

# 1 Purpose and Need

The National Park Service (NPS)<sup>1</sup> is developing a Facilities Development Plan (FDP) for Saint Croix Island International Historic Site (SACR) to guide the development of visitor and operational facilities for the next 15 to 20 years. This Environmental Assessment/Assessment of Effect (EA) presents and analyzes the environmental effects of four alternative development schemes, in accordance with the National Environmental Policy Act (NEPA) of 1969, the National Historic Preservation Act, NPS *Management Policies* (NPS 2006), regulations of the Council on Environmental Quality (40 CFR 1508.9), and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis, and Decision-making* (NPS 2001a).

## 1.1 INTRODUCTION / BACKGROUND

Saint Croix Island International Historic Site, located in Calais, Maine, in the village of Red Beach (see Figure 1.1), was proclaimed a national monument in 1949 and redesignated as an international historic site in 1984. It commemorates the 1604 site of the first French attempt to colonize the territory called Acadia and the location of one of the earliest European settlements in North America.



Figure 1.1 Saint Croix Island International Historic Site – Island and Mainland Sections

Archeological evidence suggests that the area around Saint Croix Island had already been inhabited for several thousand years before European settlement by Native American groups known collectively as the Wabanaki people. Today, the Wabanaki are represented by the following federally recognized tribes in Maine: Passamaquoddy Tribe, with reservations at Indian Township and Pleasant Point; Penobscot Indian Nation; Houlton Band of Maliseet Indians; and Aroostook Band of Micmacs. The Passamaquoddy were living in the immediate vicinity of the island at the time of European contact. Tribal members continue to have an enduring connection to Saint Croix Island to the present day.

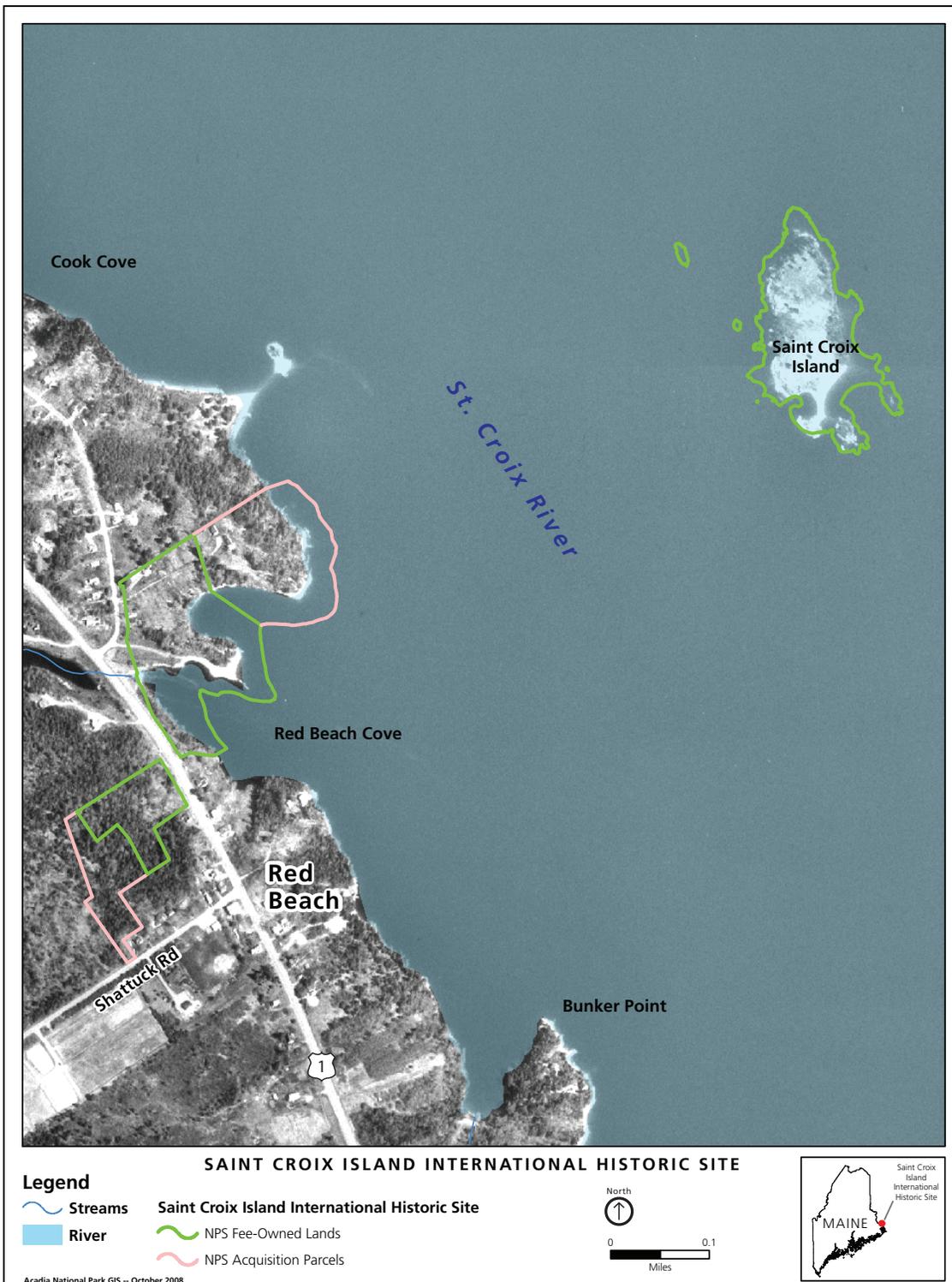
A memorandum of understanding between the United States and Canada recognizes the international significance of Saint Croix Island and commits both nations to joint planning and commemoration. Parks Canada maintains a self-guiding interpretive trail on the Canadian shore, facing Saint Croix Island, in Bayside, New Brunswick.

<sup>1</sup>A complete list of acronyms in bold throughout the text is provided in section 5.1.

