

2 Alternatives Considered

Issues related to building preservation and use and visitor facilities were identified soon after the Lane-Robb and McGlashan-Nickerson properties were acquired by the National Park Service (NPS) in 1998 and 2000, respectively, and after a permanent ranger position was established and Meg Scheid was hired in the fall of 2004. Ranger Scheid works at the site approximately 10 months per year overseeing operations and coordinating education programs. In March 2007, planning for the Facilities Development Plan (FDP) began in earnest when an interdisciplinary team of NPS employees met to identify project goals, objectives, and reasonable alternatives for developing administrative and visitor facilities at Saint Croix Island International Historic Site (SACR). Shortly thereafter, NPS staff began meeting with park neighbors, community members, and representatives from local and tribal governments (see Chapter 4 for more detail about these contacts). These meetings resulted in:

- 1) reiterating park goals as outlined in the *Île-Sainte-Croix / Saint Croix Island International Historic Site General Management Plan (GMP)* and described in this Environmental Assessment/Assessment of Effect (EA) in Chapter 1: Purpose and Need;
- 2) defining objectives for this EA, also described in Chapter 1; and
- 3) identifying eleven alternatives that could potentially meet these objectives.

Of the original eleven alternatives, seven were dismissed from further consideration because they were determined not to be reasonable for a variety of reasons, as described later in this chapter. Four alternatives are carried forward for further evaluation, including the No Action Alternative as required by the National Environmental Policy Act (NEPA). Also presented in this chapter are complete descriptions of each viable alternative and summary tables comparing alternatives (Table 2.1), costs (Table 2.2), how well they meet planning objectives (Table 2.3), and effects of each alternative on the human environment (Table 2.4).

Table 2.1 Summary of Alternatives

Components	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Maintenance Facilities	Continue current activity in existing shed and McGlashan-Nickerson garage. During off-season, vehicles and large equipment storage would be at Acadia National Park. Access road shared with neighbors.	Replace existing maintenance shed adjacent to McGlashan-Nickerson house with new maintenance facility with these new facilities: <ul style="list-style-type: none"> • small heated maintenance work space • unheated storage space for vehicles, boat, equipment and statue covers • parking and turning area sufficient for 3 employee vehicles 	Construct new maintenance facility similar to Alternative B but locate on St. Croix Drive on site of Lane-Robb house. Remove maintenance shed adjacent to McGlashan-Nickerson house.	Same as Alternative C: Construct new maintenance facility on St. Croix Drive on site of Lane-Robb house. Remove existing maintenance shed adjacent to McGlashan-Nickerson house.

Components	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Ranger Station	Continue current visitor services and administration in McGlashan-Nickerson house. Limited parking/turning area retained but not expanded.	Construct new ranger station along parking circle with following facilities: <ul style="list-style-type: none"> • reception and book sales counter • interpretive exhibits • staff and public rest-rooms • water fountain • outdoor education area • administration and staff library areas • break room/heated storage/meeting room 	Same as Alternative B: Construct new ranger station along parking circle.	Same as Alternative B: Construct new ranger station along parking circle.
Quarters for Seasonal Employees	Continue to provide quarters for two summer-season employees in McGlashan-Nickerson house while seeking rentals in private sector.	Provide quarters for one summer seasonal employee to rent in either new ranger station or maintenance building. Depend on private sector for seasonal rental for one employee.	Provide quarters for two summer-seasonal employees to rent. Quarters would be provided in either the new ranger station or new maintenance building, or one in each.	Provide no quarters at SACR. Depend on private sector or interagency agreement to provide seasonal rentals for employees.
McGlashan-Nickerson House Protected	Continue NPS maintenance and operation of building.	Preserved through lease or partnerships. Use by NPS discontinued.	Same as Alternative B: Preserved through lease or partnerships. Use by NPS discontinued.	Same as Alternative B: Preserved through lease or partnerships. Use by NPS discontinued.

2.1 ALTERNATIVES CARRIED FORWARD FOR CONSIDERATION

2.1.1 Actions Common to Alternatives B, C, and D

Under all action alternatives (Alternatives B, C, and D), the historic McGlashan-Nickerson house would be preserved, as would the orchard and yard surrounding the house. The NPS would protect the building through a partnership with a private or public entity. Options include a lease under the provisions of 36 CFR 18, *Leasing of Properties in Park Areas*. The primary intent would be to preserve the building’s historically significant features. Use of the building would be consistent with its significance—for example, use as a private residence would be favored over many other uses because it was historically used as a private residence. If a suitable lessee could not be found, the building would be stabilized and alternate NPS uses, such as housing, would be considered. If no alternative uses were found, the building would be winterized and closed, pending a future lease or use. Any proposed changes of use or treatment would require compliance with Section 106 (§ 106) of the National Historic Preservation Act.

The historic Pettegrove-Livingstone house and its cultural landscape would be protected from visual intrusions. Any new buildings proposed would be architecturally compatible with those on St. Croix Drive and would be no taller than two stories. All new buildings would be energy efficient and incorporate principles of sustainable design and construction. The first floor of all public buildings would be universally accessible. No additional parking would be developed along the parking circle, and the vault toilet and interpretive trail would be retained. No transmission towers would be permitted because the site’s small size would prevent siting a tower where it would not have an

adverse impact on the surrounding cultural landscapes of the McGlashan-Nickerson and Pettegrove-Livingstone houses. Emergency response for police and structural fire protection would continue to be provided by the City of Calais.

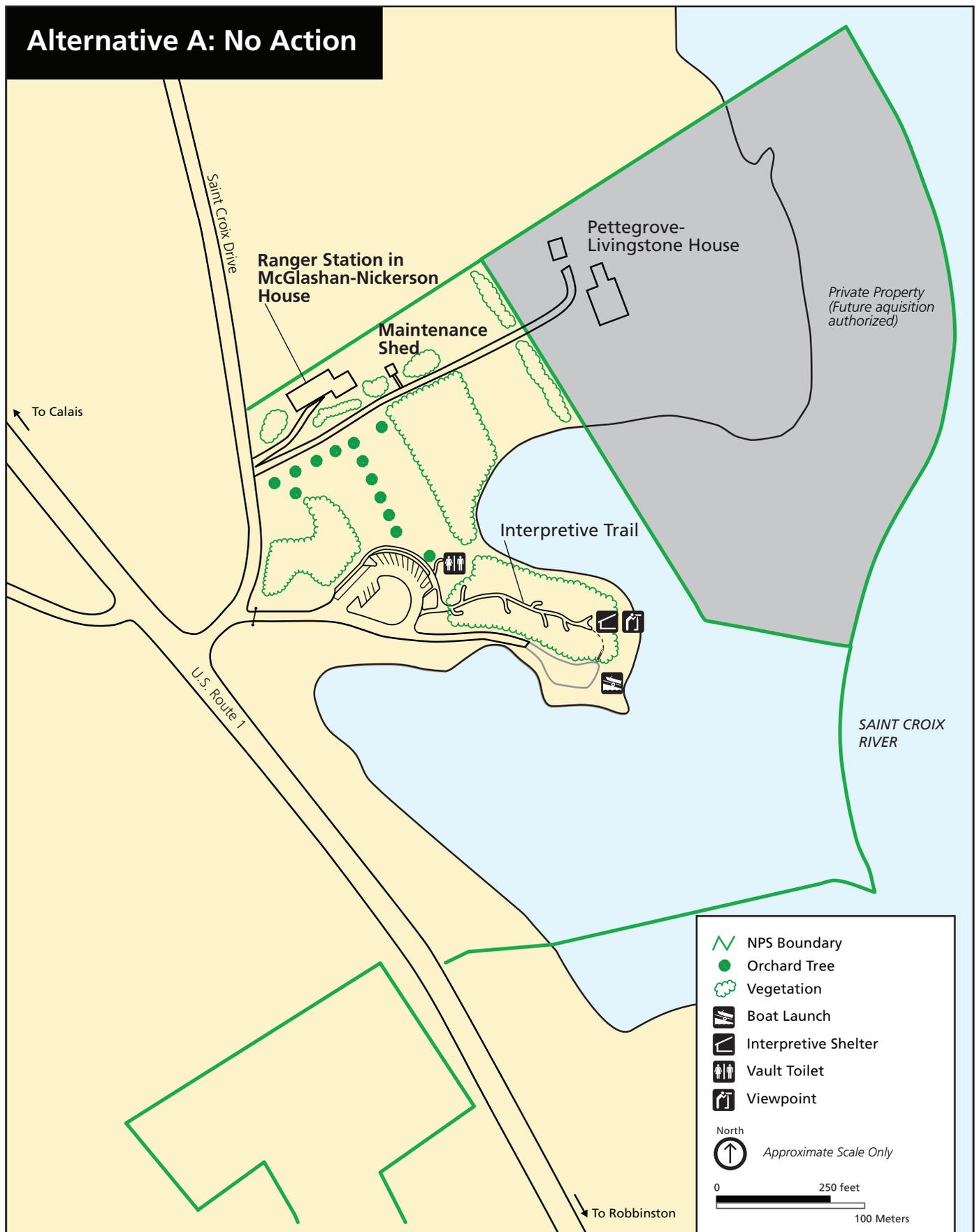
All components of each alternative would meet all applicable federal and state laws and regulations. No ground-disturbing activities would commence until required permits or agency determinations of compliance with regulations have been obtained.

2.1.2 Alternative A: No Action

This alternative would continue current practices, and no new facilities would be constructed (see Figure 2.1). This alternative would not meet the goals and objectives outlined in the GMP and this EA—it is included for the purposes of comparing existing conditions to the action alternatives and their effects. Alternative A is expected to have a 20-year life cycle cost of \$1,130,000 (in 2008 dollars; see Table 2.2).

- **Maintenance:** Maintenance and storage would continue to take place in the first floors of the McGlashan-Nickerson house garage and barn and in the shed nearby. Larger maintenance equipment such as boats, tractors, and mowers would be stored outside during the summer months as equipment storage needs grow. Vehicles would be parked at employee's homes off-site after business hours to protect them from vandalism. During the winter, vehicles and large equipment would be transported to Acadia National Park headquarters in Bar Harbor, Maine, for storage and servicing.
- **Ranger Station:** No new visitor facilities would be constructed. Park visitor services and education activities would continue to be based in the McGlashan-Nickerson house. The one-lane gravel access road to the house would be shared by park visitors and staff and would continue to be plowed in winter, with parking limited to one vehicle with a small turn-around area. In the summer, parking at the McGlashan-Nickerson house would be limited to three vehicles, with turning allowed on the lawn to prevent accidents caused by drivers backing their vehicles the entire distance of the driveway. Most park visitors would park at the parking circle, and an estimated 10% of park visitors would walk approximately 140 yards uphill through the grassy orchard to the ranger contact station to speak with a ranger, obtain park brochures, get drinking water, purchase educational materials, get their NPS park passports stamped, or see exhibits (M. Scheid, SACR ranger, personal communication). School groups and visitors arriving by buses or coaches would be met and greeted by a ranger on the bus in inclement weather, as there would be no shelter large enough to accommodate a group larger than about 20 persons. A small restroom in the McGlashan-Nickerson house would serve visitors and staff without disabilities, year-round. The restroom would also serve staff living at the house in the summer. A limited selection of educational materials would be available at the McGlashan-Nickerson house because the layout of the house and competing uses restrict the amount of available display space. The main portion of the house would be made universally accessible to visitors or staff by installing a temporary ramp; however, the bathroom would not be universally accessible. Gates to the site would be closed after business hours in the summer and at all times during the winter, with parking limited to approximately two cars outside the gate along St. Croix Drive until snow accumulates and eliminates this parking option.
- **Quarters:** There would be no housing constructed for seasonal park rangers; rental housing for two summer-season rangers would continue to be provided on the second story of the McGlashan-Nickerson house in the event that no housing could be found in the private sector. Visitors and staff, both on- and off-duty, would continue to share limited restroom and parking facilities. Rental income would help off-set maintenance costs of the building.
- **McGlashan-Nickerson House:** The building would continue to be used for park administration, public contact, exhibit and sales area, storage, and housing. Structural deficiencies, health and safety issues, and maintenance problems in the McGlashan-Nickerson house would be addressed as operational funding became available and would likely pay for only a small portion of the needs of operating the building and a temporary ramp to make the building universally accessible. Health and safety issues such as high radon levels in the building's air, lead paint, and code deficiencies would be addressed as funding became available. Additional NPS funding would be sought for extensive rehabilitation and preservation; however, in the past, funding for rehabilitation has been very limited.

Figure 2.1 Conceptual Site Plan for Alternative A

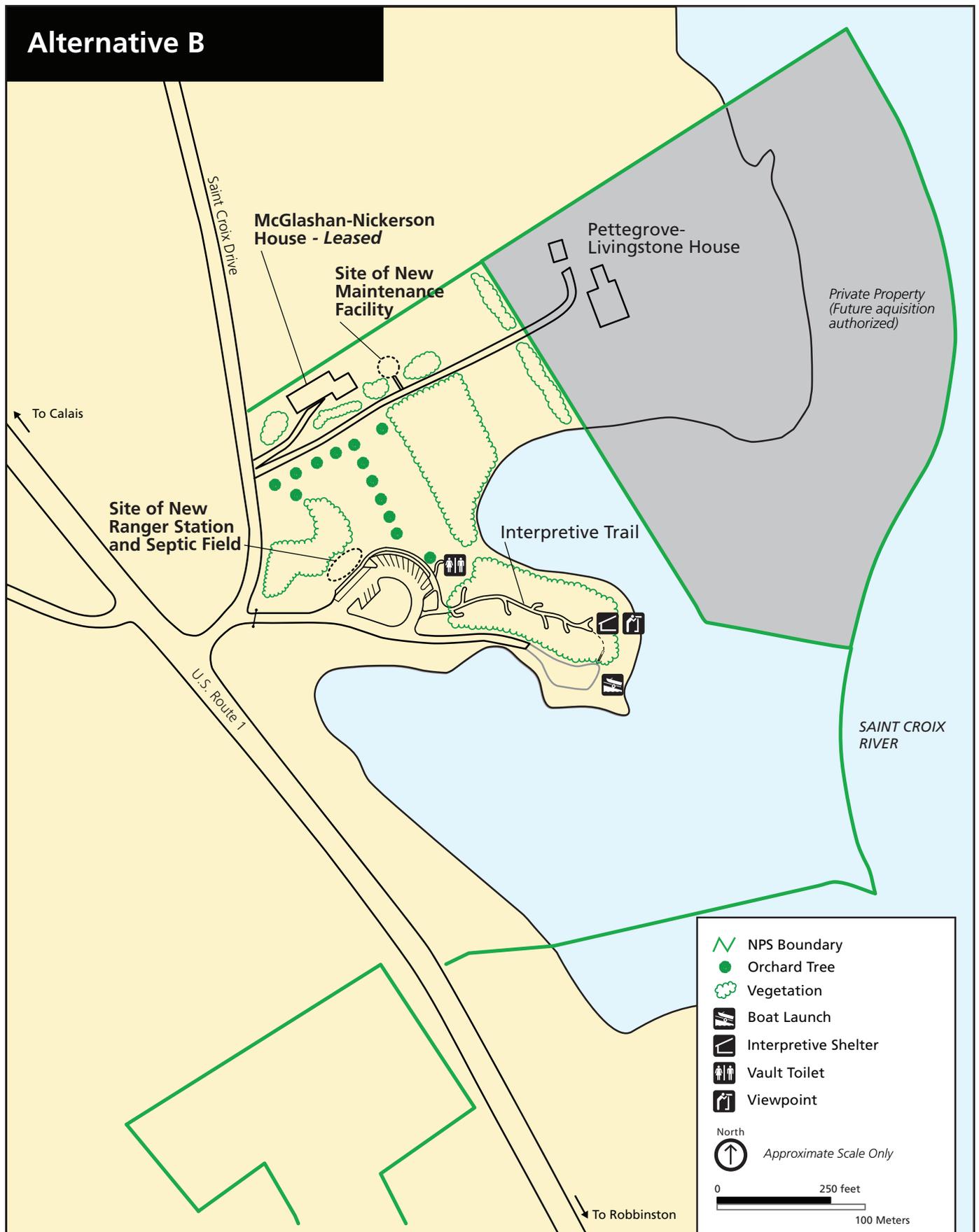


2.1.3 Alternative B

This alternative proposes constructing a new ranger station along the parking circle and a new and expanded maintenance facility next to the McGlashan-Nickerson house and providing quarters for one seasonal employee on-site in the upstairs portion of either the new ranger station or the new maintenance building (see Figure 2.2). The McGlashan-Nickerson house would be protected through a lease or other partnership. This alternative would be implemented in phases and is estimated to have a 20-year life cycle cost of \$850,000 (in 2008 dollars; see Table 2.2).

