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

D-28 / September 2005
September 2005

Dear Friend of Ebel's Landing National Historical Reserve:

It is with great pleasure that we submit to you the two-volume Draft General Management Plan and Environmental Impact Statement for Ebel's Landing National Historical Reserve (GMP/EIS). When completed, this plan will guide our management of the Reserve with a 15-20 year vision for its operation and protection.

However, before the GMP/EIS can be completed, it is important that we receive comments on this draft. Please take the time to review this draft and provide us with any comments you may have.

The Draft General Management Plan offers three alternative approaches to public use and enjoyment of the Reserve, protection of natural and cultural resources, and the overall management of this unique unit of the National Park System. The environmental consequences section of the document provides an understanding of the effects each alternative would have on the environment.

Your input to this plan is important and will make it a better guide for the future of the Reserve. You are invited to “Open House” meetings where you can meet with the Trust Board and NPS and Reserve staffs, to ask questions, discuss, and provide comments. These meetings will be held in the fall. Dates, times, and locations of these meetings will be published in local newspapers, in the Draft General Management Plan Alternatives Newsletter, and on our web page at www.nps.gov/ebla. You can submit comments or receive updates on the GMP/EIS online through the NPS Planning, Environment and Public Comment System at http://parkplanning.nps.gov/ebla. An electronic public comment form is provided through this website.

The public comment period for this draft GMP/EIS will begin with the publishing of the Notice of Availability in the Federal Register. All comments must be postmarked or transmitted no later than 60 days after the Notice is published in the Federal Register. This date will be made available on the above websites.

If you chose not to submit comments online, please send your written comments to:

Reserve Manager
Ebel's Landing National Historical Reserve
PO Box 774
Coupeville, WA 98239

Since its creation in 1978, Ebel's Landing National Historical Reserve has benefited from strong community support and broad public participation. Our planning effort for this Draft General Management Plan has also benefited from your participation and involvement. We thank you for taking the time to help make this the best plan possible for such a special place.

George Lloyd, Chair
Trust Board of Ebel's Landing National Historical Reserve
OH BEAUTIFUL PRAIRIE

Oh beautiful prairie
How did you come to be?
Tell me your story,
Of how you came to be.

I will tell you my story
Of how I came to be,
I started under a glacier
that sat on top of me.

It pushed me out of the way,
It made my hills you see today,
It made a hollow deep and wide
and sat there a long, long time.

And finally the sun came and melted it away,
It left behind a beautiful lake
That many years ago dried up to make,
The prairie you see today.

Emma Ruggiero
Three alternatives have been developed by the National Park Service (NPS), Reserve staff, and Trust Board in Volume I of the draft general management plan (GMP) and environmental impact statement (EIS) for Ebey’s Landing National Historical Reserve (Reserve). They respond to NPS planning requirements and to issues identified during the public scoping process. These alternatives address visitor use and the preservation of cultural and natural resources that protect and interpret the rural community on Whidbey Island from 19th century exploration and settlement in Puget Sound to the present time. Alternative B is the Preferred Alternative of the NPS and Trust Board and, if approved, will become the GMP for the Reserve. Volume II contains supplemental reports prepared by consultants which helped in the development of this draft GMP on topics including the cultural landscape, farmland preservation and case studies, and the adequacy of county zoning within the Reserve.

**Alternative A** constitutes the No Action alternative and assumes that existing programs, facilities, staffing, and funding would generally continue at their current levels. The NPS would dispose of NPS-owned and managed farms within the Reserve to the private sector after placing conservation easements on them.

**Alternative B** is the NPS Preferred Alternative. The Reserve’s Trust Board, and the NPS, in cooperation with partners, would enhance existing programs and resources management, as well as administrative, maintenance, and visitor services within the Reserve. To maintain and protect the rural landscape, the NPS would continue to purchase conservation easements on priority properties based upon a new land protection plan. The NPS would exchange NPS-owned farms to private farm owners for additional protection on other properties within the Reserve. Historic buildings would be rehabilitated to the Secretary of the Interior’s Standards. The county would be encouraged to develop a zoning overlay for the Reserve to aid in land use control. In addition, a minor boundary adjustment would be recommended. To orient and inform the visitor about the Reserve, three gateway kiosks would be developed along State Route 20 and a visitor center/contact station would be sited in an historic building in Coupeville or within the historic district. Three development concept plans for three sites are included at the end of this alternative.

**Alternative C** changes the management structure of the Reserve from a Trust Board of volunteers to a paid commission structure. Many actions are similar to Alternative B but with some distinctions. Approximately five acres of NPS-owned land at Farm II would be retained for administrative and maintenance use before exchanging the remaining farmland to a private farm owner for additional protection on other properties within the Reserve. One of the three gateways would be in a historic building in the north of the Reserve. The Reserve would partner for a visitor contact facility at a proposed marine science center.

The environmental consequences of the alternatives are examined in the EIS. Results of public involvement, consultation, and coordination are included. For further information, or to send written comments on this draft plan, contact or write to the Reserve Manager at Ebey’s Landing National Historical Reserve, PO Box 774, Coupeville, Washington 98239-0774; telephone: (360) 678-6084. All comments received are part of the public record and copies, including any names and home addresses of respondents, may be released for public inspection. Individual respondents may request that their home addresses be withheld from the public record, which will be honored to the extent allowable by law. However, this request must be stated prominently at the beginning of the comments. Submissions from organizations, businesses, and officials will be made available for public inspection in their entirety. This document is available online at the NPS Planning, Environment and Public Comment System at [http://parkplanning.nps.gov/ebla](http://parkplanning.nps.gov/ebla). Public comments should be submitted through this website.
How To Use This Document

Volume I of this draft general management plan/environmental impact statement is presented in six chapters and includes appendices, bibliography, and an index.

The summary at the beginning of the document provides a synopsis of this document.

Chapter 1 sets the stage by describing the development of Ebey's Landing National Historical Reserve and Trust Board, the role of the four partners, and important actions that have occurred since establishment of the Reserve. It also provides the Reserve's purpose, significance, and desired future conditions that were developed with public involvement during the planning process.

Chapter 2 describes the purpose and need for this GMP/EIS.

Chapter 3 provides detailed information on the environment, which could be affected by the decisions contained in the individual management alternatives.

Chapter 4 describes three management alternatives including the NPS's Preferred Alternative. The alternatives represent reasonable sets of management decisions that are considered within the parameters of the GMP. The end of this chapter includes two summary charts: Summary of Actions for Each Alternative and Summary of Impacts.

Chapter 5 describes the impacts of each alternative on resources.

Chapter 6 summarizes public involvement and the consultation process that was an integral part to the creation of this draft GMP/EIS. Chapter 6 also includes summaries of public comments received by the NPS.

The appendices provide more detailed information, including a glossary, which some readers may find helpful when reviewing the main text of the document.

Volume II contains supplemental reports prepared by consultants on topics related to the cultural landscape, farmland preservation and case studies, and the adequacy of county zoning within the Reserve.

How to Comment on this Document

The public comment period for this draft GMP/EIS will begin with the publishing of the Notice of Availability in the Federal Register. All comments must be postmarked or transmitted no later than 60 days after the Notice is published in the Federal Register. We encourage you to review the document and welcome your comments.

During the comment period, comments may be submitted using several methods:

We suggest that you submit comments online at: NPS Planning, Environment and Public Comment System at http://parkplanning.nps.gov/ebla. An electronic public comment form is provided through this website.

A postage paid comment response form is included in the Draft General Management Plan Alternatives Newsletter. You may use this form and attach additional pages as necessary. You can also send a letter to:

Ebey's Landing National Historical Reserve
P.O. Box 774
162 Cemetery Road
Coupeville, WA 98239

In addition, comments may be made in person at one of the upcoming public workshops that will be conducted in late September or early Fall. The specific dates and times for these workshops will be announced in local newspapers, in the Draft General Management Plan Alternatives Newsletter, and online at the above site.

A limited number of additional copies of this report are available from the mailing address above. In addition, this draft GMP/EIS is available at the public library in Coupeville.

Public comments and contributions have been an invaluable component of this planning process, and the Reserve Trust Board and the National Park Service look forward to your comments on this Draft GMP/EIS.
Summary

Ebey’s Landing National Historical Reserve was created by Congress in 1978 as a unit of the National Park System. However, the Reserve is not a typical national park. It is an experiment in its approach to park management and land protection. Ebey’s Landing is the first “historical reserve” in the National Park System—its boundaries surround mostly private land (approximately 85 percent) and it is managed through a partnership. Though most national park units are managed by a superintendent, the Reserve is managed by a nine-member Trust Board comprised of representatives from four units of government—town, county, state, and federal. Given this nontraditional approach, the Reserve presents unique opportunities and challenges to planning, management, public use, Reserve operations, and preservation of significant natural and cultural resources.

The current comprehensive plan for the Reserve is now 25 years old. The production of a new general management plan (GMP) is necessary to respond to changing conditions, and to provide a new framework for the future management, protection, and public use of Reserve resources for the next 15-20 years.

Since the Reserve was established, many changes have occurred. The Seattle-Tacoma Metropolitan Area has grown considerably, increasing visitation and residency to central Whidbey Island and changing the character of the rural environment. Over the years, dairy-based and other types of agriculture have declined within the Reserve while conversion of land to residential use is on the rise. Washington State Department of Transportation improvements along State Route 20—a State Scenic Highway and the main highway through the Reserve—are incrementally changing the historic road patterns and increasing speeds in favor of the commuter at the expense of the park visitor. All these factors affect the ability of the National Park Service and the Trust Board to preserve the rural setting which the enabling legislation seeks to protect: “to preserve and protect a rural community which provides an unbroken historical record from ...19th century exploration and settlement...to the present time.”

Other changes have been favorable. Nonprofit organizations such as The Nature Conservancy, the Whidbey-Camano Land Trust, and the Au Sable Institute now own and have protected land within the Reserve, preserving agriculture and protecting open space and unique natural resources. Partnerships have been forged that protect historic buildings and new “niche” agriculture is beginning to appear as economic factors change.

As part of the general management planning process, three alternatives have been developed that address these changes and other issues discussed in the “Purpose and Need” chapter of this GMP. Both the action alternatives, Alternatives B and C, are intended to address these issues successfully, if the recommendations are implemented. The Preferred Alternative is the alternative chosen by the Trust Board and the NPS to implement.

An environmental impact statement (EIS) has also been prepared, which outlines the impacts or effects that each of the alternatives will have on the Reserve environment. It also assists managers and the public in assessing the relative merits and effects of any one alternative from the others.

As a partnership park, the success of this plan is not solely determined by the National Park Service; rather, the plan’s success depends upon the will and perseverance of all those who have the authority and desire to implement actions within this plan. Final GMP/EIS approval is obtained by the Trust Board recommending the signing of the Record of Decision and the approval by the NPS Regional Director, Pacific West Region. In acknowledgement of the partnership arrangement, the Trust Board will be recommending the adoption of the approved final GMP by the elected officials from the town of Coupeville and Island County as a component of their comprehensive plans.
This general management plan is a two-volume document that includes the GMP/EIS in Volume I. Volume II includes supporting technical reports prepared by consultants on agriculture, land use change patterns, and the adequacy of county zoning for protecting the Reserve.

In conjunction with the GMP/EIS, a land protection strategy was produced by a consultant for the Trust Board and some of the key elements of this plan are included within this GMP/EIS. A more detailed land protection plan, which seeks to implement these strategies, will be completed by the National Park Service in consultation with the Trust Board in the near future. Once a draft of the land protection plan is produced, it will be made available for public review and comment.

No Action Alternative
The No Action Alternative, Alternative A, is required by the National Environmental Policy Act and provides the baseline from which to compare the other alternatives. Under this alternative, current management practices would continue as funding allows. Emphasis would be upon protecting the values of the Reserve largely through partnerships with others without substantially increasing staff, programs, funding support or facilities.

It would be assumed under this alternative that the principal support for the Reserve would continue to come from the leadership of the predomi-nately volunteer Trust Board. A small staff consisting of the Reserve Manager and part-time administrative assistant would continue to serve the Reserve, along with an NPS part-time natural resource position and the combined NPS Cultural Resource Specialist/Trust Board appointee. From time to time, staff would be augmented by assistance from the Pacific West Region Seattle Office, North Cascades National Park Service Complex and other NPS park units in the Region as time and funding permit.

The Reserve staff would continue to protect historic structures and natural resources on retained NPS owned land in fee. The Reserve staff would also continue to monitor and manage easements, helping to protect the cultural landscape. The Trust Board would continue to encourage private landowners within the Reserve to be private land stewards of natural resources. State parks would continue to be managed according to state law and policies. The resources on any NPS lands owned in fee would continue to be managed according to federal law and NPS policies.

Land protection efforts would continue to rely upon availability of federal funds secured through the Land and Water Conservation Fund (LWCF) by NPS staff, largely to acquire conservation easements from willing sellers on the high priority lands within the Reserve. However, the principal reliance of the Trust Board for protecting Reserve values would continue to be upon local land use controls from the town of Coupeville and Island County. No expansion of facilities, staff, programs, or services would be anticipated under this alternative. There would be no adjustment to the Reserve boundary under this alternative.

Alternative B Preferred Alternative
This alternative constitutes the Preferred Alternative for Ebey’s Landing National Historical Reserve. The Trust Board and the National Park Service would respond to new operational and land management realities by enhancing programs, resources, and administrative and visitor facilities. This alternative would focus on promoting agriculture, protecting resources, and providing for greater opportunities for public education and enjoyment.

The NPS would seek increased budget appropriations from the National Park Service operating base to enlarge staff presence at the Reserve. The profile of the Reserve staff would expand from four to ten staff positions comprised of both Trust Board and NPS employees. This staff increase would be phased over time as funding permits. Staff composition would expand the limited maintenance and resource capabilities and allow for education and interpretive positions.

The Trust Board would adopt a new land protection plan subsequent to publication of this GMP that would better articulate the long-range land protection needs by prioritizing highly valued landscapes. Emphasis would continue to be upon the purchase of conservation easements from will-
ing sellers, augmented by land use protection measures by local government and nonprofits. The establishment of an overlay district in the unincorporated portion of the Reserve (not to be confused with the existing town’s historic overlay zone) would be one of several key recommendations for strengthening design, zoning, and permitting authorities by Island County and the town of Coupeville.

The Reserve staff would expand its role in natural resource protection within the Reserve by partnering with other organizations and agencies, when appropriate, on such issues as prairie restoration, roadside vegetation, protection of prime and unique agricultural soils, air and water quality, elimination of exotics and protection of night sky/natural quiet.

Facility improvements would include new information kiosks at three gateway areas into the Reserve and a visitor center/contact station in a historic building either in the town of Coupeville or in the historic district to inform the public about the Reserve. This building could also serve as the Reserve’s administrative headquarters. This alternative would promote partnerships with others to achieve education and visitor goals.

To promote agriculture within the Reserve, the NPS would seek to exchange NPS-owned farms to private owners for additional protection on other properties within the Reserve. The NPS-owned historic buildings would be stabilized and the Jacob Ebey House and Ferry House rehabilitated in accordance with the Secretary of the Interior’s Standards. The NPS would retain protective easements on the Rockwell House and Reuble Farmstead, as well as on the adjoining farmlands, before they are exchanged.

Once Farm II (the Reuble Farmstead) is exchanged, the Reserve’s maintenance facility would need to move. The Reserve would explore partnering opportunities with units of local government, nonprofits, or others within the Reserve to accommodate this function.

Congressional legislation would also be sought to provide for a modest boundary expansion of the Reserve to incorporate additional prairie, agricultural lands, and wetlands. These would include the remainder of Crockett Lake and the Naval Air Station-Whidbey Outlying Landing Field not currently within the Reserve, additional portions of Smith Prairie, and Bell Farm in the northwest area of the Reserve. Any boundary changes proposed would be fully coordinated with willing property owners and managers.

The Trust Board would work with the public, the Island County Marine Resources Committee, and other agencies to protect the coastal waters adjacent to the Reserve.

Three development concept plans have been included at the end of this alternative showing detailed treatment of the South Gateway, the Ferry...
Alternative C

This alternative would capture many of the components of Alternative B, but with a few important distinctions.

First, the overall policy management of the Reserve would be executed by a part-time Commission that would be compensated through a stipend for their service. This Commission would replace the current Trust Board management structure. Reserve Staff would increase from four (No Action) to ten positions that would be exclusively hired and managed by the Commission. In Alternative C, the Commission would seek increased budget appropriations from the National Park Service operating base to enlarge staff.

As in Alternative B, the land protection emphasis would primarily focus on securing conservation easements on important Reserve landscapes from willing sellers, augmented by local land use controls. In addition, Alternative C would recommend that Island County reinstitute a system of transfer of development rights for the protection of agricultural, and other important lands.

Rather than exchanging all NPS-owned farmland, the NPS would retain a five-acre portion of NPS-owned Farm II, including the historic farm buildings, for use as the Reserve’s administrative and maintenance facilities, then exchange the remainder of agricultural land for additional protection on other properties within the Reserve. The historic Reuble Farmstead buildings at Farm II would be stabilized and rehabilitated to the Secretary of Interior’s Standards and adaptively reused as NPS administrative offices and workshop facilities. Some non-historic buildings may be removed. Preservation maintenance training could be incorporated into any rehabilitation work done on the historic buildings.

The Ferry House would be stabilized and a barn-like building would be built at the Ferry House using new compatible construction to serve as a visitor information and interpretive center.

The Jacob Ebey House would be treated the same as in Alternative B using the house as a seasonal contact station and the Blockhouse as an exterior exhibit. Before exchanging the farmland to a
farmer, the NPS would retain protective easements.

For enhancement of visitor services, the Commission staff would partner with other organizations in the development of a visitor contact facility at a proposed marine science center to educate visitors and interpret the marine environment. The Commission staff would explore the potential to use an historic building to serve as a northern gateway contact facility in addition to two other gateways proposed.

The same minor boundary expansion would be recommended as in Alternative B; however, it is recommended that the legislation authorizing the change in the Reserve boundary direct a suitability/feasibility study of the western coastal area of Whidbey Island for potential designation as a National Marine Sanctuary managed by the National Marine Fisheries Service.
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Background of the Reserve

**Background**

**Establishment of Ebey’s Landing National Historical Reserve**

Section 508 of the Parks and Recreation Act of 1978 (Public Law 95-625 and USC Sec. 461) established Ebey’s Landing National Historical Reserve. (See Appendix A: Ebey’s Landing National Historical Reserve Legislation.)

It is unique in that it is the first “historical reserve” in the National Park System. It is a “partnership” park that uses a cooperative strategy to bring together private and public resources at the local, state, and federal level.

The Reserve was created “to preserve and protect a rural community which provides an unbroken historic record from…19th century exploration and settlement in Puget Sound to the present time” and emphasizes four historic eras. These eras are Vancouver’s exploration of the Puget Sound in 1792, the first permanent settlement on Whidbey Island by Isaac Ebey, the Donation Land Claim settlements and subsequent settlements, and the development of the town of Coupeville. The Reserve’s boundaries reflect this history and are the same as those of the Central Whidbey Island Historic District established in 1973, which were based on the settlement patterns resulting from the Public Lands Survey Act of 1850, also known as the Donation Land Claim Act.

Though the Reserve is a unit of the National Park System, the Reserve varies from traditional National Park System units. The legislation points to the fact that this is a community that has evolved from early exploration to the present and consists of descendants of original settlers as well as new residents. As such, the Reserve cannot be interpreted from one specific point in time, as is the case of most traditional, particularly historic, NPS sites. In addition, most of the land (approximately 85 percent) is privately owned, with the rest a combination of local, state, and federal ownership. The NPS has purchased little land within the Reserve (approximately 3.8 percent or 684 acres), but has actively acquired easements (interests in land, not fee title) on farms and important open spaces. The concept of the Reserve was a community effort and participating in land protection is voluntary on the part of private landowners. Sales of easements to the National Park Service to protect the rural landscape are on a willing seller basis. This has been a key to the Reserve’s success in the community.

The impetus to protect central Whidbey began from local citizens’ initiative to protect Ebey’s Prairie from inappropriate development and is well documented in the Reserve’s administrative history (McKinley 1993). The concept of a national historical reserve was viewed as a way to preserve open space with a minimum disturbance.
to private landowners—to provide initial federal support without threatening local autonomy. As part of the legislation, management of the Reserve was to be through a unit of local government and not solely with the NPS. The reserve concept permitted immediate protection of critical lands threatened by development and allowed for continued federal technical assistance while transferring the management role to a local entity.

The Trust Board was created to fulfill the mandate of the enabling legislation calling for “a unit of local government” to manage the Reserve. According to Public Law 95-625, when local government having jurisdiction over land use within the Reserve had enacted appropriate zoning ordinances to protect its historic and natural features, management would be conveyed to local government. Washington State Parks and other agencies already established in the area would continue to function with little impact from the Reserve. The NPS would provide technical assistance and provide grants of up to 50 percent of the Reserve’s annual cost of operations and maintenance. If the Secretary of the Interior found that local authorities failed to conform to the plan, the Secretary could assume control of the Reserve.

The Act required a comprehensive plan to be developed within 18 months to identify those areas most appropriate for 1) public use and development, 2) historic and natural preservation, and 3) private use subject to appropriate local zoning ordinances designed to protect the historical rural setting. Congress could not appropriate funds without the plan. Once completed, Island County, and the town of Coupeville would use the final plan to establish appropriate zoning ordinances while NPS proceeded to implement the necessary land protection measures. The 1980 Ebey’s Landing National Historical Reserve Comprehensive Plan was the first and only general management plan for the Reserve.

**Ebey’s Landing National Historical Reserve Trust Board**

Ebey’s Landing National Historical Reserve is a partnership between the town of Coupeville, Island County, Washington State, and the National Park Service. On July 23, 1988, an Interlocal Agreement for the Administration of the Reserve was recorded, which established a joint interagency administrative board for management of the Reserve. (See Appendix B: Interlocal Agreement for the Administration of the Reserve.)

Instead of a traditional park superintendent, policy oversight of the Reserve is managed by a nine-member board of volunteers representing the four governmental partners. There are seven local residents on the Reserve’s Trust Board (three appointed by the town of Coupeville, four appointed by Island County), one representative from Washington State Parks, and one from the National Park Service. The Trust Board members each serve a four-year term. It is the first NPS unit to be managed by a trust board entity. (For a complete list of names and positions, see Appendix C: Trust Board Members.)

The Trust Board employs a Reserve Manager to oversee the day-to-day operation of the Reserve. The Reserve Manager is assisted by staff composed of both NPS employees and Trust Board employees. Currently, the Reserve Manager is the only full-time staff employed by the board.

The Trust Board has primary management responsibility for volunteer programs, and partnership and community planning functions. The Board shares responsibility with the National Park Service in the functional areas of administration, interpretation, maintenance, land protection, and resource management. The role and responsibilities of the National Park Service are discussed in the following section.

**Role of the Island County**

Island County will use the Reserve’s GMP as an element of the county’s comprehensive plan to assist the Reserve in the protection and stewardship of the cultural landscape and historic properties. This would be achieved through sound land use planning practices for all private properties outside of Coupeville and within the Reserve. In addition, the county will annually provide direct and in-kind financial support up to 50 percent of the operating costs of the Reserve (subject to limitation in annually appropriated budget).
Role of the Town of Coupeville

Similar to the county, the town will use the Reserve’s general management plan as an element of the town’s Comprehensive Plan to assist the Reserve in the protection and stewardship of the cultural landscape and historic properties. The town will annually provide in-kind financial support and may provide other direct or indirect financial support. The town of Coupeville will also implement sound planning and development regulations and ordinances that work toward preserving the character of the Reserve.

Role of Washington State Parks

Washington State Parks will use the Reserve’s general management plan as a planning tool for projects and facilities within the Reserve. Washington State Parks’ role is stewardship of state park lands: Ebey’s Landing, Fort Casey and Fort Ebey state parks. This includes promoting public activities on state lands that are compatible with the overall purposes of the Reserve. In addition, Washington State Parks may provide financial assistance through public grants or other financial support, including in-kind contributions to the Trust Board. State Parks will consult with the Trust Board in exercising its responsibilities and authority within the Reserve.

Role of the National Park Service

Since Ebey’s Landing National Historical Reserve is a unit of the National Park System, the NPS is an integral player in the protection and long-term preservation of the historical Reserve, with a role distinctive and separate from the other partners. As one of four partners representing the umbrella entity formed for the purposes of managing the Reserve (the Trust Board), the NPS has five primary responsibilities: operations (including maintenance) and management of federal lands, resources, and programs; developing and periodically updating the general management plan for the Reserve in collaboration with the Trust Board; participating as one of nine members on the Reserve’s Trust Board; requesting appropriations for budget; and providing senior policy level oversight of Trust Board management of the Reserve.

Operational responsibilities include general land protection, cultural and natural resource management and protection, interpretation, and facility maintenance within the Reserve. The NPS is a model for stewardship in these areas for both visitors and residents of the Reserve.

The role of the NPS Cultural Resource Specialist/Trust Board member is to serve as the NPS representative on the Trust Board and represent the national perspective and to ensure that the public investment in the Reserve is upheld.

In addition, the NPS is responsible for requesting an appropriation for the Reserve’s budget for up to 50 percent of the annual operations of the Reserve. The remaining costs would be provided...
Island County Zoning and Ordinances

Island County, through the Growth Management Act and Comprehensive Plan process, re-instituted five acre minimum zoning within the Rural Zoning District of the county. Though in 1980, the Reserve’s own 1980 comprehensive management plan, adopted by the county, called for five acre zoning in the rural areas of the Reserve, it has become obvious to the Reserve Trust Board and staff that zoning at this development density will not preserve the historic views and scenic rural quality that the legislation for the Reserve sought to protect. This zoning change has, and will continue to have, impacts in maintaining agricultural land and critical open space within the Reserve. In addition, the lack of clustered development provisions hinders protection of open space.

Several National Register-listed contributing properties have been demolished in the Reserve since its creation, beginning with the 1850s Kineth House and Barn overlooking Penn Cove near Snakelum Point. Some of these properties were deemed significant in the 1930s and were recorded as part of the Historic American Building Survey documentation projects during the Great Depression. The lack of an adequate demolition ordinance in the county will result in additional losses of historic properties.

Au Sable Institute

In the mid-1990s, the property owned by the Washington State Fish and Game Department known as the Game Farm in historic Smith Prairie (a portion of this property is within the Reserve) was subdivided into ten-acre tracts intended to be sold at market value for home sites. The Trust Board and NPS, along with other concerned groups, worked with legislators from Washington State to prevent the immediate sale of this significant property until a conservation buyer could be found. Fortunately, the Au Sable Institute, a non-profit environmental education organization, came forward to purchase the property for its Pacific Rim campus and to protect the remnant prairie plant community. Native Puget Lowland grasslands are one of the most endangered types of ecosystems in Washington State. There are only two remaining glacial outwash prairies in the
Background of the Reserve

Robert Y. Pratt Preserve

When Robert Y. Pratt died in 1999, he left hundreds of acres of significant prairie, woodlands, and cultural resources at risk; however, he also provided that the historic Ferry House, the Bluff Trail, and portions of Peregos Lagoon and bluff would remain in conservation status by being deeded to an appropriate conservation organization. Through an aggressive fundraising and acquisition effort, The Nature Conservancy (TNC) purchased four key Pratt estate holdings: Ferry Forest (approximately 20 acres), the West Woods area (approximately 400 acres) which abuts the Bluff Trail; the Cottage parcel (less than one acre); and the West Ridge parcel which included the Jacob Ebey House and Blockhouse, sheep barn and machine shed, and farmland (approximately 60 acres).

The Nature Conservancy subsequently donated the Ferry House and a surrounding five-acre parcel to the NPS; sold the Ferry Forest, Cottage, and West Ridge property to the NPS; sold a conservation easement on the West Woods to the NPS. The Nature Conservancy sold the Jenne Farm parcel (approximately 140 acres) to a private conservation buyer. This buyer then sold a scenic easement over most of the parcel to the NPS.

The Nature Conservancy established the West Woods, Bluff Trail, and Peregos Lagoon as the Robert Y. Pratt Reserve. This preserve is one of TNC’s most visited holdings in Washington State.

Seattle Pacific University Conference Facilities

Seattle Pacific University began plans recently to increase the conference capability of the Casey Conference Center, adjacent to and originally part of the historic Fort Casey Military Reservation (now Fort Casey State Park and within the Reserve). Development plans included selling off open space and agricultural lands to the north of the main campus in order to raise funds for building a new conference facility. Lands to be affected include a parcel that contains a federally listed plant commonly known as the Golden Paintbrush, and woodlands with a designation by the state of Washington as a Natural Heritage Forest Area. An application for some of the property to become a special review district was filed with the county, only to be rescinded later after public outcry and lawsuit. No easements have yet been purchased to protect these significant lands in the Reserve.

Washington State Department of Transportation Improvements

Improvements to the Keystone-Port Townsend Ferry terminal are being proposed by the Washington State Department of Transportation (WSDOT). Originally considering three alternatives, public feedback resulted in WSDOT scaling back its plans to only consider improvements to the existing ferry terminal. One of the many issues is whether to remove the older, possibly historic, vessels along the Keystone-Port Townsend route and replace them with the newer, larger Issaquah class of vessels in order to make all the ferryboats operating in Puget Sound interchangeable as needed. There are potential effects on the cultural landscape in the area of Admiralty Head and Keystone Spit/Crockett Lake should these improvements occur.

Washington State Growth Management Act

In March of 2004, the Washington State Legislature passed a bill that amended the state’s Growth Management Act (GMA) and allows towns located completely within the boundaries of national historical reserves to be exempt from GMA density requirements. The GMA called for future growth to be diverted into towns and cities where services already existed. Because of this, Coupeville was concerned about potential impacts to the quality of life for its residents, as well as adverse impacts to the resources within the Reserve. Coupeville is the only town in the state that falls within the boundaries of a national historical reserve. This bill allows Coupeville to restrict zoning densities within its town limits as long as it pro-
Purpose and Significance

Purpose of Ebey’s Landing National Historical Reserve

Purpose statements are the foundation for all subsequent decisions and qualify the language used in the legislation to more clearly state the purpose of the Reserve. They are the specific reasons why this area warrants national reserve status.

The National Park Service Organic Act of 1916 established management criteria for all units of the National Park System. The stated purpose of the National Park Service is “…to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such a manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

Specifically, the purpose of the Reserve is to preserve and protect the cultural landscape and to commemorate the history of a rural community, which provides a continuous record of exploration and American settlement in Puget Sound from the nineteenth century to the present. This includes the first thorough exploration of Puget Sound by Captain Vancouver in 1792; settlement of Whidbey Island by Colonel Ebey; settlement during the years of the Donation Land Law beginning in the 1850s; and the growth of the town of Coupeville. Preservation of natural and cultural resources in the Reserve happens in the context of a living, working, and changing community.

Significance of Ebey’s Landing National Historical Reserve

Significance statements are also drawn from the enabling legislation and other legislative descriptive documents. Significance statements explain what resources and values warrant the area’s designation as a national reserve.

Through planning team workshops and public meetings, the local, national, and international significance of the Reserve has been determined as:

- Ebey’s Landing National Historical Reserve is the nation’s first national historical reserve; a new kind of national park unit cooperatively managed by a trust board representing local, state, and federal interests.
- The Reserve provides the nation a vivid and continuous historical record of Pacific Northwest history, including early exploration and American settlement of the Puget Sound region.
- Early settlement at Ebey’s Landing, precipitated by the 1850 Donation Land Claim Act helped establish American claims in the Pacific Northwest, resulting in the 1859 Border Resolution.
- The historical landscape of the Reserve appears much as it did a century ago. Historic homes, pastoral farmsteads, and commercial buildings are still within their original farm, forest, and marine settings.
- Within the fast growing Puget Sound region, the Reserve has quickly become the only remaining area where a broad spectrum of Northwest history is still clearly visible within a large-scale (and partially protected) landscape.

Secondary Significance

- Ebey’s Landing National Historical Reserve consists of excellent undisturbed examples of post-glacial geological features such as kettle ponds, steep gravel bluffs, remnant prairies formed by glacial lakes, and sweeping shoreline topography left by the receding glaciers.
- The unique climates, rainshadow, soils, maritime influence and geologic features result in an unusual diversity of plant and animal species, communities, and habitats.
- Within the Reserve, the visitor can experience a variety of diverse physical and visual landscapes within a small geographic area.
- Because the Reserve is a short drive from major Northwest population centers, it is a popular destination for various forms of recreational and educational activities.
- Penn Cove within the Reserve has an internationally significant shellfish (mussels) industry dependent upon high water quality.
- Due to the sheltered harbor, Penn Cove has been a focus of human activities from prehistoric times to the present day.
Desired Future Conditions

The following are desired future conditions or goals of the Reserve. These goals incorporate mandates required of Reserve management and include input solicited from the public on how they would like to see this area managed. Since these following conditions are general in scope, specific resource conditions, strategic planning goals and management strategies would be developed for the four management zones for the Reserve in later planning efforts. This would include the eventual development of a resource stewardship plan for the Reserve. All the alternatives presented in this GMP should be able to meet these goals to varying degrees:

- At Ebey’s Landing National Historical Reserve, one of the nation’s first Pacific Northwest settlements is preserved through a protected, viable, and dynamic landscape for the public to see and experience.
- With the full cooperation and assistance of Island County and the town of Coupeville, the rural historic landscape of the Reserve retains its integrity. New development is designed and sited to respect the cultural landscape and to protect key landscape features and characteristic patterns that are of historic significance.
- The town of Coupeville, Island County, Washington State Parks, and the NPS all understand the benefits that the Reserve provides to each organization and supports the Reserve fully. Fiscal support for the Reserve is evidenced in the budgets of each partner as well as by Congressional action to provide land protection funds when needed.
- The presence of the Reserve enhances the social, physical, and economic health of the central Whidbey community as it continues to grow and evolve. The local community appreciates and protects its historical inheritance and valuable natural resources by assisting in the maintenance of open space and historical structures and providing recreational and educational opportunities to residents and visitors alike.
- The agricultural community operating within the Reserve is vital and is able to respond to changing market conditions to remain economically viable.
- Residents enjoy a high quality of life because the Reserve is adequately protected.
- Recreational opportunities within the Reserve are provided by each of the Reserve partners, each according to its unique abilities. Programs are coordinated so that the highest quality recreational opportunities are provided most efficiently and in a way that complements the rural historic landscape of the Reserve and benefits the local community as well as visitors.
- Visitors safely enjoy and are satisfied with availability, accessibility, diversity, and quality of Reserve facilities, services, and appropriate recreational opportunities.
- Residents and visitors are provided opportunities to learn about the natural and cultural history within the Reserve and have individual opportunities to contribute to the protection of the Reserve.
- Natural resource conditions in the Reserve are maintained for natural processes and healthy ecosystems.
- Natural Landscapes of bluffs and beaches are maintained in natural conditions with minimal structural intrusions.
- Areas and resources important to Native Americans are protected and respected.
- The Reserve is a model for sustainable development that respects a community’s need to adapt to new challenges while protecting a nationally significant historical resource. The Reserve partnership is a model of cooperative management of cultural and natural resources. A well-developed sense of stewardship exists within the local community and among the Reserve partners that assures the health of the Reserve into the future.
- The management of the Reserve is well understood within the local community and strengthens a sense of community identity and pride.
- Historical structures are preserved and maintained. Appropriate use is encouraged and archaeological sites are protected.
- Historic and scenic views are maintained and enhanced.
Crockett Blockhouse, Whidbey Island, ca. 1999. NPS Photo.
Purpose and Need for the Plan

Purpose of the Plan

The purpose of this general management plan (GMP) is to protect significant resources and manage visitor use at Ebey’s Landing National Historical Reserve during the next 15-20 years. Successful implementation of the GMP would result in the preservation of natural and cultural resources and an enhanced visitor experience. Where law, policy, or regulations do not provide clear guidance, management decisions will be based on the Reserve’s purpose, public concerns, and analysis of social and resource impacts of alternative courses of action, including long-term operational costs. This plan is intended to be adopted by both the town of Coupeville and Island County for integration into local land use plans, policies, and ordinances. Another purpose of this plan is to provide guidance to Washington State Parks concerning how their individual park plans and activities can be well integrated into their overall park planning process.

This general management plan will not describe how particular programs or projects will be implemented or prioritized. Those decisions will be deferred to more detailed implementation planning, which will follow the broad, comprehensive plan presented in this document.

National Parks and Recreation Act of 1978

The National Parks and Recreation Act of 1978 (Public Law 95-625), requires the preparation and timely revision of general management plans for each unit of the National Park System. The National Park Service management policies call for each GMP to “...set forth a management concept for the park [and] establish a role for the unit within the context of regional trends and plans for conservation, recreation, transportation, economic development, and other regional issues...” Congress has also specifically directed (16 U.S.C. 1a-7[b]) the NPS to consider, as part of the planning process, the following:

- General management plans for the preservation and use of each unit of the National Park System, including areas within the national capital area, shall be prepared and revised in a timely manner by the Director of the National Park Service. On January 1 of each year, the Secretary shall submit to the Congress a list indicating the status of completion or revision of general management plans for each unit of the National Park System.

- General management plans for each unit shall include, but not be limited to:
  - measures for the preservation of the area’s resources;
  - indications of types and general intensities of development (including visitor circulation and transportation patterns, systems and modes) associated with public enjoyment and use of the area, including general locations, timing of implementation, and anticipated costs;
  - identification of an implementation commitment for visitor carrying capacities for all areas of the unit; and
  - indications of potential modifications to the external boundaries of the unit, and the reasons therefore.

Need for the Plan

While it is the policy of the NPS to prepare or revise a GMP for units of the National Park System every 15-20 years, the first and only Comprehensive Plan for the Reserve was published in 1980. The first need for the GMP is to comply with congressional mandates to provide a timely revision to the Reserve’s GMP. The second need for the plan is to address the many issues that have changed since the previous comprehensive plan was written. Recent population growth and subsequent development on Whidbey Island has placed an added importance to protecting the character of the rural landscape within the Reserve from incompatible development. Island County’s Rural Zoning District is one of the predominant zoning
districts in the Reserve and allows the subdivision of land into lots as small as five acres. This development pattern continues to have a significant impact on the visual character of the Reserve. Organizations such as The Nature Conservancy and Au Sable Institute have recently become landowners within the Reserve and have become partners on several projects. These opportunities for partnerships need to be explored.

A further discussion of these and other issues can be found in the following “Planning Issues and Concerns” section.

The proposed GMP is accompanied by an environmental impact statement (EIS), which identifies and evaluates the effects or impacts of various alternative approaches to the protection and appropriate uses of Ebey’s Landing National Historical Reserve.

Planning Issues and Concerns

The following topics describe some of the preliminary needs or challenges the GMP must address for the Reserve to carry out its responsibilities of preserving the resources and provide for public use. These issues were developed by NPS staff, the Trust Board, and the public through the initial public participation process. They have been summarized and are listed by category. For a more detailed background of these issues, refer to “The Affected Environment” chapter of this document.

Land Protection

Recent population growth occurring in Central Whidbey Island in the last 20 years has placed an added importance to protect the character of the rural landscape within the Reserve from incompatible development. It is fully acknowledged that the Trust Board does not have authority to unilaterally implement the Reserve goals but must rely upon local government’s applicable laws and ordinances, as well as landowner cooperation.

Congress intended that the Reserve would remain largely under private ownership. To ensure that the land within the Reserve is protected, the NPS has been primarily purchasing less than fee interests in land called scenic easements. (Due to various terminology used in legal documents, the term “scenic easement” as used by the NPS, is synonymous with the more common term “conservation easement”.) Despite recent appropriations, a recurring need will remain for additional funds for acquisition to buy easements on key parcels within the Reserve. There is a need for a new land protection plan. There is also a need for public education about the federal government’s role in land protection and a desire by the managing partners of the Reserve for public community support for land protection strategies.

Cultural Resources

The cultural resources within the natural setting are the features that make the Reserve unique and worthy of national status. The Reserve continues...
to lose cultural integrity as historic structures or landscapes are lost through demolition, neglect or inappropriate alterations, and the landscape becomes developed through incremental changes. To protect these cultural resources, there must be adequate information. Unfortunately, there is a deficiency in information such as the location of archaeological sites, knowledge of traditional cultural places, full understanding of the characteristics of a cultural landscape, protection of large contiguous agricultural fields, and development of a county demolition ordinance. There is a need for improved coordination with other federal, tribal, and state agencies and with non-governmental organizations about cultural resources. There is a growing need for cultural resource technical assistance to local property owners.

Natural Resources
There is a growing body of baseline information about the natural resources within the Reserve. Vascular plant inventories took place in 2004, adding to work done previously by local botanists. A two-year butterfly inventory commenced in June 2004; a small mammal inventory may occur in summer of 2005; the Whidbey Audubon Society is very active keeping concise bird lists, including a Raptor Nesting Survey for the Reserve completed in 2003. The Natural Resources Conservation Service has begun fieldwork to revise the 1962 Island County soils map.

However, there are major information gaps. For example, little is known about threatened and endangered species on most private lands. The Reserve has not been systematically mapped for populations of Class A, B, and C noxious weeds. Information about invertebrates, bats, and non-vascular plants is insufficient. High quality agricultural soils may not be adequately protected. In the marine environment, water quality and quantity are concerns, including aquifer recharge, saltwater intrusion, and aquifer drawdown. In Penn Cove, potential threats need to be addressed for both recreational and commercial activities. There is a need to explore a variety of technical assistance services to local property owners.

Visitor Use
Recreational use continues to increase as the population increases, including both residents and visitors. The Reserve has an outdated Visitor Survey (last done in 1995). There is a need for creating “visitor use profiles” at popular sites within the Reserve to help manage future potential impacts from visitor use. There are conflicting recreational policies and permitted uses among federal, state, and local entities. There is a need to create additional public access for trails along public and private lands. Future carrying capacities need to be created for trails, trailheads, parking lots, and other facilities. In addition, the lack of vessel mooring capacity at Penn Cove in Coupeville needs to be explored.

Administration
There are many staffing needs at the Reserve in-
The Reserve has a lack of facilities at present for the following: permanent, well-located office space; a central visitor orientation space; waysides, trails, and kiosks; and storage, museum and collections space. In relationship to these facilities, entrances into the Reserve need to be identified and developed and maintenance and management requirements determined. Other issues include determining the appropriate staff and facilities at the Reserve, and whether there should be museum collections and a formal personal services program.

The numerous NPS-owned historic and non-historic structures create an increasingly urgent need for greater security and fire protection. The dairy farms present numerous hazardous situations, and lack of staffing prevents adequate protection.

Equipment needs for the Reserve include the procurement of a vehicle, office equipment, and adequate collections storage.

Impact Topics
Impact topics were identified from those issues identified during the scoping period of the GMP/EIS and from relevant NPS policies and regulations. The specific topics addressed in this chapter are the following:

- Cultural Resources
  - Cultural Landscape
  - Historic Buildings and Structures
  - Archaeological Resources and Collections Management
- Natural Resources
  - Geology, Soils, and Air Resources
  - Soundscape
  - Water Resources
  - Vegetation
  - Wildlife
- Agricultural Resources
- Visitor Experience
- Recreational Resources
- Scenic Resources
- Interpretation, Education, and Outreach
- Reserve Facilities
- Reserve Management and Operations
- Socioeconomics
- Reserve Boundary and Land Protection

Impact Topics Dismissed
Below are issues that are not problematic or would not cause an environmental impact. The following impact topics were discussed during the planning process, but were dismissed from further consideration for the following reasons:

Floodplains
According to the Island County Watershed Coordinator (Byler 2004), there are no floodplains in the Reserve. Though numerous landforms were created by prehistoric glacial floodplain actions, there is no flowing surface water today. Therefore, the topic of floodplains was dismissed as an impact topic in this environmental impact statement.

Hazardous Materials
There are no hazardous materials used, or disposed of, in connection with Reserve’s operations on federally owned property. Since the majority of land is in private ownership, the extent of hazardous materials on non-federal properties is not
fully known. Therefore, a separate topic of hazardous materials was not included as an impact topic in the document.

**Sacred Sites**

Sites that are sacred to contemporary individuals and communities, including members of federally recognized American Indian tribes and other Native Americans, may be documented through a variety of methods. These methods include consultations with the people for whom certain places are sacred, through the collection of oral history data, and through archaeological and anthropological research. As noted in the “Affected Environment” chapter of this GMP, two places within the Reserve have the potential to be regarded as culturally significant by contemporary Native Americans who are known to have traditional associations with land within the boundaries of the Reserve. One of the two places is an obelisk on privately owned land that may have associated burials. The other is shown as a “USA Indian Cemetery” that may continue to be federally owned and held in trust for a contemporary tribe. Neither of these two places are controlled or managed by the National Park Service.

The stone obelisk is located on private land adjacent to Parker Road, above Snakelum Point. Although the obelisk does not appear to be in its original location, it was referred to in a local newspaper as a “tombstone” in 1918. At that time, there were the names of two individuals on the monument. Two more names were added at a later date, perhaps as recently as the mid-1930s or early 1940s. All four names represent members of a prominent Skagit Indian family who lived on Whidbey Island during the mid-nineteenth century. It is not known whether or not human remains are still associated with the obelisk. The obelisk has the potential to be culturally significant. Further research, including consultations with Native Americans, is needed to determine whether or not contemporary individuals regard the site to be culturally significant or sacred.

The other site with the potential to be culturally significant or sacred to contemporary Native Americans is a cemetery near Long Point that is shown on Island County plat maps as a “USA Indian Cemetery.” Tax assessment records show that the parcel is exempt and that it is federal land that was acquired from a private owner as recently as 1959 for the use of Skagit Indians. The area is on a hillside and overgrown with vegetation; consequently, surface evidence of burials is not readily apparent (York 2004). Additional research on the status of the land, the history of its use as a cemetery, and its significance to contemporary Native Americans is needed to determine whether or not the site is culturally significant or sacred.

**Indian Trust Resources**

In general, Indian trust resources are related to federal land that is held in trust for a federally recognized tribe. In those situations, the federal government, represented by the Bureau of Indian Affairs (BIA) in the Department of the Interior, has an obligation to protect resources such as oil, gas and timber or the income derived from selling or leasing such resources on behalf of a tribe. The Reserve is not within the boundaries of land that is held in trust on behalf of any federally recognized Indian tribe, but there are two specific matters that may be related to trust land in one case and trust resources in another. First, there is a .39 acre parcel of land within the Reserve that is, according to Island County Assessors Office records, owned by the United States of America and held in trust for the Skagit Tribe of Indians as a perpetual cemetery. Second, it is possible that a tribe or tribes may have legal access to shellfish in intertidal zones of the Reserve that are regarded to be “usual and accustomed” tribal fishing sites for one or more federally recognized tribes. As a result of the Boldt Decision on treaty rights (Federal Supplement, 1974 and 1980) and a series of more recent cases, both fish and shellfish are regarded to be “trust assets.”

The NPS has consulted the Puget Sound Agency and the Portland Area Office of the Bureau of Indian Affairs respectively on the ownership status of the cemetery within the Reserve and the issue of usual and accustomed tribal fishing sites in the vicinity of the Reserve. Although the intent of an officially recorded July 2, 1959 warranty deed was to transfer ownership of a .39 acre parcel of land from a private owner to the USA on behalf of the
Skagit Tribe, the Puget Sound Agency has no record of the parcel being placed into trust on behalf of any contemporary federally recognized tribe. The NPS has shared this information with the Swinomish Indian Tribal Community because of their status as successors of interest for the historic Skagit Indian Tribe. With reference to whether or not the inter-tidal zone or any specific locations in the vicinity of the Reserve have been designated as “usual and accustomed” fisheries, personnel in the Portland Area Office would not provide that information. However, it is unlikely that trust resources would be impacted by the proposed action relative to either tribal fishing rights or the parcel of land set aside as a perpetual cemetery.

Pertinent Laws, Policies, and Procedures

This section summarizes the laws, executive orders, NPS policies, and operational procedures related to the preparation of park planning documents. The following section highlights those that are most pertinent to the planning for the future protection, use, and management of Ebey’s Landing National Historical Reserve.

The National Park Service Organic Act

The NPS Organic Act of August 25, 1916 (16 USC 1) established the National Park Service. “The service thus established shall promote and regulate the use of the Federal areas known as national parks, ...by such means and measures as conform to the fundamental purpose of said parks, ...which purpose is to conserve the scenery and the natural and historic objects and the wildlife therein and to provide for the enjoyment of the same in such manner and by such means as will leave them unimpaired for the enjoyment of future generations.”

National Parks and Recreation Act of 1978

Public Law 95-625, the National Parks and Recreation Act of 1978, requires the preparation and timely revision of general management plans for each unit of the National Park System. The NPS Management Policies (U.S. Department of the Interior 2001) calls for each GMP to “…set forth a management concept for the park [and] establish a role for the unit within the context of regional trends and plans for conservation, recreation, transportation, economic development, and other regional issues....” Congress has also specifically directed (16 USC 1a-7[b][4]) the NPS to consider, as part of the planning process, what modifications of external boundaries might be necessary to carry out park purposes.

General Authorities Act of 1970

This act defines the National Park System as including “…any area of land and water now or hereafter administered by the Secretary of the Interior through the NPS for park, monument, historic, parkway, recreational, or other purposes...” (16 USC 1c[a]). It states “…each area within the national park system shall be administered in accordance with the provisions of any statute made specifically applicable to that area...” (16 USC 1c[b]) and in addition with the various authorities relating generally to NPS areas, as long as the general legislation does not conflict with specific provisions.

Redwood Act of 1978

The Redwood Act (16 USC 1a-1) in 1978 further states “…that these areas, though distinct in character, are united through their interrelated purposes and resources into one national park system as cumulative expressions of a single national heritage... The authorization of activities shall be construed and the protection, management, and administration of the areas shall be conducted in light of the high public value and integrity of the national park system and shall not be exercised in derogation of the values and purposes for which these various areas have been established, except as they have been or shall be directly and specifically provided by Congress.”

National Historic Preservation Act of 1966

The National Historical Preservation Act of 1966 (NHPA), as amended, expresses a policy of supporting and encouraging the preservation of prehistoric and historic resources for present and
Purpose and Need for the Plan

future generations by directing Federal agencies to assume responsibility by considering historic resources in their activities. The statute ensures the accomplishment of its policies and mandates by the following: expanding and maintaining a National Register of Historic Places; approving state preservation programs; authorizing a grant program to states and to individuals; establishing the Advisory Council on Historic Preservation to advise the President, Congress, and federal agencies on historic preservation matters, conduct training and educational programs, encourage public interest in preservation, and implement Section 106 of the act; establishing procedures that federal agencies must follow in managing federally owned or controlled property and requires that agencies conduct necessary planning and action to minimize harm to the landmark prior to the approval of any federal undertaking that may directly and adversely affect any National Historic Landmark and must obtain comments of the Council; and by establishing a National Historic Preservation Fund.

NHPA Section 106

The National Historic Preservation Act of 1966 (as amended) requires that proposals and alternatives relating to actions that could affect cultural resources both directly and indirectly, and the potential effects of those actions, be provided for review and comment by the State Historic Preservation Officer (SHPO), Tribal Historic Preservation Officer (THPO), and the Advisory Council on Historic Preservation. The GMP will be submitted to the appropriate offices for review and comment according to the procedures in 36 CFR Part 800 and delineated in the 1995 Programmatic Agreement signed by NPS, the National Conference of State Historic Preservation Officers, and the Advisory Council.

Section 106 states that any federal agency having jurisdiction over a proposed federal undertaking, and any federal department or independent agency having authority to license an undertaking must take into account the effect of the undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. This must be done prior to the approval of spending federal money. In addition, the agency must allow the Advisory Council on Historic Preservation (established under Title II of this Act) a reasonable opportunity to comment on this undertaking.

Section 110 of the National Historic Preservation Act gives federal agencies positive responsibility for preserving historic properties in their ownership or control. Agencies are directed to establish preservation programs to identify, evaluate, protect, and nominate to the National Register historic properties, whether they are of significance at the local, state, or national level. It calls for them to use such properties, where feasible and compatible with their preservation, in preference to acquiring, constructing, or leasing others. The law emphasizes cooperation with SHPOs in establishing such programs.

Section 111 states that federal agencies, after consultation with the Advisory Council for Historic Preservation, will establish and implement alternatives for historic properties that are not needed for current or projected agency purposes. Federal agencies may lease historic properties owned by the agency to any person or organization, or exchange any property owned by the agency with comparable historic property, if the agency determines that the lease or exchange will adequately ensure the preservation of the historic property.

Section 112 provides that each federal agency having responsibility for the protection of historic resources, including archaeological resources, will ensure that all actions taken by employees or contractors will meet professional standards. These standards will be guided by regulations developed by the Secretary of the Interior in consultation with the Advisory Council for Historic Preservation, other affected agencies, and appropriate professional societies of the disciplines involved. Agency employees or contractors will also meet qualification standards established by the Office of Personnel Management in consultation with the Secretary of the Interior and appropriate professional societies. Section 112 also provides that records and data are permanently maintained in appropriate databases and made available to potential users.
Ebey’s Landing National Historical Reserve Legislation

On November 10, 1978, an act (Public Law 95-625 [92 Stat. 3508]) established Ebey's Landing National Historical Reserve, “in order to preserve and protect a rural community which provides an unbroken historical record from nineteenth-century exploration and settlement in Puget Sound to the present time...” and to commemorate the first thorough exploration of the Puget Sound area, the first permanent settlers to Whidbey Island, early active settlement during the years of the Donation Land Claim Law, and the growth of the historic town of Coupeville.

The Reserve is managed by a unit of local government, the Trust Board of The Reserve, as called for in the enabling legislation. This board was created by an early planning coalition consisting of the NPS, local government and the community, working together to complete the Reserve’s first comprehensive plan in 1980. The Reserve includes the area of approximately 8,000 acres identified as the Central Whidbey Island Historic District.

Executive Orders 11988 and 11990

The objectives of Executive Orders 11988 (Floodplains Management) and 11990 (Protection of Wetlands) are to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains and wetlands. Application of the final NPS procedures for implementing those executive orders will occur if a NPS proposal affects the 100-year floodplain (500-year for critical actions), coastal high hazard zone, flash flood area, or wetland. If a proposed action involved adverse impacts to a floodplain or wetland areas, a Statement of Findings (SOF) will be prepared that documents the rationale for determining that there will be no practicable alternative to locating in or impacting these areas. The SOF will be prepared for concurrence signature by the Chief, NPS Water Resources Division (WRD), and approval by the NPS Regional Director, Pacific West Region.

Executive Order 13006

This executive order pertains to locating Federal facilities on historic properties within cities. The federal government has undertaken efforts to revive central cities which historically served as centers for growth and commerce. The order seeks to strengthen cities by encouraging the location of Federal facilities within cities. The order reaffirms commitments set forth in the National Historic Preservation Act to provide leadership in the preservation of historic resources and in the Public Buildings Cooperative Use Act of 1976 to acquire and utilize space in suitable buildings of historic, architectural, or cultural significance.

In addition, Section 2 of this order states that Federal agencies will give first consideration to historic properties within historic districts. If no property is suitable, then agencies will consider other developed or undeveloped sites within historic districts. If none exists, then agencies will consider historic properties outside of historic districts. Any rehabilitation or construction that is undertaken pursuant to this order must be architecturally compatible with the character of the surrounding historic district or properties.

Executive Order 13112

The objectives of this executive order are to restrict the introduction of exotic species into the natural ecosystems on federal lands and to encourage states, local governments, and private citizens to prevent the introduction of exotic species into natural ecosystems of the United States. This order provides a legal basis for NPS to conduct vegetation management activities to restrict the introduction of those exotic species, which do not naturally occur within the Reserve, and provides the basis for the Reserve to work with others to restrict the introduction of exotic species.

This order does not pertain to plantings that are historically appropriate for the period or event commemorated. National Park Service management policies (4.4.2.5 Maintenance of Altered Plant Communities) state that where necessary to preserve and protect the desired condition of specific cultural resources and landscapes, plants and plant communities generally will be managed to reflect the character of the landscape that prevailed during the historic period. Efforts may be made to extend the lives of specimen trees dating from the historic period being commemorated. An
individual tree or shrub known to be of historic value that is diseased beyond recovery and has become hazardous will be removed and may be replaced. While specimen trees or shrubs that need to be perpetuated are still healthy, their own progeny will be propagated from seed or through vegetative reproduction, such as cuttings (National Park Service 2001: p.36).

**Executive Order 12898**

Executive Order 12898 requires an analysis of impacts on low-income populations and communities, as appropriate. The Department of the Interior’s policy on environmental justice (No. ECM95-3) is based on this Executive Order. It requires the NPS, in all environmental documents, to “…specifically analyze and evaluate the impacts of any proposed projects, actions, or decisions on minority and low income populations and communities, as well as the equity of the distribution of the benefits and risks of those decisions.” If significant or no impacts are predicted on minority or low-income populations, then this should be stated and the reasons provided.

**National Environmental Policy Act of 1969**

The National Environmental Policy Act of 1969 (NEPA) requires the preparation of either an environmental assessment or environmental impact statement for all federal proposals that may have significant environmental, sociological impacts, or both, on park resources or adjacent areas.

A policy memorandum dated February 22, 1991 from the NPS Associate Director for Planning and Development specified that EISs are to be prepared in conjunction with general management plans. That position reinforces the policies and procedures of the Departmental Manual, which state that EISs will be the normal rule in preparing GMPs rather than the exception. This EIS describes potential impacts that might result from implementation of any of the alternatives discussed. Following public and agency review of the draft and final EIS, the Superintendent (or in this case, the Trust Board), Deputy Regional Director, and the Regional Director of the NPS Pacific West Region, will sign a Record of Decision indicating the proposed action and the rationale for its selection. The GMP may then be implemented.

**Endangered Species Act**

The Endangered Species Act of 1973 (ESA), as amended, directs federal agencies to ensure that any action it authorizes, funds, or implements is not likely to jeopardize the existence of any listed species or destroy or adversely modify critical habitat (50 CFR 400). When a project or proposal by a federal agency has the potential to impact a known endangered, threatened, or candidate plant or animal species, Section 7 of the Endangered Species Act requires that agency to enter into formal consultation with the U.S. Fish and Wildlife Service (USFWS). The NPS management policies (4.4.3.4 Management of Threatened or Endangered Plants and Animals) direct the NPS to give the same level of protection to state-listed species, as is given to federally listed species. Prior to implementing any development proposals at the Reserve, the NPS will consult with the USFWS to obtain species listings, and to ascertain the need to prepare a biological assessment of the proposed actions. Similar contact will be made with the appropriate state agencies. (NPS 2001: p.35)

**Washington Coastal Zone Management Program**

Congress passed the federal Coastal Zone Management Act in 1972 to encourage the appropriate development and protection of the nation’s coastal and shoreline resources. The Coastal Zone Management Act gives states the primary role in managing these areas. To assume this role, the state prepares a Coastal Zone Management Program (CZMP) document that describes the state’s coastal resources and how these resources are managed. Washington was the first state to receive federal approval of a CZMP in 1976. The Department of Ecology’s Shorelands and Environmental Assistance Program is responsible for implementing Washington’s Program.

Under Washington’s Program, federal activities that affect any land use, water use or natural resource of the coastal zone must comply with the enforceable policies within the six laws identified in the program document. The six laws are the
The NPS has detailed written guidance to help managers make day-to-day decisions. The primary source of service-wide policy is contained in the publication *Management Policies*, revised and published in 2001 by the National Park Service. These policies state that all parks are complex mixtures of values and resources, each with its own unique qualities and purposes, each requiring specific treatment in the development and implementation of management strategies and operational plans. However, the managers of all parks are required to apply policies in a consistent and professional manner to achieve the congressional mandate for management of the National Park System.

The management policies further state that the NPS will conduct planning activities for the following: to evaluate possible additions to the National Park System; to identify how park resources will be preserved and how parks will be used and developed to provide for public enjoyment; to facilitate coordination with other agencies and interests; and to involve the public in decision-making about park resources, activities, and facilities. The NPS plans will represent the agency’s commitment to the public and to Congress on how parks will be managed.

**Native American Graves Protection and Repatriation Act**

The Native American Graves Protection and Repatriation Act (NAGPRA) provides protection to native gravesites on tribal and federal lands. The intent of NAGPRA is to “provide for a process whereby Indian tribes...have an opportunity to intervene in development activity on federal or tribal lands in order to safeguard Native American human remains, funerary objects, or objects of cultural patrimony... [and to afford] Indian tribes...30 days in which to make a determination as to appropriate disposition for these human remains and objects.” Under certain conditions, culturally affiliated Indian tribes or lineal descendants will have ownership and control over human remains and cultural items, which are located on federal lands.

A permit must be obtained from the managing land agency where the burial site is located to excavate a burial site. If the site is located on federal lands, the site may be excavated only after consultation with the appropriate tribe. If buried cultural items are discovered during other activities, such as construction, all activities must stop and the responsible federal agency notified, who in turn, notifies the appropriate tribe. This act will apply to any federally managed land within the Reserve.

**National Park Service Management Policies**
Director's Order—77
The NPS Natural Resources Management Guideline, DO-77, is a comprehensive guideline on natural resource management, combining existing guidance with documentation of unwritten practices and procedures of NPS natural resource management. It guides the actions of park managers so that activities planned and initiated in the parks comply with federal law, regulations, and the Department of the Interior and NPS policies.

National Park Service Strategic Plan
The 1997 NPS publication, the National Park Service Strategic Plan includes the NPS mission statement and mission goals. It gives five-year long-term goals to help the agency measure performance and guide the allocation of available human and financial resources. The National Park Service Strategic Plan incorporates the requirements of the Government Performance and Results Act (GPRA).

In addition to NPS strategic planning, staffs at individual NPS units are required to produce mission goals and a five-year strategic plan for their unit. In planning for parks, both strategic planning and general management planning share the need to articulate the purpose and significance of the park unit and to define park mission goals in relation to overall service-wide goals. In strategic planning, parks must translate mission goals into five-year long-term goals and allocate human and financial resources accordingly. For planning, managers must ensure that proposed actions in the plan are harmonious with park mission goals and help implement their various provisions by articulating actions and strategies that are utilized by park managers to guide the long-term preservation and public use of each national park unit.

Island County Comprehensive Plan and Zoning Ordinance
(See discussion of plans in the “Affected Environment” chapter, “Socioeconomic Factors” section.)

Shoreline Master Programs
Both Island County and the Town of Coupeville have adopted Shoreline Master Programs which implement the Shoreline Management Act (Chapter 90.58, Revised Code of Washington). The Programs provide goals, policies and regulations which are additional to all other ordinances in the County and Town. The plans promote orderly development of the shoreline, public access, and protection of natural and cultural resources in the shoreline area.

Coupeville Comprehensive Plan
(See discussion of plan in the “Affected Environment” chapter, “Socioeconomic Factors” section.)

Open Space Tax Program
Island County participates in Open Space Tax Programs authorized by Chapter 84.34, Revised Code of Washington. The programs allow a reduction in local property taxes for qualifying agricultural, forest, and open space lands. Additionally, Island County has adopted a Public Benefit Rating System to provide property tax relief as an incentive to protect open space, habitat, and historic and archeological resources.

Scenic Byways
(See discussion of byways in the “Affected Environment” chapter, “Socioeconomic Factors” section.)

Special Valuation Tax Program
In accordance with Chapter 84.26 Revised Code of Washington, both Island County and the Town of Coupeville have adopted Special Tax Valuation programs for the rehabilitation of historic properties. These tax programs provide owners of locally designated historic properties with a reduction in property taxes by excluding the value of rehabilitation work from property valuations for up to 10 years.

This voluntary program provides that approved improvements made on historic structures will not be taxed, provided the owner agrees to not modify the character defining features of the building during the agreement period.
The Affected Environment

The purpose of this chapter is to describe the physical, biological, cultural, and social environments of Ebey's Landing National Historical Reserve, including human uses that could be affected from implementing any of the alternatives described in the following chapter. Though this chapter contains topics that were identified as important issues by the public and the agencies during scoping, it also contains environmental background data relevant to both readers and park managers.

The Cultural Environment

Physical Development and Historical Significance

The physical landscape of Whidbey Island has been shaped by natural and cultural forces for over 25,000 years. The landforms, soils, and shorelines that characterize the island landscape are the residue of the Vashon Glacier’s moraine depositing sand, gravel and other materials over thousands of years. Receding ice left lakes and lagoons, which eventually formed into the rich and fertile prairies found in the Reserve. Human use and adaptation to the land has created a unique physical relationship between the built and natural environment that is reflected in the patterns of use present in the Reserve today.

The Reserve is unique in that the historical landscape provides the nation a vivid and continuous historical record of Pacific Northwest history. The land appears much as it did a century ago. Patterns of settlement, historic homes, pastoral farmsteads, and commercial buildings are still within their original farm, forest, and marine settings. A visitor can experience a variety of diverse physical and visual landscapes within a small, geographic area. The community comprising the Reserve is a healthy, vital one that allows for growth while respecting and preserving its heritage. (See Figure 4, Cultural Landscape Features for a more detailed map of the cultural landscape features or characteristics, refer to Ebey’s Landing National Historical Reserve General Management Plan/Environmental Impact Analysis, Volume II, Technical Reports, An Analysis of Land Use Change and Cultural Landscape Integrity for Ebey’s Landing National Historical Reserve by Nancy Rottle.)

The Reserve has a long, rich history. Many scenic views that Captain George Vancouver of the Royal British Navy saw and noted in his 1792 journal are still evident today. American Indians inhabited the island at the time of Vancouver’s expedition, and the captain described their activities. When the first white settlers set foot on central Whidbey Island, they encountered not a harsh wilderness but a tempered landscape already shaped by centuries of human use and occupation. The Skagit Indians had permanent settlements along the shores of Penn Cove at what are now Monroe’s Landing, Snakelum Point, and Long Point. The native people had abundant natural resources at their disposal to sustain their community. They routinely cultivated camas, bracken fern, and (later) potatoes on nearby prairies, and by selectively burning, they kept these naturally open areas clear of brush.

European exploration of the Puget Sound region increased beginning in the late 18th century. As the Indians had more contact with Euro-Americans, diseases such as smallpox spread through native villages decimating these indigenous communities. Within approximately one century’s time, the native population on central Whidbey Island went from 1500 residents to three documented in 1904.
The explorations of the area by early sea travelers documented the natural riches and astounding beauty of the island. Reports of open meadows, natural prairies, abundant timber, and dark, rich, prairie soils did much to advertise the amenities offered by Whidbey Island, and within half a century white settlers were arriving. Spurred on by the Oregon Territory’s Donation Land Claim laws of 1850 and 1853, settlers came to homestead lands not yet determined to be in the United States. By encouraging the land “give-away”, the government was better assured of staking its claim to these fertile northern Puget Sound lands.

Isaac Ebey was one of the first to take advantage of the new law and claimed his allowable 640 acres—one square mile—of prairie, accessible from one of only a few low spots on the steeply bluffed western edge of the island (hence the name “Ebey’s Landing”). Ebey paced off his own claim since the government had not yet sent surveyors out to map the area. His family and friends followed, and within three years, the remaining prairie lands on central Whidbey were claimed. While the prairies drew the farmers, the deep, protected waters of nearby Penn Cove drew the interest of sea captains who could travel down the coast to San Francisco and other ports with lumber for shipbuilding and return north with supplies for the growing community.

Slowly a community evolved as the population increased. Farmers were successful with their crops, and sea captains and other entrepreneurs embraced a commerce of selling local goods off island and returning with items not available on Whidbey. At the turn of the 19th century, central Whidbey had the basis of a stable and prosperous community. Recreation and tourism, and the arrival of the military, brought further benefits to the area, which continue to the present. The visible patterns on the land and extant historical buildings and structures define this cultural landscape today as a microcosm of Pacific Northwest history. It is the last place in the Northwest where these broad patterns of history are evidenced in the land.

Archaeological Resources

A total of 35 archaeological sites have been recorded in the Reserve, all of which are in the locale of Penn Cove with the exception of one in the vicinity of Ebey’s Landing. Many appear to be recent—the remains of Indian groups encountered by the early explorers. The location and nature of some of the sites, however, suggests a respectable antiquity, perhaps as old as 10,000 years. The sites have been recorded on statewide survey forms that are filed with the Office of Public Archaeology at the University of Washington.

Previous archaeological work in the Reserve and on the island as a whole has been limited. Archaeologists have surveyed little of the land within the Reserve because so much of it is in private ownership. The NPS’s role in gathering field information has been limited for the same reason. The possibility of finding additional sites remains high, and recently, during some excavation work for real estate development on the north side of Penn Cove, cultural material was located, and project work stopped, to enable an archaeologist to visit the site and observe in order for construction work to continue. This resulted in the preparation of a draft National Register nomination form for the Penn Cove Park archaeological site at Monroe’s Landing. This site is significant as a large, early historic Indian village associated with several locally prominent American Indians.

It is known that local property owners in the area of Ebey’s Prairie and Crockett Prairie have uncovered and retrieved hundreds of items of cultural
The Donation Land Claim laws stimulated initial homesteading, but it was the creation of Washington Territory in 1853 and the subsequent use of treaties with representatives of native people by Governor Isaac Stevens that formally acquired land for future homesteading and other purposes. Representatives of named tribes and bands of Indians sometimes referred to as chiefs and sub-chiefs signed the treaties and thereby simultaneously “cede[d], relinquish[ed] and convey[ed]” vast tracts of land and “reserved” certain other lands for the occupancy and use of their respective tribes and bands. One such “Stevens Treaty” was made at Mukilteo or Point Elliott, approximately 30 miles south of Ebey’s Landing National Historical Reserve, on January 22, 1855. Another dating to January 26, 1855 was made at Point No Point, on the Kitsap Peninsula just south of Whidbey Island and the Admiralty Inlet. Both of these treaties directly affected native people who once lived on different parts of Whidbey Island and elsewhere.