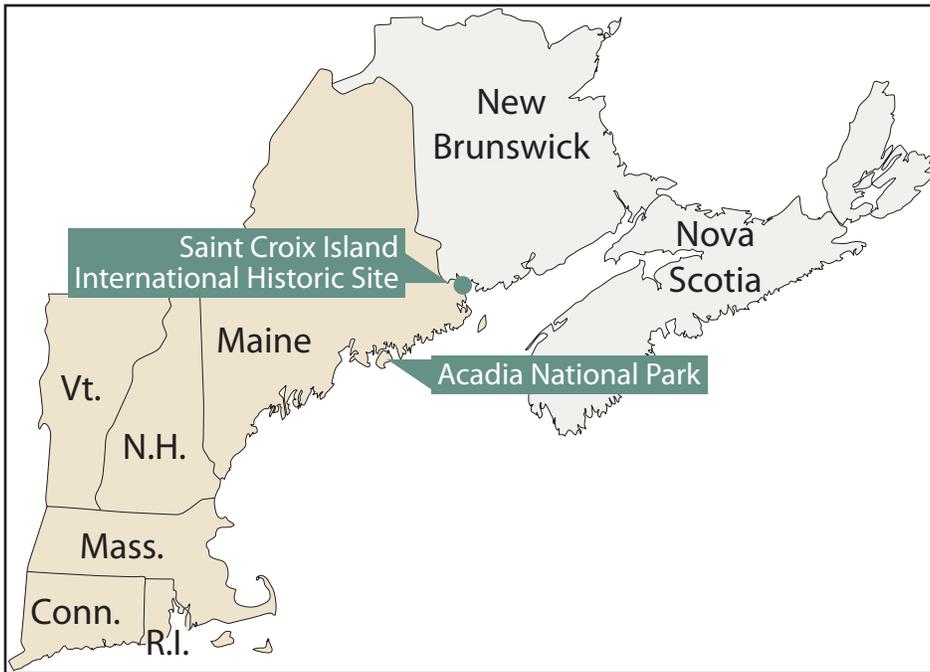
Saint Croix Island, approximately 6.5 acres, is located in the St. Croix River, immediately adjacent to the United States–Canada border. The NPS currently manages Saint Croix Island and 29.5 acres on the mainland (see Figure 1.2), with 8.9 additional acres authorized but currently in private ownership. The mainland sections include an upland parcel west of U.S. 1 and a shore parcel east of U.S. 1, referred to in this EA as Red Beach, where current administrative and visitor facilities are located. Acadia National Park, 120 miles distant, is the administrative headquarters for SACR (see Figure 1.3).

The *Île-Sainte-Croix / Saint Croix Island International Historic Site General Management Plan (GMP)*, completed in 1998, defined long-term (10–15 year) development and interpretive goals for the site (NPS 1998a).

The NPS has prepared this EA for the draft Facilities Development Plan in accordance with guidance from the GMP.



**Figure 1.2** Saint Croix Island International Historic Site – Land Ownership



**Figure 1.3 Saint Croix Island International Historic Site – Regional Context**

## 1.2 PURPOSE

The purpose of the facilities development described in this EA is to enhance future visitor experiences and maximize operational effectiveness and efficiency in support of the park’s mission by 1) developing appropriate facilities at Red Beach consistent with the recommendations of the GMP and 2) considering additional information and subsequent changes to the site that have occurred since the GMP was published, including the acquisition of two mainland parcels.

This EA will determine the best approach for implementing the GMP’s recommendations for providing administrative and visitor facilities at Red Beach, specifically a ranger station with year-round restrooms and other amenities, employee housing, and expanded maintenance facilities. It will also address the use of the McGlashan-Nickerson house, acquired by the NPS in 2000, after the GMP was published.

The Lane-Robb house was also acquired after the GMP was published. However, unlike the McGlashan-Nickerson house, it has been determined by the State Historic Preservation Officer that the Lane-Robb house is not eligible for listing in the National Register of Historic Places (see Appendix 6.1). It is in poor condition and also would not be suitable for future NPS use because of where it is located on the site in relation to other facilities, its layout, and its inaccessibility for use by people with disabilities. Therefore, the Lane-Robb house will be removed from the site and will not be addressed in this EA; however, the use of the property on which the house currently sits will be considered in this EA.

The Facilities Development Plan will not address the future use of any adjacent privately-owned parcels located within the site’s authorized boundary.

## 1.3 FACILITIES DEVELOPMENT PLAN / ENVIRONMENTAL ASSESSMENT GOALS AND OBJECTIVES

Consistent with the GMP, the goals of the proposed Facilities Development Plan are to:

- Preserve Park Resources – Lands within the site boundary are managed to protect the site’s natural and cultural resources while ensuring adequate facilities for site management and public use.
- Provide for public enjoyment and visitor experience – Visitors safely use the international historic site based on appreciation of its history and significance and are satisfied with the availability, accessibility, diversity, and quality of facilities, services, and recreational opportunities.
- Ensure organizational effectiveness – Facilities reflect the NPS’s commitment to environmentally sustainable design and operations in a way that reinforces the cultural and natural resource values of the site.

At the time when the GMP was being developed, planning was underway for a regional heritage center in downtown Calais. The Downeast Heritage Center opened in 2004, with a subsequent name change to the Downeast Heritage Museum in 2006. It provided exhibits, interpretive materials, visitor facilities, and way-finding information for visitors wishing to learn more about the region's cultural heritage and to visit SACR. Therefore, the GMP planned for facilities at SACR that would not duplicate these visitor services. However, the Downeast Heritage Museum closed in 2008. In the absence of the Downeast Heritage Museum, there remains an unfulfilled need for improved visitor services at SACR. This EA reflects these needs.

The GMP recommends that the NPS provide a ranger station at Red Beach to support administrative functions and augment visitor services. Specifically, the GMP identifies the following visitor amenities for the ranger station: reception counter, interpretive exhibits, restrooms, water fountain, and outdoor education area. The GMP also suggests the possibility of providing staff housing in association with the ranger station. New needs for the ranger station, identified by the NPS since the GMP was published, include an area to provide educational literature for visitors, space for a library and other staff resources, and sheltered space to greet and orient two groups of up to 20 people in inclement weather.