- **Maintenance:** A maintenance and storage building would be constructed in the vicinity of the existing maintenance shed, east of the McGlashan-Nickerson house (see Figure 2.2). The new building is estimated to be between 1,000 and 2,000 square feet on two stories and would contain a small heated work space and unheated storage for boat, vehicles, grounds and building maintenance equipment, and statue covers. The building would be screened from view from the Pettegrove-Livingstone house and parking circle by vegetation. Access to the maintenance building would be via the one-lane, gravel driveway shared with residents of the Pettegrove-Livingstone house. Parking spaces for three employee vehicles would be provided near the maintenance building, requiring a parking and turning apron of about 2,500 square feet.
- **Ranger Station:** A new ranger station that either could be operated year round for visitor education and park administration or could be closed in winter would be constructed directly adjacent to the parking circle. The building would have a footprint of approximately 1,000 square feet and would provide between 1,000 and 2,000 square feet of usable space on two floors. It would contain at minimum an information desk, sales area, educational exhibits, staff and public restrooms, a water fountain, offices, staff break room and library, meeting space, storage, and mechanical room. An education area large enough to protect groups of up to 40 visitors divided into two groups in inclement weather would be provided; 20 under the existing interpretive shelter and 20 in the ranger station. An underground septic system would serve the ranger station restrooms, would be constructed west of the building, and would be set back more than 100 feet from the upper edge of the shoreline of the St. Croix River. The septic field would be 32 feet wide by 19 feet long and with slopes and fill would cover 32 feet by 56 feet (C. Gilley, Acadia National Park engineer, e-mail communication).
- **Quarters:** Quarters for one summer-season employee would be constructed in the upstairs of either the new ranger station or new maintenance building (included in the square footage provided above). The employee housed on-site would pay prevailing local market rental rates, which would be applied toward building maintenance. Other SACR employees would be expected to find housing in the local community.
- **McGlashan-Nickerson House:** Please refer to section 2.1.1, Actions Common to Alternatives B, C, and D.

Figure 2.2 Conceptual Site Plan for Alternative B

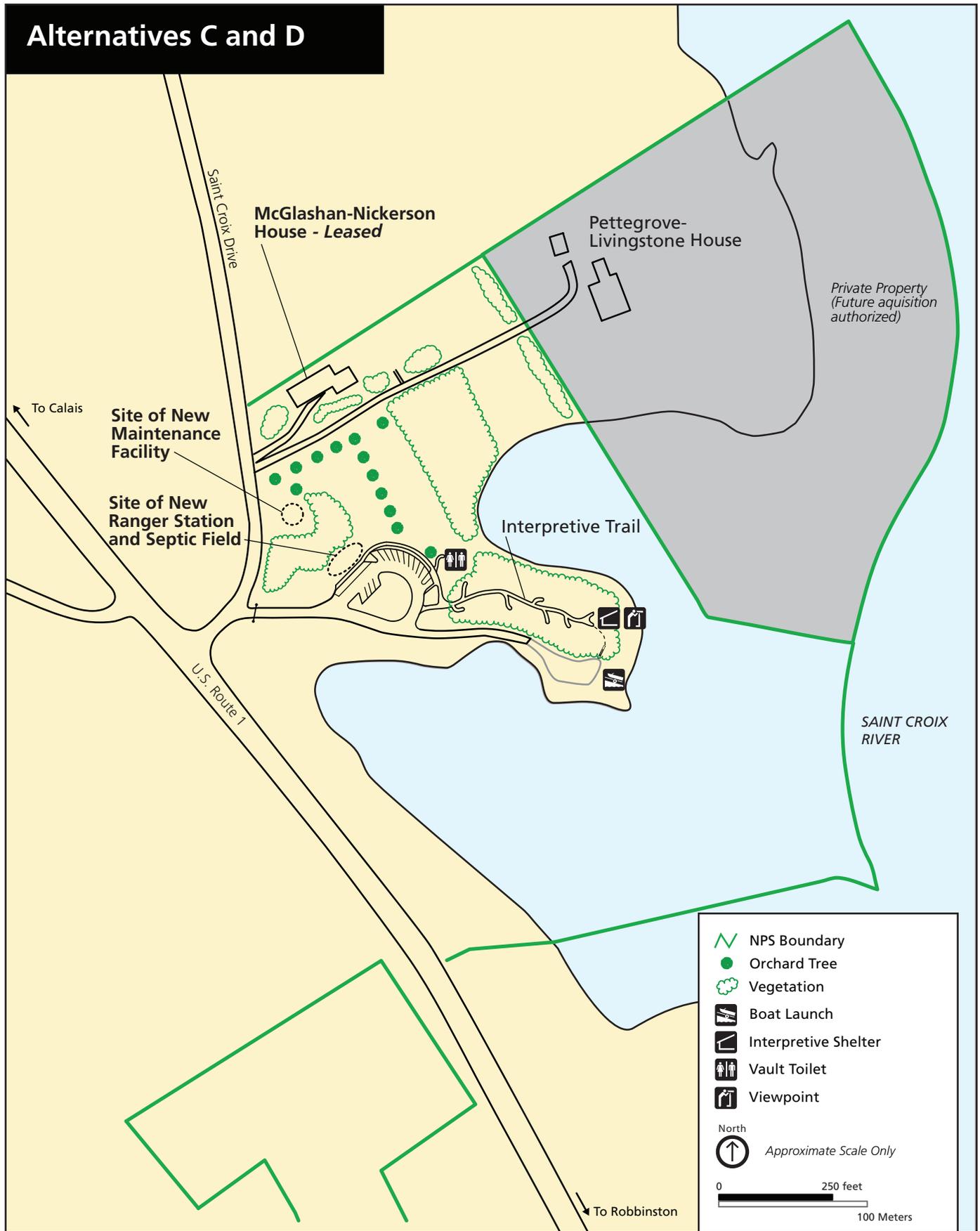


2.1.4 Alternative C: NPS Preferred Alternative

This alternative proposes constructing a new maintenance facility at the site of the Lane-Robb house on St. Croix Drive and providing quarters for two seasonal employees on-site (see Figure 2.3). Like Alternative B, a new ranger station would be constructed along the parking circle, and the McGlashan-Nickerson house would be protected through a lease or other partnership. This alternative would also be implemented in phases and is estimated to have a 20-year life cycle cost of \$910,000 (in 2008 dollars; see Table 2.2).

- **Maintenance:** A 1,000- to 2,200-square-foot, two-story building for maintenance and storage would be constructed at the current site of the Lane-Robb house, with access to the building from St. Croix Drive. The building would contain a small heated work space and an unheated space for storing a small boat, vehicles, grounds and building maintenance equipment, and statue covers. It might also include a space for housing one or two seasonal employees during the summer. A parking and turning apron of approximately 2,500 square feet would be installed next to the building to accommodate employee parking and maintenance functions. The building would share a septic system with the new ranger station. Trees and other vegetation would be planted to help screen the building from views from the McGlashan-Nickerson house and from St. Croix Drive while protecting, as much as possible, the existing water view (in winter) from the house directly across the street. The existing maintenance shed next to the McGlashan-Nickerson house would be removed from the site and the lawn restored. Traffic on the one-lane gravel access road to the Pettegrove-Livingstone house would be used almost exclusively by the residents and guests of that house.
- **Ranger Station:** As in Alternative B, a new ranger station and 32-foot x 19-foot septic field east of the building would be constructed adjacent to the circle drive.
- **Quarters:** Quarters would be provided for two employees on-site—either in the new ranger station or maintenance building, or, less likely, in both. NPS employees would rent the quarters and would pay prevailing market rental rates. Rental income would help pay for maintaining the buildings.
- **McGlashan-Nickerson House:** Please refer to section 2.1.1, Actions Common to Alternatives B, C, and D.

Figure 2.3 Conceptual Site Plan for Alternative C: NPS Preferred Alternative and Alternative D



2.1.5 Alternative D

This alternative is identical to Alternative C except that no quarters would be provided in SACR facilities for seasonal housing (see Figure 2.3 for the Conceptual Site Plan for Alternatives C and D). A new ranger station would be constructed along the parking circle, and a new maintenance facility would be constructed at the site of the Lane-Robb house, but neither facility would include apartments for summer use by seasonal employees or associated overnight parking. Like Alternatives B and C, the McGlashan-Nickerson house would be protected through a lease or other partnership. This alternative would be implemented in phases and is estimated to cost \$790,000 over a 20-year life cycle (in 2008 dollars; see Table 2.2).

- **Maintenance:** As in Alternative C, a 1,000- to 2,000-square-foot, two-story building for maintenance and storage would be constructed at the site of the Lane-Robb house. No housing would be included in the building under this alternative. The building would be screened with trees and other vegetation. A parking and turning apron of approximately 2,500 square feet would be installed next to the building. The existing maintenance shed next to the McGlashan-Nickerson house would be removed and the lawn restored. (See description of Alternative C for more details.)
- **Ranger Station:** As in Alternatives B and C, a new ranger station would be constructed adjacent to the parking circle, although it would not include any housing for employees. Instead, that area would be used for storage and a slightly larger employee meeting space, break room, and staff library than in Alternatives B and C.
- **Quarters:** No quarters for seasonal park employees would be provided on-site. Seasonal employees would be expected to find housing in the private sector or through an agreement with another public entity that may have housing, such as Moosehorn National Wildlife Refuge.
- **McGlashan-Nickerson House:** Please refer to section 2.1.1, Actions Common to Alternatives B, C, and D.

2.2 COSTS

Costs include both initial costs for construction and rehabilitation and annual operating costs of the buildings being considered in this plan (see Table 2.2). Other maintenance needs for roads, grounds, and island structures will stay the same under all alternatives, so those costs are not considered here.

Construction of new facilities would cost more than rehabilitation of the McGlashan-Nickerson house, but the smaller, more efficient newly constructed buildings would require much less annual operating and maintenance funding, as illustrated in the table below. “Annual operating costs” includes utilities, custodial, and annual repair costs, as well as cyclic component replacements such as re-roofing and painting. “Construction and/or rehabilitation costs” are the estimated present worth amount for 2009 construction or rehabilitation. “Life cycle costs” are defined as the present worth of the cost of construction or rehabilitation and 20 years of maintenance and operation. The present worth of annual operating costs was calculated for 20 years at a 4% discount factor. (This is the amount that would have to be invested at 4% to provide an income flow equal to the annual operating cost.)

Table 2.2 Summary of Costs by Alternative

Type of Costs	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Annual Operating Costs	\$47,000	\$18,000	\$19,000	\$17,000
Construction and/or Rehabilitation Costs	\$490,000	\$600,000	\$640,000	\$560,000
20-Year Life Cycle Cost	\$1,130,000	\$850,000	\$910,000	\$790,000

There would be much greater annual operating costs related to the McGlashan-Nickerson house in Alternative A compared to Alternatives B through D. This would result in a greater total expenditure for the No Action Alternative (A) over 20 years as compared to the new construction alternatives (B, C, and D).

2.3 ALTERNATIVES CONSIDERED AND DISMISSED

2.3.1 Lane-Robb House Considerations

As discussed in Chapter 1, NPS staff considered many options that would have retained and used the Lane-Robb house, including rehabilitating it and using it as a ranger station, employee housing, or both. After discussions with community and tribal members and professional staff from the State Historic Preservation Office and the City of Calais, a number of issues were identified. One of the most difficult was the topography around the house in association with other features of the park. The 30-foot vertical difference in elevation between the first floor of the house and the parking circle makes universal accessibility possible only through a very long series of switchback trails or with multiple new parking spots. The location and orientation of the Lane-Robb house would make it difficult for rangers to monitor public use of the interpretive trail and boat launch from the building. In addition, bringing the building up to modern health and safety codes and correcting structural and maintenance deficiencies would require extensive rehabilitation. For these reasons, the decision was made by the park superintendent in May 2008 to begin the federal process to obtain clearance to remove the Lane-Robb house. The process generally takes up to a year and, if approved by higher authorities, will allow removal of the house by the spring of 2009, in time for phased implementation of the final SACR FDP.

2.3.2 Construct Maintenance or Employee Housing on NPS Lands West of U.S. 1

Various initial alternatives explored putting the maintenance or employee housing on NPS land west of U.S. 1, but after site visits these options were considered unsafe or otherwise unreasonable. Having the maintenance facility on the opposite side of the road from the primary site would require having maintenance employees cross the busy highway with maintenance equipment such as lawn mowers or small tractors. Having a separate housing unit on the west side of the site would be prohibitively expensive, would increase adverse environmental effects because it would require additional ground disturbance and construction in a previously undisturbed area, would eliminate the site security advantages of having an employee presence on the site throughout the day and night (as in Alternatives B and C), and would be difficult because of the steep topography.

2.3.3 Construct Ranger Station and Retain McGlashan-Nickerson House for Housing

The McGlashan-Nickerson house is much larger than would be needed to meet the NPS need for housing up to two seasonal employees and would require considerable alterations to meet required health and safety codes for work force housing. In addition, a major consideration is the current lack of adequate NPS funding to properly rehabilitate and maintain the McGlashan-Nickerson house to preserve its historic integrity and significant features. It was determined that this option would be prohibitively expensive and would not meet the goals outlined in Chapter 1.

