creek Ranger Station, about 2 miles from the mouth of Silver Salmon Creek, and approximately 1/3 mile from the nearest point of the creek along the southeast boundary of the park formed by Cook Inlet. This parcel is located on the opposite side of the Chigmit Mountains approximately midway between Tuxedni and Chinitna Bays. The nearest village is Pedro Bay located approximately 50 miles southwest.

3.2 Water Resources and Fish

Sucker Bay

Sucker Bay is located on the southeast shore of Lake Clark, which is the sixth largest lake in Alaska. The lake is 41 miles long, 3.1 miles wide, and averages a depth of 350 feet. Lake Clark supports populations of Arctic grayling, lake trout, northern pike, whitefish, sockeye salmon, and Dolly Varden and provides important spawning and rearing habitat for sockeye salmon (*Oncorhynchus nerka*). Sucker Bay lies within "the Kvichak River drainage, which includes Iliamna Lake and Lake Clark watersheds [and] is one of the world's most productive spawning and rearing habitats for sockeye salmon" (Young 2005). Figure 4 illustrates that the Sucker Bay parcel is located adjacent to sockeye salmon spawning habitat. The Lake Clark watershed provides habitat for one of the most economically important salmon runs in Bristol Bay. Sockeye salmon in the hundreds of thousands (in some years millions) annually enter the lake to spawn in its tributaries.

The Sucker Bay Lake (adjacent to Sucker Bay) population of sockeye salmon is the most genetically distinct within the Kvichak River drainage. Currently, this population has reduced genetic diversity and reduced number of spawners. This could indicate that this population of sockeye salmon is susceptible to extinction (Woody et al. 2002). Water quality is generally considered excellent, although during the summer there is an increase in turbidity due to glacial flows.

Silver Salmon Creek

Silver Salmon Creek is located between Tuxedni and Chinitna Bays on the west shore of Cook Inlet. The creek originates in Silver Salmon Lake. The total length of the stream is approximately 1.5 miles. The maximum width of Silver Salmon Creek is about 200 feet in the intertidal area. The width decreases to 30 to 50 feet above the intertidal area. Depending on rainfall and seasonal

variation, the average depth in this area is approximately 2 to 3 feet. The parcel being considered for exchange is located approximately 1/3 mile from nearest point of the creek.

Alaska Department of Fish and Game (ADFG) aerial survey counts of coho (silver) salmon (*Oncorhynchus kisutch*) for Silver Salmon Creek began in 2000. The few surveys that have been conducted have not been collected systematically and reveal no escapement trends for the stream yet. However, a strong coho salmon run attracts anglers to the Silver Salmon Creek area in the last half of the summer. The stream is closed to salmon fishing within 1/2 mile of the outlet of Silver Salmon Lake and the lake itself is closed to salmon fishing. The sport fishery is small at Silver Salmon Creek according to ADFG Sport Fish Division mail survey results. Coho salmon are the target species and catch and release is a common practice. The harvest of a few humpback (pink) salmon (*O. gorbuscha*) and Dolly varden (*Salvelinus malma Walbaum*) is reported in some years. The magnitude of the fishery in Silver Salmon Creek cannot be estimated accurately due to the small number of anglers who fish there. However, NPS ranger reports indicate an average of 26 visitors to Silver Salmon Creek each day during the summer, and some private pilots and guides will take anglers to nearby Shelter or Polly Creeks due to crowding at Silver Salmon Creek (NPS 2006).

3.3 Wildlife Habitat

Sucker Bay

Large mammals, such as moose (*Alces alces*), black bear (*Ursus americanus*), and brown/grizzly bears (*U. arctos*) travel the Lake Clark shoreline. Caribou (*Rangifer tarandus*) occasionally occur in the area. The full suite of furbearers and small mammals, such as red fox (*Vulpes vulpes*), gray wolves (*Canis lupus*), lynx (*Lynx canadensis*), ermine (*Mustela sp.*), voles (*Clethrionmys sp.*) and shrews (*Sorex sp.*) occur throughout the area.

Silver Salmon Creek

The Silver Salmon Creek area is one of nine important salt marsh areas along the 200-kilometer Cook Inlet coast of the park, which provides critical foraging habitat for coastal brown bears (Bennett 1996). The largest salt marsh areas and greatest density of coastal brown bears are found near the heads of Tuxedni and Chinitna Bays. Brown bear densities (bears per square kilometer) were 7.1 at Glacier Spit Marsh in Chinitna Bay, 5.2 on the south side of Tuxedni Bay, and 0.8 at Silver Salmon Creek. It is important to note that salt marsh habitat provides extremely important forage for coastal brown bears from May until August when coho salmon appear in the local streams.

Gray wolf and coyote (*Canis latrans incolatus*) were observed in Tuxedni and Chinitna Bays from 2001 to 2003 (Putera personal communication) and undoubtedly occur along the Lake Clark National Park coastline.

River otter are abundant along the Lake Clark National Park coastline. Otter signs were most commonly observed in sand flats and rocky intertidal zones (Bennett 1996). Otters are long-lived top trophic-level carnivores (Larsen 1984) that may occur in densities of 0.2 and 0.8 animals per kilometer of shoreline in the Gulf of Alaska (Testa et al 1994).

Small mammal inventories were conducted in the Silver Salmon Lakes area and along the Johnson River in July 2003 (Cook and MacDonald 2004). Documented species included cinereus shrew (*Sorex cinereus*), montane shrew (*S. monticolus*), northern red-backed vole

(*Clethrionomys rutilis*), and two species of meadow jumping mouse (*Zapus hudsonius* and *Microtus pennsylvanicus*). All of these species are widely distributed and fairly common throughout their range.

At least one bald eagle (*Haliaeetus leucocephalus*) nest likely occurs in the Silver Salmon Creek vicinity. Coastal bald eagles generally nest in Sitka spruce (*Picea sitchensis*) within 100 meters of a water body (Bennett 1996). Bald eagles are commonly seen especially during the annual run of coho salmon in the creek.

Other viewable species found in salt marshes include sandhill cranes (*Grus Canadensis*), mergansers (*Mergus sp.*), and shorebirds in ponds, sloughs, and muddy margins.

3.4 Land Use and Status

Sucker Bay

The Sucker Bay parcel is a private inholding located in Lake Clark National Preserve, which consists of 1,410,000 acres. The parcel has been used for fishing and berry picking. Specific land uses permitted within the preserve boundaries on federal land include subsistence activities such as berry picking and hunting, sport hunting, sport fishing, and tourism and recreation. Land status within the preserve is divided amongst federal and private land. Land use and status in the vicinity is dominated by undeveloped Native corporation land used for subsistence, sport hunting, sport fishing, tourism and recreation land uses. There are some private inholdings scattered along the shore of Lake Clark that are used for commercial lodges or guiding services, some are used for residential purposes, and some are vacant.

Silver Salmon Creek

The Silver Salmon Creek parcel is located in Lake Clark National Park, which consists of 2,620,000 acres. Specific land uses permitted within the park boundaries include subsistence hunting, subsistence fishing, sport fishing, tourism, and recreation. Land status within the park is divided amongst federal and private land. The Silver Salmon Creek parcel is park land and has a fish camp operated by SCF. There are two private inholdings in the vicinity that are commercially operated lodges, and six private inholdings that are seasonal residences or recreation destinations in the vicinity of the Silver Salmon Creek parcel. Tourism and recreation (including sport fishing) are land uses in the vicinity of the subject parcel. Surrounding land is federally owned.

3.5 Visual Resources/Aesthetics

Sucker Bay

The Sucker Bay parcel is located within the boreal forest, which includes white spruce, black spruce muskeg, paper birch, balsam poplar, and bogs. This area is remote, and there is little evidence of human activity. Scenery to the west includes a lakefront view of Lake Clark. Mountains reaching heights of 3,000 feet encompass the eastern view.

Silver Salmon Creek

The view from the Silver Salmon Creek parcel contains young spruce (most are less than 20 feet tall), with younger spruce at varying stages growing below (Photo 1). Groundcover consists of predominately native grasses and other low-growing species. The preeminent feature of the

Silver Salmon Creek area is found in the middle ground view of salt marshes near the meandering creek. These productive flat areas attract grazing and consorting brown bears in May, June, and early July. Iliamna Volcano makes up the background view in the Silver Salmon Creek area. Saddle Mountain and Triangle Peak rise above 3,000 feet just northwest of Slope Mountain. The view to the east of the parcel is Cook Inlet (Photo 2).





Photo 1. Vegetation

Photo 2. Cook Inlet View

A structure comprised of two Atco trailers with a wooden frame covered in Rhinohide weatherproofing material (i.e., visqueen) to form a roof; the trailers are connected by decking would be visible from the beach. There is also a plywood storage shed covered in Rhinohide, a banya, a bunkhouse, an outhouse, and salvage material and refuse (Photo 3). These structures are not NPS facilities. Looking north from the Silver Salmon Creek property is a windmill. There is scattered human development in the area that includes an NPS ranger station and two tourist lodges.



Photo 2. Existing Structures

3.6 Visitor Use

Sucker Bay

Common recreation activities in the park and preserve include bird watching, camping and backpacking, day hiking, fishing, hunting, kayaking and canoeing, power boating, rafting, and wildlife viewing. There are a number of private lodges within the boundaries of LACL and along the shores of Lake Clark and one at Keyes Point (NPS 2006). There is a staffed visitor center approximately 16.5 miles northeast of Sucker Bay located at Port Alsworth that provides interpretive displays, a gift shop, and up-to-date information regarding activities and conditions. Approximately 300 to 400 visitors sign in annually, mostly during the summer months. The Sucker Bay property is currently a private inholding; therefore, public access to the parcel is restricted.

Silver Salmon Creek

Common visitor uses are the same for the Silver Salmon Creek area as for the Sucker Bay area. Silver Salmon Creek Lodge and Alaska Homestead Lodge, located near the subject parcel, offer guided fishing, sea kayaking, canoeing, coastal hiking, berry picking, bear viewing, and wildlife photography (Coray 2006, Isaak 2006). There is a permanent ranger station located at Silver Salmon Creek approximately 1.5 miles from the subject parcel that provides public information, guidance, and emergency support. In 2004, over 250 people disembarked from private planes that landed on the beach, most of them for the purpose of sport fishing in the creek. The NPS staff have estimated that visitation to Silver Salmon Creek increased 44 percent between 2000 and 2003. SCF estimates that each summer for approximately 30 to 40 days, 5 people per day visit and stay at the Silver Salmon Fish Camp.

4.0 ENVIRONMENTAL CONSEQUENCES

4.1 Introduction

This chapter provides an evaluation of the potential impacts of the alternatives on the resources described in Chapter 1, Purpose and Need for Action and Issues Selected for Detailed Analysis.