This EA addresses the following objectives:

- Protect and determine the appropriate and sustainable use of the historic McGlashan-Nickerson house.
- Protect the character of the surrounding community by using architectural styles that are consistent with those in the neighborhood.
- Provide an accessible, year-round visitor contact facility that can accommodate 20 visitors.
- Provide a year-round facility for maintenance operations and storage.
- Provide a year-round space for administrative operations.
- Provide parking for five employees, either in existing or new spaces.
- Provide three-season, sheltered group assembly space for 40—20 at the ranger station and 20 under the existing interpretive shelter on the trail.
- House two seasonal employees on-site or within reasonable driving distance to the site.
- Provide high-quality visitor experiences and elicit high visitor satisfaction.
- Provide year-round, universally accessible rest rooms.
- Incorporate sustainability principles and pollution prevention in all actions.
- Enhance security for site resources.
- Protect the site's character, historic structures, cultural landscapes, and other natural and cultural resources.

## **1.4 NEED / EXISTING CONDITIONS**

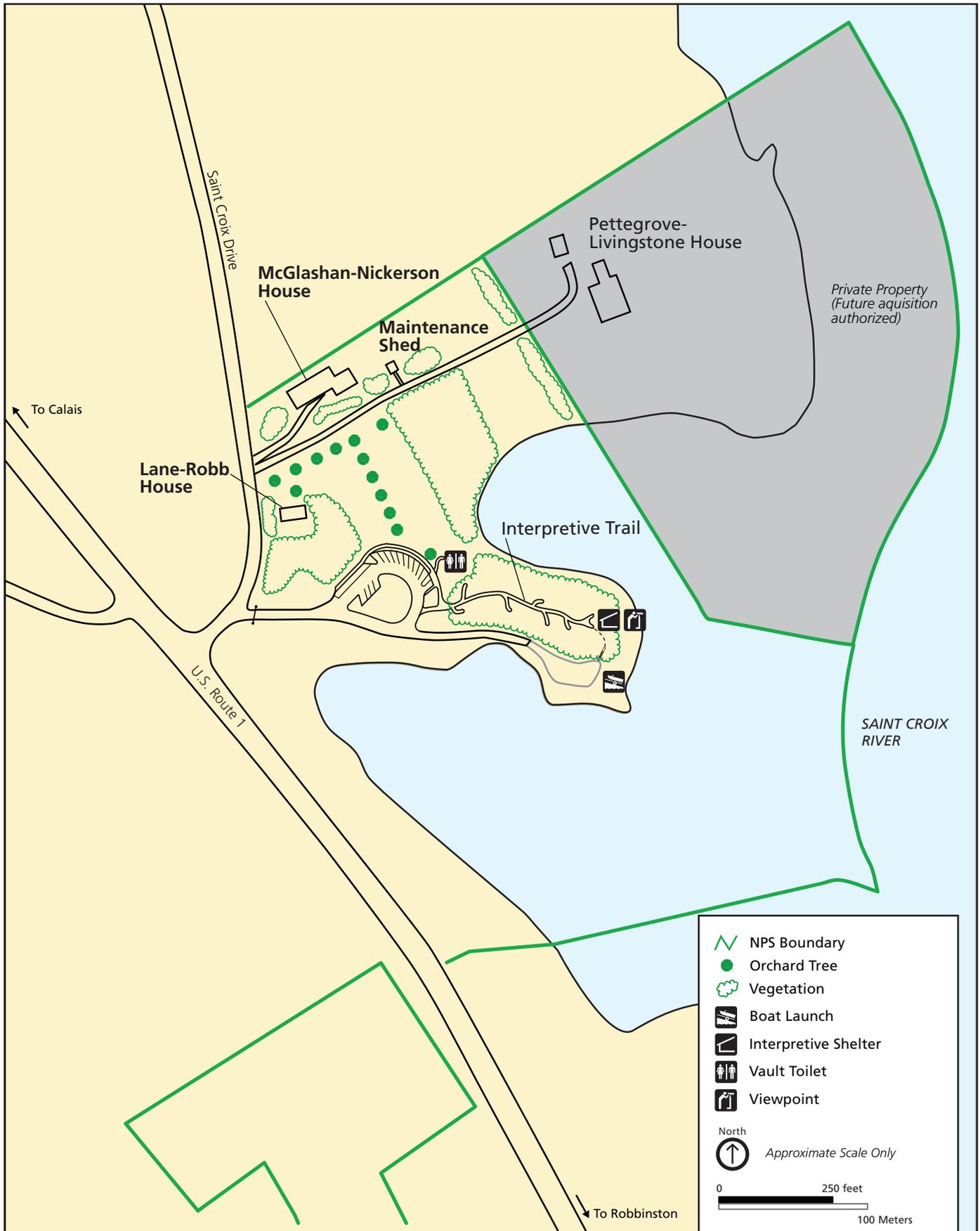
Current administrative and visitor facilities at Red Beach include an interpretive trail and shelter, vault toilet, unimproved boat launch, and parking for 15 cars and one bus or recreational vehicle. The site also includes the historic McGlashan-Nickerson house, as described below. Administrative functions and visitor services are currently located in the McGlashan-Nickerson house, and maintenance operations are located in a utility shed located alongside the house. The Lane-Robb house is vacant and is scheduled to be removed from the site in the spring of 2009. Figure 1.4 shows the placement of existing facilities on the mainland site.

The current facilities at SACR are inadequate to provide quality experiences for visitors, are not universally accessible, and are insufficient for current levels of visitation (especially groups arriving by bus) and NPS staffing. Site security at SACR is a growing concern because in the last five years there have been at least six incidents of vandalism and theft at the site. Parking is inadequate at the McGlashan-Nickerson house and near the gate when facilities are closed to vehicles but public use is allowed. Furthermore, operation of the McGlashan-Nickerson house as a visitor contact station/administration office and employee housing is not sustainable over the long term because it is in poor repair, is not energy-efficient, requires constant maintenance due to the age and condition of the structure, and has other operational issues as described below.

### **1.4.1 McGlashan-Nickerson House**

The NPS acquired the McGlashan-Nickerson house in 2000, as authorized in the 1949 enabling legislation (An Act To Authorize the Establishment of the Saint Croix Island National Monument in the State of Maine, approved June 8, 1949 [63 Stat. 158]). Built around 1883 as a single-family residence, it is a 7,280-square-foot, two-story frame structure.