2.3.4 Combine Ranger Station and Maintenance Building

Conceptual designs were created that combined both functions in one building, with the maintenance entrance on the top floor, accessed by St. Croix Drive, and the ranger station portion accessed via the parking circle below. The large mass of this building adversely affected the view from the McGlashan-Nickerson house, and it was difficult to design a building that met neighbor's requests in scoping meetings to keep any buildings similar in scale and design to those already in the neighborhood. In addition, this would have required removing much of the vegetation between the Lane-Robb house and the site of the proposed ranger station on the parking circle.

2.3.5 Move the Maintenance Shed to the Vicinity of the Circle Drive

As the existing maintenance shed only meets a portion of the total maintenance and storage needs and is not architecturally compatible with the neighborhood, this alternative was dismissed.

2.3.6 Cluster Ranger Station and Maintenance Buildings

Conceptual designs were created that placed the maintenance building immediately behind the proposed ranger station and next to the Lane-Robb house foundation. This was done to save construction and operational costs by clustering the buildings. The large mass of this building adversely affected the view from the McGlashan-Nickerson house, and it was difficult to design a building that met neighbor's requests in scoping meetings to keep any buildings similar in scale and design to those already in the neighborhood. In addition, this would have required removing much of the vegetation between the Lane-Robb house and the site of the proposed ranger station on the parking circle. Snow would accumulate between the buildings, which would be difficult to remove.

2.4 MITIGATION MEASURES

Mitigation measures would be employed to avoid and minimize adverse impacts to the natural and human environment.

Best Management Practices for sediment and erosion control would be used to avoid and minimize soil loss and runoff into adjacent waters. These devices and practices include installing temporary silt fences and sedimentation basins, spraying water to reduce air-borne dust, demarcating the limits of construction, covering soil piles, and keeping stockpiles outside of vegetated areas and away from wetlands and streams. Disturbed soil would be reseeded and stabilized with vegetation immediately. If soils could not be revegetated immediately after disturbance because of season or growing conditions, they would be mulched with straw or wood chips to prevent soil erosion and invasion by non-native plants.

As much as possible, construction activities would be scheduled to allow continued visitor use of the site during construction. Some construction would be completed during the winter and off season, which would further minimize visitor impacts. Vegetative screens would be planted as necessary to help buildings blend into the landscape.

Excavations for building foundations and other ground-disturbing activities would be done in the presence of a trained archeologist to prevent adverse effects on archeological resources. In the unlikely event that previously undiscovered archeological resources would be discovered during construction, all work in the immediate vicinity of the discovery would be halted until the resources could be identified and documented and an appropriate mitigation strategy developed, if necessary, in consultation with the State Historic Preservation Officer and Tribal Historic Preservation Officers. If human remains, funerary objects, sacred objects, or objects of cultural patrimony were discovered during construction, provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

Buildings and associated septic fields would be sited to minimize adverse effects on the orchard, natural vegetation, and the adjacent shoreline and water resources.

Buildings would be similar in size, color, and architectural design to the surrounding community. Roof color would be dark grey to reduce visibility from afar. The areas surrounding new buildings would be planted with evergreen trees and other plants to screen them from view and help them blend into the landscape.

All facility development would comply with applicable federal and state laws and regulations and would be consistent to the maximum extent practicable with the enforceable policies of the Maine Coastal Program.

2.5 ALTERNATIVE SUMMARIES

Table 2.3 presents a summary of the extent to which each alternative meets plan objectives.

Table 2.4 summarizes the anticipated environmental impacts for Alternatives A, B, C, and D. Only those impact topics that have been carried forward for further analysis are included in this table. Chapter 3 provides a more detailed explanation of these impacts.

Table 2.3 Extent to Which Each Alternative Meets Plan Objectives

Objectives	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Protect McGlashan-Nickerson house (National Register property).	Partially meets objective. NPS would continue to maintain; however, current funding levels are not adequate to protect house over the long term.	Partially meets objective. Lessee or partner has not yet been identified.	Partially meets objective. Lessee or partner has not yet been identified.	Partially meets objective. Lessee or partner has not yet been identified.
Identify a sustainable use of the McGlashan-Nickerson house.	Does not meet objective. NPS funding is not adequate for long-term building preservation.	Does not meet objective. Location of new maintenance building may conflict with proposed use of house.	Partially meets objective. Lessee or partner has not yet been identified.	Partially meets objective. Lessee or partner has not yet been identified.
Provide a sustainable, accessible, year-round visitor contact facility.	Does not meet objective. Visitors do not find the building. Building is not sustainable given current funding.	Meets objective.	Meets objective.	Meets objective.
Provide three-season, sheltered group assembly space for 40.	Does not meet objective. McGlashan-Nickerson house public spaces combined with covered outdoor interpretive shelter are not large enough.	Meets objective.	Meets objective.	Meets objective.
Provide a sustainable, year-round space for administrative operations.	Does not meet objective. NPS funding is not adequate for long-term building maintenance and operation.	Meets objective.	Meets objective.	Meets objective.
Provide sustainable, year-round facility for maintenance operations and storage.	Partially meets objective. On-site storage is not adequate for growing, long-term operational needs.	Meets objective.	Meets objective.	Meets objective.
Provide sustainable on-site rental quarters for two seasonal employees to maximize operational efficiency.	Partially meets objective. Building does not meet health and safety codes. Quarters do not provide adequate privacy.	Partially meets objective – one employee only. Relies on availability of seasonal housing in the private sector, which has not been available in the past.	Meets objective.	Does not meet objective. Relies on availability of seasonal housing in private sector, which has not been available in the past.

Objectives	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Provide quality visitor experiences and high visitor satisfaction.	Does not meet objective. Visitors do not find the ranger contact station in the McGlashan-Nickerson house. Downeast Heritage Museum has closed so no alternative information station about SACR is available.	Meets objective.	Meets objective.	Meets objective.
Provide year-round, universally accessible rest rooms.	Does not meet objective. Vault toilet is closed in winter. McGlashan-Nickerson house is not universally accessible.	Meets objective.	Meets objective.	Meets objective.
Enhance security for site resources.	Partially meets objective. Rangers are more removed from trail and statues in McGlashan-Nickerson house than other alternatives.	Partially meets objective. Enhanced site presence provided by one employee housed on-site.	Partially meets objective. Enhanced site presence provided by two employees housed on-site.	Partially meets objective, but less than Alternatives B and C because no after-hours presence at any time of year.
Protect the site's remote character, historic structures, cultural landscapes, and natural and cultural resources.	Partially meets objective. NPS funding is not adequate for long-term preservation of McGlashan-Nickerson house.	Meets objective, assuming lessee or partner can be found.	Meets objective, assuming lessee or partner can be found.	Meets objective, assuming lessee or partner can be found.
Protect cultural landscapes of McGlashan-Nickerson and Pettegrove-Livingstone houses.	Partially meets objective. Visual intrusion of maintenance shed on Pettegrove-Livingstone house viewed is partially screened by vegetation but intrusion on McGlashan-Nickerson house is not.	Does not meet objective because larger maintenance structure would be more difficult to screen from view of both Pettegrove-Livingstone and McGlashan-Nickerson houses.	Mostly meets objective because maintenance shed would be removed from site. New ranger station and maintenance facility would be partially visible from McGlashan-Nickerson house.	Mostly meets objective because maintenance shed would be removed from site. New ranger station and maintenance facility would be partially visible from McGlashan-Nickerson house.
Protect Architectural Character of Community	Meets objective. Character of the community would be unchanged.	Meets objective. New structures would be architecturally compatible and similar in size and scale with existing buildings in the community.	Meets objective. New structures would be architecturally compatible and similar in size and scale with existing buildings in the community.	Meets objective. New structures would be architecturally compatible and similar in size and scale with existing buildings in the community.
Provide Five Parking Spaces for Employees	Does not meet objective. Employee parking at McGlashan-Nickerson house and parking circle displaces visitors.	Meets objective. Three new spaces built in utility apron at new maintenance facility and two existing spaces at parking circle used.	Meets objective. Three new spaces built in utility apron at new maintenance facility and two existing spaces at parking circle used.	Meets objective. Three new spaces built in utility apron at new maintenance facility and two existing spaces at parking circle used.

Table 2.4 Environmental Impact Summary by Alternative

Impact Topics		Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Natural Resources					
Soils	No change in existing conditions. Continued soil compaction near the McGlashan-Nickerson house from parking and turning on the lawn. Effects negligible and reversible.	Minor adverse effects as a result of ranger station and maintenance facility construction. About 365 cubic yards of soil would be removed or disturbed in an area of 5,500 ft ² .	Same as Alternative B, but soil removal and disturbance for maintenance facility would be at site of Lane-Robb house instead of beside McGlashan-Nickerson house.	Same as Alternative C.	
Vegetation	No effects.	Minor adverse effects from loss or change in vegetation types of about 5,500 ft ² for construction of two buildings and associated septic field. Most of area affected would be lawn.	Same as Alternative B. Most of area affected would be lawn and the wooded area between the new ranger station and the Lane-Robb house.	Same as Alternative C.	
Cultural Resources					
Historic Structures	Short-term minor adverse effects to McGlashan-Nickerson house. Over long-term, house would continue to deteriorate without additional funding for rehabilitation, and cause moderate adverse effects.	Moderate beneficial effects to McGlashan-Nickerson house because lessee would pay for rehabilitation and maintenance.	Same as Alternative B.	Same as Alternative B.	
Cultural Landscapes	The view from the McGlashan-Nickerson house would not be changed. The orchard would not be affected by construction of new facilities and would continue to be managed as part of the landscape. No changes to Pettigrove-Livingstone House cultural landscape.	Moderate adverse effects to McGlashan-Nickerson and Pettigrove-Livingstone house's cultural landscapes from expanded maintenance facility within viewsheds of both houses. Former site of Lane-Robb house would remain open space, which would be a minor improvement to the cultural landscape.	Minor beneficial effect associated with locating maintenance building on former site of Lane-Robb house, with removal of non-historic shed next to the McGlashan-Nickerson house.	Same as Alternative C.	

Impact Topics		Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Archeological Resources	There would be no ground-disturbing activities from developing facilities, resulting in no impacts to archeological resources.	Negligible impacts to archeological resources from ground disturbing activities. Archeological survey has been completed for areas identified for facilities development.	Same as alternative B.	Same as alternative B.	Same as alternative B.
Visitor Use & Experiences	No change in visitor experiences—a moderate adverse effect. McGlashan-Nickerson house would not be universally accessible. Up to 90% of park visitors would not use the visitor center in the McGlashan-Nickerson House.	Moderate beneficial effects because most visitors would find and use the new ranger station. Improved accessibility, exhibits, sheltered meeting space, and other facilities.	Same as Alternative B.	Same as Alternative B.	Same as Alternative B.
Land Use	There would be no changes in land use. The McGlashan-Nickerson House and maintenance shed would be the only buildings on the mainland portion of the site. The orchard would remain as would all areas of natural and managed vegetation.	Two new buildings would be added to Red Beach with overall minor effects, as they would be similar in size, style, and scale as other buildings in the neighborhood. The maintenance building would be close to the leased McGlashan-Nickerson house and privately owned Pettegrove-Livingstone house, which could adversely affect the occupants of those houses more than Alternatives C and D. Site of Robb-Lane house would remain open space.	As in Alternative B, two new architecturally compatible buildings would be added to the site, but the maintenance building would be on the site of the Lane-Robb house. This would be an improvement to occupants of the two existing historic structures, but might adversely affect the view to the water from the house across St. Croix Drive. Overall negligible effects on land use.	Same as Alternative C.	Same as Alternative C.

Impact Topics	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Park Operations	<p>No change in current park operations—a moderate adverse effect. Poor condition and high operational costs of McGlashan-Nickerson house would not change. Maintenance operations hampered by lack of adequate work and storage space. Housing in McGlashan-Nickerson house would be sub-standard. Vandalism could continue to threaten park facilities because park staff would be housed in the McGlashan-Nickerson house during the summer and would be more distance from primary park resources. Vehicles and other large equipment would continue to be stored at Acadia National Park during winter.</p>	<p>Moderate beneficial effect by improving facilities. Leasing McGlashan-Nickerson house would reduce operational and rehabilitation costs. Facilities would improve maintenance and interpretive operations. Housing for one employee would meet modern standards and would improve hiring and morale. Vandalism in summer would likely decrease because park staff would be housed on-site. Park vehicles and equipment would be stored on-site and all park operations would be consolidated in two new facilities.</p>	<p>Minor beneficial effect—more than Alternative B because providing housing for two, rather than one, employees would enhance hiring bilingual employees.</p>	<p>Moderate beneficial effect, but less than Alternatives B and C because no park staff would be housed on-site, which could adversely affect hiring and lead to greater response time in the event of a health emergency or crime because there would be no employee presence after business hours May–October.</p>
Human Health & Safety	<p>The McGlashan-Nickerson house would continue to have lead paint and radon issues and not meet modern health and safety standards for public buildings, which would be a moderate adverse impact.</p>	<p>The McGlashan-Nickerson house would be rehabilitated for lead containment and/or abatement, and new facilities would meet current building codes for human health and safety, which would be a moderate beneficial effect.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative B.</p>

Impact Topics	Alternative A: No Action	Alternative B	Alternative C: NPS Preferred	Alternative D
Resource Conservation, Including Energy and Pollution Prevention	<p>Moderate adverse effect on resource conservation. The continued operation of the McGlashan-Nickerson House for visitor information, seasonal housing, and administrative offices would result in using approximately 1,800 gallons of #2 fuel oil per year to heat the structure, and there would be no funding to make energy conservation improvements. Outdoor lighting would not protect the dark night sky.</p>	<p>There would be a minor beneficial effect on resource conservation. NPS operation of the McGlashan-Nickerson House would cease, and through a lease there might be funding to make energy conservation improvements to the house. While new facilities would require an input of materials and supplies, they would be designed and built to be as “green” as practicable. Light pollution would be prevented by using full cut-off fixtures and restricting outdoor lighting to the minimum necessary to ensure safety and security.</p>	<p>Same as Alternative B.</p>	<p>Same as Alternative B.</p>

2.6 IDENTIFICATION OF THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The Environmentally Preferred Alternative is defined by the Council on Environmental Quality as “the alternative that will promote the national environmental policy as expressed in the National Environmental Policy Act [Section 101 (b)].” This section states that the Environmentally Preferred Alternative should:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Ensure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences.
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.
- Achieve a balance between population and resource use that will permit high standards of living and a wide sharing of life’s amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Alternative A only minimally meets the above six evaluation factors because it uses the McGlashan-Nickerson house as a visitor center and housing facility that does not meet health and safety standards and under current funding the house would not be protected and would continue to deteriorate. The house was designed and built as a residential structure and is not suitable for a visitor contact station. It is not energy efficient, nor does it have sustainable features.

Alternative B meets more of the evaluation factors because it protects historic resources and provides an energy-efficient, sustainable visitor center for public use while retaining the character and resources of the site. However, Alternative B does not fully meet the operational needs of the site because it does not provide on-site housing for two seasonal employees, which is considered important to operations and site security, and because the new maintenance building would be adjacent to the McGlashan-Nickerson house and could interfere with other uses of the house by private or public partners.