The Treaty of Point Elliott

The Treaty of Point Elliott involved twenty-two named tribal groups and an unspecified number of “other allied and subordinate tribes and band of Indians.” It covered much of the Puget Sound Basin from Commencement Bay on the south (near Tacoma) to the mouth of the Lummi River (near Bellingham Bay and

Contact Period Tribal Presence and Displacement

The previous sections indicate that the Reserve, Whidbey Island, and the surrounding region were occupied by native people at the time of Euro-American contact and for thousands of years previously. In this section, the native people at the time of initial Euro-American settlement during the 1850s are described, as well as what happened to them as the settlers established themselves and their patterns of agricultural land use on Whidbey Island.

Native Americans and canoes on the beach, Whidbey Island, ca. 1895. Oliver S. Van Olinda, Photographer, Permission of University of Washington Libraries. Special Collections Division.
the Gulf of Georgia) on the north. On the west, the area went from the Gulf of Georgia, south to Hood Canal. On the east, the area was bounded by the summit of the Cascade mountain range. The treaty identified four areas that became known as the Lummi, Swinomish, Tulalip and Port Madison/Suquamish Indian Reservations, and it specified that the tribes and bands agreed to move to and settle on the reservations “within one year after the ratification of the treaty, or sooner.” The US Senate ratified the Treaty of Point Elliott on March 8, 1859 but people moved to reservations over an extended period of time. In the interim, it was lawful for them “to reside upon any land not in the actual claim and occupation of citizens of the United States, and upon any land claimed or occupied, if with the permission of the owner” (Sanger 1863: p. 927-932).

Based on linguistic analysis, anthropologists regard most of the indigenous people of Whidbey Island to be within a language grouping known as Southern Coast Salish (Suttles and Lane, 1990: 485-502). The two Coast Salish languages for the Southern Coast Salish are Lushootseed and Twana. Lushootseed was spoken by the vast majority of native people who lived in the area covered by the Treaty of Point Elliott and to the immediate south in an area that was addressed through the Treaty of Medicine Creek. The Southern Coast Salish people had 49 separate local communities with uniquely descriptive native language “tribal” names that were located throughout the Puget Sound Basin in the pre-reservation and early reservation period nineteenth-century (Suttles and Lane, 1990: 486).

On Whidbey Island, there were several named Southern Coast Salish tribes or bands who both had villages in various places on the island, as well as to the north on Fidalgo Island and on the mainland in the vicinity of the Skagit River and elsewhere. Despite their unique, locationally derived names, the native residents were neither isolated nor completely sedentary. They visited and were visited by members of many other tribes to trade, raid, and exchange members and for other purposes. Their extensive travels by canoe and by foot were made to have contact with other Coast Salish people as well as members of tribes who lived outside of the Coast Salish region.

The Skagit River Valley on the mainland runs from the western slopes of the Cascade Mountains to Skagit Bay on the northeast side of Whidbey Island. It was an area with nine separately named tribes or bands in 1855 (Sampson 1972). Among them was one of several Skagit tribes, the Mesekwegwils (the tribal name is variously spelled as Me-ske-wi-guilse and Mee-seequaguilch) who both lived near the Skagit River between Lyman and Birdsvie, and on Whidbey Island from Snakelum Point, south to Holmes Harbor (Sampson 1972: 21, Suttles and Lane 1990: p. 487). Other Skagit tribes, sometimes called Lower Skagit or Whidbey Island Skagits lived to the north of the Mesekwegwils and Snohomish people lived to the south (Sampson 1972: p. 21, Ruby and Brown 1986: p. 107-109). As noted in the previous section, there are two Skagit village archaeological sites located near Penn Cove. One is on the north side and the other is near Snakelum Point (Suttles and Lane 1990: p. 486). There are many other sites in addition to the larger villages in the immediate vicinity of Penn Cove (Bryan 1963).

**The Point No Point Treaty**

The Point No Point Treaty involved four named groups and covered the area of Washington Territory from Whidbey Island on the east to within fifteen miles or so of the northwestern tip of the Olympic Peninsula on the south side of the Strait of Juan de Fuca. From the northwestern shores of Whidbey Island, the area covered in this treaty extended southward to include Hood Canal. As with the other Stevens Treaties, the signatories who represented the four tribes as named in this treaty (S’Klallam, Sko-ko-mish, Too-an-hooch and Chem-a-kum) ceded most of their traditional territory and were allowed to reserve only a much smaller area. In this case, only one reservation consisting of 3,840 acres located on Hood Canal was designated (Sanger 1863: p. 933-937).

The S’Klallam or Clallam is the one tribe among those involved in the Point No Point Treaty that is known to have lived on certain parts of Whidbey Island before and during the non-Indian settlement represented by Isaac Ebey and others in the early 1850s (Farrar 1917). Anthropologists regard
American Indians, it is widely known that archaeological sites, burials and a variety of cultural resources have special cultural significance to native people of the Pacific Northwest. In addition to archaeological sites, two specific places are culturally important to tribes and tribal members with traditional associations to the Reserve. One is the Snaklin Monument, a five-foot tall stone obelisk, located within a small chain link fenced enclosure on private land near Parker Road in the northeast section of the Reserve. The other is an area shown on a plat map as a “USA Indian Cemetery.” The site of the cemetery is on a wooded hillside approximately one-quarter mile northwest of the Snaklin Monument. Both the monument and the cemetery are less than one-half mile away from Snakelum Point on the south side of Penn Cove.

In early 1995, the Snaklin Monument was the subject of a brief study undertaken by archaeologist Dr. Gary C. Wessen. In addition to describing the monument, nearby features and the setting, Wessen found and reviewed historic documents, and conducted interviews with 11 individuals. The information isn’t definitive about exactly when or where the monument was originally erected. An item from the *Island County Times* dating to June 21, 1918 referred to the monument as a “tombstone” and described two inscriptions: “Old Chief Snaklin, died 1849”, and below this the words “George Snaklin, died 1880, aged 60 years” (Wessen 1995: p. 7). Wessen notes that the 1918 de-
scription of the monument’s location does not match the present location. Some of his interviews and references to the “memorial at Snakelin Pt. for Skagit Tribe” (Sept. 24, 1937 Minutes of Whidbey Island Chapter No. 6 of the Daughters of the Pioneers of Washington, as quoted in Wessen 1995: p. 8) support the idea that the obelisk and any associated human remains may have been relocated in the late 1930s or 1940s. By that time, there were two additional inscriptions on the opposite side of the obelisk: “Chief Charlie Snetlum, Died – June 5, 1857” and “Chief Charlie Snetlum, 1843-1934” (Wessen 1995: p. 5).

Whether or not burials are at the site of the obelisk, it is associated with the names of four members of at least three generations of a prominent Skagit Indian family who lived in what is now the Reserve before 1855 and until the 1930s. Regardless of spelling, the family name became a widely known place name that lives on for Whidbey Island. Old Chief Snaklin was an important man who died on December 16, 1852 according to the diary of Isaac Ebey’s wife Rebecca, who referred to him as “Sneetlem” (Farrar 1917: p. 56). Both the Chief’s son, George Snetelum, Senior, and grand-son, George Snetelum, were among the signatories of the Point Elliott Treaty (Sanger 1863: p. 930). Another grandson of Old Chief Snaklin is represented on the monument in the inscription for Chief Charlie Snetlum, 1843-1934 (Wessen 1995: p. 7).

The second place of likely cultural significance for contemporary American Indians is an area set aside by the U.S. Government for tribal use as a cemetery. The extent of the area was determined through a land survey in 2001 and the information was shared with the tribal officials of the Swinomish Indian Tribal Community at that time. In addition to the interests the Swinomish have expressed in the significance of the monument and the cemetery, the Snoqualmoo Tribe of Whidbey Island has held periodic memorial events at the monument and it is apparent that offerings are left by visitors to the monument. The future uses of these two places will involve the tribes, the landowners and the Reserve to the extent that is determined to be appropriate in each case. A comprehensive study of these and other places of potential cultural significance throughout the Reserve will be conducted in collaboration with traditionally associated tribes when funding becomes available.

Cultural Landscape Resources

Historic settlement and development patterns, natural features, and cultural features are important elements of the cultural landscape of the Reserve. Collectively, landscape patterns and their relationship over time, imprint and reflect human history in the land and gives it its character. Ten cultural landscape characteristics contribute to the character of the Reserve.

1- Overall Spatial Organization

The Reserve is organized by four major natural landforms comprised of prairies, uplands, wooded ridges, and shorelines. These landforms historically provided a strong physiographic framework in which the early settlement of central Whidbey occurred, and structured development of the landscape into ten distinct character areas as defined by the NPS in 1983. The two shorelines are strong linear boundaries on the east and west sides of the island and historically influenced the development of transportation systems, access for trade, and the movement of goods. The two major ridges influenced early land use and development by physically channeling settlement onto the more accessible, open prairie lands. Historically, farmsteads were clustered along early roads that tended to follow property lines and natural landforms such as ridges. All services and market-related functions were concentrated in the town of Coupeville, platted in 1883 and the county seat of government. To a large degree, these historic trends and large-scale landscape patterns and organization are evident in the Reserve today.

2-Response to the Natural Environment

There is a strong correlation between historic land use and current agricultural capability of the soils in the Reserve. Two large areas of fertile soils are found in Ebey’s and Crockett prairies. In addition to this prime resource, the majority of other areas in the Reserve are dominated by a variety of soils,
which as a group, are suitable for agriculture with proper management. In some areas of the uplands near San de Fuca and Fort Casey, farmers cleared woodlots for pasture and less intensive feed crops. These patterns of use, based on the physical properties of the soil, are still evident today throughout the upland areas, where farms are smaller and woodlots frame developments into pockets of land.

Natural vegetation influenced the ability of settlers to work their claims. Forests restricted development on the ridges until the later 1800s, as did three salt marshes at Crockett Lake, Perego’s Lagoon and Grasser’s Lagoon. Natural features strongly influenced transportation patterns. Roads generally followed the edge of the ridges, along shorelines and property lines, connecting settlers to each other and the west coastline of the island to Penn Cove.

In a similar response to natural features, the historic town of Coupeville was built on the inland waters of Penn Cove in part because that location was critical for providing access to ships carrying natural resources (timber) and, later, farmers’ goods, to outside markets. The cove was deep and well protected, two important features for the sailing ships of the later 19th century.

3-Land Use Categories and Activities

The Salish Indians beginning about 1300 were among the dominant people influencing the ecology of central Whidbey. Their occupation was characterized by the establishment of a winter village, which included a variety of activities, and the development of smaller, temporal, seasonal sites designed to maximize mobility in the gathering of seasonal resources. The Salish burned the prairies as a means of increasing plant production and to invigorate plant production for game animals along the edges of the prairies.

The white settlers claimed lands beginning in the 1850s, taking the prairies first and the uplands later. Farms were built and fences enclosed the large open prairies to define more discrete land uses. The cultivation of fields occurred within the fenced areas and grazing occurred outside. Lands were rented to those unable to own land or too late to claim any under the laws encouraging settlement.

Primary land uses in the Reserve today include the following: agricultural use of the prairies; concentration of residential, commercial, government, and service development in the town limits of Coupeville; the conservation of natural areas and systems (such as forests, woodlands, wetlands, lakes, and parklands); and the recreational use of shorelines and beaches along the coast and Penn Cove. While new development is occurring and land uses are changing in specific areas, these broad land use systems mirror historic patterns and reflect a continuity of use based on the needs of a growing community and the qualities of the natural resources found in the Reserve.

4-vegetation Related to Land Use

Vegetation in the Reserve can be divided into two categories: cultural vegetation (primarily associated with the agricultural landscape) and native communities (associated with the forests and beach/salt marsh vegetation along the low lakes and shorelines). Plant communities introduced or impacted by humans are a common occurrence throughout the Reserve but are most evident in the prairies and uplands. The introduction of crops, fencing of property, clearing of land to build homes, and a variety of land use practices related to the development of a viable market crop between 1855 and 1900, left the landscape of the Reserve permanently altered. Fencing properties led to the development of hedgerows.

The primary forest cover naturally occurs along the ridges and upland areas of the Reserve and along the shores of Penn Cove. The cover is dense in places and historically forced settlers onto open lands because the clearing of such large trees required a significant amount of labor. During the 1900s, the forests were heavily logged. Madrone trees along the shores of Penn Cove were planted in the early part of the 20th century to complement the existing numbers in an effort to beautify the shoreline and attract tourists.

Significant salt marshes are located at Crockett Lake, Perego’s Lagoon, and Grasser’s Lagoon. Some of these areas were used historically for
7-Cluster Arrangement
Clusters of buildings and structures found in the Reserve represent several historic eras and trends in the settlement and development of the landscape. There are fourteen primary farm clusters in the Reserve at Ebey’s, Crockett, and Smith prairies. Building clusters in the Reserve are designated as such because of their historical association with each other, and because of a functioning relationship among several individual buildings.

Fort Casey is considered a cluster because of the historical associations and relationships among a variety of structures still present today. The cluster is spread out over a large area. The overall organization of the landscape and the formal hierarchical layout of the officer’s quarters, barracks, parade ground, service areas, workshops, and defense structures still exist within its original setting and location on Admiralty Head. Much of this infrastructure has been in place since 1906. Other features include gun emplacements, sidewalks, service-related buildings, among other built structures, and all retain a distinct relationship to one another.

8-Archeological Resources
See previous section “Archaeological Resources” under the “Cultural Environment” heading.

9-Views and Other Perceptual Qualities
As a cultural landscape, the Reserve is viewed holistically as a collection of resources, many of which are significant. Historic views and perceptual qualities also contribute to the significance of the landscape. These views can be treated as tangible resources and are identified using the historical record and are based on character-defining features of the cultural landscape. Fifteen contributing views have been identified in the National Register nomination that documents the contributing resources of the historic district.

10-Small-Scale Features
A variety of small-scale features found in the Reserve adds character and texture to the cultural landscape. Many of these features are associated with historic structures such as old lampposts in
Fort Casey or individual specimen trees like the black walnut tree outside the Captain Thomas Coupe saltbox. There are historic gates and fences, wooden post and wire fencing along roads and property lines, remnant orchards, hedgerows, building ruins and the individual grave markers in the cemetery that collectively give richness to the cultural landscape of the Reserve.

Museum Objects and Artifacts
The Trust Board currently does not hold any object collections in its possession, nor does it intend to be a repository for such items at this time. The Trust Board does have a slide and photograph library that includes both present-day and historical images. Many of the historical images are duplicates of material the museum holds; some are images duplicated from private collections (oral history participants). The slide and photograph library is frequently used by researchers, including members of the local community, children and young adults working on research projects for school such as History Day, and contractors working for the NPS or other organizations.

There is a small reference library in the Trust Board office, containing a variety of materials on topics including natural and cultural resource management, history, rural land preservation, architecture, preservation planning, natural history guides, among others. Augmenting the reference library are natural and cultural resource vertical files containing articles and manuscripts, both published and unpublished, and general ephemera on topics relevant to the Reserve.

The Reserve works with North Cascades National Park Service Complex to conserve and store the artifacts that resulted from work on the Ferry House foundation and the Jacob Ebey Blockhouse. Approximately 15,000 archaeological items were uncovered. The Ferry House artifacts contained a mix of historic and prehistoric materials totaling approximately 12,000 items including the associated records. The Block House artifacts are all historic archaeology items that are in the process of being analyzed and are expected to number less than 3,000.

The Trust Board works in partnership with the Island County Historical Society, which is the official, though non-profit, repository for items associated with Island County history. Its museum has a large collection of items that have been donated to it over the years. Its capacity to take additional items is limited by the lack of adequate collections and storage space and staff to oversee its management. The museum and collections are managed by a group of volunteers and at various times participation can be sporadic.

Should the Trust Board determine that collections are a positive and appropriate arena for the Reserve to expand into on-site, it will be necessary to devise creative solutions for collections management. This may include, though not necessarily limited to, entering into a formal partnership with the museum. This is also true for archival materials. The Trust Board is generating archival materials that represent its administrative history. These materials have been organized and placed in boxes that remain in the office (taking up valuable space). To date, no long-term solution has been considered for these important resources. A Scope of Collections Statement is underway to help determine solutions to some of these concerns. A Museum Management Plan for the Reserve’s NPS collection is currently underway by staff at North Cascades National Park Service Complex.

The Natural Environment
The Reserve is located in the western hemlock forest zone of Western Washington. It encom-
passes approximately 13,617 acres of land and 3,955 surface acres of salt water for a total of 17,572 acres. Central Whidbey Island contains the island’s best farmland, broad prairies, a deep protected cove, high seaside bluffs, low rolling hills, shallow brackish lakes, and a narrow, rugged beach along Admiralty Inlet.

A great diversity of wildlife inhabits the wooded areas, wetlands, and shorelines of the Reserve. Deer, raccoons, coyotes, and a number of small mammal species are common in the wooded areas. Many species of waterfowl use the wetlands and shoreline for breeding, nesting, and resting during migration. Crockett Lake and the bordering agricultural land adjacent to Fort Casey State Park support a large population of permanent and migratory waterfowl as well as other birds and small wildlife. Kennedy’s Lagoon and Penn Cove are also significant waterfowl habitats. The Reserve is located on the Pacific Flyway.

There is also a considerable variety of flora species, due in part to the different habitat zones encompassed by the Reserve. Representative species from woodland areas, prairies, coastal bluffs, beaches, fresh water kettle ponds, lagoons, wetlands, and marine ecosystems can be found. There are also several locations where sensitive species are located.

While there exists a variety of habitats and significant species, there has been little emphasis on the understanding or inventorying of natural species or processes within the Reserve. The majority of the land is privately owned and humans have manipulated virtually all of the land for many decades, mostly for agricultural purposes, including logging. The threats to the traditional land uses that affect its rural character are urgent and continuous.

**Climate**

Several factors influence the maritime climate surrounding Whidbey Island. One major influence is the Pacific Ocean, which acts as a regional thermostat that generates moisture-laden air. Major bodies of water help to regulate temperatures on landmasses. They form a great atmospheric heat reservoir with a tremendous capacity for storing heat and releasing it slowly. Thus, for the most part, the maritime environment does not experience great influxes of extreme weather.

The other geographic climate influencing factors are the surrounding mountains. To the east, the Cascade Mountains deflect continental winds. The prevailing wind direction is from the south and southwest in the fall and winter and from the west and northwest in the spring and summer. Roughly, one hundred miles to the west is Washington’s Pacific Coast, where the continental United States receives its highest annual rainfall. The Olympic Mountains stand between the Pacific Coast and Whidbey Island, which places the Reserve within the rain shadow of the Olympic Mountains.

Data collected at the weather monitoring station in Coupeville documents that the area encompassing the Reserve averages only 20.77 inches of precipitation annually, compared to over 40 inches on the south end of Whidbey Island. An overall average rainfall for Whidbey Island would be close to 30 inches. About 80 percent of the annual precipitation occurs...
from October through May. The average maximum temperature is 57.9 degrees Fahrenheit; the average minimum is 41.7 degrees Fahrenheit. The extreme temperatures range from 90 to 0 degrees Fahrenheit. The growing season within the Reserve is 202 days. Total cloud cover averages 255 days per year with only 43 days of clear skies.

A May 1990 report by the Intergovernmental Panel on Climate Change (representing 39 countries and reporting on the greenhouse effect), stated that unless emissions of greenhouse gases are immediately cut by more than 60 percent, global mean temperatures could increase up to 5.4 degrees Fahrenheit by the end of the twenty-first century. A two to six foot sea level rise is predicted using computer simulated models. This amount of sea level rise could result in significant adverse environmental impacts on groundwater such as saltwater intrusion, inundation of shoreline environments and possible displacement of wetlands (Island County 1990: III-14).

**Air Quality**

The Environmental Protection Agency (EPA), the Washington Department of Ecology (DOE), and the Northwest Air Pollution Authority (NWAPA) regulate air quality on Whidbey Island. The EPA has established National Ambient Air Quality Standards (NAAQS) to protect the health and welfare of the public for the six so-called “criteria” or conventional pollutants - carbon monoxide, ozone, nitrogen oxides, sulfur dioxide, lead and fine particulate matter. The DOE has established ambient standards for Washington State, which are identical to the federal NAAQS except for more stringent sulfur dioxide standards. The DOE is also responsible for developing and implementing state implementation plans that will assure compliance with state and federal ambient air quality standards. The NWAPA is the local air pollution control agency serving Island, Skagit, and Whatcom counties and shares responsibility with DOE to develop and implement the state implementation plans. In addition, all three agencies share responsibility for conducting air quality monitoring, evaluation, and regulation of hazard-
Air Quality Monitoring

NWAPA operates a particulate monitoring station in Oak Harbor. No other air quality monitoring is currently conducted on Whidbey Island. The map on the previous page shows the locations of other monitoring stations within the three counties of NWAPA’s jurisdiction.

Three other counties border on Whidbey Island: the Puget Sound Clean Air Agency (PSCAA) conducts particulate and carbon monoxide monitoring in Snohomish County; no air quality monitoring is conducted in Jefferson or San Juan County. Additional monitoring is conducted in the large urban areas to the south (Seattle/Everett/Tacoma) and to the north (Vancouver, British Columbia) of Whidbey Island.

Although there has been little air quality monitoring on Whidbey Island itself, monitoring elsewhere in the airshed along with modeling indicate that all areas of the island are currently in attainment of the NAAQS (personal communication with Axel Franzmann, Air Quality Scientist, NWAPA, 2001).

Industrial Sources of Air Pollution

The only large industrial source on Whidbey Island is the Naval Air Station near Oak Harbor. Although it is the only large industrial source on the island, the Naval Air Station is relatively small compared to other industrial sources in the airshed including Tesoro and Shell oil refineries at Anacortes in Skagit County; Intalco, ARCO, and ConocoPhillips in Whatcom County; and Port Townsend Paper in Jefferson County. Reported 2002 emissions from these selected large industrial sources are shown in Table 1 for comparison.

The Port Townsend Paper mill near Port Townsend in Jefferson County, approximately five miles west of the Reserve, is of particular concern to the National Park Service due to its proximity to the Reserve and because the prevailing winds are from the west, especially during the summer months. In addition, the plume from the mill is often clearly visible from Ebey’s Landing and the odor of sulfur compounds can sometimes be detected at the Reserve.

Other Air Pollution Sources

Statewide data indicates that industrial sources are only responsible for about 13 percent of the air pollution in the state; motor vehicles contribute 55 percent of the air pollution; woodstoves and fireplaces 9 percent; outdoor burning 4 percent; and all other sources (such as small businesses like dry cleaners and gasoline stations) 19 percent.

NWAPA indicates that a similar distribution would be found in Island, Skagit, and Whatcom counties with motor vehicles contributing the largest amount of air pollution. (See NWAPA’s “2002 Air Operating Permit and Other Large Source Emission Inventory for Island, Skagit, and Whatcom Counties of Washington State”.)

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Table 1: Reported 2002 annual emissions for selected industrial sources

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<th>Source</th>
<th>CO</th>
<th>NOx</th>
<th>PM10</th>
<th>SO2</th>
<th>VOC</th>
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<tr>
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<td>30</td>
<td>31</td>
<td>34</td>
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<td>550</td>
<td>267</td>
<td>545</td>
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</table>

Table 1: Reported 2002 annual emissions for selected industrial sources within the airshed as published by NWAPA in their “2002 Air Operating Permit and Other Large Source Emission Inventory for Island, Skagit, and Whatcom Counties of Washington State” and by Olympic Region Clean Air Agency in their 2002 emission inventory for Jefferson County available on their website at http://www.orcaa.org/EIJefferson02.pdf
Night Sky and Natural Quiet

As our cities and towns grow, the places where the public can enjoy the sounds of nature or find clear views of our nighttime celestial skies are increasingly becoming compromised. Natural quiet and night sky are resources that are often an overlooked part of the environment.

Light pollution is the visible intrusion of light into our nighttime environment. The source of much of this pollution can be attributed to poorly designed outdoor light fixtures that allow light to stray beyond the intended purpose. The impacts of poor nighttime lighting include urban sky glow (the brightening of nighttime skies), glare, the trespass of light and wasted energy (International Dark Sky Association 2001). Light pollution can adversely affect night-flying migratory birds. The areas within the Reserve experiencing higher concentrations of light pollution are the town of Coupeville and the State Route 20 corridor. Some light pollution within the Reserve is possibly stray light from the town of Oak Harbor. The primary sources of the light pollution are poorly designed building and roadway light fixtures and vehicle lights.

According to the Coupeville town planner (Cort 2001), the lighting regulations for the Coupeville area are fairly standard, but are effective in containing light onsite and directing it downward. In 2003, Island County passed a lighting ordinance to preserve the qualities of the island’s night sky resources. All fixtures must be retrofitted if not in compliance with the new regulations. The county has printed a brochure outlining the new ordinance, which is available at the county offices in Coupeville.

Noise pollution is the audible pollution of the natural environment from foreign sources. The U.S. Navy maintains an Outlying Landing Field (OLF) that cuts through Smith Prairie within the Reserve. The field is used by pilots to practice simulated aircraft carrier landings. When in use, there is an extreme noise impact. The Public Affairs Office at Naval Air Station, Whidbey Island (Martin 2001), states that the flight schedules normally vary from several times per week to once a month. The time of day and length of practice sessions also vary. This erratic schedule implies that significant noise impacts can occur on a regular, but inconsistent basis.

Another source of noise pollution is State Route 20. Part of the State Route 20 corridor runs through the Reserve and there is a sizable amount of noise pollution attributed to highway traffic. There are about 3 million vehicles per year (Washington State Department of Transportation 2004). Personal watercraft (commonly referred to as jet skis) usage in Penn Cove, though infrequent, is another source of noise pollution.

Geology

The Puget Lobe of the Cordilleran ice sheet predominantly shaped the major surface features of Whidbey Island. This ice sheet formed during the Pleistocene Epoch between 2.2 million and 10,000 years ago. Continental glaciers advanced and retreated from Canada into Puget Sound during this time. The last period of glacial advance, known as the Vashon Stade of the Fraser Glaciation, reached its maximum between 18,000 and 14,000 years ago (Burns 1985). About 1,250 meters of ice covered the area near Whidbey Island during this time. This last period of glaciation left deposits of unsorted, boulder-clay layers referred to as Vashon till. This glacial till covers most of the upland areas of Whidbey and Camano islands, and varies in thickness from several feet to approximately 175 feet. This advance also left proglacial outwash sands at the lowest Vashon levels of Whidbey Island. These sands are overlain by till, which was later overlain by glacial-marine drift gravels (Easterbrook 1962, 1968, 1969). Other remnants of glacial impacts are kettle ponds, which were formed by large, soil-covered blocks of ice, left by the glaciers, which melted slowly leaving behind steep-walled depressions in excess of 200 feet deep and filled with water.

Soils

Glacial upland soils cover approximately 75 percent of Island County. In these areas, the glacial parent material has resulted in surface soils of coarse to fine-textured material ranging from moderately good to somewhat excessive drainage.
The soil series occurring on glacial uplands on Whidbey Island include Hoypus, Keystone, Whidbey, Swantown, Casey, Townsend, and Bozarth.

Sediment washed from upper slopes during the glacial retreat collected in glacial lake bottoms, mixed with organic matter and formed the fertile soils of the prairies. These prairies have attracted populations of humans for hundreds of years. The prairies have been in continuous agricultural use for over 150 years by European-descended immigrants, and probably hundreds of years longer by American Indians.

The west coast beaches along Admiralty Inlet consist of materials deposited by glaciers and washed by wave action. At Ebey’s Landing, the beach is gravel-sand subject to erosion from currents and to accretion from the upland erosion. (Gallucci, 1980).

All the coastal formations are mainly composed of Pleistocene sediments. At Point Partridge, these are Everson gravels (Everson interstadial, Fraser glaciation, upper Pleistocene). Undifferentiated Pleistocene sediments comprise Ebey’s Landing. Toward the south and Fort Casey, it is Vashon drift (Vashon stade, Fraser glaciation, middle Pleistocene), Everson glacio-marine drift, and Vashon till. Along the shorelines, these alternate with pre-Fraser non-glacial undifferentiated Pleistocene sediments (Gallucci, 1980).

The most common wetland mineral soils in the County include Norma, Bellingham, and Coveland series. The most common organic wetland soils are Semiahmoo muck, Tacoma peat, Mukilteo peat, and Tanwax peat series. These are all poorly drained soils with shallow water tables.

The best farmland in Island County is U.S. Department of Agriculture (USDA) Class II (productive agricultural) which comprises 5 percent of the total landmass. Over 45 percent of the existing Class II lands within Island County are found within the Reserve (Luxenberg and Smith 1995: p.17). (See Figure 5, Prime, Unique, and Important Agricultural Soils.)

**Topography**

Elevations range from sea level to 200 feet. Generally, the narrow shoreline strip ends at steep slopes and cliffs. These fall away gradually inland to the low-lying prairies. No place in the Reserve is more than two and a half miles from the shoreline. The beaches and shoreline slopes and bluffs are in a constant state of erosion and accretion. Soils on slopes in excess of 15 percent grade, which includes some of the prairie edges, are subject to severe erosion when the vegetation cover is removed. Twenty-five miles of shoreline are included within the Reserve. This shoreline varies from the windswept cliffs on the west to the protected shores of Penn Cove.

**Water Resources**

For its size, the Reserve contains a broad diversity of marine and freshwater resources. (See Figure 6, Hydrology.) The land within the Reserve is bounded on the east by the Saratoga Passage (Puget Sound) and on the west by Admiralty Inlet (between the Strait of Juan de Fuca and Puget Sound). The Reserve contains extensive marine resource areas including Penn Cove, Kennedy’s Lagoon, and Grasser’s Lagoon in the northeast, Admiralty Inlet and Perego’s Lagoon to the west, and Admiralty Bay and Crockett Lake (lagoon) in the south.

These areas provide habitat and nursery grounds for marine invertebrates and fish at Grasser’s Lagoon, Kennedy’s Lagoon, and Crockett Lake, support important commercial fisheries at Penn Cove, and provide wildlife habitat for waterfowl and terrestrial animals at Penn Cove, Crockett Lake, and Perego’s Lagoon.

The Reserve lies within two watersheds, the central/south Whidbey and north Whidbey watersheds. The central/south Whidbey watershed boundary is located directly south of Coupeville, continues west across the prairie to Ebey’s Landing and continues south throughout Whidbey Island.

**Surface Hydrology**

The only surface water that is used for domestic consumption in the general vicinity of the Reserve
Penn Cove supports extensive commercial and recreational fisheries. The high quality waters are used by the commercial aquaculture industry, Penn Cove Shellfish, LLC, for the production of locally and internationally renowned Penn Cove mussels.

There are two permitted effluent discharges into Penn Cove. The town of Coupeville and Penn Cove Park discharge sewage effluent after treatment into central Penn Cove. According to the Coupeville Town Planner, the effluent discharges meet all applicable water quality standards.

Occasionally personal watercrafts will enter the cove. The noise and water pollution attributed to their use is a concern to many living in the Reserve. The Coupeville town planner considers jet skis a minor problem, due to their very infrequent presence in Coupeville waters. The Coupeville Town Council has recently passed a new comprehensive plan, which supports regulating personal watercrafts. The means of regulating this use will not be decided until April 2001. The compromise could possibly be a speed limit within the Cove.

Penn Cove is one of several Puget Sound marine areas monitored as part of the Washington DOE Marine Waters Monitoring Program. The habitat quality of marine waters are characterized by analyzing the stratification of the water column (layering of the water according to temperature and salinity changes) and by measuring dissolved oxygen, turbidity, and the availability of sunlight below the water surface. Penn Cove was found to exhibit persistent stratification. Stratification will affect the distribution of toxins and other biological stressors, such as low dissolved oxygen concentrations (Kearsley and Parvin 1998).

During the 1993-94 monitoring season, there were months when dissolved oxygen concentrations fell below 5 mg/l, and one month (October 1993) of nearly anoxic conditions. Some fish species are stressed by environmental conditions when dissolved oxygen concentrations fall below 5 mg/l (Kramer 1987; Whitmore et al. 1960), while others may not exhibit stress at 2 mg/l (Pihl et al. 1992). Between October 1995 and September 1996, low dissolved oxygen concentrations were observed.
more frequently, and fell below 3 mg/l in November 1995 and September 1996. When oxygen concentrations drop below 3 mg/l, near hypoxic conditions occur. Continuous or intermittent hypoxic conditions may result in a shift in species composition, a decrease in population numbers and species diversity, a disruption of predator-prey relationships, and a shift in trophic pathways (Newton et al. 1998). There is no site-specific information concerning the impact of stratification or low dissolved oxygen concentrations on salmonids in Penn Cove (Kearsley and Parvin 1998).

The Washington DOE Marine Waters Monitoring program recommends that human activities, which could stimulate plankton production, decrease circulation, or increase oxygen demand be carefully evaluated in the vicinity of Penn Cove (Newton et al. 1998). The low dissolved oxygen concentrations are believed to result from natural conditions (Kearsley and Parvin 1998).

**Lake Pondilla**

The area surrounding Lake Pondilla is topographically diverse, densely forested and remote, and contains the highest ridges and deepest depressions within the Reserve (Gilbert 1985). This is the only area of kettles found on Whidbey Island. While many kettles remain within the area, Lake Pondilla is the only extant kettle pond. Little is known regarding water quality or biota associated with this interesting freshwater feature.

**Perego's Lagoon**

Located on the eastern shore of Admiralty Inlet, Perego's Lagoon is a coastal lagoon south of Point Partridge and north of Ebey's Landing. The lagoon is approximately 0.6 mile in length and generally about 0.1 mile wide. A narrow (100-150 foot wide) beach consisting of sand, gravel, and cobble separates it from the inlet. The coastal strip appears to be subjected to moderate wave action (0.5-2 feet) and is strongly influenced by long shore currents that deposit eroded upland sediments in this vicinity (Gallucci 1980). Slope changes abruptly inland of the lake with a cliff-face of approximately 240 feet rising almost immediately behind the lake.

**Crockett Lake**

Crockett Lake is the largest inland water feature and historically was a salt marsh opening to Admiralty Bay. It is a productive wildlife resource. The lake receives regular limited tidal inundation through tidal gates at its southwest corner.

When early settlers arrived in the area, Crockett Lake was a large tidal lagoon, separated from Admiralty Bay by an 800-foot wide sandy bar called Keystone Spit. At the time of settlement, the lake probably covered about 600 acres when full. Mudflats around its margins were regularly exposed and inundated as the water level changed in regular tidal and seasonal cycles. The lake was surrounded by tidal salt marsh and some brackish and freshwater marsh in areas where groundwater discharged into the lake. Though the amount of water exchange between the lake and Admiralty Bay varied with seasonal tides and the changing morphology of the channel, it probably had a regular flushing of seawater at all higher tides. Minor changes in salinity may have occurred due to

**Grasser's Lagoon**

Grasser's Lagoon is a 19-acre salt marsh that is located at the head of Penn Cove. It is tidally inundated twice a day. The lagoon serves important functions as a shoreline buffer zone and wetland habitat. A viable salt marsh exists in the upper intertidal area of the lagoon that provides ideal habitat for waterfowl. Numerous bird species including great blue heron, western grebe, pied-billed grebe, and kingfisher have been observed. The rocky sandspit forming the outer boundary of the lagoon supports significant numbers of shorebirds, including high concentrations of turnstones, surfbirds, and rock sandpipers, normally found in comparable numbers only on jetties and offshore rocks of the open coast. The shallow waters of the lagoon are used by a number of fish species including juvenile chum, pink and coho salmon, herring, smelt, and flounder. The abundance of shellfish and finfish in the area of the lagoon and adjoining waters of Penn Cove support high numbers of diving ducks, mergansers, and herons feeding in the area (U.S. Fish and Wildlife Service, 1985). Although there is no riparian buffer separating the lagoon from the surrounding roads, it appears to be functioning relatively well (Kearsley and Parvin 1998).
winter floods or low tides and evaporation in the summer, but these were probably minor compared to what occurs today.

Tidal gates were installed in 1948 by Island County Drainage District No. 6 in an effort to drain Crockett Lake and some of the marshlands surrounding it. This reduced the lake to about ten acres in size in 1953. Draining the lake combined with the establishment of drainage ditches into the marshes was apparently successful and allowed agriculture to expand into the former marshlands.

In 1974, the flapper valves rusted off the gate and again allowed water to flow into the lake. The drainage district was no longer active so the valves remained open and the lake grew to about 750 acres by the spring of 1982. Flooding occurred and while the inundation of agricultural lands was no longer an issue (lands around the lake were no longer cultivated), it became an issue for surrounding residents. Residents of Telaker Shores, a nearby housing development whose residences had been flooded, reactivated the drainage district and installed new flapper valves on the gates in April 1982.

In the 1980 Ebey’s Landing National Historical Reserve Comprehensive Plan, the National Park Service identified the natural resource values of Crockett Lake. The lake serves as an important staging area for spring and fall shorebird migration and an over-wintering area for waterfowl during the fall and winter. The NPS Manager to the Reserve said in an affidavit that reducing the lake to its former size would reduce and impair the scenic, historical, and natural values and therefore would adversely affect the preservation and protection of the lake environment.

In 1986, the drainage district contracted with Entranco Engineers to evaluate some of the management alternatives. Entranco suggested regulating water levels at 4 to 5 feet above MLLW (mean lower low water) to protect septic systems at Telaker Shores. Lower levels were predicted to be better for wildlife because more of the mudflats would be exposed for feeding. The report neglected to mention that without regular inundation, the benthic organisms in the mudflat would quickly die.

In 1987, the Skagit County Superior Court issued a decision (in response to a lawsuit filed in 1985 by Seattle Pacific University) requiring the Drainage District No. 6 Commissioners to maintain lake levels at specific guidelines (Doody 1990). The drainage district agreed to allow staff from Fort Casey State Park to operate the gates and manage water levels. In 1989 or 1990, mosquitoes became a problem and lake water management operations were blamed. In 1992, the infestation was so severe that several local citizens began operating the gates to lower lake levels. They also initiated a program of biological and chemical control for the mosquitoes, with state approval. The university, state agencies, and Audubon Society have recognized the mosquito problem and have not objected to lowering the lake.

Observations indicate that the partially drained lake is unsightly and not very productive for wildlife except in the marshes. It appears that the productivity and scenic value of Crockett Lake have been greatly reduced by manipulation of lake levels.

Currently, according to the hydrogeologist for Island County, the tidal gates are still in place but in disrepair. While water may flow through the pipes that form the gates, it is unclear to what extent the gates still inhibit natural water flow and fish passage.
**Subsurface Hydrology**

Residents of Whidbey Island are dependent upon a sole source aquifer with a finite water supply for domestic water and irrigation. As such, the aquifer receives a high level of regulatory protection. The county, under the State Environmental Policy Act (SEPA) and the Planning Enabling Act (Chapter 36.70 RCW) is required to control development to protect groundwater sources (Island County 1989). The U.S. Environmental Protection Agency, upon the request of Island County government, designated the county a Sole Source Aquifer in 1982, which provides for an additional review of any federally funded projects to insure that there will be no degradation to the county’s aquifer system. The designation has no effect on non-federally funded projects (Island County Hydrogeologist 2004).

According to the administrator for the Sole Source Aquifer Program, the EPA is not interested in reviewing policy plans such as this general management plan, but is interested in federally funded construction projects having a potential to impact the aquifer. There is a varying threshold for which projects are reviewed, based on the potential for threat to the aquifer. Whether or not projects are reviewed depends upon factors such as local geology, proximity to drinking water sources, and size (Bender 2004).

In 1986, the Department of Ecology designated Island County a Ground Water Management Area under the authority of WAC 173-100 and in 1987 provided a grant to develop a Ground Water Management Plan which was produced in 1991 (Island County 1991).

The groundwater system consists of five aquifer zones. Each consists of a series of water bearing zones, called aquifers surrounded by low permeability sediments called aquitards. Recharge for the aquifers comes from precipitation. Most of this precipitation is lost by runoff, transpiration by plants, or evaporation. Groundwater flows from recharge areas to discharge areas toward the sea (Island County 1991).

Precipitation contribution to the groundwater recharge is less than might be expected. This is because the rain shadow effects allow only an average of 20 inches of rain per year in the vicinity of Coupeville. Another factor that influences groundwater recharge is soil surface permeability. Some of the glacial soils have low-surface permeability or they “hardpan” during times of precipitation. This retards percolation into the groundwater aquifer. It is estimated that an average of 6 percent of the precipitation percolates through the soils to recharge the aquifer.

Groundwater pumping exceeds recharge in the vicinity of the Reserve causing saltwater intrusion in some areas. Saltwater intrusion is a serious problem. As pumping exceeds the rate of recharge, saltwater displaces the freshwater. Once contaminated, the aquifer can remain salty for long periods. Preventative management of groundwater is more effective and efficient than remedial measures once contaminated (Island County 1991). Saltwater intrusion has been documented within the Reserve in the areas of West Beach, Coupeville, Ebey’s Prairie, and outside the Reserve at Admiral’s Cove.

According to the Island County’s Ground Water Management Plan, the demand and withdrawals of groundwater in Island County show a 62 percent increase in consumption in 20 years (between 1980 projected to 2000). If population growth and accompanying development continues, there is the potential of decrease in groundwater recharge and an increase in groundwater contamination. Problems associated with this would include saltwater intrusion, nitrates, pesticides, and other contaminants without proper groundwater management.

Water rights are presently over appropriated in certain areas of the county, particularly in northwest and southwest of Penn Cove. If these water rights are fully exercised, water will be removed from the groundwater system at a rate greater than the rate of replenishment (Island County 1991).

According to the hydrogeologist for Island County, the groundwater within the vicinity of Coupeville is “hard”, with elevated iron and manganese levels. These are both secondary contaminants, meaning that they are not health risks but can cause aesthetic concerns involving taste, col-
The Affected Environment

remains have found that the maps are not comprehensive; they must also rely on finding hydric soils in the soil surveys, and site visits to identify wetlands.

The majority of wetlands in Island County are formed in depressions that occur in areas experiencing intrusion. Some wetlands have formed on glacial uplands where glacial lakes once occurred, and there are a number of wetlands in the deltas and tidal flats in the coastal areas of the islands. Some of these have been manipulated in the past to serve as water reservoirs for stock or irrigation use.

Marine wetlands run from Admiralty Head to just south of Perego’s Lagoon, and start again at Point Partridge and continue north along the shore out of the Reserve’s boundaries. Estuarine wetlands line the shore from Admiralty Head south around Admiralty Bay and south beyond Reserve boundaries. Also in Penn Cove, estuarine wetlands extend from beyond the boundaries at Snakelum Point and around Penn Cove through Blowers Bluff beyond Reserve boundaries into Oak Harbor.

Vegetation

Woodlands

Whidbey Island is within the western hemlock zone of western Washington and is characterized by the vegetation commonly associated with that zone. Most of the wooded areas were logged or burned by 1900. The remaining woodlands are second and third growth Douglas fir, western red


Woodlands near the Jacob Ebey House, Whidbey Island, ca. 2000. NPS Photo.
The common species of salt marsh and beach vegetation include: cattail, orchard grass, pickleweed, seaside arrowgrass, slough sedge, silver cinquefoil, hardstem bullrush, salt grass, salt brush, blue grass, blacken fern, wild rose, seaside plantain, everlasting pea vine, yarrow, velvet grass, blue wild rye, California oat grass, caralline alga, creeping bent grass, dune wild rye, English plantain, green urchin, gumweed, Kentucky bluegrass, Nootka rose, northern saitas, orchard grass, purple snake root, rock weed, Rocmer’s fescue, sea lettuce, sea shore lupine, sea shore red fescue, snowberry, tomatc clover, wiry kelp, woolly sunflower, sea rocket, chick lupine, salt brush, sand verbena, and coastal mugwort.

Crockett Lake

The lake is vegetated in the low marsh areas primarily by emergent, salt-tolerant species such as pickleweed (*Salicornia virginica* L.), saltmarsh arrowgrass (*Triglochin sp.*), threesquare bulrush, saltgrass, and spearscale. In higher areas, the wetland supports silverweed, yarrow, redtop, dock, and Puget Sound gumweed. There are unvegetated mudflats in the central portion of the west half of the wetland.

Smith and Ebey’s Prairie

Native Puget Lowland grasslands are one of the most endangered types of ecosystems in Washington State. There are only two remaining glacial outwash prairies in the northern Puget region and one of these is Smith Prairie. The undisturbed site at Au Sable Institute’s property is the best example of the two remaining prairies and a good candidate for large-scale restoration for native prairie plant community. A small four-acre restoration project for Ebey’s Prairie is scheduled for the summer of 2004.

The prairie remnant at Smith Prairie is estimated to occupy about five and one-half acres. It is the only known glacial outwash prairie site in this region where the prairie grass, *Festuca idahoensis* variety *roemeri*, achieves dominance. Foothill sedge (*Carex tumulicola*), and the exotic Kentucky blue grass (*Poa pratensis*) are abundant. There is a good diversity and abundance of native prairie forbs, including spring gold (*Lomatium utriculatum*),
grasser's hill is a privately owned 190-acre grass covered hillside located at the head of penn cove. the nps holds a conservation easement on part of the hill. grasser’s hill has scenic and archaeological values, and portions retain native vegetation associations—outwash prairies and oak savannas. restricted to the west side of the cascades in oregon, washington, and southern vancouver island, these vegetation types have been reduced 90 percent in extent since european settlement of the pacific northwest (chappell 2003). areas of grasser’s hill are mapped as having soils supporting these vegetation types (u. s. department of agriculture 1958). the vegetation on all of the remaining areas of these mapped prairie and savanna soils has been converted to agriculture, residential development, roads, or grown into shrubfields. from 1997-2002 portions of the remaining prairie vegetation on grasser’s hill were disturbed by new horticultural activity and subjected to regular mowing.

while there are no federally or state listed species on grasser’s hill, extensive field surveys by steve erickson, a local botanist and conservationist, over a number of years have yielded the following information regarding several species of regional and local conservation concern, based on the number of occurrences and area occupied.

recent genetic work on the blue flag iris (iris missouriensis) found on grasser’s hill indicates it is an unusual endemic native distinct from more common populations found east of the cascades (rochefort 2004). the species carex tumulicola is known to occur only in washington in the columbia gorge near bingen (hitchcock 1974), in the san juan islands (atkinson, s. et al. 1993), and on central whidbey and fidalgo islands (erickson 2004). there are eight reported occurrences on central whidbey, including grasser’s hill and schoolhouse prairie. (erickson 2004).

two species that formerly occurred on grasser’s hill have possibly been extirpated since 1992. construction of sky meadow road in the 1980s was observed to have destroyed populations of brodaea congesta. these plants were not located in searches in 1993, 1994, 1995, 1996, and 1997.
A hedgerow can provide many diverse benefits to the land immediately adjacent to it. Hedgerows slow down water run-off, allowing more time for it to filter into the soil and the aquifer. They reduce soil loss by wind and water action. Hedges break up wind motion near the ground and help maintain soil moisture. Local soil fertility is enhanced due to the activities of associated hedgerow animal communities. Hedgerow plant species draw minerals from deep within the soil and deposit them near the surface. The insect eating mammals, amphibians, birds, and other invertebrates, which make hedgerows their home, assist in pest control. Many mammals and migratory birds are attracted to hedgerows for shelter, feeding, and nesting. In the Reserve, at least 22 species of birds depend upon the hedgerows for breeding, nesting, feeding, or shelter from predators (NPS “Hedgerows” brochure—no date).

One occurrence of Grass Widow (Sisyrinchium bellum) is known on central Whidbey. It occupies an area of several hundred square feet on the upper portion of Grasser’s Hill. Triteleia hyacinthin is found at two locations on Whidbey Island, including Grasser’s Hill, where there were less than 325 plants reported in the mid-1990s. Indian Paintbrush (Castilleja miniata v. dixionii) is found at eight locations on Whidbey Island, including Grasser’s Hill. Showy fleabane (Erigeron speciosus) occurs at six locations on Whidbey Island, including less than 20 plants on Grasser’s Hill. Also located here are over 1,000 plants of the Chocolate Lily (Fritillaria lanceolata = F. affinis). Death Camas (Zygadenus venenosus) has been reported at five locations on Whidbey Island, including Grasser’s Hill. Roemer’s Fescue (Festuca idahoensis v. roemeri) occurs on central Whidbey only in prairie and savanna remnants and on some coastal bluffs, including Grasser’s Hill (Erickson 2004).

**Hedgerows**

The Reserve recognizes the cultural and natural importance of hedgerows. In the Reserve, hedgerows define historic cultural land use patterns dating back to the early Euro-American settlement in the 1800s. Some of the first Donation Land Claim boundaries can be identified today by hedgerows.

Most hedgerow origins can be traced to abandoned or unmaintained fence lines. Birds landing on the fences excrete shrub, herb, and grass seeds. Seeds may also be deposited by wind, water movement, farm machinery, small mammals, and automobiles. As the vegetation establishes itself, the fence becomes obscured. Occasionally, trees can be found within hedgerows.
Class A weeds are non-native species with a limited distribution in Washington State and Island County. Preventing new infestations and eradicating existing infestations is the highest priority. Law requires eradication. Class B weeds are non-native species presently limited to portions of the state. Preventing infestations and containment of these weed species are the primary goals in Island County. Class C weeds are non-native weeds found in Washington. Many of these species are widespread in the county. Long-term programs of suppression and control are encouraged and in some cases required in Island County.

The following noxious weeds are found within the Reserve and are designated for control by the ICNWCB:

**Poison Hemlock**
Poison hemlock (*Conium maculatum*) is a class C weed. There is a sizable population along the bluffs at Ebey’s Landing. Poison hemlock is toxic by touch, making its manual removal undesirable. Chemical controls have proven effective in eradicating this dangerous plant. In 1999, the ICNWCB released Hemlock moth (*Agonopterix alstroemeriana*), a biological control agent, in an attempt to control this species.

**Canada Thistle**
Canada thistle (*Cirsium arvense*) is a class C weed. It is abundant throughout the Reserve, with a sizable population on the Au Sable Institute property. Control methods that have been used by ICNWCB include mowing and biological control agents. In 1993, a population of thistle stem gall fly (*Urophora cardui*) was released on Grassar’s Hill in an attempt at control. In 1997, populations of Canada thistle stem weevil (*Ceutorhynchus litorum*) were released at four sites in Island County. A year later, a population of Canada thistle bud weevil (*Larinus planus*) was released. There is concern that these biological control agents may feed on native thistle and other plant species and may inadvertently affect these populations. Impacts associated with biocontrols are poorly documented.

**Spartina**
Spartina (*Spartina anglica*) a salt marsh grass, was introduced to Port Susan in the early 1960s in order to convert tidelands into pastureland for cattle. Since its introduction, it has spread throughout Puget Sound. The species is harmful in that it collects sediment, turning areas of mudflat into salt marsh. This changes the entire nature of the ecosystem, crowding out native vegetation such as eelgrass beds and impacting bird, fish, and marine invertebrate populations. Spartina anglica has been identified in Penn Cove. Both governmental agencies and citizen groups have worked to eradicate this Class B noxious weed. According to Gloria Wahlin, Island County Noxious Weed Board Coordinator a resident of Stanwood planted spartina in the early 1960s. The resident planted it on a beach so that his cattle could graze
Sensitive Species

The Reserve is the home of many unique and rare plants. Although only one plant, the golden paintbrush (Castilleja levisecta), is listed as threatened at the federal and state level, there are other species not protected that are of local importance and their preservation helps protect genetic diversity.

According to Frosty Hollow Ecological Restoration, a conservation group, the areas of unique local flora are Grasser’s Hill, Smith Prairie and the former DNR game farm (now owned by the Au Sable Institute and managed as a summer environmental camp), Ebey’s Bluff, Fort Ebey State Park, Bocker Environmental Preserve at Camp Casey, West Beach Road, Zylstra Road, Ebey’s Landing, and Point Partridge. The major threats include development, mowing, road maintenance, visitor impacts, noxious weeds, and increased competition from tree and shrub cover.

Golden Paintbrush

Golden paintbrush (Castilleja levisecta) is a federally listed “threatened” species under the Endangered Species Act. There are only 13 occurrences remaining on earth, five on Whidbey Island. Of these, three are found within the Reserve, at Fort Casey State Park, the Bocker Environmental Preserve (at the Seattle Pacific University’s Whidbey Island campus), and on TNC property south of Ebey’s Landing. A population study was conducted in 2003 at all three sites. At two of the three sites, where similar studies were conducted previously, the populations have dropped significantly.

At Fort Casey, a previous survey in 1989 found more than 400 individuals, and in 1993, only 120 individuals were counted. At the Bocker Environmental Preserve, 1984 and 1985 surveys of a five by five-meter area found over 1200 and 2700 plants respectively. In 1993, 273 plants were counted in the same area; in 2004, only 68 plants were counted (Sheehan 2005). At the site south of Ebey’s Landing, no previous study is known to have occurred. In 1993, a random transect sampling estimated the population at over 4000 individuals, with a small sub-population of an esti-
Explanations for the declining population size at Fort Casey have included the pattern and timing of mowing, visitor use, increased cover by shrub and other competitive species, predation by rabbits, and natural succession of plant communities. At the Bocker Environmental Preserve, increased tree and shrub cover offer one explanation for decline in species numbers.

Wildlife

The classification “Priority Habitats and Species” by the Washington Department of Fish and Wildlife (WDFW) are defined as key species use areas and key fish and wildlife habitats based on expert empirical knowledge. The compiled data does not represent exhaustive inventories. All the priority species areas mapped represent known use areas—they are not potential habitats. Priority habitats are areas that support diverse, unique and/or abundant communities of fish and wildlife. The Priority Habitat and Species Areas identified by WDFW within the Reserve include the following: Penn Cove; Crockett Lake; the bluffs north and south of Ebey’s Landing; Perego’s Lagoon; Kennedy’s and Grassers’ lagoons; the bluffs north and south of Blower’s Bluff; the coastal tidelines that line the shores of the Reserve; bald eagle nest and foraging sites; and numerous smaller areas which include fresh and saltwater wetlands, estuaries, bluffs, and urban natural open spaces. Approximately 78 Priority Habitat and Species Areas occur within the boundaries of the Reserve.

It is important to note that habitat and species information can only show that a species or habitat type is present. They cannot show that a species or habitat type is not present. Site-specific surveys are frequently necessary to rule out the presence of priority habitat and species. Detailed surveys have not been conducted by NPS.

Terrestrial Mammals

Habitat fragmentation, development, and the introduction of exotic species have all contributed to the present composition of mammalian species in the Reserve. Mammals can be highly secretive creatures. Many of them are nocturnal; some are small, and therefore, difficult to study. There has not been a conclusive inventory of mammal species on Whidbey Island. Many of the wild mammals of the Reserve, such as coyotes, deer, and raccoons, breed in forested habitats, but suitable habitat for smaller species (such as shrews, voles, mice and rats) is also available along fence rows and at farm sites. Aquatic habitats are used as feeding areas by scavengers and carnivores such as raccoons, skunks and coyotes, otters, as well as for bats, which capture insects over the water.

According to staff at Fort Casey State Park, there were an undetermined number of feral guinea pigs released within the vicinity of Fort Casey State Park sometime around 1990. It is believed by park officials that they existed within the Reserve for roughly one month afterwards. Ten were captured. The rest, if any of the population remained, were assumed dead due to predation. No recent sightings have been reported. A small mammal survey is scheduled for the summer of 2005.

Marine Mammals

Little is known of significant feeding, rearing, or breeding habitat for marine mammal populations within the Reserve. To date, there has not been a comprehensive marine species inventory within the Puget Sound area. Whales, dolphins, and seals may be temporary visitors in the surrounding waters. A harbor seal (*Phoca vitulina*) haul-out site, located east of Oak Harbor, is operated by WDFW. The area has year-round occupancy by harbor seals. Due to the proximity to Penn Cove and the Reserve boundaries, seal visitation and use should be expected. Orca whales have been observed in Penn Cove periodically.

Birds

There are many bird species that inhabit the area within and around the Reserve. The majority of species are using the natural habitat areas within the Reserve as feeding grounds, migratory resting places and wintering grounds.

Nesting communities are most likely found within the forested areas and to a much smaller extent along the shoreline border communities of Ebey’s
Landing, Penn Cove and Crockett Lake. Crockett Lake serves as an important staging area for spring and fall shorebird migration and, along with Penn Cove, an over-wintering area for waterfowl during the fall and winter. Crockett Lake has been an International Shorebird Survey site since 1997. In 2001, Crockett Lake and Penn Cove were both designated Important Bird Areas by Washington State Audubon. A year-long baseline bird survey of selected habitat types within the Reserve was completed in 2003.

There are nine known Bald Eagle (Haliaeetus leucocephalus) nesting sites in the Reserve in the areas of Point Partridge, Kennedy’s Lagoon, West Beach, Kettles Park, Coupeville, Long Point, Ebey’s Prairie, Smith Prairie and Admiralty Bay. All nests are active and productive. The majority of nest activity occurs during late winter, spring and summer. In addition, there is a foraging area near Coupeville with regular large year round concentrations averaging up to 25 eagles. These nine nests and the foraging area are considered Priority Habitat and Species Areas by the WDFW.

During the 2002, Christmas Bird Count 11,291 birds of 82 species were counted in the Reserve. Included in the total were 20 Bald Eagles and 2 Peregrine Falcons (Falcon peregrinus). The Reserve supports a high density of both breeding and wintering birds of prey, including Red-tailed Hawk (Buteo jamaicensis), Bald Eagle, Northern Harrier (Circus cyaneus) and American Kestrel (Falco sparverius). The numerous Red-tailed Hawk nests probably indicate an equivalent breeding popula-

Marine birds are most easily distinguished by habitat type. Some locally common species that can be seen in the different habitat types within the Reserve are the following:

- Rocky coasts—oystercatchers, Black Turnstones (Arenaria melanocephala), Surfbirds (Alpbriza virgata), sandpipers, Harlequin Ducks
- Intertidal and tidal shallows—Harlequin Ducks
- Stone, pebble and cobble beaches—Killdeer (Charidrius vociferus), Pigeon Guillemots, kingfishers, gulls
- Mudflats and salt marshes—gulls, terns, cormorants, dabbling ducks. (This area is considered the richest bird habitat because of the quantity of plant biomass.)

Reptiles and Amphibians

There has been no known conclusive inventory of reptiles and amphibians for the Reserve; however, excellent habitat for reptiles and amphibians may be found throughout the Reserve. The northwestern garter (Thamnophis ordinolices), red-legged frog (Rana aurora), and Pacific chorus frog (Pseudacris regilla) are found within the Reserve. Also present is the western toad (Bufo boreas) (Washington Department of Game and Soil Conservation Service 1979).

Invertebrates

No information is available concerning terrestrial invertebrates within Ebey’s Landing National Historical Reserve. Limited marine species information is available.

Fish

There has been no systematic biological survey of the waters of Puget Sound (Kruckeburg 1991). However, according to a collection of surveys, it is estimated that there are about 211 species of fish.
that populate the Puget Sound area (Kruckeburg 1991).

The common fish that inhabit shoreline, tidepool, mudflat, estuary, kelp, and eel grass beds are the following: salmon, trout, sharks, little blennies, and sculpins. Beyond the reach of tides, the common pelagic, or free swimming, species are: salmon, dogfish sharks, rat fish, herring, hake, and some rockfish. Below the reach of tides within the benthic or bottom dwelling habitat, flounder, cod, sole, and rockfish are the most common species found.

The WDFW has identified Penn Cove as a spawning area for surf smelt and sundance. For surf smelt, the spawning area exists in the subtidal zone and extends from Snakelum Point around Penn Cove to Monroe’s Landing, with the western shore of Penn Cove used only sporadically for spawning. For sundance, individual spawning areas exist on Snakelum Point, Long Point, Lovejoy Point, Monroe’s Landing and just east of San de Fuca. No known rock sole spawning and herring spawning areas or herring holding areas exist within the Reserve.

The local salmon fishery is heavily used, as has been the case for many years. The marine and fresh water systems adjacent to and within the Reserve are very important for juvenile salmon rearing and migration, particularly pink and chum fry. Some of the more common salmon species and nearby relatives that utilize the Puget Sound area are: pink salmon (Oncorhynchus gorbuscha), king salmon (Oncorhynchus keta), coho/silver salmon (Oncorhynchus kisutch), sockeye salmon (Oncorhynchus nerka), chinook salmon (Oncorhynchus tshawytscha), coastal cutthroat trout (Salmo clarkii), rainbow/steelhead trout (Salmo gairdneri), brown trout (Salmo trutta), brook trout (Salvelinus fontinalis), dolly varden (Salvelinus malma).

**Shellfish**

Commercial resources include a substantial subtidal clam bed offshore from Ebey’s Landing. Penn Cove clam beaches are among the most productive in the state and constitute a very valuable recreational resource. There is a Washington Department of Fisheries (public) beach on the south shore of Penn Cove, which is one of the most productive hard-shell clam beaches in the state. There is also a groundfish sport fishery of unknown magnitude in Penn Cove.

Penn Cove Mussels, Inc., a mussel culture operation, was established in Penn Cove in 1975. It was the second mussel culturing operation in the United States. In March of 1996, it entered into a joint venture with Coasts Seafoods Company, whereby becoming Penn Cove Shellfish, LLC. The site is located on the south side of the Cove, sheltered from prevailing winds by a high bluff. The geography of Penn Cove makes it a nutrient trap for the outflows of the Skagit and Stillaguamish river systems. The fresh water and nutrients, combined with the sunlight provided by the rain shadow effect of the Olympic Mountains, is advantageous for plankton growth. The mussels are cultured on floating rafts moored in the cove. Each of the 38 rafts (40 feet by 80 feet, 40 feet by 120 feet, and 30 feet by 90 feet each), hold approximately 1500-2400 of these mussel seed collector lines, on which the mussels grow (Penn Cove Shellfish 2001). The company plans to add three new rafts in the near future. Mussels grow consistently to two inches in eight to ten months, at which point they are harvested. Between three-quarters to one million pounds of mussels are produced a year (Jefferds 2000).

**Intertidal, Benthic, and Pelagic Communities**

Below the influence of the tides, there is a submarine landscape of great variety. Habitable bottoms formed from sand, clay, and gravel substrates provide the predominant settling ground for life. These sediments are derived mainly from the rivers feeding into the sound but also, the erosion of submarine slopes contributes to sediment deposits. Life on submarine terrain is largely sedentary, or sluggish. The benthos, or bottom dwelling zone, ranges from the bottom of the submarine troughs up to the intertidal zone. In the intertidal and splash zones, when beyond the reach of tides, marine life waits for the water and revitalizing nutrients to come to it.
Some representative species within the coastal intertidal zones are the following:

- Rocky habitats—limpets, barnacles, periwinkles, mussels, rockweed, purple sea star, anemone, kelp, rockfish, sea urchins, sea cucumbers.
- Sandy or cobble habitats—sea gull, dune grass, sand piper, six-rayed star, Dungeness crabs, sun star, sand dollars, jellyfish, sand sole, razor clam, butter clam.
- Muddy habitats—marsh grass, black brant, eel grass, micro-crustaceans, English sole, juvenile salmon, marine worms, benthtosea clam, ghost shrimp.
- Surface layer of the water—copepods, fish eggs, and fish larvae.

The major groups of marine invertebrates within Puget Sound are sponges, hydroids, sea anemones, ribbon worms, round worms, segmented worms, chitons, clams, snails, limpets, crabs, barnacles, other carapaced creatures, starfish, sea urchins, and sand dollars. Communities of sea urchins, Pandalid shrimp, hardshell subtidal and intertidal clams, northern abalone, and subtidal geoducks exist within the Reserve and can be found at the following locations:

- Sea urchin—a community is located offshore from Point Partridge on Partridge Bank in the Strait of Juan de Fuca.
- Pandalid shrimp—a community located from Admiralty Head north through Ebey’s Landing to Point Partridge. Another, much larger, community is located offshore from Ebey’s Landing north over Partridge Bank in the Strait of Juan de Fuca and beyond the boundaries of the Reserve.
- Hardshell subtidal clam—a community located from Fort Casey State Park to Perego’s Lagoon. Another small community is found in Penn Cove, near Kennedy’s Lagoon.
- Hardshell intertidal clam—a community is located from Long Point around Penn Cove and beyond Blower’s Bluff.
- Northern abalone—a community hugs the coast at Ebey’s Landing.
- Subtidal geoduck—three small communities are located offshore from Point Partridge in the Strait of Juan de Fuca. A larger community exists off the western shore of central Whidbey, just north of the Reserve’s boundaries.

The most extensive of the oceanic habitats is the pelagic zone where plants and animals are found floating or swimming. Common species that can be seen within this habitat zone are phytoplankton, floating plants, and microscopic algae, which form the basis for most marine food chains. This microscopic algae is able to absorb carbon dioxide from its environment, combine it with dissolved salts, and photosynthesize food using radiant energy from the sun.

Giant kelp (Nereocystis luetkeana) beds support lots of algal life in addition to larger life forms. This annual plant prefers to grow in places where the sea is in motion. It can reach lengths of up to 20 feet. The best beds occupy a zone that is just below the lowest low tide zone at a depth of 40-60 feet (mean low water).

Eel grass (Zostera marina) meadows with their subtidal waters and muddy bottoms are ideal habitat zones. Eel grass, also called the pasture plant, is distant kin to the cereal grains, the grasses. Its growth patterns provide ample biomass for itself and other organisms such as algae, sea anemones, marine worms, snails, limpets, crabs, ducks, and fish. Both kelp and eel grass beds serve as nurseries to many fish species. Eel grass is sensitive to changes in water quality.

**Marine Invasive Species**

There are a number of marine species in the immediate vicinity of the Ebey’s Landing National Historic Preserve that are not native but have been in the area for so long that they have become generally perceived by the public as being local flora and fauna. These include the Manila or Japanese littleneck clam (Venerupis philippinanrum), Pacific or Japanese oyster (Crassostrea gigas), Eastern softshell clam (Mya arenaria), and the beach grass Ammophila arenaria. Three other species have either arrived more recently or have been found in nearby waters. Two of these are the European green crab and the purple varnish clam and are mentioned below. The third is a salt marsh grass (Spartina anglica), which is discussed in the “Vegetation” section of this chapter.
The European green crab (*Carcinus maenas*) is native to the Atlantic coast of Europe, ranging to Northern Africa. It was first documented on the West Coast of the United States in 1989 when it was found in San Francisco Bay. Spreading northward since then, numerous adult European green crabs have been collected in Grays Harbor and Willapa Bay on the Washington Coast and at least two live adults found at the head of Barkley Sound on the west side of Vancouver Island, Canada. To date, the European green crab has not been documented on Whidbey Island. This crab is described as a voracious predator consuming bivalve molusks, small crustaceans, and other organisms and having the potential to impact populations of Dungeness crabs, bivalves, and other native species. In other areas where it has become established, the crab has fed not only on the larva of native crab species, but has also out competed them in capturing prey with its superior speed and dexterity. The Washington Department of Fish and Wildlife presently maintains a long-term monitoring and control program for this species.

The purple varnish clam (*Nuttallia obscurata*) is an Asian species believed to have been introduced to the Strait of Georgia in the late 1980s via ballast water from a ship. It has spread rapidly throughout the area and has been documented on Whidbey Island beaches at least as far back as 2002. Shells from this species have been found in Penn Cove. The clam is found 8-10 inches deep in the substrate and somewhat higher in the intertidal than the area occupied by Manila and native littleneck clams. Impact of this species is not yet determined. Research indicates that it is preyed upon by birds and raccoons.

**Agricultural Resources**

Traditional agricultural land use within the Reserve dates back to the first European settlers. American Indians practiced types of agricultural use, but their methods were much different from those practiced by the Europeans. American Indians often and regularly would perform prescribed burns on sections of the prairie in order to encourage the growth of edible plants, like camas, bracken fern, and chocolate lily. On the prairie, edible bulbs were dug with wooden hand tools.

European settlers’ agricultural practices were much more similar to those employed today. Historically, within central Whidbey Island, agricultural use of the land has played a large part in the livelihood of the inhabitants. This is still true to some extent but the mainstay of the community economic base has shifted.

According to an official at the Washington State University Cooperative Extension Office (Meehan 2000), land use, over time, has changed to more, smaller-scale farms. Presently, the general trend is toward loss of farmed lands. This is true within the Reserve and is due in large part to strong residential development pressure. Due to the increased difficulty in making a profit on agricultural land, the number of people maintaining a working farm is dwindling.

There is still an active farming community within central Whidbey Island. Typical commercial crops include grass, alfalfa, cabbage, and beet seed for export, lavender, conifer seed, strawberries, barley and peas. In 2000, within the Reserve there were 3,355.6 acres in cropland within the Reserve, 1,138.6 acres in pasture, 1,437.1 acres in grassland, and 5,290.7 acres in woodland. (Refer to Ebey’s Landing National Historical Reserve General Management Plan/Environmental Impact Analysis, Volume II, Technical Reports, An Analysis of Land Use Change and Cultural Landscape Integrity for Ebey’s Landing National Historical Reserve by Nancy Rottle.)

The Whidbey Island Conservation District provides conservation plans to landowners at no cost.
American Indian Use of Fire

American Indians used fire as a tool to manipulate vegetation in the Pacific Northwest (Williams 1997). Humans used fire to hunt and harvest natural products, to ward off predators, and to maintain the habitat against natural succession that would convert the land into forest (Pyne 1982). There were three common patterns of American Indian fire use in the Northwest; frequent burning in westside prairies and dry Douglas-fir forests, maintenance of small patches of open prairie for agriculture or hunting by coastal or mountainous tribes, and widespread burning by inland or “plateau” tribes east of the Cascade Mountains (Knudson 1980). It is believed that American Indians burned where they lived to promote a diversity of habitats (Williams 1997).

