

Alternative C—Preferred Alternative

Alternative C would incorporate all of the management actions that are “Common to All” as previously described, plus the following alternative-specific actions.

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Cultural Resources	Cultural Landscapes – Alternative C, Preferred Alternative Management actions: <ul style="list-style-type: none"> Same as Alternative B, plus: English Camp: <ul style="list-style-type: none"> The park would partially restore one-half to one acre of the Sandwith orchard to better portray the extent of the orchard during the encampment period. Park staff would replant historically accurate fruit trees in gaps to maintain the late 19th-century character of the orchard. To give visitors an understanding of the role of the Crook family, the park would preserve the number, variety, and style of existing fruit trees in the Crook family orchard through cyclic maintenance and replace individual trees with the same species as needed. Information regarding treatment of the orchards was derived from recent research and past planning efforts. American Camp: <ul style="list-style-type: none"> The historic prairie would be restored on a larger scale than in Alternative B to improve the native species composition, ecological function, and visual quality of the prairie as it existed during the encampment period. Historic and natural values of the prairie are managed to be complementary. This treatment is consistent with the historic landscape report and the cultural landscape inventory.
	Archaeological And Historic Resources – Alternative C, Preferred Alternative Management actions: <ul style="list-style-type: none"> Treatment of archaeological resources would be the same as Alternative A with sites preserved and, if appropriate, interpreted to the public. The historic buildings and structures would be the same as Alternative B, plus historic buildings, if authentic and processing integrity, from the encampment period located on the island would be repatriated back to their original location within the camps. One building, known as the Brown house, is located in Friday Harbor. National Park Service staff would acquire the historic structures from willing sellers and replace them in their exact location. This would be done in accordance with NPS Management Policies regarding movement of historic structures (NPS management policy 5.3.5.4.5). English Camp: <ul style="list-style-type: none"> Part of the barracks would be rehabilitated for combined use as an interpretive exhibit, visitor contact station, and special events facility. Park staff would seek funding to rehabilitate the hospital building and make it available for public interpretation. Treatment of the blockhouse and commissary would be the same as in Alternative B. The Crook house would be stabilized, preserved, and used as an exterior exhibit with interpretive signs and displays that tell the story of the Crook family era. The park would retain the flexibility to potentially use the Crook house in the future for certain adaptive uses if remedial clean-up actions are successful. American Camp: <ul style="list-style-type: none"> The laundress’ quarters would continue to be viewed as an exterior exhibit.

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- The officers' quarters would be open for visitation as a combined interpretive exhibit and study house. One-half of the officers' quarters would be rehabilitated for an exhibit showing a typical officers' quarters; the other half would remain available for study for those interested in the evolution of an historic building and the alterations that have occurred to it over time.

Museum Collections – Alternative C, Preferred Alternative

Management actions:

- A portion of the military-era collections would be relocated to San Juan Island to a collections study room located at either park headquarters or at the visitor center. The study room would meet NPS standards for collections storage. Collections of the encampment era, including some non-military items from locations such as San Juan Town would be readily available to researchers, park staff, and to visitors. Important natural resource items would also be included in the collections study room. These collections will aid park staff in preparing interpretive and other special event programs to the public.
- Prehistoric collections would continue to be maintained by the Burke Museum at the University Of Washington in Seattle.
- Records for museum collections would continue to be maintained at North Cascades National Park.

Natural Resources

Vegetation, Including Special Status Species – Alternative C, Preferred Alternative

Management actions:

English Camp:

- The vegetation on Mitchell Hill has been heavily altered, primarily from timber harvest. If acquired, the NPS would manage the forest to promote progression toward a multiple species stand more characteristic of natural forest succession, similar to what is done elsewhere in the park where farming or forestry occurred prior to acquisition.

American Camp:

- A larger area of the prairie would be replanted in native species or otherwise restored to historic conditions than in Alternatives A and B. Invasive plant species would be eliminated or controlled where feasible. Woody vegetation would be managed to prevent intrusion into portions of the landscape that were open grassland during the historic period.

Wildlife, Including Special Status Species – Alternative C, Preferred Alternative

Management actions:

- A monitoring program would be established to detect species populations in decline, species as indicators of the health of the ecosystem, and monitor for the presence of species of special concern.

Coastal Water Resources And Hydrologic Systems– Alternative C, Preferred Alternative

Management actions:

- As in Alternative B, park staff would inform visitors about the value of bays and surface and subsurface water quality in the watershed.
- The park would work to acquire and manage the intertidal zone within the park. The NPS would seek to exchange the tidelands with DNR. Park staff would work with the county and partner with other adjacent owners to establish a marine preserve at both American and English camps, to be managed collaboratively under the auspices of the County Marine Resources Committee and partner agencies.
- The park would work toward implementing the goals of the NPS Ocean Park Stewardship Action Plan.
- The park would strive to implement the recommendations of the assessment of coastal water resources and watershed conditions at San Juan Island National Historical Park.

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- The park would work together with the Northwest Straits Commission and the San Juan County Marine Resources Commission on education projects and programs related to water issues.

English Camp:

- The park would work with the state, county, and other interested parties in the development of a cooperative management plan for Garrison and Westcott Bays, which would include educating the public and visitors about sustainable boating, mooring, anchorage, human impacts, and the creation of a “no wake” zone in the bays.

American Camp:

- Park staff would coordinate with the Whale Museum and NOAA to add the South Beach shoreline at American Camp to the Whale Watch Voluntary Exclusion Zone, which would extend the protected areas to orca whales by limiting approach of tour boats to one-quarter mile.

Geologic Resources – Alternative C, Preferred Alternative

Management actions:

- Same as “common to all”

Air Quality – Alternative C, Preferred Alternative

Management actions:

- The park would participate and implement the Climate Friendly Parks Program to determine the park’s ecological footprint, and in turn, potentially mitigate certain actions related to climate change.

Visitor Experience

Interpretation And Education – Alternative C, Preferred Alternative

Management actions:

- The park would enhance the interpretation of natural resources such as geology, vegetation, and the human connection to the landscape through additional programs and learning opportunities.
- The park would encourage tribal members to participate in preparation of exhibits/programs that relate to Native American connection with the island.

English Camp:

- As in Alternative B, the park staff would develop a wayside exhibit or other media for interpreting the orchards at English Camp.
- As in Alternative B, the park would develop a visitor use management plan.

American Camp:

- Interpretation of cultural resources would be enhanced over Alternative A. In addition, park sites such as San Juan Town and the Hudson’s Bay Company’s Belle Vue Sheep Farm, the interior of the officers’ quarters, hospital, and any repatriated buildings (potentially two buildings) would be actively interpreted to visitors.

Recreation – Alternative C, Preferred Alternative

Management actions:

- As in Alternative B, the NPS would improve existing roads for bicycling use, and if additional land were acquired, park staff would partner with bicycle user groups to establish and maintain bicycle trails and enforce the proper use of trails.
- As in Alternative B, the NPS would partner with the county to establish new trail connections to connect the park with existing long distance trails. Various routes would be considered.
- The park would support county efforts to implement the concept of an old military road trail connecting English Camp with American Camp, as part of an island-wide trail system.

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	<p>English Camp:</p> <ul style="list-style-type: none"> ▪ The NPS would continue to allow compatible, non-motorized use along the multi-use trails at Mitchell Hill, if acquired. ▪ As in Alternative B, the park would establish an ADA trail between the Crook house and the parade ground for persons with disabilities. ▪ As in Alternative B, the park would work with partners to establish a trail connection between Roche Harbor and the park along the administrative road. <p>Scenic Resources – Alternative C, Preferred Alternative</p> <p>Management actions: Same As Alternative B.</p>
Soundscapes	<p>Soundscapes – Alternative C, preferred alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ Same As Alternative B.
Socioeconomics	<p>Socioeconomics – Alternative C, Preferred Alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ Same as “common to all.”
Facilities	<p>Facilities – Alternative C, Preferred Alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ The VIP sites would be treated the same as Alternative B. <p>English Camp:</p> <ul style="list-style-type: none"> ▪ The Crook house would be stabilized, preserved, and used as an exterior exhibit with interpretive signs and displays about the Crook family era. The park would retain the flexibility to potentially use the Crook house in the future for certain adaptive uses if remedial clean-up actions are successful. ▪ The educational camp would be established at a new site along the administration road. <p>American Camp:</p> <ul style="list-style-type: none"> ▪ The 1979 double-wide trailer serving as the temporary visitor center would be removed and replaced with a permanent 5,400 square foot visitor center at the existing site in American Camp. The building would incorporate sustainable “green” building design including low shielded outdoor lighting. ▪ The existing parking lot would be enlarged to include approximately 30 parking spaces for visitors. ▪ The fire camp would remain in its present location at American Camp, but would be formalized and include minimal improvements, such as bathrooms.
Transportation, Access, And Circulation	<p>Transportation, Access, And Circulation – Alternative C, Preferred Alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ All the following actions would take into consideration preservation of historic road remnants and circulation patterns through compatible uses such as trails and linkages to significant resources within the camps.

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	<p>English Camp:</p> <ul style="list-style-type: none"> ▪ The primitive character of the entrance road at English Camp would be maintained, and the road would be improved to handle increased two-way traffic. Improvements would include paving or chip sealing certain segments of the road where traction or erosion are a problem. Two to three informal turnouts would be created to allow cars approaching each other to pass. ▪ The administrative road into the park from West Valley Road would continue to be for administrative use only. This road may also be used as a trail connecting to other trails outside the park. ▪ The parking lot at English Camp would be maintained in its existing location with additional improvements to control runoff. ▪ As in Alternative B, informal visitor parking access to Young Hill would be formalized by providing several parallel parking spaces along the shoulder of the west side of West Valley Road for easy and safe trail access. <p>American Camp:</p> <ul style="list-style-type: none"> ▪ As in Alternative B, the non-historic existing road to the redoubt from the intersection at Pickett's Lane would be converted to a trail and the redoubt parking lot restored to natural conditions. A small parking lot would be developed by Pickett's Lane. ▪ The parking lot at the existing visitor center would be reconfigured to meet the needs of an enlarged visitor center, including adding ADA-compliant spaces. ▪ The parking lot at the Jakle's Lagoon and Mount Finlayson trailhead would be treated the same as in Alternative B, and would be reconfigured to include additional parking spaces and a restroom facility. ▪ As in Alternative B, parking lots at South Beach and Fourth of July Beach would be reconfigured to accommodate more vehicles.
Research	<p>Research – Alternative C, Preferred Alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ Same as "common to all."
Park Boundary And Land Protection	<p>Park Boundary And Land Protection – Alternative C, Preferred Alternative</p> <p>Management actions:</p> <ul style="list-style-type: none"> ▪ The park would develop appropriate resource and interpretive documents for newly acquired land. ▪ Development around the park has the potential for negative impacts on a variety of park resources, particularly historic views, and water quality and quantity. Some of these negative impacts are already occurring. The park would work collaboratively with the county and others to address neighborhood development and its affect on park viewsheds, and water resources. ▪ The park would coordinate with the DNR to acquire and manage the intertidal lands within the two camps. <p>English Camp:</p> <ul style="list-style-type: none"> ▪ The National Park Service would request appropriation of funds needed to acquire Mitchell Hill (312.32 acres) which contains part of the original historic military road spur and potentially other artifacts dating to the encampment period and which has numerous other values that would enhance protection of park resources.

