# Resources Management Plan



# Sitka National Historical Park Sitka, Alaska

June 1999

# **Resources Management Plan**

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Approved by:

Superintendent

Date

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# **Executive Summary**

### Purpose

This resource management plan (RMP) describes Sitka National Historical Park's resource management vision/objectives and the actions necessary to achieve that vision. The RMP documents knowledge and status of the park's natural and cultural resources; describes and evaluates current resource management activities; prescribes an action program; and identifies funding and personnel needs. Furthermore, a report from the General Accounting Office (GAO 1994) calls for the RMP to include the following: (1) the number, type, and source of external threats and priorities for addressing those threats; (2) project statements for each external threat, describing the mitigation actions that can be taken; and (3) the status of threat mitigation actions. In addition, internal (on park land and water) threats also exist. This plan strives to address all of these issues recognizing the current well protected conditions but anticipating that internal and external pressures will only increase in the future.

The purpose of the RMP is to set forth the direction and management philosophy for resources at Sitka National Historical Park. It will provide strategies for addressing issues and achieving identified desired future conditions over a period of 4 to 20 years. The RMP sets priorities and helps guide managers in requests for funding. This plan will include the present natural and cultural resource status, describe and evaluate the current resources program and needs, and provide individual project statements, identifying funding and personnel needs.

The Resource Management Plan will be updated at least once every four years to reflect periodic assessments of resource status, management actions to date, and changing impacts. Specific activities resulting from this program document are being developed in consultation with cooperating agencies and institutions.

# Organization

This Resource Management Plan was prepared in accordance with the *Resource Management Guidelines* (NPS 1994). The plan is based on legislative mandates and executive orders.

The RMP is divided into four primary sections:

- Section 1.0 Introduction This section gives a brief history of the park, states the purpose for which the park was established, describes natural and cultural resources, values, and special designations and explains the legislative and administrative constraints that influence resource management activities.
- Section 2.0 Present Resource Status This section outlines the status of baseline information about the park and gives commentary on the condition of park resources. This section also explains context and

identifies resource themes that help park staff to focus on the most important issues and activities.

- Section 3.0 Natural Resources Management Program This section briefly describes the current natural resources management program and outlines proposals for future short and long term actions. This includes a compilation of project statements that provide detailed information about resource issues and threats as well as proposed actions that are proposed to resolve those issues.
- Section 4.0 Cultural Resources Management Program This section briefly describes the current cultural resources management program and outlines proposals for future short and long term actions. This includes a compilation of project statements that provide detailed information about resource issues and threats as well as proposed actions that are proposed to resolve those issues.

A multitude of actions are identified amongst all of the project statements, more than can feasibly be accomplished with current funding and personnel constraints. Enumeration of all conceivable actions helps in priority setting and is instructive in establishing program direction. Although budget tables associated with each project statement display four funding years, revisions of RMPs rarely occur more often than every five years and more frequently every ten years. Descriptions of many actions in the plan will extend its utility. Project statements are written such that they can stand alone and be used in various funding initiatives. Therefore, some redundancy between project statements exists.

The appendices give detailed, supplemental information about funding, staff, resource baseline information, and so forth.

# Implementation

The RMP is the vehicle that park staff use to evaluate park resources and determine program priorities. This formal mechanism should lead to a scientifically founded and well-thought-out resource program. Recognizing the dynamic nature of park resources and public enjoyment of those resources, the resource program must be flexible and responsive. A full description of the Vision for the resource program is contained in Section 3.0 and Section 4.0 of this plan.

The RMP documents the park's operating program to attain natural and cultural resource objectives. To accomplish this, the RMP seeks to provide a program so managers can:

**Inventory** - Identify, inventory, and understand the resources and processes that give meaning to the park.

**Monitor, Predict** - Establish and monitor baseline measurements of the resource conditions and processes so impacts can be detected before they cause serious damage and to provide a standard against which management performances can be measured. Institute a system for predicting potential threats to park values

early enough before their occurrence that budgeting and programming is done to accomplish timely research and/or management to prevent or mitigate them.

**Research** - Identify and conduct scientific investigations to answer questions about park resources and processes.

**Mitigate, Interpret, Protect -** Describe ongoing and needed mitigation, interpretation, and protection actions aimed at resolving resource related problems.

Administer Programs and Plan - Identify all planning and administrative actions necessary to support a well developed resources preservation program.

**RMP** project statements may be updated annually to reflect operations evaluations, periodic assessments of resource status, actions taken to date, and changing impacts, threats, and legal constraints. This will set priorities and helps guide managers in requesting funding.

# **Relationship to Other Plans**

The general management plan (GMP) provides overall guidance to park management for approximately ten years. Stepped down from the GMP is the park's strategic plan, which summarizes the GMP and outlines park management programs and activities for roughly five years. The RMP differs from a park strategic plan, prepared under the Government Performance and Results Act (GPRA).

RMPs establish long-term goals and objectives for park resources--including goals that cannot be reasonably achieved in the near term (for resources, 5 years is near term) or within existing budgets. They describe the current program for meeting objectives as well as strategies dependent on additional fiscal or other resources. GPRA plans establish goals obtainable within 5 years and expected budgets and a strategy to achieve them. Thus, the RMP provides an important context for developing GPRA plans. The RMP provides a complete vision, including unfunded priorities; the GPRA plan maps out actions for the next 5 years.

The project statements contain information that are reflected in the Project Management Information System (PMIS) and the Operations Formulation System (OFS). The PMIS contains only project information and most non-recurring projects included in the RMP should also be reflected in PMIS. The OFS contains base funding needs. All resourcerelated base funding needs in OFS should also be reflected in RMPs, but OFS may not include all the base funding needs in RMPs. Rather, OFS may be a more constrained view of base funding needs than is allowed in the RMP, because total increase requests (for all program areas) for OFS may be constrained, or individual regions may place their own constraints on what they choose to forward for the servicewide needs assessment. The RMP is basically unconstrained.

Maintaining a separately identified RMP database allows us to include additional information that may not be needed for the broader Servicewide databases. It also may allow us to more easily perform analyses and make reports. However, as the RMP and OFS databases move to a new technology, and now that the PMIS database is in place,

the RMP database will be redesigned so that, hopefully after the 1999 update, redundant data entry will be eliminated.

# Compliance

When necessary, environmental assessments will be prepared in accordance with the National Environmental Policy Act. If applicable, categorical exclusions will be on file for each applicable project proposal before implementation. Various other legal and regulatory requirements such as wetland and floodplain findings and Corps of Engineers permits will be obtained as appropriate.

Federal activities that may affect register-eligible cultural resources require consultation with the Alaska State Historic Preservation Office and Advisory Council on Historic Preservation in compliance with Section 106 of the National Historic Preservation Act. Specific recommendations of the State Historic Preservation Office will be sought and incorporated before the action's final approval. Other major legislative constraints include the Antiquities Act, NPS Organic Act, Historic Sites Act, Executive Order 11593, and Archeological Resources Protection Act.

Sitka National Historical Park has sent summaries of human remains and associated funerary objects and "objects of cultural patrimony" to appropriate groups as required by the Native American Graves Protection and Repatriation Act (NAGPRA). NAGPRA was signed into law in November 1990 and sets forth a process for the return to American Indians, Native Hawaiians, and Native Alaskans, upon request, certain human remains and other cultural items presently held by Federal agencies or Federally assisted museums and other institutions. The law also gives these Native American individuals and groups a formal role in decisions about activities carried out on Federal and tribal lands that may affect archaeological resources of importance to Native Americans. There are two accessions of human remains in the park's collection. The list of potential "objects of cultural patrimony" is lengthy. One request for accession information on the Herring Rock Robe was received in 1995. No repatriation claims have been made.

The park also allows limited ceremonial use of objects that the Sitka Tlingit consider sacred possessions. The foremost reason the park graciously allows this use is the American Indian Religious Freedom Act which states "...it shall be the policy of the United States to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indians...including but not limited to access to sites, use and possession [of their own] of sacred objects..." These sacred possessions are in the park collection through loan agreements, donation, purchase, and gift.

# **Plan Version**

The **RMP** is a dynamic document that is intended to be responsive to new information. Many components of the document should be updated regularly. Thorough reviews of the plan are mandatory every four years.

Park staff completed an **RMP** for Sitka National Historical Park in 1994. This version of the **RMP** is a complete update of that document.

# **1.0 INTRODUCTION**

Sitka National Historical Park preserves historically and culturally significant sites and artifacts related to the 1804 Battle of Sitka between the Kiks.ádi Tlingit and the Russians, the Russian-American period in Alaska, and the Alaska Native people of southeast Alaska. The park lies on the outer shore of Baranof Island in southeast Alaska, within the city and borough of Sitka, approximately 100 air miles southwest of Juneau (Figure 1-1).

In 1890, President Benjamin Harrison reserved land in Sitka for a "public park." Some of this federally reserved land was later proclaimed Sitka National Monument by President Taft in 1910, which was 6 years before the National Park Service itself came into being. On February 25, 1952, President Harry S Truman signed a proclamation that readjusted the boundary. In 1972, Congress passed a law, which changed the Park's designation from a national monument to Sitka National Historical Park. This law also expanded the park to include the Russian Bishop's House. The park commemorates a part of early U.S. history, including czarist Russia's exploration and colonization of Alaska (Appendix B).

Today the park consists of two separate units that encompass approximately 107 acres, of which 49.5 acres are tidelands. These units are termed the visitors center unit and the Russian Bishop's House Unit. The visitors center unit consists of the visitors center which houses park headquarters, the Southeast Alaska Indian Cultural Center, Totem Trail and other adjoining trails, site of the historic Kiks.ádi Tlingit fort, battleground of the 1804 Battle of Sitka, and the Russian Memorial.

The Russian Bishop's House unit, near Sitka's central business district, consists of the Russian Bishop's House National Historic Landmark and two adjacent historic buildings: the Priests' Quarters and the Old School. The Russian Bishop's House, which was the bishop's residence with a small chapel on the second floor, is one of four intact examples of architecture remaining from the Russian colonial period in North America.

# 1.1 History

Sitka National Historical Park lies at the mouth of Indian River, which drains 12.6 square miles of central Baranof Island Mountains. The Kiks.ádi, a Tlingit Clan, first landed here many centuries ago and claimed the Indian River as their land and resource base. Russian fur traders arrived in the late eighteenth century to trade and exploit the resources and later to occupy the area.

A climactic episode of the Russian-Tlingit hostilities, known today as the Battle of Sitka, took place at the mouth of Indian River in 1804. The Tlingits withdrew from the area, leaving the Russians to develop a new settlement at the site of the Tlingit village where downtown Sitka is now located. In 1808, this became the capital of Russian America, known as New Archangel. The Kiks.ádi returned to Sitka in 1821 and settled outside of the Russian perimeter.

The Russian settlement and Tlingit ranche (as it was termed) began to swell in the 19<sup>th</sup> century. Indian River became more heavily utilized as a convenient source of fish, wildlife, and plants. In time, this area also became a site for social and recreational activities. *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b) notes that the Tlingit concentrated primarily on subsistence hunting, fishing, and gathering in the park and the Russians increasingly used the park for gardening and recreation. By 1890, increased and disparate use of the park necessitated legislation to protect the landscape.

Today the park is utilized by a myriad of people. The local public in Sitka use the park for recreational and educational purposes. This includes walking, jogging, viewing wildlife, picnicking, school field trips, and enjoying year-round interpretive walks, talks, and demonstrations. Many locals feel a strong sense of ownership toward the park. The native community considers the Sitka National Historical Park important for many of the following additional uses: specific ceremonial and educational activities for Tlingit cultural conservation, help with curatorial needs upon the expected return of many cultural artifacts from various museums around the country as a result of the Native American Graves Protection and Repatriation Act, traditional use studies, and support for the Southeast Alaska Indian Cultural Center activities. *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b), emphasizes that, despite the pressures of contact, Sitka Tlingits have continued to maintain their physical, social, symbolic, and spiritual ties to Indian River.

Destination visitors from all over the world come by plane, ferry, or cruise ship. They may visit the park as part of a tour of Sitka, a place to stretch their legs or see a totem pole. A chance to walk in a temperate rain forest under towering Sitka spruce and hemlocks and observe migrating salmon may be the highlight of a visit. Other visitors will have strong impressions of the native artisans associated with the Southeast Alaskan Indian Cultural Center. Museum visitors will admire the fine Tlingit house posts and weaving on display at the visitors center. Many visitors associate Sitka with its Russian past and will bring back strong memories of a visit to the Russian Bishop's House. Historians may be inclined to view the Russian Bishop's House as one of the last remaining examples of a Russian log structure in the new world, admiring its construction. Sitka National Historical Park has a feature for almost everyone to enjoy.

# 1.2 Purpose of the Park

The overall direction for the management of Sitka National Historical Park emanates from the 1916 legislation that created the National Park Service to:

promote and regulate the use of the Federal areas known as national parks, monuments, and reservations . . . to conserve the scenery and the natural and historic objects and the wild life 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. (NPS Organic Act, 16 USC 1)

Within that general directive, the statements of purpose, significance, and primary interpretive themes provide the framework on which the action alternatives are based and

set the parameters for how the area should be managed and used. The purpose statements tell specifically why Sitka National Historical Park was established as a unit of the national park system and the significance statements tell why the park is important to our national heritage.

#### Park Purpose

According to the park's enabling legislation, the purposes of Sitka National Historical Park are to achieve the following:

- Preserve and interpret the site of the last major resistance of Alaska Native people to Russian colonization.
- Preserve and interpret the battleground and fort site of 1804.
- Preserve and interpret the site of the former village of the Kiks.ádi clan.
- Preserve and interpret the numerous totem poles that were present in the park in 1910.
- Preserve and interpret the Russian Bishop's House, an area that illustrates a part of the early history of what is now the United States by commemorating czarist Russia's exploration and colonization of Alaska.
- Preserve the Russian Memorial, the site of the memorial to a Russian midshipman and six sailors who were killed in the 1804 Battle of Sitka.

#### Park Significance

Sitka National Historical Park is significant for the following reasons:

- It is the site of the last major armed resistance of Alaska Native people to Russian colonization, where the cultural conflicts between two rich and contrasting cultures are interpreted.
- It includes the Russian Bishop's House, which is the most intact structure of only four that remain from the Russian-American period in North America. The building represents the role and influence of the Russian Orthodox Church on the people of Alaska, which continues into the present time.
- It contains totem poles that exemplify the talents, arts, and cultures of Native peoples throughout southeast Alaska and are presented in a historical context.
- It fosters the preservation and interpretation of Alaska Native culture through its partnership with the Southeast Alaska Indian Cultural Center, a nonprofit organization that since 1969 has preserved and perpetuated traditional art and culture for visitors and residents.
- It has a long-standing role in the storage, preservation, and display of tribally owned artifacts that are still used by tribe members for ceremonial purposes.
- The convergence of the Indian River, the coastal rainforest, and the sea provides an inspiring, biologically rich environment that is critical to understanding the

events that took place here. The hydrologic processes of the river and tidal waters, along with good water quality, support important riparian and floodplain communities and intertidal wetlands, and they provide essential habitat for native fish and wildlife species.

### **1.3 Description of the Park Environment and Resources**

#### Physiographic Context

Sitka National Historical Park is located at the mouth of Indian River on Baranof Island. Indian River drains the post-glaciated valley encompassing approximately 7,800 acres, outlined by Mount Verstovia, Arrowhead Peak, the Sisters, and Gavan Hill. The park coastline is adjacent to Crescent and Jamestown Bays (Figure 1-2).

Baranof Island is one of the most rugged of all the islands in southeast Alaska, with many high peaks and slopes. The outer coast is dotted with numerous small islands. The northern part of the island exhibits soil layers of volcanic ash from past eruptions of Mt. Edgecumbe.

#### <u>Climate</u>

Sitka experiences a marine climate, characterized by relatively heavy precipitation with a small temperature range between seasons. Most of the 96.6 inches average annual precipitation in the park occurs as rain. On the other hand, the mountainous Indian River watershed develops a considerable snow pack.

In early and mid-summer the high pressure ridge tends to move north through southeast Alaska creating a relatively dry season. April through July receive 3 to 4 inches of rain per month. The high pressure moves back into the central Pacific the rest of the year, permitting storms to move into the Gulf of Alaska with stronger and more frequent frontal systems passing over southeast Alaska. The wettest months of the year are September through November, with October receiving an average of 14.8 inches.

The temperatures in the Sitka area are moderate, ranging from an average daily low of 31 degrees Fahrenheit in January to an average daily high of 55 degrees in July and August.

#### Geology/Geomorphology

The following geological and soils discussion are presented in *Ecological Inventory* (NPS 1993). The majority of the park overlies surficial deposits derived primarily from graywacke, schist, and phyllite. Landform units of the park are delineated and described in detail in *Vegetation Inventory and Forest Health Assessment* (NPS 1994). These surficial deposits include alluvium on Indian River's floodplain, estuary, and stream terrace; ablation till on the lateral moraine; and beach sands and gravel on the uplifted beach and uplifted beach meadow. The source rocks for all these deposits are the steep mountain sideslopes and cirque walls, located at the head of Indian River and its tributaries, which were formed during local alpine glaciation.

Deglaciation occurred sometime before 10,000 years ago. The land mass associated with the park was under water during the marine transgressions resulting from deglaciation. Since then, the beach deposits have been worked many times by wave action and Indian River. Deglaciation was followed by isostatic rebound, the upward movement of a land mass responding to the removal of the thick mass of ice from the glacier. It is estimated that the total rebound to present in the Sitka area has been approximately 35 feet. Rebound is now occurring in the Sitka area at approximately 0.13 inches per year.

Additional information can be found in *Physical and Cultural Landscapes of Sitka National Historical Park* (NPS 1995b).

#### Soil Development

Soils in the park exhibit the relative ages of each of the landforms. The upland terrace and lowlands have soils with the greatest development, suggesting they are the oldest landforms (Spodosols). Typically these are well drained shallow soils. Next in relative age are the uplifted beaches and second floodplain terrace (Inceptisols). The position of the first floodplain terrace, being lower in elevation, suggests it is the next in relative age. The youngest landforms are the estuary and the beach meadow.

#### <u>Hydrology</u>

The Indian River watershed is approximately 12.6 square miles characterized by steep topography, well-drained shallow soils, and high drainage density. It exhibits a rapid response to rainstorms, which cause large daily fluctuations in streamflow. Hydrologic calculations indicate that peak runoff occurs within six hours of a storm center passing over, with nearly all rainfall running off in 12 to 24 hours.

Streamflow is highly variable during the year. River discharge generally peaks in September and October and gradually declines throughout winter and early spring. Snowmelt at high elevations results in moderate flow increases in May and June. Minimum flows are most common in December, March, and July.

The boundaries of the park encompass most of the Indian River Delta. The 0.4 mile length of the lower river that flows through the park is characterized as a low gradient gravel-cobble bed alluvial channel. At river mile 0.5 the river flows under the Sawmill Creek Road bridge. Just upstream from the bridge the river flows over bedrock falls. A diversion structure and a flume at river mile 0.8 transport water to the Sheldon Jackson College hydroelectric generating facility and fish hatchery. The city and borough of Sitka maintains a municipal water diversion at river mile 1.4 to serve as an emergency backup water supply system.

Sitka National Historical Park claims an inchoate water right to instream flows on the Indian River within the park. In 1967, the National Park Service filed an application for a state declaration of appropriation to establish a federal reserved water right with a priority date of June 21, 1890. To date, the state has not recognized the claim or the right. The National Park Service is conducting settlement discussions with the state, Sheldon Jackson College, and the city and borough of Sitka to try to resolve water use conflicts and establish instream flows to protect the park's natural and cultural resources.

There are two existing offstream appropriations upstream of the park. Sheldon Jackson College has an appropriation for 30 cubic feet per second (cfs) for hydroelectric generation and a fish hatchery operation. The city and borough of Sitka has a certified right for 3.9 cfs for drinking water and a pending application for 6.1 cfs more. In 1985 the city developed a new water source from Blue Lake, but it retains the diversion on the Indian River as an emergency water source. Additionally, the Alaska Department of Fish and Game has a certified right to various amounts of water throughout the year to support the spawning, incubation, and rearing of salmon.

Much of the park's natural setting has been altered over the past century. Some areas have been logged and cleared for structures, trails, and roads. Wave energy, river water volume, offshore gradient, and the stream channel all have been modified by human activities. The military began dredging at the mouth of the Indian River in 1939. The need for gravel began to decrease in 1941, but more than a million cubic yards was removed from the riverbed and near shore by 1945. Gravel removal increased dramatically between 1954 and 1960. Offshore dredging continued erratically until 1979.

Extensive dredging at the mouth of the Indian River changed the river gradient and is suspected to have been responsible for an increase in the rate of bank failure along the lower river. It is also believed that dredging contributed to the severe bank erosion in 1945 along 600 feet of the estuary channel. Subsequent efforts to stabilize the banks by straightening the channel and installing log cribbing failed. A rock wall and a diversion channel were constructed in 1961 in an effort to ameliorate the erosion of the west bank about 800 feet upstream from the river mouth. Most of this work was removed by a flood that year. The remnant structure helped contain minor floods, but the river, especially at flood stages, was directed into the bank near the fort site. In 1985, riprap was placed along the lower riverbank near the fort site to address the erosion of that bank.

The river was altered again in the late 1970s, when the mobile home park on the east side of the river was extended into the mouth of the river with riprap, pilings, and fill. The river also has been affected by diversion structures upstream of the park. These act as sediment traps, affecting the transport of sediments downstream. The structures also reduce streamflow, and this further reduces the river's sediment-carrying capacity.

Significant erosion occurs along the northeast bank of the river, especially during winter storms. This bench area is composed of fill placed along the beach. In the past this site has been used for gravel dredging, asphalt production, and a sawmill. Erosion of the fill area has exposed various debris and soil contaminated with hydrocarbons. The park has instituted a program to monitor the erosion and sample the water adjacent to this site.

#### Floodplains and Wetlands

Various studies have calculated the runoff from a 100-year flood to range from 6,400 to 6,725 cfs. The probable maximum flood flow has been calculated at 17,800 cfs. The picnic area, which is within the 100-year floodplain of the Indian River, is the only developed facility in the park that would be subject to flooding. The National Park Service has determined that uses of this type are compatible uses of floodplains; as such,

they are excepted from compliance with Executive Order 11988 (*Floodplain Management*). The visitor center is not within the 100-year coastal flood areas, but it could be subject to wave action and flooding from tsunamis.

An ecological inventory of the park was prepared by the U.S. Forest Service in 1993. The inventory identified a wetland ecological unit on both sides of the Indian River, where it enters the ocean between Crescent and Jamestown Bays. This area, an estuary, occupies intertidal positions that are subject to flooding daily during high tides. The Indian River also can flood during periods of high runoff (NPS 1993).

The plant communities of the wetland areas are nonforested, dominated by plants that are salt-tolerant and able to survive periodic to daily flooding. The variety of plants increases toward the beach. Algal species are found near the permanently flooded zone, where vegetation thins and more bare ground is visible. Also present in the estuary are salt- and flood-tolerant plants such as hair grass, alkaligrass, goosetongue, and sandwort.

#### Forest and Vegetation

Baranof Island is part of the Alexander Archipelago, which comprises all the islands of southeast Alaska, extending from Yakutat Bay to northern Vancouver Island. Baranof Island and Sitka National Historical Park lie within the spruce-hemlock-cedar region of the temperate forest biome, which extends south to include the redwoods of coastal northern California. Temperate rainforest, like the publicized tropical forest, is a unique ecosystem of limited extent. In North America, it occurs primarily in southeast Alaska and British Columbia.

The vegetation in Sitka National Historical Park is a coastal temperate rainforest typical of southeast Alaska. Western hemlock closed-canopy forest type is found on all the stable landforms, including most of the park. Blueberry and devil's club dominate the shrub layer. Occasional Sitka spruce are found in the overstory, frequently taller than the hemlocks. Much of the park is second-growth hemlock (100–125 years in age) that shows an overstory of relatively uniform height. In areas where the canopy has been opened through blowdown of trees, there is a well-developed shrub understory. Under the denser canopies there are fewer shrubs and limited forbs and ferns.

The largest trees are in the forest in the northeast corner of the park. This forest exhibits old-growth characteristics such as multiple canopy layers, trees of varying diameters, snags (dead standing trees), and woody debris. Old cut stumps in this area suggest that selective logging may have been practiced here in the past.

The Sitka spruce forest type is found on relatively unstable landforms such as the floodplain on the east side of the Indian River, along the trail in low areas with greater soil water movement. It is also found near the Russian Memorial and near an old asphalt plant site. This is a successional community that is likely to be gradually replaced by hemlock. It is open-canopied with dense devil's club and salmonberry shrub layer.

Rapidly growing open-canopy red alder stands are on both sides of the river, where they tolerate subsurface flooding and drainage conditions. Under the even height alder overstory are salmonberry shrubs and fairly well-developed forb layers. Alder

communities are typically succeeded by spruce unless disturbance is extensive or repetitive. An alder stand also exists in the disturbed area southeast of the Russian Memorial.

Nonforested areas in the park are the estuary, wetlands, beach fringe, and historic Tlingit fort site, which is a maintained grass opening enclosed by the surrounding forest. The estuary is dominated by salt-tolerant, flood-tolerant plants. The beach fringe and the wetlands along the shoreline also are dominated by salt- and flood-tolerant species. A beach meadow that lies in the southwest part of the park is transitional between beach and forest. In the lowest, most frequently flooded area is a grass and umbel meadow that is able to tolerate salt and flooding during extreme high tides and storm tides. Red alder, spruce, and salmonberry have colonized slightly higher areas adjacent to the meadow.