4.2.2 Impact Criteria and Assessment

Impacts identified for each issue brought forward are based on the duration, extent, and intensity of the impact. Summary impact levels (characterized as negligible, minor, moderate, or major) are given for each issue topic. Impact level thresholds are defined in Table 2.

Table 2. Resource Assessment Impact Levels

Impact Level	Negligible	Minor	Moderate	Major
Intensity	Little or no impact to the resource would occur; any change that might occur may be perceptible but difficult to measure.	Change in a resource would occur, but no substantial resource impact would result. The change in the resource would be perceptible but would not alter the condition of the resource.	Noticeable change in a resource would occur and this change would alter the condition or appearance of the resource, but the integrity of the resource would remain.	Substantial impact or change in a resource area would occur that is easily defined and highly noticeable, and that measurably alters the condition or appearance of the resource.
Extent	None	Localized – Impact would occur only at alternative site or its immediate surroundings, and would not extend into the region.	Wide Area of Park – Impact would affect the resource on a regional level, extending well beyond the immediate alternative site.	Park Wide – Impact would affect the resource throughout the park, potentially, extending well beyond the region or park as a whole.
Duration	None	Temporary – Impact would occur only during the implementation of the project. After the project, the resource conditions would return to pre-project conditions.	Short-term – Impact would extend beyond the time of the project, but would not last more than 2 years.	Long-term – Impact would likely last more than 2 years and may continue beyond the lifetime of the project.

4.2.3 Relevant Past, Present, and Reasonably Foreseeable Future Actions

Past, present, and reasonably foreseeable future actions (RFFAs) within the project areas that could contribute to impacts on the issue topics analyzed in this EA are listed here.

Past or present actions:

• Increases in tourism have prompted the growth of sport hunting and fishing lodges in the area.

- Silver Salmon Creek Ranger Cabin is a modest-sized cabin, two toilets, and modest systems for potable water and waste disposal completed in 2005.
- Operation of the Silver Salmon Creek Lodge, which was established in 1983.
- Operation of the Alaska Homestead Lodge established in 1994, which was homesteaded in the early 1950s.
- Operation of the Silver Salmon Fish Camp, which was established in the early 1980s.

Reasonably Foreseeable Future Actions:

- Removal of existing structures at the Silver Salmon Fish Camp (Cumulative case for No Action Alternative only).
- Upgrades to the Silver Salmon Fish Camp that would not alter the existing footprint such as replacing the Atco trailers and Visqueen tents with more permanent structures (Cumulative case for Proposed Action only).
- Full-time caretaker during the summer months at the Silver Salmon Fish Camp (Proposed Action only).

4.3 Impacts of the No Action Alternative

4.3.1 Water Resources and Fish

Sucker Bay

The Sucker Bay property is located in an area used by a genetically distinct and declining population of spawning sockeye salmon. Maintaining the parcel in private ownership would likely result in small fuel spills from planes or boats that would be used by the current property owners to access the land. Typically, these types of spills are small in size with only negligible, temporary impacts to water quality and fish.

Silver Salmon Creek

Maintaining federal ownership and the continued operation of the camp would likely contribute a negligible impact to water resources and fish because of soil compaction and run-off from existing activities.

Cumulative Impacts

There are no RFFAs in the Sucker Bay project area. Maintaining private ownership of this parcel could provide opportunities for more frequent access and/or commercial/tourism development. This could impact the quality of water resources and fish because of increased access and use that would accompany these activities and the Sucker Bay parcel is adjacent to spawning habitat for a genetically distinct and declining population of sockeye salmon. However, this alternative would have a negligible contribution to cumulative impacts on water resources and fish in the project area.

The cumulative impacts in the Silver Salmon Creek area would be dominated by past and present actions including tourism resulting from and fishing lodges. The removal of the Silver Salmon Fish Camp is an RFFA that could contribute negligible cumulative impacts in the Silver Salmon Creek area because it is likely that fewer people would visit the area, thus reducing the potential for impacts to water resources and fish.

Conclusion

The No Action Alternative could result in negligible temporary impacts in the Sucker Bay area that would impact a genetically distinct population of sockeye salmon within one of the world's most productive sockeye salmon habitats. Impacts in the Silver Salmon Creek area could result from soil compaction and run-off from existing activities. The level of impact on water resources and fish would not result in any impairment of park resources fulfilling specific purposes identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.3.2 Wildlife Habitat

Sucker Bay

If the proposed land exchange does not occur, the Sucker Bay parcel would remain a private inholding that the landowner (currently SCF) could continue to access for sport hunting and fishing. The level of use is not likely to increase markedly because of its remote location and would not increase disturbance to wildlife or decrease the quality of wildlife habitat. Impacts to wildlife habitat resulting from human disturbance would likely be negligible because there are abundant un-fragmented areas that provide wildlife habitat on surrounding lands, and this parcel is not known to provide habitat for any niche species.

Silver Salmon Creek

Current human use levels would likely stay the same or increase slightly if this parcel remained in federal ownership and the operation of the fish camp continued, which could result in human disturbance to wildlife habitat. This alternative would keep the 4.95-acre parcel closed to sport hunting but open sport fishing would still be an option for visitors. However, these are negligible impacts to wildlife habitat given the relatively small size of the parcel.

Cumulative Impacts

There are no RFFAs in the Sucker Bay area. The No Action Alternative would likely contribute a negligible cumulative impact to wildlife because there are no RFFAs proposed and this property is remote. Although visitation by the current owners might increase and a small amount of development could occur, it is not anticipated that any development would fragment habitat or displace wildlife.

Cumulative impacts would be dominated by past and present actions. The Silver Salmon Fish Camp, the ranger cabin, and two lodges in the Silver Salmon Creek area have likely had a minor impact on wildlife habitat because of increased human presence and disturbance in the area. The removal of the existing structures at the Silver Salmon Fish Camp is an RFFA that could contribute to cumulative impacts in this area by increasing the amount of wildlife habitat.

Conclusion

Wildlife habitat impacts in the Sucker Bay area would be negligible, stemming from continued limited existing use of the parcel due to its remote location. Impacts to wildlife habitat in the Silver Salmon Creek area from the No Action Alternative would result from human disturbance from existing activities which would be considered negligible. The level of impact on wildlife habitat would not result in any impairment of park resources fulfilling specific purposes

identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.3.3 Land Use and Status

Sucker Bay

There would be no impacts to land use or status resulting from the No Action Alternative. The land would remain privately owned and it is expected that land use would remain as it is currently because there are no reasonably foreseeable plans for development.

Silver Salmon Creek

Land use and status would remain relatively the same under the No Action Alternative.

Cumulative Impacts

Private inholdings in the vicinity of both areas have contributed to land use patterns by establishing land status, which has determined lands used for recreation, commercial, or residential purposes.

Cumulative impacts in the Sucker Bay area would be dominated by past actions. There are no RFFAs in the Sucker Bay project area that would contribute cumulative impacts to land use and status in the project area. There would be no contribution by this alternative to cumulative impacts on land use and status in the Sucker Bay area.

In the cumulative case the removal of existing structures on the Silver Salmon Creek parcel would return the land to its natural state as forest/habitat and recreation land that is federally owned.

Conclusion

Land use and status would remain unchanged under the No Action Alternative for the Sucker Bay and Silver Salmon Creek parcels.

4.3.4 Visual Resources/Aesthetics

Sucker Bay

There would be no impacts to visual resources resulting from the No Action Alternative.

Silver Salmon Creek

The Silver Salmon Creek parcel would continue to be a visual intrusion on the surrounding natural setting. The facilities would be a minor impact to visual resources in the area.

Cumulative Impacts

There are no RFFAs in the Sucker Bay project area, and no direct or indirect impacts are expected to result from the No Action Alternative. Therefore, this alternative would not contribute to cumulative impacts on visual resources in the project area. Cumulative impacts would be dominated by past actions.

In the cumulative case the removal of existing structures on the Silver Salmon Creek parcel would restore the visual character of the area to a more natural state.

Conclusion

The No Action Alternative would not contribute any impacts to visual resources in the Sucker Bay area. In the Silver Salmon Creek area, minor impacts to visual resources would result from existing structures on the parcel. The level of impact on visual resources/aesthetics would not result in any impairment of park resources fulfilling specific purposes identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.3.5 Visitor Use

Sucker Bay

Although located within the preserve, public access is restricted to the owners of the property because the parcel is a private inholding. This alternative would keep the parcel in private ownership thus continuing to restrict dispersed or remote visitor use activities. However, this parcel is less than 80 acres within more than 3.6 million acres that a tourist can visit; therefore, this is considered a negligible impact.

Silver Salmon Creek

Maintaining the Silver Salmon Creek parcel in federal ownership would result in no change in visitor use for the primary users of the Silver Salmon Creek parcel. This action would have a negligible impact to visitor use in the project area because the parcel is 4.95 acres and a change in levels of visitor use would likely be imperceptible.

Cumulative Impacts

There are no RFFAs in the Sucker Bay project area. Cumulative impacts on visitor use in the project area would be dominated by past actions. Although the Sucker Bay parcel would remain a private inholding with no public access for visitor use opportunities, there are many alternate places for recreationists to visit for any variety of visitor use activities. For this reason, the No Action Alternative would have a negligible contribution to cumulative impacts to visitor use in the project area.

Cumulative impacts to visitor use in the Silver Salmon Creek area would also be dominated by past actions. However, removal of the existing fish camp is an RFFA that would be expected to have a negligible contribution to cumulative impacts to visitor use in the area. The existing structures give an indication that the parcel is privately owned land and therefore likely discourages visitor use.

Conclusion

Maintaining the Sucker Bay parcel in private ownership would continue to restrict dispersed or remote visitor use activities, thus contributing a negligible impact to visitor use. Negligible impacts to visitor use could occur because visitation would likely remain unchanged in the Silver Salmon Creek area.

4.4 Impacts of the Proposed Action (the NPS Preferred Alternative)

4.4.1 Water Resources and Fish

Sucker Bay

The proposed land exchange would provide protection to a portion of shoreline at Sucker Bay. This would result in a long-term (lasting more than 2 years) but minor impact to water resources and fish. This alternative could help maintain the quality of water resources and fish because the property would become part of the preserve with the commensurate protections. Human disturbance that could lead to erosion and contaminated runoff (e.g., from human waste) would be limited with the parcel in public ownership because the property would be one small piece of over 3.6 million acres of parkland available to visitors.

Silver Salmon Creek

Transferring the Silver Salmon Creek parcel to private ownership would likely maintain current human use levels. The existing fish camp's rustic accommodations, including an outhouse, and a well for potable water would likely maintain the quality of water resources and fish in the area. The proposed action would likely contribute long-term negligible impacts to water resources and fish because the rustic amenities help prevent and ease impacts, such as erosion and run-off, to water resources and fish.

Cumulative Impacts

There are no RFFAs in the Sucker Bay area. The Proposed Action would contribute a negligible cumulative impact to water resources and fish because this action would afford protection of land adjacent to spawning habitat for a genetically distinct population of sockeye salmon.