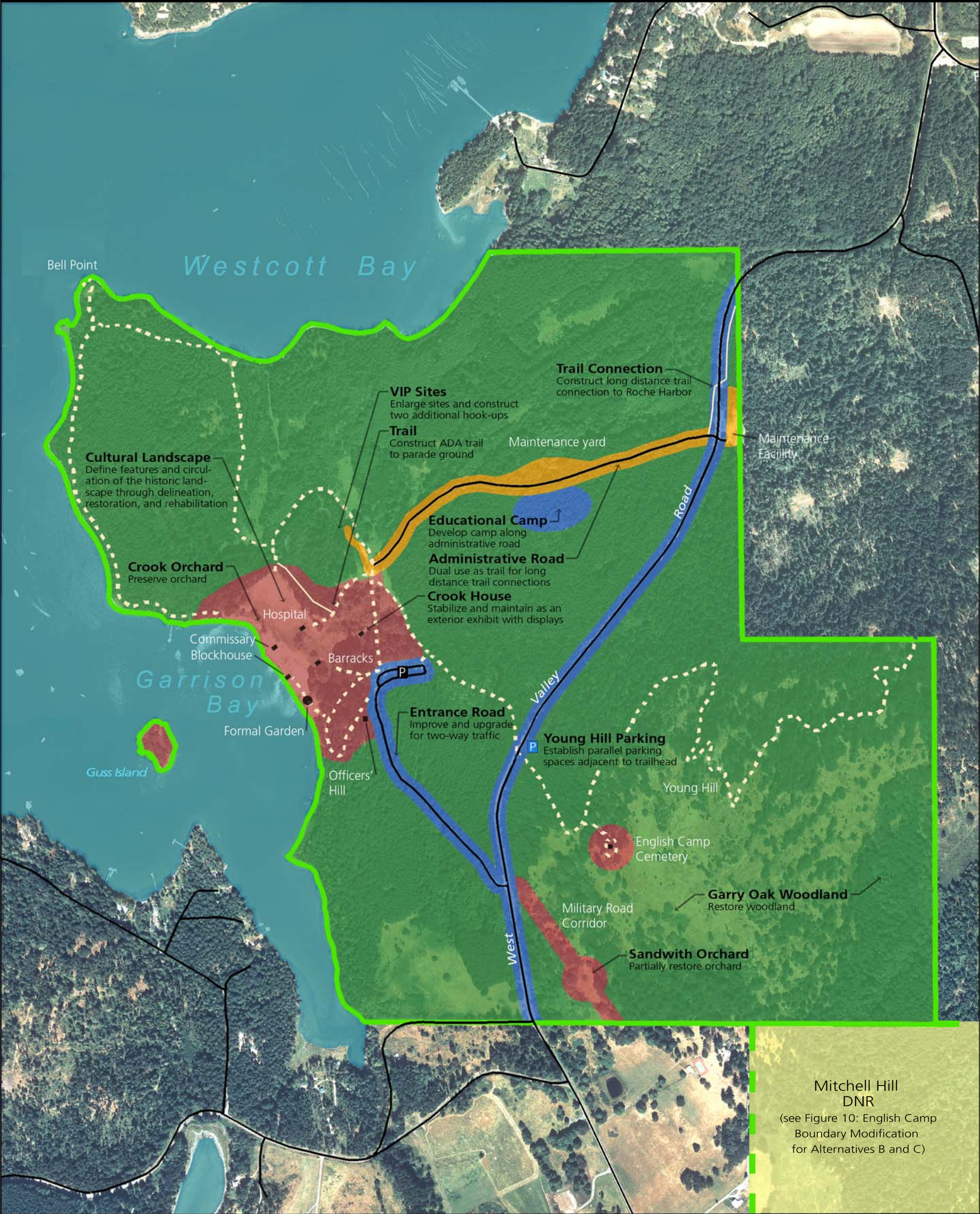
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American Camp:

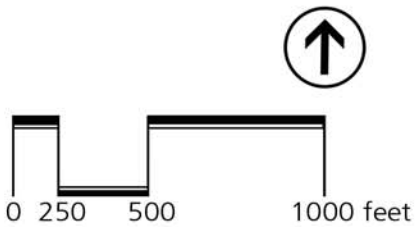
- The boundary at American Camp would be modified to encompass an adjacent 27.32 acres of BLM land, which is managed by DNR through a lease. It would also include the 10.29-acre Cattle Point Interpretive Area, two DNR tracts totaling 78.61 acres contiguous to the park called the Cattle Point Natural Resources Conservation Area, and a private 1.9-acre parcel. Historically, these tracts along with American Camp were part of the original military reservation. These properties also encompass part of the same critical dune and forest ecosystem shared by NPS and would extend public shoreline access and coastline protection along the Strait of Juan de Fuca. The boundary adjustment would provide consistent management standards for both cultural and natural resource protection and recreational use.
- The boundary modification at American Camp would also include the Third Lagoon Preserve, a 20.08-acre San Juan County Land Bank/DNR property currently in public use.
- This alternative would encourage the acquisition of conservation easements by private non-profits, local government, or others, from willing sellers owning farmland located at the northern boundary of American Camp near the reported site of the American settler's farm where the incident that initiated the Pig War occurred. In addition, the NPS in cooperation with partners would explore less than fee title strategies to protect the woodland habitat in the Cattle Point Water District parcel that is not dedicated to water treatment use and road access.



Alternative C (Preferred Alternative):
Management Zones and Schematic Design for English Camp
San Juan Island NHP Draft GMP/EIS



Management Zones			
	Administrative		Road
	Cultural		Proposed Road
	Natural		Trail
	Visitor services		Proposed Trail
	NPS Boundary		
	Parking		
	Proposed Parking		



Produced by: National Park Service, Pacific West Region, Seattle, Washington
Data Sources: NPS - DOQs (1997), management zones, NPS boundary, roads, trails

Figure 11
Date Created: October 2007

Alternative C (Preferred Alternative): Management Zones, Boundary Modification, and Schematic Design for American Camp
San Juan Island NHP Draft GMP/EIS



Management Zones

- Administrative
- Cultural
- Natural
- Visitor services

- NPS Boundary
- Proposed Boundary Addition
- Trail
- Proposed Trail

- Road
- Parking
- Proposed Parking

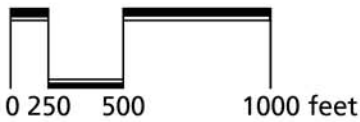


Figure 12

Produced by: National Park Service, Pacific West Region - Seattle
Date Created: October 2007
Data Sources: NPS - DOQs (1997), management zones, NPS boundary, roads, trails
San Juan County - parcels
USGS DOQ (1990)

Development Cost Estimates

The NPS development cost estimates to implement Alternative C would be \$7,488,000 over the next 15-20 years. These costs include the construction of a \$4,000,000 replacement visitor center. It is assumed that meeting the long-range development needs of the park would not just rely upon federal appropriated funds. A variety of other public and private sector funding sources would be sought by the park to assist in implementation efforts. Other parks have successfully found partners to help with funding major projects, and some of the costs associated with actions in this alternative may prove to be less expensive when donated materials, labor, and other support are forthcoming. Costs are expressed in 2007 dollars and phased over 15-20 years.

These costs are based upon general “class C” estimates of site development. These estimates are not intended to be used for budgetary purposes. These costs should only be used for relative comparison of the alternatives proposed in the GMP. Prior to submitting funding requests for the design and construction phases, “class B” estimates are required, based upon detailed site design that will provide decisions about facility size and cost.

Park Operations

Staffing for Alternative C

The Preferred Alternative calls for four additional permanent staff over Alternative A for a total of thirteen permanent staff positions to carry out the operational responsibility of the park over the next 15-20 years. In addition, there would be an increase of three part-time staff positions.

Outside of the existing staff, the park currently pays for part-time curatorial services provided by North Cascades National Park where most of the park’s collection is located. Alternative C would add the

equivalent of one full-time journeyman level curator position which would be apportioned between North Cascades National Park and San Juan Island National Historical Park.

Total staffing under Alternative C is shown in the following table and includes additional staffing which would be needed for managing the proposed boundary additions.

Additional full-time staff positions under Alternative C:

- One interpretation/education position
- One visitor protection (law enforcement) position
- One maintenance position
- One journeyman level curator position (equivalent FTE)

Additional part-time/seasonal staff positions under Alternative C:

- One visitor protection (law enforcement) position
- One maintenance position
- One resource specialist/plant ecologist position

Operating Base for Alternative C

The addition of four full-time staff and three part-time seasonal positions would add \$300,000 to the operating base over Alternative A. In addition, additional administrative costs for equipment and supplies at the permanent visitor center would amount to approximately \$10,000.

Total operating costs for Alternative C would be \$1,035,000 per year (in 2007 dollars). Alternative C would cost \$310,000 more in annual operating costs than Alternative A.

The implementation of the approved plan (no matter which alternative is selected) will depend on future funding, Service-wide priorities, and partnership funds, time, and effort. The approval of a GMP

Staffing Under Alternative C

Administration	Maintenance	Interpretation/ Education	Resource Management And Visitor Protection	Total Staff
3 Permanent	3 Permanent	3 Permanent	4 Permanent	13 Total
	(1 New)	(1 New)	(2 New)	
0 Seasonal	2 Seasonal	1 Seasonal	3 Seasonal	6 Total
	(1 New)		(2 New)	
3 Total	5 Total	4 Total	7 Total	19 Total

does not guarantee that funding and staffing needed to implement the plan will be forthcoming. Full implementation of the GMP could be many years into the future.