Alternatives C and D equally meet the criteria for the environmentally preferred alternatives, but in different ways. Both protect the historic resources of the site, including the McGlashan-Nickerson house and the Pettegrove-Livingstone house; provide for beneficial visitor use; and meet operational needs. Alternative C improves security for the site by providing on-site employee presence in housing throughout the summer, but in doing so takes the opportunity for rental revenue out of the local community. Conversely, Alternative D would provide the opportunity for rental revenue to the local community, but would not provide for an employee presence after-hours and therefore might increase the risk of vandalism at the site compared to Alternative C. Alternative C is preferred by the NPS because seasonal rental housing has not been available in the local community. There is concern that this lack of housing will continue to adversely affect the ability of the NPS to recruit, hire, and retain bilingual seasonal employees at SACR and may continue to force the use of the McGlashan-Nickerson house for employee housing, preventing a lease or cooperative agreement to help preserve and maintain the building.

3 Environmental Consequences

This chapter describes the natural and cultural resources of the site, visitor use, and current operations and analyzes the potential environmental consequences, or impacts, that would occur as a result of implementing the Saint Croix Island International Historic Site (SACR) Facilities Development Plan (FDP). Topics analyzed in this chapter include specific natural resources that could be affected (soils and vegetation); cultural resources (historic structures, cultural landscapes, and archeological resources); visitor use and experience; land use; park operations; human health and safety; and resource conservation, including energy and pollution prevention.

Direct, indirect, and cumulative effects, as well as the possibility of resource impairment, are analyzed for each resource topic carried forward. Potential impacts are described in terms of type, context, duration, and intensity. General definitions are defined as follows, while more specific impact thresholds are given for each resource at the beginning of each resource section.

- **Type** describes the classification of the impact as either beneficial or adverse and direct or indirect:
 - *Beneficial*: A positive change in the condition or appearance of the resource or a change that moves the resource toward a desired condition.
 - *Adverse*: A change that moves the resource away from a desired condition or detracts from its appearance or condition.
 - *Direct*: An effect that is caused by an action and occurs in the same time and place.
 - *Indirect*: An effect that is caused by an action but is later in time or farther removed in distance, but is still reasonably foreseeable.
- **Context** describes the area or location in which the impact will occur. Are the effects site-specific, local, regional, or even broader?
- **Duration** describes the length of time an effect will occur, either short-term or long-term:
 - *Short-term* impacts generally last only during construction, and the resources resume their pre-construction conditions following construction.
 - *Long-term* impacts last beyond the construction period, and the resources may not resume their pre-construction conditions for a longer period of time following construction.
- **Intensity** describes the degree, level, or strength of an impact. For this analysis, intensity has been categorized into negligible, minor, moderate, and major. Intensity level definitions are different depending on the impact topic and are noted in the analysis that follows. In general, impacts can be described as follows:
 - *Negligible*: Impact is barely discernible.
 - *Minor*: Impact is barely measurable and is generally localized.
 - *Moderate*: Impact is measurable and may be localized or regional in scope.
 - *Major*: Impact is obviously measurable and is generally regional in scope.

Cumulative Effects: The Council on Environmental Quality regulations, which implement the National Environmental Policy Act of 1969 (42 USC 4321 et seq.), require assessment of cumulative impacts in the decision making process for federal projects. Cumulative impacts are defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions” (40 CFR 1508.7). Cumulative impacts are considered for all alternatives.

Cumulative impacts were determined by combining the impacts of the alternative being considered with other past, present, and reasonably foreseeable future actions. Therefore, it was necessary to identify other past, ongoing, or reasonably foreseeable future projects on-site or nearby that could affect SACR. The geographic scope for this analysis includes elements within two miles of the Red Beach portion of SACR, while the temporal scope includes projects within a range of approximately ten years before and after 2008. Given this, the following projects were identified for the purpose of conducting the cumulative effects analysis, listed from past to future:

- Acquisition of the Lane-Robb house, 1998: The Lane-Robb house property was acquired by the National Park Service (NPS) from a willing private seller in December 1998.
- Acquisition of the McGlashan-Nickerson house, 2000: The McGlashan-Nickerson house property was acquired by the NPS from a willing private seller in March 2000.
- Facility development, 2003: Improvements made to Red Beach included constructing an interpretive trail with bronze statues and a paved parking area, improving the access driveway and boat launch, providing a new vault toilet, and improving access for persons with disabilities. These improvements were made to accommodate expected increases in site visitation associated with the 400th anniversary of the arrival and settlement of French explorers, and beyond.
- Temporary use of the McGlashan-Nickerson house for visitor information, seasonal housing, and administrative offices, 2006 to the present.
- Closure of the Downeast Heritage Museum, 2008.
- Removal of the Lane-Robb house and rehabilitation of the house site, expected spring of 2009.

Other foreseeable future actions within the St. Croix River watershed include expanded operations at Bayside Quarry, about two miles across the river in Canada, for the purpose of developing an industrial park, and a proposed installation and operation of a liquefied natural gas (LNG) facility to be located approximately one mile upriver. A second LNG facility is proposed to be located about five miles downriver, beyond the geographic scope of analysis of cumulative effects for this Environmental Assessment/Assessment of Effect (EA). The cumulative effects from the upriver LNG project and the proposed Bayside Quarry development project on the Red Beach site are unknown and cannot be analyzed because of the lack of construction and operational details available for the proposals at this time.

Impairment: NPS *Management Policies* (2006) require us to analyze potential effects to determine whether or not actions would impair park resources (NPS 2006). The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act, as amended, begins with a mandate to conserve park resources and values. National Park Service managers must always seek ways to avoid, or to minimize to the greatest degree practicable, adversely impacting park resources and values. However, the laws do give the NPS the management discretion to allow impacts to park resources and values when necessary and appropriate to fulfill the purposes of a park, as long as the impact does not constitute impairment of the affected resources and values.

Although Congress has given the NPS the management discretion to allow certain impacts within parks, that discretion is limited by the statutory requirement that the NPS must leave park resources and values unimpaired, unless a particular law directly and specifically provides otherwise. The prohibited impairment is an impact that, in the professional judgment of the responsible NPS manager, would harm the integrity of park resources or values. An impact to any park resource or value may constitute an impairment, but an impact would be more likely to constitute an impairment to the extent that it has a major or severe adverse effect upon a resource or value whose conservation is:

- 1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- 2) key to the natural or cultural integrity of the park; or
- 3) identified as a goal in the park's general management plan or other relevant National Park Service planning documents.

Impairment may result from NPS activities in managing the park, visitor activities, or activities undertaken by concessionaires, contractors, and others operating in the park. A determination on impairment is made in the conclusion section for each of the resource topics carried forward in this chapter.

3.1 DESCRIPTION OF NATURAL RESOURCES AND IMPACTS

Intensity Level Definitions

The definition of intensity levels for all natural-resource impacts, including soils and vegetation, and for both adverse and beneficial effects is as follows:

Negligible: Impacts would be barely detectable, measurable, or observable.

Minor: Impacts would be detectable, but not expected to have an overall effect on the natural community. Impacts generally affect less than one-half acre of the resource or would not be expected to be outside the natural range of variability for that resource.

Moderate: Impacts would be clearly detectable, but could have short-term appreciable effects on the local ecology. Impacts may affect up to one acre of the resource, but would not threaten the continued existence of that resource.

Major: Long-term or permanent, highly noticeable effects on individual species, community ecology, or natural processes. Impacts may affect over one acre of resource area or may affect the continued existence of that resource.

3.1.1 Soils

The soils on the mainland portion of SACR consist of a thin, fine-grained, well-drained sandy loam (Sewall 1976). Bedrock outcrops are dispersed throughout the area. There has been a large amount of fill as a result of industrial development around Red Beach (see Figure 3.1) and the construction and maintenance of U.S. 1. Along the shore of the mainland there are areas of tidal mudflats and alluvial and marine-deposited soil that extends below the high water line. Along the northern edge of Red Beach there is an area of Buxton/Scantic complex soil, a fine-textured soil consisting of silts and clays (Johnson 1996). The small peninsula that supports the interpretive trail is eroding from a variety of effects, including waves, groundwater movement, and surface runoff from impervious surfaces. A large, nine-foot diameter drop culvert on the adjacent stream prevents natural sediment enrichment of the shoreline and further exacerbates erosion along the small peninsula (Greco 2008).

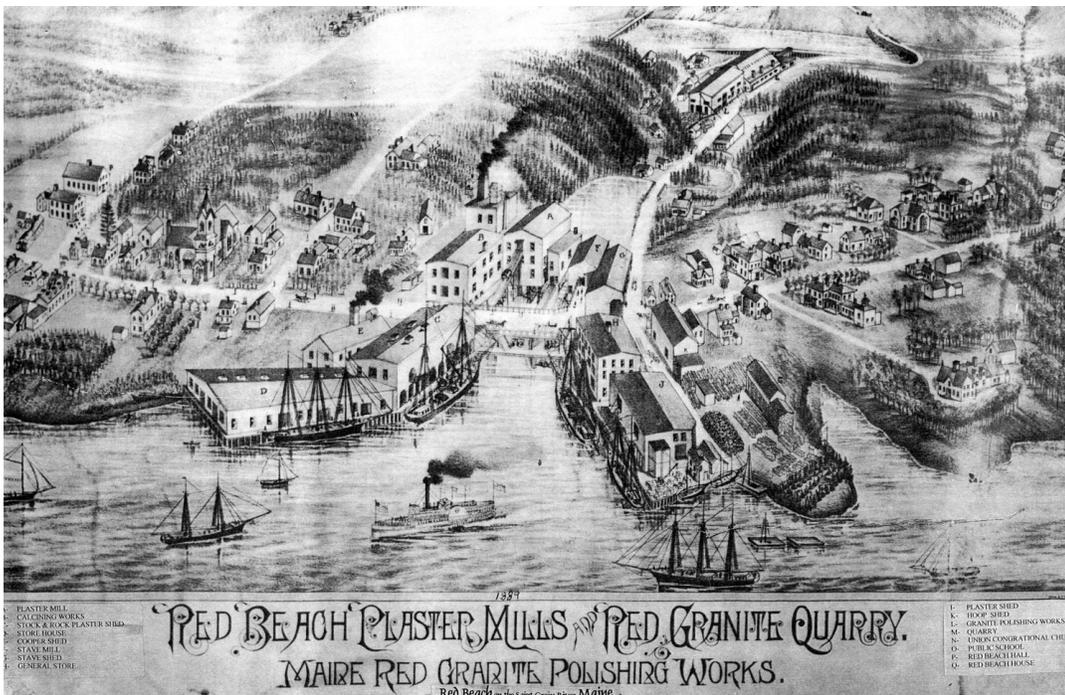


Figure 3.1 Historical development of Red Beach site (ca. 1889)

Impacts of Alternative A (No Action Alternative)

Under this alternative, there would be no additional soil disturbance from constructing new facilities; however, the goals of the FDP would not be met. Approximately 250 square feet of soils near the McGlashan-Nickerson house would continue to be compacted from parking and turning vehicles associated with using the building as a visitor contact station, office, and housing. This alternative would result in a direct but negligible, long-term, adverse effect on soils, but the impacts would be reversible by decompaction of the soil and revegetation of the affected area if the parking area were to be abandoned in the future.

Cumulative Effects on Soils

Since there would be no effects on soils under Alternative A, cumulative effects would consist only of the effects of past, present, and reasonably foreseeable future soil-disturbing actions, including development of visitor facilities in 2003. Facility development in 2003 (primarily construction of the vault toilet, parking circle, and interpretive trail and

improvements to the existing driveway and boat launch) resulted in already-disturbed soils being moved around on-site but little gain or loss of soil materials. The 2003 developments added about 3,800 square feet of impervious surface over the soils in this area, but all soils had already been disturbed by historic industrial activities and site facilities such as the boat launch. Therefore, cumulative effects to soils from Alternative A would be negligible.

Conclusion

This alternative would not meet the goals of the FDP and would result in a negligible, long-term, adverse effect on soils at the Red Beach site because a limited amount of soil compaction from parking near the McGlashan-Nickerson house would continue. These impacts would be reversible by decompaction of the soil and revegetation of the affected area if the parking area next to the house were to be abandoned in the future. Under this alternative, there would be no impairment of soils.

Impacts of Alternative B

Construction of an expanded maintenance facility and a ranger station with its associated septic field would permanently remove approximately 255 cubic yards of soil and disturb an additional 110 cubic yards of soil over a surface area of approximately 5,500 square feet (well less than one-quarter of an acre) at Red Beach. Based on historical drawings of the area, sub-surface soils in the vicinity of the existing maintenance shed do not appear to have been significantly altered by prior construction or development, but they would be disturbed by installing a new foundation for the maintenance facility. Soils that would be disturbed by the proposed construction of the ranger station along the parking circle have been previously disturbed. Removal and disturbance of soils under Alternative B would be considered an adverse, direct, long-term, minor impact. This impact would be localized and, unlike the effects of Alternative A, would not be reversible.

Cumulative Effects on Soils

Previous facility development in 2003 was on already-disturbed soils that were rearranged over an area of about 3,800 square feet. The total surface area of disturbed soils on the site, including 2003 development of the parking circle and interpretive trail (3,800 square feet of new area disturbed), when added to soil disturbance of proposed buildings in the FDP (5,500 square feet) would be an area of approximately 9,300 square feet, or slightly less than one-quarter of an acre of the 29.5 acres of the total mainland area of SACR. The soil in much of the area proposed for new development in the action alternatives was extensively altered by development of the historic Red Beach industrial complex in the late 1880s, although the area where the maintenance shed would be built has not been significantly altered. When the effects of the proposed development are added to the effects of previous facility development, there would be an adverse, direct, long-term, minor, cumulative impact to soils.

Conclusion

Alternative B would result in an adverse, direct, long-term, minor effect to soils. When added to previous development, the cumulative adverse effects would cover an area less than one-quarter acre and would be considered minor. Of the action alternatives, Alternative B would have slightly more adverse effects on soils than Alternatives C and D because a portion of the soil disturbance associated with new construction would be in an area where soils have not been previously disturbed. There would be no impairment of soils.

Impacts of Alternatives C (NPS Preferred Alternative) and D

The effects of implementing Alternative C would be similar to those in Alternative B (remove approximately 255 cubic yards of soil and disturb an additional 110 cubic yards of soil over a surface area of approximately 5,500 square feet), although they would be in different areas on the site. As in Alternative B, this would be an adverse, direct, long-term, minor impact. These effects would be localized, as they would be restricted to the area under and directly adjacent to the proposed two buildings, and they would not be reversible. Because soils surrounding the Lane-Robb house had already been disturbed when the house was constructed and the septic field installed, the effects on soils of constructing the maintenance building there might be slightly less than in Alternative B where the maintenance facility would be constructed on previously undisturbed soils.

Cumulative Effects on Soils

Cumulative effects for Alternatives C and D would be similar in nature and size to cumulative effects in Alternative B, but all construction would be in previously disturbed soils. There would be an adverse direct, long-term, minor cumulative effect on soils from this alternative.

Conclusion

Alternatives C and D would result in adverse, direct, long-term, minor effects on soils. Alternative B would have slightly more adverse effects on soils than Alternatives C and D because the portion of the soil disturbance associated with construction of the maintenance facility would be on soils with little previous disturbance. There would be no impairment of soils under any alternative.