Figure 1.4 Saint Croix Island International Historic Site – Existing Conditions



In 1990, the Maine Historic Preservation Commission listed the McGlashan-Nickerson house on the National Register of Historic Places. The house was vacant from 2001 until 2005. (For additional details about the McGlashan-Nickerson house, see section 1.7.2.)

In 2004, the site's first two permanent staff members were hired: a park ranger specializing in visitor services and education, and a boat operator providing general maintenance who had formerly worked as a seasonal employee for up to six months of the year. In 2005, administrative functions and visitor services were set up in an existing temporary trailer, out of view from the trailhead and parking area. After one season, these operations moved to the McGlashan-Nickerson house, which was intended to serve only as a temporary facility until facility planning efforts could examine park needs and determine the appropriate development strategies for use of existing and proposed park structures.



Figure 1.5 McGlashan-Nickerson house with staff and visitor parking

Current operations in the McGlashan-Nickerson house are inefficient and inadequate to serve visitors or support park operations. The McGlashan-Nickerson house does not meet modern health and safety standards for public buildings and, according to the park engineer, requires extensive work throughout to stabilize the structure and prevent further deterioration. Currently needed exterior repairs include replacement of the porch, roof, shutters, and gutters; window repair; lead paint containment or abatement both inside and outside the building; treatment for airborne radon that exceeds state and federal standards; and re-painting, at a minimum. Additional repairs are needed inside the structure. The building is not universally accessible. The estimated cost for retrofitting the building to meet health and safety codes, stabilizing the building, making it universally accessible, and preserving its historic character is between \$400,000 and \$500,000 (C. Gilley, Acadia National Park engineer, personal communication). The existing residential septic system is not adequate to serve the numbers of visitors who are expected to visit the site in the next 10–15 years. In addition:

- The building's residential layout has proven to be incompatible for combined visitor services and administrative operations, including inadequate interior space to meet, greet, and orient visitors and large groups; inadequate space for educational items; and inadequate restroom facilities.
- Parking adjacent to the building is insufficient to meet demand because it is limited to only three vehicles. In addition, there is no graveled place for drivers to turn their vehicles; when conditions permit, drivers must turn on the lawn to avoid having to back out of a long, narrow driveway (see Figure 1.5).
- Although visible from the interpretive trail and parking area, the McGlashan-Nickerson house is remote and is missed by an estimated 90% of visitors (M. Scheid, SACR park ranger, personal observation). Visitors who see and choose to visit the house from the parking circle must hike 140 yards uphill across the grass through an apple orchard or drive back out to the main access road, up St. Croix Drive, and around to the house using a one-lane gravel driveway. This driveway is not suitable for recreational vehicles or vehicles towing campers or trailers.
- Because the McGlashan-Nickerson house is distant from the primary visitor use area, it is difficult to provide site

security and oversight from its location—140 yards away from the interpretive trail, boat launch, and parking circle. The bronze statues along the trail are at increasing risk from theft or vandalism as the market for scrap metal continues to rise.

- The house is disproportionately large and energy inefficient for winter operations, which are not expected to exceed two people. Facilities cannot be closed down in the winter to save resources when they are not staffed.
- The cost for sustainable maintenance and operation of this large structure is beyond current budget levels, and without major rehabilitation, the condition of the house will continue to deteriorate. Industry standards for maintenance of this structure indicate the need for an annual budget of approximately \$40,000, as compared to the current available maintenance budget of approximately \$15,000 (J. Vekasi, Acadia National Park chief of maintenance, personal communication).

**Key points:**

- *Providing improved administrative and visitor facilities will be addressed in this EA, including providing restrooms that could be available year-round and a sheltered group assembly space.*
- *The disposition and sustainable use of the McGlashan-Nickerson house will be addressed in this EA.*
- *Enhanced security of site resources will also be addressed.*

#### **1.4.2 Maintenance**

Recent changes at the site, such as the acquisition of two adjacent land parcels with structures, development of the parking area and interpretive trail, and increased visitation and staff since the 2004 quadricentennial, have resulted in increased demands for maintenance. Maintenance operations have outgrown the unheated 12-foot x 18-foot utility shed, built in 1974 for one seasonal maintenance worker and limited equipment. There is insufficient storage space for current equipment: two vehicles, a boat and trailer, tractor, mowing equipment, sculpture covers, and a growing amount of general maintenance supplies. Currently, both vehicles are driven off-site at the end of each work day because there is no secure on-site parking location, and private staff vehicles have been vandalized. In winter, when maintenance staff is furloughed, one vehicle and all heavy equipment are transported 120 miles to Acadia National Park for storage and servicing. In spring, the same equipment is transported back to SACR. Insufficient maintenance facilities and storage space have resulted in inefficient and costly operating procedures.

**Key points:**

- *Maintenance work space, and equipment and materials storage will be addressed in this EA.*

#### **1.4.3 Quarters**

Reliable, temporary housing for seasonal staff is needed. Currently, there is no officially designated on-site housing at SACR, and lack of housing severely limits the ability to hire seasonal staff. The NPS seeks to hire a bilingual workforce at SACR (NPS 1998a), yet despite extensive efforts, it has been very difficult finding qualified candidates locally (M. Scheid, SACR park ranger, personal communication). A bilingual work force that must be recruited from outside the local area requires quarters during seasonal work assignments, typically May through September. Local, temporary housing for seasonal employees—primarily during peak and shoulder visitor seasons—has proven extremely difficult to find as many landlords favor year-round tenants as opposed to summer-only rentals. Since 2005, three trained seasonal employees have chosen not to return, citing lack of available housing as their primary reason. The NPS has expended considerable effort and funds searching for local, private rentals for staff prior to their arriving in the area to work, with little success.