Asset Management

In Alternative C, there would be an increase in the number of assets at the park by one or more depending on how many historic structures were repatriated to the park from elsewhere on the island. These buildings are located on San Juan Island and have been adapted to modern uses. One building, called the Brown House, has been authenticated as a camp building and has high integrity. Once relocated, it is the intent of this proposal to restore the exteriors and use them as exterior exhibits, so the costs of maintaining them would be less than a traditional building with associated interior costs and infrastructure.

In the Alternative C, a permanent visitor center would be constructed on the existing site to replace the 1979 double-wide trailer presently in use. As in Alternative B, the construction of a sustainable design building would offset many of the energy use and maintenance costs of a traditional building, and definitely one such as the existing 1979 double-wide trailer.

Boundary Modification

The proposed boundary additions for Alternative C are shown on Figures 10 and 11 for English Camp and Figure 12 for American Camp.

At English Camp, Alternative C would add the Mitchell Hill Property to the park boundary. This property is served by a dedicated easement for an existing access road and right-of-way, which is a legal appurtenance to the DNR property from West Valley Road.

At American Camp, Alternative C would add four DNR parcels to the park boundary, a BLM property, and a private parcel. One of the DNR properties is co-owned with the San Juan County Land Bank. For a detailed analysis of the individual parcels, see Appendix C: Analysis of Boundary Adjustment and Land Protection.

Language in the legislation for San Juan Islands National Historical Park specifically states:

“That the Secretary of the Interior is authorized to acquire on behalf of the United States by donation, purchase with donated or appropriated funds, or by exchange, lands,

interests in lands, and such other property on San Juan Island, Puget Sound, state of Washington, as the Secretary may deem necessary for the purpose of interpreting and preserving the sites of the American and English camps on the island, and of commemorating the historic events that occurred from 1853 to 1871 on the island in connection with the final settlement of the Oregon Territory boundary dispute, including the so called Pig War of 1859. Lands or interests therein owned by the state of Washington or a political subdivision thereof may be acquired only by donation.”

This park enabling legislation thus provides the Secretary of the Interior with the legislative authority to make the determination for the park boundaries to include land adjustments at both American and English camps as described in Alternative B. With this legislative authority, the Mitchell Hill property at English Camp and the other areas in the Cattle Point area at American Camp that are proposed to be included as part of the park, are sufficiently authorized to modify the park boundary, as long as the Secretary of the Interior deems it necessary, and funding is available. In the case of state owned land, the land can only be acquired by the NPS by donation from the state of Washington.

Inclusion of Washington State land parcels 3, 4 and 7 at Cattle Point at American Camp that are managed by the Department of Natural Resources may occur through a donation of these lands to the park. Washington DNR has expressed a preliminary interest in doing so. Until that donation is completed, the Washington DNR would retain ownership and work with the park and other parties to ensure compatible management.

These proposed American Camp additions were part of the original military reservation where joint occupation activities took place. They are part of the landscape setting crucial to understanding the story. Having these lands will allow the NPS to better interpret the park story by having public trails that take the public to these sites. It also provides for a continuous protected coastline and coordinated management involving a single public ownership from South Beach around to the eastern portion of Cattle Point. The lands proposed for addition to the park are currently managed by the Washington State DNR and the Bureau of Land Management. Current management of these lands do not relate to the park's period of significance, and, while social trails now exist, the agencies have never established or maintained formal trails for public use on these properties.

The DNR lands at the Mitchell Hill site at English Camp involve a different land classification status within DNR because of the property’s status as School Trust land. In this instance, given the state’s fiduciary trust responsibilities to the Washington State Education Fund, the state interest in the Mitchell Hill site would need to be purchased, most likely by a third-party non-governmental entity (such as a land trust). Subject to available funds, the third-party entity would then be compensated by the federal government and title would then be conveyed to the park. The culmination of this transaction would not only benefit the park and the public, it would also benefit the state school construction fund and Washington State school programs. The National Park Service would request an appropriation from Congress through the Land and Water Conservation Fund or other sources in order to secure the funds necessary to purchase the Mitchell Hill property from the third-party non-governmental entity. The Washington DNR is actively seeking to divest itself of its remaining school trust properties in San Juan County and supports the ultimate acquisition of Mitchell Hill by the NPS. The addition of the Mitchell Hill to the English Camp unit of the park provides for the important protection of portions of known locations of the historic military road that linked English and American camps, protects one of the oldest stands of Garry oak in the San Juan Island archipelago, and provides for enhanced recreational opportunities for public use and enjoyment of the site through a network of hiking trails that link to trails in other portions of the park to the island-wide trail system.

English Camp

Mitchell Hill property (DNR-state of Washington)
312.32 acres



American Camp

Parcel 1 (County Land Bank/DNR)	20.08 acres
Parcel 2 (Cattle Point Water District)	2.36 acres
Parcel 3 (DNR-state of Washington)	39.84 acres
Parcel 4 (DNR)	38.77 acres
Parcel 5 (BLM-federal)	27.32 acres
Parcel 6 (private landowner)	1.9 acres
Parcel 7 (DNR)	10.29 acres

The NPS would seek donation for parcels 3, 4, and 7, but not parcel 1. Parcel 1 would most likely need to be reimbursed because of the nature of the state’s joint ownership with the San Juan County Land Bank. The Land Bank interest would need to be acquired most likely by a third party non-governmental entity (such as a land trust), which would then be compensated by the federal government and title conveyed to the park. The acquisition of parcel 1 would be acquired to provide public trail access and to provide onsite management of the resource values that are present.

Parcel 2 is owned by the Cattle Point Water District. This parcel contains a reverse osmosis treatment facility to serve certain residential portions of Cattle Point Estates. The NPS, in cooperation with private non-profit partners, would explore various less than fee title strategies to protect the woodland habitat of the remainder of the tract not dedicated to water treatment use and road access.

For parcel 5, federal land managed by BLM, an administrative transfer would be proposed by the Secretary of the Interior. Opportunities for purchase would be explored with the private landowner on a willing seller basis only.

The entire boundary addition would include 452.79 acres.

USER CAPACITY

Developing Indicators and Standards

General management plans are required to include user capacities for all areas of a park. It is not necessarily a set of numbers or limits, but instead a process involving monitoring, evaluation, actions (managing visitor use), and adjustments to ensure a park’s values are protected. The idea behind this process is that with any use on public lands comes some level of impact that must be accepted. Therefore, it is the responsibility of the National Park Service to

decide what level of impact is acceptable and what actions are needed to keep impacts within acceptable limits. Instead of just tracking and controlling user numbers, the NPS park superintendent and staff manage the levels, types, behaviors, and patterns of visitor use and other public uses as needed to protect the condition of the resources and quality of the visitor experience. The monitoring component of this user capacity process helps test the effectiveness of management actions and provides a basis for informed adaptive management of public use.

User capacity is the type and level of visitor use that can be accommodated while sustaining resource and social conditions defined by the park's management objectives. User capacity can be affected by physical constraints or by the perception of crowding or diminished quality of visitor experience. The foundation for user capacity decision making is in a general management plan's qualitative descriptions of desired resource conditions, visitor experience opportunities and general levels of development and management, which were developed in the management zones.

The GMP also includes identification of the indicators and standards that will be monitored and a range of management strategies that may be employed in the future as needed. An indicator is a measurable variable that can be used to track changes in resource and social conditions related to human activity so that progress towards a desired condition can be assessed. A standard is the management decision about the minimum acceptable condition for an indicator. The development of indicators and standards are the focus for determining capacity in the GMP.

The physical capacity of the buildings, parking lots, and additional infrastructure are the focus of establishing capacity at San Juan Island National Historical Park. Many of the facilities at the park were designed and built at a time of lower visitation. The present parking lot size is helpful to park management for managing user capacity. The number of parking spaces per site is as follows:

- English Camp 33
- American Camp visitor center 12
- Redoubt 9
- Jakle's Lagoon 7
- Fourth of July Beach 20
- South Beach 31

The maximum legal occupancy of buildings also plays

a role in user capacity and the facility capacity can help the park manage user capacity for the park: for the visitor center at American Camp it is 60 persons; for the English Camp barracks it is 75 persons. Each developed area typically has a duplex toilet; in some cases toilets are more limiting than parking or building capacity. Seating capacity to view the park movie is six to eight at American Camp and approximately 50 at English Camp. The English Camp barracks building is only open in the summer. This information on physical capacity is helpful in the development of indicators and standards.

No visitor use management plan currently exists at the park. However, a workshop to address user capacity was facilitated in October 2005 by the Cooperative Ecosystem Studies Unit of the University of Washington with the participation of park and regional office staff. The results of the workshop are on file at the park.

Following is a table that identifies the indicators and standards for each management zone.

The last steps of user capacity decision making, which continue indefinitely, are monitoring the indicators and standards and taking management actions to minimize impacts when needed. The park would monitor indicators to determine if standards were being exceeded with techniques that could include non-systematic monitoring of visible impacts to trails or resources as part of regular staff and volunteer patrols, establishing systematic trail and resource assessments, reviewing special permit requests, and reviewing general information collected with respect to visitor trends, parking problems, vandalism, accidents and visitor complaints. Potential management actions that might be undertaken if

standards are exceeded could include increasing educational programs, modifying facilities, improving trail delineation or hardening trails, closing sensitive resource areas, removing invasive plants and revegetating with native species, and limiting the number of permits issued for different special park uses. The indicators and standards included in this general management plan/environmental impact statement will generally not change in the future. However, as monitoring of the park's conditions continues, managers may decide to modify, add, or delete indicators if better ways are found to measure important changes in resource and social conditions. A detailed monitoring plan for San Juan Island National Historical Park will be developed.

MITIGATION MEASURES

Mitigation measures are the practicable and appropriate methods that would be used under any alternative to avoid and/or minimize harm to the park's natural and cultural resources, and visitors. These mitigation measures have been developed using existing laws and regulations, best management practices, conservation measures, and other known techniques from past and present work in and around San Juan Island National Historical Park.