3.1.2 Vegetation

As noted in the Natural Resource Inventory (Cronan 1997), the shore section of the mainland overlook includes open park-like woodland vegetation typical of plant communities along the coast. There are no rare plant species at the shore parcel, and the vegetation present includes white spruce (*Picea glauca*), balsam fir (*Abies balsamea*), white pine (*Pinus strobus*) red oak (*Quercus rubra*), paper birch (*Betula papyrifera*), wild rose (*Rosa* spp.), and quaking aspen (*Populus tremuloides*). The shore parcel also includes a mowed field and grass/shrub-dominated area. The lawn areas are dominated by introduced grasses with wild rose, raspberry (*Rhus* spp.), and silverrod (*Solidago bicolor*) along the edge. Shrubs, where present, include alder (*Alnus* spp.) and cherry (*Prunus* spp.). More dense woods in the area between the circular drive and St. Croix Drive are dominated by white cedar (*Thuja occidentalis*) with old apple trees (*Malus sylvestris*) and a well-developed shrub layer.

The heterogeneous intertidal zone also includes small patches of salt marsh vegetation as well as mudflat or sandflat habitats covered seasonally with various species of algae.

A mature orchard with a single row of old apple trees in a grass lawn leads from the north side of the parking circle and up to the Lane-Robb and McGlashan-Nickerson houses. The orchard stands on a steep grade with poor soil, and grasses and mosses are the dominant cover type.

Impacts of Alternative A (No Action Alternative)

Under this alternative, there would be no effects on vegetation. Vegetation cover types, including apple trees, would remain as they exist now. Spruce would continue to mature and would be expected to be killed by insects or disease, or blow down over time, but would be replaced by natural regeneration. Apple trees would continue to be pruned to maintain their vigor but would eventually succumb to age.

Cumulative Impacts

Of past, present, and reasonably foreseeable actions, only the 2003 facility development has had any effect on vegetation. As noted in the soils section, approximately one-tenth acre of lawn and a small area of woody vegetation was removed and covered by pavement or disturbed by construction of the parking circle and other facility development. Much of that area was replanted in lawn and trees, resulting in a loss of less than 4,000 square feet of vegetation—an adverse, direct, long-term, minor effect.

Conclusion

Alternative A would result in no effects on vegetation, but would not meet the goals of the FDP. There would be no impairment of vegetation.

Impacts of Alternative B

Impacts to vegetation by implementing Alternative B would be adverse, direct, long-term, and minor. Approximately 5,500 square feet (slightly more than one-tenth of an acre) of vegetated surfaces, mostly lawn, would be permanently removed for construction of the maintenance and ranger station buildings. No old apple trees in the orchard would be affected. There would be some slight additional short-term adverse effects during construction, but these areas would be replanted.

Cumulative Impacts

Previous facility development in 2003 resulted in a loss of about 4,000 square feet of vegetation. When added to loss of vegetation resulting from construction of buildings proposed in Alternative B (5,500 square feet), there would be total loss of vegetation of approximately 9,500 square feet, or less than one-quarter of an acre of the 29.5 acres of the total mainland area of SACR. When the effects of the proposed development are added to the effects of previous facility development, there would be an adverse, direct, long-term, minor cumulative impact to vegetation.

Conclusion

Alternative B would result in an adverse, direct, minor, long-term effect on vegetation. Only the area of the footprint of the buildings would be affected over the long-term, and all disturbed soils would be revegetated immediately upon completion of construction. There would be no impairment of vegetation under this alternative.

Impacts of Alternatives C (NPS Preferred Alternative) and D

Implementing Alternatives C and D would remove approximately 5,500 square feet of vegetated surfaces, including some lawn and wooded sections. This would be an adverse, direct, long-term, minor impact. Less than one-quarter acre of the trees and shrubs growing between the parking circle and the Lane-Robb house would be removed, but most of that area would be replanted following construction. No old apple trees in the orchard would be adversely affected.

Cumulative Impacts

Alternatives C and D, when added to past, present, and foreseeable future actions, especially 2003 construction of the parking circle and other facility improvements, would result in a total loss of approximately 9,500 square feet of vegetation on the site. In terms of other actions in the watershed, this loss of vegetation and change in vegetative types would be minor and limited to the footprints of the buildings, especially since much of the area that would be cut or disturbed would be replanted. Overall, there would be an adverse, direct, long-term, minor cumulative impact on vegetative resources at Red Beach.

Conclusion

Implementing either Alternative C or D would remove approximately 5,500 square feet of vegetation. Approximately one-quarter acre of vegetation type would change from woodland to lawn and shrubs. This would be an adverse, direct, long-term, minor effect. No federally or state-listed rare plant species or habitats would be adversely affected. There would be no impairment of vegetation under any of the alternatives.

3.2 DESCRIPTION OF CULTURAL RESOURCES AND IMPACTS

3.2.1 Impacts to Cultural Resources and Section 106 (§106) of the National Historic Preservation Act

In this Environmental Assessment/Assessment of Effect (EA), impacts to historic properties are described in terms of type, context, duration, and intensity, as described above, which is consistent with the regulations of the Council on Environmental Quality that implemented the National Environmental Policy Act (NEPA). This EA is intended, however, to comply with the requirements of both NEPA and §106 of the National Historic Preservation Act. To achieve this, a §106 summary is included under the preferred alternative for each of the cultural resource topics carried forward. The §106 summary is intended to meet the requirements of §106 and is an assessment of the effect of the undertaking (implementation of the alternative) on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations. A letter dated December 13, 2007, was sent to the State Historic Preservation Officer informing him that a combined document would be used to meet §106 obligations.

In accordance with the Advisory Council on Historic Preservation's regulations implementing §106 of the National Historic Preservation Act (36 CFR Part 800, *Protection of Historic Properties*), impacts to archeological resources, the cultural landscape, and historic structures were identified and evaluated by 1) determining the area of potential effects; 2) identifying cultural resources present in the area of potential effects that were either listed in or eligible to be listed in the National Register of Historic Places; 3) applying the criteria of adverse effect to affected cultural resources either listed in or eligible to be listed in the National Register; and 4) considering ways to avoid, minimize, or mitigate adverse effects.

Under the Advisory Council's regulations, a determination of either adverse effect or no adverse effect must also be made for affected National Register eligible cultural resources. An adverse effect occurs whenever an impact alters, directly or indirectly, any characteristic of a cultural resource that qualify it for inclusion in the National Register (e.g., diminishing the integrity of the resource's location, design, setting, materials, workmanship, feeling, or association). Adverse effects also include reasonably foreseeable effects caused by the preferred alternative that would occur later in time, be farther removed in distance, or be cumulative (36 CFR Part 800.5, *Assessment of Adverse Effects*). A determination of no adverse effect means there is an effect, but the effect would not diminish in any way the characteristics of the cultural resource that qualify it for inclusion in the National Register of Historic Places.

Council on Environmental Quality regulations and NPS Director's Order 12: *Conservation Planning, Environmental Impact Analysis and Decision-making* also call for a discussion of the appropriateness of mitigation, as well as an analysis of how effective the mitigation would be in reducing the intensity of a potential impact—e.g., reducing the intensity of an impact from major to moderate or minor. Any resultant reduction in intensity of impact due to mitigation, however, is an estimate of the effectiveness of mitigation under NEPA only. It does not suggest that the level of effect as defined by §106 is similarly reduced. Although adverse effects under §106 may be mitigated, the effect remains adverse.

A §106 summary is included in the impact analysis sections under the preferred alternative. The §106 summary is intended to meet the requirements of §106 and is an assessment of the effect of the undertaking (implementation of the alternative) on cultural resources, based upon the criterion of effect and criteria of adverse effect found in the Advisory Council's regulations.

3.2.2 Historic Structures

Both the McGlashan-Nickerson and Pettegrove-Livingstone houses have been listed on the National Register of Historic Places. The McGlashan-Nickerson house is documented as a locally significant resource as a rare example of Italianate design within the village of Red Beach. It is presently used for administration, visitor contact, and staff housing. The Pettegrove-Livingstone house is not owned by the NPS. It has statewide significance for its gothic architecture and "Downingesque" landscape architecture (Mohney 1994).

Intensity Level Definitions

For purposes of analyzing potential impacts to historic structures/buildings, the thresholds of change for the intensity of an impact are defined as follows:

Negligible: Impact(s), either adverse or beneficial, is at the lowest levels of detection—barely perceptible and not measurable. For purposes of §106, the determination of effect would be no adverse effect.

Minor: *Adverse:* Impact would not affect the character-defining features of a National Register of Historic Places eligible or listed structure or building. For purposes of §106, the determination of effect would be no adverse effect.

Beneficial: Stabilization/preservation of character-defining features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. For purposes of §106, the determination of effect would be no adverse effect.

Moderate: *Adverse:* Impact would alter a character-defining feature(s) of the structure or building but would not diminish the integrity of the resource to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be no adverse effect.

Beneficial: Rehabilitation of a structure or building in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. For purposes of §106, the determination of effect would be no adverse effect.

Major: *Adverse:* Impact would alter a character-defining feature(s) of the structure or building, diminishing the integrity of the resource to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be adverse effect.

Beneficial: Restoration of a structure or building in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. For purposes of §106, the determination of effect would be no adverse effect.

Impacts of Alternative A (No Action Alternative)

Over the short term, Alternative A would result in adverse, direct, minor impacts to the McGlashan-Nickerson house. The house would continue to be used for administration, visitor contact, and seasonal employee housing, which would require continued maintenance to be stabilized and kept in usable condition. However, over the long-term, without an infusion of funding for significant rehabilitation work, the building would continue to deteriorate and there could be an adverse, direct, moderate impact.

Cumulative Effects

National Park Service funding for significant stabilization and rehabilitation of the McGlashan-Nickerson house is not likely to be available in the foreseeable future. There are no other past, present, or reasonably foreseeable future actions that would affect the McGlashan-Nickerson and Pettegrove-Livingstone houses. Therefore, cumulative impacts are the same as the impacts identified above for Alternative A.

Conclusion

Over the short term, the Alternative A would result in adverse, direct, short-term, minor impacts, but over the long term, without stabilization and rehabilitation, adverse impacts to historic structures would increase to the level of moderate. There would be no additional cumulative impacts to historic structures. Considering these effects, this alternative would not impair historic structures.

Impacts of Alternative B, C, and D

These alternatives propose constructing a new ranger station along the parking circle, a new maintenance facility either next to the McGlashan-Nickerson house (Alternative B) or on the site of the Lane-Robb house once it is removed (Alternatives C and D), and providing quarters for one to two seasonal employees on-site (Alternatives B or C). The McGlashan-Nickerson house would be protected through a lease or other partnership. With construction of a new ranger station, the McGlashan-Nickerson house would no longer be needed for administration, visitor contacts, and housing. A lease under the provisions of 36 CFR 18, *Leasing of Properties in Park Areas*, would be developed with an occupant who would rehabilitate the building for an appropriate use consistent with the building's historic significance. Any such agreement or lease would require that the building be reused and rehabilitated in a manner consistent with the *Secretary of the Interior's Standards for the Treatment of Historic Properties* and would also require compliance with §106 of the National Historic Preservation Act. There would be no impacts to the Pettegrove-Livingstone house under any alternatives. The impacts to historic structures in these alternatives, including Alternative C, the NPS Preferred Alternative, are the same, and would be beneficial, direct, long-term, and moderate.

Cumulative Effects

There are no other past, present, or reasonably foreseeable future actions that would have an adverse or beneficial, direct or indirect effect on the McGlashan-Nickerson house or the Pettegrove-Livingstone house when added to the effects of Alternatives B through D. Therefore, cumulative effects would be the same as those outlined above from Alternatives B through D.

Conclusion

Because there would be no adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of SACR; 2) key to the natural or cultural integrity of the site; or 3) identified as a goal in the site's general management plan or other relevant National Park Service planning documents, there would be no impairment of the site's resources or values. Implementation of this alternative would not result in any unacceptable impacts and is consistent with §1.4.7.1 of *NPS Management Policies* (2006).

§106 Summary

After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR §800.5, *Assessment of Adverse Effects*), the National Park Service concludes that implementation of the NPS preferred alternative would have no adverse effect on historic structures at SACR.

3.2.3 Cultural Landscapes

Both the McGlashan-Nickerson and Pettegrove-Livingstone houses have been listed on the National Register of Historic Places, with associated cultural landscape features. The grounds, garden, and apple orchard of the McGlashan-Nickerson house and the landscape surrounding the Pettegrove-Livingstone house must be protected. There are no identified landscape features on the mainland associated with the 1604 historic cultural landscape of Saint Croix Island. The significant 1604 cultural landscape of Saint Croix Island lies outside the area of potential effects for this EA.

For purposes of analyzing potential impacts to cultural landscapes, the thresholds of change for the intensity of an impact are defined as follows:

- Negligible:* Impact(s), either adverse or beneficial, is at the lowest levels of detection—barely perceptible and not measurable. For purposes of §106, the determination of effect would be no adverse effect.
- Minor:* *Adverse:* Impact would not affect a character-defining pattern(s) or feature(s) of a National Register of Historic Places eligible or listed cultural landscape. For purposes of §106, the determination of effect would be no adverse effect.
- Beneficial:* Preservation of character-defining patterns and features is in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be no adverse effect.
- Moderate:* *Adverse:* Impact would alter a character-defining pattern(s) or feature(s) of the cultural landscape but would not diminish the integrity of the landscape to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be no adverse effect.
- Beneficial:* Rehabilitation of a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be no adverse effect.
- Major:* *Adverse:* Impact would alter a character-defining pattern(s) or feature(s) of the cultural landscape to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be adverse effect.
- Beneficial:* Restoration of a landscape or its patterns and features in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. For purposes of §106, the determination of effect would be no adverse effect.

Impacts of Alternative A (No Action Alternative)

Alternative A would result in no changes to the current cultural landscape. The maintenance shed would continue to be located within a partially screened viewshed of the Pettegrove-Livingstone house landscape, resulting in negligible effects. The view from the McGlashan-Nickerson house and the orchard would not be changed.

Cumulative Effects

In relation to this project, Alternative A would not affect cultural landscapes; therefore, the project would have no cumulative affect on the cultural landscapes when considered with other past, present, or reasonably foreseeable future actions.

Conclusion

The Alternative A would result in negligible impacts to cultural landscapes because no construction activities would be conducted. As such, this alternative would not contribute to any cumulative disturbance to cultural landscapes. Considering these negligible effects, this alternative would not impair cultural landscapes.

Impacts of Alternative B

In this alternative, a ranger station would be built adjacent to the parking circle, and an expanded maintenance facility would be constructed on the location of the current maintenance shed. The location of the Lane-Robb house would remain an open space, and the McGlashan-Nickerson house would be managed through a historic lease or other agreement. The orchard associated with the McGlashan-Nickerson house would remain intact.