Future upgrades to the Silver Salmon Fish Camp are RFFAs that would likely contribute to cumulative impacts in the area. Although the footprint of the fish camp is not expected to change, removal of existing trailers and construction of a new structure could contribute to soil compaction and run-off. Impacts from future upgrades to the fish camp would be temporary and localized, and otherwise negligible.

Conclusion

The Proposed Action would provide protection to the shoreline of Sucker Bay as it would become part of the preserve. Impacts resulting from this protection of shoreline would help maintain the quality of water resources and fish in the Sucker Bay area. Negligible impacts in the Silver Salmon Creek area would result from soil compaction and run-off from existing activities. The level of impact on water resources and fish would not result in any impairment of park resources fulfilling specific purposes identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.4.2 Wildlife Habitat

Sucker Bay

The Proposed Action would result in a net gain of 79.98 acres of wildlife habitat into protected status. As part of the preserve, sport hunting would be allowed on the property in addition to subsistence activities. However, it is expected that few, if any, people would utilize this land for those purposes, because the adjacent land is privately owned, and the nearest guiding outfits are located in Port Alsworth, which is almost 17 miles away. These activities could lead to increased disturbances to wildlife thus decreasing the quality of habitat. Overall, the Proposed Action would contribute negligible impacts to wildlife habitat.

Silver Salmon Creek

The Proposed Action would result in a net loss of 4.95 acres of wildlife habitat from protected status. However, this would be considered a negligible impact because the property is hardened by decades of human use and is a small portion of the park. The Silver Salmon Creek area is renowned as high quality brown bear habitat and good silver salmon fishing. The Proposed Action could result in increased human use that could lead to habitat degradation and increased human-bear interactions. The area provides critical foraging habitat for brown bears; however, these bears are somewhat habituated to the presence of humans because of the existing surrounding developments. Therefore, this alternative would likely generate negligible impacts to wildlife habitat.

Cumulative Impacts

There are no RFFAs in the Sucker Bay area. If the proposed land exchange occurs, the property would have the same protections as other parcels included in the preserve under federal ownership and NPS management. Therefore, no development would occur and wildlife habitat would remain as it is today or improve. Because the additional habitat is less than 80 acres within a 3.6 million acre park and preserve, this would generate a negligible impact to wildlife habitat.

The Silver Salmon Fish Camp, the ranger cabin, and two lodges in the Silver Salmon Creek area have likely had a minor impact on wildlife habitat because of increased human presence and disturbance in the area. It is reasonably foreseeable that a full-time caretaker would reside at the Silver Salmon Fish Camp during the summer, which could increase human-wildlife interactions thus increasing the level of habituation wildlife has with humans. This alternative would provide a negligible contribution to cumulative impacts on wildlife habitat as wildlife in the project area is already somewhat habituated to humans because of the current level of development.

Conclusion

The Proposed Action would result in a net gain of 79.98 acres of wildlife habitat into protected status and potentially small increases in hunting and subsistence activities on the Sucker Bay parcel. Under this alternative, 4.95 acres would be lost from protected park status, and slight increases in human use and disturbance could occur resulting in negligible impacts. The level of impact on wildlife habitat would not result in any impairment of park resources fulfilling specific purposes identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.4.3 Land Use and Status

Sucker Bay

The land status of the Sucker Bay parcel would change from privately owned to federally owned public land as a result of the Proposed Action. Land uses could also change and could include subsistence activities, sport hunting, sport fishing, and visitor use. These impacts would be considered long-term and minor because the status would last more than 2 years and the change in land use would be noticeable but localized. Increased visitor use could add to incidental and intentional trespass on private land because the adjacent lands are privately owned and access to those parcels is restricted unless specifically authorized by the landowners. This impact would also be considered negligible because the likelihood that visitor use would increase at this particular parcel is low.

Silver Salmon Creek

Long-term but minor impacts of the Proposed Action include a change in land status from federal to private ownership, and a negligible impact to land use would occur. Although the land would continue to be used for recreation by SCF and their guests, a long-term permit would no longer be needed, as it would be privately owned. Land uses would be determined by the covenants that would run with the title to the land.

Cumulative Impacts

Past and present actions would dominate cumulative impacts to land use and status in the project areas. Private inholdings in the vicinity of both areas have contributed to land use patterns by establishing land status, which has determined lands used for recreation, commercial, or residential purposes.

There are no RFFAs in the Sucker Bay project area that would contribute to cumulative impacts to land use and status. Adjacent land status includes privately owned land, and land uses likely are dominated by subsistence activities and restricted visitor use. Other impacts to land use could include new management guidelines carried forward by the NPS; however, they would assimilate with the current land management. Thus it is reasonable to assume that any change in land use and status resulting from the Proposed Action might be imperceptible, and therefore contribute negligible cumulative impacts to land use and status.

Past and present actions would dominate cumulative impacts in the Silver Salmon Creek area. The Proposed Action would contribute long-term but minor cumulative impacts to land use and status in the area primarily because of the contribution of direct and indirect impacts.

Conclusion

Long-term minor impacts to land use and status on the Sucker Bay parcel could take place if the proposed land exchange occurs. Impacts would include a change in ownership from private to federally owned and potential changes in land use would be consistent with other federally owned and NPS managed parts of the park. Long-term minor impacts to land status (i.e., federally owned to privately owned) and negligible impacts to land use would be expected to occur on the Silver Salmon Creek parcel with the Proposed Action.

4.4.4 Visual Resources/Aesthetics

Sucker Bay

The proposed land exchange would transfer this property to the NPS, thus extending commensurate protections to visual resources in the project area because the parcel would become part of the preserve. Impacts to visual resources would be long-term, lasting more than 2 years, but otherwise minor.

Silver Salmon Creek

Impacts to visual resources would be expected to be negligible because any future alteration or development to the landscape of the parcel would correspond with current and future management guidelines.

Cumulative Impacts

Cumulative impacts on visual resources/aesthetics in both areas would be dominated by past actions. There are no RFFAs in the Sucker Bay project area. The Proposed Action would have a minor contribution to cumulative impacts on visual resources/aesthetics because the Sucker Bay property would become part of the preserve protections commensurate with preserve status would ensue. This alternative would have a negligible contribution to cumulative impacts on visual resources/aesthetics in the area.

A future upgrade to the Silver Salmon Fish Camp could contribute negligible cumulative impacts to visual resources/aesthetics in the area. Facility upgrades would not alter the existing footprint of the camp, but would alter the appearance of the current structures.

Conclusion

The Proposed Action would contribute minor impacts lasting more than 2 years to visual resources/aesthetics in the Sucker Bay area because no development would be permitted on the Sucker Bay property as part of the preserve. In the Silver Salmon Creek project area, negligible impacts to visual resources/aesthetics could result from this alternative The level of impact on visual resources/aesthetics would not result in any impairment of park resources fulfilling specific purposes identified in LACL enabling legislation, or that are essential to the cultural integrity of the park and preserve.

4.4.5 Visitor Use

Sucker Bay

If the land exchange were completed, a resulting net gain of 79.89 acres would be available for public visitor use in perpetuity to a previously restricted area. This would benefit the public by opening access to this area. Visitor use opportunities would increase, but visitation may not increase. Impacts would be considered negligible because this parcel is less than 80 acres within over 3.6 million acres of parkland available for visitor use.

Silver Salmon Creek

The Silver Salmon Creek parcel would become a private inholding under this alternative, thus available for visitor use only to SCF and their guests. This would be considered a negligible impact because the property is small, and there are many other areas for public visitor use. Visitor use to the Silver Salmon Creek area is not expected to increase far beyond current levels.

Cumulative Impacts

Cumulative impacts on visitor use in both areas would be dominated by past actions. There are no RFFAs in the Sucker Bay area. The proposed land exchange would have a negligible impact to cumulative impacts on visitor use in the area because the area is remote and difficult to access. Thus, few visitors would be expected to visit the new addition to the preserve.

There are no RFFAs that would be expected to contribute to cumulative impacts on visitor use in the project area. Although the Silver Salmon Creek parcel would become a private inholding as a result of the proposed land exchange (i.e., not an area open for public visitor use), the property is less than 5 acres, and visitors to the park have access to many other areas. The area has not, in

practice, been used for public visitor use in recent years. For these reasons, the proposed land exchange would have a negligible impact to cumulative impacts on visitor use in the project area.

Conclusion

The Proposed Action would make 79.98 acres available for public visitor use in the preserve and would also result in a loss of 4.95 acres available for visitor use in the park. Overall, these impacts would be negligible because of the size of LACL and other areas available for public visitor use.

5.0 CONSULTATION AND COORDINATION

5.1 Agency Consultation and Coordination

U.S. Fish and Wildlife, Endangered Species Program: *Greg Balough, Branch Chief, was contacted via email November 1, 2006 for Endangered Species Act, Section 7 informal consultation.*

The LACL Cultural Resources program sent 29 letters to Alaska Native Organizations, local communities, and interested parties requesting information concerning historic or traditional use of the Silver Salmon Creek parcel. Neither the Nondalton City Council nor the Pedro Bay Corporation both knew any cultural resources associated with the Silver Salmon Creek parcel.

The NPS has determined that consultation is not required with State Historic Preservation Office (SHPO) or with tribal entities because there are no known cultural resources located on either property.