#### <u>Wildlife</u>

#### Aquatic Species

Pink and chum salmon enter the intertidal and lower floodplain channel segments of the Indian River to spawn from mid-July through September. The fry emerge and migrate to the ocean from late-February through mid-May. Fish from the Sheldon Jackson College hatchery may enter the river during spawning.

Coho salmon and steelhead trout migrate upstream but have not been observed spawning in the park. The primary rearing and spawning habitat for coho salmon and steelhead trout is above the Sheldon Jackson College diversion dam. The dam is a partial barrier to upstream migration, but a fish pass allows upstream access for these species under certain flow conditions.

Anadromous Dolly Varden enter the river in August, migrating upriver through the park to spawn farther upstream. The fry emerge from the gravels in the spring and disperse throughout the river. Non-anadromous resident fish in the river include rainbow trout, coast range sculpin, and Dolly Varden. Marine species of fish common to the marine waters of Sitka also inhabit the intertidal and estuarine areas at the river's mouth.

An aquatic resource survey completed in 1995 revealed that in general, fish habitat suitability in the lower reaches of the Indian River is limited by a lack of pool habitat, few deep pools, and lack of cover. These habitat conditions were directly related to the paucity of large woody debris, the major pool-forming agent in southeast Alaska watersheds, which has an important function in providing habitat cover and density (NPS 1995).

#### **Terrestrial Species**

The park intertidal and shoreline areas support a variety of migratory waterfowl and shore birds during spring and fall. Gulls, crows, and ravens scavenge along the tidal flats and the river. Bald eagles are common in the general area, especially during the spring herring spawn and fall salmon runs, when eagles feed on fish carcasses in the river and adjacent tidal flats. Such mammal species as shrews, mice, voles, red tree squirrels, mink, and river otters also inhabit the park. Sitka blacktail deer are uncommon in the park, probably because of the frequent presence of people and dogs. Brown bears occupy the Indian River drainage but rarely enter the park.

#### **Threatened or Endangered Species**

No threatened or endangered plant species is known to exist in the park. It is suspected that a number of plant species on the sensitive species list of the Alaska Region of the U.S. Forest Service inhabit the Sitka area, but none are known to have been found in the park.

No endangered or threatened animal species is known to inhabit the park. The endangered humpback whale and the threatened Steller sea lion are commonly sighted in marine waters around Sitka. The endangered American peregrine falcon and the recently delisted Arctic peregrine falcon may pass through the area as transients, primarily during seasonal migration.

#### Archeological Resources

Less than 1 percent of the park has been surveyed archeologically. With the area's history of glaciation, finding physical evidence of prehistoric human occupation of the park more than 10,000 years ago is unlikely. Instead, physical manifestations of historic Tlingit and Russian occupations and subsequent American occupations are more likely to remain. In 1958 test excavations were made to find the historic Tlingit fort in the Indian River area through archeological means. Subsequent research has shown that some of the artifacts appear to be from later dates and may be associated with Russian homesteads known to have been in the area. Specific locations are still subject to further investigation.

Most of the park's archeological studies have dealt with cultural resource compliance during the Russian Bishop's House restoration. These include Shinkwin 1978, Blea 1986, 1984, and numerous brief letter reports.

Section 4.0 outlines the programs necessary to address cultural resource management issues and provide long-term protection of the resources. These sections are reviewed annually and updated as necessary; it was last revised in 1994. The plan places high priority on efforts to identify the specific location of the Tlingit fort archeologically.

#### Historic Resources

Sitka National Historical Park was listed on the National Register of Historic Places on October 15, 1966. The listing refers to the visitor center unit, including the area that is referred to as the "fort site." Some local residents call this unit Totem Park. The main mandate of the Sitka National Historical Park is to commemorate and preserve the battleground and the historic Tlingit fort site. "Fort site" refers to the location - still not determined exactly - of the Tlingit stockaded fort known to have existed in the Indian River/Sitka Sound area during the 1804 Battle of Sitka. The presumed site is presently delineated by a grassy clearing.

Part of the mandate of the park is to preserve the Russian Bishop's House and related buildings through interpretive and adaptive use. The Russian Bishop's House was begun in 1842 by Arvid Etholen, a Finn who was chief manager of the Russian American Company (1840–45). It was designed to contain not only the living quarters of the new bishop, but also his administrative offices, a chapel, a seminary, and subsequently a parish school. The influence of Finnish shipbuilding can be seen in the architecture of the house, especially on the inside.

The Russian Bishop's House was restored during a fifteen year period and is currently used to tell the story of Russia's presence in North America. In 1981 the structure was designated a National Historic Landmark. This historic property is the most intact of the four remaining buildings of this period in the Western Hemisphere.

A school was added to the property in the 1880's and a small dwelling, called the priests' quarters, which used as rental property by the church was moved to the location in the 1930 or 50's. The adjacent Priests' Quarters and the Old School were built in the American period, ca. 1880's. These buildings are scheduled to be rehabilitated and used in daily park operations. Their exteriors have been preserved, but the interiors are in need of rehabilitation.

Other park historic elements include trails like the Russian Walk which was later overlaid by the Totem Trail of the American period. In the late 19th century a few additional trails (circa 1884 and 1895) were added to the colonial Russian walking trail, part of which became the park's Totem Trail.

Early in the 20th century the park became a repository for 18 Tlingit and Haida totem poles collected by Territorial Governor John G. Brady in southeast Alaska (NPS 1986b). Most of these poles were displayed as part of the Alaska Pavilion at the 1904 Saint Louis World's Fair honoring the 1803 Louisiana Purchase. After the Lewis and Clark Exposition in Portland, Oregon in 1905, 14 totem poles and 4 house posts were returned to Sitka and placed in the park.

The returned totem poles, known as the Brady poles, were erected in the park in landscaped sites or nodes along what became known as the Totem Trail by Sitka artist Elbridge Warren Merrill. The totem poles are important components for the successful listing of the park in the National Register of Historic Places. The "Brady" poles were reconstructed by CCC workers in the 1930s and 40s. Fragments of the original Haida and Tlingit Brady totem poles are stored as curated artifacts in the park's museum collection. Replicas are currently displayed along the Totem Trail in the visitor center unit of the park.

The Russian Memorial, an element of the park since at least 1824,commemorates a Russian midshipman and six others who were killed in the Battle of 1804. Originally a plain wooden Orthodox cross inside a small picket enclosure marked the graves, but the present cross is more ornate.

#### Cultural Landscape

The cultural landscape of Sitka National Historical Park is the product of successive human and natural changes that have occurred over many years. The scenic qualities of

the Indian River, which the Tlingit have valued for thousands of years, were central to the creation of the public park in 1890 and have continued to be a major attraction. This riparian corridor is constantly being shaped by natural forces and human actions, which have resulted in a shifting channel that drives the continual change that characterizes cultural features. Early bridges were washed out, and the present bridge (built in 1968) perpetuates a tradition established by the historic structures.

The fort site area, situated near the mouth of the Indian River, is a central component of the park's landscape. It has attracted a succession of Native, Russian, and American settlers. The settlers harvested the spruce/hemlock forest in the mid-19th century. A clearing near the river's mouth was a fairly constant feature that was recognized as the site of the Tlingit fort. Initially the clearing was not completely enclosed by trees, but in recent decades dense forest growth developed between the clearing and the uplifted beach. Now the clearing is enclosed by forest. This creates a scene different from the historical setting of the beachfront which in 1804 was open to the river and sea and backed by the forest.

The park's beaches and tidal flats have been shaped by the constant forces of tides and wave action. The beach has risen above the wave zone through isostatic rebound and has been colonized with terrestrial vegetation. From the 1804 battle to the 1940s the area included open grass, beach, and beach meadow across the peninsula. Now it is made up of irregular topography that supports several plant communities and is increasingly being enclosed by alders and other small trees and shrubs.

Two major historic paths that cut through the park. The old Russian path to the Indian River and the Totem Trail probably overlapped as they entered what is now the park and led out to the Indian River peninsula. Several aspects of the paths have changed significantly. The ground surface has been modified since the old trail served first as a Russian, then an American, "corduroy" road. The old growth has given way to a community consisting of clearing, stumps, shrubs, and immature trees that resulted from 19th century woodcutting. Today the trail passes through a dense, tall second-growth spruce/hemlock stand.

The Totem Trail was originally a commonly used trail that led along the edge of the forest to the mouth of the Indian River. E. W. Merrill, a local photographer and later the first unofficial caretaker of the park, was asked in 1906 to arrange the totem poles collected by Gov. John Brady. Merrill placed the totem poles along the trail in such a way that many were visible from both the trail and the beach. Instead of standing in the clearings and extending above the treetops, most of the totem poles are now overtopped and enclosed by the forest.

Throughout the park's history a series of other vernacular, or "social," trails has traversed the west side of the park. The character of other trail corridors has been altered by historic thinning of forest stands and the subsequent maturation of the present secondgrowth stand.

At the Russian Memorial, the character of the grave marker has changed little. The immediate site has become enclosed in second-growth spruce/hemlock. Today it is probably more secluded and densely surrounded by vegetation than during the Russian

period, although Navy dredging in the 1940s reduced the enclosure to a narrow strip of trees on the river side of the memorial.

The park entrance has changed over the past 100 years both inside and just outside the present boundaries. Two mission cottages built in the later 19th century stood in the vicinity of the present visitor center. An ornamental gateway built in the 1920s was removed before the visitor center was built in 1965. The original parking lot and a small comfort station gave way to the visitor center, which totally transformed the historical rustic, informal entrance into a highly developed zone that forms the initial park experience for most visitors. Simple plantings harmonize with the building and contrast with the forest trees behind the visitor center. The totem poles near the entrance are arranged in a way that allows hurried visitors to see them. The more culturally traditional display of totem poles on the lawns enhances the aesthetic power of their form and expression. Any future changes in the park's cultural landscape will be conducted according to the recommendations in the cultural landscape report.

The landscape adjacent to the park entrance has changed little since the visitor center was built. The area is bordered on the southwest by an expanse of beaches and tidal flats. From the top of the retaining wall at the back of the beach can be seen the Indian River peninsula, the beach, the sound, the distant islands, and the mountains.

#### Ethnographic Resources

Prior to 1998, little was documented about site-specific ethnographic resources in the area that is now Sitka National Historical Park. The park vicinity was known to be an area where the Tlingit lived historically, where they built a village and a fort, and where they fished, hunted, and gathered. Thomas F. Thorton, University of Alaska Southeast, recently published *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b), using interview, archival, and published sources. Key events in the park's natural, mythic, and social history are detailed including geological occurrences, ecological and habitat changes, the discovery and settlement of the area by the Kiks.ádi clan and other Sitka Tlingit, and development of Indian River as a Tlingit, Russian, and American landscape. The following paragraph provides a brief summary of conclusions resulting from the traditional use study.

"The *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b) describes and analyzes traditional Tlingit patterns of use of Sitka National Historical Park from an ethnohistorical perspective. Since the pre-contact period, the park and Indian River valley have been a vital center of secular and sacred activities among the Tlingit. It was and is a land of great prospect and joy in terms of its bountiful natural resources, as well as a landscape of refuge and tragedy, as evidenced in the unfolding of events in the Tlingit battle with the Russians in 1804. For the possessing clan, the Kiks.ádi, the river has long been an important source of history, identity, and subsistence fish, wildlife, shellfish, and plant resources as well as a recreation site. Finally, for the residents of the cottage settlement at Sitka from 1888-1945, a tumultuous period in Tlingit cultural history, the park was a year-round dwelling place for food collecting, recreation, entrepreneurial, and spiritual activities."

#### **Museum Collections**

Sitka National Historical Park's museum collection is tangible evidence of the forces, events, and cultures the park commemorates. Its preservation and use are central to accomplishing the park's mission. Included in the 140,000 items of the collection are Haida and Tlingit totem poles, Russian-American archaeological items and documentation, Russian-American historical furnishings, Russian Orthodox religious objects, Tlingit ethnographic objects and oral history tapes, historical photographs, archives, and natural history and herbarium collections. Managing the collection involves long-term loan partnerships with three Tlingit clan house groups and the Russian Orthodox Church of Alaska. In addition to use by scholars and the park staff for interpretation and research, the collection is used for ceremonial purposes by both Tlingit and Russian Orthodox groups. The following items are included in the park's collections and are described in detail in the *Museum Management Plan* (NPS 1997a):

- **Totem Poles** Thirty-three totem poles in the park's museum collection range from originals collected by John Brady to replicas to newly commissioned originals. They are valued for their long, complex history of display, ownership, and conservation, as well as for their artistic merit.
- Archeological Collections The park's archeological collection includes 35,000 artifacts from Old Sitka, the Fort Site, and the Russian Bishop's House. These artifacts speak for some of the most significant Russian-American settlements among the few existent in North America. For example, a cast metal plate from the Old Sitka collection has Russian letters translating, "Land of Russian Possession, No. 12." It is the only such plaque recovered of about 20 that were buried during Russian exploration worldwide.
- Historical Collections When the park purchased the "Russian Mission House," all period contents of the house were added to the museum collection. These include original Russian furnishings and more than 2,000 architectural items: building fragments, building hardware, and wall coverings. About 300 original icons, incense burners, altar furniture, and vestments remain with the house, on permanent loan from the Russian Orthodox Church. Also in the collection are books from the house library dating from the 1840s to the 1970s. According to park historian David Nordlander, some of these became rare after the book-burning purges of the Russian Revolution.

In addition to the 16,000 historic items in the collection, the park curates 88 linear-feet of archives, over 300 maps and charts, and over 4,000 historical photographs and slides. These include 203 glass plate negatives by E. W. Merrill. Topics include park totem history, Bishop's House restoration, original documentation of archeological excavations, the Southeast Alaska Indian Cultural Center, and park administrative and building records.

• Oral History Tapes — Park historian George Hall began recording conversations with Tlingit elders in 1958. Tapes continued to be made by Superintendent Ellen Lang through the mid-1970s, and again in the early 1990s. The original recordings are stored, and cassettes of the 156 originals are available

for use. Among the tapes is the earliest known recording of a Tlingit memorial party. An inventory of these and other oral history tapes in Sitka has dramatically increased their use by researchers and the local Native community.

- Ethnographic Collections Chilkat robes, Tlingit dance staffs, rattles, bentwood boxes and drums, carved house posts, painted house screens, spruce root baskets, ceremonial daggers, and crest hats make up the ethnographic collection. Most exhibit items in the visitor center and the exhibit hall have been on loan to the park for over 30 years from three Tlingit clan houses. This collection includes more than 400 items.
- **Natural History** The park has 201 cataloged herbarium samples. A number of additional samples were collected during the 1997 field season.

#### Historic Partnerships

At Sitka National Historical Park, the history of acquisition, care and interpretation of artifacts are closely linked throughout the park's history. This can be seen in the *Administrative History of Sitka National Historical Park* (NPS 1987a) and the History of the Museum Collection cited above and detailed in the *Museum Management Plan* (NPS 1997a). In terms of partnerships, the early decades of park operation established a pattern of close ties with the local community. Additionally, ties to universities interested in the study of Native cultures were established. Research and major undertakings were initially carried out in conjunction with other public and private agencies.

The park has developed numerous partnerships. Museum collections are on long-term loans to/from Tlingit clans, the Russian Orthodox Church, Sheldon Jackson Museum, and the Alaska State Museum. Formal agreements exist with the Southeast Alaska Indian Cultural Center and the Sitka Tribe of Alaska. Detailed discussion of these partnerships can be found in the *Museum Management Plan* (NPS 1997a).

#### **Related Resources in Sitka**

The city of Sitka is important as the historical context of Sitka National Historical Park. Including the park, Sitka contains 20 historic properties listed in the National Register of Historic Places. The concentration of such diverse properties in a small Alaskan town is relatively large.

#### National Historic Landmarks

The NPS manages the National Register Landmark program. Under the direction of the NPS's historic partnership program, the park assists the community with that program. In addition to the Russian Bishop's House, the following six properties in Sitka are listed on the National Register of Historic Places as national historic landmarks.

- Alaska Native Brotherhood Hall
- Building 29 (Russian-American period)
- Castle Hill (site of American flag-raising on October 18, 1867)

- Old Sitka
- Saint Michael's Cathedral [Russian Orthodox]
- Sitka Naval Operating Base and U.S. Army coastal defenses on Japonski Island from World War II

#### **Building 29**

Building 29 was built circa 1850 to 1852. About 60 percent of the original square-logged structure remains within the walls of the present building, which is still on its original location and retains its integrity of site, scale, and orientation to Lincoln Street. Building 29 retains more original fabric than the Erskine House at Kodiak or the Commandant's House at Fort Ross, California. These structures, along with the Russian Bishop's House and Building 29, are the only buildings in the Western Hemisphere that remain from the Russian colonial period. Of the four, only Building 29 is not protected and not being preserved for its historical value.

Building 29 represents the commercial, mercantile aspects of Russian life at Sitka, in contrast to the intellectual life found at the Russian Bishop's House. The National Park Service's interest in preserving this building stems from its rare historical and commercial significance.

The future of Building 29 is uncertain. The diminishing inventory of structures of the Russian colonial era (down from 16 in the 1970s) makes the preservation of this structure critical. Documentation work by the National Park Service in 1994 has begun to raise community interest in preserving the building. The present private owner is concerned about its preservation and has inquired into possible NPS acquisition on a willing-seller basis. Present-day use is commercial on the first floor, residential on the second, and storage on the third.

#### Blockhouse

The Blockhouse is a reproduction of a Russian colonial era structure that the National Park Service built in the 1960's. The Bureau of Land Management owns the property where the blockhouse is situated. The Bureau is working with the city and borough of Sitka, the Sitka Tribe of Alaska, and other non-NPS entities on an agreement to maintain and operate the site. The National Park Service supports this effort.

# **1.4 Legislative and Administrative Constraints**

Section 1.0 gives a brief summary of the proclamations and public laws which define Sitka National Historical Park's purposes and legal descriptions. Appendix B contains the detailed proclamations and public laws referenced in this plan. Section 1.2 outlines the 1916 legislation that created the National Park Service. Resource management policies and philosophies are derived from the founding language of the National Park Service and supplemental Congressional declarations. The National Parks and Recreation Act of 1978, the Redwoods Act, further defined and amended the NPS Organic Act by stating: The authorization of activities shall be construed and the protection, management, and administration of these areas shall be conducted in the light of the high public value and integrity of the National Park System ...

The park is listed on the National Register of Historic Places. Therefore, federal regulation 36 CFR 800 derived from the National Historic Preservation Act applies to managing Sitka National Historical Park. The Native American Graves Protection and Repatriation Act is a pertinent law for park management. Additionally, federal regulations as promulgated in Title 36, Chapter 1, *Code of Federal Regulations*, also direct management and use of National Park Units. Federal regulations specific to Alaska are found in 36 CFR Part 13.

### **1.5 Resources Management Objectives**

The resources management program at Sitka National Historical Park attempts to fulfill the broad legislative purposes identified with the enabling legislation for the park and the mandates for management of NPS units. Program objectives are assimilated from appropriate sections of the park's general management plan.

#### **Desired Future Conditions**

The desired future conditions presented below form the foundation of the action alternatives. The statements describe the desired ends that the park is working to achieve in order to accomplish its purposes and maintain its significance.

#### Natural Resource Management

The park's natural resources and processes are conserved and protected. The protection of cultural resources takes precedence in implementing natural and cultural resource policies.

Natural processes, including the action of water, are allowed to continue unimpeded in natural zones.

Ecological processes and conditions associated with the Indian River and adjacent riparian areas are protected. A healthy, viable river and riparian system sustains wildlife populations. Water quality and minimum streamflows needed to sustain the dependent biota of the Indian River, particularly native fish populations, are maintained.

The estuarine and other intertidal habitats and resources are protected, preserved, and interpreted.

The rainforest and other vegetative communities are preserved, protected, and interpreted.

#### **Cultural Resource Management**

A comprehensive, systematic research program for cultural resources, arranged in priority order, exists. Ongoing research and baseline data collection are integrated into sound, accepted cultural resource management practices.

Museum collections and display exhibits are stored and protected in appropriate facilities. A comprehensive museum management program ensures that the park effectively deals with the full range of related needs.

All items loaned to the park by the Tlingit are protected and preserved. The National Park Service provides proper storage and protection of these artifacts. The Tlingit have access to their artifacts.

Priorities are assigned to future acquisitions according to their support of the park's purpose and significance.

The park's totem poles are stored, protected, preserved, and displayed.

The park's cultural resources are protected from damage by erosion.

An approved policy for the use of ethnographic objects gives local people specific direction about how to preserve and use items in the park's museum collections.

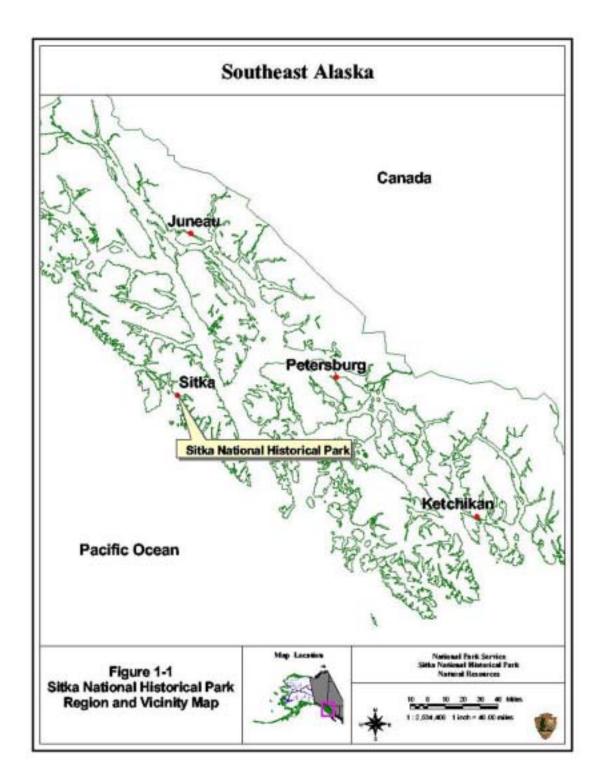
The Totem Trail, the fort site, the battleground, and the Russian Memorial are protected and managed as historic landscapes.

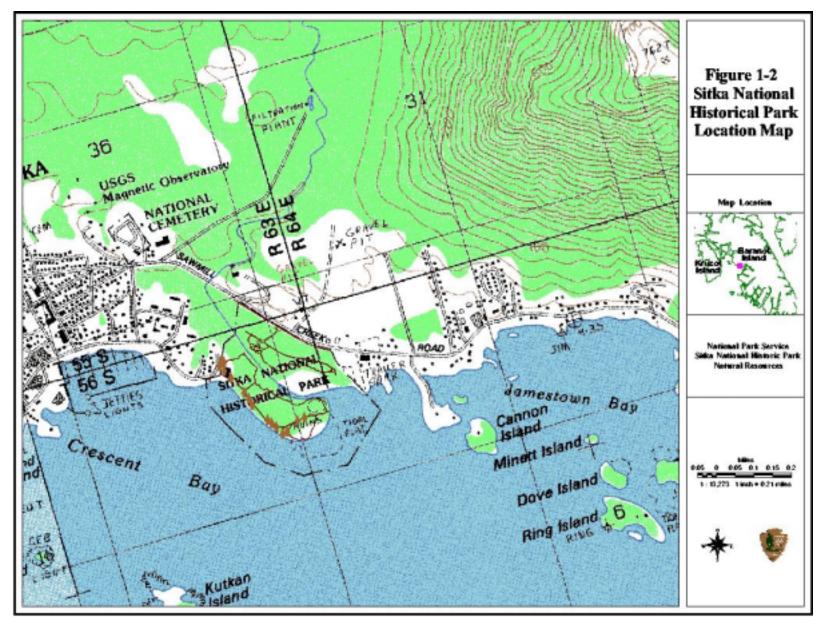
The location of the fort site and the battleground are confirmed and commemorated.

A Tlingit memorial has been established to commemorate the Alaska Native participants in the 1804 battle and the subsequent Survival March, and these subjects are included in park interpretation.

Visitors to the Russian Bishop's House can enjoy exhibits and interpretive presentations without undue wear and tear on the structure and its furnishings. The respectful, dignified ambience in this facility is worthy of a place of worship. NPS policies and partnership activities with nearby landowners and the city protect the setting and the historic scene from incompatible development.

Building 29 is preserved and protected.





# 2.0 Present Resources Status

Sections 2.1 and 2.2 summarize comprehensive baseline information on the park's natural and cultural resources, respectively.

# 2.1 Natural Resources

This section describes and evaluates the park's baseline information and long-term monitoring needs.

# **Baseline Information and Current Conditions**

In 1992, the service issued guidelines for resource inventories and monitoring (NPS 1992). That guideline established a minimum level of resource information that should be available in all parks. Baseline information is summarized in Table 2-1 as either meeting, exceeding, or not meeting the minimal level of baseline information as described in Appendix A of NPS-75. Detailed descriptions of each inventory component can be found in the following sections.

# Historical Database

The following sections briefly describe baseline data that has been collected for Sitka National Historical Park. Data is in the form of field notes, maps, photographs, reports, data sheets, and automated databases. This information is poorly organized and exists in a variety of incompatible formats. As a result, it can only be accessed with difficulty and limited thoroughness.

Information management is becoming increasingly important for the protection and management of park resources. An understanding of historical information is needed to help guide the direction of these programs and prevent duplication or omissions of it in planning and management. Park resource managers and scientists can greatly improve responses to management questions if information is well organized and current.

NPS-75 states that the park must maintain an automated bibliography of all descriptive documents and scientific studies pertaining to park natural resources, including extended research for published and unpublished documents outside the park.

# Physical and Cultural Landscapes

*Physical and Cultural Landscapes of Sitka National Historical Park* (NPS 1995b) was prepared by Vanguard Research in 1995. The purpose of this investigation is to provide information for proposed archeological surveys, provide baseline data for natural resource management, and furnish information useful for park interpretive purposes and the general public. The report describes the park's morphogenesis and develops a chronology of significant landform building events. It is a preliminary study to be used as a basis to support future research.