The general management plan provides a management framework for the park. Within this broad context, the alternatives include the following measures that

Indicators and Standards

Zone	Indicator	Standard
Cultural and Natural	Social trails per mile of official trail.	No more than two social trails per mile of official trail.
Cultural and Natural	Incidents of audible human-caused sound.	No more incidents during peak use season than current baseline (2006/2007).
Cultural and Natural	Size of groups granted special event permits.	No more than 15 percent of special events will include more than 75 people.
Cultural and Natural	Location of special events granted permits.	Permits will not be granted for locations of primary visitor interest during peak season.
Cultural	Visible degradation of vegetation in the cultural landscape related to visitor activity.	Degradation visible at a landscape level will not persist through more than one year.
Cultural	Deterioration of historic structures.	Deterioration will not threaten historical integrity, structural integrity, visitor safety, or the desired visitor opportunities.
Natural	Diversity of native plant species in forest communities.	Plots located between two and ten meters from trail center will contain at least 80 percent of native plant species found in comparable control plots located in areas not frequented by visitors.
Natural	Diversity of marine invertebrate species in the rocky tidal zone.	Plots located in areas of high visitor use will contain at least 80 percent of native species found in comparable control plots located in areas not frequented by visitors.
Visitor Services	The waiting period necessary to talk with park staff at visitor orientation facilities.	During peak use periods at least ninety percent of visitors seeking orientation information will wait less than fifteen minutes to talk with park staff at visitor orientation facilities.
Visitor Services	Visitors' ability to view next available audio-visual program.	During peak use periods, no more than one showing per day will have inadequate capacity to accommodate all visitors waiting to view the audio-visual program.
Visitor Services	Parking utilized by large groups of visitors (including special events).	Single groups of visitors will not be allowed to occupy more than half the official capacity of any parking lot.
Visitor Services	Visiting motor vehicles displaced due to lack of parking.	During peak use periods no more than five percent of motor vehicles will leave the American Camp visitor center and English Camp parking lots without having an opportunity to park.

would be used to minimize potential impacts from the implementation of the alternatives. These measures would be applied to all alternatives, subject to funding and staffing levels. Additional mitigation would be identified as part of implementation planning and for individual projects to further minimize resource impacts.

Management of Cultural Resources

The protection of San Juan Island National Historical Park's cultural resources is essential for understanding the past, present, and future relationship of people with the park environment and the expressions of our cultural heritage. The park would pursue strategies to protect its cultural resources that would allow the integrity of the park's cultural resources to be preserved unimpaired. They would also ensure that the park is recognized and valued as an outstanding example of resource stewardship, conservation education and research, and public use.

Cultural Landscapes and Historic Buildings and Structures

- All project work relating to cultural landscapes and historic buildings/structures would be conducted in accordance with the guidelines and recommendations of the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* and the *Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for the Treatment of Cultural Landscapes*. Typical mitigation measures include measures to avoid adverse impacts, such as rehabilitation and adaptive reuse for historic buildings/structures, designing new development to be compatible with surrounding historic properties, and screening new development from surrounding historic resources and cultural landscapes to minimize impacts.
- When a building's original use can not be accommodated, adaptive use is the best strategy to ensure that buildings remain in good condition. When not being adaptively used, the next best approach for preserving these structures is regular preservation maintenance, which ensures that roofs and walls as well as supporting structural elements are maintained in a sound, weather-resistant condition. An example of adaptive use is using

historic structures to house park operations.

Archaeological Resources

- Archaeological surveys would precede any ground-disturbing activity in a proposed project location. Proposals for project locations are based upon existing knowledge of distribution of archeological resources and known archeological resources would be avoided to the greatest extent possible. If National Register eligible or listed archaeological resources could not be avoided, an appropriate mitigation strategy would be developed in consultation with the State Historic Preservation Officer and associated American Indian tribes, as appropriate.

Museum Collections

- Mitigative measures related to museum collections consist of conservation of a collection through proper storage, handling, and exhibit of objects as specified in the NPS Museum Handbook and NPS Director's Order – 24, Museum Collections Management.

Traditionally Associated Peoples

- The NPS would continue to consult with culturally associated Native American tribes on a government-to-government basis to identify ethnographic resources and develop appropriate strategies to mitigate impacts on these resources. Such strategies could include continuing to provide access to traditional use or spiritual areas and screening new development from traditional use areas to minimize impacts on ethnographic resources.
- Consultation with Native Americans linked by ties of kinship, culture, or history to park lands would address the inadvertent discovery of human remains, funerary objects, sacred objects, or objects of cultural patrimony, and all provisions outlined in the Native American Graves Protection and Repatriation Act (25 USC 3001) of 1990 would be followed.

Management of Natural Resources

Air Quality

- The NPS would implement a dust abatement program. Standard dust abatement measures

could include the following elements: using water or other soil stabilizers, covering haul trucks, employing low speed limits on unpaved roads, minimizing vegetation clearing, and revegetating with native species.

- NPS vehicle emissions would be minimized by using the best available technology whenever possible.
- The NPS would encourage the public and commercial tour companies to employ methods that reduce emissions, including reducing idling of vehicles.
- Sustainable designs that reduce energy demands would be employed, thus reducing pollutant production.

Soundscapes / Natural Quiet

- The NPS would implement standard noise abatement measures during park operations, including: scheduling to minimize impacts in noise-sensitive areas, using the best available noise control techniques wherever feasible, using hydraulically or electrically powered impact tools when feasible, and locating stationary noise sources as far from sensitive areas as possible.
- The NPS would locate and design facilities to minimize objectionable noise.
- Idling of motors would be minimized when power tools, equipment, and vehicles are not in use.
- The NPS would muffle above ambient noise whenever possible to reduce noise impacts.

Night Skies (Lightscapes)

- Existing outdoor lighting in the park would be replaced with fixtures (directed inward and downward) that do not contribute to night sky light pollution.
- The NPS would use energy-efficient, low-impact lighting, such as diffused light bulbs, and techniques such as down-lighting, to prevent light spill and preserve the natural lightscape.

Hydrologic Systems including Wetlands

- Projects adjacent to or in waterways would be timed to occur during the dry season, usually

late summer.

- The NPS would implement erosion control measures, minimize discharge to water bodies, and regularly inspect construction equipment for leaks of petroleum and other chemicals to prevent water pollution. Minimize the use of heavy equipment in water.
- Runoff control systems would be integrated into the designs of larger parking areas near water resources to minimize water pollution.
- Sediment control and prevention plans for projects that could impact water quality would be developed.
- The NPS would delineate wetlands and apply protection measures during projects and perform project activities in a cautious manner to prevent damage caused by equipment, erosion, and siltation.

Soils

- New facilities would be built on soils suitable for development. Minimize soil erosion by limiting the time that soil is left exposed and by applying other erosion control measures, such as erosion matting, silt fencing, and sedimentation basins in construction areas to reduce erosion, surface scouring, and discharge to water bodies. Once work is completed, revegetate construction areas with appropriate native plants in a timely period.

Vegetation

- The NPS would monitor areas used by visitors for signs of native vegetation disturbance. Public education, revegetation of disturbed areas with native plants, erosion control measures, and barriers would be used to control potential impacts on plants from erosion or creation of social trails.
- The NPS would develop revegetation plans for disturbed areas and require the use of genetically appropriate native species. Revegetation plans should specify species to be used, seed/plant source, seed/plant mixes, site-specific restoration conditions, soil preparation, erosion control, ongoing maintenance and monitoring requirements, etc. Salvaged vegetation should be used to the extent possible.
- The NPS would implement a noxious weed control program. Standard measures could include the following elements: use only weed-free materials for road and trail construction,

repair, and maintenance; ensure equipment arrives on site free of mud or seed-bearing material; certify all seeds and straw material as weed-free; identify areas of noxious weeds pre-project; treat noxious weeds or noxious weed topsoil before construction (such as topsoil segregation, storage, herbicide treatment); when depositing ditch spoils along the roads, limit the movement of material to as close as possible to the excavation site; scrupulously and regularly clean areas that serve as introduction points for invasive plants (campgrounds, staging areas, and maintenance areas); revegetate with genetically appropriate native species; inspect rock and gravel sources to ensure these areas are free of noxious weed species; and monitor locations of ground-disturbing operations for at least three years following the completion of projects.

Wildlife and Fish

- Techniques would be employed to reduce impacts on fish and wildlife, including visitor education programs, restrictions on visitor and park activities, and law enforcement patrols.
- The NPS would implement a wildlife protection program. Standard measures would include project scheduling (season and/or time of day), project monitoring, erosion and sediment control, fencing or other means to protect sensitive resources adjacent to project areas, disposing of all food-related items or rubbish, salvaging topsoil, and revegetating.
- The NPS would consult with National Oceanic and Atmosphere Administration (NOAA) Fisheries Service for projects within essential fish habitat.

Special Status Species

- Mitigation actions would occur during normal park operations as well as before, during, and after projects to minimize immediate and long-term impacts on rare, threatened, and endangered species. These actions may vary by project area, and additional mitigation measures may be added depending on the action and location. Many of the measures listed for vegetation, wildlife, and water resources would also benefit rare, threatened, and endangered species by helping to preserve habitat.
- Facilities/actions/ operations would be located and designed to avoid or minimize the removal

of rare, threatened, and endangered species habitat. If avoidance is infeasible, the NPS would minimize and compensate for adverse effects as appropriate and in consultation with the appropriate resource agencies.

- Work would be planned in areas in or near suitable threatened and endangered bird habitat as late as possible in the summer/fall.
- The NPS would conduct work outside of critical periods for the specific species when possible.
- Restoration and/ or monitoring plans would be developed and implemented as warranted. Plans should include methods for implementation, performance standards, monitoring criteria, and adaptive management techniques.
- For projects in or near streams, the NPS would employ appropriate best management practices.
- Measures would be implemented to reduce adverse effects of nonnative plants and wildlife on rare, threatened, and endangered species.
- The NPS would conduct surveys and monitoring for rare, threatened, and endangered species as warranted.
- Critical habitat features, such as nest trees, would be protected and preserved whenever possible.
- The NPS would follow the elements of the *Conservation Agreement and Strategy for the Island Marble Butterfly*.

Management of Scenic Resources

Mitigative measures are designed to minimize human-made visual intrusions. These include the following:

- Where appropriate, use facilities such as boardwalks and fences to route people away from sensitive natural and cultural resources while still permitting access to important viewpoints.
- The NPS would design, locate, and construct facilities to minimize adverse effects on natural and cultural resources and visual intrusion.
- Vegetative screening would be provided, where appropriate, to protect significant views or vistas.

Sustainable Design and Aesthetics

- Projects would use sustainable practices and resources whenever practicable by recycling and reusing materials, by minimizing materi-

als, by minimizing energy consumption during the project, and by minimizing energy consumption throughout the lifespan of the project.

OTHER ACTIONS AND ALTERNATIVES CONSIDERED

The Council on Environmental Quality (CEQ) guidelines for implementing NEPA requires federal agencies to analyze all “reasonable” alternatives that substantially meet the purpose and need for the proposed action.