Fire after Euro-American Settlement

Evidence shows that the frequency of large fires increased with the appearance of American settlers in the 1840s (Pyne, 1982). Reasons for burning were mainly to clear land of trees and underbrush for farming. Embers from open hearths and American Indian burning were also ignition sources for fires.

The fire season of 1910 and the severity of fires that year had a profound influence in how society would deal with future wildland fire. Society launched into an effort to remove wildland fire from the landscape and active wildland fire suppression became the goal for land management agencies.

Presently, the Washington Department of Natural Resources and local fire departments carry out wildland fire protection for the Reserve. Island County wildland fire starts for the previous ten years show that only four were caused by lightning and 233 were human caused (DNR 2001). The wildland fire workload can be influenced through continued or expanded use of wildland fire prevention programs.

Wildland Fire or Natural Fires

Natural fires are those wildland fires caused by natural sources. The most common natural wildland fire ignition source for the Reserve is lightning. Other
types of ignition sources, though rare, are spontaneous combustion or volcanic in origin. Lightning fires for the Pacific states represent approximately 37 percent of all wildland fires (Taylor, 1974). Lightning occurrence, with associated wildland fire starts, has an occasional rating on Whidbey Island. (Agee, 1993)

Fire Regime and Interval

In studying the fire history on Whidbey Island, the fire regime for timber stands on Whidbey Island is a High Severity Fire Regime (Fire Regime 5) (Agee 1993). Common fire types in this type of fire regime would generally be low intensity surface fires with some torching early in the fire season. This would change to crown fires and severe surface burning after prolonged drought or during periods of high temperature and low humidity. When fires occurred, they would be severe surface fires that would replace entire tree stands. The fire return interval for timber stands in the Reserve is between 100-300 years. The fire return interval is defined as the amount of time between two successive fire events in a given area (Agee 1993).

Fire Ecology

Wildland fire has had direct effects on the vegetation within the Reserve. Fire will eliminate individual plants thus setting the site back to an earlier successional stage. Negative effects from a human standpoint would occur if fire removed desirable plants or wildlife habitat from the site. If a plant has adapted to fire effects the impact may actually be positive. (Agee, 1993)

Fire and Air Quality

A significant by-product of the combustion process is smoke. Comprised of small particulates of fuels that did not completely burn; smoke is carried into the atmosphere by transport winds, which have a major bearing on where the smoke accumulates prior to atmospheric dispersal. Smoke impacts air quality in two ways: the first is in the form of airborne pollutants, which can adversely affect human health, and the second is the clarity of air, which affects the ability to see for long distances or creates regional haze impacts. From a health standpoint, air quality within the Reserve is good most of the year. This is due to the prevailing Puget Sound winds keeping the air mixed overhead.

Under the State of Washington Clean Air Act, the counties are required to minimize outdoor burning. Within the Reserve, in unincorporated Island County, some burning of organic waste by landowners is allowed, although it is very limited by the terms of the Outdoor Burning Ordinance (ordinance no. C-117-01). This includes yard waste, agricultural waste, and slash burning. For waste piles over four feet in diameter, a permit must be obtained by the Island County Fire Warden. For slash burning, landowners must receive permits from Washington State Department of Natural Resources.

Interpretation

Interpretation of the stories of Ebey’s Landing has relied primarily on a few wayside exhibits, the Island County Historical Society’s self-guided walking tour, and on volunteers at the historical museum. The Reserve does not have an interpretive plan and currently has no interpretive staff to implement a plan. The process for developing a Long Range Interpretive Plan is expected to begin in 2005 and will incorporate the themes generated in this GMP, as well as specific recommendations for the best ways to interpret those themes, including recommended staffing. The plan will address non-personal interpretive services such as wayside exhibits and web sites, and personal interpretive services including the use of volunteers, partnerships and staff.

Interpretive Themes

The following primary interpretive themes are based on purpose and significance statements, which were developed from the enabling legislation of the Reserve. Primary interpretive themes are the big concepts that are the foundation for an interpreter to develop specific programs or products, which will provide opportunities for a visitor to form their own emotional or intellectual connections to the meanings and significance of a park. In order to provide a range of these opportunities for connections to each of the themes, every visitor should be given varied and multiple op-
opportunities to understand the primary interpretive themes, ideally resulting in greater appreciation for stories of the Reserve and a sense of stewardship toward park resources.

Change—People have long been attracted to the Ebey’s Landing area, making it their home for similar reasons yet bringing new motivations and uses. Principle topics include the following:

- Native American prehistoric and historic use
- Early exploration
- American settlement and commerce
- Water to land transportation
- Military history
- Living Landscape—Ebey’s Landing National Historical Reserve is a living landscape, illustrating continuity among change from early use of the land by Native Americans and later explorers and settlers to present day uses. Topics include:
  - Historical landscape
  - Agricultural connection of prairies to coast
  - Recreational and educational activities
  - Ecology—unique combinations of climate, maritime influences, and geologic features have shaped the landscape, resulting in an unusual diversity of habitats and species. Topics include:
    - Shellfish operation
    - Natural resources in Penn Cove
    - Biodiversity
    - Natural environment directed settlement patterns
  - Geology—Glaciers played a key role in shaping the Ebey’s Landing area, leaving behind many clues for today’s explorers to discover.
  - Historical Reserve—Protecting and preserving this new type of national park takes partners across the community. The Reserve is a model for learning new ways to manage our treasured places.

Visitor Experience Goals

Ebey’s Landing National Historical Reserve is a new kind of national park, created to preserve and protect a rural community, its historic sites and natural beauty. It provides a place to learn about Pacific Northwest history from Native American settlement up to the present time, and to learn about this new type of park that depends on cooperative management. It also provides visitors opportunities for outdoor recreation and reflection. Visitors will:

- Have advance access to information through a variety of media, in a variety of locations, including the park website, exhibits at the ferry terminals, and published guides that will assist them in planning a trip to Whidbey Island and the Reserve, thereby maximizing their time, enjoyment and understanding of the history and resources.
- Receive interpretive information through exhibits, self-guided walks, the Reserve’s brochure, and a variety of personal and non-personal services that orient them to the Reserve’s features.
- Understand the ways that privately owned land is being protected as part of the Reserve for future generations.
- Safely enjoy a variety of accessible, sustainable recreational experiences.
- Understand the importance of resource protection and leave the park with a sense of stewardship toward natural and cultural resources protected by the park.
- Learn about the unique and sensitive species of the area and the communities they inhabit.
- Understand that there has been a continuum of human/nature interaction at this place, probably since the end of the Ice Age.
- Have opportunities to continue to enjoy solitude, dark night skies, prairie landscapes, and ocean vistas.

Interpretive Programs and Opportunities

In some years, the park has hired seasonal interpreters to conduct interpretive tours, but most interpretation is through the wayside exhibits and two self-guided publications: the NPS’s walking tour brochure of Coupeville and the driving and bicycling tour brochure. These are distributed at the Island County Historical Museum, Coupeville Library, Coupeville Chamber of Commerce and at other locations. The interpretive programs and media communicate messages derived from the primary interpretive themes. Current interpretive
opportunities include the following:

**Website**
The park website provides informational and interpretive materials with historical and current photographs and illustrations, including the following topics:

- History and Vision for the Reserve
- Cultural Landscapes and Hedgerows
- Settlement Patterns
- Landforms of the Reserve
- Research Materials and Information
- Archaeological Heritage and Resources
- Historic Buildings
- Management Documents

**Port Townsend Ferry Terminal**
This is the arrival point for visitors taking the ferry to Whidbey Island from the Olympic Peninsula. Visitors have easy access to a three-sided kiosk with orientation information on the reserve concept, a map of the Reserve and an interpretive panel on the Washington State Ferries System. This can also be a busy area during ferry arrivals so many visitors may not get oriented to the Reserve here.

**Coupeville**
Visitors have another orientation opportunity at the Coupeville Wharf, with a kiosk containing a map of the Reserve and two other interpretive panels.

The Island County Historical Museum, located near the wharf, provides the Reserve’s primary personal orientation services using volunteer staff in the museum and on some walking tours of Coupeville. The Island County Historical Society operates the museum and is a partner with the NPS and Trust Board through a cooperative agreement. They have permitted temporary exhibits on Ebey’s Landing to be displayed in the museum, space permitting. The volunteers do not receive any interpretive training from the National Park Service and usually do not get any NPS orientation training about the Reserve. The Trust Board staff periodically provides some Reserve orientation information to museum docents.

The Island County Historical Society distributes the NPS produced self-guided walking tour (brochure) of Coupeville, which incorporates some information on Ebey’s Landing. The NPS has interpretive exhibits on the porch of the museum and brochure holders so after-hour visitors can access Reserve information. Other orientation and interpretive kiosks are located at Ebey’s Landing, Fort Ebey, and the Prairie parking lot.

Interpretive wayside exhibits and kiosks are located at key locations throughout the Reserve. These are Crockett Blockhouse, Ebey’s Landing and Bluff Trail, Fort Casey, Fort Ebey, Keystone Spit, Monroe’s Landing, Prairie Overlook and Prairie Wayside.

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*Prairie Overlook interpretive wayside, Ebey’s Prairie, Whidbey Island, ca. 2000. NPS Photo.*  
In 2001, the NPS assessed the existing interpretive media in the Reserve, which included an inventory of themes interpreted, the effectiveness of each exhibit, and recommendations for improved interpretation addressing the cultural landscape. The report will be a key piece in the development of the Long Range Interpretive Plan.

Recreational Resources

The Reserve has a diverse range of recreational activities for visitors and residents. These vary from exploring the cobbled beach of Keystone Spit to attending performances of nationally known musicians and actors. Because of the temperate climate of the Pacific Northwest, virtually all of these activities can be enjoyed the year-round. While there is a choice of activities to participate in locally, the Reserve is also in close proximity to the recreational opportunities on the Olympic Peninsula, the San Juan Islands, and the North Cascade Mountains.

The primary recreational resources and opportunities within the Reserve are owned and managed by partner agencies including the town of Coupeville, Island County, and Washington State Parks. Their management would continue under current laws, policies, and regulations for those government agencies under all alternatives. The NPS and Trust Board would have authority and management responsibility over NPS-owned lands in the Reserve.

The town of Coupeville’s current Comprehensive Plan for Parks, Recreation and Open Space assert goals and policies that include a recreation mission, a land acquisition mission, open space preservation, and a desire to improve coordination of park and recreational facilities between the town of Coupeville, Island County, the NPS, and the Coupeville School district. The plan states that it should be a continuing priority for the town to provide for a wide range of indoor and outdoor facilities for both passive and active recreation. Another goal includes planning for pedestrian and bicycle travel within the town, to coordinate with Island County’s non-motorized trails plan, and connect with public paths and scenic areas within the Reserve (Town Comp Plan, p. 107). The Town conducted a community opinion survey with residents in 1992 and again in 2001. Results from the 2001 survey showed that 43 percent of respondents thought having nearby outdoor recreation was “Very Important” (45 percent in 1992) and 44 percent thought it to be “Important”; 57 percent thought the pace of life was “Very Important” (53 percent in 1992); and 65 percent thought Coupeville’s rural, village nature was “Very Important” (58 percent in 1992). When asked how they rated outdoor recreation opportunities, 61 percent (62 percent in 1992) responded they were “Satisfied”. When asked about tourism (and the associated activities that come with that) being an advantage or disadvantage to Coupeville, 55 percent (43 percent in 1992) noted that the benefits outweighed the disadvantages; 82 percent (71 percent in 1992) thought tourism should be encouraged as a business that would provide jobs in central Whidbey Island.

In Island County’s Comprehensive Plan, an appendix notes the results of a March-April 1991 Island County Survey (Phase B, Public Review Draft, July 14, 1998). There was a 3.64 percent response rate, considered a high response for surveys of this type. Respondents were asked to prioritize nine potential actions the county could take to improve the parks and recreation situation and the results for high priority actions were as follows: shoreline access (57.4 percent), scenic vistas (36.6 percent), natural area (35.8 percent), trail system (34.5 percent), improve existing parks (32.9 percent), small parks (22.2 percent), destination parks (19.8 percent), playgrounds (18.2 percent), and regional visitor parks (5.3 percent). The five highest priorities on central Whidbey Island are shoreline access, trail system, scenic vistas, natural areas, and improvements of existing parks. The highest priority in Island County as a whole was for increased access to and use of the shoreline. Increased shoreline access was significantly higher than any other category in the survey. This is a remarkable finding in a county containing over 200 miles of saltwater shoreline and the County’s plan suggests that this is a serious problem. The second highest priority in the County as a whole was to maintain scenic vistas from County and State roads.
Washington State Parks has numerous areas under its management on central Whidbey Island. These are very important recreational resources in the Reserve and provide services and opportunities to thousands of visitors a year (Ebey’s Landing State Park visitation in 2003 was 84,143; Fort Casey State Park visitation in 2003 was 727,054; Fort Ebey State Park visitation in 2003 was 331,771). Numerous public comments received during the Comprehensive Area Management Plan (CAMP) process for Fort Ebey, Fort Casey and Ebey’s Landing state parks included statements about linking the state parks together with bike and walking trails, and the need to coordinate all park planning efforts with the Reserve and other agency planning efforts. The Draft Recreational Resource Values stated for Fort Casey include:

- Develop and operate the park to offer a high quality recreational experience to all who visit;
- Partner with Beach Watcher staff to promote environmentally sensitive beach and trail use throughout the park;
- Work cooperatively with Washington State Ferries, Washington State Department of Fish and Wildlife and the Army Corps of Engineers, to provide boating and fishing access to the waters of Puget Sound and the Strait of Juan de Fuca;
- Offer an increasing number of interactive and educational tours of the park’s cultural resources;
- Develop and encourage a variety of other day use activities as diverse as picnicking, bird watching, fauna identification and kite flying;
- Continue to provide a unique on-the-water camping experience, which also offers visitors a base from which to explore other park and area features; and
- Offer a high quality underwater park for the non-consumptive use of scuba divers.

(Note: there are no Recreational Resource Values developed yet for the other state parks in the Reserve).

**Washington State Parks**

Most of the recreational activities in the Reserve occur on public state park lands. Fort Casey State Park is located at the Reserve’s southern boundary at Admiralty Head. This park has breathtaking views of the Strait of Juan de Fuca and contains a historic military infrastructure designed and built beginning in the 1890s to protect the entrance to Puget Sound. Visitors to the park can enjoy overnight camping with showers and restrooms, hiking the bluffs and beachcombing, exploring historic gun emplacements, batteries and bunkers, visiting a 1901 lighthouse, reading interpretive exhibits, kite flying, picnicking, and scuba diving at the underwater preserve located off Keystone Spit near the ferry landing.

Fort Casey State Park manages Ebey’s Landing State Park, located at the bottom of Hill Road intersecting Eby Road. This ten-acre parcel of public land offers beautiful vistas of the steep western shoreline of Whidbey Island and across the strait to Port Townsend, the Olympic Peninsula, and Vancouver Island. It consists of a small parking lot, a picnic table, an interpretive kiosk, three low-mount interpretive panels, a vault restroom, interpretive facilities (NPS) a hiking trail up the bluff, and beach access. At times, visitors use remote controlled airplanes and hang glide off the steep bluff. It is one of the most popular public areas in the Reserve and parking is often not available on summer weekends. Visitors and residents can enjoy hiking, walking, and beachcombing along Keystone Spit, nearly all of which is managed by Fort Casey State Park.
Casey State Park. Wildlife is common in this area, and the annual bird count conducted by the Whidbey Audubon Society takes place here and across the highway along Crockett Lake.

Fort Ebey State Park is located in the Reserve’s central west area along bluffs overlooking the Strait of Juan de Fuca with commanding views of the water. This state park has a “wilder” character than Fort Casey, though it, too, was originally a military installation dating from the World War II era. Opportunities for visitors in the 645-acre park include hiking in the dense woodlands, walking to a glacial kettle (Lake Pondilla), camping (not available in the winter), reading interpretive exhibits, mountain biking in the kettles area, and hiking the beach or portions of the bluff.

Hikers and bikers can now walk from Fort Ebey State Park through the kettles and woods to access the Kettles Trail, which runs along State Route 20 and leads to Coupeville. An extensive trail system is intended for the entire Reserve with plans to link public use areas together through the purchase of conservation easements over private lands. (See Figure 7, Parks and Trails map.)

Island County Parks

Rhododendron Park is an undeveloped park with dual ownership. Thirty-two acres are maintained by Island County and ten acres are managed by the Washington State Department of Natural Resources. Fort Casey State Park provides maintenance assistance. This park is located in dense woods between SR 20 and Patmore Road, and offers primitive camping (five sites) available year round. It consists of a ball field, a pump house, restrooms, and a picnic area. In the spring, this park displays native rhododendrons in bloom.

Island County manages a quarter-acre site at the foot of Monroe’s Landing Road under a 25-year use agreement with Washington State Game Department. This public land has been upgraded in cooperation with the National Park Service. Monroe’s Landing contains a public boat launch for access to Penn Cove (one of only two in the Reserve), and limited beach access for swimming. Visitors and residents use the beach for clamming. Farther along the Penn Cove shoreline to the east is a three-quarter acre picnic area called Scenic Heights maintained by Island County. At the end of Libbey Road, on the northwestern edge of the Reserve, is Libbey Beach Park. This three-acre site has beach access to the Strait of Juan de Fuca, and includes a shelter, a picnic area with a barbecue, and a vault restroom.

Town of Coupeville Parks

Coupeville offers a diverse range of recreational activities, including a new trail system. A newly installed 2000-foot trail along the east end of Front Street ends at Captain Coupe Park on Penn Cove. This trail will eventually reach the eastern edge of town on Parker Road to create an interconnected community trail system. The town has numerous historic buildings to visit housing galleries, shops, and restaurants. Coupeville has the greatest concentration of 19th century buildings in the state of Washington. Many of the buildings in Coupeville contribute to the historic integrity and significance of the National Register historic district.

The town owns and maintains two community parks, three neighborhood parks, and two mini-parks. Community parks include Town Park and Captain Coupe Park.

Town Park is 3.8 acres and consists of a grassy area with large, old trees. The park contains 500 feet of waterfront with a 440-foot trail leading to the beach on Penn Cove. The site includes a cookhouse, picnic tables, barbecue pits,
restrooms, tennis court, shuffleboard and playground equipment, and a live performance stage called the Pavilion where concerts and other special events are held. Captain Coupe Park is one acre in size with extensive views across the cove. It has the only low bank waterfront with public access in town, a boat launch and floating dock, boat trailer parking, restrooms, picnic tables, and barbecues.

The three neighborhood parks include Sixth Street Park, Peaceful Valley Park, and Summit Loop Park (formerly Sunset Terrace Park). Sixth Street Park is 1.2 acres and includes playground equipment, picnic tables, a ball field, and tennis court. Peaceful Valley Park is a one-acre park and consists of open, undeveloped land behind the library. Summit Loop Park is a half-acre park situated in a picturesque location on Pennington Hill with views to the Cascade and Olympic mountains.

The town’s two mini-parks includes 0.11-acre Cook’s Corner Park (now called Triangle Park) at the corner of Ninth and Main streets where special events are held and a sculpture is displayed. Front Street Stairs, on the north end of Front Street, is a beach park accessing Penn Cove by a flight of stairs. The town also owns community open space areas, which include a 3.93-acre parcel in the Peaceful Valley development and a number of undeveloped street rights-of-way.

### Washington Department of Fish and Wildlife Public Lands

The Washington Department of Fish and Wildlife owns a small parcel of land along Madrona Way (.62 acres in Lot A-1 and 1.73 acres total within the Reserve) at the south shoreline of Penn Cove about .7 miles from the intersection of SR 20 and Madrona Way. Referred to as Salt Water Access Reserve A, the site has panoramic views across Penn Cove, Camano Island, and the Cascade Mountains. The beach area is separated from the upper land area by a damaged concrete sea wall. This day-use public site is not known to the public. Tribal members use it to access tidelands for shellfish harvesting and for informal recreational activities such as picnicking.

### Types of Recreational Activities

Penn Cove is an important recreational resource within the Reserve. Its deep, protected waters provide opportunities for kayaking, canoeing, sailing, and motor boating. A few jet skis are in use primarily during the summer months. Each year nearby Oak Harbor hosts “Race Week,” and scores of sailboats can be seen on Penn Cove waters for the competition. Sailing and other boating activities occur year-round in the cove. Fishing and crabbing are other activities that the cove provides for visitors and residents.

The Reserve contains several hundred National Register listed historic buildings and structures representing a diverse array of architectural styles.
and historic eras. The Trust Board distributes a driving and bicycling tour brochure of the Reserve and offers information about the area’s natural and cultural history. The tour leads visitors to various public access areas and scenic waysides and overlooks. Visitors can also learn about the area from the Island County Historical Museum, located in Coupeville. Operated by volunteers, the museum has displays and exhibits that speak to Island County history, and distributes Reserve interpretive materials to the public.

Coupeville is an attraction for heritage tourism enthusiasts because of its history and architecture. Throughout the year, the town or other organizations host special events such as historic car rallies, the Penn Cove Water Festival, Arts and Crafts Festival, Greening of Coupeville, Mussel Festival, among others, and parades for most major holidays. Residents from elsewhere on the island will participate in these parades and other activities.

Activities such as tennis, baseball, football, basketball, and track occur in the town limits. The schools provide these facilities. There are also baseball diamonds located in Rhododendron Park and in Coupeville off Haller and Sixth streets.

Hunting occurs within the Reserve on private lands with permission of landowners. Most are bird hunters who use the woodlands surrounding Fort Ebey State Park and agricultural fields in the prairies.

**Scenic Resources**

The setting within the Reserve is spectacular—the combination of sky and water, and the variation of landforms and vegetation such as prairies, woodlands, kettles, agricultural fields, and uplands. The wealth of natural resources has influenced and shaped human settlement and the use of land over hundreds of years. Many of these settlement and use patterns are still present in the cultural landscape.

According to the 1995 visitor survey, visitors come to the Reserve predominately because of the beautiful scenery. Scenic resources are among the most important resources within the Reserve that need protection. Part of this protection involves the maintenance of the rural landscape that creates the scenic elements.

As part of the GMP planning workshops, the planning team identified the significance of the Reserve through the enabling legislation. In terms of scenic resources, the significance of the Reserve is that the historical landscape appears much as it did a century ago. Historic homes, pastoral farmsteads, and commercial buildings are still within their original farm, forest, and marine settings. In addition, one of the Desired Future Conditions or goals for the Reserve is that historic and scenic views would be maintained and enhanced. While changes in historic views are evident, especially in the addition of structures, the majority of views up to this point have retained their cultural integrity.
The threat of changing land use, particularly conversion from agriculture and woodlands to residential development, can significantly change the rural character of the Reserve. (Refer to Ebey’s Landing National Historical Reserve General Management Plan/Environmental Impact Analysis, Volume II, Technical Reports, Views and Vistas, Historic Changes from Pre-1950 to 2000 map, 2003 An Analysis of Land Use Change and Cultural Landscape Integrity for Ebey’s Landing National Historical Reserve by Nancy Rottle.)
San de Fuca Uplands

The San de Fuca Uplands are characterized by undulating and gently rolling hills that begin at the shoreline of Penn Cove and rise in elevation. The slope levels onto agricultural land, divided by woodlots and residential subdivisions. The visual continuity of open fields and Penn Cove is relatively unimpaired. Significant natural features include saltwater wetland areas, Garry oak communities, and remnant prairie communities. Significant areas include Grasser’s Hill and Lagoon, San de Fuca’s commercial and residential building clusters, Arnold Farm, Monroe’s Landing, Muzzall Farm, Vande W erfhorst Farm, and Blower’s Bluff.

The north entry into the Reserve is through the San de Fuca Uplands with entrance points via State Route 20 through San de Fuca, Monroe’s Landing Road past the Oak Harbor Air Park, or Penn Cove Road. Other significant corridors include Arnold Road and Zylstra Road.

Penn Cove

The Penn Cove character area is characterized by low beaches and uplifted banks. It consists of 3,955 acres of open water with nearshore and shoreline habitats of mudflat tidelands, high sandy bluffs, beaches, and eelgrass beds. The Penn Cove shoreline has more than thirty archaeological sites along the shoreline, including three permanent Salish villages. Significant areas include Blower’s Bluff, Monroe’s Landing, Grasser’s Lagoon, Kennedy’s Lagoon, Long Point, and Snakelum Point.

Penn Cove served as the historic water entry for the Reserve incorporating the historic Coupeville Wharf and San de Fuca Wharf and docks, and others no longer standing. Significant corridors are Scenic Heights Road, Penn Cove Road, and Madrona Way.
West Coastal Strip

The west shore of the Reserve along Admiralty Inlet is an eight-mile strip of narrow sand and stone beaches that give way to dramatic bluffs and ravines. Elevations range from sea level to just over 200 feet. Bluff instability, combined with steep slopes and well-drained sandy soil, prevents development of forest and shrub vegetation and helps maintain conditions allowing development of low-growing herbaceous plants. Nearshore areas include eelgrass and bull kelp beds. Remnant prairie populations and populations of a federally threatened plant, golden paintbrush (Castilleja levisecta), are found at several locations along the bluffs.

Significant areas include Point Partridge, Fort Ebey State Park, Ebey’s Landing Bluff Trail, Perego’s Lagoon, Ebey’s Landing State Park, Camp Casey, and Fort Casey State Park. Significant corridors are Hill Road, trails through Fort Ebey and Fort Casey state parks, Ebey’s Landing Bluff Trail, and the coastal bluff and beach trail.

The West Coastal Strip character area, adjacent to Admiralty Inlet and the Strait of Juan de Fuca, is the western boundary of the Reserve, extending from Point Partridge south to Admiralty Head. There are several beach access points along public roads and trails.

West Woodlands

The Kettle and Pratt Woodlands area is characterized by dense forests including Douglas fir, western red cedar, and alder, with salal, Oregon grape, and rhododendron understory. The interior portions of these woodlands are remote and isolated. The area contains kettles and trails that connect to Fort Ebey State Park. After owner Robert Pratt died, TNC purchased 400 acres of woodlands, eventually selling an easement to NPS.

The kettles are large depressions up to 200 feet deep, which are significant geological features, formed by retreating glaciers. Kettle holes are formed when huge blocks of ice melt. These melted ice blocks formed deep ponds and wetland areas. Most of the kettles found in the Reserve occur in forested areas. Lake Pondilla is the only kettle large enough to be classified as a pond. The remaining kettle holes are scattered and relatively small in size.

Other significant sites are historic Coveland and the Captain Whidbey Inn. Significant corridors are Libbey Road, State Highway 20, Madrona Way, and the Kettles Trail.

Access through this area is primarily along trails leading from State Highway 20, Fort Ebey State Park, and Ebey’s Landing Bluff Trail.
Coupeville

This nineteenth century seaport town, set on the southern edge of Penn Cove, has the greatest concentration of historic buildings in the state and is the second oldest town in Washington State. It is also the commercial center of the Reserve. Within the town limits, one can experience dramatic views of Penn Cove, Mt. Hood, the Cascades Mountains, and prairies.

Significant areas within Coupeville are the Coupeville Wharf, Town Park, Captain Coupe Park, Summit Loop Park, historic Front and Main streets and Prairie Center. Coupeville’s historic resources include historic buildings, structures, platted neighborhoods, and remnant orchards. Significant corridors are Main Street, Front Street, Broadway, Madrona Way, Coveland Street, Ninth Street, and Parker Road.

Entry to Coupeville is primarily via State Route 20, with secondary access via Parker Road from the east, Madrona Way from the west, Fort Casey Road and Engle Road from the south, and water entry via Penn Cove.

Ebey’s Prairie

Ebey’s Prairie is located in the central portion of the Reserve and is the largest natural prairie on Whidbey Island. It contains its most productive agricultural land, which reflects its agricultural character. It is characterized by its historic farm clusters, fields, fences and hedgerows, upland ridges, and forest edges. It has a long history of agricultural use by Skagit Indians, dating back 8,000 years, and by European settlers since the 1850s.

Significant areas and locations within this Character Area are Ebey’s Landing, the Ferry House and ravine, Sunnyside Cemetery and the (Davis) Blockhouse, Jacob Ebey House and Blockhouse, Sherman-Bishop Farm, Smith Farm, Engle Farm, Jenne Farm, and the inter-prairie ridge between Ebey and Crockett prairies.

Primary access to Ebey’s Prairie is along State Route 20 and Engle Road. Significant corridors include Ebey Road, Hill Road, Sherman Road, Cook Road, and the Ebey’s Landing Bluff Trail (leads away from prairie).
**Fort Casey Uplands**

The Fort Casey Uplands is characterized by undulating and gently rolling hills of forest, fields, and residential areas. Natural areas include remnant prairie communities, a Washington State Natural Heritage Forest, and golden paintbrush populations. Cultural areas include the historic buildings of Fort Casey State Park and Camp Casey.

Access is along Engle Road, Fort Casey Road, and Hill Road. Another significant corridor is the southern portion of the coastal bluff and beach trail.

**Crockett Prairie**

Crockett Prairie is a natural, open prairie adjacent to Crockett Lake, Keystone Spit, and Admiralty Bay. Crockett Lake is a salt marsh, and is an important migratory bird habitat and nesting area. From Keystone Spit, the view of Crockett Prairie is complemented by the open water of Crockett Lake and the tree covered ridges beyond. Other significant areas include the inter-prairie Ridge between Ebey’s and Crockett prairies, and the Washington State Ferry Terminal. Historic remnants in this area reflect the building of Fort Casey, including ponds, wharf, and dock remains.

Primary access routes are Engle Road from Coupeville and State Route 20 along Keystone Spit. Significant corridors are Wanamaker Road, Patmore Road, and Fort Casey Road.
Parker and Patmore Woodlands

The Parker and Patmore Woodlands are a natural resource area characterized by densely wooded second and third-growth Douglas fir forest with western red cedar, alder, salal, and rhododendron undergrowth. It is located along a ridge on the eastern portion of the Reserve.

Significant areas are the Reeder Farm, Long Point, Snakelum Monument, and Rhododendron Park. Significant corridors are State Route 20, Parker Road, Patmore Road, and Keystone Road.

Smith Prairie

Smith Prairie is a 600-acre natural prairie surrounded by Douglas fir forest. The prairie is open, characterized by agricultural features reflecting its cultural history. Significant areas are Au Sable Institute (the former site of the Washington State Game Farm), Naval Air Station-Whidbey’s Outlying Landing Field, and two commercial tree farms growing seed stock. The Au Sable Institute property is the site of the largest remaining remnant of a native prairie community on Whidbey Island.

State Route 20 provides the main south entry into the Reserve. Other significant corridors are Parker Road, Morris Road, and Keystone Road.
Visitor Use

Visitor Use Patterns
The University of Washington conducted a visitor survey in the summer of 1995, between July 7 and August 28. The survey used a questionnaire format and 968 visitors were surveyed. The results and analysis of that survey are published in the *Ebey’s Landing National Historical Reserve, 1995 Visitor Survey*. The following narrative on visitor use patterns summarizes the information generated on who uses the park and how visits are planned, trip information and satisfaction, and numbers of visitors, expenditures, and economic impact on the Reserve.

Visitor Profile
According to the report, the average age of the sampled visitors, which included no one younger than 16, was approximately 47 years. Ages ranged from 16 to 85 years. Visitors 40-49 years of age were the largest group (26 percent), followed by 50-59 (22 percent), 30-39 (21 percent), 60 and older (20 percent), and 16-29 years of age (11 percent).

Fifty-six percent of the respondents were females and 44 percent were males. The majority of visitors (78 percent) were married. Caucasian/non-Hispanics comprised 97 percent of the sample. Those of Asian heritage made up approximately two percent of the sample; Native Americans/Alaska Natives accounted for approximately one percent of those surveyed. There was only one respondent of African American heritage. Approximately one percent of those sampled identified themselves as Hispanic.

Of the respondents to the survey, approximately 61 percent of the visitors were currently employed, 2 percent were unemployed, 17 percent were retired, 13 percent were homemakers, 5 percent were students and 2 percent were military. Of those employed, the majority of visitors were in occupations classified as managerial or professional. The average visitor had completed 16 years of education.

The largest group of visitors was comprised of two people (36 percent) with the second largest group comprised of four people (21 percent). Almost half of the visitor groups came with children 15 years or younger.

The majority of visitors (88 percent) did not live on Whidbey Island. Residents made up 11 percent and approximately 1 percent lived within the Reserve. For those visitors not living on Whidbey, approximately one-half (59 percent) were from Washington State, 10 percent were from Canada and 8 percent were from California. Of those from Washington State, over one-third (37 percent) were from King County.

About 48 percent of visitors were visiting the Reserve for the first time and the mean number of visits was one, though 19 percent had been to the Reserve three to nine times and ten percent were returning a tenth time or more. These statistics reveal that although the majority of those sampled had little previous experience with the Reserve, a small portion had visited there a great number of times.

Planning the Trip
One-third of visitors made the decision to visit the Reserve on the same day as their trip and another third decided no more than three days before their trip. The majority (70 percent) responded that they had planned a visit to the Reserve when they were planning their trip. Most visitors (79 percent) did not seek information before the trip, but those who did used information from friends and relatives. Other sources were previous visits, maps, brochures and travel guides.

The Trip
Reasons for visiting the Reserve varied, but included the scenery, state parks, family, Coupeville Arts Festival, nature, history, and to look at real estate. The vast majority of visitors were not aware that the area was a national historical reserve. Of those places visited within the Reserve, the places having the highest number of visitors was the town of Coupeville, followed by Fort Casey State Park, Coupeville Wharf, Fort Ebey State Park, the lighthouse, and Camp Casey. The least visited
places were Crockett Lake, Sunnyside Cemetery, Prairie Wayside, Driftwood Park, and the Bluff Trail.

Most visitors arrived by private vehicle (88 percent) with most (44 percent) coming via the Deception Pass bridge. About one-third arrived by ferry from Mukilteo. Only one-quarter sought information about the Reserve after they arrived in the Reserve. Most visitors spent two hours in the Reserve, while 30 percent spent three to four hours. Twenty-two percent were overnight visitors. The most common method of moving through the Reserve was by car (59 percent), but also walking, hiking, bicycling, and boating were mentioned.

Visitor Satisfaction

The survey also asked visitors if anything detracted from their visit and 18 percent responded. The reasons visitors provided were in eight categories: unhappy with the lack of information and signage in the Reserve, upset that attractions were closed, had “some problems” in Coupeville, had problems at the campgrounds, were angry at the weather, encountered “some health hazards”, unhappy with services and facilities, and felt like they did not have enough time to experience the Reserve.

Visitors were also asked if there were educational and information services that they wished were available to them. Almost half (48 percent) of the respondents wrote an answer in the space provided. The comments were varied and included such items as the desire for more guides, maps, nature walks, history, and information on plant and animals.

For overall satisfaction with their visits, 36 percent of visitors stated that their visit was “very good” and 42 percent described it as “excellent” or “perfect”. Almost three-quarters of visitors (74 percent) said that they would visit the Reserve again.

Numbers of Visitors, Expenditures, and Economic Impact

Since there are no entry gates at the Reserve, visitation numbers were difficult to estimate. Visitors arrive on the island by three routes: the Mukilteo/Clinton ferry, the Port Townsend/Keystone Ferry, and over the Deception Pass bridge. A few visitors arrive by personal boat or by air. Other visitors live on the island. Though various options were explored, the method chosen was to ask people who were waiting in line for the ferries to depart whether they had stopped at the Reserve while on the island and then use those figures to make estimates of the total number of visitors. The final estimate of the total number of visitor groups (average size of 3.9) traveling through the Reserve during the summer months was 113,106 visitors.

In estimating the direct economic impact of the Reserve, the study looked at the amount of money spent per group multiplied by the number of total estimated groups. The overall average amount of money that each visitor group spent was determined to be $70 in expenditures. The greatest portion of money (34 percent) was spent on food.

When the $70 in expenditures is multiplied by the 113,106 total numbers of visitors, a total sum of $7,917,420 is realized. That means that visitors spent almost 8 million dollars in the Reserve during their stay over the peak visitation period (in 1995 dollars when the study was completed). Economists explain that money spent directly at such places as hotel, restaurants, and shops are then further invested by the owners of these places. These industries or trades buy from and sell to each other and to industries in other regions. Therefore, the impact of the money is actually larger than 8 million. The general trade and services multiplier is 2.055 and when calculated, the total economic impact of dollars spent at the Reserve is 16.4 million.

To project that figure to 2005 dollars, assuming an average annual inflation rate of 3 percent over ten years, the total estimated amount that visitors now spend in the Reserve is $21.3 million. This figure does not take into account the population growth in the metropolitan region since 1995 when the study was completed and the increase in visitation that is likely to have occurred.

This analysis shows that the Reserve not only provides large numbers of visitors with enjoyable opportunities for recreation and education but also
that the Reserve make a valuable contribution to the health of the local economy.

**Federal Lands Recreation Enhancement Act**

Due to the limited amount of land owned in fee by the federal government and the nature of the park unit, Ebey’s Landing National Historical Reserve does not currently collect fees. However, the Reserve is eligible to receive, or have access to, monies that are collected by “fee parks.”

**Socioeconomic Factors**

**Location and Access**

Situated in northern Puget Sound, Whidbey Island is 27 miles north of Seattle and 50 miles south of the Canadian border. To the east of the Sound is the Cascade Mountain Range and roughly one hundred miles to the west is Washington’s Pacific Coast. The majority of Washington’s population lives in the 75-mile corridor between Tacoma and Everett to the east of Whidbey Island. Ebey’s Landing National Historical Reserve is less than a three-hour drive from Washington’s most populous cities, from Tacoma (193,556 population), north through Seattle (563,374) and Everett (91,488) to Bellingham (67,171). The populations on the Olympic Peninsula are only a ferry ride away. Bordering the Reserve is the city of Oak Harbor (20,830), home of the Whidbey Island Naval Air Station.

The site is in the 2nd Congressional District in Washington State and the 10th State Legislative District. Ebey’s Landing National Historical Reserve is situated in Island County, Washington, which is comprised of both Whidbey and Camano Islands.

**Regional Context**

Land connections to Whidbey Island and the Reserve from the mainland are provided by State Route 20 from Skagit County using the Deception Pass bridge. This bridge and the road across Fidalgo Island are serious transportation bottlenecks at times, given the population on North Whidbey, the presence of NAS Whidbey, Deception Pass State Park and the fact that the continuation of State Route 20 is the Cascade Loop Highway. Ferry service is provided by the Washington State Ferries (WSF) arriving on south Whidbey Island at Clinton, from the mainland city of Mukilteo; a ferry from Port Townsend arrives in the Reserve at Keystone Harbor adjacent to Fort Casey State Park. In addition, several public and private airfields presently exist on Whidbey Island.

Island County has a variety of parks and recreation facilities. (Refer to “Recreational Resources” section for additional information.). These recreation opportunities are owned and maintained by different governmental and nonprofit organizations including federal, state and local government, and private volunteer groups. Located on the very northern tip of Whidbey Island is Deception Pass State Park. The park is the most heavily visited state park in Washington, with almost 2.84 million visits recorded in 2000. The boundary of the Reserve encompasses several parks, including Fort Casey, Fort Ebey, Ebey’s Landing and Keystone Spit, and Rhododendron Park managed by Island County (Island County Comprehensive Park and Recreation Plan 1999).

Over the past ten years, travel to and from Island County has been increasing. This is evident from the 140 percent increase in daily traffic at the Deception Pass bridge; and by the 52 percent annual vehicle traffic increase on the Washington State Ferry system to Island County. (Island County, Island County Comprehensive Plan 1999: p.8-51)

**Transportation**

**Island Transit**

The transit needs of Coupeville and its residents are served by Island County Public Transportation Benefit Area Transit (PTBA), operating as Island Transit. The agency’s services include fixed route, paratransit service, vanpool program and ride matching programs. All of Island Transit’s services are provided free to its users. The system is fully funded by a 0.3 percent sales tax, matched by funds from the Motor Vehicle Excise Tax revenues generated within the PTBA.
Since Island Transit began in 1987, ridership increased by 1803 percent (from 13,024 to 247,794 users) after the first year. Ridership overall for Whidbey Island has increased dramatically over the years, peaking in 1998 at 792,947 with users traveling 1,048,854 miles. The year 2000 fixed ridership totals for Whidbey Island were 506,243 with users traveling 721,549 miles.

Island County has identified the following areas of interest to the Reserve that should be considered as candidates for local feeder service expansion (based on current and predicted use and discussions between the public and Island Transit):

- Service connections between Oak Harbor and the Mount Vernon/Burlington area
- Point Partridge area
- Recreational areas, such as Deception Pass, Oak Harbor waterfords, the Kennedy’s Lagoon to Coupeville, Fort Casey, Crockett Lake, South Whidbey State Park, Pass Lake area and Scenic Heights/Penn Cove area

**Ferry Service**

Washington State Ferries provides passenger and auto ferry services to two routes that serve Whidbey Island. Just south of Coupeville, the landing at Keystone connects via ferry to Port Townsend in Jefferson County. The second route serves the terminal at Clinton at the south end of Whidbey Island. This route connects to Mukilteo in Snohomish County and links Whidbey Island with the Seattle-Everett metropolitan area (Town of Coupeville, *Town of Coupeville Comprehensive Plan 1999: p. 36-37*).

Between 1977 and 1996, vehicle usage increased by over 106 percent on the Mukilteo-Clinton Ferry and nearly 185 percent on the Keystone-Port Townsend Ferry. During the same time, the total ridership increased by over 85 percent on the Mukilteo-Clinton Ferry and over 169 percent on the Keystone-Port Townsend Ferry. Since 1986, ferry usage has been increasing at a relatively steady rate.

The WSF’s Long-Range System Plan anticipates that new vessel safety regulations for crossing Puget Sound’s major shipping channel will require a new class of ferry vessel to be used for the Port Townsend to Keystone Ferry run. It is expected that these new ferries would have a 110-vehicle capacity. With these new vessels, WSF expects to meet the level of service standards for the next twenty years.

The *Island County Comprehensive Plan* states that the ferry terminals are valuable elements of the transportation system and should be maintained as such. In accordance, Island County plans to work with the WSF, WSDOT, and Island Transit to provide the following improvements:

- Highway improvements along SR 20 and Engle Road to improve access to the terminal, allowing for convenient vehicle waiting and loading.
- Permanent facilities for additional vehicle holding areas to accommodate future increases.

**Air Service**

There are seven airfields currently operational on Whidbey Island. Two of these airfields, the Coupeville Naval Outlying Landing Field (OLF) and the Whidbey Island Naval Air Station, are restricted to military use only. Of the remaining five airfields, three are private and two operate commercially. The two commercial airfields are the Oak Harbor Airpark and the Langley-Whidbey Airpark.
**Roads and Highways**

Travel on local roads and highways accounts for the largest single element of Island County’s transportation system. Two state highways transect Whidbey Island and the Reserve and serve as the primary north-south travel corridors. These state highways, SR 20 and SR 525, connect Whidbey Island to the mainland in Skagit County via the Deception Pass bridge, to Mukilteo in Snohomish County via the Clinton ferry, and to Port Townsend in Jefferson County via the Keystone ferry.

State Route 20 and SR 525 receive a large amount of commuting traffic. According to the 1990 Census, about 6,000 county residents work outside the county. During the summer months, traffic congestion increases considerably when seasonal population and visitor use is most noticeable in Island County.

The average daily traffic in Island County is forecasted to increase on county roads and state highways by approximately 18 percent between 1996 to 2003 and by approximately 64 percent by year 2020. These values represent average annual growth rates of approximately 2.6 percent and 2.7 percent per year. The growth rates are determined from future permanent population and employment estimates.

The average annual daily traffic taken from milepost 20.02, approximately one-quarter mile east of Rhododendron Park, depicts increased traffic along State Route 20 from 2001-2004.

**Table 2: Average annual daily traffic along Hwy 20 at Milepost 20.02**

<table>
<thead>
<tr>
<th>Year</th>
<th>Traffic (cars per day)</th>
</tr>
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<tbody>
<tr>
<td>1996</td>
<td>6,900</td>
</tr>
<tr>
<td>1997</td>
<td>7,300</td>
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<tr>
<td>1998</td>
<td>7,600</td>
</tr>
<tr>
<td>1999</td>
<td>7,600</td>
</tr>
<tr>
<td>2001</td>
<td>7,600</td>
</tr>
<tr>
<td>2002</td>
<td>7,700</td>
</tr>
<tr>
<td>2003</td>
<td>8,000</td>
</tr>
<tr>
<td>2004</td>
<td>8,200 (3 million per year)</td>
</tr>
</tbody>
</table>

Island County is responsible for approximately 594 miles of roads, including 79 miles of major rural arterials, 131 miles of minor rural arterials, 370 miles of other local rural roads and 14 miles of urban roads. In addition, there are approximately 54 miles of state highways within Island County, of which approximately 51 miles pass through the unincorporated areas of the county. Most county and state roads are two-lanes.

Visitors use many of the state and county roads as the primary way to view the Reserve. A brochure provided by the Reserve highlights a 43.6-mile driving and bicycling tour. A system of interpretive roadside panels and kiosks provide additional information at several of the stops. There are ten waysides within the Reserve at the following locations: Monroe’s Landing, Fort Ebey State Park, the Coupeville Wharf, Prairie Overlook at Sunnyside Cemetery, Ebey’s Landing, Prairie Waysides at Engle Road, Crockett Blockhouse (at Fort Casey Road), Ft. Casey State Park and Keystone Spit, and the Keystone Ferry Landing.

**Deception Pass Bridge**

Many residents and government officials believe that the traffic congestion leading up to and over the Deception Pass bridge in North Whidbey Island is a problem. Washington Department of Transportation (WSDOT) has conducted surveys and public outreach in an effort to determine the problem and possible solutions. This could involve constructing a new bridge, adding a new ferry route, or improving the road infrastructure approaching the bridge. Some citizens are concerned that increased access will negatively impact the rural island character that has attracted them to the area, while others feel that increased access will be beneficial for the economy.

If a new ferry or bridge were to be built, there is much disagreement as to the location. There is also a distinct difference in opinion depending on the region of Island County in which one resides. South and central Whidbey Island residents, who may not travel across the bridge regularly, are more likely to be opposed to a new bridge, while north Whidbey residents tend to be the opposite. This is a concern for the Reserve, because increased access increases the pressure of development, hence threatening the rural character of the Reserve.
Highway Level of Service Standards

There are six Levels of Service (LOS) categories used to describe the quality of a transportation system. For roadway sections, these levels of service categories range from LOS “A” through LOS “F” with LOS “E” being the point where the traffic demand on the roadway is equal to the capacity of the roadway. LOS “C” is a generally accepted level-of-service by transportation professionals for rural and low-density urban areas. Currently, WSDOT has set planning goals and have set LOS “C” as their level of service goal for state highway through rural areas. In urban areas, WSDOT has set their level of service goal at LOS “D”.

According to WSDOT, improvements are needed on two areas within the Reserve to maintain LOS on SR 20. The first is from Oak Harbor city limits south to Libbey Road and the second is from Libbey to Main Street in Coupeville. In both areas, the WSDOT plans to provide four lanes with left turn pockets. This action is of concern to the Reserve. Existing roads follow historic road patterns, which are part of the cultural landscape. Widening roads include smoothing and straightening curves and elevating roadways, which impact adjacent land by fragmenting farmland, increasing speeds, changing drainage and historic road patterns, and affecting views. Safety issues need to be addressed, but in a manner that realizes that this is a unit of the National Park System and visitors may be traveling at slower speeds to experience and enjoy the scenery of the Reserve.

Six-Year Transportation Improvement Programs

Island County and WSDOT plan improvements to the state highway and county roadway system on an annual basis through the development of six-year Transportation Improvement Programs. Projects are selected in part on their LOS grade. State and county funding for these road projects are determined by their priority rating; road projects with a higher rating are more likely to be funded. In these six-year programs, emphasis is given to safety improvements and operational improvements.

The following chart shows Island County’s six-year transportation improvement program projects that would occur within the Reserve. The county priority rating determines which projects will be funded first. Projects with low priority ratings that do not receive funding can be resubmitted in later rounds, which they often are.

According to the Island County Comprehensive Plan, “new roadways will be given the lowest priority rating. New roads should link and integrate roadway segments into a rational circulation system.” The following planned rural roads are located within the Reserve boundaries and according to the Island County Comprehensive Plan, they should be considered with new developments:

- Arnold Road to Balda Road
- Wanamaker Road to Houston Road
- Ft. Casey Road to SR 20

Table 3: TIP Projects within Reserve Boundaries

<table>
<thead>
<tr>
<th>Priority</th>
<th>Project Title</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Madrona Way Phases 1, 3</td>
<td>R/W for road realignment away from embankment; retaining</td>
</tr>
<tr>
<td></td>
<td></td>
<td>wall at beach; asphalt concrete paving (ACP) overlay;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>guardrail.</td>
</tr>
<tr>
<td>13</td>
<td>Madrona Way Section 2</td>
<td>Flood damage repair</td>
</tr>
<tr>
<td>27</td>
<td>West Beach Rd. Phase 2</td>
<td>Widen to 6 feet ACP shoulders; drainage; regrade vertical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>curves; ACP overlay; bicycle route.</td>
</tr>
<tr>
<td>28</td>
<td>West Beach Road Phase 3</td>
<td>Widen to 6 feet ACP shoulders; drainage; regrade vertical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>curves; ACP overlay; bicycle route.</td>
</tr>
<tr>
<td>38</td>
<td>Patmore/SR 20 Intersection</td>
<td>Intersection realignment</td>
</tr>
<tr>
<td>40</td>
<td>Monroe's Landing Rd. Section 1</td>
<td>6 feet paved shoulders; drainage; bus pullout.</td>
</tr>
<tr>
<td>44</td>
<td>Monroe's Landing Rd. Section 2</td>
<td>6 feet paved shoulders; intersection channelization;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>drainage; bus pullout.</td>
</tr>
<tr>
<td>47</td>
<td>Scenic Heights</td>
<td>Right of Way; grading; drainage</td>
</tr>
<tr>
<td>54</td>
<td>Parker/ SR 20 Intersection</td>
<td>Intersection realignment (Joint WSDOT/ County)</td>
</tr>
<tr>
<td>55</td>
<td>Parker/ SR 20 Intersection</td>
<td>Right of Way; realign; reconstruct; ACP overlay.</td>
</tr>
</tbody>
</table>

Source: Island County Comprehensive Plan 1999
Scenic Highways and Corridors

For many roadways in the state, scenic resources have already been identified through WSDOT’s Scenic Highways Program. A total of 1,918 miles have been designated as scenic highways and another 1,360 miles have been determined to be eligible. The Scenic Highway Program was developed to assist corridor communities, agencies, and interest groups involved with the scenic highway by forming partnerships and strategies to address tourism and resource management issues. The only legislative requirement for highways with Scenic and Recreational designations is on outdoor advertising control outside corporate city limits. Any other requirements to protect scenic views originate at the local level and are incorporated into local comprehensive plans as ordinances. In Island County, SR 20 and SR 525 have been designated as scenic highways by WSDOT and are included in WSDOT’s Heritage Corridor Program.

In addition to the state program, Island County has defined its Scenic Corridors Program. A scenic corridor pertains to the land on the sides of roadways that is generally visible to the public traveling on the roads and is characterized by views and vistas of unusual natural significance in the county. A scenic corridor would continue to allow for the full use of its right-of-way for road and utility purposes, without restraints to design and safety standards. Capacity, safety, and maintenance needs would not be compromised in viewing surrounding land and seascapes. Nearly all roadways within the unincorporated areas of Island County could fall within the scenic corridor designation except for residential streets and commercially zoned areas (Island County Comprehensive Plan, Island County 1999).

Land Use and Ownership Patterns

Industry and Economy

The economy of central Whidbey is composed of public administration, agriculture, and tourism. The public administration sector makes up the largest portion of employment within the area, which includes Island County offices, Island County General Hospital, and central Whidbey schools based in Coupeville.

The historic town of Coupeville (1,640 population) is located within the Reserve and is a little more than one square mile in area. Due to its central location, Coupeville’s role for providing public and county services continues to grow. Although now primarily a residential community, Coupeville has served as the commercial center for the surrounding residential area since its founding in 1853. It was later incorporated in 1910. (Town of Coupeville, Town of Coupeville Comprehensive Plan 1999: p. 7)

Coupeville has always had an economy based upon service activities—the government services in the Island County Courthouse being a prime example. Second to this is retail businesses serving the residential, agricultural, and building activities of central Whidbey Island. In recent years, there has been significant growth in medical services. Whidbey General Hospital has expanded its facilities and services. In addition, a 92-bed convalescent home and many specialist physicians have established practices in Coupeville.

A 1995 visitor survey for the Reserve conducted through the University of Washington estimated visitation at 113,106 visitor groups a year. These groups spent an average of $70 each, for a total of nearly $8 million a year. The money tourists spend at places including hotels, restaurants and shops is then further invested by the business owners into the local economy. These industries or trades buy from and sell to each other and to industries in other regions. Therefore, the indirect impact of dollars spent by Reserve visitors is much higher. The visitor survey estimated this number to be $16.4 million (Ebey’s Landing National Historical Reserve, 1995 Visitor Survey).

The Whidbey Island Naval Air Station also influences the economy. Although Oak Harbor absorbs much of the population associated with this facility, a small percentage of Navy personnel and civilian employees elect to live in Coupeville. In 1990, 64 workers, or almost 12 percent of the total Coupeville labor force (555 people) were in the Armed Forces (U.S. Bureau of the Census 1990).
In total, Island County is anticipated to increase its total employment from 21,589 in 1996 to 33,345 by the year 2020, representing an increase of 11,756 jobs (a 54 percent increase). Sixty-four percent of the projected new jobs are anticipated to be located in the county’s three Urban Growth Areas (UGA), and the remaining 36 percent in the unincorporated areas of the county. Central Whidbey is projected to gain 1,264 jobs, with 841 occurring within the town of Coupeville. A growth of 5,884 is anticipated to occur within the Oak Harbor Urban Growth Area (U.S. Bureau of the Census 1990).

Coupeville has a potential labor force of 1,120 persons over the age 16. Of these, 555, or almost 50 percent are actually in the labor force, including both civilian and military workers. The remaining 565 people are not in the labor force. Given the large number of Coupeville residents over age 65, many of those not in the labor force may be retired. Within the civilian labor force, 466 persons were employed and 25 were unemployed, for an unemployment rate of 5.1 percent (U.S. Bureau of the Census 1990).

**Resource Industries**

**Agriculture**

Some of the first crops raised in the prairie by Euro-American settlers were hay, grains, and potatoes. Today, typical crops grown in the Reserve include grass, corn, barley, and alfalfa for silage, cabbage, beets, timber, lavender, conifer seed, strawberries, squash and peas. Over 45 percent of the existing Class II lands (productive agricultural) within Island County are found within the Reserve. The dominant crop grown is hay, comprising 7,608 acres of Island County farmland; this is due in part to the prevalence of dairy farms in the area. In 1997, only 106 acres of land was dedicated to growing vegetables in the county (U.S. Department of Agriculture, Federal Census of Agriculture 1997).

The exact number of farms and farmland within the Reserve is not clear. The Whidbey Island Conservation District, which provides conservation plans for landowners, serves 73 farms (both commercial and small farms) within the Reserve, for a total acreage of 7,446.3. In addition, the Conservation District is serving 25 woodland owners, with a total acreage of 1,120.5 (Weber 2000).

The largest and most significant farm operations in Island County are dairy farms. Currently, there are four dairies in Island County, three dairies on Whidbey Island and one on Camano Island. Livestock products accounted for 85 percent of the total market value sales ($10,538,000) in 1997, while crop sales accounted for only fifteen percent. In 1997, dairy products accounted for $6,503,000 in...
sales, compared to $1,561,000 in crop sales (U.S. Department of Agriculture, Federal Census of Agriculture 1997).

Lower milk prices have made it difficult for farmers with smaller farms. In 1995, there were five dairies in the Reserve; in 2001 there were only two. One of these farms, the Engle Farm, recently went bankrupt and was purchased from the bank by the Trust for Public Land (TPL). The National Park Service bought the property from TPL. The former owners, under a lease with the NPS, are currently operating a Holstein heifer feeding operation, with approximately 350 cattle.

Indeed, agriculture has been seriously impacted and is endangered within the Reserve, due to the result of low prices, loss of local crop processing plants, closure of support businesses, and impacts from urban sprawl (such as nuisance lawsuits, and vandalism). There are few alternatives for farmers to offset the increased liability issues. Newer installations or higher leveraged operations have a much higher cost of production and have been losing money heavily the last ten to fifteen years. According to the Island County dairy agent, the “last straw” has been the mandated waste management facilities upgrades that are very expensive and have not been financially possible for many farmers, even with matching grant funds. The milk support program only becomes effective if the price gets below $10.60 per hundred-pound weight (cwt) which is about $1/cwt under the average cost of production.

A disturbing trend is the increasing number of farms with net losses. Both in 1992 and 1997, there were more farms with net losses than farms with net gains, and the gap is widening. In 1997, only 63 farms posted net gains while 198 had net losses. While the average market value of agriculture products sold per farm increased by 21 percent from $33,278 in 1992 to $40,376 in 1997, 195 of the county’s 261 farms still made less than $10,000.

The Federal Census of Agriculture shows that the amount of land dedicated to farming in Island County decreased by 19 percent between 1992 and 1997. Since 1978, the total number of farms has increased slightly from 244 to 262. However, the number of full-time farms has decreased by eight percent from 122 farms in 1992 to 112 farms in 1997. Since 1978, the average farm size has also continued to decrease from an average of 89 acres per farm to 61 acres. These changes appear to have come from the sale and redistribution of land that had been large and intermediate sized farms (U.S. Department of Agriculture, 1997).

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<tr>
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<td>1-9</td>
<td>19</td>
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<td>48</td>
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<td>10-49</td>
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<td>50-179</td>
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<td>180-499</td>
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<td>18</td>
<td>16</td>
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<td>Greater than 500</td>
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<td>5</td>
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<td>2</td>
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<td><strong>Total:</strong></td>
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<td>232</td>
<td>244</td>
<td>308</td>
<td>278</td>
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Source: Census of Agriculture

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<td>Less than 5,000</td>
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<td>5,000-9,999</td>
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<td>250,000 or more</td>
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<td>8</td>
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</table>

Source: Census of Agriculture

According to Don Meehan, a member of the Washington State University Cooperative Extension faculty located in Coupeville, the changes in land use over time have typically seen more farms, but on smaller scales. The general trend is towards loss of farmed lands. This is true of the Reserve and is a growing trend because of strong development pressure. Due to the increased difficulty in making a profit on agricultural land, the number of people willing to make the sacrifice of maintaining a working farm is dwindling.
Aquaculture

There are three existing aquaculture districts found within the surrounding waters of the Reserve. District 1E is located in Penn Cove on the south shore west of Coupeville and is permitted to Penn Cove Shellfish, LLC. District 2C has no current regulated activities, however geoduck harvesting has been allowed under previously issued shoreline permits. According to the DNR, District 3E, which is located offshore from Fort Ebey State Park, was harvested two to three years ago for geoducks by state and tribal officials. Although District 3E is a significant bed, the geoducks are too small and not of high commercial value. It is possible the tribes will harvest this bed again.

Penn Cove Shellfish, LLC. was established in 1975 and is the oldest and largest mussel farming in the country. It was the second mussel culturing operation in the United States. They now produce two varieties of mussels and clams and numerous types of oysters; but only the mussels are grown in Penn Cove. The mussels are cultured in 38 floating rafts. Three new rafts will be added in the near future. Between three-quarters to one million pounds of mussels are produced a year (Jeffers 2000). The shellfish are sold to restaurants and wholesalers locally and around the world.

Island County is responsible for regulating aquaculture districts and permits. For any new aquaculture district or expansion of existing aquaculture districts, an environmental review, public input, and aesthetic impacts must be considered. Conditional approvals of substantial development permits are made upon clear finding that the physical, aesthetic, environmental, and recreational qualities of the shoreline are preserved for public enjoyment. Any new aquaculture projects are required to locate in existing districts that have remaining capacity. The countywide density of net-pen and raft culture operations is regulated to minimize cumulative environmental and visual impacts. (Island County, Island County Comprehensive Plan 1999: p. 3-29).

Timber

The first major lumber company on the island, Grennan and Cranney, opened in 1856 and was followed a few years later by a small shipyard in Oak Harbor. By the 1860s, logging was a major part of the local economy. Originally slow operations that utilized axes and bull teams, loggers could only cut about an acre a month (White 1980), but they increased their output when they adopted the crosscut saw and used horses and larger crews. By 1900, a cheaper and more efficient system was introduced with the donkey engine, a steam engine outfitted with skids and a winch.

The biggest trees in the county grew on southern Whidbey and on Camano Island, but virtually all the mature trees were immense. For example, the hemlock’s average diameter at maturity on good sites was 3 to 4 feet, and its height 125 to 200 feet. The diameter of the cedar was 4 to 6 feet and its height was approximately 200 feet. Spruces had a diameter of 6 to 7 feet and stood 230 to 245 feet. The fir was the largest of all, with a diameter of 5 to 7 feet and stood 245 to 330 feet (White 1980). By the end of the nineteenth century, most of the old growth Douglas fir had been cut, so loggers turned to cedar, hemlock, and second growth fir; however, by then the larger sawmill operations had transferred to Camano Island (National Park Service 1993). When Puget Mill logged off their last large tract of land—1,480 acres on north Camano Island in the early 1920’s—large-scale logging in the county ended (Richard White). Afterward, only small logging contractors remained.

While commercial forestry activities were of primary significance to the area in historic times, their economic importance is currently minimal relative to other sectors of the economy. Projecting present trends into the future, the relative commercial significance of central Whidbey forests as sources of logs and pulpwood will diminish. The majority of current forestry is conversion of forest to real estate development.

There is less land owned by DNR now than there was 20 years ago. According to DNR officials, this trend will continue, due to the urban interface and high visibility. Logging on Whidbey Island is difficult. The state agency recognizes the unpopularity of logging adjacent to residential areas. The trend for DNR is to transfer state owned lands to local governments and to lease lands to the county,
state parks, and school districts. Rhododendron Park was recently transferred to the county. The last logging practice performed on state owned lands was a thinning project in 1997 in south Whidbey Island.

Contemporary Tribal Communities

At present, there are no tribal reservations in Ebey’s Landing National Historical Reserve or elsewhere on Whidbey Island. Nevertheless, present-day descendants of Whidbey Island’s native residents at the time of the treaties of Point Elliott and Point No Point in 1855 are now members of several contemporary tribes with reservations elsewhere in the Puget Sound Basin. In addition, some descendants may belong to tribes that became federally recognized in the twentieth-century; and, at least one group that began to seek formal federal recognition in 1988. Finally, it is possible that descendants of Canadian First Nations who were referred to in the 1850s as “Tribes from the north” may have some combination of direct and indirect associations with the history and resources of Whidbey Island. The Reserve will initiate a study that will more fully document the contemporary tribes and tribal communities with traditional associations to it during the fall of 2004. The summary here is based on a combination of preliminary research done to identify all native communities who are likely to be traditionally associated with Ebey’s Landing and interaction with certain tribal representatives and tribes who have expressed interests in the Reserve during the time since its establishment.

Point Elliott Treaty Reservations

Beginning with one of the four reservations established through the Point Elliott Treaty, the reservation that is closest to the Reserve is the Swinomish Indian Tribal Community. Located only twenty air miles or so northeast of Penn Cove, the Swinomish reservation consists of 7,169 acres on Fidalgo Island. The reservation is bordered on the east by the Swinomish Channel. It extends north to State Route 20 and Padilla Bay. When the reservation developed in the second half of the nineteenth-century, members of other Southern Coast Salish tribes (Kikiallus, Suquamish and Skagits) and at least one Central Coast Salish tribe (the Northern Straits speaking Samish) joined the Swinomish as reservation residents (Sampson 1972: p. 31-50; Suttles 1990; Suttles and Lane 1990; Ruby and Brown 1986: p. 230-233). Members of the Swinomish community are actively involved with the Reserve and have recently expressed interest in San Juan Island National Historical Park.

The Tulalip Reservation, located a few miles north of Mukilteo on the mainland and north of Everett, was originally identified in the Treaty of Point Elliott as a “township of land” for both the site of “an agricultural and industrial school” and a place to settle “all the Indians living west of the Cascades Mountains.” Initially known as the Snohomish Reservation, the early residents began to use Tulalip (a Luhshootseed language name for the bay around which the reservation was located) as a preferred name (Suttles 1990: p. 488). Although the goal of settling all the Indians west of the Cascades was not realized at Tulalip, members of an impressive number of tribes in addition to the Snohomish became residents of the
reservation over time. Among them were several Central Coast Salish tribes such as Stillaguamish, Snoqualmie, Skykomish, Skagit and Samish. An unknown number of Samishes lived on the Swinomish, Tulalip and Lummi reservations at different times. A separate Samish Tribe that has an office in Anacortes became federally recognized in 1996. Intermarriages took place and relationships persist among families despite which reservation they may live on or which tribal community they may belong.

The Lummi Indian Reservation is the third of four reservations established by the Point Elliott Treaty. It is located north of Bellingham and is primarily occupied by Lummis, Samishes and Nooksacks whose ancestors used the San Juan Islands and southern Gulf Islands in pre-reservation times. Representatives of the Lummi Tribe maintain interests in San Juan Island National Historical Park and regard San Juan Island to be part of their traditional territory in the vicinity of the international border. There may be members of the Lummi Tribe with relationships to individuals and families at both the Swinomish and Tulalip reservations. It is possible that they may maintain traditional associations through those relationships to areas traditionally occupied by Samishes on northern Whidbey Island.

The Port Madison/Suquamish Indian Reservation on the Kitsap Peninsula, to the northwest of Seattle, is approximately the same distance away from Ebey’s Landing National Historical Reserve as is the Lummi Reservation. It is the last of the four reservations designated by the Point Elliott Treaty. One reference indicates that in pre-reservation times their traditional use area extended as far north as Whidbey Island (Ruby and Brown 1986: p. 226). It is not known if the nature of their use included village or other residential sites anywhere on Whidbey Island, or if it was limited to activities such as fishing.

**Point No Point Treaty Reservation and the Clallam**

The only reservation designated by the Point No Point Treaty is adjacent to Hood Canal on the Olympic Peninsula. Known as the Skokomish Reservation, it was originally intended as a residence for the Twana speaking Skokomish, the Clallam (known also as Klallam and S’Klallam) and two other groups in an area where Southern and Central Coast Salish speaking groups occupied adjacent areas. The Skokomish are not known to have associations with Whidbey Island or Ebey’s Landing National Historical Reserve, but the Clallam have clear associations. Instead of taking up residence at Snohomish, the Clallam continued to live on the Olympic Peninsula, along the Strait of Juan de Fuca and elsewhere in Puget Sound where they lived and fished prior to 1855. They ultimately established three reservations within their traditional territory and the area covered by the Point No Point Treaty.

One group of Clallam families who maintained residence near Dungeness on the Olympic Peninsula purchased acreage east of Port Angeles, Washington in 1874 and established Jamestown. This group received federal recognition in 1980 as the Jamestown S’Klallam Tribe. A second group maintained residence near Port Angeles and the Elwha River. Acreage was acquired on their behalf in the mid-1930s by the federal government and it formally became the federally recognized Lower Elwha Reservation in 1968. A third group of families established residence near a sawmill at Port Gamble in the late 1800s and, like their relatives at Lower Elwha, they acquired land in the 1930s under the auspices of the Indian Reorganization Act of 1934. This became the Port Gamble Reservation (Ruby and Brown 1986, Suttles 1990, Tiller 1996).

While the diaries of the Ebey family clearly document that the ancestors of the present-day populations of Lower Elwha, Jamestown and Port Gamble were visitors and residents of Whidbey Island in the 1830s, the nature of contemporary Clallam interests in the Reserve is unknown (Farrar 1917). It is possible that future consultation with the three Clallam tribes and additional research may illuminate traditional associations for both these US tribes and their linguistic and cultural relatives who now live as members of First Nations in Canada.
Tribes That Have Recently Received Federal Recognition

In addition to the Samish who received federal recognition in 1996, there are two other federally recognized tribes who may have direct or indirect traditional associations with various parts of Whidbey Island. These tribes are the Sauk-Suiattle and the Upper Skagit. Their histories have been closely intertwined before and since the time of the Point Elliott Treaty. The Sauk-Suiattle lived along tributaries of the Skagit River in the foothills of the Cascade Mountains. They are said to have traveled along the Skagit River to Skagit Bay in Puget Sound. They received recognition in 1975 and acquired reservation land in 1982. The Upper Skagit acquired reservation land and federal recognition in the mid 1970s (Ruby and Brown 1986, Tiller 1996). Both the Sauk-Suiattle and Upper Skagit are actively engaged with the National Park Service at North Cascades National Park and the extent of their interests in the Reserve have not been determined.

Tribe seeking federal recognition

There is one local group of individuals who refer to themselves as the Snoqualmoo Tribe of Whidbey Island. They petitioned the Branch of Acknowledgment of the Bureau of Indian Affairs for federal recognition in June 1988 (Marino 1990: p. 179). The Snoqualmoo have a mailing address in Coupeville and sometimes hold memorial services at the site of the Snakelin Monument that is located on private land within the Reserve.