In 2007, with all reasonable alternatives for finding local housing in the private market exhausted and unable to hire qualified staff without housing options, the NPS established temporary housing for two employees in the McGlashan-Nickerson house, where administrative functions and visitor services had already been temporarily located. Combining housing with visitor services and administrative operations in the McGlashan-Nickerson house has compounded the problems cited above, including lack of privacy for housed staff, inadequate site security because of the distance from the interpretive trail to housing, and shared use of restroom facilities by visitors and on- and off-duty employees. In addition, the McGlashan-Nickerson house is not universally accessible, nor is there adequate parking for visitors and staff. Current housing circumstances are inadequate as a long-term solution to the park's housing and recruitment needs.

**Key points:**

- *Housing options for two seasonal employees will be addressed in this EA.*

## 1.5 RELATIONSHIP TO OTHER PLANS AND STUDIES

Current plans that pertain to this EA are listed below, in their order of occurrence, followed by pertinent information.

### *Visitor Center Feasibility Study* (NPS 1995)

This study was conducted to determine the suitability of retrofitting either the Lane-Robb house or the McGlashan-Nickerson house for NPS offices and a visitor center. The study recommended the Lane-Robb house as a more desirable solution, and these findings were incorporated into the 1998 GMP. Further programming, designing, and cost estimating were recommended. Additional assessments that identified the poor condition of the house, the difficulty of making the house universally accessible from the primary parking area due to a 30-foot elevation change, the layout of the house, and the determination by the State Historic Preservation Officer that the house was not eligible for the National Register of Historic Places resulted in a May 2008 decision to remove the house from the site.

### *l'Île Sainte-Croix - Saint Croix Island International Historic Site: General Management Plan* (NPS 1998a)

The purpose of the GMP is to clearly define the site's mission, mission goals, and management direction. It provides a foundation to guide and coordinate all subsequent management decision-making. This EA is based on NPS legislation and the GMP. The GMP predicts that use levels will likely increase due to improved facilities and increased services. The GMP recommends adding a ranger station at Red Beach, possibly including housing. The goals of this EA are consistent with the GMP.

### *Long-Range Interpretive Plan* (NPS 1998a)

Along with the GMP, the Long-Range Interpretive Plan provides the details necessary to put the recommendations of the GMP into action. It focuses on how the mission goals established in the GMP relative to interpretation and education will be achieved over time. The Long-Range Interpretive Plan provided a comprehensive blueprint for the 2003 interpretive trail development, and it guides all interpretive and educational decisions that occur within this EA, such as providing a visitor contact facility and quality visitor experience and satisfaction.

### *Cultural Landscapes Inventory for Saint Croix Island International Historic Site* (NPS 2000, revised 2004)

This inventory documents and evaluates the historic development and existing conditions of the park's landscape. The inventory provides general guidelines to guide development while ensuring that the historic significance and integrity of the site is not lost over time.

### *Value Analysis Study for Saint Croix Island and Overlook (Mainland)* (NPS 1998b, amended 2000)

This study was conducted to assist park managers with decision-making relative to a construction project rehabilitating SACR mainland and island facilities in preparation for the site's quadricentennial in 2004. Final recommendations of the Value Analysis Study relevant to facilities planning have been considered in this EA, including: 1) retaining the Lane-Robb house for possible future use; 2) relocating the existing maintenance shed near the new parking lot for a possible future ranger contact station; and 3) locating a pedestrian connection from the lower parking lot to the Lane-Robb house, depending on possible future use of that structure.

The study also revealed that although a pedestrian connection or trail could connect the upper portion (Lane-Robb house) and lower portion (parking area) of the site, universal accessibility was problematic due to 30 feet of grade change. For the entire site to be accessible, the study concluded that parking for persons with disabilities would need to be provided at both the upper and lower portions of the site, and visitors with access needs would be required to drive between park exhibits and facilities if the Lane-Robb house were to be retained to become a visitor use facility.

### *Saint Croix Island International Historic Site - Buildings: Where to from Here?* (NPS 2005)

This internal NPS document summarizes options discussed by Acadia's management team prior to 2004 and includes input from the SACR ranger hired in 2004. It outlines possible short and long-term options for SACR operations and ultimately helped park managers identify the need for facility planning. Relevant discussion points have been carried forward in this EA.

### *National Park Service Management Policies* (NPS 2006)

This EA is consistent with the goals and objectives of NPS *Management Policies*.

## 1.6 PUBLIC SCOPING

The scoping process identifies the resources that may be affected by a project proposal and explores possible alternate ways of achieving the proposed goals while minimizing adverse impacts. SACR staff conducted both internal scoping with appropriate NPS staff and external scoping with the public and interested or affected groups and agencies.

Internal scoping was conducted by an interdisciplinary team (IDT) from Acadia National Park and SACR. IDT members met several times between March 2007 and September 2008 to discuss the purpose and need for the project; various alternatives; potential environmental impacts; past, present, and reasonably foreseeable projects that may have cumulative effects; and possible mitigation measures. Over the course of this facility planning effort, team members also conducted three site visits to view and evaluate the alternative types and locations of facilities.

External scoping began on April 23, 2007. A fact sheet with a map of existing conditions and NPS contact information was developed to inform the general public about this planning effort. It was distributed at a neighborhood meeting of St. Croix Drive residents on April 27 and mailed to those who could not attend. It was distributed to interested individuals and stakeholders during one-on-one meetings, and to all local chamber of commerce members via e-mail. A link was posted from the SACR website to the NPS Planning, Environment, and Public Comment website in 2007, announcing and outlining the planning process. A total of 116 people were contacted, including city officials; state, federal, and international agencies; a local historical society, museum, tourist information bureau, and Chamber of Commerce; a regional economic council; a county government planner; affiliated Native American tribes; and the State Historic Preservation Officer.

Upon publication of this EA, the NPS plans to mail a copy to stakeholders and interested persons, including those who participated in the 2004 Ste.-Croix Coordinating Committee and those involved in the public scoping of the 1998 GMP, to inform them about the EA and solicit their comments on the proposed facilities outlined in the four alternatives. Other scoping activities are outlined in Chapter 4.