Under NEPA, an alternative may be eliminated from detailed study for the following reasons [40 CFR 1504.14 (a)]:

- Technical or economic infeasibility;
- Inability to meet project objectives or resolve need for the project;
- Duplication of other less environmentally damaging alternatives;
- Conflicts with an up-to-date valid plan, statement of purpose and significance, or other policy; and therefore, would require a major change in that plan or policy to implement; and
- Environmental impacts too great.

The following alternatives or variations were considered during the alternatives development phase of the project, but because they did not meet one of the above criteria, they were rejected.

Other Alternatives

Cultural Resources Emphasis Alternative

An alternative originally considered but rejected by the planning team included an alternative with a cultural resources emphasis that was later dropped because of similarities with the No Action Alternative. The park has historically been managed with a strong cultural resource emphasis.

Increased Emphasis on Natural and Cultural Resources Management

A second alternative considered would have broadened the scope of resources by placing

additional emphasis on natural and cultural resources management. Cultural resources would continue to be protected and interpretation of cultural resources and sites would be enhanced. Natural resource interpretation on themes such as geology and astronomy would be improved through additional interpretive methods and programs. After going through the Choosing by Advantages process to pick a Preferred Alternative, this alternative became redundant to the Preferred Alternative.

Other Actions

In addition to alternatives, there were several actions considered but rejected for the following reasons:

Combined Visitor Center and Administrative Headquarters

The idea to include administrative facilities as part of a new visitor center was discussed by the planning team. One reason that this idea was rejected was due to the availability of potable water at American Camp. The present well shares an aquifer with the neighboring community and has elevated levels of chlorides, indicating that salt water intrusion is occurring in the aquifer. Having additional administrative staff at the visitor center would require additional water extraction. Additionally, building a larger facility to include administrative offices could potentially have a bigger visual impact on the adjacent historic setting and cultural landscape.

Relocate Crook house within English Camp

An action to relocate the Crook house to another location within English Camp was originally considered by the planning team. The Crook house was constructed after the historic encampment period, which is the period of historic significance for the park. The location and prominence of the house confuses some visitors into thinking that the house is a resource connected to the encampment period. The Crook family and their efforts are an integral part of the history of the site. After the military left, the Crook family bought the land and were caretakers of the remaining buildings and cemetery before it became a state park and later a national park unit. If the NPS were to remove the Crook house from its present location, the impact would be an adverse effect and could result in a loss of historic integrity.

Include Entire Historic Military Road in Park Boundary

A concept to include the entire historic military road that connected English and American camps as part of the park boundary was briefly discussed and dismissed. Though it could have enhanced the interpretation of the interrelationships between the two camps, gaining public support at this time for the trail and the ability to acquire interests in private property was determined to be unrealistic.

IDENTIFICATION OF THE ENVIRONMENTALLY PREFERRED ALTERNATIVE

The environmentally preferred alternative is defined as the alternative that causes the least damage to the biological and physical environment. It is also the alternative which best protects, preserves, and enhances historic, cultural, and natural resources.

In accordance with NPS Director's Order-12, Conservation Planning, Environmental Impact Analysis, and Decision-making, the NPS is required to identify the "environmentally preferred alternative" in environmental documents. The environmentally preferred alternative is determined by applying the criteria suggested in the National Environmental Policy Act (NEPA) of 1969, which is guided by the Council on Environmental Quality (CEQ). The CEQ (46 FR 18026 - 46 FR 18038) provides direction that "[t]he environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101", which considers:

- Fulfilling the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assuring for all generations safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attaining the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- Preserving important historic, cultural and natural aspects of our national heritage and maintaining, wherever possible, an environment that supports diversity and variety of individual choice;
- Achieving a balance between population and resource use that will permit high standards of living and a wide sharing of life's amenities; and

- Enhancing the quality of renewable resources and approaching the maximum attainable recycling of depletable resources (NEPA Section 101(b)).

The Council on Environmental Quality states that the environmentally preferable alternative is "the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources (46 FR 18026 – 46 FR 18038)." According to NPS NEPA Handbook (DO-12), through identification of the environmentally preferred alternative, the NPS decision-makers and the public are clearly faced with the relative merits of choices and must clearly state through the decision-making process the values and policies used in reaching final decisions.

After the environmental consequences of the alternative were analyzed, the alternative was evaluated to see how well the goals from NEPA section 101 listed above are met.

Alternative A represents the No Action Alternative and would continue ongoing management of programs and actions. The park would continue to be managed in accordance with approved plans and policies.

Cultural resources would continue to be protected and preserved; however, no additional historic structures would be opened to the public. Natural resources would continue to be managed as a critical element of the cultural landscape as well as for public recreational opportunities.

Alternatives B and C both call for expansion of cultural and natural resource management to enhance protection of resources. Additional measures would be employed to enhance the cultural landscape and to restore the orchards and prairie. More historic buildings would be opened to the public, providing new visitor opportunities and personal connections with park resources.

Interpretation of natural resources topics, including fire management, wildlife, and exotic species, would expand in Alternatives B and C. Prairie restoration would also be expanded in both alternatives, allowing the opportunity for additional preservation and interpretation of this rare Northwest resource. The park would also work to cooperatively manage intertidal areas with DNR and other partners.

In both alternatives, there would be expanded

recreational opportunities emphasizing non-motorized multi-use trails for bicyclists and hikers. New infrastructure, such as improved roads and parking, and conversion of temporary visitor facilities to permanent structures would also improve public access to park resources.

Alternatives B and C differ the most in the extent of development, and site disturbance of the new visitor center and its location, as well as certain other features, such as the location of the educational camp and the emphasis on cooperative partnerships to increase marine resource protection, to protect endangered species and to address the potential impacts of global climate change.

While Alternatives B and C both call for a permanent visitor center to replace the temporary double-wide trailer at American Camp, Alternative B proposes construction closer to the historic scene, which would improve access for visitors, but which would also create additional impacts by developing a previously undeveloped area. The visitor center in Alternative B would also include a collections study room for some museum collections, whereas in Alternative C the collections study room could be located at either the permanent visitor center or at park headquarters in Friday Harbor. Alternative B also proposes a loop road through English Camp to improve visitor access, including visitor safety, but which would also result in additional impacts to resources. A small maintenance building would also be constructed in this alternative.

Historic structures, such as the Crook house, hospital, officer's quarters, and others would be treated differently in Alternatives B and C. In Alternative B, the Crook house would be preserved both inside and out, with a visitor contact station on the first floor and administrative offices on the second floor. In Alternative C it would become an exterior exhibit with perhaps some flexibility for adaptive use in the future if remedial actions are successful. In Alternative C, two buildings at the park, the officer's quarters and the hospital, would be opened, instead of being exterior exhibits as in Alternative B. Alternative C would also include the possible repatriation of historic buildings located elsewhere on the island that have maintained integrity since their removal from the camps.

Both alternatives would improve parking and access to a number of park areas, including Young Hill, Pickett's Lane, Jakle's Lagoon, South Beach, Fourth of July Beach, and the Mount Finlayson trailhead.

Alternative C also enhances visitor access to both American and English camps by replacing the visitor center on the existing site with a larger, permanent structure and improving the existing entrance road to English Camp by adding turnouts that would allow for safer two-way traffic flow. The modified access road (compared to Alternative B) would have fewer impacts while still providing similar long-term benefits to visitors.

Alternative C also includes some key elements for long-term resource protection, including developing a cooperative management plan for Westcott and Garrison bays, seeking to exchange the tidelands with the DNR, establishing a Marine Preserve, and actively participating in the Climate Friendly Parks program.

Alternative C includes the park taking a more active role to support county efforts to implement the concept of an Old Military Road Trail connecting the camps as part of an island-wide trail system which would improve public access and provide new recreation opportunities.

After careful review of potential resource and visitor impacts and assessing proposed mitigation for cultural and natural resource impacts, the environmentally preferred alternative is Alternative C. This alternative clearly surpasses Alternative A, the No Action Alternative in realizing the six goals stated above. While Alternative B is similar in many respects to Alternative C, Alternative C overall provides the highest level of protection of cultural and natural resources while allowing for human use and enjoyment of park resources. Taken as a whole, this alternative is environmentally preferred because it would best meet all six goals stated in the National Environmental Policy Act.

SUMMARY OF COSTS

The costs of implementing the alternatives are summarized in the table below. For the purposes of cost estimating, general assumptions were made regarding the amounts and size of development or restoration. These assumptions were then carried across all alternatives so that comparable costs could be considered for each alternative. Costs identified in the GMP are not intended to replace more detailed consideration of needs, sizes, and amounts of future development. They should not be used as a basis for funding requests or budgeting. These figures only relate to NPS capital development costs and do not include contributions by partners that offset capital costs.

The NPS recognizes that a GMP is a long-term (15-20 years) plan, and in the framework of the plan, park managers would take incremental steps to reach management goals and objectives. Although some of the actions can be accomplished with little or no funding, some actions would require more detailed implementation plans, site-specific compliance, and additional funds. The park would actively seek alternative sources of funding, but there is no guarantee that all the components of the plan would be implemented.

Summary of Comparative Costs (FY 2007 Dollars)*

	Alternative A	Alternative B	Alternative C
Annual Recurring Costs	\$725,000	\$1,095,000	\$1,035,000
Development Costs	\$2,380,000	\$11,885,000	\$7,488,000**

***Figures are rounded**

****These costs include the repatriation of two historic buildings to the park.**



SUMMARY OF ALTERNATIVES

This table summarizes the individual actions called for the in different alternatives, including those actions that are common to all the alternatives.