# Asphalt Plant

An asphalt hot plant was installed on the north bank of the Indian River delta in 1957, authorized by a special use permit. The asphalt plant was established to provide material for the paving of Sitka's streets. Upon closure of the plant, sometime between 1959 and 1961, surplus asphalt, debris, and equipment not removed from the plant were covered with fill and abandoned onsite. In recent years, equipment, cables, and asphalt have been eroding from the bank into the mouth of the Indian River.

A site assessment was completed by Shannon and Wilson, Inc. (NPS 1995c) in 1995 and included detailed analytical results of 33 samples from 10 test pits. Soil samples were analyzed for diesel range organics, residual range organics, aromatic organic compounds, halogenated organic compounds, and metals. Detected contamination appeared to be a mixture of weathered diesel and asphalt-range material. No significant levels of volatile or aromatic hydrocarbons were found on the site. No metals were found significantly exceeding background levels, with the exception of one sample containing an elevated level of lead. This sample was anomalous when compared to the other lead concentrations measured at the site.

The park is following Shannon and Wilson, Inc. recommendation of a no action alternative for remediation of soil contaminated with diesel. The park is required to monitor erosion and beach conditions regularly and respond to any sudden release of unacceptable contaminated soils into the marine waters. Additionally, the park is monitoring this site as described in *Monitoring Plan for Asphalt Plant Remediation* (NPS 1995d).

# Erosion

Erosion in the lower Indian River channel, from the footbridge to the estuary, has been monitored with notes and slides since 1991. This data needs to be compiled and analyzed to recommend management alternatives.

Erosion along the northeast bank at the mouth of Indian River has been monitored with slides since December 1992 and physical measurements since June 1995. This data needs to be compiled and analyzed to recommend management alternatives.

## Water Quality Data

Baseline Water Quality Data Inventory and Analysis, Sitka National Historical Park (NPS 1998c) was prepared in 1998 by the National Park Service Water Resources Division, Fort Collins, Colorado. This document presents the results of surface-waterquality data retrievals for the park from six of the U.S. Environmental Protection Agency's national databases. However, the majority of the data retrieved was collected outside the Indian River watershed and is not applicable. Therefore, the goal of this document, to provide descriptive water quality information in a format useable for park planning purposes and characterize baseline water quality was not accomplished.

Water quality has been monitored at the asphalt plant site in accordance with *Water Quality and Erosion Monitoring Plan for Asphalt Plant Remediation* (NPS 1995d), since June 1996. The sample locations and results have been entered into a database and GIS system. However, this data needs to be linked and analyzed.

The data collected for this monitoring is limited to the lower Indian River. Samples have been collected upstream of residential influence. However, Indian River water quality needs to be addressed with a comprehensive water quality monitoring program plan.

# Aquatic Resource Survey

Aquatic Resource Survey: Indian River, Sitka National Historical Park, Alaska (NPS 1995a) was prepared by the U.S. Department of Agriculture, Forest Service, Tongass National Forest, Chatam Area, Sitka, Alaska. This report presents the results of an ecological survey designed to assess aquatic resource conditions and trends within Sitka National Historical Park. Principal areas of investigation include: watershed hydrology, fish habitat, channel morphology and stability, and water quality.

The following summarize key results of this survey:

- Watershed and climatic characteristics of Indian River cause large, flashy peak flow events in the lower river. Historic flood events in the park have damaged or swept away inchannel structures, and caused major changes in stream channel morphology.
- Localized areas of stream bank erosion, along the east bank of Indian River, were identified in this survey. However, current flood plain and channel conditions are stable, relative to natural streams systems.
- Fish habitat within the park is primarily suited for pink and chum salmon spawning. The lack of pool habitat and large woody debris habitat make this portion of Indian River less suitable for juvenile salmonid rearing habitat.
- Relatively low diversity and the presence of pollution tolerant macroinvertebrate generally indicate slight water quality impairment in lower Indian River.

Recommendations included:

- Riparian management objectives should strive to 1) maintain healthy shrub and tree communities along stream banks and active flood plain area, and 2) allow natural recruitment of large woody debris from the riparian area to increase aquatic habitat diversity.
- Additional macroinvertebrate monitoring is needed to determine water quality trend in lower Indian River.
- A riprap dike constricting the lower flood plain should be modified to reduce stream bank erosion at the head of the Indian River estuary.

#### Instream Flow and Water Rights

The following documents have provided for evaluation of instream flow in Indian River: *Quantification of Instream Flow Requirements for Recreational and Interpretive Purposes* (NPS 1987c) and *Instream Flow Investigation* (NPS 1987b). The first report quantifies selected recreational and interpretive instream flow requirements for visitor activities including water-dependant recreation activities, water-enhanced recreation activities, interpretation of the history of the area, and interpretation of the life cycle of pacific salmon. The *Instream Flow Investigation* identifies the following:

- Instream flow requirements for maintaining habitat areas and populations of fish within the boundaries of the park. These requirements led to the establishment of Alaska Department of Fish and Game's certified rights to various water flows throughout the year.
- Assesses potential impacts to fishery resources and their habitats which may occur due to the withdrawal of water from Indian River.
- Assists resource managers and developers in preparing and evaluating alternatives that may prevent or mitigate adverse impacts to the fishery resources caused by the withdrawal of water.

Collaborative efforts between USGS, Sheldon Jackson College, the park, and the NPS Water Rights Branch in 1998 resulted in the ability to accurately measure instream flows on Indian River. There are presently five sites along Indian River and Sheldon Jackson's diversion to monitor stream discharge. Four of these sites have dataloggers that record stream depth every 15 minutes. The park and USGS are monitoring these sites by collecting a discharge measurement and downloading the dataloggers every 4 to 6 weeks. USGS compiles and maintains all original data in their database.

This effort will eliminate a major hurdle in successfully resolving water rights issues in a way that protects park resources and values and allows water rights holders use of the water for beneficial purposes. It is important for the park to have personnel trained in accessing the USGS database. The final data can then be transferred to a park database, which will be imperative in hydrological studies.

# Ecological Inventory

*Ecological Inventory: Sitka National Historical Park* (NPS 1993) was prepared by the U.S. Department of Agriculture, Forest Service, Tongass National Forest, Chatam Area, Sitka, Alaska. This ecological inventory was prepared to provide a uniform system for understanding the significant characteristics of the various landforms, vegetation, geology, and soils that occur in the park, and their relationships to one another and to their environments. The inventory evaluates the kinds, extent, location, and quality of these resource components in the park. The following objectives were accomplished:

- Inventory, classify, and map ecosystems of the vascular and non-vascular plant species at the park's visitors center unit.
- Develop a forest stand profile/history and provide recommendations on the stand health and potential hazard trees in areas of high visitor use.
- Compile inventories and prepare a final report.

This information may be used by park personnel to assess resources and make management decisions suitable to specific areas or particular plant or animal species of

the park. Baseline data collected under this ecological inventory may be used to compare changes in resources over time.

## Vascular Plant Species Inventory

Field surveys were conducted in summer 1992 by USFS to identify all vascular plants, *Ecological Inventory* (NPS 1993). All parts of the park were examined, and every plant encountered during the search was identified. However, since detailed surveys were not conducted during the spring and early summer, many plants were probably overlooked. The following information was collected for each plant: scientific name, family, common name, brief habitat information, and life form.

*Vegetation Inventory and Forest Health Assessment, Sitka National Historical Park* (NPS 1994) was prepared by the U.S. Department of Agriculture, Forest Service, Tongass National Forest, Chatam Area, Sitka, Alaska. Inventory efforts were designed to build upon the *Ecological Inventory* (NPS 1993). Eleven permanent vegetation plots were located and surveyed within six ecological land units within the park. The following information was collected for each vegetation plot: total cover by vegetation layer, tree canopy (overstory and understory), coarse woody debris, and general environmental data. The additional observations were taken through each of the forested ecological units: stand structure, species composition, history of disturbance, and insect and disease activity.

## Species of Special Concern

Species of special concern, including endemic and exotic species based on legislation or other factors have not been addressed within Sitka National Historical Park. Particular plant species have been mentioned in videos and letters. This documentation needs to be collected for further investigation of these plant populations. For example, Johannes Anonby, western Norway, provided some information on a lichen, *Usnea longissimaI*, which he found in the park. This species of lichen is endangered in Europe most likely because of air pollution. Monitoring this lichen may lead to important information about its level of tolerance to different types of disturbance from urban development.

## Forest Health / Hazardous Tree Inventory

A forest health evaluation was conducted for the park in March 1993 by the Environmental Health and Protection group of the USFS, *Vegetation Inventory and Forest Health Assessment* (NPS 1994). The report states that, in the case of the park, maintaining the aesthetic and historical condition of the forest is perhaps the primary goal of forest management. Additionally, providing a safe environment for the many recreational users is important. Insects and disease are impairing efforts to achieve this goal. The following problems and management alternatives will help improve forest health of the park:

Problem	Management Alternative
Heart Rot Fungi	Hazardous trees could be felled in place.

Hemlock Dwarf Mistletoe	Large hemlocks killed by dwarf mistletoe should be evaluated as hazardous trees if located near trails or valuable structures.
Spruce Needle Aphid Defoliation	Defoliation directly or indirectly results in spruce tree mortality and may become hazardous trees. Therefore, monitoring of the most heavily defoliated areas (1992 hazardous tree identification) is recommended.

Hazardous tree identification was conducted in 1992 by a USFS Silviculturist, *Ecological Inventory* (NPS 1993). Thirteen hazard trees were identified, mapped, and marked in the field.

The Vegetation Inventory and Forest Health Assessment (NPS 1994) was written to supplement the 1992 forest health evaluation documented in the *Ecological Inventory* (NPS 1993). This report rated 24 trees as hazardous requiring removal or some other action to reduce the likelihood of hitting the target. The identification of 24 hazard trees within the narrow area that was considered emphasizes the need for a park vegetation management plan.

These studies did not include rating trees that would strike totem poles or interpretive way stations. Similarly, trails and roadways were not rated since there are only moving targets at these locations. A comprehensive rating and mapping project needs to be undertaken in order to develop an understanding of the scope of the hazardous tree situation and potential over time.

The Vegetation Inventory and Forest Health Assessment (NPS 1994) recommends the following actions:

- Begin a hazard tree monitoring program.
- Begin monitoring forest health using overlay maps of forest composition, mistletoe and aphid infestation, or other important biological or human caused agents at work in the park.
- Determine if trampling is having a negative effect on tree health, and if so, what are the best solutions.

The *Forest Health Management Report* (NPS 1997b) was written to supplement the 1994 evaluation. Trees and limbs were removed in accordance with these recommendations in the fall of 1997. A field evaluation was conducted in 1998. The park will continue regular evaluations and monitoring of trees.

# Macroalgae Inventory

A macroalgae inventory was conducted from July to September 1997. Forty three macroalgae species were identified and inventoried along 53 transects established in the rocky intertidal area of the park. Macroalgae are important environmental monitors, and changes in distribution patterns may indicate changes in temperature, salinity, currents, or nutrients. The seasonal variation in macroalgae requires that a spring inventory is

required for a complete collection. Additionally, it will be useful to build a GIS database with the data collected. It is recommended that the park initiate a macroalgae monitoring program for monitoring long-term environmental changes.

# Fish and Wildlife

*Instream Flow Investigation* (NPS 1987b) includes a biological resource section that summarizes the fish species that utilize Indian River. A brief description of aquatic species can be found in Section 1.3, Wildlife. This investigation also summarizes the annual escapement counts for salmon in Indian River from 1962 through 1986. The park has since collected escapement counts for salmon from 1987 through 1998. These numbers are currently in an Excel database and require interpretation and presentation in the form of a complete report.

A brief description of terrestrial species can be found in Section 1.3, Wildlife. Informal lists of birds and mammals have been created for the park. However, a terrestrial species inventory consistent with National Park Service methods of has not been completed for Sitka National Historical Park.

# Precipitation and Meteorological Data

Precipitation and daily maximum and minimum air temperatures have been collected for Sitka National Historical Park from 1980 to 1993. This data was collected to correlate with flow measurements collected by USGS during these years. This data needs to be compiled into a park database and linked with ArcView maps for various hydrological studies. Data was also collected for 1967 to correlate with water chemistry data collected by USGS that year. Data for other years collected at the FAA station on Japonski island is available from the NOAA internet site.

# 2.2 Cultural Resources

The park contains a variety of significant cultural resource elements contained in two separate units. These units are termed the visitors center unit and the Russian Bishop's House unit. The visitors center unit, in addition to its cultural values, also possesses significant natural resources. Section 1.3 describes the following cultural resources found throughout the park and related resources in Sitka: archeological resources, historic resources, cultural landscapes, ethnographic resources, museum collections, historical relationships, Building 29, the blockhouse, and seven National Historic Landmarks. Cultural resource studies lead to a better understanding of the resources throughout the park and in Sitka. The following sections give a brief description of the studies conducted in recent years. Section 4.0 contains current and proposed resources management programs for the park including an overall strategy behind the project statements.

# **Baseline Information and Current Conditions**

Many cultural resource reports and studies have been completed in recent years to identify, evaluate and manage the resources. However, these documents need to be

supplemented with an Archeological Overview and Assessment, as well as archeological identification and evaluation studies, in order to evaluate past efforts and identify and assist in future archeological management plans. This study, which is currently under way, will be completed in 1999.

## **Museum Collection**

The park's museum collection offers a wealth of potential for research and heritage education. In the last five years, the collections of Tlingit oral history, archives, and photographic collections have become standard reference material for Sitka researchers, as have the baskets, Chilkat robes, and carvings for Native artists. However, much of the collection's potential remains to be utilized. The Old Sitka archaeological collection has never received careful analysis. All of the Russian American archaeological collections at the park are a rich source for comparative analysis with related sites elsewhere. Historic Russian wallpaper, architectural fragments, moldings, hardware, and bricks collected during renovation of the Russian Bishop's House await systematic study and documentation in useable format. Fifteen hundred Russian books from mid-1800's to mid-1900's are untouched except for translated titles. The Borhauer basket collection and accompanying documentation offer unique opportunities to investigate, not only the baskets themselves, but the identities of the basket makers and the situations in which they were acquired. The extensive history of the park's totems remains to be written.

# Ethnographic Study

The *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b) has contributed a great deal of information on the ethnography of Sitka National Historical Park. It describes and analyzes traditional Tlingit patterns of use of Sitka National Historical Park from an ethnographic perspective. Sitka National Historical Park will undoubtedly remain a vital center of symbolic and social activity because of its deep and poignant history and its central location to the present Tlingit community at Sitka. Additionally the study points out the importance of the Alaska Southeast Cultural Center and the park's accessibility and curatorial capacities.

Interpretive exhibits within the visitor center should also be enhanced to highlight subsistence values in the park through use of video and photographic displays of particular harvest and processing activities. Traditional ecological knowledge concerning subsistence resources within the park should also be protected.

Finally, *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b) has uncovered intriguing aspects of Tlingit ties to Sitka that are worthy of further investigation. For example projects proposed by the Sitka Tribe of Alaska include 1) a short biography of Amelia Cameron, the well-respected and influential matriarch of the cottage community, 2) a focused history of the park from the perspective of its original inhabitants, the Kiks.ádi clan, and 3) biographical sketches of residents of the cottages. If planned and executed cooperatively with the Sitka Tlingit, all of these proposals have the potential to enhance cultural resource values at Sitka National Historical Park and to strengthen Tlingit ties to this important landscape.

# **Cultural Landscape Studies**

*Physical and Cultural Landscapes of Sitka National Historical Park Impressions of Indian River* (NPS 1995b) and *Impressions of Indian River, A Landscape History of Sitka National Historical Park* (NPS 1998d) have provided the park with cultural landscape documentation. *Physical and Cultural Landscapes of Sitka National Historical Park Impressions of Indian River* (NPS 1995b) models the chronology of landform evolution within Sitka National Historical Park over the past 5,500 years and provides baseline data for future archaeological surveys in the park. The study provided strong evidence that the 1804 Kiks.ádi fort was located at or in the immediate vicinity of the area currently designated as the fort site by the park service. Archaeological monitoring of the geomorphology fieldwork documented two unifacially worked cobble choppers, the first prehistoric stone tools of known provenience located within park boundaries. Other previously undocumented cultural resources and subsurface charcoal concentrations of suspected cultural origin are also documented.

*Impressions of Indian River, A Landscape History of Sitka National Historical Park* (NPS 1998d) traces the history of the park, in terms of the changes that took place in its physical landscape and of the role that the land has played in the dynamic community in which it is situated. The park has a cultural history that is long and rich. It has been an important locale for the Tlingit, then to Russian fur-hunters and colonists, and ultimately to American settlers. *Impressions of Indian River* is a historic landscape study that encompasses all of these periods of occupation and addresses a series of specific research objectives. The results of this study supply the baseline historical and cultural information to facilitate the development of management guidelines for the park.

The cultural landscape of Sitka National Historical has been shaped and enriched by the dynamic interaction of the several cultural groups that came together in Sitka. The story of the park's landscape exemplifies and gives shape to the complex and intricate dialectic relationships that develop when divergent cultures interact with one another. The social, spiritual, and material dimensions of that story enrich the community at large.

# National Register Documentation

National Register Documentation has been completed, and approved, by the Keeper of the Register for the Russian Bishop's House and Sitka National Historical Park. Contributing elements of the latter unit include; the fort site, 1804 battleground, portions of historic trails, and CCC era totem poles.

# **Totem Poles**

The totem poles at Sitka have a complicated preservation history and are important objects with different meanings to multiple groups. Currently the park manages all of the historic totem poles as important ethnographic museum objects from a fragmented knowledge base rather than from a position of broad, well-grounded and integrated knowledge. This includes the original Brady poles identified in the enabling legislation, and the Civilian Conservation Corps reproductions of the Brady poles. Administrative History of Sitka National Historical Park (NPS 1987a) discusses the totems in several chapters. The history indicates that in the 1920s there was some confusion regarding the number of original Brady poles and there was concern expressed regarding documentation of pole placement and the recordation of each pole's history. A research project is needed to gather information such as acquisition, preservation, ethnographic, artistic and landscape, and organize it into a useable synthesized whole. Additionally, an approved management plan for the park's totem poles needs to be completed.

Natural Resources	atural Resources Baseline Current Information Information*		Information Required
Historical Database	Not meeting minimal level.	Collections stored at the park.	Establish automated bibliography and procedures for maintaining currency.
Vascular Plants	Meeting minimal level.	Inventory conducted.	Convert data to park database and establish monitoring.
Wildlife	Not meeting minimal level.	Observations documented.	Conduct inventory and establish database.
Fish	Meeting minimal level.	Inventory conducted.	Establish park database.
Species of Special Concern	Not meeting minimal level.	Observations noted in video and letters.	Conduct inventory and establish database.
Coastal Inventory	Not meeting minimal level.	Macroalgae inventory conducted.	Complete coastal inventory and monitoring and database established.
Vegetation Mapping	Not meeting minimal level.	Ecological inventory conducted.	Convert data to park database and establish monitoring.
Forest Health	Meeting minimal level.	Hazardous tree inventory.	Monitor forest health.
Digital Cartographic Data	Meeting minimal level.	Park established in ArcView.	
Digital Soils Map	Meeting minimal level.	Inventory conducted.	Convert data to park database.
Digital Geology Maps	Meeting minimal level.	Inventory conducted.	Convert data to park database.
Water Quality Data	Not meeting minimal level.	Data collected since 1996.	Compile and report data and establish regular monitoring.
Aquatic Resource Survey	Meeting minimal level.	Inventory conducted.	Convert data to park database and establish monitoring.
Instream Flow and Water Rights	Meeting minimal level.	Surveys, investigations, and monitoring current.	Establish park database and resolve water rights issues.
Air Quality	Not meeting minimal level.	None.	Establish inventory and monitoring stations and database.
Precipitation and Meteorological Data	Meeting minimal level.	Precipitation, and maximum and minimum daily air temperatures collected.	Establish database.

 Table 2-1
 Natural Resource Baseline Information

\* The present database status is described as meeting, exceeding, or not meeting the minimal level of baseline information as described in Appendix A of NPS-75, the *Natural Resources Inventory and Monitoring Guideline*.

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# 3.0 Natural Resources Management Program

The primary goal of the natural resource management program is to maintain natural processes to the greatest extent possible while protecting human life, private property, significant cultural sites, critical wildlife habitat, and endangered species. Past activities within the park have undoubtedly disturbed, altered, or destroyed many of the natural resources within the park. These activities may have also disturbed or removed important historic and cultural resources. Because of the small acreage associated with the park, it has been and may continue to be difficult to limit or mitigate activities outside the park boundaries, which have an impact upon the park resources.

The following sections contain the current and proposed resources management program for the park. Present resource descriptions, conditions, and threats are identified in Sections 1.0 and 2.0 of this plan. Section 3.1 provides an overall strategy behind the project statements and Section 3.2 provides complete project statements, including problem statement, recommended action, staffing and funding, funding sources, and compliance.

# 3.1 Current Program and Needs Overview

# **Resource Issues and Objectives**

Natural resources are inherently complex, reflecting the intricacies of ecological science and human interaction with the landscape. These conditions are further confounded by the large presence of visitors within a small park as well by human activities external but adjacent to the park. Although Sitka National Historical Park is small, the resources are very diverse, including 57 acres of temperate rainforest, meadow, estuary, anadromous fish river, and 50 acres of intertidal land. The placement of Sitka National Historical Park, within one mile of downtown Sitka, further complicates managing this array of resources.

Many of the park's natural resource issues can be investigated and resolved by complying with the establishment of long term ecological monitoring. This includes monitoring water quality (freshwater and marine), instream flow, aquatic resources, coastal resources, fish, wildlife, erosion, forest health, vegetation, and air quality. The following paragraphs give a brief summary of the present issues that are dependent on the inventory and monitoring of these resources.

Large scale development of land within and adjacent to the Indian River watershed poses imminent and long term degradation to the quantities, quality, and associated resources of the river. The Indian River represents a major component of the park's purpose. This river is used for contact recreation and the growth and propagation of fish, other aquatic life, and wildlife. Monitoring water quality of Indian River will provide information in determining probable sources of water pollution and may ensure protection of these resources.

Indian River streamflow is highly variable during the year. River discharge generally peaks in September and October and gradually declines throughout winter and early spring. It is not known if the allotment of water that reaches the park meets minimum flows to support

the salmon life cycle. The City of Sitka, Sheldon Jackson College, and the Alaska Department of Fish and Game have identified water rights on Indian River. Monitoring instream flow will allow water allocation issues to be settled. Additionally, the introduction of hatchery fish within the Indian River system may also degrade resources. Sheldon Jackson College and the park may work in cooperation on a study investigating this potential hazard.

The inventory of park resources and monitoring of park ecosystems offer an excellent mechanism for understanding natural environmental variation and relationship to human activities including road and trail maintenance and development, vegetation clearing, mowing, and application of pesticides or herbicides. These inventories allow for sound development and evaluation attempts in mitigating adverse impacts by providing empirical evidence of ecological change. The park will be better positioned to actively participate in the management of these resources by developing sound technical information on the vegetation and wildlife that are present in the park.

Programs such as erosion control, channel diversion, and large scale gravel extraction have had significant impacts on Indian River and associated shoreline. Erosion concerns regarding historic sites and landscapes have been an ongoing problem and concern for park management. Erosion is continuing at present on the northeastern mouth of the river. Additionally, a trailer park adjacent to the park's boundary on the northeastern mouth of Indian River has placed fill into the bay, expanding the trailer park's capacity. This project took place without the permit approval from the Corps of Engineers and continues to pose problems to the park from a natural systems process perspective and deterioration of viewshed. How the fill influences erosion, sediment loading, river channeling, river and intertidal life, etc. is unknown. As erosion processes continue over time, issues will arise concerning the fill area including undermining of fill area resulting from erosion of park lands, encroachment onto park property, and activities which conflict with park purposes.

Air pollution from local point sources such as the city's waste incinerator may have impacts on park resources. An air monitoring program will provide data to identify resources that may be affected by air pollutants and ensure that facilities and activities within the park are in compliance with Clean Air Act requirements. Air pollution can impair visibility, injure vegetation, erode buildings and monuments, acidify water, leach nutrients from soil, and effect visitor's health and enjoyment.

Sitka National Historical Park has experienced an increase in tourism from 25,000 visitors in 1967 to from 160,000 to 300,000 at present. The majority of these visitors arrive on approximately eight to ten 1,000 to 2,000 passenger capacity cruise ships per week, which anchor off shore from the park. The resulting effects on the Park's 50 acres of marine intertidal zone must be determined to alert management to changes in resource conditions. Baseline water quality information on the near shore marine environment will document changes in water quality and aesthetic degradation that may occur due to fuel handing procedures, disposal of sewage, and discharge of the non-sewage gray water (sink and shower water).

Another resource affected by increased tourism is the park trail system. The park is interlaced with a trail system, which has developed along historic footpaths and old roads. A myriad of social trails have developed throughout the park. Trail width, tread, surface covering, and routine maintenance have impacts on the park's resources. Erosion of trails and associated erosion from social trails are issues which need to be addressed. Associated uses such as picnic sites, placement of portable restrooms, and storage of large wood chip piles should be addressed in a trails management plan.

Potential oil or hazardous material spills pose threats to the park's shoreline, Indian River, and associated resources. Cruise ships, private, and commercial vessels all travel and anchor within 5 miles of the park's shoreline. Private and commercial vehicles travel over and adjacent to Indian River, its tributaries, and Sheldon Jackson's diversion. The potential of a leak, from a large fuel tank with heating oil or a failed sewer line, is also a threat to Indian River. It is critical that the park have easy to follow procedures to handle anything from a car overturned in a tributary, leaking hazardous fluids, to a large vessel running aground near the park. These threats also emphasize the value of monitoring the natural resources of Sitka National Historical Park.