5.2 Preparers

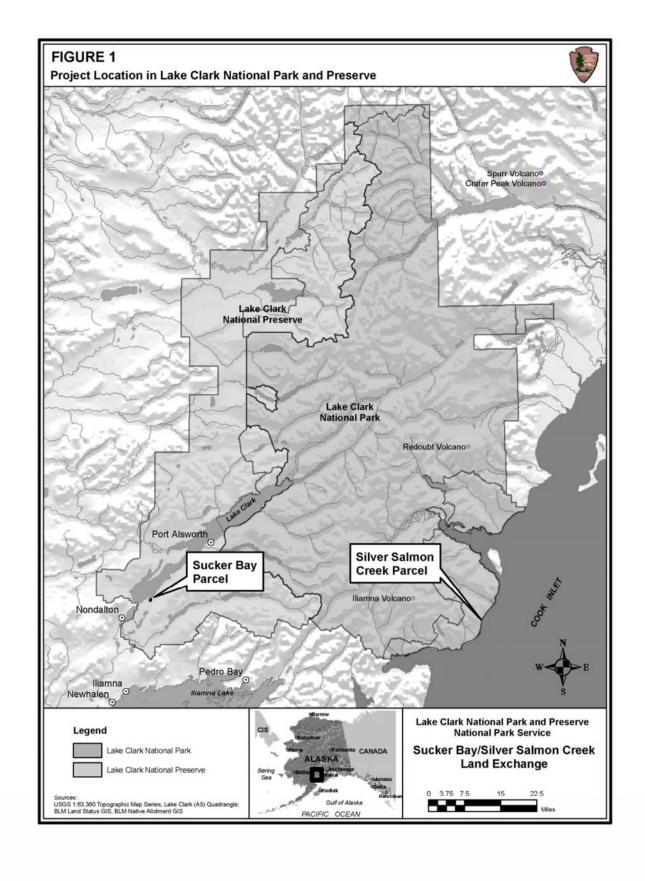
Luke Boggess, GISP – URS Corporation, GIS Specialist
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Tonya Messier – URS Corporation, Word Processing
Pauline Ruddy, B.S. – URS Corporation, Environmental Scientist
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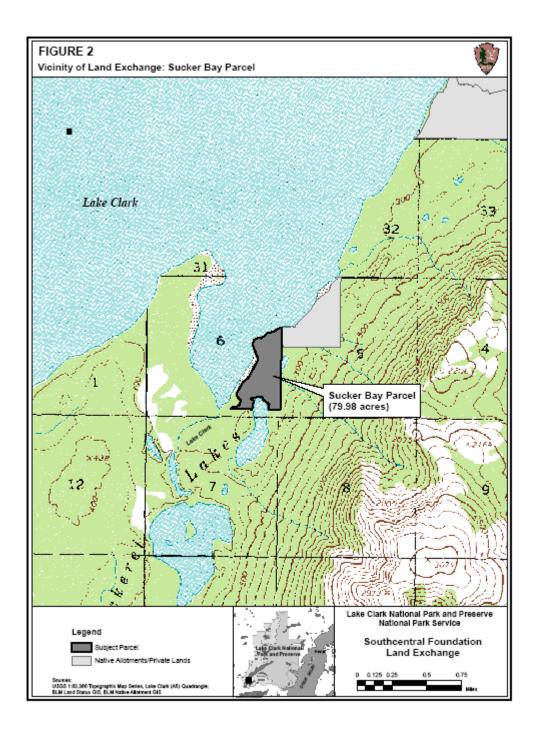
5.3 Contributors/Advisors

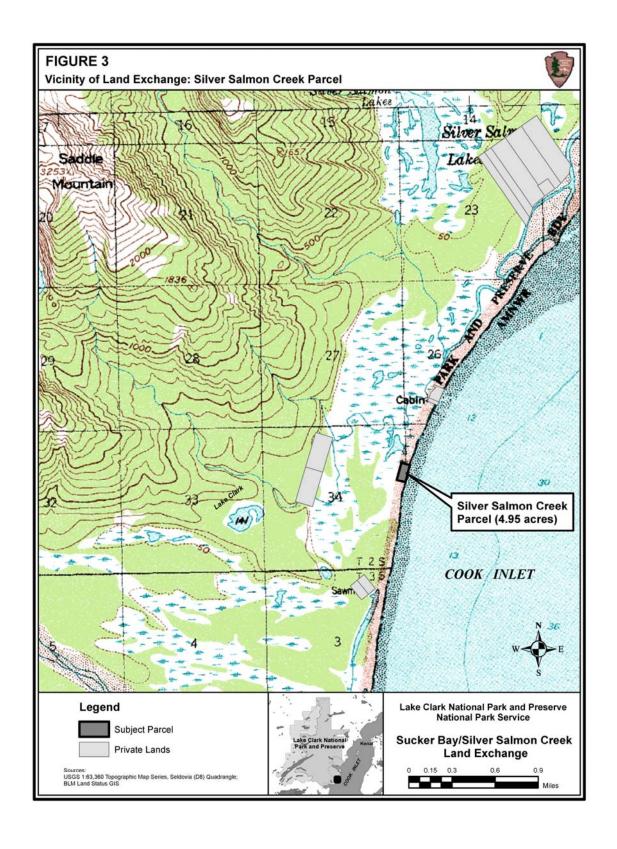
Joel Hard, Superintendent, Lake Clark National Park and Preserve Jeanne Schaaf, Chief Cultural Resources, Lake Clark National Park and Preserve Dale Vinson, Archeologist, Lake Clark National Park and Preserve Judy Putera, Biologist, Lake Clark National Park and Preserve Glen Yankus, Environmental Protection Specialist, NPS Alaska Regional Office

6.0 REFERENCES

- Bennet, A. 1996. Physical & Biological Resource Inventory of the Lake Clark National Park-Cook Inlet Coastline, 1994 1996. Lake Clark National Park and Preserve, Kenai Coastal Office.
- Cook, J.A., and MacDonald, S.O. 2004. Mammal Inventory of Alaska's National Parks and Preserves. Lake Clark National Park and Preserve. Annual Report 2003.
- Coray, D. 2006. Silver Salmon Creek Lodge. Retrieved on November 25 from: http://www.silversalmoncreek.com/index.htm
- Isaak, J. 2006. Alaska Homestead Lodge. Retrieved on November 27 from: http://www.alaskawildlife.com/index.htm
- Larson, 1984. in Bennet, A. 1996. Physical & Biological Resource Inventory of the Lake Clark National Park-Cook Inlet Coastline, 1994-96. Lake Clark National Park and Preserve, Kenai Coastal Office.
- Putera, J. in U.S. Department of the Interior, National Park Service. 2005. Silver Salmon Creek Ranger Station EA. Personal communication.
- Testa, et. al. 1994 in Bennet, A. 1996. Physical & Biological Resource Inventory of the Lake Clark National Park-Cook Inlet Coastline, 1994 1996. Lake Clark National Park and Preserve, Kenai Coastal Office.
- Woody, et. al. 2002. Summary of OSM Final Report No. FIS 01-042, Lake Clark Population Assessment Research. USGS Biological Resource Division.
- U.S. Department of the Interior, National Park Service (NPS). 2006. Lake Clark information website. Retrieved on November 24, 2006 from: http://www.nps.gov/lacl/index.htm
- ____. 2000. 2001 Management Policies, 08 December 2000.
- Young, D. B. 2005. Distribution and Characteristics of Sockeye Salmon Spawning Habitats in the Lake Clark Watershed, Alaska. Technical Report/the NPS/NRWRD/NRTR-2005/338. NPS.







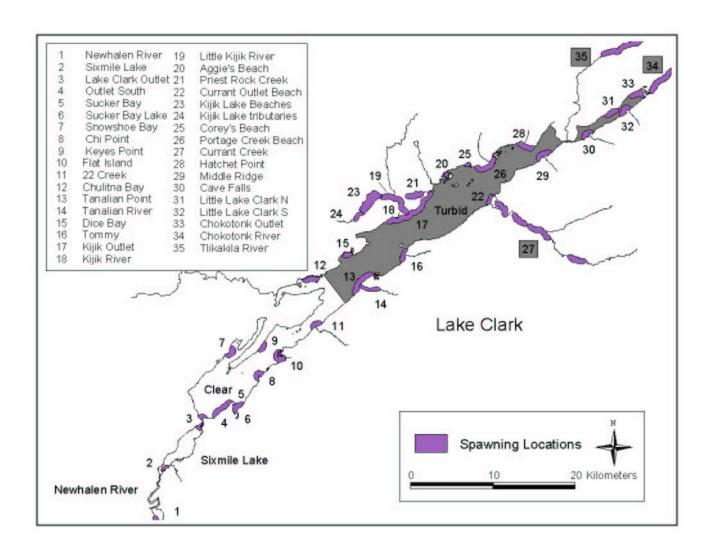


Figure 4. Sockeye Salmon Spawning Habitat at Sucker Bay

Source: (Young 2005)

APPENDIX A

Alaska National Interest Land Conservation Act (ANILCA), Section 810(a) Summary Evaluations and Findings

I. INTRODUCTION

This section was prepared to comply with Title VIII, Section 810 of the Alaska National Lands Conservation Act (ANILCA). It summarizes the evaluations of potential restrictions to subsistence uses that could result from proposed actions by Lake Clark National Park and Preserve to exchange a 4.95 acre parcel at Silver Salmon Creek in Lake Clark National Park for a 79.98 acre tract owned by the Southcentral Foundation (SCF) located along the southeast shore of Lake Clark at Sucker Bay in Lake Clark National Preserve.

II. 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 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...and (C) reasonable steps will be taken to minimize adverse impacts upon subsistence uses and resources resulting from such actions."

When Congress passed ANILCA in 1980, it expanded the national park system in Alaska by creating new parks, monuments and preserves and making additions to existing units. In establishing these new park areas, ANILCA Title II states the purposes for which Congress created each unit and the outlines the human uses and activities that may be permitted. ANILCA Title II Section 201(7)(a) states the following purposes for Lake Clark National Park and Preserve:

"To protect the watershed necessary for perpetuation of the red salmon fishery in Bristol Bay; to maintain unimpaired the scenic beauty and quality of portions of the Alaska Range and the Aleutian Range, including active volcanoes, glaciers, wild rivers, lakes, waterfalls, and alpine meadows in their natural state; and to protect habitat for and populations of fish and wildlife including but not limited to caribou, Dall sheep, brown/grizzly bears, bald eagles, and peregrine falcons... Subsistence uses by local residents shall be permitted in the park where such uses are traditional in accordance with the provisions of Title VIII."

ANILCA Section 810 (a) further requires that the potential for significant restriction of subsistence uses by a proposed action be evaluated on "...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."

III. PROPOSED ACTION ON FEDERAL PUBLIC LANDS

Lake Clark National Park and Preserve proposes to exchange a 4.95 acre parcel at Silver Salmon Creek in Lake Clark National Park for a 79. 98 acre tract owned by the Southcentral Foundation (SCF) located along the southeast shore of Lake Clark at Sucker Bay in Lake Clark National Preserve, with the following provisions:

- Costs associated with the land exchange would be paid by SCF. Such costs would include the survey and appraisal costs for the properties.
- The NPS would continue to permit SCF to use the Silver Salmon Creek parcel, pursuant to the existing agreement, until the land exchange is final.
- SCF would develop a formal land use plan outlining how SCF would use the exchanged lands and conduct activities on adjacent park lands, including off-road vehicle use and fishing activities.
- Commercial uses on the Silver Salmon Creek parcel would be prohibited and the NPS would have the right of first refusal in the event that SCF sells the parcel in the future.

IV. AFFECTED ENVIRONMENT

This section presents summaries of the affected environments pertinent to subsistence uses at Lake Clark National Park and Preserve.

SILVER SALMON CREEK IN LAKE CLARK NATIONAL PARK

Lake Clark National Park and Preserve was established in 1980 by Title II Section 201(7) of ANILCA and is located in Southcentral Alaska adjacent to Cook Inlet to the east and Iliamna Lake to the south. Subsistence uses are allowed within Lake Clark National Park and Preserve in accordance with Title II, Section 201(1) and Title VIII of ANILCA.

Section 803 of ANILCA defines subsistence uses as: "the customary and traditional uses by rural Alaska residents of wild, renewable resources for direct personal or family consumption as food, shelter, fuel, clothing, tools, or transportation; for the making and selling of handicraft articles out of non-edible by-products of fish and wildlife resources taken for personal or family consumption; for barter, or sharing for personal or family consumption; and for customary trade."