The Snoqualmoo have adopted the spelling of their name as it appeared in the Point Elliott Treaty of 1855. They are a separate and distinct petitioner from the Snoqualmic Tribe that received federal recognition on August 29, 1997. The Snoqualmoo have offices in Carnation and claim the Snoqualmie River and the Snoqualmie Falls areas as the heart of their traditional area.

Population Trends

In 1942, the development and subsequent growth of the Whidbey Island Naval Air Station at Oak Harbor affected the population of the area. Between 1940 and 1960, the county’s population increased by 222 percent compared to the state’s 64.3 percent.

Island County’s growth has continued to surpass the state average. Much of the population increase has been due to in-migration of residents. Since 1990 there has been a growth of 11,363 persons in Island County; of that number 5,249 were the result of natural population increase (9,896 births and 4,647 deaths) while 6,114 resulted from net immigration (Washington State Office of Financial Management website 2001). During the 1980s, two-thirds of Whidbey Island’s growth came from in-migration. This in-migration slowed to just over 50 percent during the 1990s (Island County, Island County Comprehensive Plan 1999: p. 4-12).

In 1995, the high series forecasts from the Washington Office of Financial Management (OFM) projected the population of Island County to increase to 78,651 by the year 2000 (the actual: 71,558). The same forecast has projected that growth will continue to 98,667 in 2010 and 118,779 in 2020 (refer to table 6). (Washington State Office of Financial Management 2001 website).

<table>
<thead>
<tr>
<th>Table 6: Population Trends 1970-2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>1970</td>
</tr>
<tr>
<td>1980</td>
</tr>
<tr>
<td>1990</td>
</tr>
<tr>
<td>2000</td>
</tr>
<tr>
<td>2010*</td>
</tr>
<tr>
<td>2020*</td>
</tr>
</tbody>
</table>

Source: Office of Financial Management 2000 and Port of Coupeville Park and Recreation Plan (page 4)
* Forecasted
The central Whidbey share of Island County’s population has held relatively steady over the years, at 13 to 14 percent, and is expected to decrease only slightly through the year 2020. Although a significant number of unimproved lands and planned residential developments exist, continued water problems in this region are expected to stabilize growth rates. Central Whidbey is projected to show a population increase of about 3,800 people, or 9 percent of the county’s growth by 2020.

Demographics

Age Distribution
The trend toward dramatic increases in retirement age populations was experienced in nearly all areas of the county. Since 1980, the older segments have continued to grow at a faster rate than the remainder of the population.

During the 1980s, population groups age 65 and over increased at twice the overall growth rate. Similarly, in Coupeville, the 65 and over age group increased by 91.5 percent, more than twice the overall growth rate. In Coupeville, the population of those over the age of 85 grew by 293.8 percent during the 1980s. In contrast, the 18-24 year old age group increased by only five percent countywide and, in Coupeville, declined by almost ten percent.

Groups older than 85 experienced the highest growth rates in the county between 1990 and 2000 with an increase of 475 percent. With 14.2 percent of the population in 2000 over 65, the percentage of elderly surpassed the state average of 11.2 percent. (Town of Coupeville, Town of Coupeville Comprehensive Plan 1999: p. 9)

While the largest changes have generally occurred in older populations. The largest demographic remains the middle-aged population, with the median age in 2000 for the county being 37 years old. In 1990, the median age in Coupeville was 41.5.

Racial and Ethnic Distribution
In Island County, the large majority of the population remains Caucasian, non-Hispanic. Minority populations are small, but continue to grow. In the 1980s, African Americans and Asian/Pacific Islanders grew by more than 100 percent, African Americans composed 2.4 percent, and Asian/Pacific Islanders composed 4.3 percent of the population. People of Hispanic origin increased by nearly 60 percent and comprised the second largest ethnic group, with four percent of the population in 1990. In 2000, the racial and ethnic distribution has remained relatively the same (Office of Financial Management 1999; Island County Island County Comprehensive Plan 1999: p. 4-12 to 4-13; Town of Coupeville, Town of Coupeville Comprehensive Plan 1999: p. 9).
Economically Disadvantaged Demographics

Household Income

Island County typically has a lower median household income than the state average. In 1989, Island County had an estimated 6.6 percent of its population below the poverty level, an estimated 4,719 persons, of that 1,995 were under the age of 18.

In 1990, the median household income in Coupeville was $20,758, significantly less than the county median of $29,161. Household income estimates are an average of both family and non-family households. In 1990, median family income in Coupeville was $32,995, while median non-family income was $9,626. Income sources reported in the census reflect the town’s large retired population; 358 households had wage and salary income, 232 had social security income and 153 had retirement income (Town of Coupeville, Town of Coupeville Comprehensive Plan 1999: p. 10-11). In 1990, there were 144 Coupeville residents below poverty level; included in these numbers were 25 families, 44 were children under the age of 18, eleven were under the age of 5, and 29 were over the age of 65.

In 1990, of the 996 Coupeville residents who were 25 years of age and older, 18.2 percent of them did not have a high school diploma, 4.4 percent had less than a ninth grade education, and 21.9 percent had a bachelors degree or higher.

Civilian Unemployment

The civilian labor force consists of those who are working and those without a job and are looking for work, but does not include military personnel. The unemployed does not include retirees or persons in institutions (including students). The Armed Forces employs 24.1 percent of Island County residents. Due to NAS Whidbey, it is important to look at civilian unemployment, to more accurately represent the county.

The unemployment climate of the state and Island County has improved dramatically since the early 1980s. A string of national recessions (1970, 1973-75, 1980, and 1981-82) played havoc with unemployment. Over ten percent of the county’s work force were idle in 1975 and 1977 and close to ten percent were jobless in 1982 and 1983. The recovery following the 1981-82 recession was very strong, even unprecedented in its duration, and

<table>
<thead>
<tr>
<th>Table 9: Population by Race</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<tr>
<td>---------------------------</td>
</tr>
<tr>
<td>Total Population</td>
</tr>
<tr>
<td>Total</td>
</tr>
<tr>
<td>Caucasian</td>
</tr>
<tr>
<td>African American</td>
</tr>
<tr>
<td>Native American</td>
</tr>
<tr>
<td>Asian</td>
</tr>
<tr>
<td>Pacific Islander</td>
</tr>
<tr>
<td>Hispanic</td>
</tr>
<tr>
<td>Other</td>
</tr>
<tr>
<td>Two or more</td>
</tr>
<tr>
<td>Source: Office of Financial Management 2000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 10: Median Household Income: 1989 to 1999 and Forecast for 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washington</td>
</tr>
<tr>
<td>Island</td>
</tr>
</tbody>
</table>
unemployment declined every year until 1991. The 1990-91 recession was mild compared to the previous ones and while unemployment did increase in 1991 and 1992, it did not reach excessive heights. Each of the last two years brought declines. The 2000 rate in Island County was 4.1 percent while the statewide rate was 5.2 percent (Refer to table/chart 11).

Ethnically, the labor force composition of Island County is slightly less diverse than its general population. According to the 1990 Census, 92.1 percent of the county’s labor force was white. The next largest racial group, Asian/Pacific Islanders, had a 4.3 percent share. The three remaining racial divisions, African American, Native American, and “Other Race”, each accounted for less than 2.0 percent of the total. People of Hispanic origin, who can be of any race, made up 2.2 percent of the labor force.

While the general population of Island County is evenly split between males and females, the labor force is not. Sixty percent of the work force is male while 40 percent is female. Statewide, males also have a slightly larger portion of the work force at 55 percent.

Comparisons of the 1980 and 1990 censuses, however, show that the county is part of a nationwide trend of increased female participation in the work force. Even though males still outnumber females, there was significant change during the past decade. In Island County, the number of males that worked increased by 40 percent while the number of females increased by 61 percent. The type of employment was also changing. Women took full-time jobs at a higher rate than did men. The number of women working full-time in Island County increased by 93 percent from 1980 to 1990 while the number of men working full-time increased by 46 percent.

In Coupeville, the size of the labor force in 1990 was 555 people, including 64 in armed forces. Females were more than twice as likely to be unemployed as males. The civilian unemployment rates show a greater division in racial backgrounds with whites making up 90 percent of the workforce (26,940 of 29,794).

### Table 12: Island County Unemployment by Race and Gender for 1990

<table>
<thead>
<tr>
<th>Race/Sex</th>
<th>Total Workers</th>
<th>Unemployed</th>
<th>Total/Sex</th>
<th>Employed</th>
<th>Unemployed</th>
<th>Civilian Unemploy-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian/Male</td>
<td>26,940</td>
<td>1092 (4.0%)</td>
<td>16,637</td>
<td>16,149</td>
<td>488 (2.9%)</td>
<td>4.7%</td>
</tr>
<tr>
<td>Caucasian/Female</td>
<td>10,303</td>
<td>9,699</td>
<td>604 (5.9%)</td>
<td>640 (5.9%)</td>
<td>6.5%</td>
<td></td>
</tr>
<tr>
<td>African American/Male</td>
<td>926</td>
<td>29 (3.1%)</td>
<td>695</td>
<td>670</td>
<td>25 (3.6%)</td>
<td>14.2%</td>
</tr>
<tr>
<td>African American/Female</td>
<td>231</td>
<td>207</td>
<td>24 (10.4%)</td>
<td>13 (5.9%)</td>
<td>13.9%</td>
<td></td>
</tr>
<tr>
<td>American Indian/Male</td>
<td>392</td>
<td>27 (9.4%)</td>
<td>182</td>
<td>160</td>
<td>22 (12.1%)</td>
<td>23.1%</td>
</tr>
<tr>
<td>American Indian/Female</td>
<td>210</td>
<td>195</td>
<td>15 (7.1%)</td>
<td>10 (4.9%)</td>
<td>13.8%</td>
<td></td>
</tr>
<tr>
<td>Asian-Pacific Islander/Male</td>
<td>1,182</td>
<td>125 (10.6%)</td>
<td>522</td>
<td>496</td>
<td>26 (5.0%)</td>
<td>8.5%</td>
</tr>
<tr>
<td>Asian-Pacific Islander/Female</td>
<td>660</td>
<td>561</td>
<td>99 (15.0%)</td>
<td>53 (16.6%)</td>
<td>18.4%</td>
<td></td>
</tr>
<tr>
<td>Other/Male</td>
<td>354</td>
<td>33 (9.3%)</td>
<td>312</td>
<td>304</td>
<td>8 (2.6%)</td>
<td>9.4%</td>
</tr>
<tr>
<td>Other/Female</td>
<td>75</td>
<td>50</td>
<td>25 (50.0%)</td>
<td>25 (50.0%)</td>
<td>50.0%</td>
<td></td>
</tr>
</tbody>
</table>
The Affected Environment

Housing

The numbers of low and moderate-income households in unincorporated Island County are projected to grow between the present and the year 2020. The unincorporated area of the county is projected to grow by 12,200 households through the year 2020. Of this, approximately 4,800 additional households for those below the 80 percent median income level are needed and 7,400 additional households are projected to be for those greater than 80 percent income sector of the population.

Island County recognizes that it is unlikely that those under 50 percent of the median income level will find housing they can afford unless incentives are offered for their development. People in the lower middle-income group might be able to afford housing at or below median price. (Island County Island County Comprehensive Plan 1999: p.4-16)

The numbers of low and moderate income (80 percent or less of the median) households in unincorporated central Whidbey are also projected to grow between the present and the year 2020. The unincorporated portion of central Whidbey is projected to need 1090 additional households for the sector of the population below the 80 percent median income level through 2020 (Island County Island County Comprehensive Plan 1999: p.4-13 to 4-20).

In 1990, forty percent of Coupeville residents rented and 60 percent owned homes. The median apartment rent was $450 and the median house value was $138,000.

Public Assistance

Historically, the per capita income in Island County has been lower than the average for the nation and the state. For this reason, one might expect the proportion of public assistance recipients in the county to be relatively high; however, this has not been the case. In 1998, the Washington State Department of Social and Health Services (DSHS) identified 14.3 percent (10,355) of Island County residents receiving a public assistance service compared to 22 percent of Washington State residents utilizing a DSHS service. Island County was ranked 37th out of the 39 Washington

Table 13: Estimated Additional Households by Income Distribution for Central Whidbey

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>1996</th>
<th>2000</th>
<th>2010</th>
<th>2020</th>
<th>24-year</th>
<th>Additional Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Whidbey, Unincorporated</td>
<td>Census Est. of Income Dist.</td>
<td>8,600</td>
<td>9,300</td>
<td>10,200</td>
<td>12,000</td>
<td>3,400</td>
</tr>
<tr>
<td>Less than 50%</td>
<td>21%</td>
<td>1,848</td>
<td>1,999</td>
<td>2,192</td>
<td>2,579</td>
<td>731</td>
</tr>
<tr>
<td>50-80%</td>
<td>19%</td>
<td>1,625</td>
<td>1,758</td>
<td>1,928</td>
<td>2,268</td>
<td>643</td>
</tr>
<tr>
<td>80-100%</td>
<td>10%</td>
<td>862</td>
<td>932</td>
<td>1,022</td>
<td>1,202</td>
<td>341</td>
</tr>
<tr>
<td>100-120%</td>
<td>10%</td>
<td>834</td>
<td>902</td>
<td>989</td>
<td>1,164</td>
<td>330</td>
</tr>
<tr>
<td>More than 120%</td>
<td>40%</td>
<td>3,431</td>
<td>3,710</td>
<td>4,069</td>
<td>4,787</td>
<td>1,356</td>
</tr>
</tbody>
</table>

Table 14: Summary of the densities currently allowed under Island County’s development regulations

<table>
<thead>
<tr>
<th>Zone</th>
<th>Minimum Lot Size</th>
<th>% of County</th>
<th>% of Reserve</th>
</tr>
</thead>
<tbody>
<tr>
<td>CA (Commercial Agriculture)</td>
<td>20 acres</td>
<td>4%</td>
<td>12%</td>
</tr>
<tr>
<td>R (Rural)</td>
<td>5 acres</td>
<td>30%</td>
<td>47%</td>
</tr>
<tr>
<td>RA (Rural Agriculture)</td>
<td>10 acres</td>
<td>18%</td>
<td>13%</td>
</tr>
<tr>
<td>RF (Rural Forest)</td>
<td>10 acres</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PK (Park)</td>
<td>N/A</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>RR (Rural Residential)</td>
<td>14,500 SF to 2.5 acres</td>
<td>8%</td>
<td>5%</td>
</tr>
</tbody>
</table>

Source: Island County Comprehensive Plan

(For a complete analysis of each zone and to the extent that it supports the goals of the Reserve, please see Volume II, Analysis of Island County Zoning and Development Regulations in Ebey’s Landing National Historical Reserve by David Nemens)
State counties for use rate of DSHS services. Island County residents accounted for 0.79 percent (10,355) of total DSHS clients and 0.63 percent ($28,893,928) of the DSHS direct service dollars.

DSHS provide services to assist in problems caused by some combination of poverty, disabilities, family abuse or neglect, domestic violence, recent refugee status, substance abuse, and/or juvenile criminal behavior. Forty percent of children (birth – 17), 15 percent of “working age” adults (18-64), and 12 percent of seniors (65 or older) used at least one DSHS service during fiscal year 1999. More than half of DSHS’s 1.26 million clients used more than one type of service during a year.

**Ebey’s Landing National Historical Reserve Agreements and Mandates**

The following agreements are existing legal agreements and legislative mandates that influence both planning and operations at the Reserve:

- **Trust Board of Ebey’s Landing National Historical Reserve Rules of Procedure, October 25, 1988.** (Specific rules relating to appointment, removal, and composition of members, terms, roles of officers, meeting and other procedures.)
- **Interlocal Agreement for the Administration of Ebey’s Landing National Historical Reserve, recorded July 23, 1988.** (An agreement to establish a joint interagency administrative board for management of the Reserve. Operation procedures established for Trust Board.)
- **Cooperative Agreement between National Park Service and Ebey’s Landing National Historical Reserve Trust Board, July 25, 1988.** (Agreement for NPS to partially fund, not to exceed 50 percent, the annual operational costs of the Reserve, subject to availability of appropriations.)
- **Cooperative Agreement between Island County Parks and Recreation Department, National Park Service, and Trust Board of Ebey’s Landing National Historical Reserve, July 29, 1990.** (Agreement among parties for a project to undertake a project to plan and produce interpretive exhibits installed at the county sites of Monroe’s Landing and Crockett Blockhouse, Coupeville, Washington.)
- **Cooperative Agreement between State of Washington, Department of Transportation, Marine Division, National Park Service, and Trust Board of Ebey’s Landing National Historical Reserve, June 24, 1990.** (Agreement among parties to undertake a project to plan and produce exhibits which will be duplicated and installed at two DOT ferry terminals located at Port Townsend and Keystone, Washington.)
- **Cooperative Agreement between Washington State Parks and Recreation Commission, National Park Service, and Trust Board of Ebey’s Landing National Historical Reserve, October 30, 1992.** (Agreement among parties to undertake a project to plan and produce exhibits which will be installed at three state park sites known as Ebey’s Landing, Fort Ebey and Fort Casey, Whidbey Island, Washington.)

**Land Use Documents, Related Plans, and Programs**

**Analysis of Island County Zoning and Development Regulations in the Ebey’s Landing National Historical Reserve**

This report was prepared by David Nemens Associates, Inc., Seattle, Washington in May 2001 for the National Park Service. Its purpose was to identify the relevant Island County zoning designations and development regulations applicable to properties within the Reserve. In addition, this report was to assess to which extent these designations and regulations are consistent with the goals of the Reserve. Documents analyzed included the following:

- 1998 Island County Comprehensive Plan
- Applicable parts of the Island County Code
- Ordinance adopted by the Island County Board of County Commissioners
Decisions of the Western Washington Growth Management Hearings Board

Information was also used from the 1980 Ebey’s Landing National Historical Reserve Comprehensive Plan, the 2000 Washington State Yearbook (Public Sector Information, Inc. Eugene, Oregon), and interviews with Island County Planning and Public Works Directors, and the Ebey’s Landing National Historical Reserve Trust Board. The entire report is included as a supplemental document in Volume II of this draft GMP/EIS.

This report provides background on Island County’s Comprehensive Plan and Zoning Code (see following subsection) and the Land Use and Zoning Designations. Six zones are analyzed that apply to the Reserve: Commercial Agriculture, Rural, Rural Agriculture, Rural Forest, Park, and Rural Residential. Each zone is summarized as to minimum parcel size, base density, and permitted and conditional uses. The definition, goals and policies of the zone from the Comprehensive Plan are cited in addition to the purpose, designation criteria, permitted and conditional uses under the Zoning Code. Most importantly, an analysis is provided as to the extent the zoning does or does not provide support to the overall goals for the Reserve. (See Figure 7, Island County Zoning.)

The report found that Island County’s zoning and development regulations vary in the degree to which they are consistent with, and supportive of, the purpose and objectives of the Reserve. The Rural zoning district, the largest zoning district in the Reserve, allows the subdivision of land into lots as small as five acres. Such a development pattern, were it to occur in an uncontrolled manner, would be inconsistent with the existing visual character of the Reserve. The county has adopted development standards (such as lot coverage limits and building setbacks) for the Rural zoning district; yet the report states that it is doubtful that such standards would mitigate the impact that development at a five-acre density would have on the Reserve’s visual resources. Though the county regulations encourage clustering of lots and houses through the use of the Planned Residential Development (PRD) process in the Rural zoning district, the regulations do not require use of the PRD process.

Another significant potential inconsistency between Island County’s zoning regulations and the Reserve’s objectives is in the area of allowed uses. Many of the permitted and conditional uses allowed in the zoning districts within the Reserve could be incompatible with the Reserve’s objectives. Even the County’s Commercial Agriculture (CA) district, arguably the most supportive of the Reserve’s goal of preserving the farming legacy of the area, allows minor utilities as a permitted use and communications towers as a conditional use.

The report suggests that one way to address the issues of development density, development pattern, and allowed uses would be through the adoption by the county of an overlay zone that encompassed some or all of the Reserve. Island County could adopt special zoning restrictions and requirements applicable only in this overlay zone; for example, all land subdivision within this overlay district could be required to go through a PRD process with special, more restrictive PRD standards. Similarly, allowed uses could be restricted within this overlay zone. The advantage of this approach is that it would not affect the development standards, densities, or uses allowed in other parts of the county.

Island County Comprehensive Plan and Zoning Code

The following background on the county’s comprehensive plan and zoning code were provided by David Nemens and Associates, Inc., Seattle, Washington.

Island County’s first comprehensive plan, the General Plan, was adopted in 1964, followed by the adoption of an Interim Zoning Ordinance in 1966. The county completed updating the General Plan’s cultural and natural systems inventories in 1974 (Phase I: Existing Conditions), and soon thereafter adopted amended planning policies (Phase II: Planning Policies). However, the county never amended its zoning ordinance or development regulations to be consistent with the more recently adopted policies. In 1984, the county adopted a new Planning and Zoning Strategy along with implementing performance-based zoning and development regulations.
Work on the current *Island County Comprehensive Plan* began shortly after passage of the Washington State Growth Management Act in 1990. The county prepared several drafts of the plan for public review between 1994 and 1998. In September 1998, the County Planning Commission presented its recommended comprehensive plan to the Board of County Commissioners (BOCC). The BOCC held several additional public hearings, adopting the plan on September 28, 1998.

Plan opponents, including the Whidbey Environmental Action Network (WEAN) and the Island County Citizens Growth Management Coalition, filed several appeals with the Western Washington Growth Management Hearings Board (“the Hearings Board”), challenging the timeliness and adequacy of the plan and its implementing development regulations. One of the issues included in the challenges was the consistency with Growth Management Act requirements of the county’s proposed five-acre density (one dwelling unit per five acres) in the Rural Zone. After hearing these challenges, on October 12, 2000 the Hearings Board issued a Compliance Hearing Order validating the county’s position on most of the remaining issues, including the five-acre density in the Rural Zone.

### Land Use and Zoning Designations

This report refers to two separate but closely related sets of Island County land use designations: “Future Land Use” designations, as shown on the “Future Land Use Map” of the *Island County Comprehensive Plan*; and “Zoning” as shown on the Island County zoning map. In Island County, the names of zones are identical to the names of corresponding land use designations. The county’s own maps sometimes use these terms interchangeably. However, the comprehensive plan and the zoning code are separate, distinct documents. The comprehensive plan establishes the more general policy basis for the county’s land use regulations; the zoning code contains these detailed regulations themselves. Because of the one-to-one correspondence between land use designations and zoning districts in Island County, these two sets of designations are discussed together in this report.

The “Future Land Use Plan Central Whidbey” (*Island County Comprehensive Plan Element 1: Policy Plan and Land Use Element*, Map L) illustrates the future land use/zoning designations for central Whidbey Island. According to the plan, these designations “describe the future land use plan for Island County … based on the major issues as identified in Chapter I, the existing land use analysis in Chapter II, and the goals and policies that will be used to guide and accommodate future growth as presented in Chapter IV.” (Section III page 1-111.) The “Future Land Use Plan Central Whidbey” labels its designations as “proposed zoning.”

Ebey’s Landing National Historical Reserve contains a mix of land use/zoning designations. At Ebey’s Prairie, the predominant designation/zone is Commercial Agriculture. To the west of the Prairie (in and around Sunnyside Cemetery), there is a small area designated/zoned Rural. West of this are substantial areas designated/zoned Rural Agriculture and Rural Forest. There is another area designated/zoned Commercial Agriculture in the Crockett Prairie area, and several scattered areas designated/zoned Rural Forest north and east of Crockett Prairie. Aside from these areas, and the areas designated Park (Ebey’s Landing, Fort Ebey, and Fort Casey State Parks) or Municipality (all areas within Coupeville municipal limits), and small areas of Rural Residential along the shores of Penn Cove, most of the land within the Reserve...
is designated/zoned Rural or Rural Agriculture. The following is a summary of the densities currently allowed under Island County’s development regulations for those zones present in the Reserve.

**Town of Coupeville Documents**

**Town of Coupeville Comprehensive Plan**
The plan was prepared in compliance with the requirements of the 1990 Washington Growth Management Act and the 1992 Island County Countywide Planning Policies. The plan is intended to guide the future growth, character and development of Coupeville for the next ten to twenty years and was last updated in 1999. The comprehensive plan is currently going through a ten-year update, which began in 2003. Changes to the comprehensive plan include updated demographic profiles, economic information, and land use information. The town’s designated Urban Growth Area coincides with the current town limits. As of 2000, it had a population of 1,723 people and an area a little more than one square mile.

Other than the required planning elements required by the GMA, the town has a strong sense of preserving its historic rural and “small” town character. It recognizes its beautiful natural setting on Penn Cove and small town atmosphere and develops planning goals that emphasize these points. The plan also recognizes the 1980 Comprehensive Plan of Ebey’s Landing National Historical Reserve in its Land Use element. One of the goals of the comprehensive plan recognizes the larger community of which the town of Coupeville is a member. Coordination with Island County and Ebey’s Landing National Historical Reserve is encouraged.

**Town of Coupeville Zoning**
Chapter 16.08 of the Coupeville Development Regulations and its corresponding Official Zoning Map establish the zoning districts for the town of Coupeville. The zoning code is intended to protect the public’s health, safety, and welfare and to encourage the most appropriate use of the land. In 1973, when the Central Whidbey Island National Register Historic District was designated, there were 51 historic structures located within the town limits and an additional 40 properties in the county. After the historic district was created, the town established a historic overlay zone for design review.

The town of Coupeville has a total area of 721 acres and as the seat of Island County is significantly impacted by public uses including government offices. The town is primarily zoned single family residential, with 93 percent of the remaining vacant lots designated as a reserve for residential development and the preservation of the rural character of the town. The new land use added in the 2003 update to the comprehensive plan is the “Cottage Housing District,” which is designated to have a primarily residential character, allowing higher densities with up to eight dwelling units per acre. Table 15 summarizes the land use inventory in Coupeville. (See Figure 10, Town of Coupeville Zoning.)

**Related Washington State Park Plans**

**Fort Ebey State Park and Fort Casey State Park**
Washington State Parks is currently in the process of developing a Comprehensive Area Management Plan (CAMP) for the state parks located within Ebey’s Landing National Historical Reserve. This planning process determines what type of land classification would best serve the vision of each park. These range between three management options favoring natural resource protection, cultural resource protection, and recreation related development. Additionally, resource values are developed to support the parks’ intent. These may include statements, which support the cooperative nature of the Reserve.

After development and review of the plans by both Washington State Parks planners and the public, the final land classification process would be reviewed by the Washington State Parks and Recreation Commission. After approval, the Northwest Regional Office will develop the management plan for the region. This “umbrella document” will direct the development of park specific plans.

It is the hope of the National Park Service and Ebey’s Landing National Historical Reserve Trust Board that the management plans of Fort Casey...
and Fort Ebey state parks are consistent and supportive of the mission statement of the Trust Board, the vision statement for the Reserve, and the current general management planning process the NPS is undertaking for the reserve.

Related U.S. Navy Plans
The U.S. Navy plans to continue to use the Outlying Landing Field in Coupeville to practice simulated aircraft carrier landings as long as the EA-6B is stationed at the Naval Air Station (NAS) Whidbey Island, and may continue its use beyond that if the Navy decides to base the EA-18G at NAS Whidbey Island (Meelas 2004).

Related National Park Service Plans and Studies

An Analysis of Land Use Change and Cultural Landscape Integrity for Ebey’s Landing National Historical Reserve
This document was prepared by Nancy Rottle, Assistant Professor, University of Washington Department of Landscape Architecture, and Jones and Jones Architects and Landscape Architects in April 2003 for the National Park Service. The document includes and explains the methodology, provides an analysis of land use changes from 1983-2000, and suggests recommendations. The entire report and accompanying graphics are included as a supplemental document in Volume II of this draft GMP/EIS.

The goals of the project are the following:

- To determine the patterns of landscape change that have taken place since the initial cultural landscape inventory in 1983, what contemporary pressures these patterns suggest, and what forces might compromise the future integrity of the Reserve’s landscape.
- To determine what characteristics of the historic landscape (from 50 years previous and earlier) still remain and contribute to the historic integrity of the Reserve, as defined in the Department of Interior’s guidelines for evaluating historic and cultural landscapes.
- To explore innovative preservation strategies used in other parts of the U.S., especially as applied to agricultural and forested working landscapes, and how might lessons from these examples be applied to the Reserve.

Goal three of the project was investigated in a separate report (see following report summary) on agricultural land preservation case studies and strategies.

Some of the findings documented within the Reserve between 1983 and 2000 include the following changes:

- Over 1,100 new structures were built, an increase of 49 percent (26 percent of the structures were in Coupeville, 24 percent in subdivisions, and 50 percent in other areas of the Reserve).
- Structures placed in the open and the addition of new subdivisions have had the most significant effect upon the cultural landscape of the Reserve, interrupting vistas of farmland, defining edges of hillsides with buildings instead of trees or open space against the skyline, dividing the landscape into smaller pieces, and changing the character of the ground plane from large continuous areas of vegetation to areas dotted with large new homes.
- Fourteen historic structures were lost despite NPS and Trust Board efforts to convey the value of these buildings to the historic integrity of the Reserve.
- There was a 41 percent increase in residential subdivisions, involving 233 acres and two new subdivisions.
- The visual impact of new subdivisions is substantial as they are located in primarily open areas rather than in forested areas.
- The land area for Coupeville expanded 30 percent, gaining 63 acres from the Urban Growth Area.
- Commercial land use grew by a total of 22 acres or 24 percent.
- Agriculture was reduced by 4 percent losing 158 acres primarily to subdivisions or rural residential uses.
- Woodland diminished by 2 percent, losing 111 acres primarily at the forest edge to residential and agricultural uses.
- The status of parklands appears to have increased. Due to lack of information in 1983, the status is unclear.
• There was an 11 percent increase in grassland (143 acres), a 14 percent loss of pasture (190 acres), and a 1 percent gain in cropland (32 acres). This change is probably due to a decline in active farming especially dairy grazing with fields becoming fallow or converting to residential lawns.

• Roads increased by 24 miles or 20 percent. Nearly all of these were “minor roads” (a 35 percent increase in that category). The proliferation of roads has created impacts to functioning agriculture and ecological integrity.

• There were slight gains in hedgerows (.2 miles) and windbreaks (1.8 miles) overall.

• All cluster arrangements remained between 1983 and 2000 with the addition or loss of individual structures within six farm clusters between 1995 and 2000. This suggests that an agricultural relationship to the land is still intact. However, the majority of new structures built on the Reserve did not follow the historic pattern of clustering indicating a direction change from the primarily agricultural relationship mode to a residential one.

The analysis suggests that urbanization, suburbanization, and residential pressures on the landscape are substantial, is a classic pattern in urbanizing areas, and without intervention will continue. Recent zoning changes in Island County are less restrictive than when the Reserve was created, which may accelerate the loss of the Reserve’s rural landscape. The loss of agricultural would be significant in altering the character and human relationship to the cultural landscape, and may undermine the Reserve’s purpose, “to preserve and protect a rural community which provides an unbroken historic record from…19th century exploration and settlement…to the present time.” As residential use of the land expands, the open agricultural fields will be replaced with houses. Unless successful measures are taken, farming will become increasingly challenged by conflicting interests, accelerating land values, and lack of support facilities.

The report recommends a combination of strategies for farmland protection such as overlay zoning, designation of special districts, zoning, purchase of easements and other incentive mechanisms. In purchasing easements, it is recommended that a study be done to determine those lands possessing the highest visual and historic integrity, but are least protected and vulnerable to development.

Farmland Preservation Case Studies for Ebey’s Landing National Historical Reserve

This report was prepared by Nathaniel Cormier of Jones and Jones Architects and Landscape Architects in October 2001 for the National Park Service. The purpose of the report is to inform the Reserve about ways to protect the working cultural landscape, primarily agriculture and forestry. It identifies, discusses, and documents an array of strategies that government at all levels, land protection organizations, cooperatives, and farmers have used to promote sustainable working farms and woodlots across the United States. Existing programs available at the Reserve and innovative case studies are documented at each level. This report led to an accompanying Farmland Preservation Recommendations report (summarized below), which makes specific recommendations about the Reserve. These two reports are included as a supplemental document in Volume II of this draft GMP/EIS.

Farmland Preservation Recommendations for Ebey’s Landing National Historical Reserve

This report was prepared by Nathaniel Cormier of Jones and Jones Architects and Landscape Architects in October 2001 for the National Park Service. The farmland preservation recommendations were based on case studies of farmland preservation strategies around the country and the character of the Reserve’s cultural landscape. The Reserve’s landscapes cannot be viewed as static because they will change as agricultural practices and land use goals change. Plans to protect the landscape must also protect the farmers responsible for sustaining the land. They are interdependent. Recommendations are grouped into three broad strategy categories and are based on a balance of restrictions and incentives:

• Protect the farmland—the Reserve should identify and protect the land in the Reserve best suited to farming and woodlots.
• Support the farmers—the Reserve should implement measures that make it easier for existing farmers to remain in farming and new farmers to begin farming
• Cultivate markets—the Reserve should help farmers to cultivate markets for the farm and forest products of the Reserve.

The report defines three important partners to carry out these recommendations. One of these is existing—Island County—and two others would be created, an Ebey’s Farmland Trust and an Ebey’s Farmers Cooperative. The county would be encouraged to create stronger agricultural protection through a special zoning or overlay district covering only the Reserve. The Farmland Trust would be a non-governmental organization to oversee acquisition of farmland and conservation easements and operate a development credit bank. The Trust could also pursue funding from foundations, citizens, and government agencies for its ongoing activities. The cooperative would allow farmers to share the costs of infrastructure needed to produce value-added products, which could be marketed under a Reserve label. In addition, the cooperative could run a community supported agriculture (CSA) business that sells produce to participating local and urban residents. The cooperative would give farmers a direct role in the management of the Reserve.

The report provides a matrix of the recommendations and denotes which partner would be the best to achieve them.

The remainder of the report explains in detail each strategy and provides examples.

San Juan Island National Historical Park General Management Plan
The last general management plan for San Juan Island National Historical Park (NHP) was completed in 1979. A new GMP is in progress led by the NPS Pacific West Region, Seattle Planning Office. The purpose of the park is to interpret and preserve the sites of American and English camps and to commemorate the historic events that occurred from 1853 to 1871 in connection with the final settlement of the Oregon Territory boundary dispute.

Ebey’s Landing National Historical Reserve and San Juan Island National Historical Park interpret the same period of history. Isaac Neff Ebey was a U.S. customs collector at the time, based in Port Townsend. One of his visits to San Juan Island in April 1854, created the first stand off between American settlers and the British when he threatened seizure of British property on the island to collect duties because he felt that the San Juan Islands were the possession of the Americans and not a duty free zone. Isaac Ebey’s visits are recorded as part of the events in history leading up to the establishment of the permanent water boundary between the U.S. and Great Britain. (Vouri 1999: pp. 29-33).

Existing Park Development and Programs
The total acreage of Ebey’s Landing National Historical Reserve is approximately 17,572 acres. The NPS-owned lands total approximately 684 acres with another approximately 2,023 acres held in conservation easements and development rights. The remaining acreage includes primarily privately owned lands, with other public lands managed by Washington State Parks and Recreation Commission, Island County, town of Coupeville, Washington State Department of Transportation, Washington State Department of Natural Resources, U.S. Army Corps of Engineers, U.S. Department of Defense, and Washington State Department of Fish and Wildlife. Unless otherwise noted, this section only addresses property owned by the National Park Service.

Roads and Parking
NPS-owned and managed roads (both paved and unpaved) total less than one mile and are located at interpretive and scenic waysides. Parking lots at the two NPS-owned waysides (one paved, one gravel) hold a total of 11 cars and 3 RV spaces.

Partner agencies including the town, county, and Washington State Parks have roads and parking areas under their respective jurisdictions and maintain them accordingly.
Boundaries

The boundaries of the Reserve follow the historical patterns of development created by the 1850s Donation Land Claims. The northern boundary is irregular but can be generally marked by secondary roads in the Reserve, including West Beach Road, Van Dam Road, Zylstra Road, Arnold Road, Monroe’s Landing Road, Scenic Heights Road, Penn Cove Road and Libby Road. State Route 20/525 bisects the Reserve in a generally north-south direction providing the primary means of transportation through the park unit; State Route 20 has a spur to the west leading to and along Keystone Spit and the Keystone Ferry terminal. Madrona Way follows the edge of Penn Cove and links the Grasser’s Hill area with Coupeville. Parker Road travels east of Coupeville and is the main road along Penn Cove to the east and south, where it heads away from the cove and into Smith Prairie. Other primary roads along Ebey’s, Crockett, and Smith prairies include Engle Road, Hill Road, Ebey’s Landing Road, Terry Road, Fort Casey Road, Patmore Road and Wanamaker Road. The eastern edge of the Reserve is formed by the north-south running Keystone Road which ends at Admiralty Bay in the southeast corner of the Reserve. All of these roads are public, access various areas in the Reserve, and are maintained by the state, county, or town.

Water forms boundaries in the Reserve. The west boundary of the Reserve is the Strait of Juan de Fuca; to the south is Admiralty Bay and Keystone Spit; the eastern boundary is in Smith Prairie heading north to Snakelum Point, crossing over and including Penn Cove to a point north of Blowers Bluff. There are approximately 22 miles of coastline.
Private residential areas are located throughout the Reserve. There are over 6,600 tax parcels within the Reserve. The city of Oak Harbor lies to the north approximately four miles from the Reserve’s northern boundary; Saratoga Passage and Camano Island are to the east of the Reserve; the Olympic Peninsula lies to the west across Admiralty Inlet; and to the south are the Whidbey Island towns of Greenbank, Freeland, Langley and Clinton.

**Trails**

The trails owned and maintained by NPS are a small component of the overall trail system that exists in the Reserve. National Park Service trails include a portion of the bluff trail (approximately ¾ mile, including the spur to Buttercup Hill); a trail linking the County’s Kettles Trail to the Prairie Overlook (approximately ¼ mile); and a short trail from the Prairie Wayside to an overlook of Ebey’s Prairie (less than ¼ mile); and the Ridge Trail connecting the Prairie Wayside with the Bluff Trail (approximately ¾ mile). These are unpaved trails and range in width from approximately 18 to 48 inches.

**Buildings, Facilities, and NPS-owned Properties**

The Reserve has ten primary buildings and many smaller outbuildings and agriculture structures owned by the National Park Service. In the vicinity of Ebey’s Prairie is the Reserve’s administration building, also known as the Cottage, a former Sheep Barn and Machine Shed, the historic Jacob Ebey House and Blockhouse, the historic Ferry House and outbuildings (shed and outhouse), the historic Rockwell House and the agricultural complex known as Farm I (no historic buildings). The historic agricultural complex known as Farm II is located in Crockett Prairie, and includes six historic structures, including the Reuble Barn, Gillespie House, granary, garage, shop and another building.

**West Ridge Property**

The property consists of farmland and the National Register listed Jacob Ebey House and Blockhouse, the Cottage, a sheep barn and a deteriorated machine shed. It includes a two-party well and pump house, which is shared with an adjacent private property owner. This property was purchased from The Nature Conservancy in 2002. The parcel is an irregular shape and consists of 60.5 acres of farmland currently under agricultural lease, and approximately 8 acres of mature conifer timber along the west property line.

*Jacob Ebey House and Blockhouse*

These two buildings were originally built in the 1850s but likely altered during “restoration” efforts in the 1880s and 1930s respectively. The Jacob Ebey House is approximately 640 square feet and the Blockhouse is approximately 64 square feet and located approximately one-quarter mile southwest of the Cottage. Neither building is accessible to the public due to their deteriorated condition. These buildings are not ADA accessible and have no informational signing.
The Cottage

Built in the 1940s as a single family dwelling, it was later altered with the addition of an attached garage, which doubled its size. This one story building is approximately 1,086 square feet and is presently used as the Reserve administration building by the Trust Board of Ebey’s Landing National Historical Reserve. It consists of two offices, a reception/office area, kitchen/lunch room, four small storage/supply closets (two of which double as a furnace room and telephone/computer line room), unisex ADA accessible bathroom, and conference/meeting space. Water is obtained from a two-party well (to the south), and well house, and the sewage disposal is served by a double concrete septic tank system with drainfield. The parcel totals eight-tenths of an acre and is located off Cemetery Road and to the south of State Route 20, less than one mile from Coupeville. It was purchased from TNC in 2002. While it is adjacent to the West Ridge property, it has its own tax parcel.

Sheep Barn and Machine Shed

These buildings are located to the northwest of the Cottage in the woods, but are part of the Cottage tax parcel. They are approximately 4,900 and 768 square feet respectively. The barn is used for storage and the machine shed is unused due to deterioration. The NPS needs to evaluate these structures for their National Register eligibility. These structures are not open or accessible to the public. There are no informational signs at the site.
**Farm I**
The farm is located at the intersection of Terry and Fort Casey roads, southeast of Coupeville. The property was owned for decades by the Engle family until a 1998 bankruptcy resulted in a sale to the Trust for Public Land, which later sold to the NPS in 2000. The farm consists of 115 acres of farm land, and the built infrastructure for a former 940-head dairy farm. The structures on the complex include an assortment of non-historic metal, concrete and wood frame buildings, manure lagoons (ten million gallons) and associated pump lines, silage pits, loafing sheds, storage sheds and barns, well and pump houses, equipment sheds, silos, and fencing. The dairy herd housing area totals 138,716 square feet in three buildings. There are electrical and telephone services provided to the property. The town of Coupeville provides water to the property. There are three water meters on the property and two wells provided water for the former dairy operation and field irrigation. None of the farm buildings are eligible for the National Register. The former owners of the farm retained a lease to continue farm operations until a final resolution is determined for the property.

**Farm Office**
This building is now used by the NPS as a resource management office. It is a one-story, wood-frame building, about 400 square feet in size. It contains two rooms and a storage closet and is supplied with electricity and telephone. This building is not eligible for the National Register. Should the farm property be exchanged, leased or sold, this building would be vacated by NPS.

**Rockwell House**
The circa 1891 Rockwell House was built as a residence for the former property owners farming the land. It is now on a separate tax parcel owned by the NPS. It is a wood-frame, one and a half story Victorian style house with three bedrooms and a bath upstairs. The first floor consists of two bedrooms, one bath, a living/dining room, kitchen, entry hall, and mud/laundry room. The house is approximately 2,228 square feet in size. It is currently vacant (the public does not access this building) and in need of repair. This residence is listed in the National Register of Historic Places. It was purchased from the Trust for Public Land in 2001.
Farm II
This farm is located at the intersection of Fort Casey and Patmore roads, southeast of Coupeville. It was formerly owned by the Engle Family prior to the Trust for Public Land purchasing the property after bankruptcy, which later sold to the NPS. The property contains approximately 113 acres of tilled farm land, and a building complex consisting of a residence and farm buildings, many of which are unused. The historic residence was built in 1912 and is a one-story wood frame building. It is 1,492 square feet in size and contains three bedrooms, a living and dining room, kitchen, bathroom, and laundry room. The historic outbuildings in the complex, which contribute to the integrity of the Reserve, include a large gambrel-roofed barn (Reuble Barn, 5,250 square feet), a gable-roofed barn, a garage, shed, and granary. Non-historic structures include an assortment of sheds, shops, a manure lagoon and two underground manure storage tanks (78,000 gallons), bunker silo, well and pump houses, feeder and loafing sheds, and fencing, dating from the circa 1940s to the 1990s; none of these contribute to the property or district due to age or alterations. When the NPS purchased the property, the buildings were essentially unused except for the residence and were generally in a state of disrepair.

Ferry House and Associated buildings
The circa 1858 Ferry House is approximately 1638 square feet and serves as a de facto exterior exhibit. The building is undergoing extensive preservation work and is not accessible to the public. The outbuildings (shed and outhouse) behind the Ferry House are approximately 690 square feet and are not currently used due to their condition. (Approximately 188 square feet of one outbuilding fell into ruin and has been documented and removed.) These are all contributing resources to the Reserve and are listed in the National Register of Historic Places. Due to vandalism activity that occurs periodically, “no trespassing” and “U.S. Government property” signs are located on these buildings. These historic buildings are not ADA accessible. This property was donated to the NPS by The Nature Conservancy in 2002.

Ferry Forest
This irregular shaped parcel of 20 acres was purchased from The Nature Conservancy in 2002. The property has no improvements and consists of a conifer timber forest with approximately 250 feet of frontage along Hill Road, southeasterly of the historic Ferry House.
**Keystone Spit**

The NPS purchased a small lot along Keystone Spit, near the Keystone-Port Townsend Ferry Landing, along SR 20, from a private property owner in 2002. This undeveloped lot is 0.17 acres in size and will be retained by the NPS as an access point for wildlife viewing at Crockett Lake.

**Other Site Structures**

NPS has interpretive facilities located in ten areas throughout the Reserve. These facilities are located on non-federal lands with two exceptions: the Prairie Overlook and the Prairie Wayside are NPS fee-owned lands. The remaining sites are located on county, state park, Island County Historical Museum, Port of Coupeville, and WSDOT properties.

These facilities are minimally developed with the primary focus being the interpretive panels and scenic views. The panels range from low-profile interpretive mounts (24 inches x 36 inches, metal-framed mounts with fiberglass embedded panels) to 3-sided, wood-frame kiosks (48 inches x 32 inches) with wood-shake roofs holding three fiberglass embedded interpretive panels. Some waysides include a bench, fencing, landscaping, parking areas, a trailhead and/or trail, and a bike rack. The NPS has a total of 5 kiosks and 18 low profile mounts at these waysides throughout the Reserve.

**Site Vegetation**

Generally, Reserve facilities are not landscaped. However, around the Cottage and some of the historic buildings such as the Ferry House, Jacob Ebey House, and Gillespie House, non-native plants (some of the original plantings) can be found, including lilacs, daffodils, ground cover, poplars, and fruit trees, which are all likely historic materials and add significance to the properties. All of the above-noted buildings have lawn that requires periodic mowing.

The Reserve promotes the use of hedgerows. The NPS has planted hedgerows consisting of snowberry, Nootka and rugosa rose, wild currant, and other native plants at its waysides. Trees in the area of the Cottage include willows and Douglas firs. Behind the Cottage to the north, two small planting beds were constructed to grow native plants for restoration work elsewhere in the Reserve.

Efforts have been made by NPS and the Trust Board to remove invasive species such as blackberries, hawthorne, poison hemlock, gorse, and scotch broom from government and partner-owned properties.
Washington State Parks

There are four units of the Washington State Park System within the boundaries of the Reserve. They include Fort Casey State Park, which also administers Keystone Spit State Park and Ebey’s Landing State Park at the south end of the Reserve (totaling 457 acres), and Fort Ebey State Park (226 acres), which anchors the northwest area of the Reserve. These areas of public open space are important properties for recreational and educational pursuits by residents and visitors. (See “Recreational Resources” in this chapter.) Forts Casey and Ebey each have their own park managers and staff who operate the four units with funds allocated through the state park system. In 2003, Fort Ebey and Fort Casey state parks began collecting day-use parking fees; no such collection is yet operating at Keystone Spit or Ebey’s Landing state parks but it is anticipated. Fort Casey has 35 campsites available and many areas for hiking and walking. Fort Ebey has 54 camping sites and 28 miles of hiking trails, including 3 miles of coastline hiking (Washington State Parks, Fort Ebey State Park 2004). In the area, there are other camping opportunities at adjacent Deception Pass State Park, Rhododendron Park, and in Oak Harbor.

Island County Historical Museum

Island County Historical Society is a nonprofit, 501(c)(3) organization that owns and operates the museum in Coupeville. The NPS purchased a conservation easement on the property, which enabled the museum to purchase the land and construct the museum building. For many years the Reserve’s Trust Board had office space in the building. Rent covered both administrative and exhibit space. After the Trust Board’s move to the Cottage in 2002, the museum relocated the exhibit space and no longer charges the Trust Board rent. The museum is important in that it serves as a “defacto” visitor center for the Reserve and provides interpretive materials, including two short videos, for visitors. There are brochure holders on the outside of the museum so visitors can still get information even if the museum is closed, and there are exhibits on the museum porch accessible all the time. The National Park Service has a cooperative agreement with the museum for interpretive and other programs.

Oak Harbor Air Park

There is one privately owned and operated air park in the north of the Reserve called Oak Harbor Air Park three miles south of Oak Harbor. The airfield is approximately 73 acres and has one paved runway but no airline now provides service to it. Currently, it is only used by private plane owners. There have been recent discussions in the local newspapers on the benefits of converting the property to public use.

Utility Systems

Electricity to the Reserve is provided by Puget Sound Energy. The GTE/Qwest and General Service Administration provide telephone service. The town of Coupeville provides domestic water supply and sewer service within town limits; the remainder of the Reserve is served by private wells and septic/drainfield systems. Fire hydrants are located in town and in areas that are platted subdivisions. Currently, fire protection for the NPS-owned facilities in the Reserve is provided by the county volunteer fire departments, at the same level of service as provided to other property owners. None of the NPS-owned facilities have sprinkler systems.
Alternatives

The planning team, comprised of National Park Service, Reserve staff, and the Trust Board, developed management alternatives for Ebey’s Landing National Historical Reserve, using public responses to newsletters and public meetings. National Environmental Policy Act regulations and NPS planning regulations require the formulation of a reasonable range of alternatives that address identified planning issues and management concerns. Each alternative was evaluated to ensure consistency with the Reserve’s purpose and significance, the desired future conditions, and current laws, regulations, and policies.

In addition, the development of the alternatives for the future of the National Historical Reserve recognizes that the Reserve is about the protection of heritage resources within the context of a contemporary rural community. Therefore, strategies about the preservation and use of the Reserve’s resources are advanced within this context of a living landscape; one that continues to evolve and change, and is not “frozen in time.” This plan is developed in that spirit.

Three alternatives are described in this plan and are characterized as follows: Alternative A is the “No Action Alternative” which means continuation of the present course of action or maintenance of the status quo of existing policies and programs. Alternative B is the “Preferred Alternative.” It emphasizes both the preservation of resources and the enhancement of visitor opportunities for the Reserve while providing for administrative and maintenance facilities. Alternative C is an additional alternative that builds upon elements included in Alternative B, but also provides additional actions that address the Reserve’s management structure.

It is intended that all the alternatives presented in this GMP meet both the spirit and the intent of the law establishing Ebey’s Landing National Historical Reserve. In doing so, this interdisciplinary planning team has developed a range of alternatives that provide for the long-term protection of reserve resources and the public enjoyment of those resources in a way which is cognizant and respectful of private property rights. (For a comparison of the three alternatives, see “Summary of Actions for Each Alternative” chart at the end of this chapter.)

Please note that “Reserve staff” is defined as staff working for the Trust Board and NPS staff currently assigned to the Reserve.

Actions Common to All Alternatives

Regardless of the alternative ultimately selected by the Trust Board and the National Park Service as the Preferred Alternative, the following actions would be common to each of the alternatives:

Reserve Management and Operations

- It would be recommended that the appointing level of government, either Island County and/or the town of Coupeville, designate a representative of the agricultural community for at least one of the trust board positions. This Trust Board member would be encouraged to be either an active or a retired farmer from central Whidbey Island.

- To help coordinate and guide future land use decisions within the Reserve, it is recommended that all Reserve Partners adopt this GMP as part of their own comprehensive planning as was done for the 1980 Ebey’s Landing National Historical Reserve Comprehensive Plan. This includes adoption of the GMP by the town of Coupeville and Island County as companion measures to their respective comprehensive land use plans.

Natural Resources

- The NPS and Reserve staff would advocate for an integrated pest management program in cooperation with Reserve landowners and other partners.
Agricultural Resources

- The Trust Board and Reserve staff, recognizing that the continued presence of successful agriculture is essential to the mission of the Reserve, would actively work with Island County, the Natural Resources Conservation Service and other partners to promote a viable farming economy in the Reserve.

Visitor Experience

- The Reserve staff would expand interpretation and include those cultures that lived on the land and helped to shape the cultural landscape seen today. This includes Native Americans, early Euro-American settlers, Chinese immigrants, and other peoples.
Keeping with the concept for the Reserve which revolved around citizens’ desire to maintain a viable working community, urban growth needed to be guided to avoid encroachment on the scenic, historic, and natural areas. In order to achieve this goal, three special areas of consideration were identified and defined to help set objectives for the plan. These areas were defined as Public Use and Development, Natural and Historic Preservation, and Private Uses (subject to local zoning controls to protect the historic rural setting). These areas were applied over the entire Reserve boundary regardless of ownership. A definition of these areas from the Reserve’s 1980 Comprehensive Plan follows. (Objectives for these areas are stated on pages 59-62 of the Ebey’s Landing National Historical Reserve Comprehensive Plan.)

Public Use and Development

Public use areas are those areas within the Reserve that the general public may have access to, whether privately or publicly owned. Sites designated “public use” have historic and natural values. They have potential as primary recreational areas because of this combination of assets.

Historic and Natural Preservation

Historic areas are defined as specific sites or locations with significant events or people associated with the history of the area. Natural areas are defined as having unique physical features, which remain relatively untouched by human activity.

Private Use Areas

Private use areas are privately owned properties subject to local land use and design controls to which there is no physical public access. (See Figure 11, Management Zoning: Alternative A.)

Reserve Management

Policy and Oversight

Setting the policies and general actions for the Reserve would continue to be the responsibility of the Trust Board within the framework of the Reserve’s legislation, the GMP, and relevant NPS policies and guidelines. Each year, the NPS would conduct an appraisal of the management and op-
The Trust Board would continue to have general policy and oversight of the Reserve partnership and oversee general management and protection of lands with conservation interests acquired using federal money. For all of the Reserve, the Trust Board would continue to pursue the protection of land and resources, provide administration of programs and technical support, participate in the local land use-review process, and be an advocate for and support the concept of the Reserve. (Refer to “Background of the Park” chapter, “Ebey’s Landing National Historical Reserve Trust Board” section for specific information on Trust Board composition and responsibilities.) The Trust Board would continue to be evaluated by the Deputy Regional Director in Seattle for the Pacific West Region.

Management
The Reserve Manager and support staff would continue to provide day-to-day administration and operational support and develop and implement public use, interpretative, and educational programs for the Reserve. Under Alternative A, the Reserve Manager would continue to report directly to, and be supervised by, the Trust Board.

The Cooperative Agreement between the NPS and the Trust Board would be revised to clarify the evolving roles and responsibilities of each party.

Under this Alternative, the NPS would continue to support the part-time NPS Cultural Resource Specialist/Trust Board member. The NPS Cultural Resource Specialist, acting in a liaison capacity with the Trust Board, would continue to seek funding from NPS sources for resource management, interpretation, and maintenance, and undertake long-range strategic planning in concert with the Government Performance Results Act (GPRA) on behalf of the Reserve. (Staff composition for Alternative A is detailed in the “Staffing” section of this alternative.)

The NPS staff in the Reserve would respond to all NPS reporting requirements with the exception of the annual Volunteers in the Park (VIP) report and the service-wide interpretation report, which the Trust Board staff would prepare.

The Trust Board would be responsible for reviewing comments by Reserve staff on land use actions by the town and county and submitting recommendations to these government entities concerning whether actions will have an effect on the protection of the Reserve resources.

Cultural Resource Management
The following ongoing actions in the area of cultural resource management would be expected to continue under Alternative A.

Cultural Landscape
The Trust Board would continue to participate in the town and county design review boards to further protection of the cultural landscape.

The prehistoric and historic resources within the Reserve would continue to be documented and evaluated, and research on special topics would be pursued, such as ethnographic consultation with modern day-traditionally associated people to gain knowledge of important structures and landscapes within the Reserve. The Reserve staff would continue to promote awareness of the significance of the cultural landscape and its associated features.

Historic Buildings and Structures
As buildings and structures reach 50 years of age within the Reserve, they would be documented and evaluated to ascertain their contribution to Reserve history and added to the National Register of Historic Places as appropriate.

National Park Service staff would conduct research necessary to preserve and protect NPS-owned historic properties, which include some of the more significant structures of the Reserve. Funding permitting, the NPS would stabilize and potentially utilize NPS-owned historic structures in accordance with the Secretary of the Interior’s Standards. These include the Ferry House and associated buildings (shed and outhouse); the Jacob
Ebeys Landing National Historic Site (the Block house has already been stabilized) at the West Ridge property; the Rockwell House at Farm I; and the historic structures at the Reuble Farmstead at Farm II.

The NPS and Trust Board would work cooperatively with property owners in the Reserve to provide assistance upon request that would include the following:

- Information on historic structure preservation.
- Continue to enhance the Trust Board reference library.
- Conduct seminars and training in historic preservation, including buildings, landscapes, design review among other relevant topics.
- Offer special events and outreach programs to residents and visitors related to the cultural landscape and preservation.

Additionally, the NPS Cultural Resource Specialist would work with the town and county to revise historic preservation guidelines that have been formulated to protect the Reserve’s historic properties and natural features.

**Collections Management**

The Reserve would continue to work with North Cascades National Park Service Complex to conserve and store the artifacts that resulted from work on the Ferry House foundation, the Jacob Ebey Blockhouse, and other buildings and areas of NPS activities.

**Archaeology**

Archaeology work within the Reserve has been limited since the majority of land is in private ownership. Thirty-five sites have been documented and the possibility of finding additional sites remains high. Additional reconnaissance and subsurface testing would likely increase the number of recorded sites. The NPS staff would continue established resource protection measures for the identification and treatment of archaeological resources as required by NPS management policies, working on NPS-owned lands unless otherwise authorized.

**Compliance Activities**

The NPS in collaboration with the Reserve staff would continue required federal compliance with the National Historic Preservation Act for activities within the Reserve to ensure compliance with Section 106 and 110 to support historic preservation goals. The Reserve staff would strive for enhanced consultation and relationships with affiliated tribes.

**Natural Resource Management**

The following ongoing actions in the area of natural resource management would continue under Alternative A.

**Natural Processes**

The Reserve staff would continue to promote and encourage natural processes and disturbance regimes for all natural management zones. This includes recognizing and understanding the significance that the protection of biological diversity on central Whidbey Island and the coastal environment plays in the overall ecological health of the Reserve. The Reserve staff would be advocates for natural processes throughout the Reserve (not just on NPS-owned lands or those that are NPS zoned as Natural).

**Geology, Soils, and Air Resources**

The Reserve staff would continue to encourage Island County to recognize and support the preservation of prime and unique farmland soils in the Reserve. (The NPS is required to analyze “prime and unique farmlands” in the preparation and review of EISs. This includes the identification of farmlands or soils that are of statewide and local importance. This document also includes the analysis of important state soils.) These soils are most valued for farming and are a declining resource. Once developed for other uses, such as residential, these soils are lost for future agricultural uses.

The NPS would continue to incorporate night sky preservation provisions in easement language.

**Water Resources**

The Reserve management and staff would continue to advocate for the protection of wetlands, impoundments, riparian areas, and aquifer re-
Vegetation

Vegetation management would be coordinated with the Reserve’s fire management plan, available in the fall of 2005. The Trust Board would continue to monitor the Reserve’s woodlands where already protected by NPS fee ownership or by conservation partners.

The Trust Board and the NPS staff would continue to be advocates for native plant community preservation. The Reserve staff would identify areas where the reestablishment of prairie species has a high probability of success. Native prairie plant communities would be reestablished at selected sites. NPS staff would continue to pursue project funding for protection and recovery of the threatened golden paintbrush and work with partners to ensure its viability within the Reserve.

To help encourage the establishment and role of native plants, Reserve staff would continue to be an advocate for the retention and establishment of hedgerows. Hedgerows help define cultural land use patterns dating to mid-1800s settlement and depict some of the first Donation Land Claim boundaries. The “Ebey’s Landing Hedgerows” brochure would be updated, reprinted, and distributed, informing the public about the history of hedgerows and their value to wildlife.

Through wide use of partnerships, the Trust Board and NPS staff would work together to continue the removal and eradication of exotic species on a site-by-site basis. A compatible roadside vegetation program would be encouraged through coordination with Island County, landowners, and other partners. Reserve staff would continue to inventory vascular plants throughout the Reserve and seek funding for implementing the Recovery Plan for the Golden Paintbrush (USFWS, 2000).

The NPS and Reserve staff would continue to strive to gain additional baseline knowledge of various species through surveys, volunteer projects, plant restoration projects, and others, such as the proposed 2005 multi-taxon, “Bio-Blitz”, inventory (an intensive, 24-hour natural resource inventory involving dozens of specialists from many disciplines).

Depending upon funding, research and monitoring needs as identified and prioritized in the 2001 NPS Vital Signs Workshop would be implemented by the NPS with assistance from the North Coast and Cascades Network or NCCN (the cluster of eight NPS parks in Washington and northern Oregon having similar natural characteristics that are grouped together for many logistical reasons). (See Appendix D, Vital Signs Workshop List.)

Wildlife

The direct management of NPS-owned lands and support for other lands within the Reserve would help provide for the protection of threatened and endangered species under applicable federal and state laws. Cooperating parks within the NCCN would continue to assist in species inventories and finding funding to implement research and monitoring efforts as prioritized in the 2001 NPS Vital Signs Workshop.

Compliance Activities

The NPS in collaboration with the Reserve staff would continue required federal compliance with the National Environmental Policy Act for all federal actions affecting the environment. This requirement also would include compliance with Section 7 under the Endangered Species Act, and all other relevant environmental laws.

Agricultural Resources

Protection of Reserve Agricultural Lands

The protection of agricultural lands within the Reserve and the retention of historical patterns of agricultural land uses in the Reserve would continue to be achieved through the purchase of easements and development rights on specific key parcels. These would be obtained from willing sellers.
using congressionally appropriated funds from the Land and Water Conservation Fund. Where a fee interest in land is obtained, NPS Lands Division staff in conjunction with the Trust Board would continue to explore a wide variety of protection options that could involve the saleback, leaseback, exchange or retention of these agricultural parcels. The identification of key agricultural parcels for additional protection would be linked to the Reserve’s Land Protection Plan.

The extent of change allowed on key agricultural parcels would be defined in conservation easements prepared jointly by the NPS and Trust Board. Easement language would include defining various types of crops and agricultural uses that help maintain the historic landscape and preserve the landscape character. The NPS recognizes that some flexibility would be needed to allow for changing agricultural practices. The NPS would work with the Reserve staff to develop a conservation easement administration plan.

The NPS would track integrated pest management practices (IPM) on NPS-owned farmlands as required by Executive Order 13112 (Invasive Species) and directors Order 77-7.

**Prime and Unique Soils**

The Reserve staff would continue to encourage and support the preservation of prime and unique farmland, and farmlands of state and local importance, coordinating with Island County, the Natural Resource Conservation Service (NRCS) and other partners. These soils are most valued for farming and are a diminishing resource. Once developed for other uses, such as residential, these soils are lost for future agricultural use.

**Technical Assistance and Public Awareness**

Reserve staff and partners would continue, upon request, to provide information on where to find technical assistance for private landowners regarding organic, sustainable farming, as well as the preservation of historic structures and landscape features such as hedgerows, orchard remnants, archaeological sites, and small-scale features important to the integrity of the cultural landscape.

The Reserve staff would continue to promote public awareness of the Reserve’s rich agricultural and archaeological heritage and the importance of the agricultural community to the economy, way of life, and overall character of central Whidbey Island.

**NPS-Owned Farms**

**Farm I and Farm II**

In 2000, the National Park Service became fee title owners of two dairy farm properties within the Reserve. These are known as the former Engle Farm properties, referred to as Farm I, which includes the historic Rockwell House, and Farm II which includes the Reuble Farmstead.

Though the NPS originally sought a partial interest (conservation easement) in the former Engle farm properties, circumstances required that the NPS acquire a full fee title interest. These properties have historically been used principally for dairy farming. The NPS has neither the expertise nor the desire to be long-term fee title owners of these two farm properties. In keeping with the mission of the Reserve, the best use of the land would be to continue agricultural use while protecting the historic and scenic resources. As such, the NPS would promote the continued agricultural use of these lands in a manner in which the farm properties would retain their open space, scenic, and cultural landscape values while contributing positively to the agricultural economy of central Whidbey Island.

To achieve these goals in Alternative A, the NPS proposes to dispose of both Farm I and Farm II, preferably through a land exchange for other priority property interests in accordance with 36 CFR, Part 18. Until a suitable land exchange can be identified, the NPS could consider other strategies, such as a historic property lease (36 CFR, Part 17), a cooperative agreement, or a special use permit, to promote appropriate use of the farm. The NPS would continue to rehabilitate historic structures at the Reuble Farmstead and the Rockwell House to the extent possible until the properties are exchanged. If no exchange opportunity exists, then rehabilitation work would continue while special use permits, cooperative agree-
ments, and/or historic leasing would be sought. A NPS Special Use management zone would need to be created to allow for disposition of federal property.

**West Ridge Property**
The property consists of leased farmland and several structures: the Jacob Ebey House and Blockhouse, the Cottage, a sheep barn and a machine shed. Two of the structures are listed on the National Register of Historic Places: the Jacob Ebey House and Blockhouse. The West Ridge property was purchased from The Nature Conservancy in 2002.

The Jacob Ebey House and Blockhouse were originally constructed in the 1850s as part of the Jacob Ebey donation land claim on the upper bench above Ebey’s Prairie adjacent to dense woodlands. The Blockhouse is one of four remaining in the Reserve and originally was built to provide safety for early settlers from the threat of Indian attack. Both structures would continue to function as (unsigned) outdoor exhibits for public viewing.

The Cottage was built in the 1940s as a house and later altered with the addition of an attached garage. It would continue to be used as the administrative headquarters by the Trust Board of Ebey’s Landing National Historical Reserve.

The 60-acre tract of agricultural fields would continue to be leased and actively farmed. It would be retained in federal ownership and zoned a Special Use Zone in NPS management zoning. When considered for future disposition, as an exchange, or outright auction and sale, the disposition would be in accordance with 36 CFR, parts 17 and 18.

**Recreational Resource Management**
The following actions would continue under the No Action alternative in regards to recreation and public use activities within the Reserve.

**Trails and Walks**
The Reserve staff would continue to work with partners to maintain and expand the existing hiking, biking, and horse trails into an integrated network within the Reserve. The Reserve would continue to publish the existing driving and bicycling tour brochure and Coupeville walking tour brochure, and work with partners to promote the tours. As part of a comprehensive sign system, in the long-term, the Reserve would implement a trail sign plan in conjunction with partners for unobtrusive trail signage within the Reserve.

**Appropriate Uses**
The Trust Board would strongly encourage appropriate recreational watercraft use within Penn Cove to maintain quiet for both people and fauna. The Reserve staff would provide information to visitors about water-based recreational opportunities, such as fishing, boating, and diving. In conjunction with Washington State Parks, The Nature Conservancy, and other partners, the Reserve would develop standards and appropriate locations for paragliding, model airplane flying, and other recreational uses within the Reserve. The Trust Board would continue to support opportunities for passive and leisure activities in the Reserve including photography, bird watching, antique shopping, painting, history tours, and other pursuits.

**Scenic Resource Management**
As part of ongoing efforts, the Trust Board would endeavor to protect scenery and historic views. Scenic views from existing waysides and pullouts would be maintained. In addition, the Trust Board would continue to help influence the placement of new structures on the landscape to minimize visual impact.

Through use of Land and Water Conservation Funds appropriated by Congress and managed by the National Park Service, and assisted by private conservation efforts, the Reserve would endeavor to protect valued open space and the scenic beauty of the Reserve. Property interests would be conveyed to the NPS through opportunity purchases from willing sellers. These purchases would emphasize the acquisition of scenic or conservation easements, coupled with some modest amount of fee title purchases, and donations and bargain sales of an easement or other interest in
property. Acquisition priorities would be based upon the amended land protection plan subsequent to this GMP.

**Interpretation and Education**

**Exhibits and Interpretive Media**

Current wayside exhibits in the Reserve would be maintained to NPS standards. New additions would slowly be made to the existing network of wayside exhibits and pullouts through new and expanded partnerships.

In addition, a new Long Range Interpretive Plan would be produced for the Reserve in conjunction with the NPS Pacific West Region and the Harpers Ferry Center staff.

The Reserve staff would continue to support the traveler information station (TIS) at 1610 AM that provides radio information to travelers and motorists driving to and through the Reserve. National Park Service staff would continue to upgrade the webpage as requested by the Trust Board. This website could link the Reserve’s electronic site to other related websites within the National Park System. Reserve staff would continue to distribute “Reserve orientation” videos and brochures to museums, the Central Whidbey Chamber of Commerce, and other contact points as appropriate.

Public information literature would continue to provide information about camping within the Reserve, along with information about wildlife viewing opportunities through the Internet, brochures, and partners such as Au Sable Institute and Whidbey Audubon. Finally, the Trust Board would endeavor to find suitable locations within the Reserve for the NPS Passport Stamp in addition to the Island County Historical Museum.

The Ferry House, and Jacob Ebey House and Blockhouse, would continue to be available to the public for outdoor viewing as exterior exhibits.

**Visitor Center/Contact Station**

The Island County Historical Museum would continue to serve as the defacto Reserve visitor center under this alternative. Central Whidbey and Reserve history is included along with other island history at the museum. Reserve maps and interpretive materials would be available to visitors at the museum. A Reserve exhibit within the museum would be maintained and revised as necessary. The Trust Board staff would continue to provide training to museum docents as requested.

**Partnership Programs**

The Trust Board would continue to collaborate with non-governmental organizations (NGO) and nonprofit entities engaged in public education, conservation, historic preservation, and resource stewardship to a limited degree. Limited interpretive programs for residents, school groups, and others would continue.

**Interpretive Guided Tours**

Private operators would continue to provide limited guided tours of the area under this alternative.

**Reserve Facilities**

**Visitor Facilities**

The Island County Historical Museum would continue to serve as the defacto Reserve visitor center under this alternative.