# Program Management and Strategy

The collective expertise of park staff provides input into natural resource management decisions with review by the Regional Office staff. The need for inventory and monitoring projects has been proposed to develop baseline information about the park's resources. However, many of these studies require project plans to be completed before they can be initiated. Park Service standards will be followed for developing and maintaining inventory and monitoring plans. Compilation of historical park documents and activities will provide insight into the current state of the park resources.

At present the park strives to limit activities which may be understood to negatively impact the park resources. Park staff are active in providing input into local, state, and federal decision making processes which may have direct or periphery impacts upon the park resources. Recreational uses of the park are evaluated as to their impacts upon park resources and may be limited or eliminated if they threaten resources. Other activities are allowed only under permit, which serves to protect park resources.

The park interpretive themes are focused upon the primary historic and cultural features of the park including the Battle of Sitka, fort and battle site areas, Visitor Center, Southeast Alaska Indian Cultural Center, totem poles, Russian Bishop's House, and the Russian American history. Some interpretation of the native salmon runs in Indian River take place from August through October. The temperate rain forest, tidal flats, eagles, shorebirds, berries, and wildflowers in season also generate visitor interest and are given secondary interpretation. Themes associated with traditional food gathering are presented to school groups. Future efforts will be focused on providing park information and interpretation to promote and foster a better understanding of the natural resources of the park and the need to protect and enhance the natural environment.

# **Current Activities and Capabilities**

Present natural resource oriented projects ongoing in the park include monitoring Indian River instream flow, erosion, and water quality in relation to the asphalt plant. The instream flow is monitored with four permanent stream gages within Indian River and the Sheldon Jackson diversion. Downloaded data and discharge measurements are periodically collected at these locations. This data will allow the park to monitor water levels on Indian River and may provide adequate input into ensuring at least minimum water flow levels to provide for indigenous fish habitat in the lower Indian River.

Erosion measurements, photographs, and observations have been collected along Indian River since 1991. Transect rods located on the northeastern mouth of the river have provided accurate monitoring of the erosion since 1995. Measurements are collected twice a year and after high tide and storm events.

Water quality has been monitored at the asphalt plant site in accordance with *Monitoring Plan for Asphalt Plant Remediation* (NPS 1995d), since June 1996. The data collected for this monitoring is limited to the lower Indian River. However, a few samples have been collected upstream of residential influence. Indian River water quality needs to be addressed with a comprehensive water quality monitoring program plan.

Limited park staff and expertise has hampered the development of a strong natural resource oriented program at the park. Natural resources are currently managed by the Natural/Cultural Resource manager assisted by a seasonal biological technician. The Alaska Support Office and Glacier Bay have provided expertise and support for limited programs in Sitka.

A memorandum of agreement between Glacier Bay National Park and Preserve, Wrangell-St. Elias National Park and Preserve, Klondike Gold Rush National Historical Park, and Sitka National Historical Park was signed in 1994. This agreement dedicated funds to establish a formal mechanism for managing the coastal park unit lands and waters of each unit. Glacier Bay is currently working with Sitka to develop a coastal resource management plan which will address the inventory, monitoring, research and management needs.

## Program Needs

Sitka National Historical Park will continue to focus upon management of natural resources according to NPS policies and mandates. It is necessary to develop plans, which address trail management, hazard tree management, integrated pest management, and restoration of historic or cultural scenes. The park will have to develop strategies to ensure adequate quantities of water in Indian River. Protecting the integrity of Indian River from upstream development may be the greatest challenge facing the park at this time. The park will have to explore alternatives to limit impacts from adjacent properties.

Current program needs focus on the continuation of collecting baseline data regarding water quantity and quality of Indian River, monitoring permanent vegetation plots, producing an aquatic resources inventory, inventorying the tidal zone of park managed lands, and developing long range strategies to restore the historic scene. Program plans must be developed for the natural resources monitoring programs conducted at the park. Reporting schedules will also be initiated with these programs. Therefore, all observations and data will be easy to reference and useful for monitoring the overall ecology of the park.

The park has limited personnel and funding to allocate to full time emphasis on natural resource management. A permanent position must be funded to focus on and effectively manage the natural resources in Sitka National Historical Park. The park will continue to rely on funding and expertise from the Alaska Regional Office, servicewide programs, and initiative funding for various projects.

# 3.2 Natural Resource Project Statements

In response to the concerns outlined in previous sections and other program needs, individual project statements have been developed for Sitka National Historical Park. These project statements describe all current and anticipated resource management undertakings, including ongoing, day-to-day, base-funded operations as well as proposed projects. The following list provides brief narrative descriptions of the key actions of each project statement. Complete descriptions can be found in the respective project statements following the abbreviated list.

- **N-100** Natural Resource Program Management Establish a program plan which includes addenda for associated detailed projects. This program will include improving relationships with other agencies and organizations and developing educational programs.
- **N-110 Historical Database** A comprehensive, systematic program is required for acquiring, storing, and analyzing resource information. Establish an automated bibliography and procedures for maintaining currency.
- **N-120 Geographic Information Systems** Develop and update themes for Sitka's GIS/ArcView system that are critical for resource planning and management.
- **N-130 Publish a Public Information Guide** Develop an attractive public information guide for the natural resources in Sitka National Historical Park.
- **N-210** Air Quality Monitor air quality to ensure protection of public health, safety, and welfare and natural and cultural resources.
- **N-220 Meteorology** Work will be focused on gathering and archiving historic data for easy access.
- **N-310 Indian River Water Quality** Monitor water quality of Indian River to ensure protection of public health, safety, and welfare and aquatic resources.
- **N-320 Tributaries of Indian River** Monitor tributaries to understand the water quality data throughout Indian River.
- **N-330 Channel Morphology** Conduct a hydrology study encompassing the lower portion of Indian River to prevent further detriment to the overall condition of the park.
- N-340 Watershed Stewardship Program Develop a watershed stewardship program.

- **N-350 Water Rights** Monitor instream flow to determine if sufficient flows are maintained in Indian River throughout the year.
- **N-360** Aquatic Invertebrates Inventory biotic diversity and establish long term monitoring.
- **N-410 Intertidal Water Quality** Monitor water quality of the tidelands to ensure protection of public health, safety, and welfare and aquatic resources.
- **N-420 Coastal Inventory and Monitoring** Characterize the marine resources of tidelands adjacent to the park.
- N-510 Soil Resources Soils mapping will occur.
- N-520 Geological Survey Geology mapping will occur.
- N-530 Terrestrial Vegetation Landcover mapping will occur.
- N-540 Special Concern Species Lichen inventories and mapping will occur.
- N-550 Forest Health Hazardous trees will be monitored.
- **N-560 Pest Management** Determine if pest management is necessary in the park.
- **N-570 Trails Management** Develop a trails management plan which includes erosion, width, tread, surface covering, routine maintenance, and associated uses such as picnic sites, placement of portable restrooms, and storage of large wood chip piles.
- **N-580 Geomorphology Landform Chronology** Develop maps portraying the geomorphology landform chronology of Sitka National Historical Park.
- **N-610 Fish** Monitor salmon escapement rates in Indian River.
- **N-620 Hatchery Effects on Indian River** Provide data to document the effects of the hatchery reared salmon on natural resources of Indian River.
- **N-630 Wildlife** Conduct inventory and monitoring and establish a database on wildlife present in Sitka National Historical Park.
- **N-710 Hazardous and Toxic Materials** The transportation and storage of hazardous and toxic materials in or near park waters may impact environmental quality. The park will develop concise procedures to handle all potential spills.

# Natural Resource Program Management

PROJECT CODE:	N-100
SERVICEWIDE ISSUES:	<ul> <li>N16 Near-Park Development</li> <li>N17 Biodiversity</li> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N24 Other</li> </ul>

#### PROBLEM STATEMENT

Sitka National Historical Park contains significant coastal, aquatic, atmospheric, geologic, and terrestrial biotic resources. These natural resources are highly dynamic ecologically. The park is located in a downtown environment and is vulnerable to the pressures of development and growing visitation.

## **Present Condition**

The Natural/Cultural Resources Division at Sitka has had one seasonal biological technician on staff for the past two years. Due to the significance of the resource issues, such as water rights, water quality, and numerous inventory and monitoring projects, this position has been funded full time through many different avenues. Funding increases committed to resource management are critical for a continuous and successful program.

#### **Interagency and NGO Cooperation**

A number of project statements call for improved relationships with other agencies and organizations. The U.S. Geological Survey, Sheldon Jackson College, and the Alaska Department of Fish and Game are the most frequently cited. The division needs to work with other agencies and organizations to improve the exchange of technical information and to improve working relationships.

## **RECOMMENDED ACTIONS**

Table 1-1 lists all ongoing and funded natural resource management activities that are supported by the park.

**Provide Natural Resource Division with Full-Time Permanent Biologist** – This position will assist in managing and will support the tasks associated with the project statements presented in this plan. Additionally, this position will provide support to cluster activities throughout Glacier Bay National Park and Preserve, Wrangell-St.Elias National Park and Preserve, and Klondike Gold Rush National Historical Park.

**Develop Cooperative Monitoring Programs** – The park would cooperate with the schools, state and federal agencies, and other institutions in the development of inventory and monitoring programs for Sitka National Historical Park and outlying areas. Standardized

formats and techniques among these groups would expedite the sharing of information vital to sound planning and management throughout the region.

**Provide Regular Technical Reports** – It is important to share information about the successes and pitfalls of program development with other resource management professionals. Peer-reviewed protocols and publications are tangible products of the natural resource management program. Reports will be prepared that target different audiences including park managers, schools, and the general public.

**Provide Information for Interpretive Activities and Popular Literature** – The resource management staff will work closely with interpretive staff to provide information for park literature and interpretive programs. Whenever possible, resource management staff carrying out monitoring activities will be partnered with interpretive staff on specific projects to develop information for interpretive programs and activities. A biennial popular report written in an informative style will also be published for interested members of the public and park staff.

STAFFING AND FUND	ING				
PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Cooperative Monitoring Programs and Provide Regular Reports		See re	lated project sta	atements.	
Full-Time Permanent Position	53/1.0	53/1.0	53/1.0	53/1.0	212/4.0
Provide Information for Interpretive Programs	Covered by full-time biologist position.				
TOTALS	53/1.0	53/1.0	53/1.0	53/1.0	212/4.0

# STAFFING AND EUNDING

## **FUNDING SOURCES**

Park Base – Recurring Operating Base / Natural Resources

# **Historical Database**

PROJECT CODE:	N-110
SERVICEWIDE ISSUES:	N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them
	C26 Other Issues - Insufficient Understanding of Park Cultural Resources and Threats to Them

#### **PROBLEM STATEMENT**

Sitka National Historical Park is without a comprehensive, systematic program for acquiring, storing, and analyzing resource information. The lack of such a system precludes timely retrieval and analysis of resource information essential to sound planning and management of the park. The integrity of management decisions is a direct reflection of the scope, accuracy, and currency of the information available for analysis. Therefore, it is important for baseline information to be complete, readily accessible, and in a form that can be easily manipulated and analyzed for specific resource management issues. NPS Management Policies (NPS 1988) state that acquisition of adequate information for planning and management decisions is a prerequisite to action.

Current systems for archiving have been recently improved with transferring data into a database compatible with many software programs. However, this has only been done with data acquired recently. Many resource studies and reports have been produced by other agencies and organizations. It is critical that the data in these reports be obtained in an electronic format.

#### **RECOMMENDED ACTIONS**

**Develop Data Management Standards and Protocols** – To facilitate organization of baseline information, park staff will develop a metadata management system for organizing all other databases within the Natural/Cultural Resources Division. A digest of those databases will be produced and available to park staff and cooperators. Additionally, folders will be created within the network system and on individual hard drives (not accessible to the network) that will mirror hardcopy files.

**Support Professional Information Management Practices** - Sufficient space will be provided for information storage. Resource management files will be located on the server and backed-up periodically. Those files located on remote resources computers will be backed-up and stored off site on a monthly basis.

**Aerial Photographs** – Low altitude aerial photography will be obtained at a minimum of every five years. These efforts would focus on areas upstream of the park which are targeted for potential development.

**Document Monitoring Results** – Geographically referenced information from long-term monitoring of Sitka's resources would be input into the park's GIS/ArcView system routinely. Resource data will be collected based on park standards. For detailed plans, see Geographic Information Systems project statement.

**Provide for Public Distribution of Information** – Resource inventory information will be made available to the public through various publications and the park web site.

#### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Data Standards		Covered b	y full-time biolo	gist position.	
GIS Plan	2.0				2.0
Aerial Photographs		3.0		3.0	6.0
TOTALS	2.0	3.0		3.0	8.0

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water resources, Natural Resources Inventory and Monitoring, Geographic Information Systems.

## COMPLIANCE

All appropriate NEPA and NHPA compliance documents will be prepared before initiation of any project and will be maintained on file at Sitka National Historical Park.

# **Geographic Information Systems**

PROJECT CODE:	N-120
SERVICEWIDE ISSUES:	<ul> <li>N16 Near-Park Development</li> <li>N17 Biodiversity</li> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N11 Water Quality – External Influences</li> </ul>

#### **PROBLEM STATEMENT**

Sitka National Historical Park initiated a GIS program in FY99. The park has recently been awarded funds to complete the establishment of this program by expanding the access of ArcView to all divisions and providing local printing capabilities. Training will be required for the park GIS contact and primary users to make use of these capabilities.

The park currently has many themes developed for interpretive and maintenance use. However, the natural resource data available in ArcView is very limited. Many of the studies conducted in the past 10 years are not readily available in digital format. The GIS data associated with these studies needs to be acquired and made available in ArcView. Further improvements will be made by making the data viewable in software packages such as MapObjects, presented during the Alaska's GIS annual strategy session.

#### **RECOMMENDED ACTIONS**

**Develop a Geographic Information System Plan** – A GIS plan will be prepared to provide overall direction for the management of GIS and ArcView systems for Sitka National Historical Park. The plan would identify park issues and park expectations for GIS/ArcView applicability. Additionally, the plan would also identify trained personnel to operate these systems; needs for office space for GIS/ArcView personnel and equipment; computer hardware and software requirements of park staff; the types of resource information needed by these systems; how that information would be obtained and input into the computer system.

**Provide GIS Training** – All natural resource personnel must have an introduction to ArcView training. This training is necessary for viewing, accessing, and entering data into the comprehensive system that is used for resource planning and management.

**Develop and Update Themes** – GIS/ArcView themes are needed to establish baseline information and provide the basis for future research and monitoring needs.

**Obtain Existing Digital Data** – Digitize data that exists in other formats. This is important for complete and easy access to all natural resource information.

**Support Independently Funded GIS/ArcView Research Projects** – The park will benefit from supporting independently funded GIS/ArcView research projects by private and public

organizations, agencies, and universities. Sheldon Jackson College is currently improving their ArcView courses and capabilities and may be able to integrate coursework that will benefit the park and the college.

**Support Web Page Topics** – The park will integrate maps and photographs created and edited in ArcView with natural resources, cultural resources, and associated interpretive themes. These themes will be presented on the park's home page. This will allow a better understanding of the park's resources to the general public.

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
GIS Plan	Cove	ered by full-time	biologist positi	on, AKSO, and	GLBA.
Training	2.5	2.5	2.5	2.5	10
Develop and Update Themes	Covered by full-time biologist position, AKSO, and GLBA.				
Obtain Existing Data	Covered by full-time biologist position.				
TOTALS	2.5	2.5	2.5	2.5	10

## STAFFING AND FUNDING

# FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resources Inventory and Monitoring, Geographic Information Systems.

# **Publish Public Information Guide**

PROJECT CODE:

N-130

SERVICEWIDE ISSUES:

- N17 Biodiversity
- N20 Lack of Baseline Data Insufficient Understanding of Park Ecosystems and Threats to Them
- N24 Other

## PROBLEM STATEMENT

Sitka National Historical Park contains significant coastal, aquatic, atmospheric, geologic, and terrestrial biotic resources. The natural resources of the park are not presented in a collective document for visitor access. These resources are highly dynamic ecologically and vulnerable to the pressures of development and growing visitation. Increased awareness may provide public and interagency support.

## **RECOMMENDED ACTIONS**

**Develop a Public Information Guide** – Develop an attractive public information guide for the natural resources in Sitka National Historical Park. The guide will include many color photographs and associated text in preserving the state and health of these resources. This may increase public interest in park resources. Whenever possible, resource management staff carrying out monitoring activities will set aside photographs and literature to be used in developing this guide. Additionally, the resource management staff will work closely with interpretive staff to provide information for this guide.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Provide Information for Guide		Covered b	y full-time biolo	gist position.	
Publish Guide				58	58
TOTALS				58	58

#### STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Geographic Information Systems.

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# Air Quality Management

PROJECT CODE:	N-210
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N14 Air Pollution</li> </ul>

#### **PROBLEM STATEMENT**

SITK has no data in providing information in characterizing the air quality in the park. Air pollution from local point sources such as the city's waste incinerator, adjacent to park boundaries, may have impacts on park resources. It is the responsibility of NPS to monitor air quality to ensure protection of public health, safety, and welfare and natural and cultural resources. Additionally, an air monitoring program will provide data to identify resources that may be affected by air pollutants and ensure that facilities and activities within the park are in compliance with Clean Air Act requirements. Air pollution can impair visibility, injure vegetation, erode buildings and monuments, acidify water, leach nutrients from soil, and effect visitors health and enjoyment.

## **RECOMMENDED ACTIONS**

**Develop an Air Quality Monitoring Program** - An air quality monitoring program is essential in acquiring information and tools needed to document air quality conditions in the park, evaluate trends, determine cause and effect relationships, and estimate changes that might result from increasing or decreasing pollution levels. This program may include participating in state regulatory development and stationary source permitting processes, as required by the Clean Air Act. Monitoring the key indicator resources will provide an early warning system for necessary additional research and/or mitigation.

**Exercise Affirmative Responsibility to Protect Air Quality** – Review environmental documents, plans, and reports on proposed developments outside the park which may adversely affect air quality within the park. Exercise affirmative responsibility if necessary.

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program		Covered b	y full-time biolo	gist position.	
Monitor Population		2.0	2.0	2.0	6.0

## STAFFING AND FUNDING

TOTALS	2.0	2.0	2.0	6.0

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resources Inventory and Monitoring, Air Quality.

#### COMPLIANCE

All appropriate NEPA and NHPA compliance documents will be prepared before initiation of any project and will be maintained on file at Sitka National Historical Park.

# Meteorology

## PROJECT CODE: N-220

SERVICEWIDE ISSUES:

-220

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

## PROBLEM STATEMENT

Lack of climatological data may lead to an incomplete understanding of biological phenomena. While it may not be possible to monitor and document all weather variations within a park that is large and diverse, Sitka offers a small area to support a comprehensive monitoring program. Meteorological monitoring is a fundamental component of other park resource studies such as water quality, erosion, coastal monitoring, and special concern species.

## **RECOMMENDED ACTIONS**

**Collect and Archive Historic Data** – Meteorological data has been collected by Sitka FAA, Japonski AP, Alaska from September 1949 to present. This data can be downloaded and incorporated into a database that is easily accessible.

**Increase Meteorological Monitoring** – Additional data can be collected during all field activities.

#### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Collect Historic Data		Covered b	y full-time biolo	gist position.	
Develop a Section for Climatology in all Monitoring Plans	Covered by full-time biologist position.				
TOTALS		Covered b	y full-time biolo	gist position.	

## FUNDING SOURCES

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring.

## COMPLIANCE

All appropriate NEPA and NHPA compliance documents will be prepared before initiation of any project and will be maintained on file at Sitka National Historical Park.

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# **Indian River Water Quality**

PROJECT CODE:	N-310
SERVICEWIDE ISSUES:	<ul> <li>N00 Fisheries</li> <li>N02 Threatened and Endangered Species</li> <li>N04 Non-Native Animal</li> <li>N12 Water Flow</li> <li>N16 Near-Park Development</li> <li>N17 Biodiversity</li> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N11 Water Quality – External Influences</li> </ul>

#### **PROBLEM STATEMENT**

Sitka National Historical Park has limited historical water quality data in providing information in determining probable sources of water pollution that are or could be present in Indian River. It is the responsibility of NPS to monitor the water quality of Indian River to ensure protection of public health, safety, and welfare and aquatic resources. Indian River is used for contact recreation and the growth and propagation of fish, other aquatic life, and wildlife. It is the responsibility of the park to monitor the water quality of Indian River to ensure protection of this resource. Additionally, the request for analytical funds, to maintain a water quality monitoring program for Indian River, is essential to maintain compliance with local state and federal regulations. This data will be useful in establishing background levels of water quality for future problems that may be encountered.

The lack of baseline data for the many lakes and rivers poses problems for park management when it comes to making decisions affecting the resources. Natural or anthropogenic changes in these water bodies can not be tracked in the absence of baseline conditions.

## **RECOMMENDED ACTIONS**

#### Develop and Implement a Water Quality Monitoring Program for Indian River -

Collecting baseline data and monitoring must be conducted to survey the impacts on Indian River, resulting from land uses within the watershed. Particularly the impact of urban development, which has and will continue to occur in the vicinity of the Indian River watershed. Monitoring the key indicator resources will provide an early warning system for necessary additional research and/or mitigation.

A thoughtfully designed monitoring program on representative waters in Sitka would provide the park and southeast Alaska with baseline conditions and a longer-term look at changes over time. Using standard methods and a sampling design that would allow statistical analyses, these monitoring sites in Sitka would assist management in making important decisions.

**Complete Field Studies and Publish Monitoring Protocols** – Fieldwork has been initiated in coordination with the asphalt plant site monitoring. Draft protocols need to be finalized and peer reviewed. The need for additional studies to refine existing protocols will be evaluated against the need to establish a basic level of information for other significant attributes where no work has been conducted to date.

**Identify Threshold Limits that Indicate Unacceptable Changes** – The overall value of long-term monitoring for managing the park lies in our ability to recognize human-caused resource trends that exceed the expected range of natural variation. For each attribute, scientists and NPS managers will collaborate to determine what level of change is acceptable to accomplish park mandates and what actions will be taken when that level of change is exceeded. Extensive literature reviews, consultations with subject matter experts, interpretation of existing data and collection of additional information will be required to determine quantifiable threshold limits for most attributes. This will be a continuing process as knowledge of ecosystem processes increases through time. Threshold limits, their basis for establishment, and potential management or research actions will be incorporated into appropriate planning and park management documents.

**Support Independently Funded Water Resources Research Projects** – The park would support independently funded water resources research projects on Indian River by private and public organizations, agencies, and universities when deemed appropriate by park management.

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program		Covered b	y full-time biolo	gist position.	
Monitor Population	6.0	6.0	6.0	6.0	24
Identify Threshold Limits			5.0		5.0
TOTALS	6.0	6.0	11	6.0	29

# STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

## COMPLIANCE

<u>NEPA:</u> Categorically excluded under Departmental Exclusion 6 (Non-destructive data collection, inventory, study, research and monitoring activities.)

<u>NHPA:</u> Section 106 review and consultation is not required since this is not an undertaking for Section 106 purposes.

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# **Tributaries of Indian River**

PROJECT CODE:	N-320
SERVICEWIDE ISSUES:	<ul> <li>N00 Fisheries</li> <li>N02 Threatened and Endangered Species</li> <li>N04 Non-Native Animal</li> <li>N12 Water Flow</li> <li>N16 Near-Park Development</li> <li>N17 Biodiversity</li> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N11 Water Quality – External Influences</li> </ul>

#### **PROBLEM STATEMENT**

Sitka National Historical Park has limited historical water quality data in providing information in determining probable sources of water pollution that are or could be present in Indian River. To understand the water quality data throughout the river, the tributaries must be investigated. These tributaries contribute waters from different landscapes, including muskeg, forest, residential, and traffic areas. Many of the tributaries also serve as spawning grounds for coho salmon. No water resource information has been collected on any of the tributaries to date.

The lack of baseline data for tributaries poses problems for park management when it comes to making decisions affecting the resources. Natural or anthropogenic changes in these water bodies can not be tracked in the absence of baseline conditions.

#### **RECOMMENDED ACTIONS**

**Enhance Relationships with Community and External Agencies** - The park would cooperate with the schools, state and federal agencies, and other institutions in the development of a monitoring program for the Indian River tributaries. Standardized formats and techniques among these groups would expedite the sharing of information vital to sound planning and management.

#### Develop and Implement a Monitoring Program for the Tributaries of Indian River -

Baseline studies of the tributaries of Indian River are needed to understand the river and coho fishery. It is recommended that hydrographs be developed for the tributaries of the river. In addition, basic chemical and biological sampling needs to be completed over a period at least three years to develop characterizations of the waters. Because these tributaries are dependent on precipitation, flow and associated constituents can vary significantly within a season and between years. Using standard methods and a sampling design that would allow statistical analyses, these monitoring sites in Indian River would assist management in making important decisions.

### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program	Covered by full-time biologist position.				
Monitor Population	2.5	2.5	2.5	2.5	10
TOTALS	2.5	2.5	2.5	2.5	10

## **FUNDING SOURCES**

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

## COMPLIANCE

<u>NEPA:</u> Categorically excluded under Departmental Exclusion 6 (Non-destructive data collection, inventory, study, research and monitoring activities.)

<u>NHPA:</u> Section 106 review and consultation is not required since this is not an undertaking for Section 106 purposes.