## 1.7 IMPACT TOPICS RETAINED FOR FURTHER ANALYSIS

The IDT identified impact topics for this project based on federal laws, regulations, policies, and external public scoping. Impact topics that are carried forward for further analysis in this EA are listed below, along with the reasons for further analysis. The text following each of these topics also describes the existing setting or baseline conditions (i.e., affected environment) within the project area. This information will be used to analyze impacts against the existing setting or baseline conditions of the project area in Chapter 3. Not every conceivable impact of a proposed action is substantive enough to warrant analysis. The following topics, however, do merit consideration in this EA (see Table 1.1 for a summary of all impact topics considered).

### 1.7.1 Natural Resources

#### ***Soils***

Constructing or rehabilitating facilities can affect soils; therefore, impacts to soils are analyzed in this EA, and soils have been retained for evaluation.

#### ***Vegetation***

The mainland portion of SACR is dominated by woodland patches and mowed areas near existing buildings and in the orchard. Facilities development can affect vegetation and views to the water; therefore, impacts to vegetation are analyzed in this EA.

### 1.7.2 Cultural Resources

Section 106 of the National Historic Preservation Act of 1966, as amended, provides the framework for federal review and protection of cultural resources and ensures that they are considered during federal project planning and execution. The *NPS Management Policies* (2006) and Director's Order 28: *Cultural Resource Management* (DO-28) charge the NPS to protect and manage cultural resources in its custody through effective research, planning, and stewardship. These policies and regulations require federal agencies to coordinate consultation with State Historic Preservation Officers regarding the potential effects of properties listed in or eligible for the National Register of Historic Places and, as appropriate, consult with Native American tribes in a government-to-government relationship

regarding cultural resources. The following types of cultural resources can be affected by facility development and associated activities—thus potential impacts to cultural resources are addressed in this EA.

### **Historic Structures**

The term “historic structures” refers to both historic and prehistoric structures, which are defined as constructions that shelter any form of human habitation or activity. The McGlashan-Nickerson house, a NPS-owned structure, and the Pettegrove-Livingstone house, in private ownership, are both listed in the National Register of Historic Places. The privately owned, historic Pettegrove-Livingstone house, located within the park's authorized boundary, has been excluded from this EA from the standpoint of decision-making about future acquisition or disposition of this property. As a National Register property, however, actions in the FDP potentially affecting it must be evaluated; therefore, this topic will be retained for analysis.

### **Cultural Landscapes**

According to DO-28, a cultural landscape is a reflection of human adaptation and use of natural resources and is often expressed in the way land is organized and divided, patterns of settlement, land use, systems of circulation, and the types of structures that are built.

There are no identified landscape features on the mainland associated with the 1604 historic cultural landscape of Saint Croix Island. However, cultural landscape features are associated with the McGlashan-Nickerson house (grounds, garden, and orchard; see Figure 1.6) and the Pettegrove-Livingstone house (“Downingesque” landscape architecture) (Mohney 1994). Therefore, effects are expected by proposed development, and this topic will be retained for analysis.



**Figure 1.6** View of orchard from McGlashan-Nickerson house

### **Archeological Resources**

In addition to the National Historic Preservation Act and *NPS Management Policies* (2006), DO-28, Section B, Archeology, affirms a long-term commitment to the appropriate investigation, documentation, preservation, interpretation, and protection of archeological resources inside units of the National Park System. As one of the principal stewards of America’s heritage, the NPS is charged with the preservation of the commemorative, educational, scientific, and traditional cultural values of archeological resources for the benefit and enjoyment of present and future generations. Archeological resources are nonrenewable and irreplaceable, so it is important that all management decisions and activities throughout the National Park System reflect a commitment to the conservation of archeological resources as elements of our national heritage.

In 1604, Pierre Dugua, Sieur de Mons, accompanied by Samuel Champlain and 77 men, established a French settlement on Saint Croix Island, one of the earliest European settlements in North America. Native Americans were also present for at least several thousand years prior to the arrival of the French. In addition to archeological resources associated with Native Americans, resources on the mainland also include remnant features associated

with the industrial history of the site as the location of the historic Red Beach industrial complex, although these have been disturbed and lack integrity. Archeological resources on the mainland could potentially be affected by facility development and will be analyzed in this EA.

### 1.7.3 Other Impact Topics

#### **Visitor Use and Experience**

The 1916 National Park Service Organic Act directs the NPS to provide for public enjoyment of the scenery, wildlife, and natural and historic resources of national parks “in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.” One of the main purposes for developing additional facilities at SACR is to enhance visitor use and enjoyment. Therefore, potential impacts on visitor use and experience are addressed in this EA.

#### **Land Use**

Visitor and administrative facilities occur within the park, and additional facilities are proposed in this EA. Developing additional facilities or removing existing facilities could affect land use within the park or in areas adjacent to it. In scoping meetings the park staff learned that neighbors were concerned about the style and scale of any new facilities that might be built at SACR. In accordance with the Coastal Zone Management Act, core laws of the Maine Coastal Program requiring federal consistency that might be triggered by changes in land use adjacent to coastal resources include the Maine Natural Resources Protection Act, Soil Erosion Control Act, and Mandatory Shoreland Zoning Act. Therefore, land use effects are addressed in this EA.

#### **Park Operations**

Visitor contacts, defined as a conversation between a site staff member and a visitor, at SACR have increased from 460 per year in 2003 to 6,437 in 2007 (NPS 2003–2007). The NPS has embarked on a program to enhance education and interpretation at the site (see Figure 1.7). Maintaining the McGlashan-Nickerson house drains NPS resources. Lack of seasonal housing in the area has adversely affected park operations. New construction of a proposed ranger station and a maintenance building would affect park operations. Parking for up to five employees is needed, requiring the construction of at least three additional spaces. Thus, the potential effects of facility development alternatives on park operations will be considered in this EA.



**Figure 1.7** Ranger greets visitors along interpretive trail

#### **Human Health and Safety**

The McGlashan-Nickerson house does not meet modern health and safety standards for public buildings. In addition, it contains lead paint. These issues could pose a threat to employee and visitor health and safety, and the level of threat varies with the different alternatives outlined in this plan. Therefore, impacts to human health and safety will be analyzed under each alternative.