**Administrative Facilities**

Under this alternative, the Reserve staff would continue to occupy offices in the Cottage (former residence) near the Sunnyside Cemetery near the edge of Ebey’s Prairie. An addition, the resources office in a small building at Farm I would continue to be used as a natural resources management office until the farm is exchanged or sold.

**Maintenance Facilities**

In the short-term, until the Farm II is sold or exchanged, the NPS would continue to use the Reuble Farmstead cluster at Farm II for maintenance facilities for the Reserve. Maintenance support would continue to be provided by staff at North Cascades National Park Service Complex subject largely to the availability of special project funds. Hand and power tools, and machines for mowing and brushing would continue to be stored at the Farm II. Historic preservation craftsmen from North Cascades National Park Service Com-
plex would continue to use the woodworking shop in the Reuble Farm for restoration projects such as the Ferry House windows and doors, subject to available funds.

The Trust Board would continue to hire a seasonal summer employee to perform minor maintenance, including mowing, litter removal, weeding, and sign/interpretive panel maintenance. Special project assistance, such as trail development and brush clearing from waysides, would be provided by North Cascades National Park Service Complex maintenance staff or other NPS park staff as funding and staffing allowed. A small volunteer maintenance program would augment Reserve maintenance. There would continue to be limited support from North Cascades National Park Service Complex for a long-term maintenance planning program or to maintain NPS-owned structures and property. There would continue to be a need for on-site management of the NPS maintenance management system (MAXIMO). The NPS staff would continue to work with North Cascades National Park Service Complex to seek maintenance funding through a variety of internal NPS sources.

Once the Reuble Farmstead is exchanged, the maintenance facilities would need to be relocated to a site elsewhere within the Reserve once Farm II is exchanged or sold. The NPS and Trust Board would explore various partnering opportunities for long-term maintenance needs with units of local and state government (potentially as part of the in-kind service requirement for the Reserve), non-profits, and individuals.

### Reserve Operations

#### Staffing

This alternative assumes current staffing levels in support of the Reserve, including both NPS and Trust Board positions. The Reserve currently has four staff positions, three of which are part-time. Administrative support (such as purchasing and payroll) for the NPS staff is provided by North Cascades National Park Service Complex and the Pacific West Region. The NPS Cultural Resource Specialist/Trust Board member would remain a combined position served by one NPS employee.

Staffing includes the following positions:

- Reserve Manager (Trust Board employee).
- Part-time Administrative Assistant (Trust Board contractor employee).
- Resource Management Specialist (NPS employee supervised by North Cascades National Park Service Complex).
- NPS Cultural Resource Specialist/Trust Board member (NPS employee supervised by Pacific West Region—Seattle Office).

#### Base Allocation

Total federal allocations for the Reserve in 2005 are $282,000.

#### Fees

There are no fees for entering the Reserve. However, there is a daily parking fee at both Fort Ebey and Fort Casey state parks. The Island County Historical Museum located in Coupeville charges an entrance fee. This museum currently serves as the Reserve’s visitor center, and visitors may receive information without paying a museum admission fee. None of the fees collected by partners goes toward the Reserve’s operating costs.

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**Hours of Operation**

Since the Reserve is primarily private land, there are no standard “park” hours. However, the Reserve’s administrative offices are generally open on weekdays from 9:00 am to 5:00 pm. The Island County Historical Museum is open year-round on the weekends and has varying seasonal weekday hours. Most of the town shops and restaurants are open from 10:00 am until 5:00 pm daily.

**Transportation, Access, and Circulation**

The most significant change in the Reserve’s circulation in the last two decades has been the addition of roads. Many of these roads serve as connections between residential properties and major roads. Two significant changes include the addition of a road through the western woodland and along Keystone Spit. Almost all pre-1950 roads still exist. Madrona Way served as the highway before a new highway was built inland in the 1970s to handle increasing traffic. Since all the major historic roads still exist today, the pre-1950 circulation has retained its integrity (Rottle 2003).

State Route 20 serves as the main access through the Reserve. It follows the historic roadbed in the majority of the corridor. The Reserve staff would continue to work with Washington State Department of Transportation (WSDOT) regarding any road improvements within the Reserve. The role of the Reserve staff would be to assist WSDOT in better understanding NPS road design standards and visitor use of roads through national park system units. In addition, Reserve staff would review proposals affecting road realignments or road closures within the Reserve.

Additional access within the Reserve is provided by town streets, primary and secondary county roads, and non-motorized trails. The public is discouraged from entering private roads and the Trust Board asks visitors to respect private property.

Island County Transit bus service would continue to provide free service in central Whidbey along the State Route 20 corridor through Coupeville. Reserve staff would work with Island Transit to increase the advertising of this service to all visitors to the Reserve.

The Reserve would continue to encourage pedestrian/bicycling use of town and county trails as commuter routes into the Town of Coupeville.

**Carrying Capacity**

Carrying Capacity is defined as the type and level of visitor use that can be accommodated while sustaining the desired resource and social conditions that complement the purposes of the Reserve and its desired future conditions. There are three major components of carrying capacity: physical capacity (such as parking spaces, facility space, road capacity); visitor experience (such as congestion in the visitor center/contact station or solitude on trails); and resources (including natural and cultural resources). The carrying capacity in a given area could be exceeded for any of these components, which would elicit management action.

Since the Reserve is not a traditional park that is NPS-owned and managed, carrying capacity is difficult to define, and therefore manage, by traditional NPS methods. Within the Reserve, Washington State Parks manage their facilities and visitor use including wayside areas on state-owned land. Washington State Ferries manages its facilities and visitor use. The same is true for Island County and the Town of Coupeville for managing their parks and visitors. Furthermore, there are additional private organizations and attractions within the Reserve offering many visitor opportunities that must deal with visitation on a daily basis.

Parking is currently provided at the state, county, and town parks, Keystone Ferry landing, in town and at private organizations. In addition, limited parking is provided at the county and state owned waysides within the Reserve. The NPS owns and maintains two waysides. The Prairie Overlook has parking for eight vehicles and the Prairie Wayside has parking for five vehicles and RVs. These waysides are rarely full, though at certain times in the summer, the Prairie Overlook by the Sunnyside Cemetery can reach capacity.
The bluffs, trails, and beach at Ebey’s Landing are well visited throughout the year. On summer weekends, the parking lot is usually full by late morning. When this occurs, visitors park along a wide berm on the county road. After this area is full (summer afternoons), visitors park illegally along Hill Road (where no berm exists).

According to the 1995 visitor survey, most visitors arrive by private vehicle (88 percent) which means that the public will continue to need parking areas. The places within the Reserve with the highest number of visitors were the Town of Coupeville, followed by Fort Casey State Park, Fort Ebey State Park, the lighthouse, and Camp Casey. These places have ample parking and are not owned or managed by the NPS. The least visited places (also having limited parking) were Crockett Lake, Sunnyside Cemetery, Prairie Wayside, and the Ridge Trail (University of Washington 1995). Island County bus service—Island Transit—is free on the island, but does not access all the areas within the Reserve.

At Ebey’s Landing, the Bluff Trail is occasionally congested and heavily used, with numerous social trails and violations such as having dogs off-leash, and non-permitted uses (mountain bikers and horses on trails not designated for these uses, and hang gliders in areas not permitted). These activities lead to increased vegetative trampling, trail widening, erosion, real or potential damage to sensitive native species such as the unusual prickly pear (*Opuntia fragilis*), and conflicts with law-abiding hikers. The NPS owns approximately one-third of the Bluff Trail and The Nature Conservancy (TNC) owns the remainder. The NPS is currently addressing these issues with TNC. In addition, in 2002, the North Cascades National Park Service Complex Trail Crew Staff conducted a trail assessment and provided recommendations on how to mitigate the damage to the trail. It is the intent of the NPS, in collaboration with the Trust Board, State Parks, and TNC to fully implement these recommendations.

**Reserve Boundary**

The boundary of the Reserve would be retained in its present configuration as referenced in legislation. The current Reserve boundary is the same boundary as the Central Whidbey Island Historic District established in 1973, which was based on the historic donation land claims of the 1850s.

**Land Protection**

**Land Protection Methods**

In the enabling legislation for the Reserve, the Secretary of the Interior was instructed by Congress to transfer management and administration to the state or appropriate units of local government when it was certain that adequate land use regulations were in place to protect the rural landscape. Under the No Action Alternative, the protection of land and associated open space, cultural landscapes, and scenic values would continue to be largely influenced by county and municipal government regulations. These regulations would include land use controls such as subdivision regulations, zoning, minimum lot sizes, and design review.

The Island County zoning district affecting most of the land within the Reserve, the Rural Zoning District, allows the development of one house per five acres. This zoning district constitutes 30 percent of Island County, but 47 percent of the land within the Reserve. Depending upon future build-out of this density, this type of development pattern would significantly alter the existing visual character of the Reserve, which the enabling legislation for the park seeks to protect.

Figure 12, Build-out Scenario, shows an existing site within the Reserve (top photo) along State Route 20, which is zoned Rural and allows for five-acre single-family development. Using the existing zoning allowances for maximum lot coverage, maximum building height, and accessory buildings, the lower photograph visually depicts the potential scale of development. The total parcel size is 45 acres, which allows for the development of nine lots. (This parcel is currently owned and protected by NPS and is used for demonstrative purposes in this photo.)
Alternatives

Local Land Use Regulations and Guidelines
The Trust Board would continue to rely on existing Island County and Town of Coupeville zoning and land use regulations. The Trust Board would continue to rely on the town’s historic overlay zone within portions of the Town of Coupeville to assist in the protection of the Reserve’s historic and natural values.

Trust Board and Reserve staff would continue to inform county and town elected officials when a proposed land use change or action within their respective jurisdictions is contrary with the values, resources, and public use and enjoyment of the Reserve. The Trust Board would provide specific recommendations to decision-makers to either suggest modifying a proposal or recommend disapproval of a land use change or action.

Design Review and Design Guidelines
The Trust Board would continue to comment on various land use and development proposals so that county government could evaluate the potential affect of the project on the significant historical, agricultural, scenic, and natural resources of the Reserve and to better inform the county land use decision-making process.

In addition, the Trust Board would continue to support the Coupeville Design Review Board and the Island County Historical Advisory Committee, whose role is to inform officials concerning the siting of new structures within the unincorporated portion of the Reserve, and review proposals for alternatives and additions on existing structures. Guidelines for both entities would be modified as needed with the Trust Board being an advocate for those proposed changes.

Funding for Land Protection
Under Alternative A, the LWCF would remain the primary source of land acquisition funds for the Reserve. This could be augmented by the efforts of nonprofit land trusts and individual citizens.

The trend of securing a variety of less-than-fee interests, such as conservation easements on key parcels from willing sellers would continue. The NPS would acquire specialized easements utilizing appropriations secured by Congress from the Land and Water Conservation Fund. As funds are made available, the acquisition of conservation easements would continue. The acquisition of these interests would result in the protection of important cultural landscapes, scenic vistas, and significant natural features, and help to augment any land use protection measures of local government. In the past, there has been some limited, fee title purchase of land from willing sellers who did not desire to convey an easement interest. This alternative would anticipate that some additional, limited, fee title purchases would occur in the future in similar circumstances. Fee title purchase may also be needed in order to secure public use and access, where the seller desires to transfer full ownership of a property, or for use in a land exchange.

Under this alternative, The Trust Board would continue to oversee management of NPS conservation easements. Nonprofit land trusts and other programs would continue to assist NPS efforts in land protection. This could include support from the Whidbey Camano Land Trust, Island County’s Conservation Futures program (supported by the county portion of the real estate excise tax), The Nature Conservancy, Trust for Public Land, and other entities.

Continued private stewardship of Reserve lands would be expected to continue with some potential donation of lands or interest in lands to the NPS or other land preservation entity.

Land Protection Priorities
Under this alternative, the priority for the protection of land within the Reserve would be based on the subsequent land protection plan as funding and opportunities arise.

Land Use Measures
Under the No Action Alternative, the following factors help determine land use management and land protection.

Alternatives 109
Action Items

Implementation of Alternative A would call for the following actions to occur:

- Initiate prairie restoration.
- Revise historic preservation guidelines for Coupeville.
- Develop comprehensive sign plan (including trails).
- Develop recreational plan with partners (standards and appropriate locations for activities).
- Participate in Washington State Parks comprehensive planning process.
- Continue to purchase conservation easements, as funding allows.
- Monitor conservation easements.
- Complete conservation easement administrative plan.
- Track IPM practices on federally-owned farmlands.
- Develop long range interpretive plan.
- Update land protection plan.
- Revise cooperative agreements between Trust Board, NPS and partners.
- Assure NEPA/NHPA compliance on all federal actions (as required by law).
Alternative B—Preferred Alternative

General Description

This alternative constitutes the Preferred Alternative for Ebey’s Landing National Historical Reserve. The Trust Board and the National Park Service would respond to new operational and land management realities by enhancing programs, resources, and administrative and visitor facilities. This alternative would focus on promoting agriculture, protecting resources, and providing for greater opportunities for public education and enjoyment.

The NPS would seek increased budget appropriations from the National Park Service operating base to enlarge staff presence at the Reserve. The profile of the Reserve staff would expand from four to ten staff positions comprised of both Trust Board and NPS employees. Staff composition would expand the limited maintenance and resource capabilities and allow for education and interpretive positions.

The Trust Board would adopt a new land protection plan subsequent to publication of this GMP that would better articulate the long-range land protection needs by prioritizing highly valued landscapes. Emphasis would continue to be upon the purchase of conservation easements from willing sellers, augmented by land use protection measures by local government and nonprofits. The establishment of an overlay district in the unincorporated portion of the Reserve (not to be confused with the existing town’s historic overlay zone) would be one of several key recommendations for strengthening design, zoning, and permitting authorities by Island County and the Town of Coupeville.

The Reserve staff would expand its role in natural resource protection within the Reserve by partnering with other organizations and agencies, when appropriate, on such issues as prairie restoration, roadside vegetation, protection of prime and unique agricultural soils, air and water quality, elimination of exotics and protection of night sky/natural quiet.

Facility improvements would include new information kiosks at three gateway areas into the Reserve and a visitor center/contact station in an historic building in either the town of Coupeville or in the historic district to inform the public about the Reserve. This building could also serve as the Reserve’s administrative headquarters. This alternative would promote partnerships with others to achieve education and visitor goals.

To promote agriculture within the Reserve, the NPS would seek to exchange NPS-owned farms to private owners for additional protection on other properties within the Reserve. The NPS-owned historic buildings would be stabilized and the Jacob Ebey House and Ferry House rehabilitated in accordance with the Secretary of the Interior’s Standards. The NPS would retain protective easements on the Rockwell House and Reuble Farmstead, as well as on the adjoining farmlands, before they are exchanged.

As in Alternative A, once the Reuble Farm is exchanged, the Reserve’s maintenance facility would need to move. The Reserve would explore partnering opportunities with units of local government, nonprofits, or others within the Reserve.

Congressional legislation would also be sought to provide for a modest boundary expansion of the Reserve to incorporate additional prairie, agricultural lands, and wetlands. These would include the remainder of Crockett Lake and the Naval Air Station-Whidbey Outlying Landing Field not currently within the Reserve, additional portions of Smith Prairie, and Bell Farm in the northwest area of the Reserve. Any boundary changes proposed would be fully coordinated with willing property owners and managers.

The Trust Board would work with the public, the Island County Marine Resources Committee, and other agencies to protect the coastal waters adjacent to the Reserve.

Three development concept plans have been included at the end of this alternative showing detailed treatment of the South Gateway, the Ferry House, and a portion of the West Ridge property.
Management Zones

Four NPS management zones were developed to guide future management actions within the Reserve. (See Figure 13, Management Zoning: Alternative B.) They include a Cultural and Natural Preservation Zone, Visitor Use and Development Zone, Administrative Zone, and Special Use Zone. Management zones vary according to the kind of resource conditions that exist within the Reserve, the type of visitor experiences that would occur, and how these areas would be managed.

Unlike most national park units that are entirely owned and managed by the NPS, most of the land within the Reserve is in private ownership where local government zoning and regulations prevail. The planning team discussed whether to place management zones on land owned in fee by the NPS and on lands with conservation easements held by NPS. For those lands with NPS easements, it is possible that private owners would object to being in a management zone that addresses public visitation. However, to promote protection of resources on private land, the planning team decided to include the private land within the Reserve as part of the Cultural and Natural Preservation Zone. On private lands there would be no public visitation or activities or facilities. There is also land within the Reserve owned by other public local and state agencies. These other public lands may experience public visitation and could develop facilities within the Reserve, unlike the private lands. These private and other public lands are shown separately on the zoning map with cross-hatching. Private owners, and other public land managers, would be expected to be stewards on their own lands with NPS and Trust Board assistance. Private owners would be eligible for incentives that would be established and available.

Cultural and Natural Preservation Zone

Resource Condition or Character

The management focus of this zone would be on maintaining and protecting the cultural and natural resources, such as the resources and experiences related to pre-history, the first permanent settlement on Whidbey Island by Isaac Ebey, the Donation Land Claim settlements and subsequent settlements, and the development of the Town of Coupeville. Resources and experiences would include those cultural landscape features that contribute to the preservation of the rural community such as agricultural fields and associated outbuildings. Resources and experiences related to coastal, woodland, upland, prairie, and wetland ecosystems and communities would be accommodated. Archaeological resources would be part of this zone.

The setting in this zone would be historic and natural, keeping resources at a high level of integrity. The historic buildings and landscape would be managed to protect the Reserve and to maintain the rural landscape character. The landscape would be managed to support visitor use and enjoyment of park resources to the extent that the Reserve’s resources would remain protected.

Visitor Experience

Visitors would be immersed in an outdoor, cultural and natural environment that is rich in Pacific Northwest his-
Visitor Use and Development Zone

Resource Condition or Character

The management focus of this zone would be on interpretation and visitor use opportunities. Resources would be modified for essential visitor and Reserve operational needs. Education and interpretive facilities and services would be provided for visitor use. This zone would serve as a primary entry into other zones within the Reserve.

Tolerance for resource degradation in this zone would be low. Visitors and facilities would be moderately managed in this zone for resource interpretation, visitor safety, and visitor needs. Although buildings, structures, and other signs of human activity would be obvious, there would be natural elements present in a “park-like” setting or in a “small town” environment. The zone would not be located near sensitive natural or cultural resources if such resources could not be adequately protected. Some elements of this zone (for example, waysides or parking) may be located on private property or property owned by Reserve partners through various cooperative agreements.

Efforts would be made to minimize development impacts, and mitigation would minimize landscape and visual impacts, if any exist.

Visitor Experience

In this developed zone, facilities would be convenient and accessible. These
areas would provide many social experiences, and the probability of encountering other visitors or Reserve staff would be expected. At all times, visitors would be encouraged to act in a manner that respects private landowners and private property. Visitors should expect some minor intrusions to the natural soundscape and viewed by traffic, overflights, and other visitors.

**Appropriate Types of Activities or Facilities**

Types of activities would include learning about the Reserve’s natural and cultural resources and its ecological, agricultural, and historical relevance. A range of interpretive, educational, and orientation programs would be provided, with the majority of orientation and interpretation of resources taking place onsite. Additional educational and recreational opportunities would be available to visitors in other venues within the Reserve, such as at Washington State Parks, and Island County Historical Museum.

Examples of this zone would be the proposed visitor center/contact station and proposed gateway kiosks, such as the South Gateway site at Au Sable, the Prairie Overlook, and the Prairie Wayside.

**Administrative Zone**

**Resource Condition or Character**

A variety of facilities and functions that support Reserve operations would be accommodated in this zone. All facilities would be sited and designed to minimize disturbance. Facilities may be modified to harmonize with the Reserve’s setting. They would be located in areas of low impact to sensitive natural resources. Green-design, native landscaping, screening for views and noise would be incorporated. Examples would be administrative offices and maintenance facilities. Historic structures may be adapted for administrative use when appropriate.

**Visitor Experience**

There would be limited opportunities for visitors. An exception would be visitors needing to contact Reserve staff at administrative offices.

**Appropriate Types of Activities or Facilities**

Appropriate activities would include administrative functions and research. The type of facilities would include the following for Reserve operations: administrative offices, supply and storage, conference/meeting space; Reserve partner offices and storage; maintenance offices, workshop space and equipment storage; curatorial space; library; administrative space for volunteers, researchers, VIPs; and associated parking and utilities.

**Special Use Zone**

**Resource Condition or Character**

The focus of this zone would be on NPS-owned fee-title properties (including structures) that have the potential to be exchanged, leased, or sold with conservation easements such as Farm I, Farm II, and the West Ridge property. In accordance with 36CFR part 17.3, no lease or freehold conveyance can be made except for lands which the GMP has designated as a Special Use Zone for the uses that are permitted by the freehold or leasehold conveyance.

Properties that would be placed into this management zone would be for eventual disposal to the private sector and not kept in fee ownership by the federal government. Less than fee ownership, such as conservation easements, would be retained by the NPS. This would allow the land to retain its scenic and agricultural qualities in keeping with the enabling legislation of the Reserve and those qualities which give the Reserve its national significance and status as a unit of the National Park System.

**Visitor Experience**

The visitor experience would be limited. In most cases, the public would not be encouraged to visit these farms, since no interpretation opportunities currently exist and none are anticipated in this zone. Visitors would be able to view the farms as they traverse the Reserve and the agricultural operations would continue to contribute to the sustainability of historic patterns of land use and the rural landscape. In some cases hiking trail corridors would traverse through this zone to link other visitor use areas.

**Appropriate Types of Activities or Facilities**

Appropriate activities would include various agricultural operations in keeping with the scale and character of the Reserve. Appropriate facilities
would be those that sustain the agricultural operations, such as Farm I, Farm II, or the West Ridge property.

Reserve Management

Policy and Oversight

Under this alternative, the responsibility for setting the policies and general actions for the Reserve would continue to be the responsibility of the Trust Board within the framework of the Reserve’s legislation, the GMP, and relevant NPS policies and guidelines. Each year, the NPS Pacific West Deputy Regional Director in Seattle would hold an annual policy level review with the Trust Board. The NPS would continue to conduct an appraisal of the management and operation of the Reserve under the requirements of Paragraph (e), Section 508 of Public Law 95–625.

As in Alternative A, the Trust Board would continue to have general policy and oversight of the Reserve partnership and oversee general management and protection of lands with conservation interests acquired using federal money. The Trust Board would continue to pursue the protection of land, provide administration of programs and technical support, participate in the local land use-review process, and be an advocate for and support the concept of the Reserve.

In the Preferred Alternative, the current NPS Cultural Resource Specialist/Trust Board appointee would be separated into two distinct positions. The NPS Deputy Regional Director in Seattle would appoint a representative from the Pacific Northwest Region with the appropriate senior management or professional background to serve as the NPS Trust Board member.

It is further recommended that two of the seven Trust Board appointments from local governments include representatives from the town and county planning commissions or planning staff. It is proposed that the state parks appointee would be at the district or regional park staff level having direct communication with and reporting to the Director of the Washington State Parks and Recreation Commission.

The Trust Board would develop position descriptions and performance standards for members in order to recruit and maintain high quality participants.

Operations and Management

The Reserve Manager continues to have day-to-day operational responsibilities for the Reserve. The description of the Reserve Manager position would be revised to reflect the work responsibilities, and the Reserve Manager would remain a Trust Board employee under this alternative. The Reserve Manager would report directly to the Trust Board and the Trust Board would hold annual performance and operational reviews with the Reserve Manager.

The Trust Board would set priorities, prepare an annual Trust Board budget, and joint workplan for the board in conjunction with NPS staff. The Trust Board would also be responsible for review and management of NPS conservation easements. NPS staff would meet all NPS requirements for performance evaluations. The Trust Board would provide the NPS Deputy Regional Director in Seattle with an annual performance review of the Reserve Manager.

Cultural Resources

Cultural Resource Management would continue in the same manner as in the No Action Alternative with the following additions.

Cultural Landscape

The Trust Board and NPS would develop a system for tracking, evaluating, and monitoring changes to the cultural landscape within the Reserve. This system would help provide baseline information used to take future actions to diminish impacts and losses to cultural landscape features such as fences, hedgerows, farm clusters, and vegetation. The system should identify the impact on the Reserve from such actions as conversion of agricultural lands to residential and other uses, changes in forest practices and transportation networks.

The NPS and Trust Board would provide a stronger advocacy role in historic preservation throughout the Reserve, working closely with and
through other partners, including traditionally associated tribes, to achieve greater protection of historic and ethnographic resources. This expanded advocacy role would include the greater Reserve community, to gain its support for the Reserve operation.

The Reserve staff would expand the technical library and archives related to Reserve history, historic preservation techniques and practices, and natural resource management information. Staff would assist in facilitating historical research, publishing research findings on various topics, and disseminating information to the academic and historical communities, as well as to the Reserve community.

There would be an expanded role for Reserve staff in interpretation, special events, and outreach programs that is intended to heighten public awareness of the unique qualities that define the rural character of the Reserve and its national significance.

**Historic Buildings and Structures**

Trust Board staff would work with the Town of Coupeville and Island County to update and strengthen design guidelines, zoning, and permitting authorities to assist historic preservation efforts and to promote compatible new construction and in-fill development. Some of this could be accomplished with an overlay zone. (See “Land Protection” section at end of this alternative.)

Stronger design review guidelines are a critical element of a successful cultural landscape protection program. Design guidelines would offer suggestions for how to site new construction without negative visual impacts. These guidelines could recommend architectural and landscape design techniques, styles, colors, and materials in keeping with the Secretary of the Interior’s Treatment of Cultural Landscapes and other recognized and accepted standards for the preservation of cultural landscapes. These actions would provide landowners information and another method in helping them to become stewards for the national historical reserve.

The National Register nomination form would be updated as necessary to ensure recognition of all significant properties over 50 years of age.

The NPS would stabilize and potentially utilize NPS-owned historic structures in accordance with the Secretary of the Interior’s Standards. These structures include the Ferry House and associated buildings (shed and outhouse); the Jacob Ebey House at the West Ridge property. Actions specific to Alternative B are as follows:

**Ferry House**

The Ferry House would be stabilized, the front porch reconstructed, and the building brought up to a level of preservation maintenance, including the shed and outhouse behind the house. Due to its historic configuration and limitations with regard to accessibility, limited tours may be offered at the Ferry House. The building would be equipped with site security appropriate to its historic setting and fabric. (See Ferry House Development Concept Plan for detailed treatment of the site at the end of Alternative B.)

**Jacob Ebey House and Blockhouse**

The Jacob Ebey Blockhouse would be preserved and interpreted as an exterior exhibit. The Jacob Ebey House would be rehabilitated as a seasonal contact station for visitor use. (See Jacob Ebey House and Blockhouse Development Concept Plan for detailed treatment of the site at the end of Alternative B.)

**Rockwell House and Reuble Farmstead**

The NPS would continue to spend limited funds on the preservation of the historic properties at Farm I and Farm II until an exchange could occur. The NPS would retain protective easements while seeking a private owner to acquire the historic buildings as part of an overall exchange of the farm properties for developments rights elsewhere within the Reserve.

**Collections Management**

Treatment for collections would be the same as in Alternative A. In addition, the NPS would develop a museum management plan that would allow for collections storage within the local museum. The plan would outline NPS requirements for storage.
Archaeology
The treatment for archaeology would be the same as in Alternative A.

Compliance Activities
Compliance activities would be the same as in Alternative A and as required by federal law.

Natural Resources
The treatment for natural resources would be the same as in Alternative A with the following additions or changes.

Geology, Soils, and Air Resources
The Reserve staff would encourage activities and programs that promote natural quiet and retain the quality of the night sky within the Reserve. The Trust Board and NPS would actively support the Island County Dark Sky ordinance and seek funding to shield fugitive light from fixtures within key night viewsheds, such as the prairies. Additionally, the Reserve would join existing air quality networks within state and federal agencies including the Washington Department of Ecology, the U.S. Forest Service, the Northwest Air Pollution Authority and others, to gather baseline data on air quality sampling and establish a monitoring program for the Reserve, addressing key monitoring subjects such as meteorology and climate, air pollution, nitrate/sulfur deposition and ozone, and lightscape.

Using a variety of land protection measures, including the purchase of conservation, scenic and development easements, fee purchase, and land swaps, the Reserve staff would work with partners to prevent the loss of prime and regionally important agricultural soils through their conversion to development or other incompatible uses, and to preserve economically viable farm units and open space. In order to assist farmers in minimizing adverse wind erosion during severe storms, technical support from the NRCS would be sought. Funding would be solicited for soils monitoring, including soil fertility, shoreline bluff stability, and prairie soil erosion.

The NPS staff would seek NPS resource management funding for the Reserve to address important research topics such as sea spray influences, effects of the pulp plant in Port Townsend, tropospheric ozone and airborne toxics. In addition, funding would be sought to study land use change within the Reserve, soil quality and its relationship to land use, delineation of prairies, and soil erosion and compaction in relationship to agricultural practices and recreation.

Water Resources
The Reserve staff would work in partnership with others to protect and restore wetlands, and advocate for mitigating for loss and damage where it occurs. Reserve management and staff would pursue partnership opportunities to protect the shoreline environment within central Whidbey Island. Staff would also pursue partnership opportunities with others to enhance natural habitats and corridors.

The Trust Board would encourage area farmers, Island County staff and officials, and others to help protect aquifer and surface waters within the Reserve and strive to minimize the application of pesticides and associated runoff contamination of surface and groundwater resources.

In addition to actions identified in Alternative A, the Reserve staff would also encourage and seek funding for conducting hydrologic assessments of significant landscape features, including Crockett Prairie/Lake, Ebey’s Prairie, and Smith Prairie aquifer recharge area. Proper functioning condition assessment of Crockett Lake would be a basic tool necessary for restoring the ecosystem health of this important wildlife resource.

The Reserve staff, in conjunction with Island County, would encourage the development and implementation of a Penn Cove water quality plan. The intent of this plan would be to encourage the mapping of degradation sources and implement strategies in conjunction with others to reduce impacts that affect the water quality of the Cove. Funding would be sought to address monitoring topics defined in the Ebey’s Landing National Historical Reserve Resources Management Plan related to the adjacent lands and waters of Penn Cove.
Vegetation

The Reserve staff would use partnerships to encourage the expansion, protection, and wise-use of woodlands and prairie plant communities within the Reserve. These partnerships would include working with Washington State University Extension Office, the University of Washington's College of Forest Resources, state and private foresters, Au Sable Institute, The Nature Conservancy, Whidbey Camano Land Trust, and others. Reserve staff would encourage the voluntary involvement of private property owners in these efforts.

Reserve staff with the National Park Service would design and implement a prairie restoration plan in partnership with landowners and other stakeholders in appropriate locations. Active prairie restoration partnerships with other national parks and agencies in the Puget Sound Trough would be established, and joint funding efforts would be initiated.

The Reserve would encourage planning and use of landscaping strategies promoting the propagation and wide use of drought-tolerant native wildflowers, ground cover, and hedgerow species, important to maintaining native wildlife as required by NPS management policies. This strategy also could be applied to roadsides.

Reserve staff would encourage partners to control exotic invasive plant species such as poison hemlock. Funding would be sought for revegetation with native plants, upon removal of targeted exotic species.

The NPS would seek funding to address monitoring issues such as state and federally listed plant status and trends, exotic plant status and trends, status of plant communities and native forests, and impacts on native vegetation from recreation.

In addition, funding would also be used to research issues developed in the Resources Management Plan on wetlands, hedgerows, golden paintbrush management, fire as a management tool, and other specific topics related to the health of the central Whidbey Island ecosystem.

Wildlife

Under this alternative, there would be an increase in the Reserve’s natural resources baseline information through research and field inquiry. In turn, this baseline would be used to update the 1995 resources management plan and project management information system (PMIS) funding requests. Staff would produce and distribute interpretive materials for the public on various natural resource management issues and concerns. In order to educate the Reserve community about wildlife and other natural features in the Reserve, various outreach programs would be conducted along with special events relating to natural resource issues.

The NPS would seek funding to address monitoring questions related to the status and trends of species composition for amphibians, birds, and mammals and other relevant topics. In addition, funding would be sought to address research on topics such as status and trends of species composition, bird assemblages and annual migration, diurnal raptor nesting, and other topics.

Staff would encourage and participate in scheduled inventories by NPS or partners as resources permit.

Agricultural Resources

Protection of Reserve Agricultural Lands

The overall protection of the Reserve’s agricultural lands would be the same as in the No Action Alternative.

Prime and Unique Soils

Staff would encourage partners to prevent the loss of prime and locally important agricultural soils and to preserve economically viable farm units and open space. The Trust Board would establish a “friends group” as a means to assist farm preservation efforts and support viable agriculture within the Reserve.

Technical Assistance and Public Awareness

The Reserve would partner with federal, state, and
local entities to provide technical assistance for property owners regarding grant programs, tax incentives, and other measures to support the preservation of historic farm structures and landscapes.

The Reserve would be an advocate for organic and sustainable agriculture.

In keeping with the historic character, the Reserve would encourage innovative agricultural product development, such as niche agriculture development and grass-based dairies within the Reserve. The Reserve would explore a variety of creative approaches to farming large parcels within the Reserve, such as “condominium” farming, whereby smaller scale specialty farmers can jointly own larger parcels of farmland.

In order to interest investors and others in farm operations within the Reserve, the Reserve staff would cooperate with existing established farm organizations to provide information to interested individuals on the community agricultural resources and history of the area.

The Reserve would support partnerships with the Washington State Cooperative Extension Office, Natural Resources Conservation Service, the Whidbey Island Conservation District and others to advance research on the area’s agricultural history, crop management, farm operations, and other topics that support private, sustained, and viable agriculture within the Reserve. Some of the concepts that could be promoted would include community-supported agriculture (CSAs), branded marketing, licensed products, cooperative processing, marketing and sales, and expanding the Coupeville Farmer’s Market.

NPS-Owned Farms

Farm I and Farm II

The treatment of Farms I and II would be the same as in Alternative A. In addition, before exchanging Farm I, one-acre of land would be retained by the Reserve for the development of a trailhead including a kiosk and visitor parking to access the Reserve’s trail network. The Reserve would acquire a trail corridor through the property. Both the trailhead and trail corridor would be sited in a location that would not conflict with agricultural operations.

West Ridge Property

As in Farm I and Farm II, the West Ridge property would continue in agricultural use while protecting the historic and scenic resources. In Alternative B, the 60-acre agricultural fields would continue to be leased in the short-term. In the long-term, the NPS, in collaboration with the Trust board, would evaluate opportunities to exchange the farmlands after retaining a conservation easement on the fields for conservation easements on other properties within the Reserve. This property would be included in the Special Use Zone of NPS management zoning to allow for disposition.

A sufficient land area would be retained to include trails and to protect the historic setting and historic structures—the Jacob Ebey House and Blockhouse. The Blockhouse would be used as an outdoor exhibit with appropriate interpretive signing. The Jacob Ebey House would be rehabilitated as a seasonal contact station for public use. The Reserve would retain the Cottage for administrative offices. (See West Ridge Property Development Concept Plan at the end of this alternative for detailed treatment of the property.)

Public Awareness of Reserve’s Agricultural Heritage

Reserve staff would work with farmers, Chamber of Commerce, and other partners, to provide and promote agricultural tourism opportunities including farm tours, the sale of local products, and overnight farm stays.

Recreational Resource Management

Trails and Walks

Reserve staff would work closely with various public and private partners to complete and expand the network of hiking, bicycle, and horse trails throughout the Reserve to link existing and proposed waysides and activity areas, including other Whidbey Island trails, as possible. It is intended that public non-motorized use of the Re-
serve would encourage the public to experience a variety of Reserve landscapes and features in a more intimate way. The development of additional trails could help reduce the pressure on currently used popular trails by dispersing users.

Cooperation would be sought with other partners such as Seattle Pacific University (Camp Casey), Au Sable Institute, Washington State Parks, The Nature Conservancy, and others to develop public self-guided nature trails.

A trailhead would be developed at Farm I to serve visitors using the trail network within the Reserve.

Reserve staff would work with partners including Island County to coordinate and develop a water trail along the Reserve’s shoreline linking to existing Whidbey Island, Puget Sound and Washington State marine trails.

The existing driving/bicycling tour route would be expanded in the northern portion of the Reserve and the brochure would be updated by adding additional points of interest for the traveling public.

**Appropriate Uses**

The Reserve would develop a system with partners for monitoring increased recreational use and work with partners to develop measures to mitigate adverse effects on visitor experience, safety, environmental quality, and community character.

**Recreational Information Systems, Sites, and Programs**

Reserve staff would help to provide or facilitate interpretive training for volunteers and private tour operators about the recreational, historical, cultural, and natural resources of the Reserve.

**Economic Benefit of Recreation Expenditures**

It is recommended that Reserve staff update the Reserve’s socioeconomic study to determine how much money people spend in the Reserve and on what activities. This study could include using the NPS Money Generation Model within the Reserve and may require staff applying for grants from outside sources.

**Scenic Resource Management**

Management for scenic resources would be the same as in Alternative A, the No Action Alternative. In addition, the following actions would be taken:

In cooperation with Island County and Town of Coupeville planning staff, area real estate offices and others, Reserve staff would develop a handbook for property owners in the Reserve. This new handbook would provide voluntary building design ideas on how new structures can best be sited on property, and how careful planning and selection of appropriate building materials and harmonious colors can help to minimize the visual impact of new development in the Reserve.

Reserve staff would endeavor to partner with Town of Coupeville, Island County, and Washington State Department of Transportation to maintain and enhance the quality and scenic beauty of the roadside areas within the Reserve. Roadside enhancement could include a native wildflower-seeding program, use of native low-maintenance ground cover (which minimizes mowing along road shoulders) and the careful design and placement of signs that do not detract from scenic views.

Reserve policies and staff would encourage clustering of new developments within the town and county to maximize the amount of common open space that is preserved.

State Route 20 is part of the Cascades Loop State Scenic Highway and designation is pending for National Scenic Byway status. The Trust Board would continue to work with partners for scenic designation on key roads through the Reserve.

The development of additional scenic roadside pullouts, overlooks, and waysides would be encouraged as appropriate. These could include gateway or entry locations, marine trail stops, shoreline access and viewpoints, and links to interpretive sites, trailheads, or nature viewing areas.

In addition, the Reserve staff would work with town staff and officials to define the viewshed from the Town of Coupeville across Penn Cove and assist in its protection by promoting the ac-
The acquisition or donation of conservation or scenic easements on key properties from willing sellers.

The Reserve would work with partners like Island County and Whidbey Camano Land Trust for the protection of scenic lands.

**Interpretation and Education**

**Exhibits and Interpretive Media**

The treatment for exhibits and interpretive media would be the same as in Alternative A. In addition, the following actions would occur:

Collections and photos relating to the Reserve would be interpreted at the local museum.

As an outgrowth of the long range interpretive plan, the wayside exhibit plan would be revised and potentially new waysides identified and sited within the Reserve. The Trust Board would have a key role in interpretive wayside planning. The wayside at the Port Townsend Ferry Landing would be improved to better acquaint visitors to Whidbey Island about the Reserve prior to their arrival on Whidbey Island.

The Ferry House and Blockhouse would be signed and interpreted as outdoor exhibits. The Ferry House may be open for limited tours. The Jacob Ebey House would be rehabilitated for visitor use as a seasonal contact station and would include interior exhibits. Signage would be placed in sensitive locations so as not to detract from scenic and historic views.

Oral histories, historic documents and photographs would be placed on the Reserve’s Internet homepage to allow a “virtual” Reserve visit for those planning a visit or those unable to travel to the area. The Trust Board would work with partners to enhance their websites with accurate Reserve information and provide links to the NPS site as appropriate.

**Visitor Center/Contact Station**

The Trust Board would seek a suitable location for an Ebey’s Landing National Historical Reserve visitor center/contact station and could partner with others such as the town, museum, or Chamber of Commerce in operating this facility. This visitor center/contact station would be in an existing historic facility centrally located, preferably in Coupeville, or in the historic district, in keeping with Executive Order 13006 (requiring federal government to seek administrative space in historic downtowns or districts). The facility would have interpretive exhibits related to the various primary interpretive themes of the Reserve. Reserve administrative offices could be located here.

Within the new visitor center, or a smaller visitor contact station, space could be available to other compatible groups to convey information about area lodging, food, and other activities of interest to the public. The facility should also include a multi-purpose space with audio-visual equipment for orientation and interpretive functions for Reserve visitors, and could serve as classroom space for students, Elderhostel, and others.

**Partnership Programs**

A docent/volunteer program would be initiated within the Reserve and coordinated through a Reserve staff volunteer coordinator and education specialist function that is part of the proposed staffing plan under this alternative.

With the assistance of the Trust Board and a Reserve volunteer coordinator, a Reserve “friends group” would be established to assist Reserve outreach, activities, and programs.

To promote public education about the Reserve, the Reserve staff would hold workshops or special events in conjunction with partners about the historic and natural resources of the Reserve. This education campaign could be done through a variety of methods such as a speakers’ bureau, guest lectures, site bulletins, posters, the Reserve newsletter, and the Internet.

Reserve interpretive and education staff would participate in the NPS “Parks as Classrooms” program to acquaint large audiences with the history and ecology of the Reserve.

Reserve staff would work with partners such as Seattle Pacific University, Au Sable Institute, Audubon Society, The Nature Conservancy and others to hold field schools and other educational and interpretive programs relating to the history.
and ecology of the Reserve.

Reserve staff would participate with other partners to develop interpretive exhibits relating to Reserve ecology at places such as the Coupeville Wharf, Camp Casey, or Captain Coupe Park with an emphasis on shoreline and aquatic resources.

**Gateway Contact Facilities**

Three small “gateway” contact facilities would be developed to aid visitors at the three main entry points into the Reserve—a southern gateway along State Route 20 in the Smith Prairie area, the Washington State Ferry landing at Keystone and/or Port Townsend, and a northern gateway along State Route 20. The facilities would be high quality, professionally designed, interpretive kiosks that are intended to be modest in size, user-friendly, and would not require staff. As funding and staffing is available, the design could incorporate a small desk space for a Reserve seasonal interpreter or volunteer to greet the public and used to staff these facilities seasonally during peak hours. Use of volunteers for these sites would be encouraged. These gateway contact facilities would provide general information about and orientation to the Reserve, including maps.

**Interpretive Guided Tours**

The Reserve staff would conduct interpretive guided tours within the Reserve and not contract out these services. The NPS staff would provide training for personal services for interpretation to NPS standards.

In addition, the NPS would provide training and certification to ensure interpretive standards are met by private operators and partners.

**Scenic Auto Tour Routes**

To maximize the public’s exposure to scenic resources and open space of the Reserve, additional public auto tour routes with directional and informational signing would be encouraged. This effort would be coordinated with partners to ensure integration with a future Long Range Interpretive Plan and sign plan.

**Educational Outreach to Reserve Residents**

In cooperation with local real estate companies, Reserve staff would develop a new brochure about living in Ebey’s Landing National Historical Reserve. This brochure would encourage new residents to reflect upon opportunities for private stewardship and provide information about farming practices, easement information, sensitive construction, and other useful items.

**Reserve Facilities**

**Visitor Facilities**

The Trust Board would seek a suitable location for an Ebey’s Landing National Historical Reserve visitor center/contact station and partner with others such as the town, museum, or Chamber of Commerce. This visitor center/contact station would be in an existing historic facility centrally located, preferably in Coupeville, or in the historic district, in keeping with Executive Order 13006.

**Administrative Facilities**

In the short term, the Reserve’s administrative staff would continue to occupy the Cottage at the Sunnyside Cemetery near the edge of Ebey’s Prairie. In the long-term a new administrative site would be located in an historic building in Coupeville or within the historic district, possibly in conjunction with the visitor center/contact station. The Cottage would be retained for use as resource offices.

In the long term, the Cottage would either be converted to other Reserve uses, or be disposed of through a land exchange for development rights on other priority properties in accordance with 36 CFR, Part 18.

**Maintenance Facilities**

Under Alternative B, an NPS maintenance foreman would be hired and assigned to provide for the long term care and maintenance of NPS-owned structures (both historic and non-historic) and property using NPS contract and volunteer services. The maintenance foreman would be trained on the NPS MAXIMO system, and would oversee long-range maintenance planning and
workshop to set up stationary woodworking equipment, a 4,000 square foot dry storage area for storing building materials and maintenance equipment, a garage with two bays for parking vehicles or other equipment such as mowers/tractors with an enclosed heated area for storage. The maintenance area would require adequate open space for maneuvering trucks, trailers, and other needs. As a contributing partner in the North Coast and Cascades Network, the Reserve could contribute opportunities to assist other parks. Examples of opportunities to assist would include providing space for dry covered 100-ton hay storage, dry covered storage for boats/trailers, and pasture for over-wintering pack stock from North Cascades National Park Service Complex and Olympic National Park. These partnerships would serve the Reserve within the network by earning in-kind services in return that would further benefit the maintenance operation.

Development Cost Estimates
The following costs are estimates for implementing Alternative B. It is assumed that meeting the long-range development needs of the Reserve would not just rely upon federal appropriated funds. A wide variety of other public and private sector funding sources would be sought by the Trust Board to assist in implementation efforts over the next 15-20 years. As has been evidenced in the past, some development costs assigned to certain actions may prove to be less expensive when donated materials, labor, and other support are forthcoming. Costs are expressed in gross construction dollars and include design, compliance, complete minor maintenance work. For those maintenance operations requiring a minimum of two people to work safely in accordance with Occupational Safety and Health Administration and Labor and Industry safe work standards (work including ladder use, roof access, moving equipment, and other tasks involving hazards), the Reserve could use seasonals, volunteers, employees from cooperating network parks, or other partners.

North Cascades National Park Service Complex maintenance staff may continue to provide special project assistance such as historic structure preservation and trail development and brush clearing from waysides, subject largely to the availability of special project funds.

The maintenance facilities now located at the Reuble Farmstead would need to be relocated to a site elsewhere within the Reserve once Farm II is exchanged or sold. The NPS and Trust Board would explore various partnering opportunities for short and long-term maintenance needs with units of local and state government (potentially as part of the in-kind match requirement for the Trust Board budget), non-profits, and individuals.

Facility experts at North Cascades National Park Service Complex familiar with the needs of the Reserve conducted a maintenance needs assessment in December 2004. The report (Belcher and Holmquist 2004) concluded that at a minimum, a maintenance operation at the Reserve would require the following: approximately 600-800 square feet of office space, a 1,600 square foot

<table>
<thead>
<tr>
<th>Development Actions for Alternative B</th>
<th>Total Estimated Costs</th>
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<tbody>
<tr>
<td>Visitor Facilities</td>
<td>$2,100,000 - 2,300,000</td>
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<tr>
<td>Administrative/Maintenance Facilities</td>
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<tr>
<td>Historic Rehabilitation*</td>
<td>$100,000 - 150,000</td>
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<tr>
<td>Trails</td>
<td>$100,000 - 150,000</td>
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<tr>
<td><strong>Total NPS Capital Costs</strong></td>
<td><strong>$2,800,000 - 3,200,000</strong></td>
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<tr>
<td><strong>Total Average Annual Life-cycle Costs (25 years)</strong></td>
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<tr>
<td><strong>Total NPS Lands Costs</strong></td>
<td><strong>$975,000 - 1,150,000</strong></td>
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*Funding for rehabilitating the Jacob Ebey House has already been secured
NPS staff assigned to the Reserve would provide expertise in the areas of cultural and natural resource management, providing or assisting in various Reserve interpretation and education programs, facility maintenance and management of NPS-owned properties and compliance and enforcement of NPS-owned easements.

In addition to assigned staff, the Trust Board would rely extensively on partners for visitor and resource protection and visitor services, including contribution of in-kind services.

Staffing would include the following positions:

- Reserve Manager (Full-time Trust Board employee).
- Administrative Assistant (Full-time Trust Board employee).
- Community Planner (Full-time Trust Board employee).
- Volunteer Coordinator/Grant Writer (Full-time Trust Board employee).
- Cultural Resources Specialist (Full-time NPS employee).
- Natural Resource Manager (Full-time NPS employee).
- Interpretation/Education Specialist (1 NPS full-time and 1 seasonal employee).
- Maintenance Manager (Full-time NPS employee).
- Maintenance Worker (1 NPS seasonal employee).

### Estimated Operating Costs (2005 Dollars)

<table>
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<tr>
<th>Description</th>
<th>Cost</th>
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<tr>
<td>Base allocation</td>
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<tr>
<td>Additional staff and support costs</td>
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<tr>
<td>Total NPS cost</td>
<td>$977,000</td>
</tr>
</tbody>
</table>

(*includes leased space, supplies, vehicles and equipment)

The difference in operating costs between Alter-
Alternatives

Reserve Boundary

Under Alternative B, it is recommended that Congress amend the boundary of Ebey’s Landing National Historical Reserve. As part of the GMP planning process, the planning team identified and evaluated any boundary adjustment that would be necessary or desirable to carry out the purposes of the Reserve. This boundary modification would be done to protect significant resources, values, and visitor experience related to the purpose of the Reserve and to address operational and management issues.

Based on these criteria, the boundary of the Reserve would be adjusted to include the following lands:

- Smith Prairie—Additional portions of Smith Prairie including the remainder of Au Sable Institute lands.
- U.S. Navy Outlying Landing Field—Portion of the OLF not currently included within the Reserve boundary.
- Crockett Lake—the eastern portion of the Crockett Lake wetlands area that is not currently within the Reserve.
- Bell Farm—active farm northwest of the Reserve.

These changes would be done in full coordination and communication with property owners. Amending language could specify that if the remaining portion of the OLF outside of the Reserve boundary was ever declared excess to the needs of the Secretary of the Navy, the NPS would seek Congressional action to authorize transfer to NPS to manage as part of the Ebey’s Landing National Historical Reserve. (See Figure 14, Boundary Modification: Alternative B, and Appendix E, Analysis of Boundary Adjustment and Land Protection Criteria.)

Fees

There are no fees for entering the Reserve. However, there is a daily parking fee at both Fort Ebey and Fort Casey state parks. The Island County Historical Museum located in the Town of Coupeville charges an entrance fee. There would be no fee for entering the Reserve’s visitor center/contact station.

Hours of Operation

Since the Reserve is primarily private land, there are no standard “park” hours. However, the Reserve’s administrative offices are generally open on weekdays from 9:00 am to 5:00 pm. Island County Historical Museum is open year-round on the weekends and has varying seasonal weekday hours. Most of the town shops and restaurants are open from 10:00 am until 5:00 pm daily. The Reserve visitor center/contact station in town would be open daily from 10:00 am to 5:00 pm.

Transportation, Access, and Circulation

In addition to those measures highlighted in Alternative A, the following actions under transportation would be included in this Alternative.

A circulation study, both water and land based, is recommended to examine visitor use patterns and identify conflicts between recreation and other traffic. Study recommendations should address improved vehicular, bicycle, pedestrian access and circulation issues, relief of congestion at key sites, and assist in public safety.

Carrying Capacity

Carrying Capacity would be the same as in Alternative A. In addition, the Trust Board would work with Island Transit and private operators to provide increased access to other public areas with the Reserve. This would help disperse visitor use at the various sites. Parking would be expanded at the Prairie Overlook Wayside (refer to the development concept plans at the end of this chapter).

Through public/private partnerships, the Trust Board and Reserve staff would encourage the protection and retention of valued agricultural, open space, and scenic lands in the remainder of Smith Prairie and in the area outside of the Reserve north and east of the airpark area north of Penn Cove. However, the NPS and Trust Board would not recommend these areas to be included within the modified Reserve boundary.

native A (current base) and Alternative B is $695,000.

Carrying Capacity would be the same as in Alternative A. In addition, the Trust Board would work with Island Transit and private operators to provide increased access to other public areas with the Reserve. This would help disperse visitor use at the various sites. Parking would be expanded at the Prairie Overlook Wayside (refer to the development concept plans at the end of this chapter).

Alone.
Land Protection

Land Protection Methods
The same land protection methods as in the No Action Alternative would be employed under this alternative.

Given the unpredictability of annual appropriations from the Land and Water Conservation Fund, the NPS and Reserve staff would seek other funding sources besides LWCF and implement other strategies to protect lands.

Alternative B strives to give further protection to the open space and rural character within the national historical reserve. The NPS, Trust Board, and Reserve staff would be encouraged to use other available land protection approaches such as purchase and sellback with restrictions, leaseback, historic property leasing, land donation, and other techniques as appropriate.

As with much of the Reserve land protection philosophy, relationships with land trusts would be used to promote and to facilitate less than fee approaches to land protection by assisting the NPS to pursue various measures and creative strategies involving the use of Land and Water Conservation Fund monies.

Additionally, under this alternative, the Reserve would work with others to assist in the protection of water recharge areas including prairie and forests within the Reserve along with agricultural lands protected by conservation easements.

The Trust Board would work with Washington State Department of Natural Resources in the protection of intertidal areas.

Finally, the Trust Board would work with the public, the Island County Marine Resources Committee, and involved agencies to protect the coastal waters adjacent to the Reserve and Penn Cove. Various county and state designations would be explored and possibly sought if appropriate. One possibility would be the Department of Natural Resource’s Aquatic Reserve designation. This designation is to promote preservation, restoration, and enhancement of state-owned aquatic lands that provide direct and indirect benefits to the health of native aquatic habitat and species and other resources in the state of Washington. Another potential designation could be an Island County Aquatic Reserve. This designation is a county status similar to that of the DNR tailored for specific conservation purposes and enforced by Island County.

Land Protection Priorities
In conjunction with the Trust Board and Reserve staff, the NPS Lands Resources Program Division would assist in locating suitable acquisitions within the Reserve and make recommendations for spending limited land acquisition funds according to the land protection plan to be completed following this GMP.

The land protection priority would be on eight intact areas within the Reserve that possess significant values critical to sustaining the rural character of the landscape. This land protection effort would focus on high scenic, natural, and cultural values. Protecting the scenic quality is in fact, protecting the rural quality and historic uses that create the cultural landscape.

The Reserve’s land protection strategy (2003) focuses on the following areas of the Reserve (not prioritized):

- Blower’s Bluff and airpark
- Zylstra and Arnold roads
- Smith Prairie
- East Crockett Lake wetlands
- West coastal strip
- Inter-prairie ridge between Ebey and Crockett prairies
- Grasser’s Hill and lagoon
- North Fort Casey Road

Blower’s Bluff and Airpark
Blower’s Bluff and open pasture are highly visible from Coupeville across Penn Cove. The Muzzall Farm is included within this unit and extends north from Blower’s Bluff across Scenic Heights Road. Muzzall Farm is presently in agricultural use and has only two owners. The Blower’s Bluff unit (these units are defined in the Recommendations for a Land Protection Strategy for Ebey’s
Alternatives

*Landing National Historical Reserve* has high agricultural, scenic, and natural resource values; medium values are given to historical and cultural features, as well as potential visitor experience. Protecting this unit with conservation easements will increase connectivity to open agricultural fields extending west to Monroe’s Landing, and to the open lands of the Oak Harbor Airpark to the north.

**Zylstra and Arnold Roads**

This unit includes the historic Arnold Farm (including the building cluster) on either side of Zylstra Road and has a single owner. The area also includes open fields extending to the west, on either side of West Beach Road, with views to the Olympic Peninsula and the Strait of Juan de Fuca. Two main landowners actively farm these open fields at the northern Reserve boundary. Three of the parcels (Bell Farm) along West Beach Road are outside of the Reserve boundary and should be considered for inclusion within the Reserve. The Arnold Farm unit has high agricultural and cultural feature values and medium scenic values. Conservation easements will protect these large, intact agricultural landscapes.

**Smith Prairie**

This unit is a large open agricultural field/prairie bordered by Douglas fir forest along State Route 20, at the southern entry of the Reserve. It has two tree farms and is the site of the Whidbey Island Naval Air Station’s Outlying Landing Field. This unit has high scenic, agricultural, and potential visitor experience values. It also has natural value since it contains Whidbey Island’s largest remnant native prairie community. Conservation easements would protect the cultural features and scenic views of this important entry area. There are seven landowners within this unit. Two areas within this unit are outside of the current Reserve boundary and are recommended to be included within the Reserve.

**East Crockett Lake Wetlands**

This large marsh, lying east of State Route 20 where it cuts through Crockett Lake wetlands, lies outside the Reserve boundary although it is an integral part of the Crockett Lake ecosystem. Overlooking Admiralty Bay and the Olympic Peninsula, it has high scenic and natural values. It is a prime bird habitat and nesting area. For these reasons the wetlands area should be included within the Reserve and should be protected with conservation easements or purchased in fee. There are three owners (one is Island County).

**West Coastal Strip**

This unit comprises the two remaining unprotected sections of the northern portion of the Coastal Bluff and Beach Trail between Fort Ebey State Park and the Bluff Trail. These sections are forested along steep coastal bluffs with views of the Strait of Juan de Fuca and the Olympic Peninsula. Protecting this unit with scenic or trail easements would enhance visitor experience and increase connectivity between the protected public areas adjacent to the West Coastal area of the Reserve. This unit has high visitor experience, scenic, and natural features values.

**Inter-prairie Ridge between Ebey and Crockett Prairies**

This unit extends from Engle Road at the Jenne Farm across the inter-prairie ridge to Fort Casey Road. It contains mostly open fields in agricultural use and has high agricultural and historic values. Conservation easements would protect its cultural and open space values. There are four landowners. Building or façade easements could be placed on the historic Jenne Farm building cluster to gain additional protection of historic resources.

**Grasser’s Hill and Lagoon**

This unit includes Grasser’s Lagoon and Grasser’s Hill, the sloping fields upland from the lagoon, as well as the open field and forested area between State Route 20 and Madrona Way. Grasser’s Lagoon is under one ownership and could be protected either with fee acquisition or preferable, through conservation easement to ensure appropriate public access. The existing conservation easement for the upland portion of Grasser’s Hill could be strengthened to include rare and unusual plant protection and trail easements. Purchasing the remaining house site in fee could preserve views of the scenic hillside. The open field and forested area across Madrona Way south of Grasser’s Lagoon is in a single ownership and could be protected with a conservation easement.
with a north Reserve entry wayside site leased or acquired in fee to interpret the Reserve and the significance of the lagoon and Penn Cove. The Grasser’s Hill unit is a highly visible area with high scenic, visitor experience and natural features values.

**North Fort Casey Road**
This unit is comprised of open fields in agricultural use. It has high agricultural, cultural feature and scenic values that could be protected with conservation easements. This unit is highly visible from many locations within the Reserve. Connectivity exists with adjacent protected farmland in Ebey’s Prairie. Protecting this unit will increase the scenic value of these adjacent areas. There are four main landowners.

The revised Land Protection Plan, which would be produced following the General Management Plan, would provide detailed description of the desired land protection methods to be used in each area of the Reserve. Significant habitat areas would be identified and included as information and criteria in land protection planning are developed.

**Land Use Measures**
In addition to the land use measures in the No Action Alternative, the following would apply:

It is recommended that Island County adopt a regulatory overlay zone over the entire unincorporated portion of the Reserve similar to the town of Coupeville for the purposes of implementing design review and other land use controls that fulfill the Reserve’s mission to preserve the historic and rural cultural landscape.

The adoption of this overlay zone is intended to help county government meet its obligations under the existing Interlocal agreement. In addition, it would provide the county with valued input concerning the potential effect (positive or negative) that development or land use change proposals would have on the character of the Reserve. It is expected that this would provide Island County with added regulatory authority to help ensure that proposed land uses and land use changes are consistent with the purposes of the Reserve.

**Funding for Land Protection**
Funding sources would be the same as in Alternative A. In addition, the following actions would occur.

The Trust Board, the Reserve staff and Reserve partners would seek new sources of funding support for land protection. It is further recommended that a “friends group” be established as a 501(c) (3) non-profit entity to support various Reserve-wide programs including land protection. Such private funding would complement LWCF appropriations and provide support for other Reserve goals and objectives.

The Trust Board would solicit private foundation and individual support, bequests from private estates, and other funding that would be used for two primary purposes:

- To support land protection efforts within the Reserve.
- To support the creation of an endowment fund for the maintenance and long-term stewardship of the lands and structures acquired.

**Action Items**
The action items would be the same as in Alternative A with the following additions:

- Develop a system for tracking, evaluating, and monitoring changes to the cultural landscape.
- Develop a museum management plan with direct assistance from North Cascades National Park Service Complex staff.
- Develop a design guidelines handbook for property owners in conjunction with partners.
- Work with Island County to develop a regulatory overlay zone over unincorporated portion of the Reserve.
- Upgrade training opportunities for Trust Board members and staff.
- Establish a friends group for the Reserve.
- Establish new cooperative agreements with organizations to facilitate Reserve operations and programs.
- Identify long-term maintenance facility for the Reserve.
- Develop a circulation study for visitor use patterns within the Reserve.
Development Concept Plans for Alternative B

Following are development concept plans that would be implemented as part of Alternative B. Development concept plans are drawings and narrative that shows in a conceptual way how actions in a GMP would be developed for specific areas. Two of these areas, the Ferry House and the West Ridge property are owned by the NPS. The South Gateway is not, but the Trust Board and NPS may be able to secure interests in land or enter into partnerships with the county or Au Sable Institute.

South Gateway
A covered information kiosk or shelter would be constructed on land near State Route 20 entering the Reserve from the south at the Au Sable Institute property. The kiosk would be three-sided to match existing kiosks elsewhere in the Reserve, and would contain maps of the Reserve, along with other orientation information. The Reserve staff would coordinate with the Institute in re-establishing prairie surrounding this site. The elevation to the east of the kiosk area could be lowered from the existing ground level and constructed in a way to expose for viewing a section of the prairie soil profile with prairie plant species. The precise messages conveyed to the public and the type of interpretive exhibits used would be detailed in a long range interpretive plan produced for the Reserve by the NPS Harper’s Ferry Center, but would include interpreting the prairie ecosystem. Reserve staff would also work cooperatively with Institute staff to explore opportunities to incorporate information on the Institute’s programs, facilities, and environmental learning opportunities.

The NPS would coordinate with the Au Sable Institute concerning the establishment of a loop hiking trail through their property to provide an interpretive experience for Smith Prairie ecology. The trailhead for this loop trail is proposed to be from the interpretive kiosk and prairie soil exhibit.

The Reserve staff would manage the site in cooperation with the county and Institute. It is proposed that the NPS acquire a conservation easement for the site. The realignment for Parker Road is on the county’s Public Works Department’s six-year road program and is waiting for funding. This project would require participation with WSDOT.

A one-way circular drive would be developed using part of the existing Parker Road alignment. Parking spaces would be provided for approximately three to five vehicles with two larger pull-through spaces for RV’s or bus parking. This site could also provide trailhead parking for proposed trails in and around Au Sable linking the institute with other areas of the Reserve. (See Figure 15, South Gateway Development Concept Plan.)

Ferry House
The Ferry House is one of the oldest structures in Washington State. It was constructed by the Isaac Ebey family as a way station for travelers plying Puget Sound. Historically, access to the Ferry House was from the beach at Ebey’s Landing, southwest of the house. A wagon road led up the ravine from the beach to the house. The historic house is in NPS ownership along with approximately five acres of land surrounding the house and ravine.

The Preferred Alternative calls for the historic preservation of the house by the NPS primarily as an exterior exhibit. The Ferry House would be stabilized, the front porch reconstructed, and the house, shed, and outhouse upgraded to a level of preservation maintenance. Due to the historic configuration, fragility, and limitations for accessibility, the house would not be accessible to the public on a regular basis, but educational and research activities would continue to be conducted there, and special tours of the structure could be provided as appropriate. To interpret the house to the public, the shed and outhouse behind the Ferry House would be stabilized and rehabilitated. Related interpretive exhibits would be placed in unobtrusive areas on the property. The Ferry House would be equipped with site security appropriate to its historic setting and fabric.

Visitors arriving by motor vehicle would be instructed (by signs) to park at Ebey’s Landing State Park where a restroom facility is located. Visitors would walk from the state park to the Ferry House on a proposed trail along Ebey Road and into the
Ferry House drive. A segment of the trail from Ebey Road to the Ferry House would be ADA accessible and would use the existing drive; the character of the two-track entry drive would be retained. Two ADA parking spaces would be located along Ebey Road in proximity to the Ferry House adjacent to the existing driveway into the property. If consistent with the long range interpretive plan, an interpretive panel may be included at this location as appropriate. The driveway would be gated and vehicular access restricted. Only vehicles for administrative use (such as those for site maintenance, law enforcement, and researchers) would be allowed.

A trail would be developed along the former historic wagon road alignment leading from the beach. The steep trail would not meet ADA standards. Before the trail could be constructed, the thicket of exotic plants on NPS property would be removed and native plants indigenous to the area would be planted. The development of this trail segment would allow for a loop trail system from the state park to the Ferry House. If it is not possible to construct the entire trail due to safety and security issues, a trail along a portion of the wagon road could be developed.

These trails, and other trail linkages would be incorporated as part of the Reserve-wide trail network and would also allow hikers who park at other locations within the Reserve to access the Ferry House and Ebey’s Landing. (See Figure 16, Ferry House Development Concept Plan.)

**West Ridge Property**

The Jacob Ebey House and Blockhouse were first constructed in the 1850s as part of the Jacob Ebey donation land claim on the upper bench above Ebey’s Prairie adjacent to dense woodlands. The Jacob Ebey House was extensively modified in the 1880s. The Blockhouse is one of four remaining blockhouses in the Reserve and was originally built to provide safety for early settlers from the threat of Indian attack. The Blockhouse also underwent alterations in the 1930s when restoration was attempted on the structure.

The Cottage was constructed in the 1940s as a house and is presently used as the Reserve’s administration building by the Trust Board. The parcel totals eight-tenths of an acre and is located off Cemetery Road to the south of State Route 20, about a mile from the Town of Coupeville.

The administrative headquarters would be relocated to the Town of Coupeville and the Cottage would augment administrative office needs.

In the Preferred Alternative, the Blockhouse would be continue to be interpreted as an exterior exhibit only, but would be signed. The Jacob Ebey House would be rehabilitated as a seasonal contact station for visitors wanting information about the Reserve. It could also be used for special events. Interior exhibits would be included in the house. The seasonal contact station would be potentially staffed with a volunteer.

A small lot providing four parking spaces would be constructed southwest of the current Ebey’s Prairie Overlook. An additional two parking spaces for persons with disabilities would be constructed off the existing Cottage driveway. At the back of the Cottage, administrative staff parking would be provided for three cars. The Ridge Trail from the Cottage to the Jacob Ebey House would be relocated and realigned for ADA accessibility. A hiking trail alignment could be developed from the Jacob Ebey House connecting to the Bluff Trail.

Interpretive panels would be placed in proximity to the walking path and trail leading from Sunnyside Cemetery and the Prairie Overlook to the Jacob Ebey House and Blockhouse. One or two wayside exhibits could be sited some distance from the historic views to and from the structures.

A hedgerow would be planted along the NPS property line to screen private residences located downhill (east) of the Jacob Ebey House. This would both physically and aesthetically enhance a visitor’s experience on the trail.

A trail map at the Prairie Overlook could also denote the location of the Jacob Ebey House and Blockhouse. (See Figures 17, 18, and 19 West Ridge Property Development Concept Plans.)
Alternative C

General Description

This alternative would capture many of the components of Alternative B, but with a few important distinctions.

First, the overall policy management of the Reserve would be executed by a part-time Commission that would be compensated through a stipend for their service. This Commission would replace the current Trust Board management structure. Reserve Staff would increase from four (No Action Alternative) to ten positions that would be exclusively hired and managed by the Commission. In Alternative C, the Commission would seek increased budget appropriations from the National Park Service operating base to enlarge staff.

As in Alternative B, the land protection emphasis would primarily focus on securing conservation easements on important landscapes from willing sellers, augmented by local land use controls. In addition, Alternative C would recommend that Island County reinstitute a system of transfer of development rights for the protection of agricultural and other important lands.

Rather than exchanging all NPS-owned farmland, the NPS would retain a five-acre portion of NPS-owned Farm II, including the historic farm buildings, for use as the Reserve's administrative and maintenance facilities, then exchange the remainder of agricultural land for additional protection on other properties within the Reserve. The historic Reuble Farmstead buildings at Farm II would be stabilized and rehabilitated to the Secretary of Interior's Standards and adaptively reused as NPS administrative offices and workshop facilities. Some non-historic buildings may be removed. Preservation maintenance training could be incorporated into any rehabilitation work done on the historic buildings.

The Ferry House would be stabilized and a barn-like building would be built at the Ferry House using compatible new construction to serve as a visitor information and interpretive center.

The Jacob Ebey House would be treated the same as in Alternative B using the house as a seasonal contact station and the Blockhouse as an exterior exhibit. Before exchanging the farmland to a farmer, the NPS would retain protective easements.

For enhancement of visitor service, the Commission staff would partner with other organizations in the development of a visitor contact facility at a proposed marine science center to educate visitors and interpret the marine environment. The Commission staff would explore the potential to use an historic building to serve as a northern gateway contact facility in addition to two other gateways proposed.

The same minor boundary expansion would be recommended as in Alternative B; however, it is recommended that the legislation authorizing the change in the Reserve boundary direct a suitability/feasibility study of the western coastal area of Whidbey Island for potential designation as a National Marine Sanctuary managed by the National Marine Fisheries Service.

Management Zones

Management zoning for Alternative C would be the same as in Alternative B with the exception of Farm II. An approximate five-acre parcel would be placed in the Administrative Zone. The remainder of the farm would stay in the Special Use Zone to allow for disposition. (See Figure 20, Management Zoning: Alternative C.)

Reserve Management

Policy and Oversight

The Trust Board management structure would be replaced with an Ebey’s Landing National Historical Reserve Commission. The Commission would work within the framework of the Reserve’s legislation, the GMP, and relevant NPS policies and guidelines. The commission would be compensated through a stipend for their service. Similar to the current Trust Board format, there would be nine commission members.