Summary of Alternatives				
Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Cultural Resource Management				
Cultural Landscapes	Complete resource management plan to provide guidance for cultural and natural resources; continue use of prescribed fire to manage cultural landscape; update the existing historic landscape report.	Continue to maintain with modest ADA trail improvements.	Same as Alternative A, plus use a variety of techniques to enhance visitor understanding of the cultural landscape such as delineating non-extant historic building sites and other landscape features: conduct additional historical research to provide better understanding of the cultural landscape.	Same as Alternative B
Crook House <i>English Camp</i>	Remove non-historic addition on back of Crook house to reestablish original character and form during the Crook family era; continue efforts to relocate bats to adjacent bat houses.	Continue to use as an exterior exhibit.	Rehabilitate as visitor contact facility on ground floor with displays about the Crook family era and for administrative use on second floor.	Stabilize, preserve, and use as an exterior exhibit with interpretive signs and displays about Crook family era; retain flexibility to use the Crook house in the future for certain adaptive uses if remedial clean-up actions are successful.
Barracks <i>English Camp</i>		Continue to preserve and use as primary visitor contact station at English Camp and for special events.	Part of the barracks would be rehabilitated for combined use as an interpretive exhibit, visitor contact station, and special events facility.	Same as Alternative A.
Blockhouse <i>English Camp</i>		Continue to be open to public for viewing.	Same as Alternative A.	Same as Alternative A.
Hospital <i>English Camp</i>		Continue to be viewed and interpreted as an exterior exhibit.	Same as Alternative A.	Rehabilitate and make available for public interpretation.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Commissary <i>English Camp</i>		Continue to be viewed and interpreted as an exterior exhibit.	Same as Alternative A.	Same as Alternative A.
Laundress' Quarters <i>American Camp</i>		Continue to be viewed and interpreted as an exterior exhibit.	Same as Alternative A.	Same as Alternative A.
Officers' Quarters <i>American Camp</i>		Continue to be viewed and interpreted as an exterior exhibit.	Same as Alternative A.	Open for visitation as combined interpretive exhibit and study house. Rehabilitate half for use as an interpretive exhibit that shows a typical officers' quarters; other half would be available as a study house.
Crook Family Orchard <i>English Camp</i>		Maintain existing historic orchard.	Rehabilitate orchard. Keep same size, but fill in gaps with historically accurate trees to depict early 20 th century orchard.	Preserve number, variety, and style of existing fruit trees. Replace individual trees with same species as needed.
Sandwith Orchard <i>English Camp</i>		Maintain existing historic orchard.	Partially restore and enlarge orchard to 1 acre and replant historically accurate fruit trees in gaps to maintain late 19 th century character.	Partially restore ½-1 acre and replant historically accurate fruit trees in gaps to maintain late 19 th century character.
Repatriation of Historic Structures		Do not acquire buildings.	Do not acquire buildings.	Acquire historic buildings once located at the camps and return to original locations within the park.
Collections Management	Maintain museum collection records; make available park collections for education, interpretation, and scientific research purposes.	Continue to maintain collections at off-site locations in Washington. Exhibit some objects in display cases at American Camp.	Provide adequate space for a collections study room located in newly constructed visitor center north of the redoubt at American Camp. The collections would include natural resource items and a portion of prehistory and historic military era collections.	Provide adequate space for a collections study room located at either park headquarters or at the visitor center. The collections would include natural resources and a portion of the military-era collection, including some non-military items.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Archaeology and Historic Structures	Install fire and security systems in all existing historic buildings. Document, preserve, protect and, if appropriate, interpret archaeological sites. Protect in undisturbed condition, if possible.	Same as Common to All	Same as Common to All	Same as Common to All
Natural Resource Management				
General	Develop a resources management plan to guide future natural resource management actions; eliminate invasive plant/animal species where feasible to ensure survival of ecosystem.	Same as Common to All	Same as Common to All	Same as Common to All
Vegetation	Develop a vegetation management plan to guide future management of natural resources; explore ways to promote and maintain these habitats, including use of fire; continue to work with students and others for restoring Garry oak woodlands and prairie habitats; update fire management plan every 5 years.	Same as Common to All	Restore prairie to enhance the historic scene and provide habitat for critical prairie plant and animal species.	Restore larger area of prairie with native plant species than in Alternative B; manage woody vegetation to prevent intrusion into portions of the landscape that were open grassland during the historic period.
Wildlife	Continue to cooperate with other U.S. and Canada agencies to manage wildlife species and their habitats, particularly listed and candidate species for federal listing; continue to construct and install bat houses adjacent to Crook house to relocate maternity bat colony; emphasize species that are regionally, nationally, or internationally	Same as Common to All	Same as Alternative A, plus expand interpretation of wildlife and impacts of invasive species to visitors.	Same as Alternative B, plus, establish monitoring program to detect species populations in decline as indicators of health of ecosystem.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Wildlife (continued)	important in inventorying and monitoring wildlife; manage non-native species, such as pests, according to NPS Management Policies.			
Water Resources	Continue to work with consortium of Puget Sound groups regarding oil spill response plans; follow provisions in the consortium's geographic response plan; continue to monitor water use and quality. Work with county to develop measures for protecting quality and quantity of shared water resources.	Continue to define ownership of intertidal areas.	Same as Alternative A plus manage the intertidal areas through cooperation with DNR and others; encourage DNR to provide free conservation easements on tidelands connected to park ownership of uplands.	Same as Alternative A plus acquire and manage the intertidal zone within the park; seek to exchange the tidelands with DNR; collaborate with Marine Resources Committee and others to establish and manage a Marine Preserve at both camps; inform visitors about the value of bays and surface and subsurface water quality in the watershed. At English Camp work with state, county and others in development of a cooperative management plan of Garrison and Westcott bays to educate public about sustainable boating, mooring, anchorage, human impacts and creation of "no wake" zone in bays. At American Camp; coordinate with Whale Museum and NOAA to add South Beach to the Whale Watch voluntary exclusion zone to extend protection to Orca whales by limiting approach of tour boats.
Geological Resources	Protect examples of marine terraces and other glacial features for education, research and interpretive purposes.	Same as Common to All	Same as Common to All	Same as Common to All

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Air Quality	Federal, state, and local air agencies that have primary responsibility for managing air quality would continue to monitor and use computer models to assess air quality in and around the park. If air quality deteriorates to the point that the ambient standards are exceeded, then these agencies would implement and the park would support additional requirements to further reduce air pollution.	Same as Common to All	Same as Common to All	The park would participate and implement the Climate Friendly Parks Program to determine the park's ecological footprint, and in turn, potentially mitigate certain actions related to climate change.
Interpretation and Education				
Levels and Topics of Interpretation	Develop comprehensive interpretive plan; maintain existing interpretation programs/topics and enhance cultural interpretation through increased use of existing cultural resources; update website with interpretive and educational materials; continue to provide self-guided walks and ranger/volunteer guided walks at both English and American camps; continue to offer summer interpretive programs covering historical and natural themes; continue to offer curriculum-based school programs and Junior Ranger program; continue park theme programs through educational camps; enhance interpretation of Native American culture and prehistory in consultation	Continue to focus interpretive displays/exhibits on historical themes; VIP program would continue to focus on interpretation.	Same as Alternative A, plus, enhance off-island interpretation by partnering with Washington State Ferries and Washington State Parks to locate interpretive exhibits on ferries and in parks; enhance interpretation through more extensive facilities and exhibits and programs open to the public; explore ways to partner with various organizations through outreach methods; develop visitor use management plan.	Same as Alternative A plus encourage tribal members to participate in preparation of exhibits/programs that relate to Native American connection with the island; add additional programs on geology, astronomy, and vegetation; develop visitor use management plan. At English Camp, develop media for interpreting the orchards. At American Camp, actively interpret San Juan Town and the HBC Belle Vue Sheep Farm to visitors.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Levels and Topics of Interpretation (continued)	with tribes; encourage tribal members to participate in preparation of interpretive exhibits and programs that related to connection of American Indians with San Juan Island.			
Recreation				
General	Continue to allow activities such as beach-combing, picnicking, bird watching, viewing and photographing wildlife, hiking, sightseeing, attending park programs; and shell fishing at English Camp (on approximately 900 feet of shoreline); continue to manage park as day-use only area; continue to prohibit overnight camping, hunting and off-road vehicles. If additional lands are acquired, prohibit hunting, but allow non-motorized use on Mitchell Hill.	Same as Common to All	Same as Common to All plus develop a kayak/canoe landing on north boundary on Westcott Bay and connect to internal trail system.	Same as Common to All.
Equestrian Trails	Horseback riding would continue at the discretion of the superintendent.	Same as Common to All	Same as Common to All	Same as Common to All
Bicycle Use	Biking would continue along park and county roads within the park.	Same as Common to All	Same as Common to All plus improve bicycling use along existing roads; if additional land is acquired, partner with bike user groups to maintain multi-use trails and enforce proper use of trails.	Same as Alternative B.
Hiking Trails	Establish one trail connection at English Camp and one trail	Pursue development of island-wide trail connections only if others take lead;	Partner with county to establish new trail connections to connect park with existing	Same as Alternative B, plus support county efforts to implement concept of an Old