# **Channel Morphology**

PROJECT CODE: N

SERVICEWIDE ISSUES:

N-330 N08 Cultural Landscape

N09 Coastal Dynamics

# **PROBLEM STATEMENT**

Sitka National Historical Park has limited data on the hydrology of Indian River within the park. Land use practices within and adjacent to park boundaries have dramatically impacted the mouth of Indian River and associated shoreline. Rock walls and rip-rap along the banks of Indian River have addressed erosion concerns but altered other natural processes on the river. Therefore, a hydrology study encompassing the lower portion of Indian River may be essential to prevent further detriment to the overall condition of the park.

Erosion concerns regarding historic sites and landscapes have been an ongoing problem and concern for the park. Erosion is continuing at present on the northeast mouth of the river. This area consists of an undetermined layer of contamination from a covered extraction/hot asphalt plant operation. Therefore, debris and contamination is constantly being exposed by erosion and washed into the Indian River and estuary.

# **RECOMMENDED ACTIONS**

**Conduct a Hydrology Study on Indian River** – Using historical photographs and documents and current files, prepare a summary of the changes to the Indian River by human activities (e.g. dredging, rip-rapping, bridge and wing-dam construction, etc.). Prepare a map showing the location of these structures over time. Identify potential effects of removal of current structures. Outline a research program that could address the mechanics of Indian River and the potential effects of structure removal or addition in light of the park's historic mandate.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Conduct Hydrology Study			15		15
GIS	Covered by fu	Covered by full-time biologist position, GLBA, and AKSO.			
TOTALS			15		15

## STAFFING AND FUNDING

# FUNDING SOURCES

Park Base – Non-Recurring Operating Base / Natural Resources, Non-Recurring Operating Base / Cultural Resources; Region – Natural Resource Management, Repair-Rehabilitation;

Servicewide – Natural Resource Preservation Program, Cultural Resource Preservation Program, Geographic Information System.

# COMPLIANCE

# Watershed Stewardship Program

PROJECT CODE:	N-340
SERVICEWIDE ISSUES:	<ul> <li>N00 Fisheries</li> <li>N12 Water Flow</li> <li>N17 Biodiversity</li> <li>N11 Water Quality – External Influences</li> </ul>

## **PROBLEM STATEMENT**

Sitka National Historical Park contains significant coastal, aquatic, atmospheric, geologic, and terrestrial biotic resources. These natural resources are highly dynamic ecologically. The park is located in a downtown environment and is vulnerable to the pressures of development and growing visitation.

Management decisions for one resource in a watershed affect other resources and the ecological functions of that watershed. While this approach is more complicated, it accurately reflects the complexities and interrelationships in a natural system.

## **RECOMMENDED ACTIONS**

**Initiate a Watershed Stewardship Program** – Follow guidance in *Watershed Stewardship: A Learning Guide* (OSU 1998). The guide is intended to be an easy to use collection of information to help individuals and groups build a mutual foundation of basic knowledge about watersheds and what it takes to work together to enhance them.

**Enhance Relationships with External Agencies** - The park would cooperate with the schools, state and federal agencies, and other institutions in the development of a watershed stewardship program for the Indian River watershed. Standardized formats and techniques among these groups would expedite the sharing of information vital to sound planning and management.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Initiate Cooperative Program	Cov	ered by full-tim	e biologist posit	tion.	
Enhance Relationships	Covered by full-time biologist position.				
TOTALS	Cov	ered by full-tim	e biologist posit	tion.	

## STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

## COMPLIANCE

# Water Rights

PROJECT CODE:

SERVICEWIDE ISSUES:

N-350

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

- N00 Fisheries
- N12 Water Flow
- N17 Biodiversity
- N04 Non-Native Animal
- N13 Water Rights

# **PROBLEM STATEMENT**

Water quantity is an essential component for aquatic resources within Sitka National Historical Park. Cooperation with public parties and agencies is essential in monitoring the water available in Indian River. Water rights of private parties adjacent to the park may result in inadequate water quantities within the park. NPS Management policies state the following action will be taken to protect the quality of water flowing through Parks:

Consistent with the rights of others, the Park Service will maintain a continuous vigilance by observing and monitoring upstream diversions, adjacent uses, and groundwater withdrawals and their effects on the occurrence, quantity, and quality of water necessary for the continued preservation of park biota and ecosystems.

The following water users hold a water rights certificate of reservation for various amounts of water from Indian River:

- City and Borough of Sitka
- Sheldon Jackson College
- Alaska Department of Fish and Game

The city and borough of Sitka has a certified right (priority date 1914) for 3.9 cfs for drinking water. In 1985 the city developed a new water source so it is maintaining this site as an emergency back-up system. Sheldon Jackson College currently has a certified right (priority date 1914) for 30 cfs for hatchery use along with hydroelectric power generation. Alaska Department of Fish and Game has a certified right (priority date 1989) for 35 through 101 cfs, varying on time of year, to support the spawning, incubation, and rearing of salmon. During winter and spring low flow periods there is insufficient water to meet current and pending off stream uses.

The NPS has Federal reserved water rights to the Indian River for the purposes for which the Park was reserved by Congress or the President. The priority date for a reserved water right is the date the land was reserved. The amount of water is the minimal amount necessary to fulfill the purpose of the reservation. The NPS's reserved water rights for the Indian River may, for example, include sufficient stream flows to protect native fish populations, among

#### Resources Management Plan Sitka National Historical Park

other things, and may be senior to the rights of Sheldon Jackson College and the city and borough of Sitka. However, the nature and extent of the NPS rights are uncertain because they have not been judicially adjudicated.

Monitoring of Indian River has been initiated by USGS, NPS, and Sheldon Jackson College. Four gages have been installed within Indian River and the Sheldon Jackson Diversion. Additionally, a fifth site has been set up as a miscellaneous site for periodic monitoring. Funding must be set aside for developing a monitoring program and maintaining the gage site.

## **RECOMMENDED ACTIONS**

Measurements of stream discharge are needed to calculate the instream flow of the Indian River. These measurements are needed to determine if sufficient flows are maintained throughout the year for purposes of all parties involved.

**Develop Cooperative Program** – The park has been working in cooperation with USGS and Sheldon Jackson College to initiate a discharge monitoring program on Indian River. Alaska Department of Community and Regional Affairs is acting as a financial liaison between Sheldon Jackson College, the National Park Service, and USGS. Further cooperation in developing a monitoring plan would be useful for all parties involved.

**Develop a Water Quantity Monitoring Plan** - Standardized formats and techniques among these groups would expedite the sharing of information vital to sound planning and management throughout the program.

**Provide Technical Reports on a Regular Schedule** – Parks developing prototype programs have an important responsibility to share information about the successes and pitfalls of program development with other resource management professionals. Technical reports that include data summaries and interpretation should be produced annually. Current documentation used for annual reports includes information downloaded from the dataloggers, field notes, photographs, location coordinates, and individual site descriptions.

**Provide Training on the USGS Database System** – All gage sites and measurements will be under the strict quality control of USGS. All data will be maintained in the USGS database, ADAPS.

**Develop a Useful Database** – All data downloaded from the gages (stage readings, water level, and some temperature readings) are currently located in an Excel spreadsheet. This data will be converted into an access database and linked with ArcView. Hydrology studies may be conducted with various software packages.

#### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Cooperative Program	Cov				
Develop Monitoring Program	Cov	Covered by full-time biologist position.			
Provide Technical Reports	Covered by full-time biologist position.				
Provide Training	2.5		2.5		5.0
Develop Database	Covered by full-time biologist position.				
GIS	Covered by full-time biologist position.				
TOTALS	2.5		2.5		5.0

## **FUNDING SOURCES**

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

## COMPLIANCE

NEPA: The project would be categorically excluded as determined from 516 DM2 Appendix 1, section 1.6 (Non-destructive data collection, inventory, study, research and monitoring activities), and 516 DM, Appendix 2.

Resources Management Plan Sitka National Historical Park

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# Aquatic Invertebrates

PROJECT CODE:	N-360
Servicewide Issues:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N11 Water Quality – External Influences</li> <li>N12 Water Flow</li> <li>N17 Biodiversity</li> <li>N16 Near-Park Development</li> </ul>

## **PROBLEM STATEMENT**

Sitka National Historical Park has limited data in providing information in characterizing the aquatic biological resources of Indian River. NPS policy states that "The National Park Service will assemble baseline inventory data describing the natural resources under its stewardship and will monitor those resources . . . to detect or predict changes. The resulting information will be analyzed to detect changes that may require intervention and provide reference points for comparison with other, more altered environments." The request for funds to design an inventory and monitoring program coupled with sound documentation and data management practices is mandatory for successful management and preservation of resources.

Aquatic macroinvertebrates are an important link in the aquatic food chain. These stream and lake dwellers feed on algal growth and detritus, and in turn are fed upon by both fish and birds. Macroinvertebrates are widely used as biotic indicators of aquatic health. They reflect the health of a system over a period of time rather than at one point as displayed by chemical analyses. The presence of certain groups of macroinvertebrates is used as an indicator of water quality. The groups of particular significance are the Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddisflies), often referred to as EPT.

During short-term exposure to water of poor quality or adverse changes in habitat, organisms that cannot tolerate the stress are destroyed and the aquatic macroinvertebrate community structure changes. Since aquatic organisms respond to their total environment, they can become an effective tool for detection of environmental changes. Unimpaired streams typically support a wider diversity of taxa than do impaired streams.

## **RECOMMENDED ACTIONS**

**Develop and Implement an Aquatic Invertebrate Inventory and Monitoring Program** -An inventory and monitoring program must be designed to provide data to characterize the Indian River based on physical features, water quality, and biological attributes including species composition, diversity, distribution, abundance, and biomass. This program is essential to identifying problems in the aquatic biological resources present in Indian River. Problems with aquatic resources are usually recognized by loss of some populations or overabundance of others. Necessary components of prudent management include knowledge and understanding of the range of aquatic biological resources present, and detailed and replicable data, including reference collections, concerning presence and distribution of major species.

## STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program	Cov	rered by full-tim	e biologist posit	ion.	
Monitor Population	2.5	2.5	2.5	2.5	10
TOTALS	2.5	2.5	2.5	2.5	10

# FUNDING SOURCES

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA).

# COMPLIANCE

# Intertidal Water Quality

PROJECT CODE:	N-410
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N11 Water Quality – External Influences</li> <li>N24 Other – Near-Park Use of Waterways</li> <li>N17 Biodiversity</li> </ul>
	N11 Water Quality – External Influences N24 Other – Near-Park Use of Waterways

## PROBLEM STATEMENT

Sitka National Historical Park has no historical water quality data in providing information in determining probable sources of water pollution that are or could be present in the adjacent tidelands. It is the responsibility of the park to monitor the water quality of the tidelands to ensure protection of public health, safety, and welfare and aquatic resources. The tidelands are used for contact recreation by thousands of visitors annually and support the growth and propagation of fish, shellfish, other aquatic life, and wildlife.

Large cruise ships and recreational boats will continue to use the areas outside the tidelands. Water quality and aesthetic degradation could occur due to fuel handing procedures, disposal of sewage, and discharge of the non-sewage gray water (sink and shower water). Additionally, the request for analytical funds, to maintain a water quality monitoring program for the tidelands adjacent to the park, is essential to maintain compliance with local state and federal regulations. This data will be useful in establishing background levels of water quality for future problems that may be encountered.

## **RECOMMENDED ACTIONS**

**Develop and Implement a Water Quality Monitoring Program -** Collection of baseline data and intertidal monitoring must be conducted to survey the impacts on approximately 48 acres of tidelands resulting from land and water uses around Sitka National Historical Park. Particularly the impact of large cruise ships anchoring outside this area. Monitoring the key indicator resources will provide an early warning system for necessary additional research and/or mitigation.

**Identify Threshold Limits that Indicate Unacceptable Changes** – The overall value of long-term monitoring for managing the park lies in our ability to recognize human-caused resource trends that exceed the expected range of natural variation. For each attribute, scientists and NPS managers will collaborate to determine what level of change is acceptable to accomplish park mandates and what actions will be taken when that level of change is exceeded. Extensive literature reviews, consultations with subject matter experts, interpretation of existing data and collection of additional information will be required to determine quantifiable threshold limits for most attributes. This will be a continuing process as knowledge of ecosystem processes increases through time. Threshold limits, their basis

for establishment, and potential management or research actions will be incorporated into appropriate planning and park management documents.

**Support Independently Funded Water Resources Research Projects** – The park would support independently funded water resources research projects on the park's intertidal zone by private and public organizations, agencies, and universities when deemed appropriate by park management.

## STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program	Cov	vered by full-tim	e biologist posit	tion.	
Monitor Population	6.0	6.0	6.0	6.0	24
Identify Threshold Limits			5.0		5.0
TOTALS	6.0	6.0	11.0	6.0	29

# FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

# COMPLIANCE

<u>NEPA:</u> Categorically excluded under Departmental Exclusion 6 (Non-destructive data collection, inventory, study, research and monitoring activities.)

<u>NHPA:</u> Section 106 review and consultation is not required since this is not an undertaking for Section 106 purposes.

# **Coastal Inventory and Monitoring**

PROJECT CODE:

N-420

SERVICEWIDE ISSUES:

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

N09 Coastal Dynamics

N24 Other – Near-Park Use of Waterways

N17 Biodiversity

# PROBLEM STATEMENT

Sitka National Historical Park has limited data in providing information in characterizing the marine resources of tidelands adjacent to the park. NPS policy states that "The National Park Service will assemble baseline inventory data describing the natural resources under its stewardship and will monitor those resources . . . to detect or predict changes. The resulting information will be analyzed to detect changes that may require intervention and provide reference points for comparison with other, more altered environments." The request for funds to design an inventory and monitoring program coupled with sound documentation and data management practices is mandatory for successful management and preservation of resources.

Lack of baseline information on populations, distributions, and nesting and foraging areas of waterfowl, shorebirds, seabirds, and raptors may result in limited protection of populations during catastrophic events.

# **RECOMMENDED ACTIONS**

**Develop and Implement an Inventory and Monitoring Program -** An inventory and monitoring program must be designed to provide data to maintain and restore all components and processes of naturally evolving park marine ecosystems. This program is essential to identifying information on the community structure and population dynamics to make decisions about potential impacts. Intertidal communities are very diverse and spatially patchy in distribution. Therefore, dominant and indicator species may be monitored to provide a picture of the community health. Routine sampling, sorting, and classifying of invertebrates will be required to understand seasonality.

**Identify Threshold Limits that Indicate Unacceptable Changes** – The overall value of long-term monitoring for managing the park lies in our ability to recognize human-caused resource trends that exceed the expected range of natural variation. For each attribute, scientists and NPS managers will collaborate to determine what level of change is acceptable to accomplish park mandates and what actions will be taken when that level of change is exceeded. Extensive literature reviews, consultations with subject matter experts, interpretation of existing data and collection of additional information will be required to determine quantifiable threshold limits for most attributes. This will be a continuing process as knowledge of ecosystem processes increases through time. Threshold limits, their basis for establishment, and potential management or research actions will be incorporated into appropriate planning and park management documents.

**Support Independently Funded Water Resources Research Projects** – The park would support independently funded water resources research projects on the intertidal lands by private and public organizations, agencies, and universities when deemed appropriate by park management.

**Participate in National and International Monitoring Networks** – The park can play an important role in understanding and protecting ecosystem processes in southeast Alaska.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Inventory and Monitoring Program	Cov	vered by full-tim	e biologist posit	ion.	
Monitor Population	6.0	6.0	6.0	6.0	24
Identify Threshold Limits			5.0		5.0
TOTALS	6.0	6.0	11.0	6.0	29

## STAFFING AND FUNDING

# FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Water Resources, Natural Resources Inventory and Monitoring; USGS-NPS Partnership Program; National Water Quality Assessment Program (NAWQA); Other Agencies.

# COMPLIANCE

<u>NEPA:</u> Categorically excluded under Departmental Exclusion 6 (Non-destructive data collection, inventory, study, research and monitoring activities.)

<u>NHPA:</u> Section 106 review and consultation is not required since this is not an undertaking for Section 106 purposes.

# **Soil Resources**

## PROJECT CODE: N-510

SERVICEWIDE ISSUES:

N-510

 N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them
 N22 Visitor Use – Developed Zones

## **PROBLEM STATEMENT**

Baseline soils information is essential to comprehending, managing, and protecting all park resources. Understanding the soil, vegetation, and water resource relationships as a vital combination is required for effective resources management. Systematic soils or landscape surveys, or other categories of soils investigations, in conjunction with geologic and hydrologic information, provide the fundamental understanding of the abiotic conditions that set the stage for understanding the biotic components and ecosystems within and around the park. Without this specific and integrated information, park resources cannot be protected and managed as policy requires.

Park land-use activities that pose a threat to the park soils resources include visitor activity and external development. High visitor impact areas, such as trails and riverbanks, demonstrate significant compaction.

# **RECOMMENDED ACTIONS**

**Soil Inventory and Monitoring**– Conduct a soils inventory in the park. Visitor use and recreation impacts to soil resources and trails and streambanks should be included in this inventory. All impacts will be monitored to direct restoration efforts.

**Develop Soils Map for GIS** - Soils/landscape mapping can provide a unifying method of collecting and communicating inventory and monitoring data. A soils GIS theme is needed to establish baseline information and provide the basis for future research and monitoring needs.

**Initiate Revegetation Projects** – Revegetation projects can be initiated in areas for stabilization and abandoned route restoration sites.

## STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Inventory and Monitoring		10			10
Develop Soils Map	Cov				
Revegetation			3.0		3.0
TOTALS		10	3.0		13

## FUNDING SOURCES

Park Base – Non-Recurring Operating Funds / Natural Resources; Region – Natural Resource Management, Repair-Rehabilitation; Servicewide – Natural Resource Preservation Program, Geographic Information System, Cultural Resource Preservation Program.

## COMPLIANCE

NHPA: Section 106 clearance will be required since the permanent survey locations may require the implanting of metal stakes to mark the plots.

# **Geological Survey**

## PROJECT CODE: N-520

**S**ERVICEWIDE ISSUES:

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

N17 Biodiversity

## PROBLEM STATEMENT

Most of the geologic data or information on Sitka National Historical Park is either of a cursory reconnaissance level or is limited to site specific areas. Little information is available for assessing park physical resources or the rudiments of ecosystem conditions. Key resource relationships and resource protection concerns, such as bedrock/soil and vegetation interactions, surface and groundwater quality, and other relationships get little attention or go unnoticed due to this basic lack of information. The condition or well-being of all park biological resources are first and foremost dependent upon the earth's surface and subsurface conditions.

Additional benefits gained by baseline bedrock and surficial geologic mapping include the inventory and identification of archeological resources and water resource conditions. These themes are covered in separate resource management plan project statements, but the relationships and many of the inventory and research methodologies are inseparable, and require synergistic planning.

# **RECOMMENDED ACTIONS**

**Geologic Mapping** – Initiate a level one geologic mapping project of the park. Anticipated products would include geologic map, geochemical and geophysical data sets for unit and regional interpretation, interpretations and exhibits for the public, and special projects or detailed studies as deemed desirable and appropriate.

**Develop Geology Map for GIS** - A geology GIS theme is needed to establish baseline information and provide the basis for future research and monitoring needs.

# STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Geology Map Study			5.0		5.0
Develop GIS Theme	Cov	Covered by full-time biologist position.			
TOTALS			5.0		5.0

# FUNDING SOURCES

Park Base – Non-Recurring Operating Funds / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resource Inventory and Monitoring, Geographic Information System.

# COMPLIANCE

NHPA: Section 106 clearance will be required since the permanent survey locations may require the implanting of metal stakes to mark the plots.

# **Terrestrial Vegetation**

## **PROJECT CODE:**

**SERVICEWIDE ISSUES:** 

N-530

N20 Lack of Baseline Data - Insufficient Understanding of Park Ecosystems and Threats to Them

N03 Threatened and Endangered Plants

N17 Biodiversity

# **PROBLEM STATEMENT**

Sitka National Historical Park is recognized as a premier example of a natural coastal temperate rainforest typical of southeast Alaska. The valuable resources of the park are directly and indirectly impacted by the increasing visitation.

Resource management for terrestrial vascular plants revolves around the maintenance and restoration of natural plant communities. NPS policy states "The National Park Service will seek to perpetuate native plant life as part of natural ecosystems." A monitoring program is essential in preserving the dynamic ecosystem of the park. The request for funds to design a solid monitoring program coupled with sound documentation and data management practices are mandatory for successful vegetative management.

# **RECOMMENDED ACTIONS**

Create and Maintain Database on Flora and Other Plant Ecology Information -Fundamental inventory information has been collected by the forest service under contract to the park service. This information needs to be collected and made easily accessible to park personnel. The data will be an important scientific, management, and interpretive tool.

Develop and Implement Long-Term Ecological Monitoring - Update the Vegetative Inventory and Forest Health Assessment prepared 18 March 1994. Permanent plots were established at defined intervals to monitor the trends, health, and species composition of the park's vegetation. These plots need to be identified and monitored on a regular basis. It is the goal of Sitka National Historical Park to preserve a dynamic ecosystem. Monitoring ecological processes and taking steps to prevent certain avoidable human disturbances detrimental to the natural functioning of the plant community is necessary to preserve natural processes.

Develop Parkwide Vegetation/Landcover Map for GIS – A vegetation/landcover GIS theme is needed to establish baseline information and provide the basis for future research and monitoring needs.

**Support Independently Funded Plant Ecology Research** – The park would support independently funded plant ecological investigations in Sitka National Historical Park by private and public organizations, agencies, and universities.

#### Resources Management Plan Sitka National Historical Park

**Support Interpretation of Vegetation** – Interpretation, especially environmental education, will be supported by direct interaction and by development of user-friendly products for access to databases, research, and program reports. An interactive, random access plant identification key is a potential example of such a product. Internet capabilities and home page information could also be developed.

## STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Monitoring Program	Covered by fu	ull-time biologis	t position, AKS0	D, and GLBA.	
Monitor Population		6.0			6.0
Create and Maintain Database	Covered by full-time biologist position, AKSO, and GLBA.				
Develop GIS Theme	Covered by fu	ull-time biologis	t position, AKS	D, and GLBA.	
TOTALS		6.0			6.0

# **FUNDING SOURCES**

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resource Inventory and Monitoring, Geographic Information System.

## COMPLIANCE

NHPA: Section 106 clearance will be required since the permanent survey locations may require the implanting of metal stakes to mark the plots.

# **Special Concern Species**

PROJECT	CODE:	
-	-	

N-540

SERVICEWIDE ISSUES:

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

- N17 Biodiversity
- N03 Threatened and Endangered Plants
- N16 Near-Park Development

# **PROBLEM STATEMENT**

Sitka National Historical Park is recognized as a premier example of a natural coastal temperate rainforest typical of southeast Alaska. The valuable resources of the park are directly and indirectly impacted by the increasing visitation.

Special concern species need to be identified and monitored throughout the park. Many of these species may be affected by pollution and important indicators for mitigation.

# **RECOMMENDED ACTIONS**

**Develop and Implement Long-Term Ecological Monitoring for Special Concern Species** - It is the goal of Sitka National Historical Park to preserve a dynamic ecosystem. Monitoring ecological processes and taking steps to prevent certain avoidable human disturbances detrimental to the natural functioning of the plant community is necessary to preserve natural processes.

**Develop a Landcover Map for GIS** – A GIS theme will be very useful in tracking the species identified in this study. Additionally, it is a tool that may provide the basis for future research and monitoring needs.

**Participate in National and International Monitoring Networks** – The park can play an important role in understanding and protecting ecosystem processes.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Monitoring Program		10			10
Develop Landcover Map	Covered by full-time biologist position, AKSO, and GLBA.				
TOTALS		10			10

# STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resource Inventory and Monitoring, Geographic Information System.

## COMPLIANCE

# **Forest Health**

PROJECT CODE:	N-550
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N24 Other – Threats to Public Health and Safety</li> </ul>

## **PROBLEM STATEMENT**

The forest in Sitka National Historical Park has endured a number of different disturbance factors, some natural and some caused by humans, since the park was officially recognized. Natural disturbance has been a common feature in the park. Wind coupled with heart rot in trees or shallow soils, has resulted in trees that are snapped off at the lower bole, have their tops broken out, or are completely uprooted.

Logging, trail building, and drainage alteration are examples of disturbances caused by humans in the park. There is also evidence of historic, cultural use in the form of axe marks on some scars of the oldest trees. Even though some of these activities occurred long ago, they have had a substantial influence on the health of the park's forest today.

Potentially hazardous trees, caused primarily by heart rot, may jeopardize the safety of visitors. Therefore, heart rot fungi should be viewed as the most serious threat of the insect and disease agents in the park.

## **RECOMMENDED ACTIONS**

**Provide Training** – Personnel from the maintenance and natural resource teams should be trained to identify potentially hazardous trees. Monitoring the areas most heavily affected by aphid defoliation can be done on a biannual basis and after severe storms or other cause for concern.

**Develop and Implement Long-Term Monitoring** - Update the Vegetative Inventory and Forest Health Assessment prepared 18 March 1994.

**Update Hazardous Trees Map for GIS** – The GIS theme for hazardous trees will be updated after each monitoring event.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Monitoring Program	Cov	rered by full-tim	e biologist posit	ion.	
Monitor Population	Cov	ered by full-tim	e biologist posit	ion.	
Provide Training	2.5				2.5

#### STAFFING AND FUNDING

#### Resources Management Plan Sitka National Historical Park

Update GIS Theme	Covered by full-time biologist position.				
TOTALS	2.5/0.05	2.0/0.05	3.5/0.1	2.0/0.05	10/2.5

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resource Inventory and Monitoring, Geographic Information System, Forest Insect and Disease Control.