### **Resource Conservation, Including Energy, and Pollution Prevention**

The NPS's *Guiding Principles of Sustainable Design* (NPS 1994) provides a basis for achieving sustainability in facility planning and design, emphasizes the importance of biodiversity, and encourages responsible decisions. The guidebook articulates principles to be used, such as resource conservation and recycling. Executive Order 13423: *Strengthening Federal Environmental, Energy, and Transportation Management* requires the NPS to further reduce greenhouse gas emissions by making responsible decisions that reduce energy use in buildings, reduce water consumption, and reduce use of chemical and toxic materials; increase implementation of environmental management systems; incorporate sustainable strategies in new and renovated buildings; and continue reduction in petroleum consumption in vehicles. Light pollution from unshielded lights could adversely affect the area's dark skies. Proposed project actions would affect resource conservation and pollution prevention on the site and, therefore, this impact topic is evaluated in this EA.

### **1.8 IMPACT TOPICS DISMISSED FROM FURTHER ANALYSIS**

The National Environmental Policy Act and Council on Environmental Quality regulations direct agencies to "avoid useless bulk. . .and concentrate effort and attention on important issues" (40 CFR 1502.15). Some impact topics have been dismissed from further consideration, as listed below (see Table 1.1 for a summary of all impact topics considered). The rationale for dismissing these specific topics is stated for each resource.

#### **Water Resources, Including Wetlands**

National Park Service policies require protection of water resources consistent with the federal Clean Water Act and Executive Order 11990.

The mainland portion of SACR is located on the shores of the St. Croix River estuary where salt water from Passamaquoddy Bay dominates. The tidal current in the estuary is strong on both outgoing and incoming tides, and the tidal range averages about 21 feet each tide cycle (Fisheries and Oceans Canada 2008). A large portion of the rocky ledges, gravel beaches, and mudflats of the historic site is covered and exposed twice daily by tidal salt water. There is an intertidal zone consisting of an upper littoral fringe; a mid-littoral zone; and a lower littoral zone. The mainland intertidal habitat includes a mudflat that gently slopes into boulders and rocks as it approaches the high-tide zone (Cronan 1997).

In the past, water quality has been an issue in the estuary due to outflows from a pulp and paper mill in nearby Woodland and from sewage treatment plants in Calais, Saint Stephen, and Saint Andrews. Water quality in the river below the Calais-Saint Stephen area had been impacted by these industries, along with runoff from residential properties and non-point agricultural pollution resulting in high fecal coliform levels (Cronan 1997). The St. Croix River is classified as a Class SC river in the tidal estuarine waters, while the freshwater portion of the river from Woodland Dam to tidewaters meets Class C standards. The waters from the stream adjacent to the site's shore were sampled in 1997, and the overall water quality was healthy (Cronan 1997). The mainland section of the site contains one perennial stream, although it is not expected to be affected by the project.

Building new facilities would increase the amount of impervious surface in the area by approximately 3,600 square feet (C. Gilley, Acadia National Park engineer, e-mail communication). However, additional runoff would be absorbed into the soil, except in the winter when the soil is frozen and not subject to erosion. Septic fields would adequately handle wastes produced by visitors. To assist with erosion control and water quality protection, disturbed areas would be re-contoured and protected using standard best management practices for erosion control until they were stabilized by revegetation. Fertilizers would be used minimally, if at all, and would not contain phosphorus. Impacts to water resources, including water quality and quantity, under all alternatives would be localized, and overall, negligible. Therefore, this topic has been dismissed from further consideration.

#### **Floodplains**

Executive Order 11988: *Floodplain Management* requires all federal agencies to avoid construction in the 100-year floodplain unless no other practicable alternative exists. The NPS strives to preserve floodplain values and minimize hazardous floodplain conditions. All proposed facility development would be located outside the 100-year floodplain; therefore, a Statement of Findings for floodplains will not be prepared, and the topic of floodplains has been dismissed.

### **Air Quality**

The federal 1970 Clean Air Act stipulates that federal agencies have an affirmative responsibility to protect a park's air quality from adverse air pollution impacts. However facility development at SACR is not expected to cause any effects to air quality; therefore, air quality impacts are not analyzed in this EA.

### **Wildlife**

While tidal areas at SACR have been identified as significant habitat for wading birds and waterfowl by the State of Maine, there are no state-mandated setbacks for facilities development required to protect these species. Potential actions proposed by the NPS are not anticipated to adversely or beneficially affect wildlife species. Therefore, impacts to wildlife are not evaluated in this EA.

### **Special Status Species and Their Habitat**

The Endangered Species Act of 1973 prohibits harm to any species of fauna or flora listed by the U. S. Fish and Wildlife Service (USFWS) as being either threatened or endangered. Section 7 of the act requires all federal agencies to consult with the USFWS (or designated representative) to ensure that any action authorized, funded, or carried out by the agency does not jeopardize the continued existence of listed species or critical habitats. Such harm includes not only direct injury or mortality, but also disrupting the habitat on which these species depend. There are no federally-listed endangered or threatened species at SACR (B. Connery and J.H. Connery, Acadia National Park biologists for wildlife and vegetation, personal communication). This will be confirmed by correspondence with the USFWS prior to construction of any facilities.

American bald eagles (*Haliaeetus leucocephalus*), once a federally listed (threatened) species under the Endangered Species Act and currently listed as threatened under state law, are resident in the area and nest along the St. Croix River. Bald eagles have been seen on Saint Croix Island as recently as 1993, and since 2007 nesting has been reported north of the site along the mainland shoreline; however, no nesting activity has been recorded within one-quarter mile of SACR mainland facilities (Charlie Todd, Maine Department of Inland Fish and Wildlife, personal communication). Therefore, impacts to threatened and endangered species are not expected and are not analyzed in this EA.

### **Soundscapes**

Noise is defined as unwanted sound. Noise associated with facilities alternatives and the corresponding accommodation of day-use visitors, mowing and other maintenance operations, and expanded interpretation of the site is consistent with that found in residential neighborhoods, and is not expected to adversely affect the soundscape. Any noise generated by enhanced facility development is not frequent enough to substantially interfere with human activities in the area or with wildlife behavior. Nor will such noise chronically impact the solitude and tranquility associated with the park. Therefore, this impact topic is eliminated from further analysis in this EA.