The new maintenance building would be architecturally compatible with the neighborhood and would be partially screened from the view of the Pettegrove-Livingstone house. However, maintenance operations will require parking and storage facilities as well, adding a developed character to the landscape. Even with mitigations such as screening, this alternative would result in an adverse, direct, long-term, moderate impact to cultural landscapes associated with both the Pettegrove-Livingstone house and the McGlashan-Nickerson house. Construction of the ranger station along the parking circle would have a negligible impact on both cultural landscapes associated with the houses because it would be more than 100 yards away and mostly out of view of both houses.

Cumulative Effects

This alternative would include construction of two new facilities on-site, adding to the visitor facilities (parking circle, vault toilet, and interpretive trail) already on-site. The site of the former Lane-Robb house on St. Croix Drive would remain an open space, which would be a minor beneficial effect. There are no other past, present, or reasonably foreseeable future actions that would cumulatively affect the site's cultural landscapes. Cumulatively, there would be an overall adverse, direct, long-term, moderate effect on the cultural landscapes associated with the historic houses.

Conclusion

Alternative B would result in adverse, direct, long-term, moderate impacts to the cultural landscapes by adding a building with significantly larger mass (maintenance building) within the vicinity of both the McGlashan-Nickerson house and Pettegrove-Livingstone house cultural landscapes. There would be no impairment to cultural landscapes under this alternative.

Impact of Alternative C (NPS Preferred Alternative) and Alternative D

In these alternatives, a ranger station would be built adjacent to the parking circle, and an expanded maintenance facility would be constructed on the location of the Lane-Robb House on St. Croix Drive. In Alternative C, housing would be provided for two employees on-site within one or both of the new buildings. In Alternative D, no housing would be included in either structure. Both new structures would be designed to be architecturally compatible and in scale with the neighborhood and would be partially screened with vegetation. The addition of the two structures would not diminish the National Register eligibility of either the McGlashan-Nickerson or Pettegrove-Livingstone Houses.

Neither of the new structures would be viewed from the Pettegrove-Livingstone house, and with the removal of the maintenance shed next to the McGlashan-Nickerson house, there would be a beneficial, direct, long-term, minor effect on the cultural landscapes of those houses under both alternatives.

Cumulative Effects

Alternatives C and D would have a beneficial effect on the cultural landscapes of both the McGlashan-Nickerson and the Pettegrove-Livingstone houses because the maintenance shed would be removed. Building a new maintenance facility on St. Croix Drive would have a negligible impact on the McGlashan-Nickerson house cultural landscape because landscape impacts would be mitigated by vegetative screening. Under both alternatives, this action would have an overall beneficial, direct, minor, long-term cumulative effect on the cultural landscapes of both historic houses when considered with other past, present, and reasonably foreseeable future actions.

Conclusion

Because there would be no adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of SACR; 2) key to the natural or cultural integrity of the site; or 3) identified as a goal in the site's general management plan or other relevant NPS planning documents, there would be no impairment of the site's resources or values. Implementation of either of these alternatives would not result in any unacceptable impacts and is consistent with §1.4.7.1 of *NPS Management Policies* (2006).

§106 Summary

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 either the NPS preferred alternative or Alternative D would have no adverse effect on cultural landscapes at SACR.

3.2.4 Archeological Resources

There are remnant archeological features associated with the historic Red Beach industrial complex along the shoreline. These archeological resources have been disturbed and lack integrity. One National Register eligible archeological site (ME Site 97.9) lies outside the area of potential effects for this EA (Pendery 2002).

For purposes of analyzing impacts to archeological resources either listed in or eligible to be listed in the National Register, the thresholds of change for intensity of an impact are defined below:

- Negligible:* Impact is at the lowest levels of detection—barely measurable with no perceptible consequences, either adverse or beneficial, to archeological resources. For purposes of §106, the determination of effect would be no adverse effect.
- Minor:* *Adverse:* Disturbance of a site(s) results in little, if any, loss of significance or integrity and the National Register eligibility of the site(s) is unaffected. For purposes of §106, the determination of effect would be no adverse effect.
- Beneficial:* Maintenance preservation of a site(s). For purposes of §106, the determination of effect would be no adverse effect.
- Moderate:* *Adverse:* Disturbance of a site(s) does not diminish the significance or integrity of the site(s) to the extent that its National Register eligibility is jeopardized. For purposes of §106, the determination of effect would be adverse effect.
- Beneficial:* Stabilization of the site(s). For purposes of §106, the determination of effect would be no adverse effect.
- Major:* *Adverse:* Disturbance of a site(s) diminishes the significance and integrity of the site(s) to the extent that it is no longer eligible to be listed in the National Register. For purposes of §106, the determination of effect would be adverse effect.
- Beneficial:* Active intervention to preserve the site. For purposes of §106, the determination of effect would be no adverse effect.

Impacts of Alternative A (No Action Alternative)

The Alternative A would result in no facilities being constructed at SACR. As a result there would be no ground disturbances that would affect archeological resources.

Cumulative Effects

As there would be no effects from Alternative A on archeological resources, there would be no cumulative effects.

Conclusion

There will be no effects on archeological resources from Alternative A, and no impairment would result from this alternative.

Impacts of Alternative B

A maintenance facility would be constructed at the location of the current maintenance shed. Archeological testing was completed on the location of the maintenance shed before it was constructed; no archeological resources were identified there (S. Pendery, NPS archeologist, personal comm.)

The proposed location for a ranger station and adjacent land have been extensively disturbed by past historic activity related to the Red Beach industrial complex and construction activities associated with NPS administration of the site, including installing the paved access road and parking lot. Archeological surveys prior to that undertaking did not identify National Register eligible resources within the area of potential effects for proposed facilities (Pendery 2002). Therefore, Alternative B would result in negligible effects to archeological resources.

Cumulative Effects

As stated above, past construction activities for facility development occurred on an area that had been disturbed in the mid-1800s to early 1900s. Therefore, there would be negligible cumulative effects on archeological resources.

Conclusion

Alternative B would result in negligible effects to archeological resources, and there would be no impairment.

Impacts of Alternative C (NPS Preferred Alternative) and Alternative D

The proposed location for a maintenance facility in this alternative is on the site of the Lane-Robb house. The area

has been extensively disturbed by past historic activity, including construction of the Lane-Robb house, its well, septic system, and driveway. No National Register archeological resources are known to be present at this location. The impacts to the area of the proposed ranger station would be the same as for Alternative B. Therefore, there would be negligible impacts to archeological resources as a result of implementing either Alternative C or Alternative D.

Cumulative Effects

No other past, present, or reasonably foreseeable future actions would affect archeological resources at Red Beach in SACR. Therefore, when combined with the proposed alternatives, there would be negligible effects on archeological resources.

Conclusion

Because there would be no adverse impacts to a resource or value whose conservation is 1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of SACR; 2) key to the natural or cultural integrity of the site; or 3) identified as a goal in the site's general management plan or other relevant NPS planning documents, there would be no impairment of the site's resources or values. Implementation of this alternative would not result in any unacceptable impacts and is consistent with §1.4.7.1 of *NPS Management Policies* (2006).

§106 Summary

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 preferred alternative would have no adverse effect on the archeological resources of SACR.

3.3 VISITOR USE AND EXPERIENCE

SACR is staffed and accessible by vehicles from mid-April through mid-November. In 2007, a vehicle counter was installed on the main paved driveway to estimate the number of vehicles at SACR. There were 5,159 vehicles counted entering and exiting the main driveway at SACR in 2007 between the months of May through mid-November. From 2000 until 2007, park staff recorded the number of visitors that were personally contacted. Visitor contacts increased from 120 in 2000 to 6,437 in 2007. Part of this increase can be attributed to increased staffing and public attention to the site over those years, in large part due to the 400th anniversary in 2004 of the settlement of the site by the French.

Visitors to Red Beach can view Saint Croix Island from the interpretive trail shelter or boat launch. A universally accessible vault toilet is available when the site is open. Both buses and passenger vehicles can access the site using the main paved road. Fifteen car and one bus or recreational vehicle parking spaces are available. Visitors gain an appreciation for the history, resources, and significance of the site through the bronze statues and interpretive displays on the trail, from a limited number of exhibits and educational sales items at the McGlashan-Nickerson house, and by speaking with a ranger or attending a ranger-led program. However, it has been estimated that up to 90% of visitors to the site do not visit the McGlashan-Nickerson house (M. Scheid, SACR ranger, personal comm.), and the house is not universally accessible.

In the off-season, the site is not open to visitors. Interpretive exhibits and the bronze statues are covered to protect them from the elements. The gate to the site is closed, but when not blocked by snow, visitors may access the site by parking in front of the gate or along St. Croix Drive and walking down to the interpretive trail or shoreline.

Intensity Level Definitions

SACR was established to preserve and protect the site of one of the first French settlements in the New World for the benefit and enjoyment of the public. The methodology used for assessing intensity levels of impacts to visitor use and experience is based on how use of existing and construction of new facilities would affect the visitor, particularly with regards to the visitors' enjoyment of the site's resources. There have been no surveys to measure visitor satisfaction at SACR. Therefore, effects on visitor experience are based on the best professional judgment of NPS staff. The thresholds for this impact assessment, both adverse and beneficial, are as follows:

Negligible: Visitors would not be affected or changes in visitor use and/or experience would be below or at the level of detection. Any effects would be short-term. The visitor would not likely be aware of the effects associated with the alternative.

- Minor:* Changes in visitor use and/or experience would be detectable, although the changes would likely be short-term. The visitor would be aware of the effects associated with the alternative, but the effects would be slight.
- Moderate:* Changes in visitor use and/or experience would be readily apparent and likely long-term. The visitor would be aware of the effects associated with the alternative, and would likely be able to express an opinion about the changes.
- Major:* Changes in visitor use and/or experience would be readily apparent and have substantial long-term consequences. The visitor would be aware of the effects associated with the alternative and would likely express a strong opinion about the changes.

Impacts of Alternative A (No Action Alternative)

There would be no change to visitor experiences from maintaining the current administrative and visitor orientation facilities at SACR. Only a small percentage of visitors to the site would use the McGlashan-Nickerson house because it is more than 140 yards distant from the main section of the park that visitors use. Exhibit and other interpretive space would be limited because of the layout of the house. Restrooms would not be accessible to persons with disabilities, unless major alterations would be made to increase the size of interior doors and the first-floor restroom, and a ramp was installed to provide access to the front porch. Restrooms at the house would be shared with on- and off-duty staff. There would continue to be very limited parking for vehicles at the McGlashan-Nickerson house, and it would not be accessible to those driving large vehicles because no turning space would be installed and the driveway would remain narrow, with a grass and gravel surface. There would be adverse, direct, long-term, moderate effects on visitor experience under this alternative.

Cumulative Effects

Other past, present, and reasonably foreseeable future, actions that could affect visitor use and experience include acquisition of the McGlashan-Nickerson house, closure of the Downeast Heritage Museum in Calais, and visitor facilities installed at the site in 2003. Acquiring the McGlashan-Nickerson house provided a place to provide some basic interpretive programs and services, although the location of the house on the site prevents many visitors from finding and using these services. Closure of the Downeast Heritage Museum is anticipated to increase the need for visitor services. Visitor facilities installed by the NPS in 2003 enhanced visitor experiences by providing a public restroom, improved paved access, parking, and interpretive trail. When these past, present, and reasonably foreseeable future actions are added to the effects of Alternative A, there would be adverse, direct, long-term, moderate, cumulative effects on visitor experiences.

Conclusion

Alternative A would result in no change in visitor experiences at SACR and would not meet NPS goals and objectives. There would be adverse, direct, long-term, moderate effects on visitor experience under this alternative.

Impacts of Alternatives B, C, and D

All action alternatives (B–D) would result in a beneficial, direct, long-term, moderate effect on visitor use and experience by providing universally accessible, enhanced educational exhibits and other facilities in the new ranger station, including indoor restrooms and covered spaces for educational ranger talks during inclement weather. These facilities would allow visitors an enhanced opportunity to gain an appreciation for the site’s history and significance. There might be adverse, short-term, negligible impacts on visitor experiences during facility construction, but construction of both the ranger station and maintenance facility would be timed to avoid the months of highest visitation to minimize these effects as much as possible. Alternatives B through D would equally meet NPS goals and objectives of enhancing visitor education and services by providing a universally accessible ranger station with restrooms, sheltered meeting space, and other facilities, and would result in a beneficial, direct, long-term, moderate effect on visitor use and experience.

Cumulative Effects

Other past, present, and reasonably foreseeable future actions that could affect visitor use and experience are outlined above under Alternative A. When these past, present, and reasonably foreseeable future actions are added to the effects of Alternative B, C, and D, there would be beneficial, direct, long-term, moderate cumulative effects on visitor experiences.

Conclusion

Alternatives B through D would equally meet NPS goals and objectives of enhancing visitor education and services by providing a universally-accessible ranger station with restrooms and would result in a beneficial, direct, long-term, moderate effect on visitor use and experience.

3.4 LAND USE

The neighborhood of Red Beach is dominated by one- or two-story, single-family residences on lots ranging in size from approximately 1 to 10 or more acres. There are no commercial entities directly adjacent to or within about one mile of SACR. Land use on private lands is influenced and managed by the City of Calais zoning regulations. There are views from an adjacent residential structure across NPS property to the St. Croix River. In meetings about the FDP, neighbors have expressed concern that any proposed NPS development be similar in scale and architectural design to houses in the neighborhood, and that maintenance activities be screened from views from local houses on St. Croix Drive.

There are several private in-holdings within the authorized boundary. The in-holding closest and most likely to be affected by the proposed actions in Alternatives B through D is the property where the Pettegrove-Livingstone house is located. Residents of that house drive through SACR to access their home and share a driveway that provides access to the existing maintenance shed.

Intensity Level Definitions

Changing the use of or adding buildings to a neighborhood can affect tangible and intangible qualities of the surrounding lands and the quality of life of those who use them. The intensity levels used to assess potential changes, both adverse and beneficial, to land use are defined as follows:

- Negligible:* Land use would not be affected or the effect would be at or below the lower levels of detection and would not have an appreciable effect on quality of life of park neighbors.
- Minor:* The effect would be detectable but would be of a magnitude that would not have an appreciable adverse or beneficial effect on land uses. If mitigation such as screening was needed to offset adverse effects, it would be relatively simple and successful.
- Moderate:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in land use, including changes in traffic levels or types, neighborhood life, and aesthetics in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- Major:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in land use in a manner noticeable to staff and the public and would be markedly different from existing land uses, traffic patterns, and aesthetics. Mitigation measures to offset adverse effects would be needed and could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No Action Alternative)

Alternative A would have no effect on land use at SACR or in the village of Red Beach. Land use would continue to be predominantly residential, and traffic on local roads would continue to be light. Park neighbors in the Pettegrove-Livingstone house would continue to share a driveway with the NPS maintenance staff. The maintenance shed would be partially screened, but visible from that house. Overall, the effects of Alternative A on land use would be negligible because there would be no change in land use. However, this alternative would not meet the goals of the FDP.

Cumulative Effects

All actions would comply with applicable shoreland zoning guidelines, as have previous facility developments. When the effects of this alternative are added to past, present, and reasonably foreseeable actions, there would be negligible cumulative effects on land use.

Conclusion

There would be negligible effects on land use from this alternative.