## COMPLIANCE

# **Pest Management**

PROJECT CODE:	N-560
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N05 Degradation of Park Resources Due to Non-Native Plants</li> </ul>
	N24 Other – Threats to Public Health and Safety

#### PROBLEM STATEMENT

An integrated pest management plan is necessary to determine if active pest management is needed; when pest management should be initiated; where and at what frequency treatments should be applied; what physical, cultural, biological, or chemical strategies should be employed; and how effective these treatments are in achieving management objectives. Integrated Pest Management integrates compatible techniques to maintain pest damage below an unacceptable injury level while providing protection from threats to public health and safety and to the natural environment. Detailed and accurate record keeping is fundamental to the evaluation process used to determine the efficacy and environmental effects of treatment actions.

Sitka National Historical Park has a number of areas within historical and landscaped ground which are kept in manipulated/manicured settings, primarily grassy lawns. Solutions to controlling weedy species or greening up lawns may necessitate applications of herbicides or pesticides. These substances may have adverse effects on other park resources. Additionally, the park is primarily a forested area that consists of western hemlock, Sitka spruce, red alder, and various species of other trees/shrubs that may be prone to infestation. Monitoring is necessary to determine the status of pest populations, and injury and action levels within the park.

## **RECOMMENDED ACTIONS**

**Develop and Implement an Integrated Pest Management Program** – The park will establish and implement guidelines for the roles and responsibilities of park managers and staff members related to pest management on an interdivisional basis. Native or exotic species which could damage park resources will be identified. Pest species and their abundance or importance will be documented. Literature and information will be collected on those specific pests of concern.

Management of pest species will be aimed at a level which ensures resource protection, while reducing economic, ecologic, and social injury. It will encourage non-chemical management of pests and provide alternatives which include prevention, biological, mechanical, physical, and cultural methods before utilizing chemical practices.

#### Resources Management Plan Sitka National Historical Park

**Develop an Inventory and Monitoring of Pest Species** – A study will be initiated to inventory all pests in the park. Monitoring and documentation of pest populations and injury levels will be used to carefully and thoroughly assess each pest problem. An action plan will be developed to address each pest after evaluating alternative management techniques. Monitoring will be conducted before and after management actions are taken to evaluate program success.

**Develop a GIS Theme**– A GIS theme will be very useful in tracking the species identified in this study. Additionally, it is a tool that may provide the basis for future research and monitoring needs.

STAFFING AND FUND	STAFFING AND FUNDING				
PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Monitoring Program			5.0		5.0
Monitor Population	Covered by full-time biologist position.				
Develop GIS Theme	Covered by full-time biologist position, AKSO, and GLBA.				
TOTALS					

# STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resource Inventory and Monitoring, Geographic Information System, Forest Insect and Disease Control.

# COMPLIANCE

# **Trails Management**

PROJECT CODE:	N-570
SERVICEWIDE ISSUES:	<ul><li>N06 Land Use Practices</li><li>N09 Coastal Dynamics</li><li>N22 Visitor Use – Developed Zones</li></ul>

#### **PROBLEM STATEMENT**

Sitka National Historical Park has experienced an increase in tourism from 25,000 visitors in 1967 to from 160,000 to 300,000 in the late 1990's. The 2.5 miles of trails provide an opportunity for the visitors to walk through an excellent example of the southeast Alaska rain forest. The large number of visitors stress the trails' foundation and require repair so that further damage and erosion remain localized. Visitors often walk off the trail into the understory of the forest canopy creating social trails. The transition area between dedicated trails and these social trails is very fragile and requires landscape stabilization

## **RECOMMENDED ACTIONS**

**Develop a Trails Management Plan** – A Trails Management Plan will be developed specific to Sitka National Historical Park. This plan will include a description of existing trail maintenance and landscape stabilization to control erosion degradation.

## STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Trails Management Plan	Covered by full-time biologist position.				
TOTALS					

## FUNDING SOURCES

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Repair-Rehabilitation; Servicewide – Natural Resource Preservation Program, Cultural Resource Preservation Program, Geographic Information System.

## COMPLIANCE

Resources Management Plan Sitka National Historical Park

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# Geomorphology Landform Chronology

PROJECT CODE: N-580

SERVICEWIDE ISSUES: N08 Cultural Landscapes

## PROBLEM STATEMENT

Seven thousand years ago Sitka National Historical Park was a small island that had recently emerged from the sea. Indian River was just beginning to place deltaic deposition along its north edge that would eventually connect the early park area to Baranof Island. During the next 2000 years, whales and other sea life swam through the area that would, in the future, house the park's Visitor Center, before that land mass emerged from the sea during violent eruptions of Mt. Edgecumbe.

Sitka National Historical Park offers the Southeast Alaska visitor an opportunity to get off the tour ship and walk and experience the natural flora and fauna of the region. Yet, many of the visitors are not aware of the non-glacial geological events that have shaped the landscape of the region.

## **RECOMMENDED ACTIONS**

**Develop Maps Portraying the Geomorphology Landform Chronology of Sitka National Historical Park** - This project would produce a series of maps that illustrate the growth and changes of the park's landform evolution from its birth out of the sea to the Tlingit and Russian battle on the beach in 1804. The necessary field data, including C14 dates, have been collected, analyzed, and published in report form by the park. However, this information has not been produced in a format that is easily accessible and understandable to the general public.

**Establish Signs with Maps and Geological Features Along Trails** - The sequences of exhibit quality maps and illustrations produced by this project, and displayed in the visitor center and along the trails, would offer the park visitor the opportunity to understand how and when the park's landforms were formed and to experience first hand this exhibit as they walk the park trails.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Geology Map	Cov	ered by full-tim	e biologist posit	ion.	
Establish Signs			5.0		5.0
TOTALS			5.0		5.0

## STAFFING AND FUNDING

## FUNDING SOURCES

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Cultural Resource Preservation Program, Geographic Information System, Exhibit Rehabilitation and Preservation, Recreational Fee Demonstration – 20 percent.

## COMPLIANCE

NHPA: Section 106 clearance will be required since the permanent locations will require the implanting of metal stakes to post the signs.

# Fish

PROJECT CODE:	N-610
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N24 Human Impacts Within and Adjacent to Park</li> <li>N17 Biodiversity</li> </ul>

## **PROBLEM STATEMENT**

Sitka National Historical Park has limited data in providing information in characterizing the fisheries in Indian River. The most detailed study of fisheries in Indian River is *Instream Flow Investigation, Indian River, Sitka National Historical Park* (NPS 1987b). This study identified instream flow requirements of Indian River for maintaining habitat areas and populations of fish within the boundaries of the park. Biological resource and habitat surveys were conducted during this study. However, population, distribution, and abundance of fish species should be monitored annually.

## **RECOMMENDED ACTIONS**

**Develop a Monitoring Plan for Fish in Indian River** – A monitoring plan will be developed to document the current status of fisheries population, distribution, and abundance within Indian River. This plan must be designed to provide data to maintain all components and processes of naturally evolving park ecosystems. It is essential to identifying information on the community structure and population dynamics to make decisions about potential impacts. Routine monitoring will be required to understand seasonality.

**Cooperative Working Relationships** – Park staff will develop a closer working relationship with Alaska Department of Fish and Game Fisheries biologists.

**Research Fisheries Habitat** – A comprehensive fish habitat survey will be conducted annually. The survey would include measurements of year-round discharge of stream system, turbidity, sedimentation, water quality, and identification of benthic and aquatic organisms. The presence or absence of fish species during different times of the year will be documented to verify habitat use. These efforts will be coordinated with Sheldon Jackson College to determine the hatchery effects on Indian River.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Monitoring Program	Cov				
Monitor Population	Cov				
TOTALS	Cov				

# STAFFING AND FUNDING

Resources Management Plan Sitka National Historical Park

## FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resources Inventory and Monitoring.

## COMPLIANCE

<u>NEPA:</u> Categorically excluded under Departmental Exclusion 6 (Non-destructive data collection, inventory, study, research and monitoring activities.)

<u>NHPA:</u> Section 106 review and consultation is not required since this is not an undertaking for Section 106 purposes.

# Hatchery Effects on Indian River

PROJECT CODE:	N-620
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N00 Fisheries</li> <li>N11 Water Quality – External Activities</li> <li>N12 Water Flow</li> <li>N17 Biodiversity</li> <li>N04 Non-Native Animal</li> <li>N13 Water Rights</li> <li>N02 Threatened and Endangered Animal</li> </ul>
	5

## **PROBLEM STATEMENT**

Sitka National Historical Park has no historical data on the effects of hatchery produced salmon returning to Indian River. A specific requirement of NPS policy to protect aquatic habitat includes to "maintain and restore aquatic habitats to protect their ecological and aesthetic character and dependent animal and plant communities." Introductions of hatchery salmon are a potent force in changing biological characteristics of native species. Genetic contamination from hybridization with introduced fishes may cause long-term implications on native species. Additionally, it is unknown if the increased number of salmon returning to Indian River has an effect on the overall ecological system.

## **RECOMMENDED ACTIONS**

**Research Hatchery Effects on Indian River** - Research will provide data to document the effects of the large number of hatchery reared salmon on natural resources of Indian River. Knowledge of life histories, seasonal cycles, and interrelationships among major species is a major element in active management. The request for funds to research the effects of hatchery salmon on Indian River are mandatory for successful management and preservation of resources.

**Cooperative Working Relationships** – Park staff will develop a closer working relationship with Sheldon Jackson Hatchery Manager.

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL			
Research Hatchery Effects	Cov							
TOTALS								

# STAFFING AND FUNDING

# FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management, Repair-Rehabilitation; Servicewide – Natural Resource Preservation Program, Natural Resources Inventory and Monitoring, Water Resources, Geographic Information System.

## COMPLIANCE

### Wildlife

PROJECT CODE:	N-630
SERVICEWIDE ISSUES:	<ul> <li>N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them</li> <li>N17 Biodiversity</li> <li>N16 Near-Park Development</li> <li>N02 Threatened and Endangered Animal</li> </ul>

### **PROBLEM STATEMENT**

Sitka National Historical Park has limited data in providing information in characterizing the wildlife present. Lack of baseline information on populations, distributions, and nesting and foraging areas of waterfowl, shorebirds, seabirds, and raptors may result in limited protection of populations during catastrophic events.

NPS policy states that "The National Park Service will assemble baseline inventory data describing the natural resources under its stewardship and will monitor those resources . . . to detect or predict changes. The resulting information will be analyzed to detect changes that may require intervention and provide reference points for comparison with other, more altered environments." The request for funds to design a solid inventory and monitoring program coupled with sound documentation and data management practices is mandatory for successful management and preservation of resources.

### **RECOMMENDED ACTIONS**

**Develop Database on Wildlife** – Fundamental inventory information and surveys have been collected by various studies under contract to the park service. This information needs to be collected and made easily accessible to park personnel. The data will be an important scientific, management, and interpretive tool.

**Develop and Implement Long-Term Monitoring** – A monitoring program must be designed to provide data to maintain all components and processes of naturally evolving park ecosystems. This program is essential to identifying information on the community structure and population dynamics to make decisions about potential impacts. Routine monitoring will be required to understand seasonality.

**Develop Landcover Map for GIS** – A wildlife GIS theme is needed to establish baseline information and provide the basis for future research and monitoring needs.

**Support Independently Funded Wildlife Research** – The park would support independently funded wildlife investigations in Sitka National Historical Park by private and public organizations, agencies, and universities.

#### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop and Implement Long- Term Monitoring Program	Cov	ered by full-tim	e biologist posi	tion.	
Monitor Population	Cov	Covered by full-time biologist position.			
Develop Database	Cov	Covered by full-time biologist position.			
Develop Landcover Map	Covered by full-time biologist position, AKSO, and GLBA.				
TOTALS					

### FUNDING SOURCES

Park Base – Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Natural Resources Inventory and Monitoring, Geographic Information System.

### COMPLIANCE

All appropriate NEPA and NHPA compliance documents will be prepared before initiation of any project and will be maintained on file at Sitka National Historical Park.

# **Hazardous and Toxic Materials**

PROJECT CODE:

N-710

SERVICEWIDE ISSUES:

N20 Lack of Baseline Data – Insufficient Understanding of Park Ecosystems and Threats to Them

- N00 Fisheries
- N09 Coastal Dynamics
- N16 Near-Park Development
- N11 Water Quality

### **PROBLEM STATEMENT**

The transportation and storage of hazardous and toxic materials adjacent to Sitka National Historical Park is not monitored and may impact environmental quality. There is the threat of either a fuel spill from the Jamestown Bay or Crescent Harbor or a catastrophic spill from a ship operating in Sitka Sound. Cruise ships, tour boats, fishing craft and charter and private vessels use of waters adjacent to the park can result in pollution through equipment malfunctions or the careless handling of fuel and other toxic materials. Lack of enough trained personnel, proper equipment and supplies could lead to an inadequate response to catastrophic events within park boundaries.

### **RECOMMENDED ACTIONS**

**Develop a Spill Response Plan** – A spill response plan specific to Sitka National Historical Park is needed for personnel to respond effectively to a spill.

### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Develop Spill Response Plan	Covered by full-time biologist position.				
TOTALS					

### **FUNDING SOURCES**

Park Base – Non-Recurring Operating Base / Natural Resources; Region – Natural Resource Management; Servicewide – Natural Resource Preservation Program, Geographic Information System.

#### COMPLIANCE

All appropriate NEPA and NHPA compliance documents will be prepared before initiation of any project and will be maintained on file at Sitka National Historical Park.

# 4.0 Cultural Resources Management Program

The primary goal of the cultural resource management program is to manage cultural resources in accordance with prehistoric and historic preservation laws and presidential executive orders and departmental regulations. NPS Management Policies require park managers to locate, identify, evaluate, preserve, manage, and interpret qualified cultural resources in every park in such a way that they may be handed on to future generations unimpaired. Consistent with the requirements of law, resource managers and professionals at all levels shall take positive action to perpetuate unimpaired the cultural resources of the national park system; to prevent adverse effects on these resources by development, visitor use, or resource management activities; and to prohibit vandalism or unauthorized excavation, collection, or appropriation of cultural resources.

The following sections contain the current and proposed resources management program for the park. Present resource descriptions, conditions, and threats are identified in Sections 1.0 and 2.0 of this plan. Section 4.1 provides an overall strategy behind the project statements and Section 4.2 provides complete project statements, including problem statement, recommended action, staffing and funding, funding sources, and compliance.

# 4.1 Current Program and Needs Overview

# **Resource Issues and Objectives**

With the exception of the Russian Bishop's House Unit the archeological and historical resources within the park are poorly understood or documented. The 1958 archeological excavation conducted at the fort site has been poorly documented and never fully analyzed. Past ground disturbances within the fort site area, including removal of tree stumps, digging pits to treat totem poles, and placement of historic fill material at the site will make future examinations of the location difficult. The battleground is believed to be adjacent to the fort site, but the exact location is unknown.

Prior to 1993, systematic archeological surveys had not been conducted within the park. Local and oral histories indicate that the park area was used extensively in the past by Native people. Although historic records provide evidence for earlier Russian or European structures within the park, they have never been located. As the oldest National Park Service unit in Alaska, little is known regarding the location and types of earlier park structures such as bridges or trails. The earliest use of the area as a park, by the Russians, is little understood.

The original totem poles, collected during 1901 to 1904, have received little documentation. Long term storage of the original poles and a detailed management plan will be provided during the visitor center rehabilitation project.

Local ethnographic information is quickly disappearing as local Native elders pass away. Many Tlingit in the local community remember experiences or use areas within the park and the history surrounding the use and ownership of sacred possessions in the park's museum

collection. However, their stories, legends, and other knowledge of the park and its museum collection will be lost if not recorded. Thornton's study, *Traditional Tlingit Use of Sitka National Historical Park* (NPS 1998b), has documented a great deal of information. However, this study has uncovered intriguing aspects of Tlingit ties to Sitka National Historical Park that are worthy of further investigation.

### Program Management and Strategy

The park has made excellent progress in the last few years towards management of its cultural resources. Many of the current program activities involving cultural resources require techniques and approaches as varied as the differing resources.

A tremendous amount of progress has been accomplished with the Russian Bishop's House. A completed Historic Structure Report and a Historic Furnishing Report have provided park management with detailed documentation for the structure. Contact with knowledgeable Russian nationals has aided with maintaining the historic integrity of the structure. An approved Operations Manual provides the park's maintenance branch with the necessary instructions to ensure the structure's upkeep.

The past practice of indiscriminate management of the totem poles has ceased. Improved temporary storage for the original totem poles is currently under construction. Wood conservation experts from Harpers Ferry Center have begun an ongoing preservation/stabilization program for the standing poles. New support bases have been provided for many of the totem poles. The first step in establishing a long term management plan for the park's poles was initiated with a totem preservation conference, held in Sitka in 1991.

The major portion of the Historic American Building Survey (HABS), for the only other Russian building in Sitka (Building 29), has been completed. Detailed photography of the structure has also been accomplished. In the event that the National Park Service acquires the structure, documentation is on hand to determine an appropriate preservation plan.

An overview outline has been examined for the Russian language archives of the Russian Orthodox Church in America, microfilm copies of which are currently housed at the park.

The park's museum management program was reviewed by a team of NPS regional curators in 1996. Their recommendations produced the *1997 Museum Management Plan*. Since that time, several projects have been accomplished. The collection was surveyed by a conservator from Harpers Ferry Center and recommendations made for care and storage of wallpaper, maps, and glass negatives. A fire suppression system is being installed in the visitor center and curatorial storage building. A collection storage plan is scheduled to be written in 1999. Renovation of the curatorial building should provide more efficient storage space. Additional projects are planned based on the 1997 recommendations.

The park has also begun an initial assessment of its archeological needs. Working within the NPS's National Archeological Survey Initiative, a multiyear program is being established. A detailed topographic mapping project of the park has been completed and assists in both natural and cultural resource endeavors.

Research pertinent to the park's cultural landscape has been completed. This multiyear project will continue to assist the park in its historical research as well as address some of the interpretive and archeological concerns.

Current management strategies recognize the need for further detailed research and documentation for many of its significant cultural resources. Many significant historic locations, such as the Battleground of 1804, need to be identified. Other past human activities related to the park's significant cultural resources also require additional research.

### **Current Activities and Capabilities**

Sitka National Historical Park has a museum collection that is highly significant and includes original materials related to the Russian presence in Alaska, including original furnishings from the Russian Bishop's House; ethnographic, historic and contemporary totem poles; archives and historic documents; archeology; and Tlingit material culture. There are significant issues related to these collections concerning, but not limited to, incoming loans, cultural use of ethnographic materials, preservation of totems and of the original furnishings on exhibit in the Russian Bishop's House and the ongoing operations of an actively used collection.

The park has one Museum Curator to manage its extensive collection of Russian and Native American artifacts. The curator has built an extremely good relationship with park staff and the public and is particularly good in dealings with the local people, especially Tlingits with strong ties to the collection. This has resulted in additional information about materials already in the museum collection and the addition of other important objects. The curator is, in large part, responsible for the feelings the Tlingits have about the park providing a "safe house" for culturally important objects.

As with many parks, however, one person is clearly not enough to manage all the diverse parts of the museum program. This includes responsibility for one furnished historic structure, exhibits in two locations, objects displayed out of doors, archives and historic documents, artifacts, a museum collection facility with inadequate space and protection, recordkeeping and providing accessibility for the staff and public use.

### Program Needs

The park has limited personnel and funding devoted to full time cultural resource management. As noted above, one permanent museum staff person is clearly not enough to manage the large, active and diverse collection. The *Museum Management Plan* (NPS 1997a) describes the positions that would be appropriate in managing the collection at Sitka National Historical Park. This includes a museum curator, museum specialist, museum technician, local hires or contract for project work, internships, and volunteers. Many cultural resource preservation directives will require the park to rely on funding and expertise from other National Park Service sources.

The park needs to continue to manage its cultural resources under the requirements of NPS-28 and other federally mandated preservation requirements. One of the highest

priorities is to ensure adequate preservation measures for the remaining original Brady collected totem poles. A finalized totem preservation and management plan is also necessary. The park must also be able to use many of its resources currently on hand. The translations of both the Tlingit oral histories and Russian language archives would greatly facilitate the park's knowledge of its cultural resources.

Current exhibit space and museum collection storage facilities at headquarters are inadequate to provide desired levels of interpretation and museum collection storage and management functions. The park superintendent and staff's continued commitment to bring the visitor center remodeling project to conclusion illustrates their commitment to addressing the need for improved facilities and protection of irreplaceable cultural resources. However, the proposed visitor center remodeling project does not contain provisions or consideration for the projected growth of the park museum collection through acquisition of ethnographic materials from the Southeast Alaska Indian Cultural Center or from local tribe members or clans. Recommendations are detailed in the *Museum Management Plan* (NPS 1997a).

Sitka has many elements of a sound archival program, but additional program development is needed to achieve its full potential for meeting the information needs of the park and its public. Acquisition of historical records and park records is inconsistent. There is no active program for identifying and soliciting historical records from the community. For park records, the critical link between records management and archives is missing. Recommendations are detailed in the *Museum Management Plan* (NPS 1997a).

A major program need is to conduct basic historical and archeological research for a number of the park's significant cultural resources. This basic research is necessary to adequately manage, preserve, and interpret these resources. The completion of a number of special studies would also enhance the park's knowledge of its historic record.

# 4.2 Cultural Resource Project Statements

In response to the concerns outlined in previous sections and other program needs, individual project statements have been developed for Sitka National Historical Park. These project statements describe all current and anticipated cultural resource management undertakings, including ongoing, day-to-day, base-funded operations as well as proposed projects. The following list provides brief narrative descriptions of the key actions of each project statement. Complete descriptions can be found in the respective project statements following the abbreviated list.

**C-100 Provide Resources to Manage Park Museum Collections** – Provide adequate funding for one and a half additional permanent museum staff to assist in implementing and maintaining the park's museum program at DOI and NPS standards.

**C-110 Update Scope of Collection Statement** – Write an approved SOCS. Follow current guidelines for SOCS as outlined in the *Museum Handbook*, Part I.

**C-120 Establish Written Policy for Use of Ethnographic Museum Items** – Establish written use policies by discussions with NPS and a group of users and potential users of the ethnographic museum objects.

**C-130 Evaluate NAGPRA Claims through Identification of Historical Photos** - A systematic effort to record the identities of the people, regalia and events of selected Merrill photographs should be made to assist in the documentation of NAGPRA claims.

**C-140 Conduct NAGPRA Consultation for Objects of Cultural Patrimony on Exhibit** -The park will consult with Tlingit clan elders concerning "objects of cultural patrimony" on exhibit at the park.

**C-200 Perform Collection Inventory** – The inventory of SITK's museum collection will be completed according to specifications in the NPS *Museum Handbook*, Part II (1997).

**C-210 Conduct Appraisal of Museum Property** – Complete an appraisal of museum property and edit *controlled property* status of each object accordingly.

**C-220** Conduct Collection Condition Survey – Complete Collection Condition Survey(s) following instructions in the *Museum Handbook*, Part I and develop an action plan based on survey findings and recommendations.

**C-230 Inventory and Assess Historical Wallpaper and Architectural Fragments** – Inventory the park's collection of historical architecture fragments, wallpaper fragments, and associated documentation.

**C-240 Catalog Old Sitka Archaeology Collection** - Analysis and museum cataloging of the uncataloged portion of the Old Sitka archaeological collection is required to meet standards in NPS-44, NPS-28, and the NPS Museum Handbook, Part II.

**C-250 Catalog Archival Slide Collection** - Original slides will be organized, cataloged, and stored archivally. Duplicates will be made for use. Slide descriptions will be searchable by using Re:discovery word search.

**C-260 Catalog Macroalgae Collection** - Museum cataloging of the uncataloged portion of the macroalgae collection is required to meet standards in NPS-44, NPS-28, NPS-77 and the NPS Museum Handbook, Part II.

**C-300 Upgrade Museum Storage and Security** - Twenty exhibit cases and nine doors in the Russian Bishop's House require security screws and locks. Two hundred glass plate negatives require stable, archival packaging. Five hundred archival maps, charts, and drawings require rehousing in oversize archival folders. Eighty-five original historic photographs require rehousing in archival mats and folders.

**C-310 Museum Collection Storage Plan** - Storage needs will be assessed for current storage, status of the existing collection, and possible expansion of the collection.

**C-320 Museum Emergency Operation Plan** – Prepare Museum Emergency Operation Plan.

C-330 Museum Object Travel Cases – Purchase travel cases for museum objects.

**C-400 Indexing and Collation of Park's Historical Archives** - Sitka National Historical Park requires additional funding to complete an ongoing project of scanning, indexing and collating the park's 88 lineal feet of historic archives.

**C-410 Photograph Museum Collection** – Develop and initiate a plan to photograph the museum collection including supplies, print storage, and staffing.

C-420 Scan Historical Photographs – Scan historical photographs.

**C-500 A NPS Enabling Legislative First: History of the Totem Pole Collection at Sitka** – Provide key interpretative information including original village location and true clan affiliation about the totem poles located at Sitka National Historical Park.

**C-510 Totem Pole Photographic Reconstruction** – Provide clear and distinct illustrations to the carvers of producing new poles to ensure precise replications of the original poles.

**C-520 Provide Totem Pole Condition Assessments and Preservation Recommendations for SE Alaska Communities** - Provide a detailed report on specific conservation needs and provide training to help assure that communities with totem collections can maintain and preserve those collections.

**C-530 Recarve Yaadaas Crest Totem Pole** - This project would be to recarve and erect the Yaadaas Crest totem pole in the visitors center unit of the park.

**C-540 Replace Deteriorating Support Posts On Four Totem Poles** - Replace deteriorating house posts for four of the 25' - 40' totem poles in the Fort Site Unit of the park.

**C-550 Recarve Saanaheit House Posts** - Recarve and erect 3 Saanaheit House Posts in front of the park's visitor center. The house posts would be recarved to replicate, as closely as possible, the original posts brought to Sitka in 1901.