### **Ethnographic Resources, Including Sacred Sites**

The NPS defines ethnographic resources as any site, structure, object, landscape, or natural resource feature assigned traditional, legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it. According to Executive Order 13007 on sacred sites, the NPS should try to preserve and protect ethnographic resources.

The Passamaquoddy Tribe identifies SACR as within its traditional tribal territory; however, no specific ethnographic resources or sacred sites are identified within the area of potential effects for this EA. The park has consulted with the four federally recognized Indian tribes in Maine, including the Passamaquoddy, about this FDP (R. Cole-Will, Acadia National Park cultural resources program leader, personal communication). As a result the park staff has determined that there would be no impacts to ethnographic resources, such as traditional cultural properties. There would be little or no change in resource conditions, such as traditional access or site preservation, nor would there be alteration of the relationship between the resource and the affiliated groups' body of beliefs and practices. Even the most developed alternative that is proposed would only have a negligible adverse effect, if any at all. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR §800.5, *Assessment of Adverse Effects*), the NPS concludes that implementation of the NPS preferred alternative would have no adverse effect on the ethnographic resources of SACR. Therefore, this impact topic is eliminated from further analysis in this EA.

### **Museum Collections**

According to Director's Order 24: *Museum Collections*, the NPS requires the consideration of impacts on museum

collections (historic artifacts, natural history specimens, and archival material) and provides further guidance, standards, and requirements for preserving, protecting, documenting, and providing access to and use of NPS museum collections. No museum collections are housed on-site at SACR. Therefore, the topic of museum collections has been dismissed from further consideration.

### ***Socio-Economics***

NEPA requires an analysis of impacts to the “human environment,” which includes economic, social, and demographic elements in the affected area. Facilities development or removal may bring a short-term need for additional personnel in the park, but this addition would be minimal and would not affect the neighboring community’s overall population, income, and employment base. Therefore, this impact topic is not included for further analysis in this EA.

### ***Environmental Justice / Protection of Children***

Executive Order 12898 requires federal agencies to identify and address disproportionate impacts of their programs, policies, and activities on minority and low-income populations. Executive Order 13045 requires federal actions and policies to identify and address disproportionately adverse risks to the health and safety of children. None of the alternatives would have disproportionate health or environmental effects on minorities or low-income populations as defined in the Environmental Protection Agency’s Environmental Justice Guidance (USEPA 1996); therefore, these topics are not further addressed in this EA.

### ***Indian Trust Resources***

Indian trust assets are owned by Native Americans but held in trust by the United States. Indian trust assets do not occur within Saint Croix Island International Historic Site and, therefore, are not evaluated in this EA.

### ***Prime and Unique Agricultural Lands***

Prime farmland has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. Unique land is land other than prime farmland that is used for production of specific high-value food and fiber crops. Both categories require that the land is available for farming uses. There are no prime and unique agricultural lands found at Saint Croix Island International Historic Site; therefore, this impact topic is not evaluated further in this EA.

### ***Wilderness***

According to the NPS *Management Policies* (2006), proposals having the potential to impact wilderness resources must be evaluated in accordance with NPS procedures for implementing the National Environmental Policy Act. Since there are no proposed or designated wilderness areas within or adjacent to the park, wilderness impacts are not further evaluated in this EA.

**Table 1.1** Impact Topics for the Saint Croix Island International Historic Site Environmental Assessment/Assessment of Effect for the Draft Facilities Development Plan

Impact Topic	Retained or Dismissed from Further Evaluation	Relevant Regulations or Policies
Soils	Retained	NPS <i>Management Policies</i> (2006)
Vegetation	Retained	Coastal Zone Management Act of 1972; NPS <i>Management Policies</i>
Water Resources, Including Wetlands	Dismissed	Clean Water Act; Executive Order 12088; NPS <i>Management Policies</i> ; core laws of the Maine Coastal Program (Coastal Zone Management Act of 1972) including the Maine Natural Resources Protection Act, Maine Soil Erosion Control Act, and Maine Mandatory Shoreland Zoning Act; Executive Order 11990; Rivers and Harbors Act
Floodplains	Dismissed	Executive Order 11988; NPS <i>Management Policies</i>
Air Quality	Dismissed	Clear Air Act (CAA); CAA Amendments of 1990; NPS <i>Management Policies</i>
Wildlife	Dismissed	NPS <i>Management Policies</i>
Special Status Species and Their Habitats	Dismissed	Endangered Species Act; NPS <i>Management Policies</i>
Soundscape Management	Dismissed	NPS <i>Management Policies</i>
Cultural Resources, Including Historic Structures, Cultural Landscapes, Archeological Resources	Retained	Section 106, National Historic Preservation Act (NHPA); 36 CFR 800; NEPA; Executive Order 13007; NPS Director's Order 29; NPS <i>Management Policies</i>
Ethnographic Resources	Dismissed	NHPA; NPS <i>Management Policies</i> ; Director's Order 28
Museum Collections	Dismissed	Director's Order 24
Visitor Use and Experience	Retained	NPS <i>Management Policies</i>
Land Use	Retained	NPS <i>Management Policies</i>
Park Operations	Retained	NPS <i>Management Policies</i>
Human Health and Safety	Retained	NPS <i>Management Policies</i>
Resource Conservation, Including Energy, and Pollution Prevention	Retained	NEPA; NPS <i>Guiding Principles of Sustainable Design</i> ; NPS <i>Management Policies</i> ; Executive Order 13423
Socioeconomics	Dismissed	40 CFR, <i>Regulations for Implementing NEPA</i> ; NPS <i>Management Policies</i>
Environmental Justice / Protection of Children	Dismissed	Executive Order 12898
Indian Trust Resources	Dismissed	Department of the Interior Secretarial Orders No. 3206 and No. 3175
Sacred Sites	Dismissed	Executive Order 13007
Prime and Unique Agricultural Lands	Dismissed	Council on Environmental Quality 1980 memorandum on prime and unique farmlands
Wilderness	Dismissed	The Wilderness Act; Director's Order 41; NPS <i>Management Policies</i>