Impacts of Alternative B

Alternative B could result in changes in the use of the McGlashan-Nickerson house by leasing it to a private or public entity. These changes could be either adverse or beneficial to land uses and cannot be predicted because there is no precedent for this action in the area. The NPS would favor use of the leased house as a residence, because that is how the house has been used in the past. However, other proposed uses would be considered as long as the significant historical features of the structure would be preserved. Because the maintenance facility would be in close proximity to the McGlashan-Nickerson house, leasing the house might be slightly less attractive to a potential lessee than in Alternatives C and D where the maintenance facility would be sited farther away, at the location of the Lane-Robb house.

The new maintenance and ranger station structures that are proposed to be added would be of a size and scale in concert with other development in the neighborhood and would be of a similar architectural scale and style. Placing the maintenance facility closer to the Pettegrove-Livingstone house might be more of an adverse effect on the residents of that house than placing it along St. Croix Drive as in Alternatives C and D. However, overall, there would be a minor effect on land use from this alternative.

Cumulative Effects

All actions would comply with applicable shoreland zoning guidelines, as have previous facility developments. When effects of this alternative are added to past, present, and reasonably foreseeable actions, there would be negligible cumulative effects on land use.

Conclusion

This alternative would have more adverse effects regarding land use to the neighbors occupying the Pettegrove-Livingstone house because the maintenance facility would be placed closer to that property. However, overall there would be negligible effects on land use from this alternative.

Impacts of Alternatives C (NPS Preferred Alternative) and D

The effects of leasing the McGlashan-Nickerson house on land use in these alternatives would be the same as in Alternative B.

As stated above, placing the maintenance facility along St. Croix Drive at the site of the Lane-Robb house would have less effect on the owners of the Pettegrove-Livingstone house but could have greater adverse effect on the owners of the house across the street, and it might alter their view of the St. Croix River. The maintenance shed would be removed from the landscape and the ranger station would be added; therefore, there would be no net addition of structures and negligible effect on land use from these alternatives.

Cumulative Effects

All actions would comply with applicable shoreland zoning guidelines, as have previous facility developments. When added to past, present, and reasonably foreseeable actions, there would be negligible cumulative effects on land use.

Conclusion

Land use would remain little changed in any alternative. New buildings would be in keeping with the scale and style of those in the neighborhood and would be at the same density of development. All of the action alternatives would have the same negligible effects on land use in the vicinity of the park and beyond. The NPS does not anticipate that visitor use at SACR would increase to the level where it would attract commercial uses or change land use on land adjacent to or in the neighborhood of the site. Alternative B might have greater adverse, minor effect on the owners of the Pettegrove-Livingstone house, and alternatives C and D might have slightly greater adverse effect on the owners of the house across St. Croix Drive from the Lane-Robb house. Overall, effects on land use would be negligible.

3.5 PARK OPERATIONS

SACR is currently staffed with one interpretive ranger, who manages park operations, supervises seasonal staff, conducts interpretive programs on- and off-site, provides visitor information, and coordinates outreach to other agencies. Three seasonal interpretive rangers augment the interpretive effort by providing information to visitors, conducting school programs, and providing guided interpretive programs to groups and individuals. As specified in the GMP, interpretive employees are bilingual in English and French, to greet and orient French-speaking (mostly

Canadian) visitors. One employee works spring to fall mowing the grassy areas on the mainland and island, plowing snow, removing trash, and maintaining structures. Urgent law enforcement, emergency response, and fire protection is provided by the City of Calais, and routine response is by park rangers stationed at Acadia National Park, which is a nearly three-hour drive away.

Intensity Level Definitions

Implementation of a project can affect the operations of a park such as the number of employees needed, the type of duties that need to be conducted, when and who would conduct these duties, how activities should be conducted, and administrative procedures. The intensity levels used to assess potential changes to park operations, both adverse and beneficial, are defined as follows:

- Negligible:* Park operations would not be affected or the effect would be at or below the lower levels of detection and would not have an appreciable effect on park operations.
- Minor:* The effect would be detectable but would be of a magnitude that would not have an appreciable adverse or beneficial effect on park operations. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.
- Moderate:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- Major:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in park operations in a manner noticeable to staff and the public and would be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed and could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No Action Alternative)

Alternative A would result in no changes in park operations but would not meet the goals and objectives of the FDP. There would be an adverse, direct, long-term, moderate effect on park operations. The condition of the McGlashan-Nickerson house would continue to deteriorate, and, without major rehabilitation, the building would be increasingly expensive and difficult to operate. Rising utility costs could put increased pressure on park managers to reduce other costs, such as staffing and visitor services, to stay within operational budgets. Health and safety issues would be addressed as budgets allow. One winter staff person would continue to work off-site in an effort to reduce energy costs. Without new and enhanced maintenance facilities, park maintenance operations would continue to operate but at a lower efficiency because operations would be restricted by inadequate storage and work space, and unheated work areas for use in spring and fall. Storage and servicing vehicles and equipment would continue to take place at Acadia National Park facilities.

Because temporary seasonal housing is generally not available in the private sector, the McGlashan-Nickerson house would continue to be used for housing summer season employees. Employee morale might continue to suffer by having to reside in dual-use quarters, sharing restroom facilities with visitors, and having little privacy. Park administrative operations would be hindered by having to share an inefficient space with off-duty employees using the house as a residence. Limited housing opportunities in the community could hinder NPS efforts to hire bilingual interpretive rangers.

Cumulative Effects

Facility improvements in 2003 and the acquisition of the McGlashan-Nickerson and Lane-Robb houses affected park operations by increasing the costs of NPS maintenance and operation. When the effects of these actions are added to the effects of Alternative A, there would be direct, long-term, moderate cumulative effects on park operations.

Conclusion

Overall, park operations would continue to be inefficient and would not meet the objectives of the GMP and the FDP. Therefore, this alternative would result in an adverse, direct, long-term, moderate effect on park operations.

Impacts of Alternative B

Under Alternative B, the expense of rehabilitating, maintaining, and operating the McGlashan-Nickerson house might be transferred to a lessee as a condition of a lease, thus saving significant public expense. This action could help protect the building while freeing SACR operating funds for other priorities. However, the likelihood of finding a lessee is unknown.

Unlike Alternative D, Alternative B would allow park managers to hire one seasonal employee without concern about finding housing for that employee in the private or public sectors, but one other employee would be required to find housing off-site. It would also provide greater separation between daily site operations and employee housing, although quarters would still be located in a building shared with park operations—either the ranger station or the maintenance facility. Rental income from one housing unit would be used to offset operational costs of housing, thus providing some return to operational expenses, although those returns would be negligible in terms of total operating costs and would not be as much as in Alternative C where there would be rental income from up to two employees.

Having an employee living on-site might enhance how quickly emergency personnel could respond in case of a fire, personal injury, criminal, or other incident because they could call the Calais police or fire department. Having an employee living in the ranger station might lessen the likelihood of vandalism (than in Alternatives A or D) because there would be a park presence after business hours near the areas of highest use and resources at risk. However, locating quarters in the maintenance building would provide about the same amount of presence as Alternatives A or D, because employees would be farther away from the areas at greatest risk of vandalism.

This alternative would have a beneficial, direct, long-term, moderate effect on operations, provided that a lessee could be found to lease the McGlashan-Nickerson house.

Cumulative Effects

The acquisition of the McGlashan-Nickerson house and previous development of visitor facilities on the site has enhanced park operations by providing additional facilities. However, the cost of maintaining those facilities, especially the McGlashan-Nickerson house, is greater than the financial resources available to the NPS. Therefore, this alternative, when added to past, present, and reasonably foreseeable actions, would result in beneficial, direct, long-term, moderate effects on park operations.

Conclusion

This alternative would result in beneficial, direct, long-term, moderate effects to park operations, although these benefits would be less than those provided by Alternative C.

Impacts of Alternative C (NPS Preferred Alternative)

The impacts to the operation of the McGlashan-Nickerson house would be identical to those of Alternative B.

Under Alternative C, quarters for two employees would be provided in either the ranger station or maintenance facility, or both. This would cost more initially to build, and, over the long-term, it would be more expensive to operate than Alternatives B or D, but some operational costs would be offset by rental income. Assuring housing for two seasonal employees would greatly enhance hiring opportunities because the availability of housing could be guaranteed.

Having two employees living on-site might provide the greatest opportunity for quickly summoning emergency personnel to respond in case of a fire, personal injury, criminal, or other incident because there would be a greater likelihood that a park employee would be present on-site and could call the Calais police or fire department after business hours. In addition, there might be a reduced incidence of vandalism under this alternative because there is a greater likelihood that at least one employee would be housed in the ranger station and would be closer to the primary visitor use areas.

This alternative would have a beneficial, direct, long-term, moderate effect on park operations, providing a lessee could be found to lease the McGlashan-Nickerson house.

Cumulative Effects

The acquisition of the McGlashan-Nickerson house and previous development of visitor facilities on the site has

enhanced park operations by providing additional facilities. However, the cost of maintaining those facilities, especially the McGlashan-Nickerson house, is greater than the financial resources currently available to the NPS. Because two employees would be housed on-site, rather than one, the beneficial effects related to having housing on-site would be greater in this alternative than Alternative B. While initial building costs would be greater in this alternative, in the past it has been easier to compete for and acquire NPS project funding for construction than for operations. Therefore, this alternative, when added to past, present, and reasonably foreseeable actions, would result in beneficial, direct, long-term, moderate effects on park operations.

Conclusion

This alternative would have a beneficial, direct, long-term, moderate effect on park operations, providing a lessee could be found to rent the McGlashan-Nickerson house. It would provide the most flexibility for recruiting and retaining seasonal employees by guaranteeing housing for up to two seasonal employees. Having employees living on-site in the summer could enhance response time in the event of an emergency or crime and could reduce the risk of vandalism. Initial costs of constructing housing would be the highest of the alternatives, but these funds have traditionally been more available than operational funds, and there would be more revenue generated to off-set housing expenses over the long-term.

Impacts of Alternative D

The impacts to the operation of the McGlashan-Nickerson house would be identical to those of Alternatives B and C. However, under this alternative, no employees would be housed on-site, reducing initial costs of building quarters, reducing costs associated with operating quarters, but also reducing rental income. The greatest adverse impact on operations would be the uncertainty of seasonal employees being able to find housing in the private sector. Also, there could be an increased risk in the summer to visitors and site resources because there would be no employee presence on-site after business hours. Therefore, Alternative D would have minor, rather than moderate, long-term, direct beneficial effects.

Cumulative Effects

The acquisition of the McGlashan-Nickerson house and previous development of visitor facilities on the site has enhanced park operations by providing additional facilities. However, the cost of maintaining those facilities, especially the McGlashan-Nickerson house, is greater than the financial resources currently available to the NPS. Because no employees would be housed on-site, the beneficial effects would be less than Alternatives B and C related to having housing on-site. Initial building costs for building the ranger station and maintenance facility would be less than in Alternatives B and C and less over the long-term but would not meet all NPS goals and objectives. Therefore, this alternative, when added to past, present, and reasonably foreseeable actions, would result in a beneficial, direct, long-term, minor effect on park operations.

Conclusion

Alternative A would not meet NPS facility goals. Alternatives B, C, and D would have the greatest beneficial impact on park operations over the long-term because they could greatly reduce NPS rehabilitation and operational costs associated with the McGlashan-Nickerson house. Alternatives B and C would provide guaranteed housing to seasonal employees and an NPS presence after-hours in the summer, thus reducing the risk of vandalism to site resources and enhancing emergency response by increasing the likelihood that after-hours incidents would be reported in a timely manner in the summer. However, these alternatives would have the highest construction costs. Alternative D could adversely affect recruiting bilingual seasonal interpretive rangers because the availability of housing in the private sector would be uncertain, and therefore Alternative D would have minor, rather than moderate, long-term, direct, beneficial effects.

3.6 HUMAN HEALTH AND SAFETY

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

Intensity Level Definitions

The intensity levels used to assess potential changes to human health and safety are defined as follows:

- Negligible:* Human health and safety would not be affected or the effect would be at or below the lower levels of detection, and would not have an appreciable effect on health and safety.
- Minor:* The effect would be detectable but would be of a magnitude that would not have an appreciable adverse or beneficial effect on health or safety. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.
- Moderate:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in health and safety, with the possibility to substantially affect staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- Major:* The effects would be readily apparent and would result in a substantial adverse or beneficial threat to the health and safety of staff or the public. Mitigation measures to offset adverse effects would be needed and could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No Action Alternative)

Alternative A would result in continued threats to health and safety and would not meet the goals and objectives of the FDP. The McGlashan-Nickerson house would continue to be deficient in modern health and safety standards for utility systems, stairways, and condition. It would continue to contain both interior and exterior lead paint, which requires expensive and careful annual maintenance for continued containment. Radon levels would be above the state and federal limits for air and would need to be addressed for continued use of the building as a public contact station and for housing. This alternative would result in an adverse, direct, long-term, moderate effect on human health and safety.

Cumulative Effects

Previous development actions, particularly establishment of a public restroom, have improved human health and safety. Alternative A would make no changes in the cumulative effects of facilities development on human health and safety.

Conclusion

Alternative A would not meet human health and safety standards, although over time, health and safety issues would continue to be addressed as funding allows. There would be an adverse direct, long-term, moderate effect on human health and safety.

Impacts of Alternatives B, C (NPS Preferred), and D

Under Alternatives B, C, and D, the McGlashan-Nickerson house would be rehabilitated by a lessee as a condition of the lease. Lead paint would be contained or abated as necessary. Radon would be mitigated. New ranger station and maintenance buildings would be constructed in accordance with current building codes and human health and safety guidelines including construction of new water and sewage systems. Alternatives B, C, and D would result in a beneficial, direct, long-term, moderate effect on human health and safety.

Cumulative Effects

Previous development actions, particularly establishment of a public restroom, have slightly improved human health and safety at SACR. Alternatives B, C, and D would add to the beneficial cumulative effect, resulting in a beneficial, direct, long-term, moderate, cumulative effect.

Conclusion

Alternative A would not meet human health and safety standards. Alternatives B, C, and D would remove the public risk of lead paint and radon exposure and would meet human health and safety standards.

3.7 RESOURCE CONSERVATION, INCLUDING ENERGY AND POLLUTION PREVENTION

Resource conservation relates to the construction and operation of facilities at the mainland portion of SACR, including consumption of natural resources (including energy use) and light pollution. This impact topic considers alternative treatments of the McGlashan-Nickerson house to enhance energy efficiency.

Intensity Level Definitions

The intensity levels used to assess potential changes to resource conservation are defined as follows:

- Negligible:* Resource conservation would not be affected or the effect would be at or below the lower levels of detection, and would not have an appreciable effect on resource conservation, including energy use, and pollution prevention.
- Minor:* The effect would be detectable but would be of a magnitude that would not have an appreciable adverse or beneficial effect on resource conservation. If mitigation were needed to offset adverse effects, it would be relatively simple and successful.
- Moderate:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in resource conservation in a manner noticeable to staff and the public. Mitigation measures would probably be necessary to offset adverse effects and would likely be successful.
- Major:* The effects would be readily apparent and would result in a substantial adverse or beneficial change in resource conservation in a manner noticeable to staff and the public and would be markedly different from existing operations. Mitigation measures to offset adverse effects would be needed and could be expensive, and their success could not be guaranteed.