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Hiking Trails (continued)	connection at American Camp to link with island-wide trail system.	establish ADA trail between Crook house and parade ground.	long distance trails; manage additional new trails on any acquired property as "non-motorized"; establish ADA trail between Crook house and parade ground; establish trail to connect Roche Harbor with administrative road.	Military Road Trail connecting camps as part of island-wide trail system.
Visual and Scenic Resources				
Dark Night Sky	Continue to provide programs that highlight values of dark night sky; continue to protect scenic values of park as required by law and policy.	Same as Common to All	New facilities would be constructed with photovoltaic systems, as possible. Outdoor lighting on buildings would be designed and directed appropriately to minimize light pollution, such as using motion sensors and fixtures with lower lumen ratings.	Same as Alternative B.
Scenic Viewshed	Educate and cooperate with adjacent private landowners and relevant agencies about how modern development affects the historic scene and provide vegetative screening where possible. Work with county to develop measures for protecting scenic viewsheds.	Same as Common to All	Same as Common to All	Same as Common to All
Soundscapes				
	Initiate development of an overflight management plan for establishing noise baseline for overflights.	Same as Common to All	Conduct baseline acoustic monitoring through the NPS Washington Office Soundscapes Program.	Same as Alternative B.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Park Facilities				
Visitor Center <i>American Camp</i>		Retain temporary 1979 double-wide trailer serving as the visitor center.	Remove temporary 1979 visitor center; construct 5,400 square foot permanent visitor center north of redoubt behind trees. Incorporate sustainable building design.	Remove temporary 1979 visitor center; construct 5,400 square foot permanent visitor center at the existing site. Incorporate sustainable building design.
Administration Building <i>Friday Harbor</i>	Remain in current location: in long-term, potential to buy a building/property on the island, preferably a historic one, for administrative purposes.	Same as Common to All	Same as Alternative A.	Same as Alternative A.
Maintenance Building <i>English Camp</i>		Retain maintenance building at current location on West Valley Road.	Same as Alternative A, plus develop a 1,000 square foot covered maintenance storage area at American Camp at the site of the existing visitor center.	Same as Alternative A.
Visitor Information Center <i>Friday Harbor</i>			Explore opportunities to partner with other groups in the creation of an island visitor information center.	Same as Alternative B.
Educational Camp		Retain at present location in English Camp.	Move camp to Mitchell Hill if acquired, otherwise retain in present location.	Develop educational camp along administrative road.
Fire Camp		Continue to maintain along Cattle Point Road north of visitor center.	Retain and formalize fire camp along Cattle Point Road north of visitor center.	Same as Alternative B, plus provide minimal improvements such as restrooms.
VIP Sites	Retain VIP sites	Continue to provide hook-ups for volunteer's trailers at both American Camp and English Camp.	Enlarge VIP sites at English Camp to provide privacy and two additional hook-ups.	Same as Alternative B.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Park Operations				
Staffing		9 Full time staff	14 Full time staff	13 Full time staff
		2 Seasonal staff	6 Seasonal staff	6 Seasonal staff
Transportation, Access, and Circulation				
Young Hill Parking		Continue informal shoulder parking arrangement along both sides of road.	Create several parallel parking spaces along west side of road for easy and safe trail access.	Same as in Alternative B.
English Camp Road System and Parking		Continue to maintain existing park entrance road as two-way; keep administrative road for park and educational camp use only; there would be no improvements for visitor parking lot.	Reconfigure road system as a one-way loop by connecting the entrance road with administrative road following existing historic alignment; construct new parking lot north of the Crook house; develop 2-3 ADA parking spaces adjacent to Crook house; restore existing visitor parking lot to natural conditions.	Maintain entrance road, but improve to handle increased two-way traffic; pave or chip seal segments for better traction and erosion control, create 2-3 informal turnouts for passing cars; keep administrative road for park and educational camp use only; improve visitor parking lot drainage.
Cattle Point Road System and Parking	Work cooperatively with state and county to provide appropriate access to private land adjacent to the park.	Continue to maintain existing park roads.	Develop new parking lot and access road to new visitor center; convert redoubt road to a trail and restore redoubt parking lot to natural conditions; create small parking lot by Pickett's Lane; reconfigure parking lots at South Beach and Fourth of July Beach; reconfigure parking lot at Jakle's Lagoon for additional parking and restroom facilities.	Convert redoubt road to a trail and restore redoubt parking lot to natural conditions; create small parking lot by Pickett's Lane; reconfigure parking lots at South Beach and Fourth of July Beach; reconfigure parking lot at Jakle's Lagoon for additional parking and restroom facilities.
Trail ADA Access	Extend ADA trail from Crook house to parade ground	Same as Common to All plus: maintain cultural landscape with some modest improvements for ADA access along trails.	Same as Alternative A.	Same as Alternative A.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Research				
General	Develop research plan to provide framework for permitting and promoting research.	Same as Alternative A.	Same as Alternative A.	Same as Alternative A.
Park Boundary and Land Protection				
Modification of Boundary	Continue to evaluate growth and development trends on the island that affect resource protection and public access; develop a land protection plan.	Maintain existing boundary.	At English Camp, request appropriation to acquire Mitchell Hill (approximately 312 acres). At American Camp, acquire adjacent BLM land, three DNR tracts adjacent to the park, and a private parcel. The park would work collaboratively with the county and others to address neighborhood development and its affect on park viewsheds, and water resources.	At English Camp, same as Alternative B. At American Camp, same as Alternative B, plus acquire San Juan County Land Bank/ DNR property currently in public use; explore less than fee title strategies to protect woodland in Parcel 2 (Cattle Point Water District); encourage the acquisition of conservation easements, by private nonprofits, local government, or others, from willing sellers owning farmland located the northern boundary of American Camp near the reported site of the American settlers' farm where the incident that initiated the Pig War occurred. The park would work collaboratively with the county and others to address neighborhood development and its effect on park viewsheds, and water resources.

Summary of Alternatives

Actions	Common to All Alternatives	Alternative A No Action	Alternative B	Alternative C Preferred
Implementation Plans				
Implementation Plans Needed	Update historic landscape report; develop land protection plan.	Same as Common to All, plus resource management strategy, vegetation management plan, updated fire management plan, comprehensive interpretive plan, overflight management plan, and land protection plan.	Same as Alternative A, plus visitor use management plan.	Same as Alternative A, plus visitor use management plan and be involved in cooperative management plan of Garrison and Westcott bays.



SUMMARY OF IMPACTS

This table summarizes the impacts called for the in different alternatives. Please see Chapter 6: Environmental Consequences for a full description of impacts.

Summary of Impacts			
Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Effects On Cultural Resources			
Cultural Landscape	No adverse effect on the cultural landscapes of the park; continued program of cultural resource management in the park would have minor to moderate beneficial impacts on the cultural landscape. This alternative would provide some beneficial impacts to cumulative effects of long-term wear and tear on cultural landscapes and would not contribute to the adverse cumulative effects.	Overall long-term moderate benefits to the cultural landscape through expanded techniques that enhance the cultural landscape, restore the orchards and the prairie. Could contribute minor to moderate adverse impact toward the cultural landscape by placing a new visitor center closer to the historic core of the cultural landscape. Impacts from construction related activities in the short-term could be moderate to major. Would also provide some additional long-term benefits to cumulative impacts on the cultural landscape.	Same impacts to the cultural landscape as Alternative B, plus added benefits from the repatriation of historic buildings and structures.
Historic Buildings and Structures	No adverse effect on historic buildings and structures in the park; emphasis on preservation of existing historic structures, and actions to remove the non-historic addition and bats from the Crook house would have minor to moderate benefits. Some additional long-term benefits to the preservation of historic structures through the public visitation of additional buildings at American Camp on the island and repatriating historic buildings to the park if possible. Some additional benefits to cumulative impacts through these same actions.	Similar impacts as Alternative A; however proposals for adaptive reuse of the Crook house and added interpretation at the barracks at English Camp would have greater long-term benefits to historic structures by giving the buildings new function and keeping them in service.	Some additional long-term benefits to the preservation of historic structures through the public visitation of additional buildings at American Camp on the island and repatriating historic buildings to the park if possible. Some additional benefits to cumulative impacts through these same actions.

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Archaeological resources	No adverse effects to archaeological resources. Overall cumulative impacts would be adverse from past disturbance and natural erosion processes; however, implementing this alternative would not contribute to adverse cumulative effects.	Could result in minor to moderate adverse impacts to archaeological resources from the development of the visitor center near the redoubt at American Camp and the construction of the loop road, parking, and kayak/canoe landing at English Camp. Cumulative impacts are the same as Alternative A, with a minor contribution to long-term, adverse cumulative effects from construction.	Minor long-term adverse impacts to archaeological resources since the location of the proposed visitor center is on a previously disturbed site away from documented significant archaeological sites. Negligible contribution to long-term, adverse cumulative impacts on these resources.
Museum collections	Maintaining museum collections at facilities off-site would result in minor benefits, limited by current curatorial staffing levels. Planned cumulative activities for storage and curation at different facilities would result in moderate long-term benefits.	Moderate long-term benefits by providing on-site collections in a collections study room, the ability to interpret them within their historic context, and additional staff to provide for care beyond basic requirements. Contribution to cumulative impacts is similar to Alternative A.	Similar moderate long-term benefits to museum collections as Alternative B by providing a collections study room in the new visitor center and additional curatorial capacity. Contribution to cumulative impacts is similar to Alternative A.
Effects on Natural Resources			
Vegetation	Long-term moderate benefits to vegetation through ongoing resource management actions, expanded interpretation of native plants, and implementation of fire and vegetation management plans. Continuing park operations and sustained or increasing visitation would have some minor adverse impacts to vegetation. Overall effect of the cumulative actions would be minor to moderate and adverse; however the contribution from this alternative would be small.	Similar moderate long-term benefits as Alternative A plus some additional benefits from partnering opportunities. Moderate adverse impacts from the construction of a permanent visitor center and associated infrastructure on a previously undeveloped site at American Camp and relocation of the road and parking lot at English Camp. Cumulative impacts are similar to Alternative A; however Alternative B has a greater contribution to long-term adverse cumulative impacts.	Similar benefits as Alternative B, with additional long-term benefits from the park's more active role related to coastal resource management. Adverse impacts from smaller scale construction would be less than Alternative B, and would be minor to moderate in the short-term and minor in the long-term. Cumulative impacts are the same as Alternative B, with this alternative contributing fewer adverse impacts to cumulative effects.
Wildlife	Overall long-term moderate benefits by promoting a plan to remove exotics to ensure the long-term survival of the native ecosystem and its associated wildlife. Providing alternative bat houses to relocate the bat colony would have short-term minor adverse impacts but long-term benefits by providing a more sustainable location.	Similar impacts as Alternative A, with some additional long-term benefits from prairie restoration. Moderate adverse short-term impacts to wildlife from construction activities, including development of a permanent visitor center and associated infrastructure on a previously undeveloped site at American Camp and development of	Similar long-term benefits to wildlife as Alternative B from prairie restoration efforts and other expanded resource management programs. Adverse impacts are less than Alternative B due to less construction of facilities and roads, and would be minor to moderate in the short-term, and would likely not exceed minor in the long

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Wildlife (continued)	Minor to moderate adverse cumulative impacts to wildlife mostly resulting from ongoing development, continued presence of exotic species, and habitat fragmentation; however the contribution from implementing this alternative would be small.	the road and parking lot at English Camp. Cumulative impacts are similar to Alternative A; however Alternative B has a greater contribution to long-term adverse cumulative impacts.	term. Cumulative impacts are the same as Alternative B, although Alternative C would contribute fewer adverse impacts to cumulative effects.
Special Status Species	Minor short-term adverse impacts to bald eagles and marbled murrelets if they are nesting on the island from the reduction or removal of exotic species. Bald eagles were delisted on June 2007 under the endangered species act, but are still protected under the U.S. Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. However, this protection does not extend to habitat protection as it did in the ESA. Protection of both the species and habitat would continue to provide long-term benefits to bald eagles and marbled murrelets. Impacts from prairie restoration would also have overall long-term minor to moderate benefits to the Island Marble butterfly by improving habitat. Cumulative impacts would be minor to moderate from past habitat fragmentation and habitat loss.	Beneficial impacts from the continued protection of sensitive species and their habitats within the park, as well as some additional short-term minor to moderate impacts, most likely resulting from noise associated with construction projects. Expanded prairie restoration efforts would have a long-term moderate benefits to bald eagles and long-term moderate to major benefits to the Island Marble butterfly. Contribution to cumulative impacts related to noise disturbance would be greater than Alternative A; however, this alternative contributes beneficial effects from increasing prairie habitat through restoration efforts.	Similar impacts to special status species as Alternative B; however, limited construction activities in this alternative would reduce adverse impacts related to noise. Cumulative impacts are the same as Alternative B.
Geologic Resources	No additional impact on geologic features or processes. Long-term minor to moderate adverse impacts to soils would continue from ongoing park operations and burrowing activity from rabbits. Cumulative impacts to geologic landforms from the Cattle Point Road proposed realignment would be moderate, long-term and adverse while impacts to soils from this project would be minor, long-term and adverse.	Some minor, short-term adverse impacts from construction activities, with no long-term impacts to prominent geologic features and processes. Soils would also be moderately impacted from construction in the short-term; however, there would be long-term benefits to soils from prairie restoration efforts.	Impacts on geologic resources and processes would be the same as Alternative B. Impacts to soils would be the same as Alternative B in terms of intensity and duration, but a smaller amount of soil area would be impacted.