**C-560 Recarve Waasgo Legend Pole** - Recarve and erect the Waasgo Legend totem in the Fort Site unit of the park.

**C-600 Legacy of a Partnership: History of the Southeast Alaska Indian Cultural Center** - Document the accomplishments of early artisans, many of whom were important to the community as elders and leaders, and to document the growth and changes the Southeast Alaska Indian Cultural Center has taken over time.

**C-610 Nearest Neighbors: The Tlingit Cottage Community and Sitka National Historical Park** - Document the history of the park's first neighbor, and how this community which stood in contradistinction to the more traditional Tlingit village at Sitka, thrived as a community for which the park served as an ideal communal property.

**C-620 Construct Building/Shelter for Alaska Native Artists** - Construct opened-sided, 24-foot by 50-foot building/shelter for artists of the Southeast Alaska Indian Cultural Center, an Alaska Native non-profit organization that has provided cultural demonstrations and programs to park visitors in the park visitor center for 30 years under a cooperative agreement.

**C-800 Update Historic Furnishing Plan** – Plan and implement a two-phase project to complete the domestic furnishings of the Russian Bishop's House (RBH).

**C-810 Replace Fire Detection, Fire Suppression, And Security Systems in RBH** - Evaluate and replace old fire suppression/detection and security systems at the Russian Bishop's House National Historic Landmark.

**C-820 Duplicate Veniaminov Bicentennial Exhibit Panels for Russian Bishop's House** - Digitally reproduce Veniaminov Bicentennial Traveling Exhibit

**C-900 Documentation and Interpretation of the Ethnobotony of Sitka National Historical Park** – In collaboration with Sitka Tribe of Alaska (STA), document and interpret the specific plant life found in the park and the Native use of this material.

**C-910** Archeological Identification, Recovery, and Evaluation Study – An archeological investigation is needed to provide information about the location, characteristics, and significance of archeological resource sites within the park and confirm the location of the historic fort site and battleground.

**C-920** Analysis of Old Sitka Archeological Collection - Perform an in-depth analysis of the Old Sitka excavation, including recovered artifacts, field documentation, and historical references.

# **Provide Resources to Manage Park Museum Collections**

PROJECT CODE:

SERVICEWIDE ISSUES:

C-100 C81 - Museum Collections (Staffing Needs) C46 - Museum Accountability

C47 - Museum Storage

C49 - Museum Environment

C30 - Notification and Consultation

### **PROBLEM STATEMENT**

Sitka National Historical Park has approximately 140,000 objects in its museum collection. This diverse collection includes archaeological, ethnographic, historic, archival and natural history items which are stored, used and exhibited in four buildings, and outdoors. A major portion of the ethnographic and historic items on exhibit are on long term loan to the park from the Russian Orthodox Church, and three Tlingit clans. In addition, these groups have arrangements with the park to use the museum collection for ceremonial purposes. This complex, active collection must be documented, protected and preserved to Department of Interior (DOI) and National Park Service standards for museum objects, as stated in the *DOI Checklist for Preservation, Protection, and Documentation of Museum Property*, the NPS *Museum Handbook*, Parts I & II, and *NPS-28, Cultural Resources Management Guideline*. The ethnographic collections are also subject to compliance with the *Native American Graves Protection and Repatriation Act (NAGPRA) and the American Indian Religious Freedom Act (AIRFA).* 

Current staffing is inadequate to correct the existing work backlog, bring museum collections management up to DOI and NPS standards and continue to manage the museum collection. The park's 1997 Museum Management Plan recommends the addition of one full-time permanent Museum Specialist, and one part-time permanent Museum Technician to accomplish the full array of duties necessary to comply with DOI and NPS museum standards. These duties, which are currently the responsibility of one curator, include annual submissions of the Inventory of Museum Property, the Collections Management Report, and completed Museum Catalog Records, annual updating of the DOI Checklist for Preservation, Protection, and Documentation of Museum Property, annual budget (PMIS) and accomplishment (GPRA) responses; consultation and responses pertaining to NAGPRA. seasonal project planning and supervision, the ongoing accessioning and cataloging of acquisitions, processing archives, records maintenance for incoming and outgoing loans, condition surveys of museum objects prior to and after ceremonial use, regular environmental monitoring and maintenance of museum spaces, assisting the public and researchers who use the collection, helping write park planning documents, as well as collateral duties as third party draft agent, and property custodial officer and time keeper for cultural resources.

### **RECOMMENDED ACTIONS**

Provide adequate funding for one and a half additional permanent museum staff to assist in implementing and maintaining the parks museum program at DOI and NPS standards.

### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$1000/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Museum Specialist	53/1.0	53/1.0	53/1.0	53/1.0	212/4.0
Museum Technician	17/.5	17/.5	17/.5	17/.5	68/2.0
TOTALS	70/1.5	70/1.5	70/1.5	70/1.5	280/6.0

### FUNDING SOURCES

Operations Formulations System (OFS)

# **Update Scope of Collection Statement**

PROJECT CODE: C-110

**SERVICEWIDE ISSUES**: C40 - Scope of Collection Statement

### **PROBLEM STATEMENT**

A Scope of Collection Statement (SOCS) is required by NPS-28, *Cultural Resources Management Guideline* and is the basic curatorial planning document. It defines the purpose of a museum collection; sets agreed-upon limits that specify the subject matter, geographical location, and time period to which the collection must relate; and considers the uses to which the collection will be put. The complex nature of the museum collection at Sitka National Historical Park requires a thorough SOCS. The assistance of temporary museum help will provide the park curator with time to focus on the issues involved with writing this document. This project is recommended in the 1997 *Museum Management Plan*.

### **RECOMMENDED ACTIONS**

Write an approved SOCS. Follow current guidelines for SOCS as outlined in the *Museum Handbook*, Part I. To assist with completion of plan, hire one GS-7 for a minimum of two pay periods to assist with public use of the collection while the curator writes the SOCS.

### STAFFING AND FUNDING

One GS-7 Museum Technician, two pay periods, \$2590.

### **FUNDING SOURCES**

Cultural Resource Preservation and Protection (CRPP)

# **Establish Written Policy for Use of Ethnographic Museum Items**

PROJECT CODE:

SERVICEWIDE ISSUES:

C-120

C30 - Notification and Consultation

C46 - Museum Accountability

C49 - Museum Environment

C50 - Museum Security

### PROBLEM STATEMENT

Sitka National Historical Park's ethnographic collection includes a number of *sacred objects* and *objects of cultural patrimony* which are used periodically for traditional purposes. The details, privileges, and obligations associated with the use of these objects should be clearly agreed upon by both the park and users, and a written policy for their use produced. This project is recommended in the park's 1998 *General Management Plan* and 1997 *Museum Management Plan*.

### **RECOMMENDED ACTIONS**

Convene a group of users and potential users of these sacred objects. Discuss the needs of the NPS and traditional users of museum objects. Establish written use policies.

### STAFFING AND FUNDING

One GS-7 Museum Technician, three pay periods, \$3,900. Interpreter, \$500

### FUNDING SOURCES

CRPP Special Ethnographic Studies

# Evaluate NAGPRA Claims through Identification of Historical Photographs

PROJECT CODE:	C-130
SERVICEWIDE ISSUES:	<ul><li>C30 - Notification and Consultation</li><li>C46 - Museum Accountability</li><li>C49 - Museum Environment</li><li>C50 - Museum Security</li></ul>

### **PROBLEM STATEMENT**

About sixty Merrill photographs in the park's collection document "objects of cultural patrimony" in use by the Native community of Sitka between 1899 and 1929. These photographs will be identified for setting and event, identity of people including name, clan, and house; identity and clan affiliation of at.óow (objects of cultural patrimony). All personal names, place names, clan names, house names, and at.óow names will be given in both Tlingit and English. History of individual at.óow will be recorded (how a piece became clan property). Written report will include reproductions of chosen Merrill photographs and research per picture. Indexed appendices will be included listing identified objects per clan and house with corresponding photographs, and identified individuals with corresponding photographs.

### **RECOMMENDED ACTIONS**

A systematic effort to record the identities of the people, regalia and events of selected Merrill photographs should be made to assist in the documentation of NAGPRA claims. Elders still live who are capable of identifying individuals, clans, houses and at.óow in these photographs. Between 1900 and 1929, the Tlingit community willingly posed for Sitka photographer E.W. Merrill in full regalia, often at public events. The park's Merrill photographs, such as those of the "Potlatch of 1904," record an exceptional array of at.óow, both among Sitka and invited clans, who posed here for group pictures. Merrill was also hired by the Native community to take funeral photos of deceased clan members' caskets with clan at.óow surrounding them. These sensitive photos function as an obituary would today. They are graphic illustrations of clan lineage and ownership, summarized in the clan's crest objects. All these photographs serve as powerful documentation of clan heritage for NAGPRA. They are also a source of interest and pride for those with relatives in the pictures.

#### STAFFING AND FUNDING

PROJECT/ACTIVITY	YEAR01 (\$/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Museum Technician	34/1.0	34/1.0			34/2.0
Digital Camera	800/				800/
TOTALS	34,800/1.0	34/1.0			34,800/2.0

### FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base Ethnography Projects Native American Graves Protection

# Conduct NAGPRA Consultation for Objects of Cultural Patrimony on Exhibit

PROJECT CODE:	C-140
SERVICEWIDE ISSUES:	<ul> <li>C30 - Notification and Consultation</li> <li>C46 - Museum Accountability</li> <li>C49 - Museum Environment</li> <li>C50 - Museum Security</li> </ul>

### **PROBLEM STATEMENT**

The current park exhibit includes many objects of cultural patrimony, including one exceptionally sensitive one. It also contains several errors and omissions, which undermine the park's credibility in the Native community. The park is currently working with exhibit specialists to rehab its exhibit. Tlingit elders should be a part of this planning process.

### **RECOMMENDED ACTIONS**

The park will consult with Tlingit clan elders concerning "objects of cultural patrimony" on exhibit at the park. Guidance will also be sought on content of Tlingit exhibit text and exhibit presentation. Selected sessions will be video taped. A translator will be available to translate during consultation. Tapes will be cataloged and archived using ANCS+.

The park will consult on exhibited objects of cultural patrimony as required by NPS and NAGPRA. Tlingit exhibit will more accurately depict Tlingit culture.

### STAFFING AND FUNDING

This one-year project will be completed under a cooperative agreement with Sitka Tribe of Alaska for \$20,000.

### FUNDING SOURCES

Native American Graves Protection and Repatriation

# **Perform Collection Inventory**

PROJECT CODE: C-200

SERVICEWIDE ISSUES:

C46 - Museum Accountability

### **PROBLEM STATEMENT**

The museum collection at Sitka National Historical Park includes over 140,000 items, with over 800 items on exhibit, and over 500 items on loan from other institutions or groups. The park has not performed an inventory of its collection in ten years. This project is necessary in order to bring the park into compliance with DOI and NPS regulations which require an inventory of *controlled property* (items on exhibit, on loan, items appraised at \$1000 or more, and firearms) be conducted every year. An inventory is an especially critical step prior to packing the museum collection for storage during remodeling of the park visitor center and museum storage buildings.

### **RECOMMENDED ACTIONS**

The inventory of SITK's museum collection will be completed according to specifications in the NPS *Museum Handbook*, Part II (1997). Random lists of assigned catalog numbers will be generated by computer and the corresponding museum objects checked for location, condition, and documentation. One hundred percent inventories for objects designated *controlled property* will be performed, as required. Documentation of the inventory results will be submitted to the Regional Director, as required. Appropriate ANCS+ catalog records will be edited to show current status of objects. In accordance with the NPS *Museum Handbook*, a team of at least two people will complete the inventory.

### STAFFING AND FUNDING

One GS - 7 Museum Technician, ten pay periods, \$13,000 One GS - 5 Museum Technician, ten pay periods, \$10,500

### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base

### COMPLIANCE

410 DM 114.60.100(bb)

# **Conduct Appraisal of Museum Property**

PROJECT CODE: C-210

SERVICEWIDE ISSUES:

C46 - Museum Accountability

### **PROBLEM STATEMENT**

Sitka National Historical Park has approximately 140,000 museum objects in its collection. Among these, two categories of objects are particularly valuable in a monetary sense: the Russian American and ethnographic collections. Currently less than 5% of these objects have been appraised by a certified appraiser. DOI and NPS regulations require museum objects valued at \$1000 or more to be designated *controlled property*, and treated accordingly. This requires the assistance of a professional appraiser. Lack of an appraisal also limits the use of monetary value as justification in acquiring funding for museum care of these objects, limits the park's ability to acquire insurance, and limits object security. This project is recommended in the park's 1997 *Museum Management Plan*. It is a necessary step prior to accomplishing a required museum collection inventory, since those items inventoried are determined, in part, by their value.

### **RECOMMENDED ACTIONS**

Complete an appraisal of museum property. Program for a certified appraiser to examine and assess the current museum collection. This may be accomplished in stages: loan items, those items with high collector's value and those that are highly portable successively. The results will be written surveys that contain lists of objects appraised, and their current market value as assigned by the appraiser. Use information to edit *controlled property* status of each object in ANCS+. Store appraisal results separately as confidential information.

### STAFFING AND FUNDING

Certified appraiser, contract, \$50,000 One GS-7 Museum Technician, two pay periods, 2,600

### FUNDING SOURCES

Cultural Resource Preservation and Protection

### COMPLIANCE

410 DM 114.60.100(bb)

# **Conduct Collection Condition Survey**

C-220

PROJECT CODE:

SERVICEWIDE ISSUES:

C43 - Collection Condition Survey C46 - Museum Accountability

### PROBLEM STATEMENT

The park's paper and photographic collections were surveyed by a professional conservator in 1998, and the park's totems have been surveyed and received treatment in the last eight years. Historical furnishings in the Russian Bishop's House, and ethnographic items in the visitor center exhibit hall were treated prior to being placed on exhibit ten years ago. However, no systematic condition survey of the historic and ethnographic collections has been made which produced recommendations for their long term storage and care. These collections include Russian Orthodox vestments and associated ceremonial textiles on loan from the Russian Orthodox church. They also include Tlingit carvings, house posts, Chilkat robes and ceremonial hats on loan to the park from local clans. Some of these people have made inquiries concerning the condition of their property at the park. Other objects in the ethnographic collection are actively used for ceremonial purposes. A professional condition survey of all these items is needed.

### **RECOMMENDED ACTIONS**

Complete Collection Condition Survey(s) following instructions in the *Museum Handbook*, Part I. Program funding and assist with site visit of conservator. Follow through with action plan based on survey findings and recommendations. This survey will result in the production of a narrative report detailing general needed improvements, object condition reports with proposals for treatment, cost estimates for conservation, and priorities for treatment. The survey can also provide information on methods to slow the rate of deterioration by changes in storage techniques and conditions. This is particularly pertinent in relation to renovations in the museum storage building and visitor center exhibits.

### STAFFING AND FUNDING

The project will be conducted by professional conservators from Harper Ferry Center for \$10,000.

### FUNDING SOURCES

Museum Collection Preservation and Protection

### COMPLIANCE

410 DM 114.60.100(bb)

# Inventory and Assess Historical Wallpaper and Architectural Fragments

PROJECT CODE:	C-230
SERVICEWIDE ISSUES:	C46 - Museum Accountability C47 - Museum Storage C57 - Structures Special Studies

#### **PROBLEM STATEMENT**

The Russian Bishop's House at Sitka, one of four remaining Russian buildings in North America, is a National Historic Landmark. During its restoration, over 2500 original architectural and wallpaper fragments were added to the park's museum collection: windows, bricks, wallpaper samples and various elements such as doors, hardware, frames and moldings. These fragments are a valuable research tool, and a representative sample of each should be preserved to document phases of construction of the house. However, multiple samples of the same items were added to the park's collection. A historical architect and a wallpaper historian should assess the current collection, determine criteria for saving well-documented samples, and designate the best representative samples. Additional windows, doors, bricks, moldings and wallpaper can then be deaccessioned to free up valuable museum storage space. Two reports should be issued, one on the wallpaper, and one on architectural fragments. They should picture the various types of fragments kept in the collection and give pertinent information on each. This will enhance the collection's usefulness to researchers and interpreters. This project is recommended in the park's 1997 *Museum Management Plan* and 1998 *Collection Condition Survey*.

### **RECOMMENDED ACTIONS**

Inventory the park's collection of historical architecture fragments, wallpaper fragments, and associated documentation. Establish criteria for inclusion in the museum collection. Document each sample with photographs, provenience and pertinent background information. Make copies of the report available to staff and researchers. This may be a good research project for graduate students in historical architecture and historical decorating arts.

#### STAFFING AND FUNDING

Historical Architect with Student Intern	\$35,000
Historical Furnisher with Student Intern	\$35,000

### FUNDING SOURCES

Cultural Resource Preservation and Protection Museum Collection Preservation and Protection Cultural Cyclic Maintenance

# **Catalog Old Sitka Archaeology Collection**

PROJECT CODE:

C-240

SERVICEWIDE ISSUES:

C46 - Museum Accountability C47 - Museum Storage C57 - Structures Special Studies

### **PROBLEM STATEMENT**

In 1799, Russians settled at Old Sitka, and in 1802 local Tlingit attacked and destroyed the settlement. In 1804, Russians returned to Sitka area and fought a second battle with the Tlingit at the mouth of Indian River in what is now Sitka National Historical Park. The U.S. Forest Service excavated the Old Sitka site in 1934-35. The collection was stored at several locations including the Juneau Federal Building and the University of Alaska, Fairbanks (UAF). In 1963, a portion of the collection was sent to the National Park Service for curation at Sitka National Historical Park. Records with the collection indicated that some of the artifacts were missing at that time. Recently, museum staff at UAF located a number of the missing artifacts and forwarded them to Sitka for curation with the rest of the Old Sitka collection. These items now require museum cataloging.

Old Sitka is a National Historic Landmark. The Old Sitka archaeological collection represents one of the few Russian American settlements in North America.

### **RECOMMENDED ACTIONS**

Analysis and museum cataloging of the uncataloged portion will enable researchers and interpreters to more readily access information about the settlement. Consolidation of the collection is recommended in the park's 1997 Museum Management Plan. Cataloging the collection is required to meet standards in NPS-44, NPS-28, and the NPS Museum Handbook, Part II.

### STAFFING AND FUNDING

One GS-9 Historic Archaeologist, four pay periods, \$6,800

### FUNDING SOURCES

Museum Collections Backlog Cataloging

# **Catalog Archival Slide Collection**

PROJECT CODE:	C-250
SERVICEWIDE ISSUES:	C46 - Museum Accountability C47 - Museum Storage C57 - Structures Special Studies

#### **PROBLEM STATEMENT**

A collection of slides dating from the 1950's to the present remain unorganized, uncataloged, and improperly stored. Their potential usefulness is great, but until they are documented, they remain inaccessible and unaccounted for.

NPS regulations stipulate museum collection accountability. The park's collection of historical slides is in danger of loss and damage due to lack of documentation and poor storage. Accomplishment of this project will establish intellectual control and archival storage for this resource.

### **RECOMMENDED ACTIONS**

Slides will be surveyed, organized, cataloged, and stored archivally. Duplicates will be made for use by researchers, the public, and park interpreters. A list of categories will be produced. Slide descriptions will be searchable by using ANCS+ word search.

#### STAFFING AND FUNDING

One GS-7 Museum Technician, six pay periods, \$8,000

### FUNDING SOURCES

Museum Collections Backlog Cataloging

# Catalog Macroalgae Collection

PROJECT CODE:

SERVICEWIDE ISSUES:

C-260

C46 - Museum Accountability

N20 Lack of Baseline Data

N24 Other - Near-Park Use of Waterways

N17 Biodiversity

### PROBLEM STATEMENT

The park conducted a macroalgae inventory in 1997. Many specimens were collected, identified, and mounted. These items now require museum cataloging. Museum cataloging will enable researchers and interpreters to more readily access information about the macroalgae present at Sitka National Historical Park.

Consolidation of the collection is recommended in the park's 1997 Museum Management Plan. Cataloging the collection is required to meet standards in NPS-44, NPS-28, NPS-77 and the NPS Museum Handbook, Part II.

### **RECOMMENDED ACTIONS**

Catalog macroalgae specimens collected in the 1997 coastal inventory. Store specimens appropriately. Produce indexed data lists for park staff and researchers.

### STAFFING AND FUNDING

One GS-7 Museum Technician, 1 pay period (cataloging)	\$1,300
One GS-9 Biologist, 1 pay period (consulting)	\$1,600

### FUNDING SOURCES

Park Base – Non-Recurring Operating Funds – Natural Resources; Servicewide – Natural Resource Preservation Program, Natural Resources Inventory and Monitoring.

# **Upgrade Museum Storage and Security**

C-300

PROJECT CODE:

SERVICEWIDE ISSUES:

C47 Museum Storage C50 Security and Fire Protection

#### **PROBLEM STATEMENT**

A line item construction project to remodel the park visitor center and curatorial area is scheduled for FY 2000. Glass plate negatives will be broken if not rehoused. Historical photos, charts and maps will be torn unless rehoused. Security screws and locks are necessary to secure artifacts on exhibit. These projects were recommended by NPS conservators and security specialists. The glass plate storage project was deemed the park's most critical conservation need prior to moving the park's museum collection. Current permanent staffing is not sufficient to accomplish this.

#### **RECOMMENDED ACTIONS**

These following projects should be completed prior to the park's remodeling project to mitigate potential damage. Twenty exhibit cases and nine doors in the Russian Bishop's House require security screws and locks. Two hundred glass plate negatives require stable, archival packaging. Five hundred archival maps, charts, and drawings require rehousing in oversize archival folders. Eighty-five original historic photographs require rehousing in archival mats and folders. Funding requested includes supplies and labor.

#### STAFFING AND FUNDING

One GS-7 Museum Technician for 6 pay periods \$8,000 Supplies \$5,000

### FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base Museum Collections Preservation and Protection

### **Museum Collection Storage Plan**

PROJECT CODE: C-310

SERVICEWIDE ISSUES:

C47 Museum Storage C42 Collection Storage Plan

#### **PROBLEM STATEMENT**

Currently the park contains 140,000 cataloged objects. Only 828 objects are on exhibit. The remainder are in museum storage. The CSP is a site specific document that will aid the park in correcting storage deficiencies documented in the *DOI Checklist for Preservation*, *Protection, and Documentation of Museum Property*. A CSP is recommended in the park's 1997 Museum Management Plan. Since a shortage of space is envisioned for collection storage even after facility remodeling is completed, efficient use of space is imperative.

#### **RECOMMENDED ACTIONS**

The proposed remodel of the park's museum storage building requires that new storage plans be designed. Storage needs will be assessed for current storage, status of the existing collection, and possible expansion of the collection. A *Collection Storage Plan* (CSP) will be written that addresses these needs in relation to the proposed remodel and makes recommendations for appropriate storage, environment, maintenance, and security issues, as well as needed supplies and equipment.

Completion of the CSP will meet recommendations in the park's *1997 Museum Management Plan.* It will provide professional direction for interior arrangement of the newly remodeled museum storage facility at the park.

#### STAFFING AND FUNDING

Consultant – Harpers Ferry Center \$10,000

#### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base Museum Collections Preservation and Protection

### **Prepare Museum Emergency Operation Plan**

PROJECT CODE:

C-320

SERVICEWIDE ISSUES:

- C49 Museum Environment
- C47 Museum Storage
- C45 Housekeeping Plan
- C70 Environment Impact
- C72 Protection and Security

#### PROBLEM STATEMENT

The park is located in earthquake and tsunami zones, and is susceptible to broken water pipes, fire, and power outages. Due to these threats, a museum emergency operation plan should be prepared for the park's museum collection. The collection includes over 140,000 items exhibited and stored in four locations. Preparation of the plan is recommended in the 1997 *Museum Management Plan*, and is a standard of the *DOI Checklist for Preservation*, *Protection, and Documentation of Museum Property*, the NPS *Museum Handbook*, Part I, and *NPS-28*, *Cultural Resources Management Guideline*.

#### **RECOMMENDED ACTIONS**

Prepare a written plan of action for the storage and conservation of the museum collection in the event of emergencies threatening its safety. Make copies available to, and train those people potentially involved with reacting to such emergencies.

#### STAFFING AND FUNDING

One GS-7 Museum Technician for four pay periods \$5,200

#### FUNDING SOURCES

CRPP
MCPP

# **Purchase Travel Cases for Museum Objects**

PROJECT CODE:

C-330

SERVICEWIDE ISSUES:

C29 Park Ethnographic Program Strategy

C47 Museum Storage

C39 Heritage Education

C72 Protection and Security

#### PROBLEM STATEMENT

Several ethnographic *objects of cultural patrimony* in the park's museum collection are used occasionally by their traditional Tlingit clan caretakers for traditional ceremonies. These *at.óow* require appropriate packing cases for protection while in transit to and from their destinations.

### **RECOMMENDED ACTIONS**

Acquire travel cases for traveling museum objects that are secure, convenient to use, and reuseable.

#### STAFFING AND FUNDING

\$700

FUNDING SOURCES

CRPP MCPP

# Indexing and Collation of Park's Historical Archives

PROJECT CODE: C-400

SERVICEWIDE ISSUES: C46 - Mu

C46 - Museum Accountability

#### PROBLEM STATEMENT

Sitka National Historical Park has funding throughout the first half of FY99 to complete an ongoing project of scanning, indexing and collating the park's 88 lineal feet of historic archives. The scanning and indexing project is providing a two-fold product: the paper and photographic archives are electronically converted in a digitized format, which provides a safety net for the perishable and flammable archive material, and it allows for the electronic indexing and collating of the material which greatly enhances its research and educational potential.

#### **RECOMMENDED ACTIONS**

Current project funding for FY99 is insufficient to finish the project. Without additional funding the historian currently working on the project will be unable to complete it. This will result in a loss of the ability to electronically recover, and protect, important historical data.