Impacts of Alternative A (No Action Alternative)

Alternative A would result in no change in resource conservation but would not meet the goals and objectives of the FDP. The McGlashan-Nickerson house would require approximately 1,800 gallons of fuel oil to heat throughout the fall, winter, and spring. Funding to rehabilitate the house and make it more energy efficient would continue to be limited. Transporting vehicles and equipment to Acadia National Park for storage and servicing would continue to expend a small amount of fuel. Outdoor lighting would not protect the dark night sky. This alternative would result in an adverse, direct, long-term, moderate effect on energy conservation.

Impacts of Alternative B

Under Alternative B, the McGlashan-Nickerson house would be rehabilitated by a lessee as a condition of the lease.

A new ranger station and maintenance building would be constructed, as much as practicable, in accordance with the NPS's *Guiding Principles of Sustainable Design* and Executive Order 13423: *Strengthening Federal Environmental, Energy, and Transportation Management*. These require 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 would be prevented by using full cut-off fixtures and restricting outdoor lighting to the minimum necessary to ensure safety and security.

Moderate gains in resource conservation of the McGlashan-Nickerson house would be offset somewhat in constructing and operating two new facilities: the ranger station and the maintenance facility. Therefore, this alternative would have a beneficial, direct, long-term, minor effect on resource conservation. This assessment is dependent on a lessee renting and rehabilitating the McGlashan-Nickerson house to make it more energy efficient.

Impacts of Alternative C (NPS Preferred Alternative)

Treatment of the McGlashan-Nickerson house and construction of new facilities would be the same as in Alternative B, except that the location of the maintenance building would move to the site of the Lane-Robb house. Housing two employees rather than one (as in Alternative B) would have no measurable change in impact on resource conservation because the size and cost of operating the buildings would not change. Therefore, the impacts of this alternative on resource conservation would be identical to those of Alternative B.

Impacts of Alternative D

The impacts to the operation of the McGlashan-Nickerson house would be identical to those of Alternatives B and C. Under this alternative, no employees would be housed on-site, increasing resource conservation during both initial construction and long-term resource use because the new buildings could be slightly smaller in size. This alternative would be the most resource conservative of all alternatives, resulting in a beneficial, direct, long-term, moderate effect on resource conservation.

Cumulative Effects

There are no past, present, or reasonably foreseeable future actions that affect resource conservation. Therefore, cumulative effects of each alternative would remain unchanged from those described above.

Conclusion

Alternative A would not meet NPS facility goals and would result in an adverse, direct, long-term, moderate effect on resource conservation. While Alternatives B and C would require an initial investment of resources, they would have a beneficial, direct, long-term, minor impact on resource conservation because new facilities would incorporate principles of sustainable design and construction and would be more energy-efficient to maintain over the long term. It would be in the lessee's best interest to invest in energy saving steps to reduce long-term costs of operating the building, so these measures would be more likely to happen and would not be dependent on limited NPS funding as in Alternative A. All new buildings would be designed, constructed, and operated based on the NPS's *Guiding Principles of Sustainable Design* and Executive Order 13423: *Strengthening Federal Environmental, Energy, and Transportation Management*. Of the action alternatives, Alternative D would be slightly more resource conservative than Alternatives B and C because the size of the new buildings could be slightly smaller and operational costs related to energy use would be slightly less if they did not contain housing units for seasonal employees. Alternative D would have a beneficial, direct, long-term, moderate impact on resource conservation.

4 Consultation and Coordination

4.1 EXTERNAL SCOPING

The National Environmental Policy Act (NEPA) requires federal agencies preparing environmental assessments to consult with stakeholders, including the general public and appropriate federal, state, and local regulatory agencies, early in the planning process to identify issues and concerns. External (public) scoping was conducted to inform various agencies and the public about the proposal to develop facilities at Saint Croix Island International Historic Site (SACR) and to generate input on the preparation of this Environmental Assessment/Assessment of Effect (EA).

Between April 23, 2007, and March 4, 2008, representatives from the National Park Service (NPS) met with five different groups of park neighbors and, during the same period, community members and other interested individuals as noted below, to determine issues and concerns related to facility development at SACR, and obtain information that could inform the development of the Facilities Development Plan (FDP). Specifically, Park Ranger Meg Scheid and/or NPS Planner John Kelly met with or communicated by telephone or e-mail about the plan with representatives from the following organizations:

April 24, 2007	Past president and one member, Saint Croix Historical Society
April 24, 2007	Jim Porter, Acting City Manager and Code Enforcement Officer, City of Calais
May 14, 2007	Vicki Farrell, Manager, Calais Information Center, Maine Tourism Association
May 16, 2007	Jim Thompson, Executive Director, Downeast Heritage Museum, Calais
July 2007	Judy East, County Planner, Washington County Council of Governments
October 2007	Bill Kolodnicki, Refuge Manager, Moosehorn National Wildlife Refuge, USFWS
December 21, 2007	Claude DeGrâce, Manager of Historic Sites, Parks Canada
January 13, 2008	Harold Clossey, Executive Director, Sunrise County Economic Council
March 4, and Sept. 16, 2008	Diane Barnes, City Manager, City of Calais, Maine
March 4, 2008	Lee Sochasky, St. Croix International Waterway Commission

Park Planner John Kelly and Cultural Resources Specialist Rebecca Cole-Will met with Donald Soctomah, Passamaquoddy Tribal Historic Preservation Officer, on July 19, 2007, in Bar Harbor. On May 13, 2008, Park Ranger Meg Scheid and Ms. Cole-Will met with Mr. Soctomah at SACR. Ms. Cole-Will also met with the Maine Historic Preservation Commission staff on March 23, 2007.

4.2 INTERNAL SCOPING

Issues related to the potential use and treatment of the newly acquired Lane-Robb and McGlashan-Nickerson houses and visitor facility and operational needs were identified in a report by SACR Ranger Meg Scheid prior to a meeting of park managers held on November 2, 2005 (NPS 2005). The formal planning process to create a Facilities Development Plan began in March 2007, when an interdisciplinary team of professionals met at Acadia National Park to review SACR General Management Plan guidance, evaluate existing conditions and studies, and interview SACR staff to identify issues and inform the planning process. From this meeting, the park staff established plan goals and objectives, identified issues, and brainstormed a number of alternative treatments to address visitor and operational needs. Additional meetings and site visits with the planning team have further refined this EA.

4.3 INTERAGENCY CONSULTATION

Federal, state, and local agencies that have jurisdiction over implementing the plan are being contacted to determine permitting and other compliance requirements for implementing the plan. Copies of this EA are being provided to each agency and to other individuals listed in section 4.4. The following agencies will be requested to provide a determination of permitting requirements under their respective jurisdiction.

U.S. Army Corps of Engineers, regarding Clean Water Act
U.S. Fish and Wildlife Service, regarding Section 7, Endangered Species Act
Maine Department of Environmental Protection, regarding Maine Natural Resources Act
Maine Department of Inland Fisheries and Wildlife, regarding Maine Natural Resources Act
Maine State Historic Preservation Commission, regarding Section 106, National Historic Preservation Act

Coastal Program, Maine State Planning Office, regarding Federal Consistency with core laws of the Maine Coastal Program (Coastal Zone Management Act)
City of Calais, Maine, regarding Maine Mandatory Shoreland Zoning Act and Floodplain Management

4.4 ENVIRONMENTAL ASSESSMENT/ASSESSMENT OF EFFECT REVIEW AND LIST OF RECIPIENTS

This EA is available for public review and comment until the closure of the 30-day public review and commenting period, expected to close on February 4, 2009. During this time, the public is encouraged to submit their written comments to the NPS address provided at the beginning of the document, or at the SACR Facilities Development Plan website at www.parkplanning.nps.gov using the Internet. To inform the public of the availability of the EA, the NPS will publish and distribute a letter or press release to various agencies, tribes, and members of the public. As indicated below, it has been distributed to a number of interested individuals, agencies, and organizations, including those agencies referenced in section 4.3 of this EA. This EA is available on the Internet at www.parkplanning.nps.gov and is being made available in local libraries during the review period. Following the close of the comment period, all public comments will be reviewed and analyzed prior to the release of a decision document and final Facilities Development Plan.

4.4.1 International, Federal, State and Local Agencies

Diane Barnes, City Manager, City of Calais, Maine
James Beyer, Maine Department of Environmental Protection
Todd Burrowes, Federal Consistency Coordinator, Maine Coastal Program
Jay Clement, Maine Project Office, U.S. Army Corps of Engineers
Skip Cole, Superintendent, Roosevelt-Campobello International Park
Claude DeGrâce, Parks Canada
Vicki Farrell, Manager, Calais Information Center, Maine Tourism Association
Tim Henderson, Town Manager, St. Andrews, New Brunswick, Canada
Bill Kolodnicki, Refuge Manager, Moosehorn National Wildlife Refuge
Mark McCollough, Endangered Species Biologist, U.S. Fish and Wildlife Service
Jim Porter, Code Enforcement Officer, City of Calais, Maine
Tom Schaeffer, Regional Biologist, Maine Department of Inland Fisheries and Wildlife
Earle Shettleworth, Jr., Historic Preservation Officer, Maine Historic Preservation Commission
Hendrik Slegtenhorst, City Manager, St. Stephen, New Brunswick, Canada

4.4.2 Community Organizations and Interested Individuals

St. Croix Valley Chamber of Commerce
Maine Chapter of the Sierra Club
National Parks and Conservation Association
Saint Croix Historical Society
Saint Croix International Waterway Commission
Sunrise County Economic Council
Washington County Council of Governments

4.4.3 Federally Recognized Tribes in Maine

Aroostook Band of Micmacs, Victoria Higgins, Acting Chief
Houlton Band of Maliseet Indians, Brenda Commander, Chief
Houlton Band of Maliseet Indians, Sharri Venno, Environmental Planner
Passamaquoddy Tribe-Indian Township, William Nicholas, Chief
Passamaquoddy Tribe-Pleasant Point, Richard Phillips-Doyle, Chief
Passamaquoddy Tribal Historic Preservation Office, Donald Soctomah
Penobscot Indian Nation, Kirk Francis, Chief
Penobscot Nation, Bonnie Newsom, Tribal Historic Preservation Officer

4.4.4 Libraries

Calais Free Library, Calais, Maine
Peavey Memorial Library, Eastport, Maine
Ross Memorial Library, St Andrews, New Brunswick, Canada
St. Croix Public Library, St. Stephen, New Brunswick, Canada

4.4.5 Press Releases

Press releases were submitted to the following organizations and individuals:

Bangor Daily News

Maine House of Representatives

Maine Publicity Bureau

Machias Valley News

St. John Valley Times

St. Croix Courier

Telegraph Journal

Quoddy Tides

U.S. Senators

U.S. Representatives

WLBZ Television Station

WQCB-FM Radio Station

WQDY Radio Station

WVII- TV

4.4.6 List of Preparers

Preparers (developed EA content):

Acadia National Park/Saint Croix Island International Historic Site:

Rebecca Cole-Will, Cultural Resource Program Manager

Judith Hazen Connery, Biologist/NEPA Compliance Coordinator

Clay Gilley, Park Engineer

Virginia Reams, Writer/Editor

Meg Scheid, Park Ranger (SACR)

Reviewers/Consultants (provided information):

Acadia National Park/Saint Croix Island International Historic Site:

John T. Kelly, Park Planner

Sheridan Steele, Park Superintendent

James Vekasi, Chief of Maintenance

Deb Wade, Chief of Interpretation

Stuart West, Acting Chief Ranger

National Park Service, Northeast Regional Office:

David Clark, Senior Environmental Compliance Specialist

Richard Crisson, Architectural Historian

Eliot Foulds, Historic Landscape Architect

Elizabeth Igleheart, Historian

Steven Pendery, Senior Archeologist

Chuck Smythe, Ethnographer

David Uschold, Compliance Manager/Regional Section 106 Coordinator

Paul Weinbaum, Historian

5 Acronyms and References

5.1 ACRONYMS

CFR	Code of Federal Regulations
EA	Environmental Assessment
DO	Director's Order
FDP	Facilities Development Plan
GMP	General Management Plan, SACR
IDT	Interdisciplinary Team
LNG	Liquefied Natural Gas
NEPA	National Environmental Policy Act of 1969
NHPA	National Historic Preservation Act of 1966
NPS	National Park Service
SACR	Saint Croix Island International Historic Site
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service

5.2 REFERENCES

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6 Appendices

6.1 INELIGIBILITY OF LANE-ROBB HOUSE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES



MAINE HISTORIC PRESERVATION COMMISSION
55 CAPITOL STREET
65 STATE HOUSE STATION
AUGUSTA, MAINE
04333

JOHN ELIAS BALDACCI
GOVERNOR

EARLE G. SHETTLEWORTH, JR.
DIRECTOR

May 8, 2007

Rebecca Cole-Will
Acadia National Park
P.O. Box 177
Bar Harbor, Maine 04609-0177

Dear Ms. Cole-Will:

The Commission has reviewed the information that you provided to us at our recent coordination meeting relating to historic properties along St. Croix Drive in the Red Beach area of Calais. This material consists of recent color photographs, as well as a copy of the 19th century atlas map and bird's eye view of this settlement. The purpose of this consultation is to ascertain whether the area, including the Lane-Robb House, is eligible for listing in the National Register of Historic Places as an historic district.

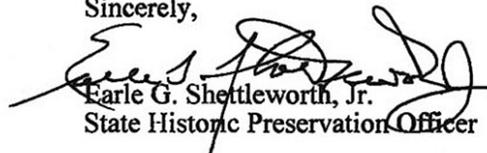
Prior consultation regarding the Lane-Robb House concluded that although it did not appear to be individually eligible for listing in the Register, further study needed to be undertaken to determine if it would be a contributing resource to an historic district. Such a district would, presumably, include the individually listed McGlashan-Nickerson House and the Joshua Pettegrove House, as well as other residential properties along St. Croix Drive.

Based on the photographs, maps and bird's eye view of the area in question, we have concluded that this collection of properties does not constitute a National Register eligible historic district. Although these buildings have an association with the history and development of Red Beach, the collective loss of integrity that is evident in altered or demolished properties and new construction has substantially diminished the area's significance. (Further research on the house at 57 St. Croix Drive would be warranted to ascertain this property's individual eligibility.)

With regard to the Lane-Robb House, in the absence of a district in which it would be a contributing resource, we believe that it is not eligible for listing in the Register. However, we recommend that if the National Park Service cannot adaptively reuse the house, it should be offered to the public to relocate it.

Please do not hesitate to contact Kirk Mohney of my staff if you have any questions relating to this matter.

Sincerely,


Earle G. Shettleworth, Jr.
State Historic Preservation Officer



PHONE: (207) 287-2132

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FAX: (207) 287-2335



Saint Croix Island International Historic Site
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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife, and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interests of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

January 2009

United States Department of the Interior – National Park Service