In accordance with regulations in 36 CFR Part 13, residents of the NPS designated resident zone communities of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth and people who reside inside the boundaries of the park are qualified to engage in subsistence activities in Lake Clark National Park and Preserve. Local rural residents who do not live in these communities or in the park, but who have customarily and traditionally engaged in subsistence activities within the park may continue to do so with a subsistence use permit issued by the park superintendent.

Major resources used for subsistence by Lake Clark National Park resident zone communities include caribou, moose, brown and black bears, Dall sheep, beaver, snowshoe hare, fox, lynx, mink, wolf, wolverine, ptarmigan, waterfowl, salmon, trout, Dolly Varden, grayling, pike, suckers, various species of whitefish, burbot, berries, wild edible plants, and wood.

Lake Clark National Park (2,439,000 acres) and Preserve (1,214,000 acres) are located in Game Management Units 9A, 9B, 16B, 17B and 19B and contain exceptional geologic features, scenery, wildlife, and cultural landscapes. These GMUs also include other federal public lands such as BLM administered lands in 9B, 16B and 17B and Denali National Park and Preserve in 16B. The park and preserve are also located in the West Cook Inlet and Bristol Bay Fisheries Management Areas of the Southcentral Alaska Region.

Silver Salmon Creek is located on the coast of Cook Inlet adjacent to Iliamna Volcano in Lake Clark National Park. The terrain is characterized by long sandy beaches, small rivers, estuaries, coastal forests of Sitka and white spruce, thickets of willow and alder, and sedge meadows. The Silver Salmon Creek area includes eight private inholdings—two of which are sites for commercially-operated lodges and six which are used as seasonal residences or for recreational purposes. In addition, the Southcentral Foundation, a nonprofit organization under Cook Inlet Region, Inc., maintains a camp at Silver Salmon Creek that is used as a recreational site for Foundation supporters.

There is little to no evidence in the literature to indicate that the Silver Salmon Creek area was occupied historically or prehistorically by Alaska Native groups. De Laguna (1934) documented several scattered *Dena'ina* village sites between Tyonek and Chinitna Bay, but makes no mention of occupation along the outer coast between Iliamna and Spring Points. A more recent ethnographic overview of the West Cook Inlet coast (2006) conducted by the Alaska Department of Fish and Game Subsistence Division appears to confirm this finding.

A 1992 study (McNabb and Petrivelli) examined customary and traditional patterns of resource use on the west Cook Inlet coast between Polly Creek and Chinitna Bay. Based on information gathered through a random survey of Kenai Peninsula residents, the study found a low frequency of contemporary use associated with Silver Salmon Creek with salmon and clams being the primary resources harvested. The study did not survey residents of the LACL resident zone communities.

SPORT AND SUBSISTENCE FISHING AT SILVER SALMON CREEK

Sport hunting is not allowed in Lake Clark National Park, however sport fishing under State of Alaska sport fishing regulations is permitted. Silver Salmon Creek is a popular sport fishing destination in the late summer when coho (silver) salmon return to the creek to spawn and both lodges cater to a sport fishing clientele. State of Alaska sport fishing regulations list the following seasons and bag limits for Alaska residents and nonresidents fishing in the West Cook Inlet Management Area:

State Sport Fishing Regulations

King Salmon 20" or Longer

1/day, 1 in possession

January 1–June 30

King Salmon less than 20"

10/day, 10 in possession January 1–June 30

Other Salmon 16" or Longer

3/day, 6 in possession January 1–September 30

Other Salmon Less than 16"

10/day, 10 in possession January 1–September 30

Rainbow/Steelhead Trout

In flowing waters:

2/day, 2 in possession. Only 1 fish 20" or longer
No Retention

June 15–April 14
April 15–June14

In lakes and ponds:

2/day, 2 in possession. Only 1 fish 20" or longer Open Entire Year

Arctic Char/Dolly Varden

5/day, 5 in possession. Only 1 fish over 12" long Open Entire Year

Arctic Grayling

2/day, 2 in possession Open Entire Year

Lake Trout

2/day, 2 in possession Open Entire Year

Other Finfish

No Bag or Possession Limit Open Entire Year

Exceptions:

Silver Salmon Creek: Within ½ mile of its outlet at Silver Salmon Lake, Silver Salmon Creek is closed year-round to all salmon fishing.

Silver Salmon Lake: Closed year-round to all salmon fishing.

Residents of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth and people who reside inside the boundaries of the park are qualified to engage in subsistence fishing in Lake Clark National Park under Federal subsistence fishing regulations. People with permanent primary residences in the preserve are allowed to subsistence fish in Lake Clark National Preserve. The following seasons and bag limits govern Federal subsistence fishing in those parts of Lake Clark National Park, including Silver Salmon Creek, located in the Cook Inlet Management Area. Federal subsistence fishing regulations also designate who is eligible to fish in a particular area through a customary and traditional use determination.

Federal Subsistence Fishing Regulations

Salmon, Trout, Dolly Varden and Char

All rural residents

Seasons, harvests and possession limits, and methods and means are the same for the taking

of those species under Alaska sport fishing regulations in effect at the time you are fishing. Rainbow/steelhead trout taken incidentally in other subsistence net fisheries may be retained for subsistence purposes.

Grayling and Burbot

All rural residents No Federal open season

Smelt

Residents of the Cook Inlet Area: No limit April 1–June 15 taken with dip nets in

fresh water

All Other Fish

Residents of the Cook Inlet Area: No limit

Year round

The most significant subsistence fishery in LACL relies on the runs of sockeye salmon that return to Lake Clark and its tributaries throughout the summer months. Subsistence salmon fishing generally takes place at family fish camps or fishing sites located close to home where salmon can be quickly butchered and processed by smoking, canning, freezing or salting. These fisheries are generally conducted using gill nets

which may be shared by several households. There are no records documenting subsistence fishing in the Silver Salmon Creek area by Federally-qualified residents of the park resident zone or the named resident zone communities. Therefore, it is reasonable to assume that most fishing activity in Silver Salmon Creek is conducted by sport fishers using rod and reel gear under State of Alaska sport fishing regulations.

FEDERAL SUBSISTENCE HUNTING REGULATIONS

Residents of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth and people who reside inside the boundaries of the park are qualified to engage in subsistence hunting and trapping in Lake Clark National Park under Federal subsistence hunting and trapping regulations. People with permanent primary residences in the preserve are allowed to subsistence hunt in Lake Clark National Preserve. The following regulations direct subsistence hunting in those parts of Lake Clark National Park located in Game Management Unit 9A, which includes Silver Salmon Creek. The regulations not only specify the seasons and bag limits for each species, but also identify which residents are eligible to harvest animals in a particular area.

Black Bear:

Rural residents of Units 9A, 9B, 17A, 17B and 17C:

3 bears July 1–June 30

Brown Bear:

No Federal open season

Caribou:

Rural residents of Units 9A, 9C and 17:

4 caribou; however, no more than 2 caribou may be taken Aug. 10–Sept. 30 and no more than 1 caribou may be taken between Oct. 1–Nov. 30.

Moose:

Rural residents of Units 9A, 9B, 9C and 9E:

1 bull Sept. 1–Sept. 15

Dall Sheep:

Units 9 remainder—All rural residents

1 ram with 7/8 curl horn or larger Aug.10–Sept.20

Covote:

All rural residents

2 coyote Sept. 1–April 30

Arctic Fox:

All rural residents

No limit Dec. 1–March 15

Red Fox:

All rural residents

2 foxes Sept. 1–Feb. 15

Hare:

All rural residents

No limit Dec. 1–March 15

Lynx:

All rural residents

2 lynx Nov. 10–Feb. 28

Wolf:

Rural residents of Units 6, 9, 10 (Unimak Island only),

11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,

and Chickaloon

10 wolves Aug. 10–April 30

Wolverine:

All rural residents

1 wolverine Sept. 1–March 31

Grouse:

All rural residents

15 grouse per day, 30 in possession Aug 10–April 30

Ptarmigan:

All rural residents

20 ptarmigan per day, 40 in possession Aug 10–April 30

The following information summarizes the total subsistence harvest of specific species in the subsection of GMU 9A that includes Silver Salmon Creek (UCU 09AO000102). This information is based on currently available Alaska Department of Fish and Game (ADF&G) permit data for the years 1994 to 2003. Permit data for the following species are not available for all years and do not differentiate between animals taken in sport and subsistence hunts. Since people living in Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth or inside the park are the only people eligible to subsistence hunt in the park, the permit information has been sorted by resident zone community to differentiate animals that may have been harvested for subsistence from those taken in non-subsistence hunts The table below represents the number of each species taken between 1994 and 2003 by residents of LACL resident zone communities.

RESIDENT ZONE COMMUNITY HARVEST FOR UCU 09AO000102

		1994	1995	1996	1997	1998	1999	2000	20012	2002			2003
TOTAL													
Black Bear		0		0	0	0	0	0	0	0		0	0
0													
Brown Bear	0	0		0	0	0	0	0	0	0	0		0
Caribou	0	0		0	0	0	0	0	0	0			0
Moose		0		0	0	0	0	0	0	0		0	0
0													
Sheep		No h	arvests	reported									
Lynx	0	0		0	0	0	0	0	0	0		0	0
Wolf				0					0			0	0
Wolverine	0	0		0	0	0	0	0	0	0		0	0

The lack of subsistence hunting activity in the Silver Salmon Creek area is not surprising given that there are no Federally-qualified subsistence users living in the area and the closest resident zone community is nearly 50 miles away on the other side of the Chigmit Mountains. Most subsistence users limit their subsistence hunting, fishing and trapping activities to areas surrounding their homes, especially those areas that can be easily accessed by boat, ATV or snowmachine. Accessing Silver Salmon Creek from any of the resident zone communities would require the use of an airplane—which is prohibited by 36 CFR 13.45—and traveling a long distance at great expense. Therefore, based on the above data, it is reasonable to conclude that the area around Silver Salmon Creek is not used to any significant degree for subsistence hunting.

SPORT AND SUBSISTENCE FISHING AT SUCKER BAY ON LAKE CLARK

Sucker Bay is located approximately seven miles northeast of Nondalton in Lake Clark National Preserve. The name "Sucker Bay" does not appear on USGS maps and is used by some local residents to designate the small bay below the Pickerel Lakes on the southwest end of Lake Clark. The *Dena'ina* name for Sucker Bay is *K'denez Yitughil'u*, or "bay into bear tree." Several other adjacent landmarks include *K'denez* in their names, which refers to a tree marked or scarred by brown or black bears.