Four commission members would continue to be appointed by the Island County Commissioners,
with two of these being at-large positions (outside the Reserve). To strengthen participation and effectiveness on the Trust Board, it is proposed that one of the four County appointees be an elected official from Island County. Three commission members would serve as appointments from the Town Council of Coupeville. It is recommended that one of the town appointees be an elected official from the Town of Coupeville.

The two remaining appointments to the Commission would come from the National Park Service and Washington State Parks. The Washington State Parks appointee would be at the district or regional park staff level having direct communication with and reporting to the Director of the Washington State Parks and Recreation Commission. The NPS Deputy Regional Director in Seattle would appoint a representative from the Pacific Northwest Region with the appropriate senior management or professional background to serve as the NPS Trust Board member.

The NPS would continue to conduct an appraisal of the management and operation of the Reserve under the requirements of Paragraph (e), Section 508 of Public Law 95-625. The NPS Deputy Regional Director in Seattle would conduct the performance review of the Commission. The Commission would oversee the Reserve Manager and conduct annual performance evaluations on the operational effectiveness of the Reserve Manager and staff.

**Operations and Management**

Under this alternative, the Reserve Manager would have daily operational responsibilities for the Reserve. The Reserve Manager would be an employee of the Commission, and would be evaluated annually by the Commission or a committee of the Commission. The Reserve Manager would supervise the Commission staff. The Commission and Reserve Manager would work together to set priorities, the annual Reserve budget, and workplan.

The NPS Cultural Resource Specialist/Trust Board member position would be eliminated, though there would still be NPS representation on the Commission. Commission staff having various functional responsibilities would be trained on NPS procedures and practices in areas such as interpretation, maintenance, budget, contracting, resource management, and other areas, as appropriate. A cooperative agreement to accomplish these tasks would be developed with NPS. A staff point of contact at a nearby park or the Pacific West Region Seattle Office would be established to deal with legal or policy issues that preclude non-government officials or staff from acting unilaterally.

**Cultural Resources**

**Cultural Landscape**

The treatment of the Cultural Landscape would be the same as Alternative B.

**Historic Buildings and Structures**

The treatment of historic buildings and structures would be the same as in the No Action Alternative with the following additions.

Through outreach programs, and as funding permit, NPS staff and Reserve partners would use NPS properties as demonstration and training sites for historic preservation. The Reserve staff would also identify adaptive reuse and interpretive uses for NPS properties and would identify other significant cultural resources within the Reserve for additional protection by the Trust Board and other partners.

The Reserve Commission and staff would work with a “friends group” as proposed in Alternative B. Alternative C proposes that this group help establish a revolving low-interest loan program to assist owners of private historic properties within the Reserve for “bricks and mortar” preservation work. As the loans are paid back into the fund, it would be available for other owners to use if they meet established criteria.

The Reserve Commission and staff would work cooperatively with town and county staff to encourage elected officials to use local tax programs and other incentives to assist property owners who choose to restore or rehabilitate National Register of Historic Places properties within the Reserve.
The NPS would stabilize and potentially utilize NPS-owned historic structures in accordance with the Secretary of the Interior’s Standards. These include the Ferry House and associated shed and outhouse; the Jacob Ebey House at the West Ridge property; the Rockwell House at Farm I; the Reuble Farmstead cluster at Farm II. Actions specific to Alternative C are as follows:

**Ferry House**
As in Alternative B, the Ferry House would be stabilized and rehabilitated including the two outbuildings (shed and outhouse) behind the house. Due to the Ferry House’s fragile condition, limited tours would be offered. The house would be equipped with site security appropriate to its historic setting and fabric. In addition, a barn stood to the north of the house until recently; it was demolished in 1990 due to deterioration. A barn-like building would be built to serve as a point of visitor information and interpretation and would follow the Secretary of Interior’s Standards for new construction.

**Jacob Ebey House and Blockhouse**
Treatment of the Jacob Ebey House and Blockhouse would be the same as in Alternative B.

**Rockwell House**
Treatment of the Rockwell House would be the same as in Alternative B.

**Reuble Farmstead**
At the Reuble Farmstead, the historic buildings would be stabilized and rehabilitated to the Secretary of Interior’s Standards to augment the Reserve’s administrative space requirements and to provide space for maintenance operations.

**Collections Management**
Treatment for collections would be the same as in Alternative B. In addition, some space within the proposed visitor center/visitor contact station could be allocated to house some of the collection of artifacts, manuscripts and other items from the Reserve.

**Archaeology**
The treatment for archaeology would be the same as Alternative B.

**Natural Resources**
Natural Resource Management would be the same as in Alternative B.

**Agricultural Resources**
The Agriculture section of this alternative would be the same as Alternative B, except for the following change for the NPS-owned farms.

**NPS-Owned Farms**

**Farm I and Farm II**
As with Alternative B, it is recommended that the majority of the two NPS-owned farm properties be disposed of to the private sector, while protecting open space and historical values.

The NPS would maintain fee title ownership of approximately five acres of Farm II, including the Rueble Farmstead, retain a conservation easement on the remainder of the property, and dispose of it through an exchange or other means. The farmstead includes the Rueble Barn, the Gillespie House, the granary, old barn, garage, and a shed (and several non-historic structures that could be removed if determined appropriate). The NPS would rehabilitate this five-acre farmstead to the Secretary of Interior’s Standards for adaptive reuse to augment the Reserve’s administrative and maintenance needs and storage.

Under Alternative C, Farm I and Farm II, minus a five acre Rueble Farmstead parcel, would be included in the Special Use Zone of the Reserve in accordance with 36 CFR Part 17.3. This zoning designation would take into account the special considerations for these two farm properties that allow for their disposition, preferably through a land exchange for other development rights on priority properties in accordance with 36 CFR Part 18. The NPS would explore opportunities for land exchanges in return for a conservation easement interest of equal value on other priority lands located within the Reserve that are not yet protected.
A land exchange would be preferred, but as an interim measure, the NPS could consider other strategies, such as historic property leases or cooperative agreements, to promote appropriate use of the farm properties. These approaches would be detailed in the land protection plan prepared following this general management plan. Under any circumstances, the NPS would retain a conservation easement on the farm properties exchanged to protect the historic character and ensure their long-term protection as valued open space and scenic resources.

Before exchanging Farm I, one-acre of land would be retained by the Reserve for the development of a trailhead including a kiosk and visitor parking to access the Reserve’s trail network. In addition, the Reserve would acquire a trail corridor through the property. Both the trailhead and trail corridor would be sited in a location that would not conflict with agricultural operations.

**West Ridge Property**
Treatment of the West Ridge Property would be the same as in Alternative B.

**Recreational Resources Management**
The treatment of recreational resources would be the same as in Alternative B.

**Scenic Resource Management**
The treatment of scenic resources would be the same as in Alternative B.

**Interpretation and Education**
The interpretation and education section of this alternative would be the same as Alternative B, including the following additions.

**Exhibits and Interpretive Media**
Collections and photos relating to the Reserve would be interpreted in a Reserve visitor center/contact station (see discussion following) operated by the Commission, the local museum, and potentially with other partners.

The NPS would work with partners to expand outreach using the latest technology to reach larger, broader, and more diverse audiences across the country.

**Visitor Center/Contact Station**
Treatment of the Reserve visitor center/contact station would be the same as in Alternative B, but the Commission would explore various opportunities to partner with other groups.

With partners taking the lead, an additional visitor contact facility would be co-located with a proposed marine science center with appropriate interpretive media.

**Partnership Programs**
The Commission, staff, and Reserve partners would seek to develop educational partnerships not only locally, but also regionally and nationally on topics such as resource management and protection, landscape preservation, and other topics.

As possible, and in conjunction with partners, seasonal administrative space would be secured for visiting researchers, guest lecturers, and educators as part of special programs and events featured at the Reserve.

The Reserve Commission would consider sponsoring a writer, scientist, or “artist in residence” program in cooperation with community groups.

**Gateway Contact Facilities**
The Reserve Commission would explore the potential for an historic building to serve as a northern gateway visitor contact facility.

**Interpretive Guided Tours**
Treatment for interpretive guided tours would be the same as in Alternative B.

**Scenic Auto Tour Routes**
Treatment for scenic auto tours would be the same as in Alternative B.

**Educational Outreach to Reserve Residents**
Treatment for educational outreach to Reserve Residents would be the same as in Alternative B.
Reserve Facilities

Visitor Facilities
The proposals for visitor facilities would be the same as Alternative B. In addition, the Commission would partner to find a suitable building in San de Fuca, which would be used as the northern gateway contact facility. The Reserve Commission and staff would encourage a partner (such as Au Sable Institute, or Seattle Pacific University’s Camp Casey) to develop a marine science center at a suitable location, such as the Coupeville Wharf. The partner would manage and operate the center and develop educational curricula and programming. The Commission could support the center by helping to develop some exhibits relating to Reserve ecology and marine environments.

Administrative Facilities
Administrative facilities would be the same as in Alternative B in the short-term. During the short-term, administrative offices would remain in the Cottage and a resource management office would remain at Farm I. Once facilities at the Reuble Farmstead have been rehabilitated, additional administrative office space would be established there. The Cottage would be retained and would be used as additional resource staff offices. Any historic buildings retained for administrative use would be rehabilitated to the Secretary of Interior Standards.

Maintenance Facilities
Reuble Farmstead facilities would be rehabilitated and used for maintenance staff office space, workshop, dry storage area, and a two-bay garage. In addition to the Reserve’s maintenance staff, the North Cascades National Park Service Complex maintenance staff may continue to provide special project assistance such as trail development, brush clearing from waysides, as time, money, and staff permit. Any historic buildings retained for maintenance use would be rehabilitated to the Secretary of Interior Standards.

Development Cost Estimates
The following costs are estimates for implementing Alternative C. It is assumed that meeting the long-range development needs of the Reserve would not just rely upon federal appropriated funds. A wide variety of other public and private sector funding sources would be sought to assist in implementation efforts over the next 15-20 years. As has been evidenced in the past, some development costs assigned to certain actions may prove to be less expensive when donated materials, labor, and other support are forthcoming. Costs are expressed in gross construction dollars.

Table 19: Development Cost Estimates

<table>
<thead>
<tr>
<th>Development Actions for Alternative C</th>
<th>Total Estimated Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visitor Facilities</td>
<td>$3,160,000 - 3,300,000</td>
</tr>
<tr>
<td>Administrative/Maintenance Facilities</td>
<td>$600,000 - 700,000</td>
</tr>
<tr>
<td>Historic Rehabilitation*</td>
<td>$540,000 - 600,000</td>
</tr>
<tr>
<td>Trails</td>
<td>$100,000 - 150,000</td>
</tr>
<tr>
<td><strong>Total NPS Capital Costs</strong></td>
<td><strong>$4,400,000 - 4,750,000</strong></td>
</tr>
<tr>
<td><strong>Total Average Annual Life-cycle Costs (25 years)</strong></td>
<td><strong>$18,000</strong></td>
</tr>
<tr>
<td><strong>Total NPS Lands Costs</strong></td>
<td><strong>$975,000 - 1,150,000</strong></td>
</tr>
</tbody>
</table>

*Funding for rehabilitating the Jacob Ebey House has already been secured.
and include design, compliance, and supplemental services.

These costs are based upon general “class C” estimates of site development. These estimates are not intended to be used for budgetary purposes. 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. Costs are expressed in 2004 dollars and phased over 15-20 years.

**Reserve Operations**

**Staffing**

This alternative calls for a total of ten Commission staff to carry out the operational responsibilities of the Reserve. The Commission staff would be supervised by the Reserve Manager.

Staffing includes the following positions:

- Reserve Manager (Full-time Commission employee).
- Administrative Assistant (Full-time Commission employee).
- Volunteer Coordinator/Grant Writer (Full-time Commission employee).
- Community Planner (Full-time Commission employee).
- Cultural Resource Management Specialist (Full-time Commission employee).
- Natural Resource Management Specialist (Full-time Commission employee).
- Interpreter/Education Specialist (Full-time Commission employee).
- Two Seasonal Interpretation Specialists (Part-time Commission employees).
- Maintenance foreman performing contracted maintenance (Full-time Commission employee).

**Estimated Operating Costs (2005 Dollars)**

<table>
<thead>
<tr>
<th>Cost Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base allocation</td>
<td>$282,000</td>
</tr>
<tr>
<td>Additional staff and support costs</td>
<td>$540,000*</td>
</tr>
<tr>
<td>NPS program support and training</td>
<td>$125,000</td>
</tr>
<tr>
<td>Commission expenses</td>
<td>$180,000</td>
</tr>
<tr>
<td>Total NPS costs</td>
<td>$1,127,000</td>
</tr>
</tbody>
</table>

(*includes leased space, supplies, vehicles and equipment)

The difference in operating costs between Alternative A (current base) and Alternative C is $850,000.

**Fees**

The fees would be the same as in Alternative B. There may be some potential fees at a proposed marine science facility.

**Hours of Operation**

The Reserve’s hours would be the same as in Alternative B.

**Transportation, Access, and Circulation**

Transportation, access, and circulation would be the same as in Alternative B with the following addition.

The Reserve Commission would request Island Transit to consider establishing regular weekend shuttles to and from the Town of Coupeville to Ebey’s Landing, Fort Casey, and Fort Ebey state parks or to other trailheads within the Reserve. The buses could be used for various interpretive opportunities. The additional service would be encouraged to enhance the visitor experience and to help relieve vehicular crowding at these popular destinations during the peak season and peak weekend days. A volunteer on the bus might offer an interpretive program and/or answer questions about the Reserve that riders might have.

**Table 20: Staffing under Alternative C**

<table>
<thead>
<tr>
<th>Position</th>
<th>Full-time</th>
<th>Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Maintenance</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Interpretation/ Education</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Resource Management</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Total Staff</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 20: Staffing under Alternative C
Carrying Capacity
Carrying Capacity would be the same as in Alternative B.

Reserve Boundary
Alternative C would be the same as Alternative B. (See Figure 21, Boundary Modification: Alternative C.)

Land Protection
Land Protection Methods
Land protection methods would be the same as in Alternative B with the following exception. It is recommended that the legislation authorizing the change in the Reserve boundary also direct that a suitability/feasibility study be done of the western coastal area of Whidbey Island for potential designation as a National Marine Sanctuary managed by the National Marine Fisheries Service.

Land Protection Priorities
Land protection priorities for Alternative C would be the same as in Alternative B.

Land Use Measures
Most of the land use measures would be the same in Alternative B with the following exceptions.

It is recommended that Island County consider re-instituting a system of transfer of development rights (TDRs) to enable landowners to transfer density credits to “receiving areas” and further protect critical cultural landscapes, viewsheds, and natural habitats. It is further suggested that these receiving areas be designated countywide. Within the Reserve, “acquisition deferred” areas identified in the land protection plan could be included as receiving areas. “Acquisition deferred” refers to those situations where it is recommended that acquisition of an interest in land be deferred, even when an opportunity for purchase exists, the NPS has the funds, and a willing seller is present. It is furthermore suggested that these receiving areas be covered by county design review standards as described in Alternative B. (For a discussion on transfer of development rights, see Volume II, Farmland Preservation Case studies for Ebey’s Landing National Historical Reserve.)

Funding for Land Protection
Funding would be the same as in Alternative B.

Action Items
Action items for Alternative C would be the same as in Alternative B. In addition:

- Train Commission members and staff.
- Expand routes and service for Island Transit.
- Explore partnership development of a marine science center.
Alternatives Considered but Rejected

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 actions.

An alternative considered but rejected for the draft GMP/EIS would establish an Ebey’s Landing National Historical Park and Reserve. Under this concept, the existing national historical reserve designation, the Reserve’s boundary, Trust Board management and operational status would remain intact. However, a core area within the Reserve would be redesignated a national historical park for additional protection from the National Park Service. This core area would be directly managed by a National Park Service Superintendent. The national historical park would encompass the following areas: Ebey’s Prairie east to the municipal boundary of the Town of Coupeville, Ebey’s Landing and the bluff area along the Strait of Juan de Fuca between Fort Casey State Park and Fort Ebey State Park, the upland forested area east and south of Ebey’s Prairie, and all of Crockett Lake and portions of Crockett Prairie. In addition to being responsible for the day-to-day management of the national historical park, the Superintendent would have also served as the NPS representative on the nine-member Trust Board overseeing the remainder of the Reserve.

Land protection goals under this concept would continue to place primary emphasis upon NPS acquisition of conservation easements complemented by a minor amount of fee title ownership. There would be less reliance on changing local land use measures under this concept.

This alternative was rejected because it did not support the cooperative spirit and partnership concept originally conceived for the Reserve. It would place heavier reliance upon the NPS for land protection and management. Under the current Reserve concept, the Reserve remains a unit of the National Park System and the NPS Regional Director has ultimate oversight. However, the NPS operational role in the Reserve is one of a cooperator and provider of technical assistance, whereas the day-to-day operational and management responsibility is largely the purview of the Reserve staff and the Trust Board made up of volunteers including appointees of local government. This has been the management formula for the protection of key Reserve resources. Though offering stronger protection of Reserve’s resources, establishing a national historical park within the core of the Reserve with an NPS Superintendent countered this management philosophy. It was also determined that having two management entities within the same relatively small area could prove to be duplicative and confusing to the public and local elected officials. The dual concept may also cause concerns relating to policy, procedures, and jurisdictional issues when applied to the same general area of central Whidbey Island.
## Summary of Actions for Each Alternative

<table>
<thead>
<tr>
<th>Actions</th>
<th>Alternative A-No Action</th>
<th>Alternative B-Preferred</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reserve Management</strong></td>
<td>Continue to provide policy and oversight by volunteer Trust Board representing local, state, and federal interests.</td>
<td>Same as Alternative A</td>
<td>Provide policy and oversight by a Commission structure, which would be compensated through a stipend for their service.</td>
</tr>
<tr>
<td>Policy and Oversight</td>
<td>Provide operations and management by Reserve Manager and staff reporting to Trust Board for duties/roles assigned; retain NPS Cultural Resource Specialist/Trust Board member position; have NPS staff report to NPS supervisors.</td>
<td>Provide operations and management by Reserve Manager and staff reporting to Trust Board; split NPS Cultural Resource Specialist/Trust Board member position into 2 positions; Trust Board staff report to Trust Board; NPS staff report to NPS supervisors.</td>
<td>Provide operations and management by Reserve Manager and staff reporting to Commission; eliminate all NPS staff positions; keep NPS Trust Board member.</td>
</tr>
<tr>
<td>Operations and Management</td>
<td></td>
<td>Same as Alternative A plus: Develop system for tracking, evaluating, and monitoring changes to cultural landscape in Reserve; provide stronger advocacy role; expand technical library and archives related to Reserve history; facilitate historical research, publish research on various topics, and disseminate information; expand interpretation, special events, and outreach programs related to history, cultural landscapes, rural character of the Reserve.</td>
<td>Same as Alternative B.</td>
</tr>
<tr>
<td>Cultural Resource Management</td>
<td>Continue to participate in county/town design review boards; document prehistoric resources and update the National Register District properties as necessary.</td>
<td>Same as Alternative A plus: Update and strengthen design guidelines, zoning, and permitting authorities to assist preservation efforts and promote compatible new construction and in-fill development; initiate overlay zone.</td>
<td>Same as Alternative B with the following exceptions: Use NPS properties for demonstration and training sites or interpretive uses for historic preservation, through outreach programs; establish a “friends group” to help establish revolving low-interest loans to property owners for preservation work; encourage elected officials to use incentives to assist property owners in rehabilitation efforts. Ferry House: Same as Alternative B plus: build new barn-like building to serve as a visitor information and interpretive center.</td>
</tr>
<tr>
<td>Cultural Landscape</td>
<td></td>
<td>Same as Alternative A plus: Update and strengthen design guidelines, zoning, and permitting authorities to assist preservation efforts and promote compatible new construction and in-fill development; initiate overlay zone.</td>
<td>Same as Alternative B with the following exceptions: Use NPS properties for demonstration and training sites or interpretive uses for historic preservation, through outreach programs; establish a “friends group” to help establish revolving low-interest loans to property owners for preservation work; encourage elected officials to use incentives to assist property owners in rehabilitation efforts. Ferry House: Same as Alternative B plus: build new barn-like building to serve as a visitor information and interpretive center.</td>
</tr>
<tr>
<td>Historic Buildings and Structures</td>
<td>Conduct research to preserve and protect NPS-owned historic properties; work cooperatively with property owners to provide technical assistance; revise historic preservation guidelines; stabilize and potentially utilize NPS-owned structures according to Secretary of the Interior’s Standards.</td>
<td>Same as Alternative A plus: Update and strengthen design guidelines, zoning, and permitting authorities to assist preservation efforts and promote compatible new construction and in-fill development; initiate overlay zone.</td>
<td>Same as Alternative B with the following exceptions: Use NPS properties for demonstration and training sites or interpretive uses for historic preservation, through outreach programs; establish a “friends group” to help establish revolving low-interest loans to property owners for preservation work; encourage elected officials to use incentives to assist property owners in rehabilitation efforts. Ferry House: Same as Alternative B plus: build new barn-like building to serve as a visitor information and interpretive center.</td>
</tr>
</tbody>
</table>

**Ferry House**: stabilize, reconstruct front porch; allow limited tours.

**Jacob Ebey House**: stabilize and rehabilitate for use as a seasonal contact station.

**Blockhouse**: preserve as exterior exhibit.

**Rockwell House**: retain protective easements and seek to exchange;
<table>
<thead>
<tr>
<th>Historic Buildings and Structures (cont.)</th>
<th>Collections Management</th>
<th>Archaeology</th>
<th>Compliance Activities</th>
<th>Natural Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain existing collection at North Cascades National Park Service Complex.</td>
<td>Same as Alternative A: Develop museum management plan that provides for local museum to hold limited artifacts provided NPS storage requirements are met;</td>
<td>Same as Alternative A.</td>
<td>Same as Alternative A.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide space for limited collections within new visitor center/contact station.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Jacob Ebey House: Same as in Alternative B.</td>
<td>Same as Alternative B.</td>
<td></td>
<td></td>
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<tr>
<td>Blockhouse: Same as in Alternative B.</td>
<td>Same as Alternative B.</td>
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<td></td>
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<tr>
<td>Rockwell House: Same as in Alternative B.</td>
<td>Same as Alternative B.</td>
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</tr>
<tr>
<td>Reuble Farmstead: stabilize and rehabilitate to Secretary of Interior's Standards to augment Reserve's administrative offices and provide for maintenance facility.</td>
<td>Same as Alternative A plus: Provide space for limited collections within new visitor center/contact station.</td>
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<tr>
<td>Same as Alternative B.</td>
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**Natural Resources**

<table>
<thead>
<tr>
<th>Geology, Soils, and Air Resources</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to support preservation of prime and unique farmland soils; incorporate night sky preservation provisions in easement language.</td>
<td>Same as Alternative A plus: Encourage natural quiet/night sky programs and activities; join existing air quality networks within state and federal agencies to gather baseline information and establish monitoring program; work with partners to prevent the loss of prime and regionally important agricultural soils; solicit resource management funding for important research topics.</td>
<td>Same as Alternative B.</td>
<td>Same as Alternative B.</td>
</tr>
</tbody>
</table>

**Water Resources**

| Continue to support and encourage existing water quality programs and protection of wetlands, impoundments, riparian areas, and aquifer recharge areas. | Same as Alternative A plus: Work with partners to protect, restore, mitigate for wetlands; protect shoreline; protect aquifer and surface waters; encourage development of Penn Cove water quality plan; seek funding for hydrological assessments. | Same as Alternative B. | Same as Alternative B. |

**Vegetation**

| Coordinate vegetation management with the Reserve's fire management plan; continue to advo- | Same as Alternative A plus: Work cooperatively with partners to expand and preserve wood- | Same as Alternative B. | Same as Alternative B. |

| Jacob Ebey House: Same as in Alternative B. | Jacob Ebey House: Same as in Alternative B. | | |
### Vegetation (cont.)

- **Alternative B**: Same as Alternative A.
- **Alternative C**: Same as Alternative B.

- **Farm I**: Place NPS conservation easement and rehabilitate historic buildings where possible; then exchange out of federal ownership to private farm operator.
- **Farm II**: Place NPS conservation easement and rehabilitate historic houses where possible; then exchange out of federal ownership to private farm operator.
- **West Ridge Property**: continue to retain property in NPS ownership; continue to lease 60-acre tract for farming; retain Cottage for Reserve administration offices and land and prairie ecology; design and implement prairie restoration plan; promote compatible roadside vegetation program; work with partners in Weed Management Area to control exotic plant species; seek funding for research and monitor projects.

### Wildlife

- **Alternative A**: Same as Alternative B plus: Increase baseline information, produce interpretive materials, and conduct outreach programs; seek funding for research and monitoring.
- **Alternative B**: Same as Alternative B.

**Wildlife**

Continue to support T&E species at federal and state level; increase knowledge in baseline species information; continue to seek cooperation from NCCN network.

### Compliance Activities

- **Alternative A**: Same as Alternative A.
- **Alternative B**: Same as Alternative A.
- **Alternative C**: Same as Alternative B.

### Agricultural Resources

<table>
<thead>
<tr>
<th>Protection of Agricultural Lands</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continue to acquire easements on key parcels; encourage protection of prime soils; define the extent of acceptable change in easements; continue to track pest management on NPS-owned farmland; continue to provide technical assistance on farming topics; continue limited community programs, which promote public awareness of agriculture.</td>
<td>Same as Alternative A plus: Partner with federal, state, and local entities to provide technical assistance for property owners regarding grant proposals, tax incentives, and other measures; establish friends group; advocate for organic and sustainable agriculture; encourage innovative agricultural product development; cooperate with existing farm organizations to interest investors in farm operations; work with others to advance agricultural research marketing, and sales.</td>
<td>Same as Alternative A.</td>
<td></td>
</tr>
</tbody>
</table>

**NPS-owned Farms**

- **Farm I**: Place NPS conservation easement and rehabilitate historic buildings where possible; then exchange out of federal ownership to private farm operator.
- **Farm II**: Place NPS conservation easement and rehabilitate historic houses where possible; then exchange out of federal ownership to private farm operator.
- **West Ridge Property**: short-term—continue to lease 60-acre tract for agricultural uses; long-term place conservation easement on land and exchange for conservation easement on other priority properties within the Reserve; retain sufficient acreage to include Jacob Ebey House, Blockhouse, and Cottage.
- **West Ridge Property**: Same as Alternative B.

**Farm I**: Farm I: Place NPS conservation easement and rehabilitate historic houses; retain Reuble Farmstead and approximately 5 acres to augment administrative capability and for maintenance facility; exchange remainder of farm out of federal ownership to private farm operator.

**West Ridge Property**: Same as Alternative B.
### NPS-owned Farms (cont.)

Maintain Jacob Ebey House and Blockhouse as exterior interpretive exhibits without interpretation.

### Public Awareness of Reserve's Agricultural Heritage

None.

Provide agricultural tourism opportunities; including sale of local farm products.

Same as Alternative B.

### Recreational Resources

<table>
<thead>
<tr>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Trails and Walks</strong></td>
<td>Continue to work with partners in maintaining existing trails into an integrated network within the Reserve; continue to promote and publish driving, biking, and walking tour brochures; implement Reserve-wide sign plan with partners.</td>
<td>Same as Alternative A, plus: Complete and expand trail network; retain one-acre at Farm I for development of trailhead; cooperate with others on developing public self-guided nature trails; partner with county on water trail; expand auto tour route in northern Reserve.</td>
</tr>
<tr>
<td><strong>Appropriate Uses</strong></td>
<td>Encourage appropriate watercraft usage; provide information about water-based recreation opportunities; develop standards and locations for paragliding, model airplane flying, and other recreational uses within the Reserve with partners; continue to support passive recreational activities.</td>
<td>Same as Alternative A, plus: Develop system for monitoring increased recreational use; mitigate with partners for adverse effects.</td>
</tr>
<tr>
<td><strong>Information Systems, Sites, and Programs</strong></td>
<td>Provide no new actions</td>
<td>Provide or enable interpretive training for tour operators on Reserve’s resources.</td>
</tr>
<tr>
<td><strong>Economic Benefit of Recreation Expenditures</strong></td>
<td>Provide no new actions</td>
<td>Update Reserve’s socioeconomic study on visitor expenditures</td>
</tr>
</tbody>
</table>

### Scenic Resources

<p>| <strong>Protection of Scenic Lands, Roadsides, and Vistas</strong> | Maintain scenic/historic views; maintain open space along existing waysides and pullouts; continue to influence placement of new structures on landscape to minimize visual impact. | Same as Alternative A, plus: Develop with partners design guidelines handbook for homeowners; enhance scenic beauty of roadside areas; encourage clustering provisions; continue to encourage the designation of key scenic roads; encourage development of scenic pullouts, overlooks, and waysides. | Same as Alternative B. |
| <strong>Viewshed Protection</strong> | Acquire easements to protect scenic quality. | Same as Alternative A, plus: Work with town to define and protect viewshed across Penn Cove. | Same as Alternative B. |</p>
<table>
<thead>
<tr>
<th>Interpretation and Education</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
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</thead>
<tbody>
<tr>
<td><strong>Exhibits and Interpretive Media</strong></td>
<td>Maintain current wayside exhibits to NPS standards; produce long range interpretive plan; work with partners to expand exhibits and pullouts; support the traveler information station; upgrade website; provide general information about Reserve; find new locations for NPS Passport Stamp station; maintain Ferry House, Jacob Ebey House and Blockhouse as exterior exhibits for visitor viewing.</td>
<td>Same as Alternative A, plus: Revise wayside exhibit plan; improve wayside at Port Townsend Ferry Landing; place oral histories, historic documents and photos on Reserve’s Internet homepage; sign and actively interpret the Ferry House and Jacob Ebey Blockhouse as exterior exhibits; rehabilitate Jacob Ebey House for use as seasonal contact station and include interior exhibits.</td>
<td>Same as Alternative B, plus: Interpret collections at Reserve visitor center/contact station operated by the Commission, potentially with partners; work with partners to expand outreach using latest technology to reach larger, broader, and more diverse audience across country.</td>
</tr>
<tr>
<td><strong>Reserve Visitor Center/Contact Station</strong></td>
<td>Island County Historical Museum continues to serve as Reserve visitor center.</td>
<td>Find suitable historic building in Coupeville or historic building elsewhere within Reserve for a visitor center/contact station; include interpretive exhibits on primary interpretive themes; could locate administrative offices here.</td>
<td>Same as Alternative B, but explore partnering opportunities with others, plus: Partner for development of a visitor contact facility at a proposed marine science center.</td>
</tr>
<tr>
<td><strong>Partnership Programs</strong></td>
<td>Continue to partner with others in existing limited educational and interpretive programs.</td>
<td>Initiate docent/volunteer program coordinated by a Reserve staff coordinator/education specialist; establish “friends group”; promote public education on Reserve through programs, posters, and workshops; participate in NPS Parks as Classrooms Program; offer field schools with partners; develop interpretive exhibits related to aquatic environment.</td>
<td>Same as Alternative B, plus: Develop regional and national educational partnerships on resource management and protection, landscape preservation and other topics.</td>
</tr>
<tr>
<td><strong>Gateway Contact Facilities</strong></td>
<td>The Reserve would not develop gateway contact facilities.</td>
<td>Develop 3 gateway interpretive kiosks.</td>
<td>Same as Alternative B, plus: Explore the potential to use an historic building to serve as the northern gateway contact facility.</td>
</tr>
<tr>
<td><strong>Interpretive Guided Tours</strong></td>
<td>Provide limited guided tours by private operators.</td>
<td>NPS would provide personal services, including training and certification to private operators; encourage public auto tour routes.</td>
<td>Same as Alternative B.</td>
</tr>
<tr>
<td><strong>Educational Outreach to Reserve Residents</strong></td>
<td>Continue to provide limited outreach.</td>
<td>Partner with real estate companies to develop a brochure about living within the Reserve.</td>
<td>Same as Alternative B.</td>
</tr>
<tr>
<td>Reserve Facilities</td>
<td>Alternative A</td>
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<td>Alternative C</td>
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<tr>
<td>Administration Facilities</td>
<td>Retain staff offices in Cottage by Sunnyside Cemetery and a natural resources management office at Farm I.</td>
<td>Same as Alternative A in the short-term; for long-term, secure administrative space in Coupeville in historic building in conjunction with visitor center/contact station if possible; retain Cottage for resource offices.</td>
<td>Same as Alternative A in the short-term; for long-term, adaptively reuse portion of Farm II, Reuble Farmstead with 5-acre tract to augment administrative needs. Continue to use Cottage for resource offices.</td>
</tr>
<tr>
<td>Maintenance Facilities</td>
<td>In short-term, continue to use Reuble Farmstead for storage and shop; continue to use seasonal employees and volunteers; no funded/established maintenance program. In long-term, explore various opportunities by co-locating maintenance facilities within the Reserve with others, such as units of local government, nonprofits, or individuals.</td>
<td>In short-term, continue to use Reuble Farmstead for storage and shop; when Farm II is exchanged, explore various opportunities by co-locating maintenance facilities within the Reserve with others, such as units of local government, nonprofits, or individuals; hire NPS maintenance foreman; adopt procedures/programs for maintenance of NPS-owned structures.</td>
<td>Same as Alternative B in the short-term; for long-term, adaptively reuse portion of Farm II, Reuble Farmstead with 5-acre tract for maintenance complex.</td>
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<tr>
<td>Reserve Operations</td>
<td></td>
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<tr>
<td>Staffing</td>
<td>3 Full-time equivalents</td>
<td>9 Full-time equivalents</td>
<td>10 Full-time equivalents</td>
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<td>4 Staff</td>
<td>10 Staff</td>
<td>10 Staff</td>
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<tr>
<td>Fees</td>
<td>Maintain no fee collection for entering Reserve; fee collection would continue at state parks and county museum.</td>
<td>Same as in Alternative A</td>
<td>Same as in Alternative A</td>
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<tr>
<td>Hours</td>
<td>Maintain existing office hours.</td>
<td>Same as in Alternative A</td>
<td>Same as in Alternative A</td>
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<tr>
<td>Transportation, Access, and Circulation</td>
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<td>Same as in Alternative A, plus: Conduct water/land circulation study throughout the Reserve to examine visitor use patterns and identify conflicts.</td>
<td>Same as in Alternative B plus: Request Island Transit to consider establishing summer weekend shuttles to and from Coupeville, Ebey’s Landing, Fort Casey and Fort Ebey state parks and other trailheads within the Reserve.</td>
</tr>
<tr>
<td>Reserve Boundary</td>
<td></td>
<td>Expand boundary to include remaining portions of US Navy OLF, Smith Prairie, Crockett Lake wetlands, Bell Farm.</td>
<td>Same as in Alternative B.</td>
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<tr>
<td>Land Protection</td>
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<tr>
<td>Land Protection Methods</td>
<td>Continue to rely on existing county and town land use controls; secure conservation easements and limited fee-title; partner with nonprofit land trusts and organizations.</td>
<td>Same as Alternative A, plus: Institute other creative land protection techniques; establish relationships with land trusts; seek other funding besides LWCF; seek to protect recharge areas through</td>
<td>Same as Alternative B, with the following exception: Recommend that legislation authorizing the change in the Reserve boundary direct a suitability/</td>
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</tbody>
</table>
### Land Protection Methods (cont.)

<table>
<thead>
<tr>
<th>Action Items</th>
<th>Alternative A</th>
<th>Alternative B</th>
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<tbody>
<tr>
<td><strong>Initiate Prairie restoration; revise historic preservation guidelines; develop trail sign plan; develop recreational plan; participate in Washington State Parks planning process; monitor conservation easements tract IPM practices; develop long range interpretive plan; update land protection plan; revise cooperative agreements between NPS, Trust Board, and partners; assure NEPA/NPRA compliance an all federal actions.</strong></td>
<td>Same as Alternative A, plus: Develop a museum management plan; develop design guidelines handbook for property owners in conjunction with partners; develop a system for tracking, evaluating, monitoring changes to the cultural landscape; upgrade training opportunities for Trust Board members and staff; establish a friends group; establish new cooperative agreements with organizations to facilitate Reserve operations and programs; identify long-term maintenance facility.</td>
<td>Same as Alternative B, plus: Train Commission members; expand routes and service for Island Transit; explore partnership development of a marine science center.</td>
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</tbody>
</table>
## Summary of Impacts

<table>
<thead>
<tr>
<th>Effects on Cultural Resources</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Landscape</td>
<td>Negligible to minor adverse impacts on the integrity of the cultural landscape and no major adverse impacts caused by NPS actions. Actions to promote the historic land use patterns with private farms leasing federally owned land provide a moderate benefit. Existing local and state zoning and development regulations do not adequately protect significant features of cultural landscape creating potential for moderate to major adverse impacts.</td>
<td>Developing a tracking system for cultural landscape changes would have positive, long-term effects. Working with Island County to develop an overlay zone including stronger design guidelines, larger minimum zoning, and stricter permitting, for the Reserve also has long-term benefits to resources but may be viewed by landowners as an adverse action. Stronger advocacy role in historic preservation to help maintain historic character has long-term beneficial effect.</td>
<td>Same as Alternative B, plus: Elevating status of Reserve management to paid Commission could have moderate to major beneficial impacts by heightening awareness of preservation.</td>
</tr>
<tr>
<td>Historic Buildings and Structures</td>
<td>Research and stabilization efforts necessary to preserve and protect NPS-owned structures provide minor benefit. Continued loss of non-NPS historic buildings and structures through demolition, neglect, or inappropriate alterations could have major, long-term, adverse impact and threaten integrity of the Reserve. Continued research and information sharing could have long-term benefit.</td>
<td>Same as Alternative A, plus: Adaptive reuse and interpretation of NPS-owned structures has long-term benefits. Expanded efforts for community outreach including a technical library and research program provide moderate to major benefits.</td>
<td>Same as Alternative B, plus: Using NPS-owned properties for historic preservation demonstrations and trainings has long-term beneficial effects. An historic building would be restored to Secretary of the Interior standards and Commission would work with officials to use incentives for owners in restoring and rehabilitating historic properties within the Reserve, providing beneficial, long-term effects.</td>
</tr>
<tr>
<td>Archaeological Resources and Collections Management</td>
<td>No adverse effects on archaeological resources. Collections management continues at North Cascades National Park results in minor to moderate adverse impact by removing collections from historic setting, but adequate storage and protection of collections also provides long-term benefits.</td>
<td>Same as Alternative A, plus: Long-term moderate benefits from development of a collections plan that provides for a local museum to hold limited artifacts provided NPS storage requirements are met.</td>
<td>Same as Alternative B, plus: New visitor center/contact station could potentially house collections providing local access resulting in long-term moderate benefit.</td>
</tr>
<tr>
<td>Effects on Natural Resources</td>
<td>Alternative A</td>
<td>Alternative B</td>
<td>Alternative C</td>
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<tr>
<td>Geology, Soils, and Air Resources</td>
<td>Negligible impacts on air resources and geology. Short and long-term adverse impacts on soils from habitat restoration and maintenance actions would be negligible to minor in intensity and duration and would result in long-term beneficial effects due to reductions in trampling, erosion, and exotic plants.</td>
<td>Impacts on air resources and geology same as Alternative A. Soil impacts same as Alternative A, plus: Additional land protection measures have beneficial effects to prevent the loss of prime and locally important agricultural soils. Active support of agency partnerships to advance research on area’s agricultural history, crop management, farm operations and other topics provide long term benefits by improving understanding of soil quality and preservation. Research monitoring would have short-term negligible impacts.</td>
<td>Same as Alternative B</td>
</tr>
<tr>
<td>Soundscape</td>
<td>The natural soundscape at the Reserve, consisting of both natural quiet and sounds associated with rural agricultural operations, would experience short-term minor adverse impacts from Alternative A, primarily through cumulative impacts generated outside the Reserve. Short-term moderate adverse impacts from construction noise could occur if the five-acre minimum build-out potential is realized.</td>
<td>Moderate benefits to the Reserve by enabling the Reserve to track changes that may impact the natural soundscape containing sounds traditionally associated with rural agriculture and natural quiet. Encouraging Island County to adopt an overlay zone would provide added benefits by maintaining the traditional soundscape and preventing intrusion of sounds associated with higher density residential development.</td>
<td>Same as Alternative B</td>
</tr>
<tr>
<td>Water Resources</td>
<td>Retaining land within the Reserve in agricultural use has positive long-term impact on freshwater resources; irrigation water used to grow crops is available for aquifer recharge and does not have to be treated. Continuation of existing management activities results in overall long-term negligible to minor beneficial effects on water quality with measurable effects limited to small localized areas.</td>
<td>Comprehensive research and monitoring agenda and working with farmers in aquifer protection would improve the local long-term beneficial effects on water resources at intensity levels ranging from negligible to potentially major. Creating impoundments or riparian corridors could create minor to moderate, short-term localized adverse impacts and minor to major beneficial, long-term impacts on wildlife and agricultural irrigation.</td>
<td>Same as Alternative B</td>
</tr>
<tr>
<td>Vegetation</td>
<td>Short- and long-term negligible to minor adverse impacts on vegetation from continued use of trails, plus off-trail trampling and spread of noxious weeds. Native plant community restoration activities and facilities maintenance</td>
<td>Forest management actions result in long-term moderate beneficial impacts to forest health and wildlife species despite short-term minor adverse impacts on removed vegetation. Native plant community restoration activities and fa-</td>
<td>Same as Alternative B</td>
</tr>
</tbody>
</table>
Vegetation (cont.)

Activities cause short-term negligible to minor adverse impacts but result in long-term indirect and direct minor to major beneficial effects as a result of vegetation restoration and public education.

Wildlife

Effects on wildlife continue to result primarily from conflicts with human uses of Reserve. Access, roads, and visitor recreation result in minor long-term adverse impacts on some species in high use areas. Prairie restoration and wildlife survey efforts cause some short-term minor adverse impacts, but with minor to moderate long-term beneficial impacts. Bald eagles common in the Reserve continue to experience negligible to minor impacts from current activities.

Same as Alternative A, plus:

- Prairie plant restoration efforts cause some short-term minor impacts, with minor to moderate long-term beneficial impacts, depending on species. Large scale restoration project such as Crockett Lake would have major long-term benefits on native flora and migratory waterfowl.
- Conservation of hedgerow habitat would have long-term beneficial impacts on numerous wildlife species dependent on plant community.

Effects on Agricultural Resources

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<thead>
<tr>
<th></th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
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</thead>
<tbody>
<tr>
<td>Protection of Agriculture Lands</td>
<td>Protection of agricultural lands in Alternative A continues to rely on scenic easements which result in moderate benefits by stabilizing the land base of agriculture. However, the high cost and pace of purchasing easements may not be fast enough to counteract the pressure to convert agricultural land which could be a moderate to major adverse impact.</td>
<td>Same as Alternative A, plus: Additional emphasis on promoting agriculture, agricultural process and innovative marketing would provide additional benefits to agricultural resources in the Reserve.</td>
<td>Same as Alternative B</td>
</tr>
<tr>
<td>NPS-owned Farms</td>
<td>Leasing NPS owned farms for agricultural purposes until their ultimate disposition provides a short-term, moderate benefit by retaining land in agricultural production. Disposing these properties, with the protection of scenic easements, in exchange for additional easement protection on lands within the Reserve is a long-term moderate benefit.</td>
<td>Same as Alternative A, plus: Retaining one acre at Farm I would be a moderate benefit by providing an opportunity for Reserve trail connections.</td>
<td>Retaining the Reuble Farmstead and five acres for Reserve functions provides several moderate, long-term benefits. Benefits include restoring buildings to Secretary of the Interior’s Standards; using restoration projects as training opportunities; adaptively reusing buildings for Reserve functions. However, this adaptive reuse does contribute to the conversion of farming structures to other uses.</td>
</tr>
<tr>
<td>Prime and Unique Soils</td>
<td>Prime and unique soils would continue to be lost if land is converted out of agriculture, a moderate adverse impact.</td>
<td>Taking a greater role working with other partners to prevent the loss of prime and unique agricultural soils would be an indirect benefit by educating the public about loss of important agricultural soils and a direct benefit by helping farmers retain important agricultural lands.</td>
<td>Same as Alternative B</td>
</tr>
</tbody>
</table>

| Effects on Visitor Experience | Alternative A | Alternative B | Alternative C |
| Interpretation and Education | Maintenance and expansion of waysides, depending on funding availability, has a minor beneficial effect. Using the Island County Historical Museum has minor adverse impacts that result from an entrance fee and the lack of any signs advertising the Reserve’s exhibit. | Development of facilities, waysides, and updating the Port Townsend Ferry Landing wayside provide direct benefits. Providing a centrally located visitor center in a historic building also has direct benefits. Increased emphasis on expanding outreach for interpretation and education provides long-term indirect benefits by improving understanding about the significance of the Reserve. | Same as Alternative B, plus: Addition of a gateway contact facility and a marine science center would be a moderate benefit. Loss of NPS uniformed rangers would be a moderate adverse impact. |
| Recreational Resources | Maintaining existing trails, implementing a sign plan for trails, and printing and distributing interpretive brochures would result in long-term beneficial impacts for visitors to the Reserve. Encouraging appropriate guidelines and enforcement of town speed limits for personal watercraft use would have long-term benefits by promoting safe recreation opportunities. Regulations of personal watercraft use may be viewed as an adverse impact by current users. | Overall, the actions proposed in Alternative B will have beneficial effects and minor impacts on the recreational resources of the Reserve. Establishing a recreational monitoring system would have long-term beneficial impacts on recreational resources. Enhancing cooperation among partners to develop a water trail around Whidbey Island with linkages to exiting marine trails would be a moderate, long-term benefit. | Same as Alternative B |
| **Recreational Resources (cont.)** | These watercraft can be a point source of pollution and have minor adverse impacts to natural quiet. | Some private property owners may view the trail as a threat if proposals suggest traversing their land. |
| Scenic Resources | Relying on voluntary landowner action to maintain historic views, protect scenery and open space, and minimize visual impact of new development could result in moderate to major adverse impacts to scenic resources if measures are not implemented. NPS would continue to acquire conservation easements by willing sellers that include provisions to address scenic resources providing long-term, direct benefits. | Creating a design guidelines handbook for property owners in the Reserve would provide a moderate, long-term benefit by educating homeowners on design and siting principles. Developing a viewshed map would also be a minor to moderate benefit and could be a useful tool to acquire voluntary conservation easements from willing sellers. Some minor adverse impacts could result if property owners view these actions as potential threats to their private property. |

<p>| <strong>Effects on Reserve Facilities</strong> | <strong>Alternative A</strong> | <strong>Alternative B</strong> | <strong>Alternative C</strong> |
| <strong>Visitor Facilities</strong> | No impacts are related to visitor facilities. | Relocating the visitor center/contact station and constructing three new gateway facilities would have minor short-term adverse impacts to resources during construction but would provide moderate long-term benefits to Reserve visitors. Locating the visitor center/contact station in a historic building would be a long-term moderate benefit by providing maintenance to the Secretary of the Interior’s Standards to an additional historic structure. | Same as Alternative B, plus: Site specific impacts from partnering to develop a marine science center would be addressed in a separate compliance document. |
| <strong>Administrative Facilities</strong> | Current administrative facilities outside of Coupeville limit the visibility of the Reserve and the multiple locations create some inefficiency and a minor adverse impact. | Short-term impacts to administrative facilities are the same as Alternative A. Long-term relocation of administrative facilities to an existing location in Coupeville offers moderate benefits by providing a central location with more visibility to both the public and Reserve partners. | Retaining the five acre tract and buildings at Farm II for both administrative and maintenance facilities provides moderate to major benefits by offering a long-term solution to the space needs for these Reserve operations location of the administrative facilities at Farm II could be a minor adverse impact by decreasing visibility and accessibility to the public and partners from town center. |</p>
<table>
<thead>
<tr>
<th>Maintenance Facilities</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
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</thead>
<tbody>
<tr>
<td>Reuble farmstead cluster at Farm II currently in use as a maintenance facility is adequate for the operation, creating no short-term impacts but potential moderate impacts in the long-term if the facility was relocated.</td>
<td>Same as Alternative A.</td>
<td>Retaining the five acre tract and buildings at Farm II for both administrative and maintenance facilities provides moderate to major benefits by offering a long-term solution to the space needs for these Reserve operations.</td>
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</tbody>
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<thead>
<tr>
<th>Effects on Reserve Management and Operations</th>
<th>Alternative A</th>
<th>Alternative B</th>
<th>Alternative C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reserve Management</strong></td>
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<tr>
<td>Varied composition of the Trust Board is a moderate to major benefit.</td>
<td>Same as Alternative A.</td>
<td>Replacing the Trust Board with a paid Commission would result in moderate benefits to the Reserve by ensuring Commission members dedicate the time necessary to manage the Reserve.</td>
<td></td>
</tr>
<tr>
<td>Ability of the NPS to obtain easements to protect key areas major long-term adverse impact on Reserve values.</td>
<td>Providing additional staff for additional preservation and Reserve operations and maintenance would enhance park values, a moderate benefit. Staffing division between NPS and Trust Board employees is a moderate to major benefit by balancing local and national expertise and responsibilities.</td>
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<tr>
<td><strong>Reserve Operations</strong></td>
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<tr>
<td>Funding for staffing levels would continue to be inadequate to meet the increased interpretation, administration and resource management needs of the Reserve. Some existing program needs at the Reserve would continue to go unmet by Reserve staff.</td>
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<tr>
<td>Replacing the shared staff in Alternative B with Commission staff only would result in major short-term adverse impacts that could become moderate adverse impacts in the long-term. If a high level of staff turnover occurs, these impacts would remain major and adverse. Major, short-term, adverse impacts from the cost and time required to train non-NPS Commission employees in the use of required NPS systems and procedures. The Reserve Manager and Commission staff would be responsible for ensuring all legal, policy and procedural requirements of maintaining federally owned land, including easement and fee interest, and managing federal funding and program areas. Long-term, moderate adverse impact from the sustained program oversight responsibility of staff in the NPS Pacific West Region-Seattle Office.</td>
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<tr>
<td>Effects on Transportation, Access, and Circulation</td>
<td>Alternative A</td>
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<td>Alternative C</td>
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<tr>
<td>Transportation, Access, and Circulation</td>
<td>The expansion of State Route 20 is the predominant influence on transportation and circulation in the Reserve. Reserve staff involvement in transportation project review will help ensure Reserve characteristics are considered in design and implementation as well as help mitigate cumulative impacts of road projects.</td>
<td>Expanded tour routes could have a positive impact on spreading out visitation in the Reserve, minimizing some potential congestion. Land and water circulation study could provide new information to help identify patterns useful in managing visitors and assisting in public safety.</td>
<td>Same as Alternative B, plus: Expansion of transit shuttle service will provide an additional means for traveling through the Reserve and could help reduce potential conflict among visitors in and travelers passing through the Reserve.</td>
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<tr>
<th>Effects on Socioeconomics</th>
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<td>Socioeconomics</td>
<td>Continued presence of farms and agricultural land uses within the Reserve contribute positive socio-economic benefits. Slow increase in development of new tourism opportunities will have a moderately positive socio-economic impact. Reduction in the number of farm related workers and recent immigration of non-agriculture workers has changed the character of the Reserve's population, a moderate adverse impact.</td>
<td>Greater socioeconomic benefit than Alternative A with increased emphasis on public information and education. Enhanced programs of land protection in concert with growth management efforts of Island County and the Town of Coupeville could result in a pattern of more concentrated land development in and adjacent to the Town of Coupeville.</td>
<td>Effects on socioeconomics under Alternative C would have a greater long-term, direct and indirect, beneficial impact with the development of a marine science center, and visitor center/contact station.</td>
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<th>Effects on Reserves Boundary and Land Protection</th>
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<td>Reserve Boundary Land Protection</td>
<td>No boundary changes proposed. Land use protection measures rely heavily on efforts at the county and municipal level. Rural zoning district change from one home per ten acres to one home per five acres would have a major adverse impact on the visual character of the Reserve if future build-out occurred at this density (see Figure 12). County development standards would not likely mitigate the impacts of development at five-acre density. Many permitted and conditional uses allowed in zoning districts within the Reserve could be incompatible with the Reserve's objectives, a moderate adverse impact.</td>
<td>Boundary changes proposed in Alternative B that attempt to retain Smith prairie, the remainder of the OLF in the Reserve boundary, and the eastern wetlands of Crockett Lake would provide major, long-term benefits to protecting the integrity of the Reserve. Incorporating other land protection measures such as leaseback, historic property leasing, donation and others allow more options for conservation than Alternative A, providing moderate to major benefits. Encouraging Island County to adopt an overlay zone for implementing design review and other land use controls could have moderate to major long-term benefits that aid in rural preservation.</td>
<td>Same as Alternative B Same as Alternative B, plus: Creating a system of transfer of development rights, if successful, would have long-term, moderate benefits. Cost associated with creating and maintaining this system would have a moderate adverse financial impact. National Marine Sanctuary designation could have moderate to major long-term benefits by protecting marine resources.</td>
</tr>
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Environmental Consequences

The National Environmental Policy Act requires that environmental impact statements disclose the environmental effects of proposed federal actions. In this case, the proposed federal action would be the adoption of a general management plan for Ebey’s Landing National Historical Reserve. This chapter describes the environmental consequences of implementing the components of the three alternatives previously described. These components are based on the issues that were identified during the public scoping sessions and that are discussed in the previous “Purpose and Need for the Plan” chapter. By examining the environmental consequences of all alternatives on an equal basis, decision-makers can decide which approach creates the most desirable combination of the greatest beneficial results with the fewest adverse effects on the Reserve.

Each program or management action that could impact resources or resource uses has been analyzed, and the conclusions of those analyses are described by resource topic. Where data are limited, professional judgment has been used to project environmental impacts. Professional judgment was based, in part, on observation, analysis of conditions, and responses in similar areas.

The alternatives in a general management plan are intended to provide broad management directions. Because of the general nature of the alternatives, the potential consequences of the alternatives are analyzed in similarly general terms. Consistent with the NEPA and NHPA Section 106, the NPS would conduct additional environmental analyses with appropriate documentation before implementing site-specific actions.

In the case of Ebey’s Landing National Historical Reserve, the majority (approximately 85 percent) of the property is privately owned. The remaining land is owned by a variety of public entities, including the Town of Coupeville, Island County, Washington State Parks, and the National Park Service. Federal government regulations would apply only to those lands that are owned in fee or on those lands where there is a federal undertaking (such as federal funding, federal action or licensing). In some instances, lands owned in partial interest (easements) by the National Park Service (approximately three percent) or other federal agency would be subject to federal regulation; however, this situation would only occur if the easement language addressed a specific topic or landscape element that is federally regulated. Federal regulations may also apply in certain cases where federal funding is used for projects. The implication of this land ownership pattern is that many of the actions in this plan are non-federal. This plan is envisioned as a partnership document. The NPS can only make recommendations or work with other non-federal levels of government, nonprofit organizations, and interested persons in order to implement the recommendations outlined in this plan.

The existing conditions for all of the impact topics that are analyzed are identified in the “Affected Environment” chapter. All of the impact topics are assessed for each alternative. For each impact topic there is a description of the beneficial (positive) and adverse (negative) effects of the alternatives, followed by a brief conclusion.

The No Action Alternative analysis identifies future conditions based on the continuation of current Reserve management strategies. This alternative reflects changes associated with the growth in regional population and increased visitor use that is anticipated during the next 15-20 years. The two action alternatives are compared to the No Action Alternative to identify the incremental changes that would occur as a result of changes in park facilities and management.

At the end of impacts of each alternative is a brief discussion of unavoidable adverse impacts, irreversible and irrevocable commitments of resources, and the relationship of short-term uses of the environment and the maintenance and enhancement of long-term productivity. The impacts of each alternative are briefly summarized in the “Summary of Impacts” chart at the end of the “Alternatives” chapter.
Definitions
The following section defines the terms used for determining the environmental consequences of the actions in the alternatives. The environmental consequences to each impact topic are defined based on impact type, intensity, and duration, and whether the impact would be direct or indirect. Cumulative effects are also identified.

Impact Type
The effects that an alternative would have on an impact topic could be either adverse or beneficial. Adverse impacts involve a change that moves the resource away from a desired condition or detracts from its appearance or condition. Beneficial effects are those that involve a positive change in the condition or appearance of a resource or a change that moves the resource toward a desired condition. In some cases, the action could result in both adverse and beneficial effects for the same impact topic.

Intensity
Defining the intensity or magnitude on an impact is taken directly from Director’s Order 12: Conservation Planning, Environmental Impact Analysis and Decision-making (National Park Service 2001). Impact intensity is the magnitude or degree to which a resource would be beneficially or adversely affected. Each impact was identified as negligible, minor, moderate, or major in conformance with specific definitions included at the beginning of each impact topic. Due to the broad nature of actions called for in this GMP, most intensities were expressed qualitatively.

Duration
Duration refers to how long an impact would last. The planning horizon for the GMP is approximately 15-20 years. Within this timeframe, impacts that would occur within five years or less were classified as short-term effects. Long-term effects would last for more than five years.

Direct Versus Indirect Impacts
Direct effects would be caused by an action and would occur at the same time and place as the action. Indirect effects would be caused by the action and would be reasonably foreseeable but would occur later in time, at another place, or to another resource.

Cumulative Impacts
Impacts on the environment can result from the incremental impact of the action when added to other past, present, and reasonable foreseeable future action, regardless of what agency or person undertakes such other action. Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time.

Projects that Make Up the Cumulative Impact Scenario
To determine potential cumulative impacts, projects in the area surrounding the Reserve were identified. Projects included in this analysis were identified by examining other existing plans and by calls to local governments and to state and federal land managers. Projects identified for the purposes of cumulative impact analyses are past actions, plans or actions that are currently being implemented, and reasonable foreseeable future plans or actions. These projects were considered regardless of what agency, organization, or person undertakes them. Projects included in the cumulative impact analysis do not affect all resources equally.

Cumulative impact analyses are presented in this document by resource topic. The projects that make up the cumulative impact scenario were analyzed in conjunction with the impacts of each alternative to determine if they would have any additive or inactive effects on a particular resource.

Washington State Department of Transportation State Route 20 Realignment
The Washington State Department of Transportation recently initiated planning on portions of State Route 20 within the Reserve. The WSDOT has been meeting with Reserve staff since 2003 on the design and future construction of the realign-
ment. The first portion of the realignment affecting the Reserve is known as the Libbey Road Vicinity to Sidney Street Vicinity section and will include safety and design features including widening of State Route 20, providing enhanced road shoulders, adding turning lanes, closing or redesigning odd angled streets intersecting with State Route 20, and designing for speed limits of 50 miles an hour.

The Reserve staff and NPS have resource and visual concerns about many of these proposed changes. The increased speed limit, though ideal for people traveling through the Reserve, can be dangerous to Reserve visitors who travel at a more leisurely pace and stop on many occasions. Most of the roads throughout the Reserve follow the historic alignment and any changes to the alignment impact the historical integrity that the Reserve seeks to protect. Any widening of the road, along with the associated large cut and fill areas, impacts the cultural landscape and introduces more modern elements into a national park unit that serves to promote, protect, and preserve the rural landscape. The Reserve and NPS staff would continue to work with WSDOT with an emphasis on those actions that promote safety and are in harmony with the purpose of the Reserve.

Washington State Department of Transportation Keystone-Port Townsend Ferry Terminal Improvement Project

In November 2003, the WSDOT initiated planning for the relocation of the Port Townsend-Keystone Ferry Terminal located at the southern boundary of the Reserve, adjacent to Fort Casey State Park. The need for the action was multifold: to improve public safety and minimize conflicts with other marine activities, accommodate replacement vessels, create operational reliability, provide adequate vehicle holding areas, improve vehicle ingress and egress, and maintain the current schedule. A series of meetings were held with other government agencies, non-governmental interested parties, and the general public in December 2003. Three potential alternatives were identified: reconstruct the existing terminal at Admiralty Head; construct a new terminal at the end of Key-}

Environmental Consequences
With the exception of two structures (sheep barn and machine shed at the West Ridge property), all of the Reserve has been inventoried for above-ground resources that may be potentially eligible for listing in the National Register of Historic Places. This effort first occurred in 1972-1973, followed by a more thorough consideration of the cultural landscape in an NPS Building and Landscape Inventory in 1983, and subsequently updated in 1995. Archaeological resources were not included in any of these efforts and thus have not been adequately surveyed. This lack of inventory data is due, in large part, to private ownership issues. A Reserve-wide inventory of archaeological sites would require the NPS to obtain permission from private property owners. A high potential exists for additional archaeological sites to be uncovered in the prairies and along shorelines throughout the Reserve.

Ongoing vascular plant surveys are being conducted within the Reserve by the NPS and partners, including The Nature Conservancy, botanists from the University of Washington, and volunteers from Whidbey Audubon and the local chapter of the Native Plant Society. At this time the inventory is incomplete. Available information largely based on public land survey, historic specimens, and literature searches is well documented, but there is considerable field work remaining. Most of the Reserve has not been systematically surveyed or mapped for noxious weeds.

While significant progress has been made in assessing and modeling groundwater issues, there are surface flow and aquifer recharge questions that remain unanswered. Most of the analysis for the GMP was based on the Island County Groundwater Management Program and its Technical Memorandum, Appendix A on “Hydrogeologic Characterization and Background Data Collection relating to Ground Water Protection and Management” (1991).

Comprehensive wildlife surveys have not been conducted and small mammal data is incomplete.

Air quality data is extrapolative from nearby stations in Skagit and Island counties, but detailed wet/dry deposition data is unavailable for the Rese-
serve. Many of the natural resource needs were developed from an NPS workshop for the Reserve on Long Term Ecological Monitoring of Vital Signs. Staff and volunteers representing both government and non-government organizations participated in the Vital Signs Workshop held in 2001.

Mitigation Measures

The NPS assumes that the mitigating measures would be applied at the time the alternative was implemented in order to minimize or avoid impacts.

- New construction would follow NPS guidelines and management policies for lightscape, energy conservation, greenbuilding, sustainability principles, protection of important resources, and replanting with native plant species. It would also take into account measures to minimize the amount of air pollution produced.

- Residents are dependent upon the sole source aquifer (protected under state and federal law) for domestic water and irrigation. All federally funded construction projects, depending upon project size, location, and proximity to drinking water sources, must be reviewed by the U.S. Environmental Protection Agency. The Reserve staff would contact the Sole Source Aquifer Program at EPA Region 10 and coordinate with the agency for any projects within the Reserve meeting these criteria.

- Trails maintenance is performed regularly and effectively to prevent erosion, eliminate and prevent social trails, and reduce hardening of trail surfaces.

- Manure lagoons will be managed in a manner that will reduce groundwater contamination.

- Any installation of monitoring and research equipment would be sensitively sited and camouflaged to minimize visual disturbance to the cultural landscape and other resources.

- Waysides, interpretive exhibits, and signage of recreational resources would be sensitively sited to minimize visual disturbance to the cultural landscape and viewsheds and reduce "visual clutter" on roads.

- To offset the increase in motor vehicle transportation that is expected within the Reserve, Reserve staff would take measures to try to increase pedestrian, bicycle, and carsharing options to offset the expected increase.

- The NPS and Trust Board would continue to protect cultural resources to the greatest extent possible with available funding and staff, through direct action on lands owned in fee and by encouraging other landowners to practice good stewardship. Disturbing significant resources would be avoided wherever possible. Where avoidance or preservation cannot be achieved, mitigation would be carried out under the guidance of the procedures of the Advisory Council on Historic Preservation (36 CFR 800) on lands owned in fee and encouraged on other lands in the Reserve.

- Before any land-modifying activity on lands owned in fee in the Reserve, a professional archaeologist would inspect the present ground surface of the proposed development site and the immediate vicinity for the presence of cultural remains, both prehistoric and historic. Should newly discovered or previously unrecorded cultural remains be located, additional investigations would be accomplished prior to earth disturbing activities.

- All preservation, rehabilitation, and restoration efforts for historic structures would be carried out in accordance with the Secretary of the Interior’s Standards for the Treatment of Historic Properties, with Guidelines for Preserving, Rehabilitation, Restoring and Reconstructing Historic Buildings.

- Should NAGPRA materials be inadvertently discovered within the Reserve, agencies would follow the tribal consultation procedures outlined in the NAGPRA of 1990.

Impairment of Resources

In addition to determining the environmental consequences of the alternatives, NPS policies require that potential effects be analyzed to determine whether or not proposed actions would impair the resources or values of the Reserve. Since most of the land within the Reserve is private, the following impairment discussion and application would apply only to those lands that are federally owned in fee title or lands with less than fee title, such as conservation easements.

The fundamental purpose of the National Park System, established by the Organic Act and reaffirmed by the General Authorities Act (as
amended) begins with a mandate to conserve resources and values. NPS managers must seek ways to avoid or minimize adverse impacts on the resources and values to the greatest degree practicable. However, laws do give the NPS management discretion to allow impacts on the resources and values when necessary and appropriate to fulfill the purposes of a unit, as long as the impact does not constitute impairment of the affected resources and values. Although Congress has given the NPS this management discretion, it is limited by the statutory requirement that the NPS must leave the resources and values unimpaired unless a particular law directly and specifically provides otherwise.

Impairment is an impact that in the professional judgment of the Reserve Trust Board and NPS would harm the integrity of the resources and values, including the opportunities that otherwise would be present for the enjoyment of those resources or values. An impact on any resource or value may constitute impairment. An impact would be most likely to constitute an impairment if it affects a resource or value whose conservation is:

- necessary to fulfill specific purposes identified in the establishing legislation or proclamation of the park;
- key to the natural or cultural integrity of the unit or to opportunities for enjoyment of the unit; or
- identified as a goal in the general management plan or other relevant NPS planning documents.

Impairment might result from NPS activities in managing a unit (in this case the Reserve), visitor activities, or activities undertaken by concessioner, contractors, and others operating in the Reserve. In determining whether impairment would occur, park managers examine the duration, severity and magnitude of the impact; the resources and values affected; and direct, indirect, and cumulative effects of the action. An impact is less likely to constitute an impairment if it is an unavoidable result, which cannot be further mitigated, of an action necessary to preserve or restore the integrity of park resources or values.

In this chapter, a determination about impairment is presented in the conclusion section for each impact topic.

**Effects Common to All Alternatives**

The following section describes specific effects from actions that are common to all alternatives presented in the GMP.

**Reserve Management and Operations**

- Agricultural representative for Trust Board—Designating a representative from the agricultural community to one of the Trust Board positions could have a beneficial minor and long-term impact on Trust Board operations. One of the goals of the Trust Board is to encourage preservation of the open space and rural landscape of the Reserve. One way to achieve this goal is to keep agriculture viable in central Whidbey. Having an active or retired farmer on the Trust Board would help ensure that working farm issues and concerns are being addressed. The agricultural representative would, in turn, help educate other Trust Board members who are not knowledgeable about farming and agricultural issues. However, given the small community in central Whidbey and the time commitment, it may be difficult to involve an active farmer.

- Adoption of GMP by local governments—The recommendation for the town and county to adopt the GMP as part of their own comprehensive planning process would help coordinate and guide future land use decisions within the Reserve. Adoption of the plan would provide a beneficial effect in that all land use plans would be coordinated in their vision for the Reserve. This action would also help to foster communication and a consolidated approach between all levels of government. In addition, land owners would benefit from more coordination on land use issues within the varying levels of government within the Reserve. The first and only Reserve comprehensive plan was adopted by the town and county after it was finalized and approved in 1980.

**Natural Resources**

- Integrated pest management program—The Reserve has an approved IPM plan. Implement-
ing an integrated pest management program in cooperation with landowners and other partners is consistent with NPS management policies (4.4.5 Integrated Pest Management Program). Implementing a consolidated program would ensure that all lands within the Reserve, not just federally owned lands or interests in lands, would benefit. The effect of using a coordinated approach to pest management is beneficial, long-term by reducing risks to the public and protecting the Reserve’s resources and the environment from pests and pest-related management strategies (especially the risk of pesticides and herbicides entering into water sources). A minor short-term minor impact could result from landowners, especially existing farmers who actively use pesticides, not wanting additional regulations if the program is mandatory rather than voluntary. (See discussion in “Natural Resources” under “Water Resources” section.)

Agricultural Resources

• Continued presence of successful agricultural production – Actively working with Island County, the Natural Resources Conservation Service and other partners to encourage the continued presence of successful agricultural operations would be a major, long-term benefit in fulfilling the mission of the Reserve. Family farms and agriculture constitute the fabric of the cultural landscape of the Reserve with tilled fields, pastures and farmsteads which define the core areas of Ebey’s, Crockett, and Smith prairies. Keeping family farms and other agricultural practices viable would help maintain a productive agricultural economy within the Reserve. Promoting a viable farming economy would have a major long-term benefit by retaining the historic land use patterns and sites that are integral to the story and integrity of the Reserve.

Visitor Experience

• Interpretation of Native Americans, early Euro-American settlers, Chinese immigrants, and other peoples—Interpreting other cultures that lived in the Reserve and helped shape and influence the history and landscape seen today would have long term benefits by telling a more complete, inclusive and comprehensive story of the Reserve. Visitors would experience beneficial effects from this broader interpretation and education.

Effects on Cultural Resources

Methodology and Assumptions

The following discussion of cultural resources includes analyses of potential impacts to the cultural landscape, historic buildings and structures, archaeological resources, and collections management. These physical components of the cultural resources at the Reserve were described separately in Chapter 3. However they are discussed together here, because the distinctions between these resources at the Reserve are often blurred. For example, the historic structures, vistas, and historic vegetation obviously contribute to the cultural landscape, and the full extent of the archeological resources, many of which also contribute to the cultural landscape, are not known. Cultural resources in all areas of the Reserve are composed of all these elements which also contribute to the cultural landscape as a whole. In addition, many of the management actions proposed in the alternatives affect a combination of two and sometimes all three of these resources. Thus, the effects of each alternative on all three types of cultural resources are discussed below.