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Geologic Resources (continued)	This alternative would have a negligible contribution to cumulative impacts.	Cumulative impacts are the same as Alternative A and implementation of this alternative would contribute short-term moderate adverse impacts to cumulative impacts from construction as well as long-term benefits from prairie restoration.	Cumulative effects are the same as Alternative B; however, Alternative C contributes less adverse impacts to soil resources.
Coastal Water Resources and Hydrologic Systems	No direct adverse impact on coastal water resources or hydrologic systems, including wetlands. Water resources in Westcott and Garrison Bays would continue to be influenced by relatively low rates of flushing, recreational boaters, and by land use practices, which combined could cause major impacts to water quality in the vicinity of English Camp. Water quality at American Camp would remain relatively high, with minor impacts from recreation activities. Continued restoration of the native plant communities would have moderate benefits to hydrologic systems. Cumulative impacts would be moderate and adverse and could be major and adverse based on potential tidal energy development programs and invasion of the European green crab. The contributions to these effects from this alternative would be very small.	Long-term benefits to coastal water resources by engaging more actively in management of the intertidal zone in cooperation with DNR. Minor to moderate adverse impacts to hydrologic systems in the short- and long-term from construction at both American and English camps. Cumulative impacts would be similar to Alternative A, with additional minor contributions.	Additional moderate to major long-term benefits to coastal water resources through additional management actions, such as implementation of the ocean stewardship strategy, and partnership opportunities. Adverse impacts to hydrologic systems would be less than Alternative B due to the location of the visitor center at American Camp on the existing site. Cumulative impacts are the same as Alternative B, with Alternative C having fewer contributions to adverse effects and greater contributions to long-term benefits.
Air Quality	No adverse impacts to air quality. Cumulative impacts associated with population growth and increased pollution primarily from motor vehicle emissions and increasing marine vehicle traffic would contribute minor to moderate adverse impacts to park air quality. Implementing Alternative A would not alter any trends that impact air quality and therefore would not contribute to cumulative impacts.	Some short-term minor to moderate adverse impacts to air quality from construction of facilities and roads at American and English camps. Alternative B would have a greater contribution to cumulative impacts in the short-term, but long-term contributions to impacts as a result of implementing this alternative would be very small.	Similar impacts to air quality as Alternative B. Limited development, notably eliminating the loop road alternative at English Camp, would contribute fewer direct and cumulative adverse impacts to air resources. Adverse impacts would be moderate and short-term, with no long-term impacts.

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Soundscapes	Long-term benefits to soundscape through development of an overflight management plan and establishment of a noise baseline for planes flying over the park. Cumulative impacts are largely from overflights and boat traffic and could be moderate and adverse in the long-term as development on Garrison Bay expands. Alternative A would have a minor contribution to cumulative impacts.	Similar impacts as Alternative A, plus additional long-term benefits from conducting baseline acoustic monitoring. Additional moderate short-term adverse impacts would also occur from construction activities at both camps. Cumulative impacts are the same as Alternative A, but this alternative would have a slightly greater contribution to cumulative impacts.	Similar impacts as Alternative B, with fewer adverse short-term impacts due to the smaller scale of construction. Cumulative impacts are the same as Alternative B.
Effects on Visitor Experience			
Interpretation and Education	Moderate long-term benefits on interpretation and education. Although visitors would enjoy the park, they would experience crowding and limited access to key interpretive opportunities as a result of overcrowded facilities during peak periods. Limited staffing and funding would prevent the further expansion of interpretive programs and limit visitor contact with park interpretive rangers. As a result, visitors may not understand the sensitivity of park resources and the complexity of the interconnections of the park's natural and cultural resources. This limitation would result in moderate, long-term adverse impacts to visitor understanding and appreciation of park resources. Park programs, facilities, and staff would continue to contribute moderate long-term benefits to cumulative impacts on interpretation and education about park resources and values.	Development of a permanent visitor center closer to the historic scene at American Camp and adaptive reuse of the Crook house at English Camp. Both would have moderate to major long-term benefits to interpretation. Expanded partnerships would also contribute moderate to major long-term benefits by reaching a broader audience. Moderate to major long-term benefits to cumulative impacts on interpretive opportunities for the public.	Construction of a permanent, larger visitor center at the existing site, which would have a major long-term benefit to interpretation. Reuse of the Crook house as an exterior exhibit would improve visitor understanding of the distinction between the encampment era and the subsequent Crook family era at the site and contribute additional moderate benefits to interpretation. Expanded partnerships would also enhance the park's ability to communicate interpretive themes to the public. Same moderate to major benefits to cumulative impacts as Alternative B.
Recreational Resources	Moderate long-term benefits to recreational opportunities. Continuing limited involvement with local efforts to establish island-wide trail connections and working with the county to improve	Major long-term benefits to recreation realized through more active participation in the expansion of island-wide trail connection and partnerships to improve bicycle use and access.	Major long-term benefits to recreation similar to Alternative B, with the added effort to help the county implement some concept of a historic military road trail connecting the two camps.

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Recreational Resources (continued)	Bicycle routes along roads would have moderate benefits to recreation and contribute to improving public safety. Maintaining the publicly accessible shoreline would have moderate benefits to recreation. Contributes moderate to major benefits to the cumulative impacts on recreation opportunities.	Active management of the intertidal zone would result in the long-term preservation of the shoreline areas which are a critical recreation resource. Addition of Mitchell Hill and other properties would also expand recreational opportunities.	
Scenic Resources	Moderate long-term benefits to scenic resources by working with adjacent landowners and others to minimize impacts to the park's scenic resources from cumulative actions outside the park.	Some additional short-term moderate adverse impacts to scenic resources from construction of a new visitor center and enlarged parking at American Camp and construction of a one-way loop road at English Camp. Removing the redoubt road at American Camp and converting it to a bicycle and pedestrian trail would have long-term benefits to scenic resources. Some long-term benefits from the use of new photovoltaic systems and lighting techniques that would enhance dark night skies.	Fewer short- and long-term impacts to scenic resources eliminating construction of a loop road at English Camp as in Alternative B. Similar long-term benefits to scenic resources as Alternative B by removing the redoubt road at American Camp and converting it to a bicycle and pedestrian trail. Long-term benefits to scenic resources by implementing new systems and techniques for outdoor lighting that would reduce light pollution and enhance dark night skies.
Effects on Visitor Access and Transportation			
Access and Transportation	Minor long-term benefits to visitor access and transportation due to the limited improvements to parking and maintenance of existing road systems at American and English camps. Some moderate long-term benefits from linking with the island-wide trail system and extending the ADA trail at English Camp. Major long-term benefits from cumulative impacts including the implementation of the County Non-motorized Transportation Plan, San Juan Island Trails Plan and Master Plan for the Friday Harbor ferry terminal.	Moderate to major, long-term benefits to visitor access and transportation from a number of improvements at both American and English camps. Construction of a new visitor center closer to the historic scene and enhancements to parking areas at American Camp, coupled with the improved parking at Young Hill and the one-way loop road at English Camp provide moderate to major benefits. Moderate long-term benefit to cumulative impacts island-wide.	Improvements contribute moderate long-term benefits to visitor access and transportation at both American and English camps. Construction of a new visitor center on the existing site and enhancements to parking areas at American Camp, coupled with the improved parking at Young Hill and improvements to the existing entrance road at English Camp would have moderate benefits. Moderate long-term benefit to cumulative impacts island-wide.

Summary of Impacts

Actions	Alternative A No Action	Alternative B	Alternative C Preferred
Effects on Socioeconomics			
Socioeconomics	Major, long-term benefit to the local economy through a sustained stream of tourism dollars and jobs supported by park-based recreation. Continuation of park facilities, infrastructure and programs also contribute major long-term benefits to the local community and area economy. Potential adverse cumulative impacts from rising home prices and the gap between wage earnings and the median cost of a home. Other cumulative impacts include economic benefits from the 2010 Olympic Games and development of Rosario Resort on Orcas Island. Contributes moderate long-term benefits to cumulative impacts.	Major, long-term benefit to the socioeconomic environment similar to Alternative A through a sustained stream of tourism dollars and jobs supported by park-based recreation. Addition of a new visitor center, improved facilities, and expanded recreation and education opportunities could result in additional tourists and a greater long-term benefit than Alternative A.	Similar major, long-term benefits to socioeconomics to Alternative B from expanded recreation and education opportunities, as well as new and expanded facilities that could attract additional visitors and bring increased tourism revenues to the local economy.
Effects on Park Operations			
Park Operations and Maintenance	No immediate change to park infrastructure and the continuation of inadequate funding and staffing levels, resulting in long-term minor adverse impacts to park operations. As projects are completed to replace or maintain aging facilities, and replace them with more sustainable infrastructure, the ongoing maintenance needs will decrease. Completing these projects would result in cumulative moderate long-term benefits. Overall short-term minor to moderate adverse impacts and long-term cumulative moderate benefits to park operations.	Long-term benefits to operations by improving infrastructure and providing a permanent visitor center that appropriately meets the needed function of the park. Construction of this facility on a different location would minimize short-term disruptions to the visitor contact function as the temporary structure could remain in place and operational while the new facility was being constructed. Additional staff and budget proposed would have long-term benefits by providing adequate staff to meet a broad range of park operational needs. Cumulative impacts are the same as Alternative A.	Similar long-term benefits by improving the visitor center and other park infrastructure. Greater short-term impacts to park operations from construction occurring in the same location as the primary visitor contact function at American Camp. Additional staff and budget would have similar benefits as Alternative B. Cumulative impacts are the same as Alternative A.