Both State of Alaska sport fishing and Federal subsistence fishing regulations apply at Sucker Bay in Lake Clark National Preserve. The area supports a small sport fishery for sockeye salmon and local residents from Nondalton use the bay to harvest redfish, or spawned out sockeyes in the fall. The following State of Alaska sport fishing regulations apply to the Kvichak River drainage upstream of Sixmile Lake including Lake Clark in the Kvichak River Drainage Management Area:

State Sport Fishing Regulations

King Salmon 20" or Longer (Yearly limit of 5)

3/day, 3 in possession. Only 1 fish over 28" May 1–July 31

King Salmon less than 20"

10/day, 10 in possession May 1–July 31

Sockeye Salmon

2/day, 2 in possession

January 1–September 30

Coho Salmon

2/day, 2 in possession

January 1–September 30

Rainbow Trout

1/day, 1 in possession. No size limit
5/day, 5 in possession. Only 1 fish 20" or longer

November 1–June 7

Arctic Char/Dolly Varden

3/day, 3 in possession. June 8–October 31

10/day, 10 in possession. November 1–June 7

Arctic Grayling

2/day, 2 in possession Open Entire Year

Lake Trout

4/day, 4 in possession Open Entire Year

Northern Pike

5/day, 5 in possession. Only 1 fish over 30" Open Entire Year

Northern Pike

5/day, 5 in possession. Only 1 fish over 30" Open Entire Year

Burbot

15/day, 15 in possession. Open Entire Year

Other Finfish

No bag or possession limit. Open Entire Year

Sport fishing in Lake Clark primarily takes place at the mouth of the Tanalian River, in the Kijik, Chulitna and Tazimina Rivers and at the outlet of Lake Clark. There is some sport fishing for sockeye salmon at Sucker Bay, but exact harvest numbers are not available. The following table summarizes the overall Lake Clark sport catch (in numbers of fish) reported by ADF&G for the years 2001 to 2005.

	2001	2002	2003	2004	2005
King Salmon	0	0	0	0	0
Sockeye Salmon	376	34	314	147	236
Rainbow Trout	0	8	21	27	0
Northern Pike	1340	1082	242	1603	1530

Federal Subsistence Fishing Regulations

Residents of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth and people who reside inside the boundaries of the park are qualified to engage in subsistence fishing in Lake Clark National Park under Federal subsistence fishing regulations. People with permanent primary residences in the preserve are allowed to subsistence fish in Lake Clark National Preserve. The following seasons and bag limits govern Federal subsistence fishing in those parts of Lake Clark National Park and Preserve, including Sucker Bay, located in the Naknek-Kvichak District (Kvichak/Iliamna-Lake Clark Drainage) of the Bristol Bay Management Area. The regulations also specify which residents are eligible to subsistence fish in a particular area.

Rainbow Trout

Residents of the Kvichak/Iliamna-Lake Clark drainage

2/day, 2 in possession April 10–October 31 5/day, 5 in possession November 1–April 9

Salmon and Other Freshwater Fish

Residents of the Kvichak/Iliamna-Lake Clark drainage Year round. Except within the Tazimina River No Limit and

within ¼ mile of the terminus of those waters, subsistence nets are only allowed June 15 to August 31.

Subsistence fishing takes place throughout the Lake Clark area but is generally concentrated near communities and permanent residences, seasonal fish camps and areas where fish are known to spawn or congregate at specific times of the year. According to the ADF&G Subsistence Division, sockeye salmon (including redfish, or spawn-outs) accounts for over 60 percent of all fish and wildlife harvested by residents of Port Alsworth and Nondalton, the two resident zone communities in closest proximity to Sucker Bay. The following table summarizes the number of sockeye salmon taken for subsistence by residents of Port Alsworth and Nondalton for the years 2001 through 2005:

	2001	2002	2003	2004	2005
Port Alsworth	1958	1201	1370	2455	2457
Nondalton	7566	5508	8016	8789	8824

Subsistence harvest numbers for freshwater fish other than salmon are not regularly collected by ADF&G or the NPS, so comparable numbers for rainbow trout and northern pike are not available. However, data collected from periodic community subsistence harvest surveys by ADF&G show that fish other than sockeye salmon vary in importance between Port Alsworth and Nondalton. Non-salmon species account

for less than five percent of the total fish and wildlife annually harvested by Port Alsworth residents while they make up nearly 15 percent of the annual fish and wildlife used by residents of Nondalton (ADF&G, 1983).

SPORT AND SUBSISTENCE HUNTING AT SUCKER BAY ON LAKE CLARK

Sucker Bay is located in Game Management Unit 9B inside Lake Clark National Preserve and both State of Alaska sport hunting and Federal subsistence hunting regulations apply. The following sport hunting regulations direct sport hunting in GMU 9B for both resident and non-resident sport hunters:

State Sport Hunting Regulations

Black Bear:

3 bears No Closed Season

Brown Bear:

1 bear every 4 regulatory years

Caribou:

Residents

3 caribou Aug.1–March 31

However, no more than 1 caribou may be

taken Aug. 1-Nov. 30

Nonresidents

1 caribou Aug.1–Sept. 30

Moose:

Residents:

1 bull Sept. 1–Sept. 15

Or 1 bull Dec. 15–Jan. 15

Nonresidents

1 bull with 50-inch antlers or antlers Sept. 5–Sept. 15

with 4 or more brow tines on at least

one side.

Dall Sheep:

1 ram with full curl horn or larger Aug.10–Sept.20

Wolf:

10 wolves per day Aug. 10–May 25

Wolverine:

1 wolverine Sept. 1–March 31

The following information summarizes the total harvest of specific species in the subsection of GMU 9B that includes Sucker Bay (UCU 09BJ000601) based on currently available Alaska Department of Fish and Game (ADF&G) permit data for the years 1994 to 2002. Permit data for the following species are not available for all years and do not differentiate between animals taken in sport and subsistence hunts.

TOTAL HARVEST FOR UCU 09BJ000601

		1994	1995	1996	1997	1998	1999	2000	20012	002			2003
TOTAL													
Black Bear 0		0		0	0	0	0	0	0	0		0	0
Brown Bear	0	0		0	0	1	0	0	0	0	0		1
Caribou						48	37	4	15	4			108
Moose		1		1	2	2							
6													
Sheep		No h	narvests	reported									
Lynx	2	0		1	1		0	0	0	1		0	5
Wolf							1						1
Wolverine	6			4	3			1					14

Federal Subsistence Hunting Regulations

Residents of Iliamna, Lime Village, Newhalen, Nondalton, Pedro Bay and Port Alsworth, people who reside inside the boundaries of the park and people with permanent primary residences in the preserve are allowed to subsistence hunt in Lake Clark National Preserve. The following Federal regulations direct subsistence hunting in those parts of Lake Clark National Preserve located in GMU 9B, which includes Sucker Bay. Federal subsistence hunting regulations also identify which residents are eligible to harvest animals in a particular area.

Black Bear:

Rural residents of Units 9A, 9B, 17A, 17B and 17C:

3 bears July 1–June 30

Brown Bear:

Rural residents of Units 9B:

Unit 9B Lake Clark National Park and
Preserve—Residents of Nondalton, Iliamna,
Newhalen, Pedro Bay, and Port Alsworth only—
1 bear by Federal registration permit only.
The season will be closed by the Lake Clark
National Park and Preserve Superintendent
when four females or ten bears have been
taken, whichever occurs first.

Caribou:

Rural residents of Units 9A, 9C and 17:

5 caribou; however, no more than 1 bull may July 1–Apr. 15 be taken from July 1–Nov. 30.

Moose:

Rural residents of Units 9A, 9B, 9C and 9E:

1 bull Aug 20–Sept. 15 Dec. 1–Jan. 15

Dec. 1–Jan. 13

Dall Sheep:

Residents of Iliamna, Newhalen, Nondalton,

Pedro Bay and Port Alsworth, and Lake Clark

National Park and Preserve within Unit 9)

Unit 9B, that portion within Lake Clark

July 15-Oct. 15

National Park and Preserve—1 ram with

Jan. 1-Apr. 1

3/4 curl or larger horn by Federal

registration permit only. By announcement

of the Lake Clark National Park and Preserve

Superintendent, the summer/fall season will

be closed when up to 5 sheep are taken and

the winter season will be closed when up

to 2 sheep are taken.

Beaver:

Residents of Units 9A, 9B, 9C, 9E and 17: April 15–May 31

2 beaver per day

Coyote:

All rural residents

2 coyote Sept. 1–April 30

Arctic Fox:

All rural residents

No limit Dec. 1–March 15

Red Fox:

All rural residents

2 foxes Sept. 1–Feb. 15

Hare:

All rural residents

No limit July 1–June 30

Lynx:

All rural residents

2 lynx Nov. 10–Feb. 28

Wolf:

Rural residents of Units 6, 9, 10 (Unimak Island only), 11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26,

11, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 23, 26 and Chickaloon

10 wolves

10 wolves Aug. 10–April 30

Wolverine:

All rural residents

1 wolverine Sept. 1–March 31

Grouse:

All rural residents

15 grouse per day, 30 in possession Aug 10–April 30

Ptarmigan:

All rural residents

20 ptarmigan per day, 40 in possession Aug 10–April 30

The table below represents the number of each species taken between 1994 and 2003 by residents of LACL resident zone communities in the subsection of 9B that includes Sucker Bay (UCU 09AO000102). Permit data for the following species are not available for all years and do not differentiate between animals taken in sport and subsistence hunts. The following information has been sorted by resident zone community to differentiate animals that may have been harvested for subsistence from those taken in non-subsistence hunts. Only two resident zone communities appear to have used the area for subsistence hunting between 1994 and 2003—Nondalton and Port Alsworth.

RESIDENT ZONE COMMUNITY HARVEST FOR UCU 09BJ000601

		<u>1994</u>	1995	1996	1997	1998	1999	2000	20012	002			2003
TOTAL													
Black Bear 0		0		0	0	0	0	0	0	0		0	0
Brown Bear	0	0		0	0	1	0	0	0	0	0		1
Caribou						0	4	14	3	3			24
Moose 2		0		0	2	0							
Sheep		No h	No harvests reported										
Lynx	2	0		1	1		0	0	0	0		0	4
Wolf				0			1		0			0	1
Wolverine	6			4	3			1					14

Even though the harvest data for UCU 09BJ000601 is not complete, it does indicate that the area supports varying degrees of subsistence activity. For example, hunters from resident zone communities account for 100 percent of the brown bears, wolves and wolverines taken in UCU 09BJ000601 and 80 percent of the lynx. In addition, resident zone hunters harvested 33 percent of the moose and 22 percent of the caribou. While this data is not specific to Sucker Bay, it does demonstrate that subsistence hunting by residents of Nondalton and Port Alsworth takes place in the local area.