Information used in this assessment was obtained from relevant literature and documentation, maps, and consultation with cultural landscape preservation experts, as well as from interdisciplinary team meetings, field trips and site visits.

The National Historic Preservation Act (NHPA) requires agencies to take into account the effects of their actions on properties listed or eligible for listing on the National Register of Historic Places (NRHP). The process begins with identification and evaluation of cultural resources for NRHP eligibility, followed by an assessment of effects on eligible resources. In Washington, this process includes consultation with the State Historic Preservation Officer (SHPO). If an action could change in any way the characteristics that qualify the resource for inclusion on the NRHP, it is considered to have an effect. No adverse effect
means there could be an effect, but the effect would not be harmful to the characteristics that qualify the resource for inclusion on the NRHP. Adverse effect means the action could diminish the integrity of the characteristics that qualify the resource for the NRHP. For the purposes of this analysis under NEPA and Section 106, the intensity of impacts on cultural resources was defined as follows:

Actions were identified with the best use of professional judgment and assessed according to impact intensity criteria listed below:

Negligible: The effects on cultural resources would be at the lowest levels of detection—barely measurable without any perceptible consequences, either beneficial or adverse to cultural landscape resources, historic buildings or structures, archaeological resources or museum collections. For the purposes of Section 106 and the NHPA, the determination of effect would be no adverse effect.

Minor: The effects on cultural resources would be perceptible or measurable, but would be slight and localized within a relatively small area. The action would not affect the character or diminish the features of a NRHP eligible or listed cultural landscape, historic structure, or archaeological site and it would not have a permanent effect on the integrity of any such resources. For the purposes of Section 106 and the NHPA, the determination of effect would be no adverse effect.

Moderate: The effects would be perceptible and measurable. The action would change one or more character-defining features of a cultural resource, but would not diminish the integrity of the resource to the extent that its NRHP eligibility would be entirely lost. For the purposes of Section 106 and the NHPA, the cultural resources’ NRHP eligibility would be threatened and the determination of effect would be adverse effect.

Major: The effects on cultural resources would be substantial, discernible, measurable, and permanent. For NRHP eligible or listed cultural landscapes, historic structures, or archaeological sites, the action would change one or more character-defining features, diminishing the integrity of the resource to the extent that it would no longer be eligible for listing in the NRHP. For purposes of Section 106, NRHP eligibility would be lost and the determination of effect would be adverse effect.

The relationships between definitions of effects, including beneficial effects, and treatments of cultural resources are analyzed in the impact analysis for each of the alternatives. Levels of beneficial effect are not directly linked to specific types of treatments, rather they depend on the particular treatment of given cultural resources. All treatments proposed under all of the alternatives would be in accordance with the Secretary of Interior’s standards for the treatment of historic properties. All treatments proposed under all of the alternatives would have no adverse effect to known cultural resources.

The area of analysis for cumulative impacts was defined as Whidbey Island.

Impacts from Alternative A Analysis

Cultural resource management in the Reserve would continue under current laws, policies, and regulations under Alternative A as they relate to NPS property and authority. Since the NPS and Trust Board do not have authority over non-NPS lands in the Reserve, actions and subsequent impacts under Alternative A are limited to NPS-owned lands only, or limited to the interests in private lands purchased by the NPS as measures of protection (scenic and conservation easements).
Environmental Consequences

**Cultural Landscape**

Though the cultural landscape within the Reserve still retains its agricultural and historic integrity, increased development would continue to convert open space, agricultural lands, and woodlots to (primarily) residential uses. Key indicators of this trend are the additions of new structures (1000 new structures or 44 percent increase) and new roads (24 miles or 23 percent increase) within the last two decades since the Reserve was created (Rottle 2003: p. 7, 12). Without intervention, this trend is expected to continue due to population growth and housing demands adjacent to the Seattle metropolitan area. Population estimates for Island County for the year 2025 range from a low of 83,137 to a high of 119,000 (Island County Planning and Community Development 2004). This population trend could result in additional development pressures on areas in and around the Reserve, potentially resulting in moderate to major adverse impacts to the cultural landscape.

In addition, the predominate Island County Rural zoning designation within the Reserve allows for the subdivision of land into lots as small as five acres. This development pattern, if it were to occur in an uncontrolled manner, would not be consistent with the existing visual character of the Reserve (Nemens 2001: p.1). Without a system for tracking, evaluating, and monitoring changes to the cultural landscape within the Reserve, incremental changes may not be noticed in time to identify the impact on the Reserve potentially causing major, long-term, adverse damage to the cultural landscape.

Infrastructure in the Reserve including roads, trails, vegetation, viewsheds, small-scale features, and archaeological sites belonging to the town, county, Washington State Parks and private property owners would be maintained or impacted by these entities or individuals according to their needs and desires within the allowable development regulations. The NPS and Trust Board influence and technical assistance may help prevent or mitigate adverse impacts that could result from actions taken by these entities and foster good stewardship of Reserve resources.

Historic vegetation would be cared for through ongoing cyclical maintenance by willing property owners and the NPS. Historic land use patterns would continue with a private-sector farmer leasing the NPS-owned farm lands to grow crops, providing a major benefit to the cultural landscape.

**Historic Buildings and Structures**

The historic buildings and structures and patterns of historic land use representing Pacific Northwest history, juxtaposed with the Reserve’s natural setting, make the Reserve unique and worthy of national significance. The context for these properties is continually threatened as development encroaches onto former open space and agricultural lands. The Reserve currently consists of 90 percent non-historic structures (less than 50 years old) and 10 percent historic structures (at least 50 years old). The number of non-historic structures has increased by 44 percent over the last two decades (Rottle 2003). (Refer to “Structures 2000” and “Structures, Gains 1983 to 2000” maps, Volume II of this GMP).

NPS staff would continue to conduct research and stabilization necessary to preserve and protect all NPS-owned historic properties. However, some privately owned historic properties would continue to be lost as evidenced by the recorded loss of 14 historic structures within the Reserve over the last two decades (Rottle 2003: p.7). The lack of an adequate demolition ordinance in the county will result in additional losses of historic properties. Continued loss of historic structures through demolition, neglect or inappropriate alterations could have a major, long-term, adverse impact on historic resources and threaten the integrity of the Reserve. The NPS can only prevent the loss of historic structures that are owned in fee or owned in partial interest (easements) by the federal government.

Stabilization of historic structures on NPS-owned lands or using federal funds would continue to follow the Secretary of the Interior’s Standards. Any undertaking of restoration, preservation, and rehabilitation would comply with NPS management policies (5.3.5 Treatment of Cultural Resources) (National Park Service 2001). Although maintenance and rehabilitation projects on historic...
buildings and structures may result in negligible or minor impacts to those resources, the net result would be a beneficial long-term impact, as these resources are critical elements of the overall cultural landscape and story of the Reserve.

The NPS, in conjunction with the Trust Board staff, would continue to complete compliance documentation required by the NHPA for activities on NPS-owned lands, or when NPS is undertaking activities on non-NPS lands to ensure resources are adequately protected (Section 106). NPS staff would continue to seek preservation funds for the stabilization, preservation and long-term maintenance of NPS-owned historic buildings and structures. These activities would have long-term, moderate to major beneficial impacts by demonstrating sound stewardship of historic resources in the Reserve. However, it is possible that the continued ownership of buildings by a federal agency could be perceived as a negative impact by those who feel these properties should be returned to private ownership and protected through easements.

Reserve staff, in conjunction with the Trust Board, would also continue to expand the knowledge of the park unit by conducting historical research on various cultural and historical topics (Section 110), and distributing this research information through studies, interpretive programs and via other media. This research and information sharing could have a long-term beneficial impact by providing other owners of historic buildings and structures with a model for preserving such resources and contributing to the broader preservation and continuum of Pacific Northwest history in the Reserve.

Island County is moving towards implementing improved guidelines and standards for its Historical Advisory Committee, which would work towards better protection of the remaining open space in the Reserve (Island County Planning Commission hearing, August 10, 2004, recommended approval of draft guidelines). Without strengthened design guidelines, local zoning regulations and permitting reviews, the Reserve would continue to see potential incompatible construction and infill development. Coupeville is completing a historic preservation plan for the town, which has the potential to expand the area of design review to the entire town, thus protecting more resources (Sheridan, 2004). Some private property owners would continue to care for their historic structures while others would allow them to deteriorate despite the permitting process and design review.

Archaeological Resources and Collections Management

No adverse effects on archaeological resources would be expected to result from the No-Action Alternative. Archaeological work within the Reserve has been limited since the majority of land is in private ownership; however, the possibility of finding additional sites does remain high. Thirty-five sites have been documented. Additional reconnaissance and subsurface testing would be likely to increase the number of recorded sites (Thomson, 2004). Moderate levels of adverse impacts could occur to the Reserve on private property without the NPS or Trust Board being able to influence a decision or action affecting archaeological resources.

NPS would continue established resource protection measures for the identification and treatment of archaeological resources as required by NPS management policies (5.3.5.1 Archaeological Resources). Where potential impacts would be identified, possible mitigation could include, but would not be limited to, avoidance and protection, data recovery (evaluated as an adverse impact that would be undertaken as a last resort), and educational outreach programs such as informative onsite tours and presentations.

Collections management activities would continue to occur at North Cascades National Park Service Complex, where a professional curator maintains the current collection and assesses, evaluates, and catalogs (as appropriate) objects resulting from NPS-funded maintenance and/or research projects. Maintaining collections at North Cascades National Park would be a minor to moderate adverse impact in that collections would be removed from their historic setting and not be locally available for visitors, staff, or researchers. However, this management strategy would also
provide some long-term benefits in that collections would be adequately stored, preserved, and displayed according to NPS standards. Adequate storage and protection of these resources would ensure their preservation for any possible future display and research opportunities.

**Cumulative Impacts**

Continuing growth in the County and the subsequent development that occurs with that growth may have negative long-term impacts on the cultural landscape of the Reserve. Current zoning and development regulations at the county level are not adequate to maintain a sense of open space or encourage the perpetuation of farming, the historic land use in the Reserve. Under-used historic buildings and structures are threatened with demolition if the owners cannot find them to be value-added to their property or operation. Farm buildings are particularly vulnerable as changing technology alters equipment size and historic buildings and structures often cannot be easily adapted to meet today’s farmer’s needs. Farmers are faced with continued pressures from housing developments and the rural/urban interface issues, including smells from agricultural activities and farm equipment on roads.

**Conclusion**

The actions called for in Alternative A would cause negligible to minor adverse impacts on the integrity of the cultural landscape in the Reserve and be of minor beneficial effect to the overall Reserve. There would be no major adverse impacts to the cultural landscape caused by the NPS’s actions. The actions called for would promote the legislation establishing the Reserve and promote its fulfillment, while residents and visitors alike would see improvements to NPS-owned historic buildings. New research on historic and natural resources would be conducted to better understand, and appreciate, the significance of this non-traditional park unit.

However, there is the potential for moderate to major adverse impacts to occur through the actions of local and state governments, due to the existing zoning and development regulations that are currently in place that do not adequately protect historic land use and significant features of the cultural landscape. The realization of the build-out potential to five acre minimum size lots could lead to intrusions into cultural landscapes or other adverse effects on lands not owned by the National Park Service but located in or near the Reserve’s boundaries.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative B**

**Analysis**

Cultural resource management under Alternative B includes all those actions noted in Alternative A with additional attention paid to design review and technical assistance, research and historic preservation practices, and collections management.

**Cultural Landscape**

Developing a tracking system for cultural landscape changes would have a positive, long-term effect on helping to identify scenic, natural and cultural impacts that might occur from changing land uses, such as conversion of woodland or agriculture to residential uses.

Working with Island County to develop an overlay zone for the Reserve would also be beneficial in maintaining the rural landscape character through stronger design guidelines, larger minimum zoning, stricter permitting and other actions. The overlay zone could offset the potential for adverse effects to the cultural landscape under the current five-acre minimum zoning. However, some landowners may view this action as an adverse impact if tighter zoning or other regulations are implemented which may restrict an owner’s ability to subdivide their land, convert its use, or build something requiring a conditional use.

In taking a stronger advocacy role in historic preservation throughout the Reserve (including interpretation, special events, and outreach programs), Reserve partners would help to maintain the historic character of the Reserve which would have a long-term beneficial effect. Having the Trust
Board identify other significant cultural resources within the Reserve for additional protection would be beneficial and proactive in the long-term protection of the historic character. This benefit would be augmented by expanding the technical library and archives related to Reserve history, along with historic preservation techniques and practices.

**Historic Buildings and Structures**

The impacts on historic structures would be the same as in Alternative A.

The NPS would adaptively reuse and interpret some NPS-owned structures, which would help in preserving the structures by using and caring for them. They would be adaptively reused following the Secretary of the Interior’s Standards for Rehabilitation and could be used as demonstration or training facilities for historic preservation, serving as role models for the Reserve and greater Island County community (Jones & Jones, Farmland Preservation Recommendations for Ebey’s Landing National Historical Reserve 2003; NPS Management Policies, 2001, Section 5.1, 5.3). This reuse would have long-term benefits by maintaining historic properties and would also be fiscally advantageous, in that the NPS would not have to seek use of and pay for structures elsewhere.

As historic preservation efforts increase, the NPS would serve as a role model and steward of historic properties. A technical library, research program and archives would be established to ensure that up-to-date information is distributed to the residents of the Reserve and others interested in Reserve history. This action would expand efforts to reach out to the community and visitors through interpretation, special events, and other educational opportunities in order to heighten awareness of the Reserve and its unique resources. A 1995 visitor survey conducted by the University of Washington at the Reserve noted that visitors would have liked more information about what to do while at the Reserve (Pergola et al. 1995). Specifically, visitors suggested that maps and brochures be made more readily available throughout the Reserve. These actions would have moderate to major beneficial impacts by heightening awareness of the Reserve and providing a role model in the community for historic preservation.

Additional actions under Alternative B would involve Section 110 of the NHPA, with the addition of lands in Smith Prairie. This addition would require inventory, evaluation and documentation of properties within the newly designated area to determine how any resources may contribute to the history of the resource and therefore be eligible for listing in the National Register of Historic Places. This action would require staff or funds to hire professionals to conduct the determinations of eligibility. However, this addition of lands would provide added benefits over Alternative A by including other structures that contribute to the cultural landscape and the history of the Reserve.

**Archaeological Resources and Collections Management**

The impacts on archaeological resources would be the same as in Alternative A.

Collections management under Alternative B would call for Reserve collections (artifacts and archives) to be primarily cared for by the North Cascades National Park Service Complex curator. However, Alternative B also calls for a museum management plan that would provide for a local museum to potentially house and display limited artifacts provided NPS storage requirements are met. Storing collections at two locations would have both minor benefits by bringing some material back to its historical context to be enjoyed locally by visitors and residents and minor adverse impacts by removing objects from the direct care of an NPS professional curator.

A plan for collections management at the Reserve is contained within the North Cascades National Park Service Complex and Ebey’s Landing National Historical Reserve Museum Management Plan (2004). A museum management plan would allow NPS staff to properly catalog and maintain collections. Developing and implementing this plan would be a minor to moderate impact on staff time and resources. However, this plan would have a minor long-term beneficial effect by providing guidance and eventually display artifacts, manuscripts and other items from the Reserve.
Cumulative Impacts

The cumulative impacts under Alternative B would be similar to those described under Alternative A. In addition, the Reserve would increase in size to encompass the historic 1850s donation land claims of Joseph Smith and John Kineth in Smith Prairie and the potential for many more archaeological sites to fall within the boundaries of the Reserve.

Additional historic properties might be added to the National Register of Historic Places as a result of determinations of eligibility. Through the establishment of a historic overlay zone in the County for the Reserve, and increased boundaries of the historic overlay zone within the Town of Coupeville, additional protection may be realized for historic properties, open space, woodlands, and agricultural lands.

With NPS-owned historic buildings and structures undergoing preservation and rehabilitation work, the NPS would continue to be a role model for historic preservation stewardship. Increased attention on conducting historical research in both natural and cultural resources will provide important information for making land protection and resource management decisions as well as enhance interpretive programs. Increased interpretation and outreach to the community, partners and visitors will result in more people being knowledge-able about the Reserve and the various ways to protect its significant natural and cultural resources. This increased outreach has the potential to result in more visitors coming to the Reserve, and the unintentional degradation of resources due to visitor impacts (excessive impacts on trails, parking lots, people encroaching on historic scenes, trespassing, vandalism, etc.)

Development trends and loss of agriculture in the Pacific Northwest place additional pressure on the preservation efforts at the Reserve. No other cultural landscape preserves in its entirety the settlement history and continued agricultural land use and production history in the Pacific Northwest. As the loss of historic buildings related to settlement of the Pacific Northwest continues due to development and population pressures, the protection of historic buildings within the Reserve and the continuation of the living history of agriculture becomes even more paramount and relevant. These trends result in moderate to major adverse impacts due to the loss of some historical buildings, and the return of others to the private sector, where the lack of adequate funding to repair, maintain, or rehabilitate existing historical buildings results in their deterioration and eventual demise.

Conclusion

Collectively, the actions proposed in Alternative B would result in beneficial minor impacts to the Reserve. However, as in Alternative A, the NPS must rely on partners to implement zoning and other development regulations that work towards protecting the nationally significant cultural landscape of the Reserve. The lack of action by partners in implementing adequate land use and historic property protection measures may result in moderate to major adverse effects on the various features that comprise the cultural landscape of the Reserve. The actions proposed for the NPS to complete will not result in adverse impacts. The effects of proposed actions for the NPS to undertake under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative C

Analysis

Cultural resource management under Alternative C includes all those actions noted in Alternatives A and B, with additional attention paid to the management entity of the Reserve, expanded partnerships and land protection.

Cultural Landscape

Under Alternative C, the current management entity of the Reserve (the Trust Board) would be replaced with a Reserve Commission. Elevating the status of Reserve management from volunteer Trust Board to paid Commission could potentially have moderate to major beneficial impacts by heightening awareness of preservation in the Reserve. This Commission would include other decision makers in key posts and could interact on the same level with other management entities in central Whidbey. The potential for this Commis-
sion to implement ordinances and incentives for preservation could provide moderate to major benefits for the long-term preservation of the cultural landscape.

The NPS-owned historic farms protected by conservation easements would be exchanged or auctioned off to the highest bidder in order to have the lands returned to the private sector with the exception of a five acre parcel at Farm II. This action would require subsequent and ongoing monitoring of those easements to ensure the terms of the protective easement are being adhered to. This action would result in productive farmland being protected and farmed through the efforts of local farmers instead of the federal government. The selling or exchanging of the historic Rockwell House would also require extensive staff time to ensure that preservation or rehabilitation of that structure is done in accordance with the Secretary of the Interior’s Standards for Rehabilitation.

Alternative C calls for the retention of the Reuble Farmstead, including buildings and approximately five acres of land. This action would have beneficial minor to moderate effects as formerly abandoned historic buildings would be adaptively reused, maintained and ultimately preserved for use by the NPS, Commission, and partner organizations.

**Historic Buildings and Structures**

The effects on historic structures would be the same as in Alternative B.

In addition, an historic building would be restored to the Secretary of the Interior’s Standards, with other partners and used as a visitor center/contact station, administrative offices and curatorial storage. The Reserve Commission and staff would work with local town and county officials to use local tax and other incentives to assist property owners in restoring or rehabilitating historic properties within the Reserve. Both of these actions would be beneficial, long-term, direct effects on the historic setting and character of the Reserve. In addition, using NPS-owned properties for historic preservation demonstration purposes and training sites not only would be beneficial to teach property owners within the Reserve how to preserve their structures, but would benefit the larger preservation community by providing technical assistance. This action would have a long-term beneficial effect on keeping historic properties within the Reserve viable.

**Archaeological Resources and Collections Management**

The effects on archaeological resources and collections would be the same as in Alternative B.

Collections storage would also be possible at the local Island County Historical Museum if adequate space existed there. Local availability of these collections would provide some moderate benefits over Alternative A by providing local access to artifacts. The need for on-site staff to be trained in collection management to ensure adequate protection measures were in place for these artifacts would be a moderate short-term adverse impact on park funding and staffing.

**Cumulative Impacts**

The cumulative impacts on the cultural landscape of the Reserve under Alternative C would be similar to those described for Alternatives A and B. As more information about the Reserve and its resources is distributed, more visitors may come to visit and more residents will better understand and appreciate the value and significance of the Reserve. This increased visitation could potentially lead to some degradation of trails, parking areas, and the overall historic scene if it is not managed properly. However, the more people who understand the significance of the Reserve and its role in preserving a vital cultural landscape in the Pacific Northwest, the greater the chance of individuals within the county and beyond taking on the role of stewardship and thus having positive, long-term benefits.

**Conclusion**

Alternative C, with its emphasis on establishing a Reserve Commission, including elected officials, boundary expansion, and increased opportunities for property owners to obtain financial assistance in preserving their historic properties, would, overall, result in long-term beneficial minor effects on the cultural landscape of the Reserve. As with
the other two alternatives, the lack of action by partners in implementing adequate land use and historic property protection measures may result in moderate to major adverse effects on the various features that comprise the cultural landscape of the Reserve.

The effects of proposed actions for the NPS to undertake under this topic heading would not result in an impairment of Reserve resources or values.

**Effects on Natural Resources**

**Methodology and Assumptions**

**Geology, Soils, and Air Resources**

Information used in this assessment of effects on geologic, soil, and air resources was obtained from relevant literature, maps, and consultation with geologists, soil scientists, and interagency cooperators, as well as from interdisciplinary team meetings, field trips, and site visits. Actions were identified with the best use of professional judgment and assessed according to impact intensity criteria listed below:

**Negligible:** Impacts would not be detectable through standard observation.

**Minor:** Impacts could result in local, transitory, or small change to geologic, soil, or air resources; total disturbance would be nearly indiscernible. Monitoring might or might not detect changes. Loss of associated contextual information would be minimal. Small effects on soil fertility would require simple mitigation to correct. No air quality mitigation required.

**Moderate:** Impacts would result in measurable change to geologic, soil, or air resources that would be consequential. Total volume of disturbance could be small, but quite noticeable in a local area, or involving unique or rare features. Monitoring would identify the most affected resources, but some features or contextual information would be lost. Soil productivity or fertility would be adversely affected over a relatively wide area, requiring larger-scale mitigation with the expectation of success. Measurable changes in air quality would have appreciable local consequences and could trigger need for monitoring of wider suite of air quality parameters. Mitigating measure might be required and they would be successful.

**Major:** Impacts would result in dramatic changes to geologic, soil, or air resources. The change would be measurable, and the level of disturbance would be large. Even with monitoring, multiple valuable features would be significantly altered, and/or associated contextual information would be lost. Soil productivity and fertility would be obviously degraded, long-term, over a large area within and outside Reserve boundaries; substantial change to the character of the soils would occur. Extensive mitigation might not be successful. Changes in air quality would be measurable and have substantial health-related consequences. Mitigation measures would be necessary and their success would be uncertain.

**Soundscape**

**Negligible:** Impacts would not be detectable and would have no effect on ambient noise environment.

**Minor:** Impacts would be slightly detectable in close proximity to the source, but are not expected to have an appreciable effect on ambient noise levels.

**Moderate:** Impacts would be clearly detectable and could have an appreciable effect on ambient noise levels; moderate adverse impacts may include introduction
of noise associated with an activity or facility into an area with little or no ambient noise.

Major: Impacts would be clearly audible against ambient noise levels; or would have a substantial, highly noticeable effect on ambient noise levels.

Moderate: Numerous individual native plants and a sizable portion of the native plant community over a relatively large area would be affected. The use of standard operating procedures to offset adverse impacts could be extensive, but likely to succeed. Special status plants could be affected.

Major: Impacts would be clearly audible against ambient noise levels; or would have a substantial, highly noticeable effect on ambient noise levels.

Moderate: Numerous individual native plants and a sizable portion of the native plant community over a relatively large area would be affected. The use of standard operating procedures to offset adverse impacts could be extensive, but likely to succeed. Special status plants could be affected.

Moderate: Considerable effect on native plant populations, including special status plants.

Major: Impacts would be clearly audible against ambient noise levels; or would have a substantial, highly noticeable effect on ambient noise levels.

Moderate: Numerous individual native plants and a sizable portion of the native plant community over a relatively large area would be affected. The use of standard operating procedures to offset adverse impacts could be extensive, but likely to succeed. Special status plants could be affected.

Wildlife

Negligible: Wildlife would not be affected, or the effects would be undetectable, and the changes would be so slight that they would not be of measurable or perceptible consequence to the population of any wildlife species.

Minor: The effects on wildlife would be detectable but localized, involving individuals, and of little consequence to the population of any species. Mitigating measures, if needed to offset adverse impacts, would be simple and successful.

Moderate: The effects on wildlife would be readily detectable and localized, with consequences at the population level. Mitigating measures, if needed to offset adverse effects, would be extensive and probably successful.

Major: The effects on wildlife would be obvious and would result in substantial consequences to the popula-

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<thead>
<tr>
<th>Water Resources (including Wetlands)</th>
<th>Negligible:</th>
<th>Chemical, physical, or biological effects would not be detectable, and would meet historical or desired water quality standards.</th>
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<td>Minor:</td>
<td>Chemical, physical, or biological effects would be detectable, but would meet historical or desired water quality standards.</td>
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<tr>
<td>Moderate:</td>
<td>Chemical, physical, or biological effects would be detectable, but would be at or below water quality standards or criteria; historical baseline or desired water quality conditions would be altered on a short-term (1-2 days) basis.</td>
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<td>Major:</td>
<td>Chemical, physical, or biological effects would be detectable and frequently altered from the historical baseline or desired water quality conditions and/or chemical, physical, or biological water quality standards or criteria would be slightly and singularly exceeded on a short-term (1-2 days) basis.</td>
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<tr>
<th>Vegetation, including Special Status Plants</th>
<th>Negligible:</th>
<th>No effect on native plant communities. Few individual and no native plants would be affected. Any effects would be small-scale. No special status plants would be affected.</th>
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<tr>
<td>Minor:</td>
<td>Some individual plants would be affected; a relatively minor portion of the plant community would be affected. Standard operating procedures to offset adverse impacts, in-</td>
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<td>Moderate:</td>
<td>The effects on wildlife would be readily detectable and localized, with consequences at the population level. Mitigating measures, if needed to offset adverse effects, would be extensive and probably successful.</td>
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<td>Major:</td>
<td>The effects on wildlife would be obvious and would result in substantial consequences to the popula-</td>
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Environmental Consequences

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dominately through the land protection measures at the county and municipal level. Island County allows one home per five acres in the Rural Zoning District, the largest zoning district in the Reserve. Depending upon future build-out of this density, this type of development pattern would have minor to major adverse impacts on soils where development occurs.

Under this alternative no new trails would be constructed and maintenance of existing trails would continue at current standards. This maintenance would result in minor adverse impacts resulting from occasional berm removal along trail edges to improve outflow of surface water and damage to individual plants at random locations. Long-term negligible to minor adverse impacts could result from soil compaction and erosion caused by the development of social hiking trails on the bluff, and from illegal bicycle use on trails.

**Air Resources**

The Reserve would continue to reduce the impact from night lighting in developing language in NPS conservation easements with landowners. This action is consistent with NPS management policies (4.10 Lightscape Management), and the county and town’s night sky ordinances. This action is a positive, minor, long-term effect in helping to preserve the night sky and the rural landscape setting. However, this alternative would not seek to encourage activities and programs that promote natural quiet and night sky.

In addition, the Reserve staff would not coordinate with other state and federal agencies in gathering needed baseline air quality data and developing a monitoring program. Though presently in attainment for all pollution criteria, without a way to evaluate potential pollutants and their sources, this lack of coordination could have direct and indirect, major, and long-term negative impacts on future air quality.

**Cumulative Impacts**

Within the Reserve, air quality is dependent upon the rate, composition, and volume of emissions from polluting sources within the greater Puget Sound and to a lesser extent, the Vancouver, British Columbia, Canada airshed. Point source pol-

**Impacts from Alternative A**

**Analysis**

**Geology, Soils, and Air Resources**

**Geology**

Geologic resources within the Reserve are primarily large-scale features associated with glacial processes, such as outwash prairies, kettle ponds, glacial erratics, ancient stream and lake beds, and numerous other ice and water formed remnants. Actions identified in alternative A would have negligible impacts on geologic features.

**Soils**

The Reserve staff would continue to encourage Island County and other governmental and private agencies, organizations and landowners in the support and preservation of prime and unique farmland soils. The highest value for these soils is for agricultural purposes. Once this declining resource is developed for other uses, such as residential or commercial construction, soils are lost to production. Paving destroys many of the organisms that make the soil viable; paving also causes major adverse impacts to soils.

Direct adverse impacts on soils from road maintenance and use could include road edge disturbance, isolated erosion, and compaction. The effects on soils from soil displacement and dust production would be local and minor. Recreational use would involve some soil loss, compaction, and erosion resulting in site-specific negligible to minor long-term adverse impacts on soils. However, if trails maintenance is performed regularly and effectively, the effects would be long-term beneficial, due to prevention of erosion, elimination of social trails, and hardening of trail surfaces where necessary to accommodate heavy pedestrian traffic.

In the No Action Alternative, the protection of land, open space, cultural landscapes and scenic values would continue to be accomplished pre-
Soil loss and movement resulting from the effects of land management activities including tilling and the development of homes, roads, and businesses, combined with periodic drought and frequent winds is local and possibly minor to moderate. Effects on soil fertility due to eolian processes are not known. Geologic features are negligibly impacted by this alternative.

**Conclusion**

Actions identified in Alternative A would have negligible impacts on air quality or geologic resources. On federally owned lands within the Reserve, soil disturbance, erosion, and compaction would be the primary adverse impacts associated with the management actions under Alternative A. Habitat restoration activities, road and trail maintenance, and fence maintenance would likely affect soils. Continuation of sustainable, best-use practices farming on the former Engle Farms would have beneficial effects on the soil. Overall, short and long-term adverse impacts on soils would be negligible to minor in intensity and duration, and have long-term beneficial effects due to reduced trampling, erosion, and introduction of exotic plants.

The effects of proposed actions under this heading would not result in an impairment of park resources or values.

**Soundscape**

Actions proposed in Alternative A would have negligible to minor impacts on the soundscape. Continuing to advocate for agricultural activities in the Reserve would provide benefits, perpetuating those sounds that are associated with viable agriculture in a rural community and consistent with the purpose of the Reserve. Opportunities for natural quiet would also prevail. However, if the five-acre minimum build-out occurred, there could be short-term moderate adverse impacts from the construction sounds in areas that previously had experienced sounds associated with rural agricultural operations or a quiet setting. Furthermore, there would be moderate adverse long-term impacts from increasing the concentration of sounds associated with residential development into the soundscape.

**Cumulative Impacts**

The Reserve experiences cumulative impacts to soundscape from four primary sources: NAS Whidbey use of the Outlying Landing Field (OLF), general road traffic along State Route 20 including roads accessing the Keystone-Port Townsend Ferry, the occasional use of jet skis, and general aircraft overflights. All these noise sources are on non-NPS owned land and outside of NPS control. Impacts to the soundscape from use of the OLF are short-term, highly variable in frequency, and range from minor to moderate in their intensity. The NPS and Reserve staff have no influence over these NAS Whidbey practice sessions. Part of the State Route 20 corridor runs through the Reserve and there is a minor adverse impact attributed to highway traffic. Approximately 3 million vehicles per year travel through the Reserve on this highway; traffic is regulated by WSDOT. Personal watercraft usage in Penn Cove generates minor short-term adverse impacts to the soundscape. The town of Coupeville is working on regulations that would help manage this noise. Commercial airplanes, commuter planes and scenic flights along the Whidbey Island coastline all generate noise resulting in minor short-term impacts to the Reserve soundscape.

**Conclusion**

The natural soundscape at the Reserve, consisting of both natural quiet and sounds associated with rural agricultural operations, would experience short-term minor adverse impacts from Alternative A, primarily through cumulative impacts generated outside the Reserve. However, short-term moderate adverse impacts from construction noise could occur if the five-acre minimum build out potential is realized.
Water Resources

Aquifer

Water has been, and will continue to be, a limiting resource on central Whidbey Island unless alternative sources are developed. Island County is a “sole source” aquifer which means that it is a finite source of water and therefore a critically important water supply. Residents are dependent upon this aquifer (protected under state and federal law) for domestic water and irrigation. All federally funded construction projects, depending upon project size, location, and proximity to drinking water sources, must be reviewed by the U.S. Environmental Protection Agency. The Reserve staff would contact the Sole Source Aquifer Program at EPA Region 10 and coordinate with the agency for any projects within the Reserve meeting these criteria.

Groundwater pumping exceeds recharge in the vicinity of the Reserve causing salt water intrusion in some areas. Salt water intrusion is the induced flow of salt water into fresh water aquifers caused by groundwater development. Once this intrusion happens, drinking and irrigation water can become undrinkable and contaminated.

Groundwater

By encouraging farming and actively buying conservation easements on key farm parcels, the Reserve staff, to a limited degree, is promoting water conservation. In 1983, approximately 84 percent of groundwater demand was for residential, industrial, and commercial uses and only 16 percent was for agricultural irrigation purposes (Island County 1991, Sapik 1988). Keeping the land within the Reserve in agricultural use has a positive and long-term impact on freshwater resources. In addition, irrigation water used to grow crops is available for aquifer recharge and does not have to be treated. A positive, indirect effect of limited fresh water resources is that it slows residential development by slowing or limiting the number of parcels that could be permitted and developed. This would, in general, be beneficial to wildlife as well by encouraging a more rural and less developed environment. (For a discussion on wetlands, see “Effects on Wetlands, Floodplains, and Threatened and Endangered Species.)

Though there exists the possibility of groundwater contamination from agricultural operations, there is very little data available on the occurrence of agricultural chemicals in groundwater. This includes potential contamination from nitrates from excessive fertilizer applications, and poorly designed high-density animal confinement operations (Island County 1991). Actively encouraging Island County staff and officials, and others to minimize the application of pesticides and associated runoff contamination of surface and groundwater resources would be a positive long-term impact on groundwater resources. Correct manure lagoon management would also prevent groundwater contamination.

As a result of population growth in the region, groundwater demand is expected to rise sharply in the future. Based on population and usage estimates, the total groundwater demand is projected to increase by 181 percent over the next 50 years (Island County 1991: II-4). This growth would have a moderate impact to groundwater resources.

Penn Cove

The relative scarcity of surface water in the Reserve means the effects of management actions would usually be localized to individual water bodies. Penn Cove is a valuable water source for fishing, aquaculture, and recreation. Leaking fluids from recreational vehicles, motor homes, boats, and other motorized vehicles used by visitors can pollute and degrade the water quality in and around Penn Cove. This water body is not under NPS jurisdiction, but is under both town and county jurisdiction. The NPS would encourage the town and county to determine impacts from sewage discharge and whether pump out stations are needed.

Cumulative Impacts

Management actions described in Alternative A are essentially administrative. The Reserve staff would continue to work cooperatively with conservation-oriented partners and the public in the implementation of protective measures regarding wetlands, aquifer recharge areas, and riparian areas. Minor trail maintenance projects and facilities improvements, such as the repair or installa-
Vegetation

Woodlands

Most of the forest remaining in central Whidbey is second and third growth forest. Only two large, densely wooded areas remain that comprise over 4,500 acres. Old growth is limited to a few remnant individuals along the bluffs above Ebey’s Landing. Since 1983, woodlands have declined by 111 acres or 2 percent within the Reserve (Rottle 2003). (Refer to “Land Use, Agriculture” map in Volume II of this GMP.)

The Reserve would continue to protect these woodlots that are already in NPS ownership or by conservation partners such as The Nature Conservancy. This protection would be a long-term beneficial effect to wildlife and birds such as eagles, hawks, owls, woodpeckers, flycatchers, vireos, thrushes, and sparrows that depend on this habitat. It is also beneficial to Reserve staff to be able to interpret the role of the forest in the character, use and history of the Reserve.

Prairies

Native Puget Lowland grasslands are one of the most endangered types of ecosystems in Washington State. The three large prairies, Crockett, Smith, and Ebey’s, cover over 5,000 acres or 42 percent of the Reserve’s land area. They are defined by rich farmland and separated by major ridges. These prairie soils, called molisols are a particularly valuable resource, and may have been farmed for thousands of years. These prairies comprise the heart of the Reserve and are most sensitive to development due to their open character and proximity to water. Reserve staff identifying areas to establish prairie species would provide a major opportunity to preserve an endangered ecosystem and associated plant life. In addition, animals that depend upon this type of habitat would benefit as it would help to ensure species survival.

Of the three prairies within the Reserve, the five and one-half acre prairie remnant in Smith Prairie is the most likely site where large scale restoration is still possible. It is the only known glacial outwash prairie site in the region where the prairie grass, Festuca idahoensis variety roemeri achieves dominance. In addition, Smith Prairie hosts an
“element occurrence” of the Idaho fescue-field chickweed community listed in the Washington Natural Heritage Plan as a “priority 3” for protection. A total of four plant associations representing Puget Lowland dry grasslands have been identified, and are included or proposed for addition to the National Vegetation Classification by Frosty Hollow Ecological Restoration. All four of these associations are considered globally, critically impaired.

Trust Board and NPS advocacy of native plant community preservation and selected restoration sites for native prairie species would have minor to moderate short and long-term beneficial impacts on preserving and enhancing the pool of genetic material associated with native prairies on central Whidbey Island. Restoration work would involve a combination of IPM techniques to prepare restoration sites, including tilling, application of herbicides, hand planting, and hydroseeding or broadcast seeding. If necessary, herbicides would be selected for specific target species and applied in clearly defined areas by state licensed applicators. Tilling and site preparation could lead to minor short-term adverse impacts due to eolian erosion.

In addition, there are about 200 species of butterflies in Washington and 50 can be linked to prairie environments. Of these, nine depend upon prairie environments for food and nesting habitat. In 1999, the Washington Department of Fish and Wildlife designated four of these nine prairie-dependent butterflies as candidates for listing as threatened or endangered. These four are the mardon skipper, the Puget blue, the Wulge checkerspot and valley silverspot Reserve (Mapes 1999). Field investigations by the Washington Department of Natural Resources have been initiated to confirm the presence or absence of these and other species. Reserve staff would promote protection of these species by identifying critical foraging and breeding habitat and working closely with other federal and state agencies to protect this habitat, yielding moderate, beneficial long-term benefits to both the prairies and the species that depend on them for habitat.

**Native and Exotic Plant Species**
Under Alternative A, the staff would encourage education about the valuable role of native plants within the Reserve. This would have minor to moderate beneficial effects on public awareness. Routine maintenance of historic structures and maintenance facilities would involve negligible to minor adverse impacts on vegetation at specific sites. Encouragement of road shoulder planting of low-growing native species would have negligible to minor beneficial effects on native populations.

The Reserve would also continue to control exotic species as required by NPS management policies (4.4.4 Management of Exotic Species). Removing exotics would have a long-term direct and indirect beneficial impact in the Reserve. Exotics can easily replace non-natives by out-competing them for basic biological requirements such as light and water. However, non-native plant material could be used and controlled in limited cases for defining the cultural resource feature of a cultural site.

Vegetation management would be coordinated with the Reserve’s 2001 IPM plan and fire management plan. The use of partnerships in the removal and eradication of selected noxious weed species on a site by site basis would have minor to moderate beneficial impacts on native plant species, and numerous wildlife species. Continued project funding for protection and recovery of the threatened golden paintbrush would have minor to moderate beneficial impacts on this rare plant’s status. Continued vascular plant inventory work would yield more baseline information that could be used to the benefit of native plant preservation efforts. Depending upon funding, research and monitoring needs as identified and prioritized in the 2001 Vital Signs Workshop would be implemented.

Trail use and maintenance work could spread noxious weeds, with minor to moderate short and long-term adverse impacts on native plant communities.

**Hedgerows**
Under Alternative A, Reserve staff would continue to support retention and establishment of hedgerows. Hedgerows are an important cultural feature in the Reserve. Some original Donation Land Claim properties are still defined by
hedgerows. Though the locations of some of the hedgerows have changed, the number of linear miles of hedgerows has slightly increased by two-tenths of a mile. Windbreaks increased by 1.8 linear miles (Rottle 2003). (Refer to “Boundaries, Hedgerows and Windbreaks, Changes” map, Volume II of this GMP.)

In addition, hedgerows contribute to associated natural resource benefits. Continuing to educate and inform the public about the positive benefits of hedgerows would have a positive long-term effect in the Reserve. A hedgerow can provide many diverse benefits to the land immediately adjacent to it. Hedgerows slow down water run-off, allowing more time for it to filter into the soil and the aquifer. They reduce soil loss by wind and water action. Hedges break up wind motion near the ground and help maintain soil moisture. Local soil fertility is enhanced due to the activities of associated hedgerow animal communities. Hedgerow plant species draw minerals from deep within the soil and deposit them near the surface. The insect eating mammals, amphibians, birds, and invertebrates which make hedgerows their home assist in pest control. Many mammals and migratory birds are attracted to hedgerows for shelter, feeding, and nesting. In the Reserve at least 22 species of birds depend upon the hedgerows for breeding, nesting, feeding, or shelter from predators (NPS “Hedgerows: Dirty Fences or Farmers’ Best Friends?” brochure—no date). (For a discussion on the native golden paintbrush, see “Effects on Wetlands, Floodplains, and Threatened and Endangered Species.)

Cumulative Impacts
Activities affecting vegetation outside the Reserve could negatively affect vegetation resources both in and outside the Reserve. Many noxious weed species occur in well-established populations in and out of the Reserve. These species include Scotch broom, poison hemlock, Canada thistle, and Himalayan blackberry. Increased visitor use could increase the migration of noxious and invasive weeds into the Reserve, necessitating extensive cooperation with the Island County Noxious Weed Board, Island County Public Works, and affected landowners, as well as educating the public about managing noxious weeds. Aggressive weed management throughout Island County, in addition to the actions described in Alternative A would result in long-term minor to moderate beneficial effects on native vegetation by controlling the spread of invasive exotics.

In addition, hedgerows contribute to associated natural resource benefits. Continuing to educate and inform the public about the positive benefits of hedgerows would have a positive long-term effect in the Reserve. A hedgerow can provide many diverse benefits to the land immediately adjacent to it. Hedgerows slow down water run-off, allowing more time for it to filter into the soil and the aquifer. They reduce soil loss by wind and water action. Hedges break up wind motion near the ground and help maintain soil moisture. Local soil fertility is enhanced due to the activities of associated hedgerow animal communities. Hedgerow plant species draw minerals from deep within the soil and deposit them near the surface. The insect eating mammals, amphibians, birds, and invertebrates which make hedgerows their home assist in pest control. Many mammals and migratory birds are attracted to hedgerows for shelter, feeding, and nesting. In the Reserve at least 22 species of birds depend upon the hedgerows for breeding, nesting, feeding, or shelter from predators (NPS “Hedgerows: Dirty Fences or Farmers’ Best Friends?” brochure—no date). (For a discussion on the native golden paintbrush, see “Effects on Wetlands, Floodplains, and Threatened and Endangered Species.)

Cumulative Impacts
Activities affecting vegetation outside the Reserve could negatively affect vegetation resources both in and outside the Reserve. Many noxious weed species occur in well-established populations in and out of the Reserve. These species include Scotch broom, poison hemlock, Canada thistle, and Himalayan blackberry. Increased visitor use could increase the migration of noxious and invasive weeds into the Reserve, necessitating extensive cooperation with the Island County Noxious Weed Board, Island County Public Works, and affected landowners, as well as educating the public about managing noxious weeds. Aggressive weed management throughout Island County, in addition to the actions described in Alternative A would result in long-term minor to moderate beneficial effects on native vegetation by controlling the spread of invasive exotics.

Agricultural lands in and around the Reserve are affected by the drift of exotic weeds and the movement of soil by the wind. Alternative A describes actions which would have negligible to minor adverse impacts of short duration and minor intensity. The restoration actions described in Alternative A could result in short-term negligible to moderate adverse effects from herbicide application, tilling, and seeding. This would result in the loss of primarily non-native vegetation, but some native plants would be lost as well. There would be increased opportunity for erosion, both from wind and rain, yielding short-term negligible to minor adverse impacts. Successful restoration projects strategically placed within the Reserve to protect and enhance native plant communities would result in a healthier, more resilient ecosystem, constituting long-term, minor to major beneficial effects. Encouragement of road shoulder planting of low-growing native species would have negligible to minor beneficial effects on native populations, and would lengthen or eliminate the mowing cycle.

Conclusion
Alternative A would result in both short and long-term negligible to minor adverse impacts on vegetation from continued use of trails, plus off-trail trampling and the spread of noxious weeds. Native plant community restoration activities and facilities maintenance activities would cause short-term negligible to minor adverse impacts, but they would result in long-term indirect minor to major beneficial effects as a result of vegetation restoration and public education.

The effects of proposed actions under this heading would not result in an impairment of park resources or values.

Wildlife
Under this alternative, the Reserve staff would
continue to seek additional information on various species both on public and private land through survey and inventory work (when and where appropriate), volunteer projects and restoration projects. Voucher specimen collections of non-listed small mammal species, for identification and reference, would be curated at the North Cascades National Park Service Complex curatorial facility in Marblemount, Washington. This survey and inventory could have a minor adverse impact on individuals of the species, but would be of little consequence to the population. Overall, having sound baseline surveys would be beneficial in determining wildlife management needs and to account for change in status over time.

Continued advocacy for, and expansion of hedgerows within the Reserve would have beneficial effects for the numerous bird, mammal, insect, reptile, and amphibian populations residing within hedgerows. Restoration of native plant communities would have short-term negligible adverse effects on some animal species, which would be offset by the long-term minor to major beneficial effects on other native species, such as pollinators, including butterflies. The idle manure lagoon (now used as an irrigation reservoir) at the former Engle Farm property would continue to provide valuable foraging and resting habitat for waterfowl, a moderate beneficial impact.

Current trail, grounds, and facilities maintenance activities would have negligible adverse effects on wildlife. Cutting or spraying of noxious weeds such as poison hemlock, depending upon the time of year, might have minor short-term adverse effects on nesting birds within individual localized stands of weeds. Restoration of near-natural conditions at Crockett Lake would have major beneficial effects on large numbers of native species.

**Cumulative Impacts**

Further development of private lands within the Reserve for residential, commercial, or agricultural uses could alter wildlife habitat and habits and cause a loss of wildlife. Increased traffic and road development could lead to greater road mortality for small mammals, large mammals, and birds. Animals regarded as pests within the Reserve, such as coyotes, have been displaced or killed, and for some small mammals and birds, the remaining hedgerow habitat is critical to their survival. Further damage to hedgerow habitat could cause minor to moderate adverse short-term and long term impacts for hedgerow-dependent species. Restoration of native plant communities would have short term minor adverse effects on some species due to impacts of herbicides, prescribed fire, and seeding treatments, but would, in the long-term, result in a healthier and more resilient ecosystem, constituting long-term beneficial effects on the habitat for numerous wildlife species.

**Conclusion**

Under Alternative A, which would continue current conditions, the effects on wildlife would continue to result primarily from conflicts with human uses of the Reserve, including disturbances by people and vehicles, and conflicts and competition with livestock use, pets, and agricultural practices. Access and roads and visitor recreation would result in minor long-term adverse impacts on some species in high use areas. Small-scale prairie plant community restoration efforts would cause some short-term minor impacts, with minor to moderate beneficial impacts over the long term, depending upon the species involved. Bald eagles, common within the Reserve, would experience current impacts, which are negligible to minor.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative B**

**Analysis**

**Geology, Soils, and Air Resources**

**Geology**

The impacts identified in Alternative B are the same as described in Alternative A.

**Soils**

In addition to the actions described in Alternative A, using a variety of land protection measures, including the purchase of conservation, scenic, and/or development easements, fee purchase, and land swaps, the Reserve staff would work with partners to prevent the loss of prime and locally important
agricultural soils through their conversion to development or other incompatible uses, and to preserve economically viable farm units and open space. In order to assist farmers in minimizing adverse eolian (wind erosion, transport, and deposition) processes during severe wind events, technical support from the NRCS would be sought. The active support of agency partnerships to advance research on the area’s agricultural history, crop management, farm operations, and other topics that support private, sustained, and viable agriculture within the Reserve would be beneficial to understanding and preservation of soils and soil quality. Funding would be solicited for following geologic processes monitoring such as status and trends of soil fertility, shoreline bluff stability, and prairie soil erosion.

Monitoring would provide useful data in assessing conditions and trends and identifying additional research needs. The impacts of monitoring would be negligible, and would provide beneficial information to be used in expanded soil protection and enhancement programs. Also, research funding would be sought in order to address questions relating to land use change; soil quality change related to land uses; and effects of agriculture and recreation on soil erosion. Research impacts, and other research needs identified in a comprehensive monitoring program, would have long-term benefits deriving from increased local knowledge and the application of scientific recommendations to the correction of any soils degradation identified.

All of the above monitoring and research project work would be non-intrusive, and of short-to-long term, with negligible impacts.

Air Resources

In addition to actions described in Alternative A, the Reserve staff would seek funding to shield fugitive light from fixtures within key night viewscapes, such as the prairies; additionally, the NPS and the Reserve Staff would join existing air quality networks within state and federal agencies including the Washington Department of Ecology, the U.S. Forest Service, the Northwest Air Pollution Authority and others to gather baseline data on air quality sampling and seek funding to establish a monitoring program for the Reserve, addressing key monitoring questions regarding spatial and temporal air quality components such as meteorology, climatology, visibility, deposition, and lightscape. Monitoring would provide useful data in assessing conditions and trends and identifying additional research needs. The impacts of monitoring would be negligible, and could provide beneficial information.

Under Alternative B, new funding would be sought to address important research questions chemical influences of sea spray, deposition effects of Port Townsend pulp mill plume, tropospheric ozone reference values, and toxicity testing for airborne substances in aquatics, soils, and biota.

The impacts of such research, and other research needs identified in a comprehensive monitoring program, would have long-term benefits deriving from increased local knowledge and the application of scientific recommendations to possible pollution mitigation or abatement measures.

Cumulative Impacts

Similar to Alternative A, within the Reserve, air quality is dependent upon external forces beyond the control of local citizens and governments. Airborne pollutants from outside the Reserve can adversely impact Reserve resources, negligible to minor and locally, of short duration and intensity, particularly during inversions. No actions identified in Alternative B would have measurable long-term impacts on air, soils, or geologic resources, although soil loss and movement resulting from the effects of land management activities including tilling and the development of homes, roads, and businesses, combined with periodic drought and frequent winds is local and possibly minor to moderate. Effects on soil fertility due to eolian processes are not known. Geologic features are negligibly impacted by this alternative.

Conclusion

As in Alternative A, actions identified in Alternative B would have negligible impacts on air quality or geologic resources; similarly, on federally owned lands within the Reserve, soil disturbance,
erosion, and compaction would be the primary adverse impacts associated with the management actions under Alternative B. Habitat restoration activities, road and trail maintenance, and fence maintenance would likely affect soils, and be short-term and of minor intensity. Restoration of drought-tolerant native prairie plant communities at selected sites would lead to reduced need for herbicides to control invasive exotics and the benefits of reduced herbicide impacts on soils. Continuation of sustainable, best-use practices farming on the former Engle Farms would have beneficial effects on the soil, minimizing soil loss, compaction and over fertilizing. Overall, short and long-term adverse impacts on soils would be negligible to minor in intensity and duration, and have long-term beneficial effects due to reduced trampling, erosion, and introduction of exotic plants.

The effects of proposed actions under this heading would not result in an impairment of Reserve resources or values.

**Soundscape**

Actions identified in Alternative B would have moderate beneficial impacts to soundscape. Implementing a tracking system for documenting changes in the cultural landscape would also allow the Reserve to identify potential changes to soundscape, such as use of new agricultural tools or technology that differ from those traditionally associated with rural agriculture. In addition, encouraging Island County to adopt an overlay zone would provide added benefits by maintaining the traditional soundscape and preventing intrusion of sounds associated with higher density residential development.

The effects of proposed actions under this heading would not result in an impairment to park resources or values.

**Water Resources**

**Analysis**

Effects on water resources would be the same as in Alternative A. In addition, promoting wetland mitigation (when possible and where appropriate), encouraging protection of the shoreline, and enhancing riparian habitats would all have positive long-term effects on the natural environment. The Reserve staff would be able to pursue these actions on NPS-owned properties, but could only take an advocacy role on other properties within the Reserve. Even if voluntary, some landowners may feel that this is advocating how they should use their land which may have limited negative effects.

Alternative B also describes a comprehensive research and monitoring agenda for a variety of freshwater and marine resource issues. All proposed work would be performed in collaboration with landowners and agencies responsible for managing lands involved in research and monitoring activities. Most of the research would be non-intrusive; however, in some instances, voucher specimens would be collected for identification, reference, and natural history archives. No specimens of state or federally listed threatened or endangered species would be collected. This research would have a negligible impact on local populations. Any installation of short-term/long-term monitoring equipment would be sensitively sited and camouflaged to minimize visual disturbance. Recommendations derived from research and monitoring of water resource issues would lead to a wide variety of potential projects that would be designed to maintain or improve aquifer recharge purity and improve surface water management and nearshore marine habitat.
The active management of the manure lagoons at the former Engle Farms would have a beneficial effect on groundwater. The knowledge derived from extensive research and monitoring would have minor to moderate beneficial impacts on planning for riparian zone protection and enhancement, Crockett Lake/marsh restoration, and aquifer protection. Restoration of riparian corridors in pre-contact settings would provide minor to major beneficial effects for a wide variety of wildlife. Construction of impoundments in abandoned or altered riparian areas would provide short-term minor adverse impacts related to soil disturbance and vegetation manipulation, and minor to major beneficial, long-term impacts on wildlife and agricultural irrigation.

Reduction of pesticide runoff might have negligible to moderate beneficial impacts on soil biota, nearshore invertebrates, and the water quality of impoundments and seeps.

**Aquifer**

Working with farmers in the protection of the aquifer to minimize contamination would be long-term and beneficial in restoring and maintaining water quality. Once an aquifer is polluted, it becomes difficult and expensive to clean up. Nitrates are a problem getting into groundwater with agricultural use. The source of the aquifers on Whidbey Island is limited and is mainly from precipitation. As such, they are not high producers and recharge happens slowly. Over withdrawal can cause saltwater intrusion which has happened at some places within central Whidbey. (Herman 2004, Island County Ground Water Management Program 1991).

**Penn Cove**

The impacts to Penn Cove under Alternative B are the same as Alternative A.

**Cumulative Impacts**

Dependent upon research findings and recommendation of prioritized sites, cooperative efforts involving restoration of riparian corridors and wetlands would create short-term minor to moderate disturbance impacts on localized habitat in limited areas, potentially including IPM practices for weed containment, control, and elimination; soil manipulation, and replanting. Short-term minor to moderate adverse effects on water turbidity would be associated with soil manipulation at localized sites.

The proposed actions in Alternative B would contribute slightly more to the cumulative impacts on water resources than would the no-action alternative (Alternative A) due to potentially increased visitation and researcher traffic, but this would be considered a minuscule increment to the overall adverse impacts.

**Conclusion**

Implementing Alternative B would improve the local long-term beneficial effects on water resources at intensity levels generally ranging from negligible to potentially major. Adverse impacts would range from negligible to potentially moderate, short-term, and long-term negligible to minor.

Creation of impoundments or riparian corridors could create minor to moderate seasonal changes in nutrient concentrations, bacteria levels, and turbidity. These effects would be localized within the small watersheds the new features would occupy.

The effects of proposed actions under this heading would not result in an impairment of Reserve resources or values.

**Vegetation**

**Woodlands**

In addition to the actions described in Alternative A, the Reserve staff would use multiple partnerships (including universities and university extension offices) to expand and preserve the woodlands and prairie ecotones within the Reserve. These actions could include such measures as brush clearing, selective thinning, creating firebreaks around facilities, snag habitat management, and the selective use of prescribed fire. These forest management actions would result in short-term minor adverse impacts on the removed vegetation and in the case of thinning, on the insects, mammals, and birds using the removed trees. Woodlot management would be prescribed toward restoring old-growth conditions, which would involve multi-age stands of timber species
and the preservation of snags for primary and secondary cavity nesters, bats, and insects, and leaving some larger diameter fallen timber for insect, small mammal, reptile, and amphibian habitat. Actions taken to improve upon this habitat would have short-term and long-term minor to major beneficial effects for a wide variety of wildlife species. These actions would also serve to open up the canopy to boost growth for remaining trees, and to provide slow release nutrients, both actions being long-term minor to moderate beneficial impacts.

The encouragement of voluntary involvement of private landowners would have a positive benefit on the resources, if those efforts are successful. Again, some landowners may view this as property rights interference.

**Prairies**

Since prairies are a threatened ecosystem in Puget Sound (as mentioned in Alternative A) developing a prairie restoration plan that would be expanded to include local and regional partnerships would have a positive, long-term benefit to both the native plant and animal species that inhabit it. Individual restoration projects would have minor to moderate short and long-term beneficial impacts on preserving and enhancing the pool of genetic material associated with native prairies on central Whidbey Island. As in Alternative A, restoration work would involve a combination of IPM techniques to prepare restoration sites, including tilling, application of herbicides, hand planting, and hydroseeding or broadcast seeding. If necessary, herbicides would be selected for specific target species and applied in clearly defined areas by state licensed applicators. Tilling and site preparation could lead to minor short-term adverse impacts due to eolian erosion. Alternative B differs from the no action alternative only in scale: the potential for localized short term wind and rain-caused erosion would be increased somewhat due to a larger number of restoration sites, but the adverse impacts would still be minor short-term and beneficial long-term.

Under Alternative B, expanded pedestrian trails would cause short-term minor to moderate adverse impacts on localized vegetation and minor short-term erosion impacts due to exposed soil on new tread. Short-term minor adverse impacts would also be associated with the increased risk of importing exotic weeds. Careful trail design and construction would minimize the above impacts, and impacts would be long-term minor, associated with routine maintenance.

**Native and Exotic Plant Species**

The effects mentioned in Alternative A would be the same in Alternative B. In addition, Whidbey Island has many unique plants due to both the island ecology and the limited development that has occurred. The Whidbey Environmental Action Network (WEAN) has identified 33 rare local plants unique to Whidbey Island. Only one was recently given protection by the county, the blue flag iris (Douthitt, December 23, 2000). Most of these plants are not protected by federal, state, or local laws, but are locally important and their preservation helps protect genetic diversity. Many are found on land that is public or protected by conservation easements (Douthitt, December 16, 2000). The Reserve staff would identify and protect these populations where possible from management activities, visitor impacts, exotic and plant encroachment, providing a localized long-term benefit to native plants.

Working with partners to create a roadside vegetation program for the Reserve would promote native plants and educate the public about exotic plants. This program would have positive effects and is consistent with NPS management policies for using native plants (4.4.2 Management of Native Plants and Animals) and preventing exotics (4.4.4 Management of Exotic Species). This action has the potential to provide more protection and a greater benefit than that afforded in Alternative A.

Under Alternative B, the use of expanded partnerships and multiple funding sources, including cost-sharing initiatives in the removal and eradication of selected noxious weed species on a site-by-site basis would have minor to moderate beneficial impacts on native plant species and numerous wildlife species. Continued project funding for protection and recovery of the threatened golden paintbrush would have minor to moderate beneficial impacts on this rare plant’s status. Continued
vascular plant inventory work would yield more baseline information that could be used to the benefit of native plant preservation efforts.

Under Alternative B, the Reserve would also take a more active role in supporting landscaping strategies promoting the propagation and wide use of drought-tolerant native wildflowers (xeriscaping), ground cover, hedgerow species, and wildlife-friendly cover species. These actions would have short and long-term beneficial impacts on wildlife habitat, prevention of exotic plant invasion, and water usage.

The Reserve staff would seek continued funding for the Recovery Plan for the Golden Paintbrush (USFWS 2000). This would include funding numerous research questions associated with long-term successful population protection and augmentation. Some of these actions would have short-term adverse effects on native and nonnative species within the golden paintbrush sites; numerous invasive plants would be removed to reduce overstory encroachment on the threatened plants. In addition, removal of encroaching vegetation would have short-term adverse impacts on the protective cover for browsing small mammals. All of these actions, however, would have short and long-term moderate to major beneficial effects on the health of the golden paintbrush populations.

Under Alternative B, the Reserve staff would continue writing grant proposals for funding numerous research questions associated with long-term successful golden paintbrush protection and augmentation. Some of these actions would have short-term adverse effects on native and nonnative species within the golden paintbrush sites. Removal of encroaching vegetation would have short-term adverse impacts on the protective cover for browsing small mammals. All of these actions, however, would have short and long-term moderate to major beneficial effects on the health of the golden paintbrush populations.

The weed management plan for the Reserve focusing on the control and elimination of poison hemlock (*Conium maculatum*) would be a prominent, multi-partner project.

Funding would also be sought to revegetate the area following removal of the poison hemlock. This work would involve a combination of IPM techniques to prepare restoration sites, including tilling, application of herbicides, hand planting, and hydroseeding or broadcast seeding. If necessary, herbicides would be selected for specific target species and applied in clearly defined areas by state licensed applicators. Tilling and site preparation could lead to minor short-term adverse impacts due to eolian erosion. Alternative B differs from the no action alternative only in scale: the potential for localized short term wind and rain-caused erosion would be increased somewhat due to a larger number of restoration sites, but the adverse impacts would still be minor short-term and beneficial long-term.

Funding would be sought to address monitoring and research issues on topics addressed in the Vital Signs workshop.

**Hedgerows**

Impacts to hedgerows are the same as Alternative A.

**Cumulative Impacts**

As in Alternative A, activities affecting vegetation outside the Reserve could negatively affect vegetation resources both in and outside the Reserve. Many noxious weed species occur in well-established populations in and out of the Reserve. Increased visitor use could increase the migration of noxious and invasive weeds into the Reserve. Aggressive weed management throughout Island County, as described in Alternative B, would result in long-term minor to moderate beneficial effects on native vegetation, by controlling the spread of invasive exotics, and restoring native vegetation to areas where weeds are removed. The cumulative impacts of expanded multi-agency and private organizational emphasis on weed control would be long-term moderate to major beneficial for a wide suite of native species. Additionally, sensitive trail design and construction would provide a moderate beneficial template for multi-agency use.

Agricultural lands in and around the Reserve are affected by the drift of exotic weeds and the movement of soil by the wind. Alternative B describes actions which would have negligible to
moderate adverse impacts of short duration and minor to moderate intensity. The more expansive restoration actions described in Alternative B could result in short-term negligible to moderate adverse effects from herbicide application, tilling, and seeding. During restoration actions, there would be increased opportunity for erosion, both from wind and rain, yielding short-term negligible to minor adverse impacts. As in Alternative A, successful restoration projects strategically placed within the Reserve to protect and enhance native plant communities would result in a healthier, more resilient ecosystem, constituting long-term, minor to major beneficial effects. Encouragement of road shoulder planting of low-growing native species would have negligible to moderate beneficial effects on native populations, and would lengthen or eliminate the mowing cycle: this course of action might serve as a valuable beneficial example for other areas in Island County.

Active forest management actions would result in short-term minor adverse impacts on the removed vegetation and, in the case of thinning, on the insects, mammals, and birds using the cut trees. Actions taken to improve upon this habitat would have short-term and long-term minor to major beneficial effects for a wide variety of wildlife species. These actions would also serve to open up the canopy to boost growth for remaining trees, and to provide slow release nutrients, both actions being long-term minor to moderate beneficial impacts, and of value to private landowners as transportable management techniques.

Under Alternative B, the Reserve would take a more active role in supporting landscaping strategies promoting the propagation and wide use of drought-tolerant native wildflowers (xeriscaping), ground cover, hedgerow species, and wildlife-friendly cover species. These actions would have short and long-term beneficial impacts on wildlife habitat, prevention of exotic plant invasion, and water usage. Again, these actions could be “leading by example” for the rest of the county.

**Conclusion**

Forest management actions, which would focus on improving habitat by opening up the canopy, would result in long-term moderate beneficial impacts to forest health and wildlife species despite the short-term minor adverse impacts on the removed vegetation.

Native plant community restoration activities and facilities maintenance activities would cause short-term negligible to minor adverse impacts, but they would result in long-term indirect minor to major beneficial effects as a result of vegetation restoration and public education. Continued project funding for protection and recovery of the threatened golden paintbrush would have minor to moderate beneficial impacts on this rare plant’s status.

Other numerous research and monitoring issues would be prioritized for seeking funding. If implemented, this research would involve negligible to minor impacts on vegetation, such as individual plant removal for collections or archives; small prescribed fires, where the impacts would be short-term minor to moderate (small mammal displacement, burning of nonnative and native shrubs, forbs and grasses); negligible to minor beneficial short-term changes in nutrient balance; and the potential for short-term negligible adverse impacts due to localized trampling during field work. However, research outcomes, such as vascular plant inventory work, would yield more baseline information that could be used to the benefit of native plant preservation efforts.

Under this alternative, implementation of prairie restoration would be expanded. Alternative B differs from the No Action Alternative only in scale: the potential for localized short term wind and rain-caused erosion would be increased somewhat due to a larger number of restoration sites, but the adverse impacts would still be minor short-term and beneficial long-term.

The effects of proposed actions under this heading would not result in an impairment of Reserve resources or values.

**Wildlife**

In addition to actions described in Alternative A, the expanded trails network called for in Alternative B would cause negligible to minor adverse impacts on localized individuals of numerous species...
drought-tolerant native wildflowers (xeriscaping), ground cover, hedgerow species, and wildlife-friendly cover species. These actions would have short and long-term beneficial impacts on wildlife habitat, prevention of exotic plant invasion, and water conservation.

Continued projects that assist the recovery of the threatened golden paintbrush would have short-term minor adverse effects on some encroaching native and non-native individual plants, but the long-term benefits to the paintbrush and its companion native prairie species would be moderate to major.

Enhanced public outreach would have minor to moderate beneficial effects on local knowledge, awareness, and participation in natural resource projects within the Reserve. Aggressive efforts to secure funding for a wide array of research and monitoring issues would lead to numerous wildlife resource benefits.

**Cumulative Impacts**

As in Alternative A, further development of private lands within the Reserve for residential, commercial, or agricultural uses could alter wildlife habitat and habits and cause a loss of wildlife. Increased traffic and road development could lead to greater roadkill mortality for small mammals, large mammals, and birds, a minor to moderate long-term and short-term adverse impact. Animals regarded as pests within the Reserve, such as coyotes, have been displaced or killed, and for some small mammals and birds, the remaining hedgerow habitat is critical to their survival. Increased attention to the value of hedgerows and their protection would have minor to moderate beneficial effects on local knowledge, awareness, and participation in natural resource projects within the Reserve. Aggressive efforts to secure funding for a wide array of research and monitoring issues would lead to numerous wildlife resource benefits.

Under Alternative B, the Reserve would take a more active role in supporting landscaping strategies that promote the propagation and wide use of
Conclusion
As in Alternative A, the effects on wildlife would continue to result primarily from conflicts with human uses of the Reserve, including disturbances by people and vehicles, and conflicts and competition with livestock use, pets, and agricultural practices. Access and roads and visitor recreation would result in minor long-term adverse impacts on some species in high use areas. Prairie plant community restoration efforts would cause some short-term minor impacts, with minor to moderate beneficial impacts over the long term, depending upon the species involved. Bald eagles, common within the Reserve, would experience current impacts, which are negligible to minor. A large scale restoration project such as Crockett Lake would have major long-term beneficial effects on native flora and migratory waterfowl.

Conservation of hedgerow habitat would have long-term beneficial impacts on numerous wildlife species dependent upon this plant community.

The effects of proposed actions under this heading would not result in an impairment of park resources or values.

Impacts from Alternative C

Geology, Soils, and Air Resources
The effects on air and geological resources would be the same as in Alternative B.

Soundscape
The effects on soundscape would be the same as in Alternative B.

Water Resources
The effects on water resources would be the same as in Alternative B.

Vegetation
The effects on vegetation would be the same as in Alternative B.

Wildlife
The effects on wildlife would be the same as in Alternative B.

Effects on Agricultural Resources

Methodology and Assumptions
Available information was obtained through relevant literature, best management practices, monitoring, consultation with the public and interdisciplinary teams. Impacts were assessed using best professional judgment and the following criteria to define impact intensities:

Negligible: Agricultural operations would not be appreciably affected.

Minor: The effect would be perceptible, and the action would result in a slight change in agricultural operations, but the change would be localized.

Moderate: The effects would be apparent, and the action would result in a limited change in agricultural operations.

Major: The effects would be readily apparent or widespread, and the action would result in a substantial change in agricultural operations.

The area of analysis for cumulative impacts was defined as the Puget Sound region.

Impacts from Alternative A

Analysis

Protection of Agricultural Lands
The retention of agriculture is integral to the preservation of the Reserve and its national significance. According to a 1997 American Farmland Trust study, every state is losing agricultural resources to urban sprawl at approximately one million acres each year (American Farmland Trust 1997: p.3). In general, developed land has more adverse environmental impacts than agricultural land. Water pollution is caused by urban runoff. Water from roofs and paved areas pass into drains instead of naturally filtering into the soil and recharging the groundwater. Septic systems for low density subdivisions can add untreated wastes into groundwater and septic fields can add more nutri-
ent loads than livestock operations. Land development can produce more sediment and heavy metal contaminations than farming and cause non-point pollution and groundwater contamination (American Farmland Trust 1997: p.6).