#### STAFFING AND FUNDING

One GS-9 Historian for 22 pay periods \$48,000

### FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base

Museum Collections Preservation and Protection

Recreational Fee Demonstration - 20%

## **Photograph Museum Collection**

PROJECT CODE:	C-410
SERVICEWIDE ISSUES:	C46 - Museum Accountability
	C81 - Museum Collections Staffing

#### **PROBLEM STATEMENT**

This project will help establish museum accountability for the park's museum collection which includes over 140,000 items. The photographic record documents object condition, augments description on the Museum Catalog Record, and acts as security documentation for objects on exhibit and in storage. Photographs are also useful for documenting condition of objects before and after use. Currently less than one percent of these objects have been photographed, the prints filed appropriately, and the pictorial data downloaded into ANCS+, the museum cataloging program. The *Museum Handbook*, Part II, recommends maintaining a visual record of all museum objects. Limited staffing and funding has hindered the completion of this project.

#### **RECOMMENDED ACTIONS**

Photograph the museum collection. Prioritize, beginning with objects which are designated *controlled property*, i.e., those items on loan, on exhibit, appraised at \$1000 or more, or firearms. Store hard-copy prints and download data images into ANCS+. Program for camera, supplies, print storage, scanning, down loading and staffing.

PROJECT/ACTIVITY	YEAR01 (\$/FTE)	YEAR02	YEAR03	YEAR04	SUBTOTAL
Museum Technician	17,000/1.0				17,000/1.0
Camera	800/				800/
TOTALS	17,800/1.0				17,800/2.0

#### STAFFING AND FUNDING

### FUNDING SOURCES

Cultural Resource Preservation and Protection (CRPP)

### **Scan Historical Photograph Collection**

**PROJECT CODE:** 

SERVICEWIDE ISSUES:

C-420

C46 - Museum Accountability C72 – Protection and Security C39 – Heritage Education

#### **PROBLEM STATEMENT**

The park has about 4000 photographs in its museum collection. Since these photographs have been cataloged and stored archivally they have received a great deal of use by researchers. However, viewing these prints currently requires an appointment with the museum curator, the only museum staff available to assist with use of the collection. It also requires the prints themselves be moved from place to place and handled. Scanning these photos into their accompanying computer catalog records would provide the public freedom to search and view this historic photo collection independently through the use of the ANCS+ computer catalog program. It would eliminate unnecessary handling of the original prints, improve security, and require less museum staff time. It would also provide convenient cross-reference for identities recorded in the accompanying museum catalog card description.

#### **RECOMMENDED ACTIONS**

Prioritize photo categories according to significance and frequency of use. Scan photograph collection into ANCS+. Make images available to researchers and park staff through the park computer network. Provide computer access to the photo collection dedicated to research and public use.

#### **STAFFING AND FUNDING**

One GS-7 Museum Technician for 13 pay periods \$17,000

#### **FUNDING SOURCES**

Cultural Resource Preservation and Protection

Cultural Cyclic

**MCPP** 

# A NPS Enabling Legislative First: History of the Totem Pole **Collection at Sitka NHP**

**PROJECT CODE:** C-500 SERVICEWIDE ISSUES: C35 – Historic Resource Study

#### **PROBLEM STATEMENT**

Beginning in 1901, the first of many totem poles were brought to the new federal park in Sitka which is now Sitka National Historical Park. Over the next four years as many as 25 poles were collected from Southeast Alaskan villages by Territorial Governor John Brady. Today these villages are no more. Recognized as a significant specific element in the National Monument enabling legislation of 1910, the totem collection has remained an important cultural resource of the park. However the detailed history for many of the poles including the original village location and true clan affiliation is unknown. As the only NPS unit retaining and interpreting totems, this project would research the identity and original locations of the park's unique collection.

The park's totem pole collection is enjoyed by almost a quarter million visitors a year, but much remains unknown about the poles' original locations and the identity of their donors. When accepted as a gift by Territorial Governor Brady, the promise made to the donors was that their name and their villages would remain with the gift. After almost a hundred years, it is time to fulfill that promise and to provide this key interpretative information about these poles to park visitors and scholars.

#### **RECOMMENDED ACTIONS**

Research the identity and original locations of the park's unique collection of totem poles.

#### STAFFING AND FUNDING

One GS-9 Historian for 22 pay periods \$48,000

#### **FUNDING SOURCES**

**CRPP** - Cultural Resources Preservation Program Base

**CRPP** - Historic Resources Studies

**CRPP** - Historic Structures Inventory

Ethnography Projects

# **Totem Pole Photographic Reconstruction**

PROJECT CODE: C-510

**SERVICEWIDE ISSUES**: C38 – Special History Study

#### **PROBLEM STATEMENT**

As replacement becomes necessary Sitka National Park's Totem Pole Preservation Plan calls for the duplication of the original donated poles. Currently 15 totem poles line the park's trail system. It is anticipated that within the next few years a number of poles will need to be recarved, and at some point, time, weathering, and fungal decay will cause the replacement of all the poles. A large number of historic photographs, taken of what are now abandoned villages, show many of the original totem poles before they were brought to Sitka. These unique glimpses into the past offer a look "in-situ" of many of the park totems.

During the last decade, the park has had 4 totem poles reproduced. The quality of the reproductions varied from those provided by "low bidder " to poles reproduced by master carvers. During the procurement process, the park lacked clear and distinct illustrations to provide to the carvers of what needed to be produced to ensure precise replications of the original poles. This project would provide these illustrations.

#### **RECOMMENDED ACTIONS**

Utilize space age imagery software, which has been perfected by NASA, DOD, NSA, museums and GIS professionals, to enhance photographic imagery, especially old or poor quality photographs. Through research and application of the imagery enhancements the true and original wood carvings would be brought to light. This project would allow for the accurate reproduction of these important cultural objects.

#### STAFFING AND FUNDING

The project will be contracted to professional graphic expert for reconstruction for \$68,000.

#### FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base CRPP - Historic Resources Studies CRPP - Historic Structures Inventory Ethnography Projects Exhibit Rehabilitation and Preservation Geographic Information System

# Provide Totem Pole Condition Assessments and Preservation Recommendations for SE Alaska Communities

PROJECT CODE: C-520

**SERVICEWIDE ISSUES**: C56 – Rehabilitation

#### **PROBLEM STATEMENT**

Sitka National Historical Park and HFC's Wood Conservationists have provided totem pole condition assessment and preservation recommendations for a number of Southeast Alaska Communities, including Kassan, Klawock, Craig, Wrangell, and Hydaburg. These individual, hands-on, condition assessments have been conducted on nearly 100 old totem poles and have contributed towards their preservation. This project is in accordance with Sec. 1318 of ANILCA.

A number of southeast communities have spectacular collections of Tlingit Indian totem carvings from abandoned towns, including Tongass, Cat, Pennock Island, and Cape Fox Village. The community of Saxman has requested that wood conservators from the National Park Service assist them in a condition assessment of this collection. Sitka National Historical Park has assisted other Southeast Alaska communities in the preservation of their totem poles, and has insured that these monuments in cedar are protected for future generations.

#### **RECOMMENDED ACTIONS**

The National Park Service's Cultural Resources Partnership Program has provided valuable historic preservation expertise, training, and assistance throughout Alaska. The benefit of this program to Southeast Alaska has been the preservation of many significant totem poles that might have otherwise been lost. In addition to the onsite assessment this project would provide a detailed report on conservation needs and offer specific training to help assure the community in its future conservation efforts.

#### FUNDING

This project will be conducted by the National Park Services Wood Conservators affiliated with Harpers Ferry Center for \$56,000.

#### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base Recreational Fee Demonstration, 20%

# **Recarve Yaadaas Crest Totem Pole**

PROJECT CODE: C-530

SERVICEWIDE ISSUES: C56 - Restoration

#### PROBLEM STATEMENT

The park's enabling legislation includes totem poles brought to Sitka in the early 1900's by territorial governor John Brady and erected in Sitka National Historical Park. The poles represent Tlingit and Haida Indian culture and heritage. Most of the originals deteriorated and were recarved and re-erected in the park during the CCC era to the present. The Yaadaas Crest pole, however, stood in the park until the 1990s when it was taken down. It, along with the remaining original poles and pole fragments, will be displayed in an enclosed area being constructed as part of a line-item construction project to remodel the visitor center scheduled for FY99/00. One of the primary cultural, recreational and educational experiences for visitors to the park is to view and photograph totem poles in a natural, rainforest setting. The park's general management plan recommends recarving/replicating the original "Brady" poles as the old poles deteriorate and erecting the replica poles based on recommendations of the park's cultural landscape study.

#### **RECOMMENDED ACTIONS**

This project would be to recarve and erect the Yaadaas Crest totem pole in the Fort Site unit of the park. The totem pole would be recarved to replicate, as closely as possible, the original pole which is one of the park's component resources which are in the proclamation designating Sitka National Monument in 1910. The new pole will be erected along park trails where the original once stood.

### FUNDING

\$100,800 – Contract to recarve totem pole.

### FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base Cultural Cyclic Maintenance Recreational Fee Demonstration, 20% Repair/Rehabilitation

# **Replace Deteriorating Support Posts on Four Totem Poles**

PROJECT CODE: C-540

SERVICEWIDE ISSUES: C56 - Restoration

#### PROBLEM STATEMENT

A recent condition assessment of the support posts on the park's 15 totem poles determined that four of the posts are in poor condition - less than 60 percent structurally sound. The totem poles are part of the park's enabling legislation and are placed along park trails in a rainforest environment. The totems are attached to support posts; and the support posts imbedded into the ground. Thousands of visitors view and photograph the park's totem poles; and the poles are significant cultural resources. A failure by a support post would seriously damage the attached totem pole and could critically injure visitors. This project is needed to preclude failure of the support posts.

#### **RECOMMENDED ACTIONS**

Replace deteriorating house posts for four of the 25-foot to 40-foot totem poles in the Fort Site Unit of the park. This will entail taking down the totem poles and support posts, removing the support posts from the poles, shaping new cedar support posts for each pole, attaching the new support posts to the poles, and re-erecting the totems with the new support posts in the park.

#### FUNDING

\$7,000 – purchase support posts. \$12,000 – contract to shape posts.

#### **FUNDING SOURCES**

Cultural Cyclic Maintenance Recreational Fee Demonstration, 20% Repair/Rehabilitation

## **Recarve Saanaheit House Posts**

PROJECT CODE: C-550

SERVICEWIDE ISSUES: C56 - Restoration

#### **PROBLEM STATEMENT**

The park's enabling legislation includes totem poles and house posts brought to Sitka in the early 1900's by territorial governor John Brady and erected in what is now Sitka National Historical Park. These house posts and totems represent Tlingit and Haida Indian culture and heritage. The original house posts were recarved in 1981; and they have deteriorated significantly. The house posts, located with the 50' Saanaheit totem pole, stand just outside the visitor center and are among the most photographed objects in the park. The park's general management plan recommends recarving/replicating the original "Brady" poles as the old poles deteriorate and erecting the replica poles based on recommendations of the park's cultural landscape study.

#### **RECOMMENDED ACTIONS**

Recarve and erect 3 Saanaheit House Posts in front of the park's visitor center. The house posts would be recarved to replicate, as closely as possible, the original posts brought to Sitka in 1901.

#### FUNDING

\$84,000 – Contract to recarve three house posts.

### FUNDING SOURCES

Cultural Cyclic Maintenance Recreational Fee Demonstration, 20% Repair/Rehabilitation

## **Recarve Waasgo Legend Pole**

PROJECT CODE: C-560

SERVICEWIDE ISSUES:

C56 - Restoration

#### PROBLEM STATEMENT

The park's enabling legislation includes totem poles brought to Sitka in the early 1900's by territorial governor John Brady and erected in what is now Sitka National Historical Park. The poles represent Tlingit and Haida Indian culture and heritage. Most of the originals deteriorated and were recarved and re-erected in the park during the CCC era to the present. In 1997, the replica of the Waasgo Legend totem carved during the CCC era was damaged; and it has been determined the pole cannot be re-erected outside an enclosed, protected structure. One of the primary cultural, recreational, and educational experiences for visitors to the park is to view and photograph totem poles in a natural, rainforest setting. The park's general management plan recommends recarving/replicating the original "Brady" poles as the old poles deteriorate and erecting the replica poles based on recommendations of the park's cultural landscape study.

#### **RECOMMENDED ACTIONS**

Recarve and erect the Waasgo Legend totem in the Fort Site unit of the park. The totem pole would be recarved to replicate, as closely as possible, the original pole which is one of the park's component resources in the proclamation designating Sitka National Monument in 1910. The new pole will be erected along park trails where it once stood.

#### FUNDING

\$100,800 – Contract to recarve totem pole.

#### **FUNDING SOURCES**

CRPP - Historic Structures Stabilization Recreational Fee Demonstration, 20% Repair/Rehabilitation

# Legacy of a Partnership: History of the Southeast Alaska Indian Cultural Center

PROJECT CODE:C-600SERVICEWIDE ISSUES:C35 – Historic Resource Study

#### **PROBLEM STATEMENT**

For over a quarter of a century, there has been a partnership between the National Park Service and the Southeast Alaska Indian Cultural Center (SEAICC). This partnership was originally formed with the Alaska Native Brotherhood to impart the values of Southeast Alaska Native cultures (Tlingit, Haida and Tsimshian) to students and park visitors. Today the SEAICC is a non-profit entity housed in the east wing of the park's visitor center. Using art as the vehicle and demonstration as the strategy, the center has conveyed values from one generation to the next. The SEAICC demonstration program has focused on woodcarving, silvercarving, weaving and regalia making to provide training for students and examples of traditional native art forms to park visitors.

#### **RECOMMENDED ACTIONS**

The SEAICC has evolved during its quarter century of existence into a model for effective partnerships. It has also had an interesting history ranging from initial opposition to exemplary model. There is a clear need to document the accomplishments of early artisans, many of whom were important to the community as elders and leaders, and to document the growth and changes the center has taken over time. The documentation could be used by other parks striving to develop partnerships with Native Americans.

#### STAFFING AND FUNDING

This project will be contracted to a professional Tlingit writer to conduct archival research, interview appropriate Elders, and prepare the final report for \$58,000.

#### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base

# Nearest Neighbors: The Tlingit Cottage Community and Sitka National Historical Park

PROJECT CODE:C-610SERVICEWIDE ISSUES:C35 – Historic Resource Study

#### **PROBLEM STATEMENT**

By the beginning of the twentieth century, two distinct but related Native communities existed in Sitka. The "Cottage Community" was first built in the 1880's immediately adjacent to the park. This community would later be described as an utopian experiment in assimilating Natives into a Christian way of life. Built as an intentional, alternative community, the cottages existed in very marked distinction to the more traditional village in Sitka which in the 1880's was still influenced by a very significance degree by Tlingit social structure, beliefs, and customs. Until the end of World War II this community utilized the park and Indian River in many traditional ways which are interwoven with the park history.

#### **RECOMMENDED ACTIONS**

Document the history of the park's first neighbor, and how this community which stood in contradistinction to the more traditional Tlingit village at Sitka, thrived as a community for which the park served as an ideal communal property.

#### FUNDING

This project will consist of a professional prepared historic resource study for \$58,000.

#### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base CRPP - Historic Resources Studies Ethnography Projects

# **Construct Building/Shelter for Alaska Native Artists**

PROJECT CODE: C-620

SERVICEWIDE ISSUES: C85 - Structures

#### **PROBLEM STATEMENT**

The Southeast Alaska Indian Cultural Center needs a sheltered area to provide traditional demonstrations to visitors, including story telling, traditional foods preparation, and totem pole, house post, and canoe carving. The end results of such demonstrations are traditional products (totem poles, house posts, canoes, etc.) that not only preserve and protect Southeast Alaska Native culture, but allow visitors to experience the culture. The only area in the park and the community currently available for such purposes will be enclosed to display the park's old totem poles, which are included in the park's enabling legislation, as part of a line-item construction project to remodel the visitor center. This shelter will be instrumental in the continued production of Southeast Alaska Native traditional art for the education and enjoyment of visitors, school children, and other residents of Sitka.

#### **RECOMMENDED ACTIONS**

Construct opened-sided, 24' X 50' building/shelter for artists of the Southeast Alaska Indian Cultural Center, an Alaska Native non-profit organization that has provided cultural demonstrations and programs to park visitors in the park visitor center for 30 years under a cooperative agreement. The building/shelter will be constructed with large, cedar logs on a concrete foundation with a 1/4 pitch roof with cedar shingles. The building/shelter will have electric power and lighting.

#### FUNDING

\$95,000 – Contract to construct shelter.

#### **FUNDING SOURCES**

Cultural Cyclic Maintenance Recreational Fee Demonstration, 20% Repair/Rehabilitation

# **Update Historic Furnishing Plan**

PROJECT CODE:

C-800

SERVICEWIDE ISSUES:

C44 - Historic Furnishing Report

### **PROBLEM STATEMENT**

Plan and implement a two-phase project to complete the domestic furnishings of the Russian Bishop's House (RBH). Phase one of the project would be the research and planning phase. It would involve team development of an updated historic furnishing plan to include significant domestic furnishings, which were not addressed in the original furnishing plan following restoration of the RBH. It would also address acquisition of furnishings and accessories to enhance interpretation of the significant role of the building in the education of Native children. Team members would include the Harper's Ferry Chief of Historic Furnishings, AKSO Historical Architect, and the park resources manager, curator, chief of interpretation and others experts as deemed necessary by the team.

Phase two of the project would involve locating, purchasing and installing authentic period household furnishings, as prescribed in the updated plan. Additional historic furnishings are needed in the Russian Bishop's House (RBH) to provide balanced interpretation of the restored building, and to provide a link to other park resources and other Russian American historic sites in Sitka.

### **RECOMMENDED ACTIONS**

Plan and implement a two-phase project to complete the domestic furnishings of the Russian Bishop's House (RBH).

### FUNDING

\$10,000 – purchase historic furnishings.

### **FUNDING SOURCES**

CRPP - Cultural Resources Preservation Program Base Parks as Classrooms Recreational Fee Demonstration, 20%

## **Replace Fire Detection, Fire Suppression, And Security Systems**

PROJECT CODE: C-810

**SERVICEWIDE ISSUES**: C44 - Historic Furnishing Report

## **PROBLEM STATEMENT**

The Russian Bishop's House is the most intact of only 4 buildings remaining from the Russian American period and part of the park's 1972 enabling legislation. Restored in the 1980s, its halon fire suppression and analog intrusion alarm systems are obsolete. These systems protect the House and its collections. They need to be updated to meet current standards. The current security/intrusion alarm does not directly interface with the local police department's system which delays response time.

## **RECOMMENDED ACTIONS**

Evaluate and replace old fire suppression/detection and security systems at the Russian Bishop's House National Historic Landmark. Replace halon system with approved misting or gas fire suppression system. Replace analog intrusion alarm with digital logitech system the interfaces with the Sitka Police Department's system.

#### FUNDING

\$10,000 – evaluate systems \$63,920 – purchase and install systems

## FUNDING SOURCES

Cultural Cyclic Maintenance Recreational Fee Demonstration, 20% Repair/Rehabilitation

# Duplicate Veniaminov Bicentennial Exhibit Panels for Russian Bishop's House

**PROJECT CODE:**C-820**SERVICEWIDE ISSUES:**C39 - Heritage Education

#### **PROBLEM STATEMENT**

The most impressive and significant resident of the Russian Bishop's House, a National Historic Landmark and part of Sitka National Historical Park, was Bishop Ioann Veniaminov. In 1997, the Veniaminov Bicentennial Commission produced a 20 panel traveling exhibit entitled "A Good and Faithful Servant: The Year of Saint Innocent. An Exhibit commemorating the bicentennial of the birth of Ioann Veniaminov 1797-1997." This superb exhibit, displayed at the park June and July 1998, covers Bishop Veniaminov's life and phenomenal accomplishments. The poster sized panels feature attractive illustrations and provide a great deal of valuable information that would enhance current interpretation of the Russian Bishop's House. The Veniaminov Bicentennial Commission has granted the park permission to duplicate the exhibit without cost. Duplicate panels would be displayed at the Russian Bishop's House to supplement current exhibits and supply additional information.

## **RECOMMENDED ACTIONS**

Digitally reproduce Veniaminov Bicentennial Traveling Exhibit. Output would include 20 high resolution computer printed panels 20"x40" matt finish. Panels would be mounted on 1/2" black core/black face Gatorboard. 20 panels @ \$160 = \$3,200. Shipping to Sitka \$75.

#### FUNDING

Contract \$3,300

## FUNDING SOURCES

CRPP - Cultural Resources Preservation Program Base

Exhibit Rehabilitation and Preservation Parks as Classrooms Recreational Fee Demonstration, 20% Recreational Fee Demonstration, 80%

## Documentation and Interpretation of the Ethnobotony of Sitka National Historical Park

PROJECT CODE: C-900

SERVICEWIDE ISSUES: C39 - Heritage Education

## **PROBLEM STATEMENT**

For thousands of years Native Americans utilized the park's natural resources for food, medicinal, and technological purposes. Plant products including berries, green sprouts, roots and rhizomes, seaweed, and tree cambium among others were sought out by the Tlingit peoples as an important component of their diet. While the importance of plant foods and herbal medicines to the Tlingit is well appreciated, the roles of plants in native material cultures is often overlooked. Heat, shelter, transportation, clothing, tools; the necessities of life came from the flora found in the park. This project would work with Sitka Tribe of Alaska (STA) in documenting and interpreting both the specific plant life found in the park and also the Native use of this material.

This project would serve two important park partnership and stewardship objectives. The first of which is the need for the documentation of the rapidly disappearing indigenous knowledge of earlier use of park lands. By documenting this important knowledge through working with Sitka Tribe of Alaska and tribal Elder consultants, this important knowledge will not be lost. The park's trail system is one of the few natural areas where Southeast Alaska visitors, especially cruise ship users, can actually experience intimately the natural beauty of the region. Selective placement of interpretive signage illustrating the types of flora of a temperate rain forest and the traditional use by the Tlingit peoples will provide important cultural and natural information to visitors.

## **RECOMMENDED ACTIONS**

Document and interpret the specific plant life found in the park and also the Native use of this material.

## FUNDING

\$150,000 – This two year project will be funded at \$75,000 per year and will require the assistance of Sitka Tribe of Alaska.

## **FUNDING SOURCES**

CRPP - Cultural Landscape Inventory CRPP - Cultural Resources Preservation Program Base Ethnography Projects Exhibit Rehabilitation and Preservation

# Archeological Identification, Recovery, and Evaluation Study

PROJECT CODE: C-910

SERVICEWIDE ISSUES:

C44 - Historic Furnishing Report

## PROBLEM STATEMENT

Although it is the oldest national park in Alaska, Sitka National Historical Park has never received a systematic archeological survey. The 1910 National Monument enabling legislation acknowledges the "site of the former village of the Kiks.ádi tribe," but important archeological questions remain regarding its extent and location. Although the park was available for use for over 6000 years, no prehistoric archeological sites have been recorded in the park. Early Russian maps indicate at least six structures within the park, but these have never been recovered. The park has been preparing for a multi-year archeological survey by completing a variety of important preamble studies including geomorphological research, cultural landscape study, archeological overview and assessment, oral histories, and a traditional native land-use study. The archeological investigation will be completed in consultation with the Sitka Tribe of Alaska.

It is the policy of the National Park Service to insure that archeological resources under its stewardship are conserved, protected, and preserved. Recognizing that information about the location, characteristics, and significance of sites within the park are lacking, this archeological investigation is needed to correct that deficiency.

## **RECOMMENDED ACTIONS**

Perform an Archeological investigation to locate the "site of the former village of the Kiks.ádi tribe" and other structures that stood within the park. Confirm the location of the historic fort site and battleground.

## FUNDING

\$285,000 - This project will be contracted for three years and will be assisted by Sitka Tribe of Alaska in the implementation of the research design and development for a stratified archeological survey. This project will also provide experience and support development for Sitka Tribe of Alaska's own archeological program as well as provide important information on their prehistory.

## **FUNDING SOURCES**

CRPP - Archeological Resources Inventory (SAIP)

## Analysis of Old Sitka Archaeological Collection

C-920

PROJECT CODE:

SERVICEWIDE ISSUES:

C02 – Identification and Evaluation Studies C08 – Special Studies

## PROBLEM STATEMENT

The Russian American Fur Trading Company first established a settlement on Baranof Island at Old Sitka in 1799. Three years later, in 1802, the settlement was demolished by Tlingit warriors. In 1934-35, the US Forest Service excavated the site with the help of the Civilian Conservation Corps. Following a series of owners and storage areas, including the basement of the Juneau Federal Building and the UAF Museum, the Old Sitka archaeological collection is now in the care of Sitka National Historical Park. Items include original province maps and lists of corresponding artifacts. Along with building, farming, and trapping hardware and household items, is a cast metal plaque with Cyrillic letters translating, "Land of Russian possession, No. 12". It is the only plaque recovered of about 20 recorded buried during Russian exploration worldwide. This Russian American settlement, one of few in North America, is designated a National Historic Landmark. In spite of its rarity, historical significance and pertinence to the park's interpretive themes, a comprehensive analysis of this collection and its implications has not been performed.

## **RECOMMENDED ACTIONS**

Perform an in-depth analysis of the Old Sitka excavation, including recovered artifacts, field documentation, and historical references. Produce written reports, and make available to researchers and interpreters.

## STAFFING AND FUNDING

Contract \$60,000

## **FUNDING SOURCES**

CRPP - Archeological Resources Inventory

SAIP

# **APPENDICES**

**APPENDIX A – REFERENCES** 

#### REFERENCES

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- Oregon State University. 1998. *Watershed Stewardship: A Learning Guide*. Produced and distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914.

# APPENDIX B – PARK LEGISLATIVE DOCUMENTS