V. ALTERNATIVES CONSIDERED

Two alternatives regarding the proposed land exchange have been evaluated:

<u>Alternative 1 (No Action Alternative)</u>: The No Action alternative describes the status quo. The NPS and Southcentral Foundation (SCF) would not complete a land exchange. The NPS would retain its 4.95 acre parcel at Silver Salmon Creek and the SCF would retain ownership of its 79.98 acre parcel on Lake Clark at Sucker Bay. The NPS would not authorize SCF use of the Silver Salmon Creek site.

<u>Alternative 2 (Proposed Action)</u>: The NPS would exchange a 4.95 acre parcel at Silver Salmon Creek, which includes the Silver Salmon Creek camp, for a 79.98 acre tract located along the southeast shore of

Lake Clark at Sucker Bay owned by the Southcentral Foundation (SCF). The Sucker Bay property is located in Lake Clark National Preserve and the Silver Salmon Creek property is in the Lake Clark National Park. The following stipulations would apply to the land exchange:

- Costs associated with the land exchange would be paid by SCF. Such costs would include the survey and appraisal costs for the properties.
- The NPS would continue to permit SCF to use the Silver Salmon Creek parcel, pursuant to the existing agreement, until the land exchange is final.
- SCF would develop a formal land use plan outlining how SCF would use the exchanged lands and conduct activities on adjacent park lands, including off-road vehicle use and fishing activities.
- Commercial uses on the Silver Salmon Creek parcel would be prohibited and the NPS would have the right of first refusal in the event that SCF sells the parcel in the future.

VI. SUBSISTENCE USES AND NEEDS EVALUATION

Both alternatives have been analyzed using the following three evaluation criteria to determine potential impacts on subsistence activities:

- 1. The potential to reduce important subsistence fish and wildlife populations by (a) reductions in abundance; (b) redistribution of subsistence resources; or (c) loss of habitat.
- 2. Potential impacts the action may have on access for subsistence hunters and fishermen
- 3. The potential for the action to increase competition among hunters and fishermen for subsistence resources.

The potential to reduce populations:

Alternative 1 (No Action Alternative): The No Action Alternative would maintain the status quo with the NPS retaining ownership of the Silver Salmon Creek acreage and the Sucker Bay parcel remaining in private ownership. The Silver Salmon Creek tract is not pristine or located in an area used for subsistence purposes by residents of the park or resident zone communities and has been impacted by years of seasonal recreational activity. The Sucker Bay parcel, in contrast, is largely intact, has been minimally impacted by human use and is located in an area utilized for subsistence by residents of Nondalton and Port Alsworth.

In the short term, maintaining the status quo at Silver Salmon Creek and Sucker Bay would probably not reduce or redistribute populations of fish and wildlife used for subsistence or result in a significant loss of habitat. However, while there are no immediate plans to develop the Sucker Bay parcel for commercial or other purposes, more intensive use of the area could result in impacts to sockeye spawning and rearing habitats and over-harvest of the Sucker Bay sockeye stock.

Alternative 2 (Proposed Action): The proposed action would exchange a 4.95 acre parcel at Silver Salmon Creek for a 79.98 acre tract located along the southeast shore of Lake Clark at Sucker Bay inside Lake Clark National Preserve. This alternative would give the NPS resource managers the ability to

regulate land use and other activities on the Sucker Bay parcel to protect water quality, wetlands and aquatic habitats necessary for the conservation of the Sucker Bay sockeye salmon stock. Provisions of ANILCA, Federal subsistence regulations, and the NPS regulations and management policies provide the tools for adequate protection of fish and wildlife populations within Lake Clark National Park and Preserve while ensuring a subsistence priority for local rural residents. In addition, the superintendent may enact closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife population.

Restriction of Access:

Alternative 1 (No-Action Alternative): The no-action alternative would maintain the status quo. The 79.98 acres at Sucker Bay would remain in private ownership and be closed to public use without permission of the land owner. Conversely, the property at Silver Salmon Creek would remain in public ownership and open to public use regardless of current occupation by the Southcentral Foundation.

Alternative 2 (Proposed Action): The proposed land trade would open access to the 79.98 acres at Sucker Bay to local residents for subsistence hunting, trapping, fishing and gathering and restrict access to the five acre parcel at Silver Salmon Creek. Since the Silver Salmon Creek tract is not used for subsistence purposes by residents of the park or resident zone communities, the land trade will result in no significant impact to Federally-qualified subsistence users.

The proposed action will add the Sucker Bay property to Lake Clark National Preserve where all rights of access for subsistence harvest on the NPS lands are granted by Section 811 of ANILCA.

Increase in Competition:

Alternative 1 (No-Action Alternative): Since the Silver Salmon Creek tract is not used for subsistence purposes by residents of the park or resident zone communities, maintaining the status quo will not result in increased competition between sport hunters and fishers and subsistence users. Similarly, maintaining the status quo with the Sucker Bay property will not result in increased competition between sport and subsistence users but could create more trespass issues over time if the area becomes a more popular destination for park visitors and local residents.

Alternative 2 (Proposed Action): The proposed action would include the 79.98 acres at Sucker Bay in Lake Clark National Preserve and place the land under Federal management. ANILCA Section 804 specifically states that, "subsistence uses shall be accorded priority over the taking on such [Federal public] lands of fish and wildlife for other purposes." Additional the NPS regulations and provisions of ANILCA mandate that if and when it is necessary to restrict taking of fish or wildlife, subsistence users will be given a priority over other user groups. Continued implementation of these provisions should mitigate any increased competition from resource users other than subsistence users. The superintendent is also authorized to enact closures and/or restrictions if necessary to protect subsistence opportunities or to assure the continued viability of a particular fish or wildlife population.

VII. AVAILABILITY OF OTHER LANDS

Subsistence users living in the park and in resident zone communities have access to and utilize other Federal, State and private lands within the region for subsistence activities. These lands include, but are not limited to: State lands adjacent to Lake Clark National Park and Preserve, Sixmile Lake, the Newhalen River and its tributaries, and tribal and village corporation lands belonging to Port Alsworth, Nondalton, Iliamna and Newhalen.

FINDINGS

This analysis finds Alternative 2 to be the preferred alternative and concludes that the proposed action to exchange the 4.95 acre parcel at Silver Salmon Creek for the 79.98 acre tract at Sucker Bay would:

- a) not result in a significant restriction of subsistence uses at Silver Salmon Creek, and
- b) open private land at Sucker Bay to subsistence and other Federally-authorized public uses.

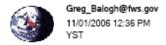
Alternative 2 is in the best interest of Federally-qualified subsistence users of the park and preserve because it results in a net gain of nearly 75 acres of land that can be used for subsistence hunting, trapping, fishing and gathering. Unlike the five acres at Silver Salmon Creek, the land at Sucker Bay can be easily accessed by boat or snowmachine from Port Alsworth and Nondalton which makes it more likely to be used for subsistence purposes by Federally-qualified subsistence users.

Bibliography:

Final Environmental Statement for the Proposed Lake Clark National Park (the NPS); the park general management plan; Resource Use and Subsistence in the Vicinity of the Proposed Lake Clark National Park (Behnke 1978); Ecosystems of the Proposed Lake Clark National Park, Alaska (Racine and Young 1978); Subsistence Production and Exchange in the Iliamna Lake Region, Southwest Alaska, 1982-1983 (Morris 1983); Land Use and Economy of Lime Village (Russell-Kari 1983); Lake Clark Sociocultural Study: Phase I (Ellanna et.al. 1986); Lake Clark National Park and Preserve: Historic Uses of Cook Inlet Natural Resources (McNabb and Petrivelli 1992); *Nuvendaltin Quht'ana*: The People of Nondalton (Ellanna and Balluta 1992); Subsistence Uses of Vegetal Resources In and Around Lake Clark National Park and Preserve (Johnson et. al. 1998); Community Profile Database (Alaska Department of Fish and Game Subsistence Division 2001); West Cook Inlet: Ethnographic Overview and Assessment for Lake Clark National Park and Preserve (Alaska Department of Fish and Game Subsistence Division 2006); Report to the Alaska Board of Fisheries for the Recreational Fisheries of Bristol Bay 2004, 2005, and 2006 (Alaska Department of Fish and Game Sport Fish Division 2006) and Alaska Department of Fish and Game hunting permit data.

Appendix B

ESA Section 7 Informal Consultation



To: Glen_Yankus@nps.gov oc: Subject: Fw: ESA section 7 informal consultation for NPS Sucker Bay/Silver Salmon Creek Land Exchange

Glen,

On my previous e-mail I hit send before I was done modifying the document. Here is a final version of it.

Greg Balogh U.S. Fish and Wildlife Service Endangered Species Program 605 W. 4th Ave., Rm G-61 Anchorage, AK 99501

907/271-2778 907/271-2786 (fax)

---- Forwarded by Greg Balogh/R7/FWS/DOI on 11/01/2006 12:33 PM ----

Greg Balogh/R7/FWS/DOI

To Glen_Yankus@nps.gov

11/01/2006 12:32 PM

Subject Re: ESA section 7 informal consultation for NPS Sucker Bay/Silver Salmon Creek Land Exchange Link

Glen Yankus Environmental Protection Specialist National Park Service AKSO - Environmental Resources Team 240 W 5th Ave. Anchorage, Alaska 99501

Dear Glen,

This is in response to your November 1, 2006, request for informal section 7 consultation as per the Endangered Species Act. In your E-mail, you indicate that you seek concurrence of your determination that the proposed land exchange outlined in your e-mail will be unlikely to adversely affect listed threatened or endangered species. Upon reviewing your project description and examining your attached figures, we concur with your determination. We note, however, that threatened Steller's eiders are present just south of the South Central Foundation's Silver Salmon Creek Camp. Here, they number in the high hundreds to low thousands. However, they have not yet been observed along the headland on which the camp is located. Should Steller's eiders be observed using the waters offshore of Silver Salmon Creek, the U.S. Fish and Wildlife Service should be notified at the contact number listed at the end of this e-mail.

Preparation of a biological assessment or further consultation under section 7 of the Act regarding this project is not

necessary at this time. If project plans change, additional information on listed or proposed species becomes available, or new species are listed that may be affected by the project, consultation should be reinitiated.

This letter relates only to species listed or proposed under ESA and/or designated or proposed critical habitat under our jurisdiction. It does not address species under the jurisdiction of National Marine Fisheries Service, or other legislation or responsibilities under the Fish and Wildlife Coordination Act, Clean Water Act, National Environmental Policy Act, Bald and Golden Eagle Protection Act, or Migratory Bird Treaty Act.

This concludes section 7 consultation for the proposed land swap of a 5-acre parcel at Silver Salmon Creek, which includes the Silver Salmon Creek camp, for a 79.89 acre tract located along the southeast shore of Lake Clark at Sucker Bay owned by the Southcentral Foundation (SCF). Thank you for your cooperation in meeting our joint responsibilities under section 7 of the Endangered Species Act. If you have any further endangered species questions, please contact me at (907) 271-2778. Please refer to consultation number 2007-021 in future correspondence on this project.

agen R Balogh

Greg Balogh U.S. Fish and Wildlife Service Endangered Species Program 605 W. 4th Ave., Rm G-61 Anchorage, AK 99501

907/271-2778 907/271-2786 (fax)

Glen_Yankus@nps.gov

To greg_balogh@fws.gov

11/01/2006 09:30 AM oc Joan_Damell@nps.gov

Subject ESA section 7 informal consultation for NPS Sucker Bay/Silver Salmon Creek Land Exchange

The National Park Service (NPS) would like to initiate a Endangered Species Act (ESA) section 7 informal consultation for the following proposed land exchange within Lake Clark National Park and Preserve.

The NPS proposes to exchange a 5-acre parcel at Silver Salmon Creek, which includes the Silver Salmon Creek camp, for a 79.89 acre tract located along the southeast shore of Lake Clark at Sucker Bay owned by the Southcentral Foundation (SCF). The Sucker Bay property is about 16.5 miles southwest of Port Alsworth and about 7.5 miles northwest of Nondalton The Sucker Bay property, an inholding, is located in Lake Clark National Preserve and the Silver Salmon Creek property is in the Lake Clark National Park (See attached figures).

The following stipulations would apply to the land exchange.

The SCF would develop a formal land use plan outlining how the SCF would use the exchanged lands and conduct activities on adjacent park lands, including ORV use and fishing activities. (See attachment)
 The SCF Silver Salmon Creek land use plan would indicate that the parcel will not be used for commercial purposes. The NPS would have the right of first refusal to the Silver Salmon Creek parcel in the event the SCF sells the parcel in the future.

Our records indicate that no federally listed or proposed species, or designated or proposed critical habitat occur in the areas proposed for land exchange. The NPS recognizes that Steller's eiders (Polysticta stelleri), a threatened species, are known to winter along the coast near the boundaries of Lake Clark National Park and Preserve.

On April 14, 2005 the USFWS concurred with an NPS determination that the construction of the Silver Salmon Ranger Cabin (about 1.5 miles from the Silver Salmon property) would not be likely to adversely affect endangered, threatened, or candidate species or their habitat (Consultation ‡ 2005-134). The NPS concludes that the proposed land exchange would not have any adverse effect on any federally listed or proposed species or critical habitat.

We would be pleased if the USFWS could respond to this determination by November 30, 2006.

If you have any questions concerning the land exchange please contact me at 644-3535.

Sincerely,

(See attached file: Sucker Bay Property.pdf) (See attached file: Silver Salmon Ck Parcel.pdf) (See attached file: Silver Salmon Creek Land Usefinall.doc)

Glen Yankus
Environmental Protection Specialist
National Park Service
AKSO - Environmental Resources Team
240 W 5th Ave.
Anchorage, Alaska 99501
(907) 644-3535 fam: (907) 64

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Appendix C

NHPA Section 106 Consideration

<u>LACL-06-001</u> Archeological Survey No.

ARCHEOLOGICAL INVENTORY REPORT FORM

1. Project:

Silver Salmon/Sucker Bay Land Exchange

2. Package No.: NA.

3. Project Description:

Lake Clark National Park and Preserve is considering by means of an Environmental Assessment, the exchange of approximately 5 acres of federal lands south of Silver Salmon Creek on the Cook Inlet coast for 80 acres of private land at Sucker Bay on Lake Clark. LACL has been urged to exchange the land because the Silver Salmon parcel is the site of the Cook Inlet Regional Inc Native Corporation's fishing camp. The 80 acres at Sucker Bay would be protected from development.

4. Project Location:

Sucker Bay is on the southwest end of Lake Clark 26.7 kilometers SW of Port Alsworth. Silver Salmon CIRI Lodge parcel is 93.3 kilometers SE of Port Alsworth between Chinitna and Tuxedni Bays. The Silver Salmon parcel is located 1.9 miles (3.06 kilometers) SW of the mouth of Silver Salmon Creek.

5. Survey Area Boundaries:

The Silver Salmon parcel is consists of 4.95 acres delineated by an unofficial survey provided by South Central Foundation which incorporates metes and bounds tied to Corner 6 of U.S. Survey No. 5626. Archeologists did not find rebar monuments marking the corners. the NPS Lands Program staff used the survey data to plot the 4.95 acre parcel onto a 1:2,534 scale color aerial photo. The archeologists used lodge buildings and trails visible on the aerial photo to orient themselves within the parcel.

6. Date(s) of Survey:

October 27, 2005, September 25, 2006

7. Surveyors:

Dale Vinson, Molly Casperson and Monty Rogers

8. Number of Person-days in Survey: 1.5

9. Description of Area Surveyed:

The Silver Salmon parcel is within the coastal lowlands bordered on the east by Cook Inlet and border on the west by the Chigmit Mountains. The east edge of the survey area is the

upper portion of a gradually sloping beach which terminates at a broad sand ridge that support discontinuous grass on its seaward portion and mature white spruce on the land ward slope. The sand ridge slopes down to the WNW. Standing water begins at the base of the ridge. The lodge occupies the sand ridge. The interior or western 60% of the parcel slopes up gradually to the west and supports black spruce interspersed with sedge meadow. Standing water covered the western part of the parcel at the time of the survey.

Test excavations on the beach ridge revealed a sequence of sand and gravel deposits overlying gray brown silty clay. The sand deposit ranges in thickness from 99 centimeters near the top of the sand ridge to 30 cm at the base of the western edge of the sand ridge. Test pits on the west edge of the sand ridge encounter the water table no deeper than 42 centimeters below surface.

Geomorphologically the area of the parcel consists of gradually sloping land relatively recently emerged from glaciation bordered on the east by Cook Inlet. Wind blow sand from the exposed beach has built up a substantial sand berm at the upper edge of the beach which impounds water draining the high lands to the west to produce wet lands.

10. Survey Procedure:

Archeologists performed pedestrian survey of the parcel, however standing water limited systematic survey to the sand ridge dividing the upland from the beach. A total of 13 test pits judgementally placed along the west slope of the beach ridge were excavated by hand and screened through ¼" mesh. Contents of a historic dump were examined and inventoried for historic debris.

11. Description of Cultural Resources Located:

Archeologists identified no eligible cultural resources. Shovel Test #1 approximately 3 meters east of the main lodge building produced recent material from between 38 and 66 centimeters below ground surface. Recovered materials include: duct tape, glazed 2" x 2" ceramic tiles, brown bottle glass fragments and the base of a ceramic saucer. All of these appeared to be common commercially available items that are less than 50 years old.

A pile of debris, referred to as the "dump", on the west face of the beach ridge south of the lodge buildings was examined to determine if a historic component was present. Examination in 2005 disclosed that the dump consisted of a surface accumulation of recently abandoned junk including classes of items commonly found at fish camps and Alaska bush locations. The dump included: steel 55 gallon drums, diesel heating stoves, a plastic shop sink, folding office chairs, green plastic tarps, liquor bottles, bicycles, a motor bike, styrofoam debris, 55 gallon drum wood stoves, a washing machine, a wood stove, a hibachi, a Weber grill, stove pipe, perforated wall shelving supports, a dinette chair and a recent model Coleman stove and aluminum beverage cans. In September 2006 nearly everything in the dump in 2005 was gone with the exception of a large (500 gallon?) steel under ground fuel storage tank.

12. Evaluation of Cultural Resources Located:

The cultural resources located were all recent items that do not meet National Register eligibility criteria.

13. National Register Status:

The cultural resources located do not meet National Register eligibility criteria.

14. Effect of the Project on Resources:

No Eligible Historic Properties are present in the Area of Potential Effects of this undertaking.

15. Recommendations: The following stipulation will be included on the XXX:

If concealed archeological resources are encountered during the installation process, please take all necessary steps to protect them and notify the Senior Archeologist, Alaska Support Office.

16. Attachments:

Attachment 1. USGS 1:63,360:, showing project location.

Attachment 2. Project map showing detail.

17. Native American Consultation:

A letter and map were sent to 29 Alaska Native communities and organizations with historic or cultural ties to lands now included in Lake Clark National Park and Preserve asking for any information or traditional knowledge pertaining to cultural resources on the Silver Salmon parcel. Written and telephone responses are being logged.

18. References Cited

Appendix D

Land Use Plan for Silver Salmon Creek Camp

Guided by its vision and mission, Southcentral Foundation ("SCF") proposes to own, operate and manage the five-acre Silver Salmon Creek Camp ("Camp") for the sole benefit of its invited guests. Pursuant to the covenants running with the land patent, SCF shall continue to utilize the site in the same non-commercial manner that it has been used over the last decade: relationship/team building retreats, organizational planning retreats, a place of spiritual healing, and a site to provide people with opportunities for positive development in culturally significant environment.

SCF anticipates that it would operate the Camp as follows:

- No commercial enterprise shall be undertaken by SCF
- Fulltime caretakers will remain at the Camp.
- Guests will be flown to the Camp by local air taxi operators.
- Guests to the Camp will stay in rustic, aesthetically-pleasing, and environmentally-compatible accommodations; and will be served prepared meals.
- Guests will be charged for the actual cost of their air transportation but accommodations and activities at the Camp will be provided free of charge.

Camp guests will be encouraged to enjoy the neighboring Park lands. Lake Clark National Park-approved activities will include:

- Hiking
- Wildlife viewing
- the NPS Ranger-led Interpretive Programs
- Fishing
- Stargazing
- Bird watching

Prior to their visit, SCF will provide its guests with an orientation that presents the rules of the Camp and emphasizes compliance with Federal and State laws, as well as Park etiquette. Whenever possible, an the NPS Ranger(s) shall be available to assist SCF with its guest orientation. In addition, guests will be strongly encouraged to visit to the NPS/Lake Clark National Park website prior to their arrival at the Camp.

Recreational use of ORVS on park lands is prohibited by law. Limited Off Road Vehicle transportation on State lands below the mean high tide line will be provided to guests as a means of transport to sites distant to the Camp. Upon arrival at the Camp, guests will be provided with ORV operating instructions, rules for safe and courteous driving of the ORV's, as well as an informational briefing using maps to delineate closed or "off limit" areas around the Camp and also addressing licensing requirements, driving safety, vegetation damage prevention, and conservation of the beach environment and its wildlife.

While SCF anticipates that Camp guests will partake in an "Alaskan" experience, SCF hopes to gradually improve the Camp over time. While the foot print and the capacity would remain relatively unchanged, SCF anticipates that the Atco trailers and Visqueen tents would eventually be replaced by safer, more permanent arrangements that better complement the natural surroundings. In addition, activities of the guests would also become more formalized and standardized in an effort to complement the Park atmosphere. Examples:

- Guided fishing lessons
- Park orientations
- Educational activities that take advantage of the Park surroundings
- Guided photo safari

SCF's activities in the Park will be guided by its objective of enhancing the Park "experience," not adding to or detracting from the natural surroundings of the Park.