As noted by Congress, the purpose of the Reserve is to preserve and protect the cultural landscape and to commemorate the history of a rural community significant in Pacific Northwest history. Analysis of land use maps between 1983 and 2000 show a net loss in agriculture of 158 acres or 4 percent during that time (Rottle 2003). (Refer to “Land Use, Agriculture” map, Volume II of this GMP.) This trend is expected to worsen as demand for homes and pressure for subdivision increases.

Continuing to purchase scenic easements to protect valuable agricultural land would create moderate beneficial impacts on agriculture in the Reserve. The approximately 2023 acres of agricultural land protected through acquisition of conservation easements provide a permanent, stable base of farmland for local agriculture. Continuing to purchase scenic easements on valuable farmland would create moderate benefits by further stabilizing the land base of agriculture in the Reserve and on Whidbey Island. However, it is unclear if the rate of protection in Alternative A will be fast enough to counteract the pressure of conversion of surrounding agricultural land to incompatible uses. Often, the high cost of purchasing easements on farmland results in a slow pace of protection (American Farmland Trust 1997: p.18).

Furthermore, continuing current strategies assumes that the emphasis would still be on the acquisition of conservation easements as money is made available from the Land and Water Conservation Funds. The fact that acquisition of easements are tied directly to the availability of these funds may be beneficial (if money is forthcoming) or adverse (if money with less than expected or withheld) and could be short-term to long-term. However, even when funding is available, easements often can’t be negotiated fast enough to effectively preserve agricultural lands.

Under this alternative, through easement language and enforcement, the limits of acceptable change on key agricultural parcels would be defined. These limits of acceptable change would include defining various types of crops and agricultural uses that help maintain the landscape and preserve the landscape character while providing the necessary flexibility to allow agriculture in the Reserve to adapt to change and remain economically viable. Revising easement language is important as new information is learned from previous easement management and would be beneficial for future easement management.

Maintaining the former Engle Farms in agricultural use would have direct beneficial impacts on preservation of agricultural land as well as soil health, the reduction of exotic weeds and erosion. Expert input from governmental and private farming specialists would have direct beneficial impacts on soil retention and fertility.

Best agricultural practices include the use of cover crops. Eolian processes (wind erosion, transport, and deposition) would continue to seasonally affect plowed fields, road cuts, eroding bluffs, trails exposed to prevailing winter winds, and unpaved farm roads. These impacts would range from negligible to minor, depending upon such factors as soil moisture, wind intensity and duration, and precipitation.

Prime and Unique Soils

In August 1980, the Council of Environmental Quality directed federal agencies to assess the effects of their actions on farmland soils classified as prime or unique by the Natural Resource Conservation Service of the U.S. Department of Agriculture. Prime and Unique Soils, including State Important soils, make up 74 percent of soils within the Reserve: prime (unconditionally) – 15.95%, prime (conditionally) – 42.53%, statewide importance – 15.21%. The fertile soils in the Reserve have been farmed for hundreds of years and manipulated for perhaps a thousand years or more. The emphasis in the Reserve on the retention of agriculture and on acquiring conservation easements on farms would be a long-term, direct benefit.

However, the slow but steady trend in central Whidbey to convert farmland to residential use would be expected to continue. Without addi-
tional measures to protect agriculture, limit development densities, and cluster development to preserve farms, prime and unique soils would continue to be lost. In addition, the federal government owns very little in either fee or in easement, which also limits the amount of control of development within the Reserve.

For additional detail, see “Effects on Natural Resources: Geology, Soils and Air Resources.”

NPS-Owned Farms

Alternative A will promote the active use of prime farmland through leasing and other means after the ultimate disposition of Farm I and Farm II. Being federally owned, the land would be managed consistent with NPS requirement for IPM, green management practices, and other best practices. Before exchanging the former Engle Farm properties, the NPS would encumber the properties with conservation easements that would provide long-term, direct benefits to the Reserve. These beneficial impacts include protecting the significant cultural landscape features on the sites; protecting the land from subdivision and uses that are incompatible with sound agricultural practices; protecting the exterior facades of contributing structures, as possible on both Farm I and Farm II; and where appropriate, provide pedestrian trail corridors that allow future expansion of a Reserve-wide trail system. These properties would be traded to a private party in exchange for similar easement protections on sites within the Reserve preferably identified as high priority lands, furthering land protection in the Reserve.

Once exchanged, the farmsteads would provide a major positive impact by making available two functional farms containing prime farm land and farmsteads, at farmland prices rather than at development prices. Depending on the terms of the exchange agreement, an exchange could promote innovative farming activities and farm processing which would have a long-term positive impact on the agricultural community.

There would also be short-term moderate adverse effects of retaining ownership and management of the former Engle Farm. These adverse impacts would include using staff time and money to maintain the buildings and residences. Farms and property owned by the NPS do not generate tax income to the county, which could be perceived as an adverse impact. There are also safety and environmental issues to be addressed such as managing the manure lagoons.

The NPS would continue to retain the West Ridge property in federal ownership, while leasing a 60 acre tract for farming. Making the 60 acres available for farming would provide a moderate positive benefit to the Reserve by continuing the land’s agricultural productivity. The NPS would continue to use the Jacob Ebey House and Blockhouse for exterior interpretive exhibits and the Cottage for Reserve administrative function. These different uses of the property could conflict and result in some moderate adverse effects. Active farming practices such as pesticide application could result in some visitor and employee safety issues.

Cumulative Impacts

Agriculture in the Reserve, on Whidbey Island and in the Pacific Northwest is struggling to meet the challenges of rising property values, encroaching and often incompatible suburban land use, rising operating costs (especially housing for farm employees), and fast-changing global markets. Agricultural support businesses such as processing plants and milling operations are in decline and also affect the viability of agriculture in the Reserve. The long distance between farms in the Reserve and processing and support systems, such as farm implement repair facilities, constitutes an additional challenge. Most municipalities lack the power and resources to protect the large areas of land needed to support entire agricultural industries (American Farmland Trust 1997: p. 16).

As agriculture loses ground, farmers become more of a minority and often lose influence in their communities, weakening their political voice especially in local planning and zoning decisions (American Farmland Trust 1997: p. 13). These zoning decisions may be made and implemented without attention to the needs of sustaining viable agriculture.
Conclusion

Protection of agricultural lands in Alternative A continues to rely on conservation easements which result in moderate benefits by stabilizing the land base of agriculture. However, the high cost and pace of purchasing easements may not be fast enough to counteract the pressure to convert agricultural land which could be a moderate to major adverse impact. Prime and unique soils would continue to be lost if land is converted out of agriculture, a moderate to major adverse impact. Leasing NPS owned farms for agricultural purposes until their ultimate disposition provides a short-term, moderate benefit by retaining land in agricultural production. Disposing of these properties protected by scenic easements in exchange for additional easement protection on lands elsewhere in the Reserve is a long-term major benefit.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative B

Analysis

Protection of Agricultural Lands

The effects on the overall protection of agricultural lands would be the same as in Alternative A.

In addition, this alternative seeks to develop more active programs and techniques. Establishing a technical assistance program involving all levels of government and other partners would help identify grant programs and tax assistance which both aid farmers and provide short-term, minor to moderate benefits. Establishing a “friends group” would be another long-term benefit to assist farmland preservation efforts.

The Reserve staff would explore and encourage the use of innovative agricultural product development techniques that would have beneficial, short to long-term effects (See Farmland Preservation Case Studies and Farmland Preservation Recommendations reports by Jones and Jones in Volume II of this GMP/EIS). The only adverse impact would stem from having farmers risk new techniques that may not be as successful or as financially rewarding as earlier efforts.

Prime and Unique Soils

Reserve staff would take a greater role working with other partners to prevent the loss of prime and unique agricultural soils. Having greater visibility on this issue would be an indirect benefit to prime and unique soils by educating the public about loss of important agricultural soils and a direct benefit by helping farmers retain important agricultural lands.

For additional detail, see “Effects on Natural Resources: Geology, Soils and Air Resources.”

NPS-Owned Farms

Impacts from short-term leasing and ultimate disposition of NPS-owned farms are the same as Alternative A.

Providing limited maintenance work to the historic structures (Rockwell House and Reuble Farmstead) by NPS following the Secretary of the Interior’s Standards, would result in a short-term financial impact to the federal government but long-term moderate benefits to important cultural resources.

Retaining approximately one acre at Farm I for a kiosk, trail connection, and limited parking would have moderate benefits by providing a trail connection for visitors and additional information about the agricultural heritage of the Reserve.

Cumulative Impacts

In addition to the impacts outlined in Alternative A, Alternative B has greater emphasis on promoting agriculture, agricultural processing and innovative marketing strategies that could benefit a wider range of farm types over an area larger than the Reserve. New markets and stronger partnerships with agriculture-related industries could form as a result of this effort and would have a positive impact on the broader Whidbey Island community.

Conclusion

Alternative B’s additional emphasis on promoting
agriculture, agricultural process and innovative marketing would provide additional benefits to agricultural resources in the Reserve. Retaining one acre at Farm I would benefit the Reserve by providing an opportunity for increased trail connections.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative C

Protection of Agricultural Lands
The effects on overall protection of agricultural land are the same as Alternative B.

Prime and Unique Soils
The effects on prime and unique agricultural soils would be the same as in Alternative B.

NPS-Owned Farms
Alternative C calls for the NPS to retain the Reuble Farmstead and approximately five acres surrounding the structures for Reserve use. While the remaining land would be available for exchange as in Alternative B, the structures on approximately five acres specified at Farm II would be excluded from any lease or disposition. Retaining this portion of the property would be a moderate to major benefit by providing existing facilities that meet the space needs for Reserve administration, maintenance, storage, and other operational functions. Adaptively re-using the structures would also benefit the Reserve by eliminating the need to find facility space elsewhere in the Reserve and would avoid potential impacts at another location. As the buildings are restored to Secretary of the Interior’s Standards, the restoration projects could provide a preservation training opportunity for other Reserve partners, parks, students, and the general public. These educational opportunities would have an indirect benefit to the Reserve by enhancing awareness of preservation and rehabilitation techniques.

A moderate, long-term impact would result from this action in that retaining the structures for Reserve functions removes a farmstead from its traditional use. However, the surrounding acreage would still be available for exchange to a private farm operator.

Cumulative Impacts
Cumulative impacts would be the same as Alternative B. Partnerships and general agricultural preservation are strengthened. While the conversion of the Reuble farmstead from family farm to Reserve use does add to the trend of conversion of farming structures to other uses, the property would be protected from neglect and removal.

Conclusion
Impacts related to the general protection of agriculture are the same as Alternative B. Retaining the Reuble Farmstead and five acres for Reserve functions provides several moderate, long-term benefits. Some buildings would be rehabilitated to Secretary of the Interior’s Standards, and the projects could be used as training opportunities to enhance awareness and technical abilities related to historic preservation. Adaptively re-using these buildings also has long-term benefits by providing for the space needs of Reserve administration, maintenance and operations while maintaining the cultural landscape. However, while this adaptive re-use does contribute to the conversion of farming structures to other uses, it is not an incompatible action in the Reserve where properties are not “frozen in time.”

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Effects on Visitor Experience
The following discussions on the visitor experience cover the effects on visitor understanding of the Reserve’s resources (interpretation, education, and outreach), recreational resources and scenic resources.

Methodology and Assumptions
To evaluate the potential impacts on the visitor experience from each alternative, information gath-
erased from the Reserve's 1995 visitor survey was used, along with relevant data from Washington State Parks, Island County, town of Coupeville, and public comment during the planning process. For analysis purposes, impact intensities for all visitor experience topics were defined as follows:

**Negligible:** Impacts would be barely detectable, affecting the experience of few visitors in the applicable setting.

**Minor:** Impacts would be detectable, affecting the experience of many visitors in the applicable setting.

**Moderate:** Impacts would be readily apparent, affecting the experience of the majority of visitors in the applicable setting.

**Major:** Impacts would be severely adverse or exceptionally beneficial, affecting the experience of nearly all visitors in the applicable setting.

The area of analysis for cumulative impacts on visitor experience is the greater Seattle metropolitan area, including Whidbey Island.

**Impacts from Alternative A**

**Analysis**

**Interpretation and Education**

Many visitors stopping at waysides, the primary interpretive sites, are educated about the Reserve. Waysides would continue to be maintained to NPS standards and others would be created in the future, based on need and funding availability. This expansion would add to the interpretive capabilities to educate the visitor about the Reserve and have a beneficial effect. However, the ability to expand the waysides and present new interpretation has limitations.

The nonprofit Island County Historical Museum would continue to be used as the “de-facto” Reserve visitor center. The advantages of partnering with the museum allow the Reserve to use a small rent-free space (100 square feet). Visitors who may not know about the Reserve would be able to pay a fee and learn about it through this exhibit and by viewing two available videos. The fee requirement may cause a minor, adverse impact. However, visitors can receive free information on request about the Reserve without paying to enter. The museum does not have any signing showing that the Reserve does, in fact, maintain an exhibit there which could be confusing for some visitors.

**Cumulative Impacts**

In the greater Seattle metropolitan area, the Reserve offers a unique opportunity for visitors to experience and learn about the significance of natural, cultural, and agricultural resources and their importance in Pacific Northwest history. Interpretive facilities are also available on Whidbey Island at Deception Pass State Park; however, these programs generally focus on the Civilian Conservation Corps (CCC) era activities. In contrast, the Reserve addresses a broader theme of the continuum of exploration, settlement and agriculture in Pacific Northwest history, and the value of this cultural landscape today. Reduction of either program could result in moderate adverse impacts to visitors seeking interpretive and educational opportunities in the area.

**Conclusion**

The maintenance and expansion of waysides, depending on funding availability, has a minor beneficial effect. Using the Island County Historical Museum has minor adverse impacts that result from an entrance fee and the lack of any signs advertising the Reserve's exhibit.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Recreational Resources**

The Reserve staff would continue to work with partners to maintain the existing hiking, biking, and horse trails within the Reserve. One of the most challenging issues for the recreational user in the Reserve are the differing and sometimes contradictory policies on allowable uses and activities, depending upon the land management agency or organization. For example, within the same trail system, a trail segment may allow dogs on leashes, while other segments may exclude them outright.
Paragliding is allowed at one of the state parks, but not the others within the Reserve.

In the No Action Alternative, Reserve staff would work with partners to develop standards and locations for uses within the Reserve, such as mountain biking, paragliding/parasailing, personal watercraft, model airplane flying, among others that have the potential to adversely impact the historic, scenic and natural resources (including natural quiet) that currently exist in the Reserve. These actions would have long-term, minor to moderate, direct beneficial effects for the recreational user. However, they may appear to be long-term adverse effects by some users who will be restricted by what activities they can participate in and where those activities can occur.

Alternative A would also implement a sign plan for trails, for use by all partners with trail linkages to a greater Reserve-wide trail system. This action would provide consistency and continuity for trail users throughout the Reserve. The implementation of a sign plan adopted by all the partners would have short-term minor impacts resulting from the cost of making signage consistent, but overall the action would be considered beneficial to the Reserve.

Though recreational personal watercraft (PWC) use within Penn Cove is infrequent at this time, the Trust Board would encourage appropriate guidelines and enforcement of town speed limits to be addressed for future use. PWCs can negatively impact the natural quiet of an area. Machines can travel up to 50 miles per hour and be a source of pollution. Unburned fuel is usually emptied into the water from two-stroke engines which could affect the quality of water in Penn Cove. In some populated areas, reported accidents have tripled (Kelly 1997).

Coupeville’s Comprehensive Plan for Parks, Recreation and Open Space states a goal (PR 1.5) to “develop an ordinance to protect the serenity and safety of Penn Cove by establishing a speed limit in Coupeville waters.” Creating guidelines and/or passing an ordinance would be a beneficial, long-term effect for helping limit noise, potential pollution, and boating conflicts. Regulating use may cause some short-term, minor impacts to current users who may find the regulations limit their use and enjoyment.

Under this alternative, the NPS would continue to print, distribute and revise as necessary all of the interpretive brochures that enhance a visitor’s understanding and enjoyment of the Reserve, including the driving/bicycling tour, the walking tour of Coupeville, and the naturalist’s brochures, among others. These tours would be promoted by the partners and others to better distribute the information to Reserve visitors. This contribution would enhance efforts by all the partners and other organizations interested in visitor services and opportunities in the Reserve and be a long-term benefit of negligible impact overall. There is a potential that some individuals or organizations, hoping to create fee-for-service tours throughout the Reserve, would view the promotion of self-guided materials as a threat to their business opportunity. They might view the availability of free walking tours and driving/bicycling tours to the public as a loss of potential business. However, as tourism grows in central Whidbey, so too will the need for a variety of personal and non-personal services and activities available for the diverse visitors to the Reserve.

The Trust Board would also continue to support opportunities for passive and leisure activities in the Reserve, including photography, antique shopping, painting, and other pursuits. This action has no impacts on the Reserve’s recreational resources and conforms with the town’s residents’ desires to promote tourism.

**Cumulative Impacts**

Continuing growth in the county and increasing numbers of visitors to the Reserve will continue to demand more recreational opportunities, some of which are unknown to park management at this time. The town’s and county’s surveys indicate that as the population increases, so will the demand on recreational resources and the need for opportunities; 56% of Coupeville residents think that as growth occurs, the town will become a less desirable place to live. These demands have the potential to adversely impact the Reserve if not undertaken in a consistent and cohesive manner amongst the partners, all of whom have different
missions and visions for the Reserve. Trends in recreation require new activities to be considered while maintaining availability for the tried and true, such as waterborne activities (such as paddling and boating), passive activities (such as photography, painting, and shopping), walking and hiking, beachcombing, bicycle riding, car touring, and fishing, among others. The Reserve does not know what will be requested in the future and for how long certain activities will be popular, as activities now popular (such as geo-caching) may become a passing fad.

The Reserve also offers a few opportunities for camping on Whidbey Island which is generally very limited. Overnight camping facilities are also available at Deception Pass State Park, South Whidbey State Park, and some recreational vehicle (RV) access is available in Oak Harbor. Reduction of any of these camping opportunities could result in moderate adverse impacts to visitors seeking an overnight camping experience.

**Conclusion**

The actions called for in Alternative A, including maintaining existing trails, implementing a sign plan for trails, and printing and distributing interpretive brochures would result in long-term beneficial impacts for visitors to the Reserve enjoying recreational resources and opportunities. Encouraging appropriate guidelines and enforcement of town speed limits for personal watercraft use would have long-term benefits by promoting safe recreation opportunities, however, these watercraft can be a point source of pollution and have minor adverse impacts to natural quiet. Regulations of personal watercraft use may be viewed as an adverse impact by current users.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Scenic Resources**

Many of the scenic views in the Reserve are also historic views. Historic views contribute to the significance of the landscape. These views can be treated as tangible resources and are identified using the historical record and are based on character-defining features of the cultural landscape. Fifteen contributing views have been identified in the National Register nomination that documents the contributing resources of the historic district.

The Trust Board would continue to encourage others to maintain historic views, protect scenery and open space, and minimize visual impact of new development. This would be accomplished mainly by education of landowners and working with the Reserve partners. Since these actions are voluntary, there would be no adverse impact to the property owners. If measures are not implemented, there could be moderate to major adverse impacts to the historic views. The NPS would continue the acquisition of conservation easements by willing sellers to the NPS and include easement language that would address the scenic quality of the landscape as funds became available. Keeping the historic and rural character of the Reserve as mandated by Congress would be a long-term, direct, beneficial effect.

**Cumulative Impacts**

Continued development on Whidbey Island and throughout the Seattle metropolitan area, coupled with zoning regulations of five acre parcels, could cumulatively impact the scenic resources of the Reserve. The introduction of more modern elements to the Reserve (such as new homes and additional traffic) could adversely affect the Reserve’s ability to speak to another time and place in Pacific Northwest history. One of the key messages of the Reserve is that it has not changed very much in the past 150 years, unlike the rest of Whidbey Island and the Pacific Northwest. The addition of modern homes and other developments could potentially threaten the integrity of the scenic resources in the Reserve.

**Conclusion**

Relying on voluntary landowner action to maintain historic views, protect scenery and open space, and minimize visual impact of new development could result in moderate to major adverse impacts to scenic resources if measures are not implemented. The NPS would continue to acquire conservation easements by willing sellers that include provisions to address scenic resources pro-
providing long-term, direct benefits.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative B**

**Analysis**

**Interpretation and Education**

As mentioned in Alternative A, limited visibility of the Reserve is an issue that the GMP seeks to address. In Alternative B, facilities and other actions are developed which serve to promote the Reserve through interpretation, education and outreach. For example, the development of a long range interpretive plan by NPS staff would have beneficial effects by coordinating overall interpretive planning for the Reserve. New waysides could be added if it is determined they are needed. When implemented, detailed compliance work would need to be undertaken.

Updating the Reserve’s exhibit at the Port Townsend Ferry Landing would be beneficial in the short and long-term. Visitors already have difficulty knowing and finding information about the Reserve. This exhibit would provide another opportunity to reach visitors before they arrive on Whidbey Island. Constructing three gateway contact facilities within the Reserve at the major entry points would also be beneficial in “capturing” visitors who might otherwise drive through the Reserve without realizing it. This would allow an opportunity to provide literature, maps, and if staffed (dependent upon availability of funding), personal contact to visitors. Use of volunteers would offset finances that would otherwise be needed to staff the facilities.

A Reserve visitor center/contact station would provide more space than is now available in the Island County Historical Museum. Classroom space would be provided including an area for showing films about the Reserve. All of these actions would be beneficial. The center could also incorporate administrative space, in which case the offices in the current administration building may be relinquished or put to some other use. A centrally located visitor center and administrative offices, preferably in a historic building, would be beneficial in that it would be in close proximity to most visitors and other government offices and services. Rehabilitating the Jacob Ebey House for visitor use would also create additional interpretive opportunities for the visitor to understand the early history and settlement of Washington State.

Providing a Reserve volunteer coordinator and education specialist would be beneficial in fostering long and short-term volunteers and support for the Reserve, and at times, providing financial help for projects. The development of field schools, interpretive exhibits, workshops or programs with Reserve partners would be beneficial in providing the community and visitors with much needed educational opportunities, information about the Reserve, historic preservation and the importance of agriculture.

Developing a new handbook with real estate companies would be beneficial in letting perspective buyers know that properties are within a unit of the National Park System. It would be beneficial in educating owners early on about the responsibilities and opportunities that this represents. In addition, it would alert homeowners to the importance of agriculture and agricultural practices that may impact their lives on a daily or seasonal basis (such as noise, odors, etc).

**Cumulative Impacts**

The addition of a visitor center/contact station and expansion of educational programs would have positive cumulative impacts to interpretation and education opportunities on Whidbey Island. The visitor center/contact station would provide visitors with a focused destination to receive information on programs offered not just in the Reserve but at other locations, strengthening public awareness and understanding of all opportunities on Whidbey Island and beyond.

**Conclusion**

Development of facilities, waysides, and updating the Reserve wayside at the Port Townsend Ferry Landing provide direct benefits. Providing a centrally located visitor center/contact station in a
Recreational Resources

Alternative B calls for the same actions as Alternative A, with enhanced cooperation among other organizations for recreational opportunities and pursuits on those privately owned lands in the Reserve. Private groups including AuSable Institute, The Nature Conservancy, Seattle Pacific University (Camp Casey), and Whidbey Camano Land Trust, to name a few, would be contacted to pursue public, self-guided nature and walking trails on their lands. Reserve staff would partner with Island County and others to develop a water trail around Whidbey Island and link to existing Puget Sound and Washington State marine trails. This trail is consistent with the desire for County residents to gain more access to shorelines around Whidbey Island. Most of these actions would involve privately owned, non-NPS lands in order to make important connections throughout the Reserve. Property owners may perceive this action as a threat to their shoreline property and consider it a long-term adverse impact. If the goal was to create a marine trail without impacting privately-owned lands, then this action would have moderate long-term beneficial impacts to the Reserve.

Under Alternative B, a system of monitoring recreational use would be developed by Reserve staff in conjunction with partners to continually evaluate the impacts of certain recreational activities on visitor experience, safety, environmental quality, and community character. If adverse effects on a visitor's experience are identified, this monitoring system would develop measures to mitigate these negative effects and consider safety, environmental quality, and community character within the context of visitor experience. Monitoring trail use would enable managers to determine if certain trails should be repaired or closed. If there are conflicts between recreational uses, guidelines for uses would be established which would be a long-term, moderate, beneficial effect. This monitoring system would have long-term beneficial impacts on recreational resources, but may be considered by some to be negative if their activities in the Reserve are curtailed or limited in any manner.

The driving/bicycling tour would be expanded into the northern portion of the Reserve, requiring revisions to the existing tour route and additional signage. This expansion would enhance a visitor's experience in the Reserve as they would expand their knowledge of the area and see areas they might not have explored on their own. Safety and signage would be of concern in expanding the route, and the addition of signage delineating tour routes might be considered by some to be a minor, adverse impact to the cultural landscape because it could result in what some call “visual clutter” along the roads.

Reserve staff would help to provide or enable interpretive training for volunteers and private tour operators about the recreational, historical and natural resources of the Reserve. The 1995 NPS visitor survey prepared by University of Washington informed management that people most enjoyed exploring the forts in the Reserve's two state parks, followed by beach activities. Nearly three-quarters of those surveyed said they visited historic Coupeville, nearly half visited Fort Casey State Park, followed by the Coupeville Wharf, Fort Ebey State Park, the lighthouse, and Camp Casey. These are all non-NPS owned properties and it is expected that these sites would continue to be the most popular attractions. In addition to providing training on activities, Reserve staff should update the socio-economic study first undertaken in 1995 to determine how much money visitors spend in the Reserve and on what activities. Both actions noted above would have long-term beneficial impacts on a visitor's recreational experience and provide the data needed to approach partners in sharing more of the operational costs of managing the Reserve (University of Washington 1995).

Cumulative Impacts

Continuing growth in the county and increasing numbers of visitors to the Reserve will fuel the de-
mand for more recreational opportunities, some of which are unknown to park management at this time. These demands have the potential to adversely impact the Reserve if not undertaken in a consistent and cohesive manner amongst the partners, all of whom have different missions and visions for the Reserve. There will always remain potential threats from unregulated private business operators who lead tours or other activities through the Reserve and may misinform visitors. Some of these operators, not very knowledgeable about the Reserve, arrive in oversized or inappropriate vehicles to tour the Reserve and can adversely impact the local community. As time passes, the cultural landscape of the Reserve will become even more significant to the nation, and may result in the community having the perception they live in a fishbowl, a place where others visit to observe “how people live” in this historic community.

Conclusion
Establishing a recreational monitoring system would have long-term beneficial impacts on recreational resources. Enhancing cooperation among partners to develop a water trail around Whidbey Island with linkages to existing marine trails would be a moderate, long-term benefit. Some private property owners may view the trail as a threat if proposals suggest traversing their land. Overall, the actions proposed in Alternative B will have beneficial effects and minor impacts on the recreational resources of the Reserve.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Scenic Resources
The effects on scenic resources would be the same as in Alternative A. In addition, the Reserve staff would develop a design guidelines handbook for property owners to help guide site development that is in harmony with the landscape. Implementing these guidelines would be voluntary but could provide a direct, moderate, beneficial impact by educating homeowners on basic design and general siting principles. Reserve staff would also work with the town and county in developing a viewshed map from Coupeville across Penn Cove which could be used to acquire voluntary conservation easements from willing sellers. This action could be viewed by some homeowners as threatening to their private property land ethic.

The Reserve staff would also partner with town and county officials to enhance the roadside areas within the Reserve. This partnership would have a beneficial scenic impact on beautifying the roadways along which visitors view the Reserve. Reserve staff would use native plants. The areas would first need to be surveyed to be sure that important existing native species would not be adversely impacted.

Clustering provisions and the development of an overlay zone would be encouraged in Island County’s zoning codes so that more open space is available for viewing. This potential open space would also be beneficial for plant and animal habitat.

Cumulative Impacts
The expanded partnerships would be an added benefit to the cumulative impacts identified in Alternative A by elevating visibility of the Reserve and protecting scenic resources critical to the preservation of the cultural landscape.

Conclusion
Creating a design guidelines handbook for property owners in the Reserve would provide a moderate, long-term benefit by educating existing and new homeowners on design and siting principles. Developing a viewshed map would also be a minor to moderate benefit and could be a useful tool to acquire voluntary conservation easements from willing sellers. Development of clustering provisions and an county overlay zone would be helpful in guiding future development to preserve open space. Some minor adverse impacts could result if property owners view these actions as potential threats to their private property.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.
Impacts from Alternative C

Analysis

Interpretation, Education, and Outreach

The effects on interpretation, education, and outreach would be the same as in Alternative B. In addition, having a historic facility serve as a northern gateway contact facility in the San de Fuca area would provide additional visitor interpretation and education and maintain a historic building. This additional site would be an added beneficial effect on the visitor experience and a place to serve as a formal entry into the Reserve.

Interpretation would also be expanded through a co-managed visitor center with partners in historic Coupeville and the jointly managed visitor contact facility at a proposed marine science center. The visitor center in Coupeville could also provide space for curatorial storage. The partner would manage and operate the center and develop educational curricula and programming. The Commission could support the center by helping to develop exhibits related to Reserve ecology and marine environments. These three facilities dedicated to visitor contact and education would be a moderate long-term benefit by attracting more visitors into the Reserve and enhancing the potential to tell the Reserve stories and associated natural science. Programs could be expanded and enhanced which would be a positive effect on interpretation.

Securing space for visiting researchers and lectures, and sponsoring “artists in residence” programs would allow the Reserve to attract interesting and important people with expertise on the Reserve, providing additional programs for the community at large.

In Alternative C, all staff are employees of a paid Commission, rather than maintaining some NPS staff. With this staffing change, there would be no presence of NPS uniformed employees. The lack of NPS uniforms may affect visitor’s understanding of the Reserve’s place as a unit of the national park system and its national significance which would be a moderate adverse effect.

Cumulative Impacts

The cumulative impacts are the same as Alternative B.

Conclusion

The addition of a gateway contact facility in a historic building, participation in development of a marine science center with others, and securing a visitor center/contact station in Coupeville would be a moderate benefit by providing an additional opportunity for visitor interpretation and education and maintain a historic building. Securing space for visiting researchers and lectures would provide benefits through additional programs for Reserve visitors and the community at large. The lack of any uniformed NPS employees serving the Reserve under Commission management may affect understanding of the Reserve as a unit of national significance within the national park system. The NPS uniform is a powerful interpretive tool, and loss of NPS uniformed rangers would be a moderate adverse impact.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Recreational Resources

The impacts on Recreational Resources would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Scenic Resources

The impacts on Scenic Resources would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Effects on Reserve Facilities

Methodology and Assumptions

To analyze the effects on the alternatives on facili-
ties, all information on facilities in the Reserve was compiled.

**Negligible:** The effect would be barely detectable, and/or the public would not be affected.

**Minor:** The effect would be slight, but detectable, and/or the public might be affected.

**Moderate:** The effect would be readily apparent and/or the public would be affected.

**Major:** The effect would be severely adverse or exceptionally beneficial and/or the public would be affected.

The area of analysis for cumulative impacts is defined as the Reserve boundary and Whidbey Island.

**Impacts from Alternative A**

**Analysis**

**Visitor Facilities**

The Island County Historical Museum would continue to serve as the Reserve’s visitor center. No new facilities would be proposed, therefore, there would be no facility impacts.

**Administrative Facilities**

Keeping the administrative headquarters in the Cottage at the edge of Ebey’s Prairie would be positive in the short-term in that the space is adequate. The location is close to Coupeville’s town center but does not allow for a visible “town presence”. The natural resources management office would remain at the former Engle Farm. Maintaining two office locations is a minor adverse impact in that it may not be as efficient as having a single location. The physical presence of Reserve staff at Engle Farm is a moderate benefit to both the public and partners by providing communication and overseeing building security. Lack of toilets or potable water is a minor short-term adverse effect.

**Maintenance Facilities**

The Reserve would continue to use the Reuble Farmstead cluster at Farm II for a maintenance facility until the farm is exchanged. In the short-term, there would be no impacts as the structures exist and adequately meet the needs of the maintenance program. Depending on the terms of the farm disposition, the farmstead cluster could be retained to continue the maintenance operation yielding a moderate to major long-term benefit. However, if the site is no longer available, an alternative site would need to be located that would adequately meet the needs of the maintenance operation (Belcher and Holmquist 2004).

Impacts related to locating an alternative maintenance facility would depend on the site selected and would need to be assessed at that time. Locating in an existing facility would be the most beneficial in that less construction with accompanying noise, dust, and disruption impacts would occur. However, there would be more cost associated with providing some type of maintenance facility, which would be a negative financial impact.

Locating in a new facility or an undisturbed site would cause environmental effects such as clearing of vegetation, site grading, and construction. These actions would be a minor, short-term adverse impact on both flora and fauna. New construction would follow NPS guidelines and management policies for lightscape, energy conservation, greenbuilding, sustainability principles, protection of important resources, and replanting with native plants.

**Conclusion**

No impacts are related to visitor facilities. The current administrative facilities outside of Coupeville limit the “visibility” of the Reserve and the multiple locations create some inefficiency and a minor adverse impact. The Reuble farmstead cluster at Farm II currently in use as a maintenance facility is adequate for the operation, creating no short-term impacts but potential moderate impacts in the long-term if the facility was relocated.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.
Impacts from Alternative B

Analysis

Visitor Facilities
A Reserve visitor center/contact station would be developed in partnership with others such as the Chamber of Commerce in Coupeville. An existing historic building would be sought in a centrally located place for visitors to get information about the Reserve. This location selection would be in accordance with Executive Order 13066 which encourages the location of Federal facilities within historic districts and historic buildings. Locating the Reserve’s visitor center/contact station in a historic building in Coupeville would be beneficial in the long-term in that a historic structure would be maintained to the Secretary of the Interior’s Standards. Furthermore, using an existing building would have fewer impacts than constructing a new building. Depending on the building selected, some alterations or renovation could be required, resulting in some minor short-term noise and dust impacts. Staging for construction may limit available visitor parking spaces for the short-term depending upon where the visitor center is located.

Three gateway contact facilities would be developed at important entry spots within the Reserve. The effects of this development would be minor during clearing and construction of kiosks. Construction would clear approximately one acre of land, which would be a minor short-term impact on both animals and plants. An area with federal, state, or locally important plants would be avoided, or the impacts minimized by boardwalks or fencing. There would be some short-term noise and dust impacts during construction. Bathrooms may be constructed at the south entry which would be a moderate long-term benefit to visitors stopping for information. Detailed compliance with site-specific impact analysis would need to be completed prior to the construction of these gateway contact facilities.

Administrative Facilities
Administrative space in the short term would be the same as in Alternative A.

Long term administrative facility needs would be addressed by securing administrative space in Coupeville, preferably in an historic building and in conjunction with a visitor center/contact station if possible. Centrally located administrative offices would be beneficial in that the offices would be in close proximity to most visitors and other government offices and services. This action would be in accordance with Executive Order 13066 which encourages the location of Federal facilities within historic districts and historic buildings. Furthermore, locating a facility that could accommodate both a visitor center/contact station and administrative offices would be a long-term moderate benefit by concentrating impacts and building maintenance in one location.

Maintenance Facilities
Impacts to maintenance facilities are the same as Alternative A.

Conclusion
Re-locating the visitor center/contact station and constructing three new gateway facilities would have minor short-term adverse impacts to resources during construction but would provide moderate long-term benefits to Reserve visitors. Locating the visitor center/contact station in a historic building would be a long-term moderate benefit by providing maintenance to the Secretary of the Interior’s Standards to an additional historic structure. While the short-term impacts to administrative facilities are the same as Alternative A, the long-term relocation of administrative facilities to an existing location in Coupeville offers moderate benefits by providing a central location that is more visible to both the public and Reserve partners.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative C

Analysis

Visitor Facilities
Impacts to visitor facilities are the same as Alternative B, plus the Reserve Commission and staff
would encourage a partner (such as Au Sable Institute, or Seattle Pacific University’s Camp Casey) to develop a marine center at a suitable location, such as the Coupeville Wharf. Co-managing with partners would be a long-term benefit and enable all partners to share the cost of operating and maintaining the center.

If a marine center was to be developed at any location, the appropriate environmental compliance document would be produced in accordance with the National Environmental Policy Act. This document would examine site specific impacts related to development of a marine center. These impacts would be mitigated depending upon the nature and extent of the impacts. Development of a marine science center at a location like the Coupeville Wharf would not be expected to cause adverse impacts since it would be developed on an existing pier. However, if changes were needed in that structure or to the docks associated with it, additional compliance would be needed. This additional compliance would be with the Washington Coastal Zone Management Act, Section 404 of the Clean Water Act for permitting in coastal waters, and other permits as required by Coupeville or Washington State.

Administrative Facilities
The short-term impacts from administrative facilities are the same as Alternative A.

Long term administrative facility needs will be achieved through adaptive reuse of the Reubel farmstead located on an NPS retained five acre tract at Farm II. Concentrating both administrative and maintenance facilities in one location would be a moderate benefit to the Reserve staff. Additional efficiency and cost-saving could result, although the Cottage would continue to support additional resource staff. Locating administrative facilities at Farm II could be a minor to moderate adverse impact in that it does not provide the same level of visibility and public accessibility as finding a site in Coupeville.

Maintenance Facilities
Long-term maintenance facility needs will be achieved through adaptive reuse of the Reubel farmstead and five acre tract at Farm II. This utilization of the structures at Farm II would provide the Reserve a long-term base of operations for maintenance at little start-up cost and afford the opportunity for highly skilled professionals to teach preservation principles in the Reserve. Additionally, the constant presence of workers and employees would enhance security and reduce liabilities associated with trespass.

This action would have a long-term beneficial effect on the maintenance operations in that it would provide a long-term solution to securing space for the maintenance operation needed space for the Commission’s maintenance foreman.

Conclusion
Impacts from visitor facilities are the same as Alternative B, plus impacts from partnering to develop a marine science center would be addressed in a separate compliance document. Retaining the five acre tract and buildings at Farm II for both administrative and maintenance facilities provides moderate to major benefits by offering a long-term solution to the space needs for these Reserve operations. However, the location of the administrative facilities at Farm II could be a minor adverse impact by decreasing visibility and accessibility to the public and partners.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Effects on Reserve Management, Operations and Staffing

Methodology and Assumptions
Park management and operations refers to the current management structure of the Reserve to provide policy direction for the protection, public use and appreciation of the Reserve. Reserve operations refer to the current staff available to adequately protect and preserve vital resources and provide for an effective visitor experience. The discussion of impacts to Reserve management, operations and staffing focuses on: the type of man-
management structure, the amount of staff available to ensure visitor and resident safety, and the ability of Reserve staff to protect and preserve resources given current funding and staffing levels. Reserve staff knowledge and examples of management structures in other parks was used to evaluate the impacts of each alternative, and the evaluation is based on the current description of management and operations above. Definitions of impact levels are as follows:

**Negligible:** Reserve management and operations would not be affected or the effect would be at low levels of detection.

**Minor:** The effect would be detectable, but would be of a magnitude that it would not have an appreciable adverse or beneficial effect on Reserve management and operations.

**Moderate:** Impacts would be readily apparent and would result in a substantial adverse or beneficial change in Reserve management and operations in a manner noticeable to staff and the public.

**Major:** Impacts would be readily apparent and would result in a substantial adverse or beneficial change in Reserve management and operations in a manner noticeable to staff and the public and would be markedly different from existing operations.

**Impacts from Alternative A**

**Analysis**

**Reserve Management**

The Reserve would continue to have an appointed, nine-member, volunteer Trust Board for the management structure. There would be no monetary incentive for members and the volunteer nature of the Trust Board may make it difficult to recruit some potential candidates, resulting in a moderate adverse impact. The varied composition of the Trust Board, which includes representatives from the town, county, state, and federal levels of government, is a moderate to major benefit in that the interests of all levels of government are represented. However, in some instances membership by appointment may be driven by personal issues instead of qualifications, a moderate adverse impact. The NPS Cultural Resource Specialist/Trust Board position would remain as one position which could cause minor adverse effects due to the demands required of each position.

**Reserve Operations and Staffing**

Funding for staffing levels would continue to be inadequate to meet the increased interpretation, administration and resource management needs of the Reserve. Some existing program needs at the Reserve would continue to go unmet by Reserve staff. Other than staffing, there would be no adverse impacts on the Reserve’s operations.

Some public meetings regarding land use proposals will continue to occur without comment and/or feedback from the Trust Board and could result in minor to major adverse impacts to the Reserve.

Diminishing funding and staff from the Land and Water Conservation Fund (LWCF) and NPS Lands Division would reduce the Reserve’s ability to obtain easements in a timely manner to protect key areas of the Reserve from the pressure of encroaching development. This lack of ability to continue obtaining easements would result in a significant long term adverse impact on the Reserve’s values.

**Conclusion**

Under this alternative, the inability of the NPS to obtain easements to protect key areas from encroaching development pressures in a timely manner due to inadequate staff and LWCF funding could result in a major long-term adverse impact on Reserve values.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.
Impacts from Alternative B

Analysis

Reserve Management

The effects on Reserve Management are the same as in Alternative A, except that the NPS Cultural Resource Specialist/Trust Board position would be split into two distinct positions. This would be a minor benefit in that the requirements for each position can be realistically met. Having two positions would require more funding which is a negative impact.

Reserve Operations and Staffing

In this alternative, like Alternative A, the Reserve Manager would continue to have daily operational responsibilities for the Reserve and would remain a Trust Board employee.

This alternative increases the number of staff positions. These positions are better defined and responsibilities are divided logically between NPS professional staff and Trust Board staff, a moderate benefit to the Reserve. NPS staff positions are those positions that require understanding of federal laws, regulations, and policies; are responsible for federal reporting requirements (such as the Government Performance and Results Act); and focus on areas where the NPS has specific knowledge and technical expertise. Maintaining these federal positions would be a moderate to major benefit to the Reserve by ensuring a direct line of accountability for federal requirements and compliance with federal regulations. Trust Board staff additions provide moderate benefits by helping Reserve management and staff be more engaged in areas such as assisting with local land use knowledge, increasing opportunities for involvement with local land use planning, recruiting volunteers, and educating the public about the Reserve’s agricultural heritage. This management split—five NPS FTE and four Trust Board FTE—is a moderate benefit in that it allows for federal and non-federal employees to work collaboratively, retain technical expertise and maximize operational efficiency.

Conclusion

The effects of Alternative B, by providing additional staff to pursue opportunities to preserve Reserve lands through protective easements, conduct research and interpretation, and historic building preservation and maintenance would enhance park values. Furthermore, the staffing division between NPS and Trust Board employees is a moderate to major benefit by balancing local and national expertise and responsibilities in the interest of the Reserve.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative C

Analysis

Reserve Management

Management under Alternative C differs from both Alternative A and B. In Alternative C, the Trust Board would be dissolved and a Commission established that would be financially compensated for their services. This Commission would potentially draw members who may be more committed and would be more willing to spend the required time on Reserve issues. Providing compensation may make it financially easier for some to commit time to a position than a volunteer position. Compensated positions may elevate the job in the eyes of the community and provide added credibility yielding indirect, minor, short- and long-term benefits. Compensation may increase the pool of interested persons willing to serve the Reserve. Funding a Commission could also be a benefit by providing leverage to ensure accountability for managing the Reserve.

However, this Commission does present a long-term financial commitment which could adversely affect other aspects of the Reserve. Financially compensating the Commission would result in additional fixed overhead costs and could reduce the amount of funding dedicated to Reserve operations and programs. Further, the sustained fixed costs would reduce flexibility in managing the Reserve during budget cycles. In addition, the funding for the Commission’s stipend would come
from the NPS. It may be difficult to guarantee a match of in-kind services from other partners which could result in an adverse effect to the Commission if all partners do not contribute equally. Another minor to moderate adverse impact could result from the Commission being viewed negatively by those who have volunteered and continue to volunteer their time to serve the Reserve and the public.

The time and expense required to educate and train Commission members on NPS regulations and procedures would have moderate adverse effects. This impact would be ongoing and long-term as turnover on the Commission occurs every four years. Establishing a contact at the NPS Pacific West Region to deal with legal or policy issues would take more time than it would in either Alternative A or B with dedicated NPS staff.

**Reserve Operations and Staffing**

The Reserve Manager would continue to have daily operation responsibilities, but would become an employee of the Commission rather than the Trust Board. The Reserve Manager would supervise the Commission staff and be annually evaluated by the Commission. Eliminating the NPS liaison position and all NPS employees would place additional responsibility on the Reserve Manager and staff to secure funding, complete reporting requirements, and ensure compliance with federal environmental regulations. These additional responsibilities would be a major short-term impact to that position, and could become moderate over time.

While technical assistance and guidance would be available through the NPS Pacific West Region, the full operational responsibility of the Reserve, including all administrative and resource management requirements for managing federal land, would fall on the Commission staff. The lack of dedicated NPS staff with specific professional expertise in natural and cultural resource management, knowledge of pertinent laws and policies, and interpretation of resources would be a major, short- to long-term adverse impact. The cost of training Commission staff to a level that would enable them to fulfill their responsibilities would be a major adverse impact to the Reserve. Furthermore, these costs could be long-term and ongoing if Commission staff turnover is not filled from a concentrated pool of trained professionals, as is the case in the NPS. This training would not only include interpretation and resource management, but all administrative functions and the technical systems that support them (such as PMIS, FPPS, FMSS, MAXIMO, PEPC, and AFS). Some of these systems are used to secure NPS and other funding for projects and operations. The responsibility for securing NPS funding and tracking expenditure that use federal funding (including payroll and procurement) would fall on Commission staff, which would be a moderate long-term impact.

Transitioning to a staff employed by the Commission would be a major, short-term adverse impact to staff in the Pacific West Region offices. There would be a significant reliance on the regional office staff to guide Commission employees as they learn the legal, policy, procedural, and technical requirements of managing federal land, fee and easement interest, and various NPS program areas. This impact could become moderate over time if the Commission is able to sustain a workforce with little turnover.

**Conclusion**

Replacing the Trust Board with a paid Commission would result in moderate benefits to the Reserve by ensuring Commission members dedicate the time necessary to manage the Reserve.

Replacing the shared staff in Alternative B with Commission staff only would result in major short-term adverse impacts that could become moderate adverse impacts in the long-term. If a high level of staff turnover occurs, these impacts would remain major and adverse. In the short-term, there would be major, short-term, adverse impacts from the cost and time required to train non-NPS Commission employees in the systems and procedures required for park operations. The Reserve Manager and Commission staff would be responsible for ensuring all the administrative and operational aspects of the Reserve which would include all the legal, policy and procedural requirements of maintaining federally owned land, including easement and fee interest, and managing federally funding and program areas. Over time,
with a stable work force, some of these impacts would become moderately adverse as Commission staff gained the necessary levels of proficiency. There is also a long-term, moderate adverse impact from the sustained program oversight responsibility of staff in the NPS Pacific West Regional Office.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Effects on Transportation, Access, and Circulation**

**Methodology and Assumptions**

Road system standards and maintenance influence the amount and type of access to a given area. Use generally increases when road conditions improve and decreases as conditions degrade. In the case of the Reserve (except for some drives and farm roads), roads are public and not under the control of NPS standards and maintenance, but rely on WSDOT and county road design and construction standards. Some of the roads within the Reserve are now undergoing improvements from WSDOT that will result in increased traffic, wider lanes, and impacts to adjacent property. These are impacts that will occur in all of the alternatives.

The same situation applies to trails, which may cross NPS owned properties, but are on a variety of public and private lands. In most cases, proposed parking would be on public streets or in cooperation with an existing organization or land owner.

**Negligible:** The effects would not be detectable and would have no discernable effect on the condition of roads and trails and/or traffic flow.

**Minor:** The effect would be slightly detectable, but there would not be an overall effect on the condition of roads and trails and/or traffic flow.

**Moderate:** Impacts would be clearly detectible, and the action could have an appreciable effect on the condition of roads and trails and/or traffic flow.

**Major:** Impacts would be substantial, with a highly noticeable influence, and the condition of roads and trails and/or traffic flow could be permanently altered.

The area of analysis for cumulative impacts is Whidbey Island.

**Impacts from Alternative A**

**Analysis**

Circulation around the Reserve is comprised of a public road system and boat travel in and around Penn Cove and the Strait of Juan de Fuca. Most travel occurs on the seven major roads constructed by 1870 to link settlers with Coupeville, the county seat, the markets on Penn Cove and with each other. Between 1983 and 2000, the length of secondary roads increased by 0.7 miles and minor roads increased by 23.2 miles (Rottle 2003). (Refer to “Circulation Network, Changes” map, Volume II of this GMP.) This road development is expected to continue as more subdivision occurs.

Because the roads contribute to the historic integrity of the Reserve, it is important for the Reserve staff to be involved with any highway improvements that might impact the Reserve and potentially change its character. These changes would include road realignment, grade changes, large cut and fill areas, and the addition of retaining walls. Having the Reserve staff coordinate with WSDOT on State Route 20 transportation improvements would have a positive long-term effect. Working with WSDOT and Island County would provide long-term direct and indirect benefits to the Reserve by ensuring that cultural landscape concerns are integrated into road project design and implementation.

Encouraging Island Transit to continue the free bus service through the Reserve would be advantageous to those local visitors with limited income and minimize pollution resulting from motor vehicles. This service could also reduce traffic congestion through the reserve and limit the number
of cars that seek alternate routes to Coupeville using back roads.

**Cumulative Impacts**

As traffic on State Route 20 continues to grow and bring additional vehicles to the Reserve, and the capacity of the ferry service increases, traffic congestion will increase throughout the Reserve. The regional arterial function of State Route 20 will bring more traffic through the Reserve. In addition, population growth in Central Whidbey contributes to increased traffic. As visitation to the Reserve increases, a greater variety of transportation methods could be apparent in the Reserve (such as bicycling and horseback) and conflicts between these various types of traffic will increase. This conflict would be particularly acute on main arterials traversing the Reserve and State Route 20 and during peak summer season visitation.

**Conclusion**

The expansion of State Route 20 is the predominant influence on transportation and circulation in the Reserve. Reserve staff involvement in transportation project review will help ensure Reserve characteristics are considered in design and implementation as well as help mitigate cumulative impacts of road projects.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative B**

**Analysis**

The effects on transportation, access, and circulation would be the same as in Alternative A. The addition of a visitor center/contact station would create a demand for more parking in an established area in town. However, shared parking opportunities and available street parking may offset some of this demand. A subsequent implementation plan and compliance document would address site-specific impacts after a location is determined. In addition, an expanded network of self-guided tour routes would provide the visitor additional places to see within the Reserve. Expanding routes may spread out visitation within the Reserve and prevent some potential congestion on nice summer days, though it might also cause additional minor inconveniences to some homeowners who find additional traffic on their roads from being included in the expanded area.

A land and water circulation study would be helpful in identifying potential high use visitation patterns, which would be helpful in managing visitors and assisting in public safety. This study could also identify new trailheads and possible marine trail stopovers, which would provide beneficial effects by enhancing recreational opportunities.

**Cumulative Impacts**

Cumulative impacts are the same as Alternative A. The expanded tour routes and need for parking generated by the visitor center/contact station would have a negligible effect on cumulative impacts.

**Conclusion**

Expanded tour routes could have a positive impact on spreading out visitation in the Reserve, minimizing some potential congestion. The land and water circulation study could provide new information to help identify patterns useful in managing visitors and assisting in public safety. The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative C**

**Analysis**

The effects on parking, access, and circulation would be the same as in Alternative B. In addition, Island Transit providing weekend shuttles would necessitate parking for shuttle users, and transit stations and transit stops. These shuttles would have a moderate short- and long-term benefit by providing visitors with an alternative transportation opportunity to navigate the Reserve. They would also benefit circulation by reducing the number of vehicles on the road in the Reserve. Furthermore, if shuttles used existing transit centers, they could benefit the Reserve by reducing the need to construct parking in sensitive areas.
Additional parking needs and circulation for the proposed north gateway and marine science center would need to be assessed in a subsequent compliance document.

**Cumulative Impacts**

The cumulative impacts are the same as Alternative B; however, an expansion of Island Transit shuttles could help reduce the potential transportation conflicts in the Reserve. The shuttle would help separate recreational users from the through traffic passing through the Reserve on main arterials.

**Conclusion**

Expansion of transit shuttle service will provide an additional means for traveling through the Reserve and could help reduce potential conflict among visitors in and travelers passing through the Reserve.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Effects on Socioeconomics**

This section identifies the potential impacts on the population, housing, social condition, employment, and regional economy that might result from implementing each alternative.

**Methodology and Assumptions**

To assess socioeconomic impacts of each alternative, the following methods and assumptions were used:

- Estimates of Reserve visitor spending were taken from the 1995 NPS visitor survey and updated assuming an inflation rate of three percent over ten years.
- For the baseline condition, it was assumed that the Reserve’s annual operating budget and number of employees would not increase more than ten percent over the next ten years.
- Available information was obtained from relevant literature, consultation with the public, interdisciplinary teams, local organizations and government staff. Impacts were assessed using best professional judgment and the following criteria to define impact intensities.

The following thresholds were defined for analyzing impacts to socioeconomic conditions.

**Negligible:** No changes would occur, or changes to socioeconomic indicators (population, employment/unemployment rate, per-capita income, property values; poverty level, crime rates, characteristics, quality and satisfaction of visitors’ experience, or effects on the rural character within the Reserve) would be below or at the level of statistical error (about three percent) and, if detected, the effects would be considered slight and short term.

**Minor:** There would be increases in the number of visitors to the Reserve or changes in socioeconomic indicators between four and ten percent.

**Moderate:** There would be increases in the number of visitors to the Reserve or changes in socioeconomic indicators by 10-20 percent.

**Major:** There would be increases in the number of visitors to the Reserve or changes in socioeconomic indicators by more than 20 percent.

The area of analysis for cumulative impacts on socioeconomics is Whidbey Island.

**Impacts from Alternative A**

**Analysis**

The total economic impact of dollars spent by visitors at the Reserve in 1995 was 16.4 million (Pergola et al. 1995). Projected to 2005 dollars (assuming an inflation rate of three percent over ten years), the total estimated amount that visitors now spend in the Reserve is approximately $21.3 million. This figure does not take into account the population growth in the metropolitan region since 1995 when the study was completed and the increase in visitation that is likely to have occurred. Reserve visitation provides an economic benefit to the local and regional economy.
The continued presence of agricultural farm uses within the Reserve and central Whidbey Island area would be a positive benefit to the economy of the area. These farms produce various agricultural products, which benefit populations within the greater Puget Sound area and beyond. The farms contribute to the property tax revenues of Island County and to the tax revenues of Washington State. A number of direct farm jobs are provided through farm income. Indirect jobs are also provided through the purchase of seed and fertilizers, expenditures for capital equipment purchases for the operation and maintenance of farm implements and equipment, and the sale of farm products into the public food supply.

The farms also have a net tax benefit to Island County in that as farm businesses, they contribute property tax income to the County. In addition, farmland offers a hedge against fragmented suburban development while supporting a diversified economic base (American Farmland Trust, 1997). Farms contribute less to demands for schools, roads, social services and other county services. If these agricultural lands converted to residential subdivisions of five acre lots or less, as permitted under current County zoning and subdivision regulations, the increase in population density would likely yield a higher demand for these services and contribute to a moderate adverse impact to socioeconomics. Protecting key farmland through the purchase of scenic easements will assist the town of Coupeville and Island County to deliver services and utilities in a more efficient manner by reducing the amount of sprawling, hard to serve, low density development that would otherwise occur in the Reserve.

As the Reserve continues slow progress to protect agricultural land and key historic views through the purchase of scenic easements with Land and Water Conservation funds, incremental growth and infill development will continue to place pressure on Reserve resources. It is anticipated that blocks of agricultural land will become more isolated from each other as surrounding rural land and existing acreage lots are converted to low density residential uses. This isolation would have a permanent negative impact on the economic viability of remaining farmland.

Cumulative Impacts

While the amount of land devoted to agriculture has declined moderately, changes in farming practices and the trend toward fewer but larger farms has reduced the number of agriculture related jobs in the Reserve. The reduction in the number of farm related workers and the recent in-migration of non-agriculture workers has changed the character of the population of the Reserve.

The Reserve has experienced moderate growth in small tourism related business such as bed and breakfasts, restaurants, galleries and retail sales. No large-scale destination tourism related projects have been proposed. Over the past three years, Seattle Pacific University proposed expansion of its Camp Casey Conference Center, which is located in the south west side area of the Reserve. This proposal would have more than doubled the capacity of the facility. The expansion idea is currently inactive, pending a determination of its compliance with the Growth Management Act, and a determination as to the availability water and sewer capacity to serve the proposal. The slow increase in development of new tourism opportunities will have a moderately positive socioeconomic impact.

Due to the quality of life offered in the Reserve, the area has experienced an in-migration of retirees and families. The current estimate of population within the reserve, base on the 2000 US census, is approximately 5,200. New jobs in the area are generally the result of small owner-run service businesses or are made possible by telecommuting and flexible workweek arrangements with larger off-island employers. A steady population increase due to in migration will continue to place pressure on Reserve resources.

Much of the population growth in the Reserve is accommodated by the large number of existing rural acreage parcels and a few existing subdivisions throughout the reserve. Additional residential growth and most non-residential growth will occur within the Urban Growth Boundary of Coupeville, in conformance with the Growth Management Act.

As agriculture provides fewer jobs, the local popu-
lating through the Reserve. An expanded network of waysides, driving tours, and trails could result in increased numbers of visitors and the resulting need for facilities, including parking and restrooms, to accommodate them. These actions and others mentioned in Alternative B would serve to attract more visitors, which in turn, would beneficially influence spending in the area.

In Alternative B, the Reserve would collaborate with other land protection programs to widen the range of protected areas, and protection methods used, in the Reserve. An emphasis on collaborating with partners to encourage innovation in agricultural research, production, and marketing (see Jones & Jones report on Farmland Preservation Strategies in Volume II of this GMP/EIS) could result in new agricultural products and employment.

Working with the town of Coupeville and Island County to improve zoning and design review programs to protect farmland and key historic sites would inform the public of the importance of these resources to the economic and social well being of a community. This effort could result in more support for right to farm initiatives and other measures to protect the viability of local agriculture.

Cumulative Impacts

Enhanced programs of land protection, as proposed in Alternative B, would result in protection of more agricultural and key scenic land in the Reserve and further reduce large acreage parcels that are available for subdivision and sale. These programs, in concert with growth management efforts of Island County and the town of Coupeville, could result in a pattern of more concentrated land development in and adjacent to the Town of Coupeville.

Conclusion

Alternative B presents a greater socioeconomic benefit than Alternative A with increased emphasis on informing the public about the Reserve and Reserve’s programs. The inclusion of a visitor center/contact station, the three gateway contact stations, and an expanded network of waysides, driving tours, and trails could result in increased
numbers of visitors and would beneficially influence spending in the area.

Enhanced programs of land protection in concert with growth management efforts of Island County and the town of Coupeville, could result in a pattern of more concentrated land development in and adjacent to Coupeville.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Impacts from Alternative C

Analysis

The effects on socioeconomics under Alternative C would have a greater long-term, direct and indirect, beneficial impact on the local community over both Alternatives A and B. The development of a marine science center and a Coupeville visitor center/contact station would potentially bring more visibility to the Reserve and in time, more visitors. As the Seattle-Tacoma metropolitan population continues to grow, there will be more urban visitors wanting to visit national park units and experience and enjoy a scenic and rural community. This increase in visitation would result in more spending which in turn would financially benefit the local economy.

Cumulative Impacts

A greater emphasis on developing visitor facilities would result in a moderate increase in visitation and subsequent tourist revenue to the local community. However, given that visitor opportunities at the Reserve would, with a few exceptions, still be oriented to the self-guided visitor, and because facilities would be dispersed throughout the Reserve, it is unlikely that major impacts to the tourism industry would result from the actions described in Alternative C.

Conclusion

Effects on socioeconomics under Alternative C would have a greater long-term, direct and indirect, beneficial impact on the local community over both Alternatives A and B with the development of a marine science center and a Coupeville visitor center/contact station potentially bringing more visibility to the Reserve and in time, more visitors.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Effects on Reserve Boundary and Land Protection

Methodology and Assumptions

As one of the provisions of Public Law 95-625, the National Parks and Recreation Act of 1978, Congress directed that the National Park Service consider, as part of a planning process, what modifications or external boundaries might be necessary to carry out park purposes. A full discussion of the methodology and assumptions used to evaluate changes to the Reserve boundary as it relates to land protection is contained in Appendix B, “Analysis of Boundary Adjustment and Land Protection Criteria.”

The impact analysis for this assessment considers the effects of boundary changes on land protection in the Reserve.

Impacts from Alternative A

Analysis

In Alternative A, there would be no change to the existing boundary.

Land use protection measures rely largely on measures at the county and municipal level which vary in the degree in which they are supportive of the purpose of the Reserve. The Rural zoning district, the largest zoning district in the Reserve, allows one home per five acres. Depending upon future build-out of this density, this type of development pattern would have an adverse impact on the existing visual character of the Reserve which the enabling legislation for the park seeks to protect. The Growth Hearing Board, which ruled on the zoning change, stated that “additional land division will cause further break up natural landscapes, more fragmentation of wildlife habitat,
The county has adopted development standards (such as lot coverage limits and building setbacks) for the Rural zoning district; yet the report states that it is doubtful that such standards would mitigate the impact that development at a five-acre density would have on the Reserve’s visual resources. Though the county regulations encourage clustering of lots and houses through the use of the Planned Residential Development (PRD) process in the Rural zoning district, the regulations do not require use of the PRD process.

Another significant potential inconsistency with Island County’s zoning regulations and the Reserve’s objectives are in the area of allowed uses. Many of the permitted and conditional uses allowed in the zoning districts within the Reserve could be incompatible with the Reserve’s objectives. Even the County’s Commercial Agriculture (CA) district, arguably the most supportive of the Reserve’s goal of preserving the farming legacy of the area, allows minor utilities as a permitted use and communications towers as a conditional use.

**Conclusion**

Land use protection measures rely heavily on efforts at the county and municipal level. The zoning for the Rural zoning district of one home per five acres would have a major adverse impact on the visual character of the Reserve if future build-out occurred at this density (see Figure 12). County development standards would not likely mitigate the impacts of development at five-acre density. Many permitted and conditional uses allowed in zoning districts within the Reserve could be incompatible with the Reserve’s objectives, a moderate adverse impact.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative B Analysis**

The current boundary of the Reserve includes the parcel boundary of the 1850 Donation Land Claims Act and is the same as the boundaries of the National Register Historic District that was established in 1973. When the NPS conducted the 1980 comprehensive plan as instructed by Congress, it seemed the most logical boundary at this time. However, since this date, as development has proceeded at the one unit per five acres density, the character of the rural landscape has changed. Some large agricultural tracts and scenic open space parcels were left out. This alternative would attempt to retain those whole or partial tracts that add integrity to the Reserve. The impacts of a boundary change would be major and long-term. The benefits would be less development and water demands over the long-term, maintenance of the rural landscape and historic scene, and protected open space for plant and animal habitat.

Including the remaining portion of Smith Prairie would protect the last important prairie remnant. This would be beneficial for prairie restoration efforts and to the plants and animals that inhabit this ecosystem.

Including the remainder of the OLF in the Reserve boundary and its subsequent retention in public ownership would assist in protecting the aquifer recharge area in this portion of Smith Prairie and central Whidbey Island. By precluding potential incompatible development if the U.S. Navy ever disposed of its property.

Including the eastern wetlands of Crockett Lake would provide additional protection to an important wildlife habitat, especially for birds. This area is currently used for bird watching. Seattle Audubon brings tours to the site as well as Whidbey Audubon. Over 200 species have been recorded here (Whidbey Audubon Society, 2004). Measures would need to be adopted to prevent increased visitation from impacting sensitive wetlands. These could include development of raised boardwalks, creation of viewing platforms, and fencing off sensitive areas as needed.

Bringing these areas into the Reserve’s existing boundary is in keeping with NPS management policies which allow boundary adjustment recommendations to protect significant resources and values, or to enhance opportunities for public en-
joyment related to park purposes (Management Policies, 3.5 Boundary Adjustments). Once inside the boundary, landowners would be able to sell conservation easements to the federal government, which in turn may help in land conservation and protection of resources.

Encouraging others to protect important agricultural and scenic areas would be beneficial in addition to expanding the boundary. Using other land protection measures such as leaseback, historic property leasing, donation and others would allow more options for conservation than in Alternative A.

Entering into a formal agreement with a local land trust would be beneficial in that many of the land protection tasks and functions, such as easement monitoring, could be undertaken by the land trust. A local group would have developed working relationships within the community which would be beneficial.

Seeking additional funding sources other than Land and Water Conservation Fund monies would be beneficial given the unpredictability of annual appropriations.

Encouraging Island County to adopt an overlay zone over the entire Reserve would be beneficial for maintaining the rural character. Island County would be able to implement a design review that would be favorable to the Reserve’s purpose and goals. Land use change proposals would be reviewed taking into consideration the effect on the Reserve as a unit of the National Park System which would have a long-term, direct, beneficial effect. Some landowners living within the Reserve may not want the added layer of regulation and view it as governmental interference.

Finally, recommending partnering with other agencies to protect marine waters through county or state designation would be a beneficial, long-term effect. This recommendation would require coordination with other agencies. This designation would allow for additional protection measures to be considered dealing with protection of water quality and marine wildlife. Some Washington State constituents or coastal property owners may not want this designation or support it based upon additional government regulations that might come with the designation.

**Conclusion**

Boundary changes proposed in Alternative B that attempt to retain Smith prairie, the remainder of the OLF in the Reserve boundary, and the eastern wetlands of Crockett Lake would provide major, long-term benefits to protecting the integrity of the Reserve. Incorporating other land protection measures such as leaseback, historic property leasing, donation and others allow more options for conservation than Alternative A, providing moderate to major benefits. Encouraging Island County to adopt an overlay zone for implementing design review and other land use controls could have moderate to major long-term benefits that aid in rural preservation.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

**Impacts from Alternative C**

**Analysis**

The effects on the Reserve boundary would be the same as in Alternative B.

Creating a system of transfer of development rights, if successful, would be positive in the long-term in that it would allow farmers to keep land in farming by selling or transferring development rights. It would require the county funding to create the program and provide staff to administer it would be a moderate adverse impact. However, there may be some creative ways to offset the cost of this program, which could be explored.

Encouraging the study for a National Marine Sanctuary that would include the western coast areas of Whidbey Island, managed by the National Marine Fisheries Service, instead of a state or county marine reserve as in Alternative B, would provide greater recognition at the federal or national level. Protection measures would be established when the sanctuary is created that would have a long-term, direct and indirect beneficial effect. Again, as with the state marine reserve, some landowners may object to the creation of a marine
sanctuary because of government regulations and the perception of a “taking” of rights.

Conclusion
In addition to the impacts from Alternative B, the potential to create a system of transfer of development rights would have long-term, moderate benefits by allowing farmers to continue their land in agricultural production. The cost associated with creating and maintaining this system would have a moderate financial adverse impact. The recommendation to study the potential for including the western coast areas of Whidbey Island for a National Marine Sanctuary designation could have moderate to major long-term benefits by protecting marine resources if the designation occurred. However, some landowners may consider designation an adverse impact because of government regulations and the perception of a “taking” of property rights.

The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Unavoidable Adverse Impacts

Unavoidable Adverse Impacts under Alternative A
Delaying the timely acquisition of conservation easements on key areas in the Reserve would continue to expose those areas to encroaching development, and result, over the long-term, in a significant adverse impact on Reserve values.

Unavoidable Adverse Impacts under Alternative B
There are no major adverse impacts to the Reserve. There would be short-term, localized impacts, such as noise, dust, and minimal visitor use and wildlife disruption due to construction activities. While the proposed action would have some adverse effects on park resources, these impacts would be site-specific, minor to moderate, and short-term. None of the impacts of this alternative would adversely affect resources or values to a degree that would prevent the NPS from fulfilling the purposes of the Reserve, or threaten the natural or cultural integrity of the site.

Short-term Use vs. Long-term Productivity

Short-term Use vs. Long-term Productivity under Alternative A
Although inadequate Reserve staff and funding for land protection might have a negligible effect in the short-term, in the long-term, productivity would be adversely affected by the loss of significant areas of the rural cultural landscape to encroaching development and other inappropriate changes to the historic land use. This would degrade the Reserve’s purpose and reduce its value to the public as a historical reserve of national significance.

Short-term Use vs. Long-term Productivity under Alternative B
Under Alternative B, there would be short-term disturbances from constructing gateway contact facilities and waysides. However, these disturbances would be offset by the long-term benefits of increasing awareness of the purpose and significance of the Reserve and its rural heritage. Increased public awareness could stimulate efforts to maintain viable agriculture in the Reserve,
which would directly contribute to the long-term productivity of the landscape.

Similar to Alternative A, if funding for land protection is inadequate and/or available funding cannot be spent in a timely manner, the conversion of land to incompatible uses remains a threat to long-term productivity of the Reserve.

**Short-term Use vs. Long-term Productivity under Alternative C**

Short-term use vs. long-term productivity is the same as Alternative B.

**Irreversible and Irretrievable Commitments of Resources**

**Irreversible or Irretrievable Resource Commitments under Alternative A**

**Wetlands**

Executive Order 1990, Protection of Wetlands, directs federal agencies to avoid to the extent possible adverse impacts associated with the destruction or modification of wetlands and to avoid direct or indirect support of new construction in wetlands wherever possible. The National Wetland Inventory identifies riparian wetlands within the Reserve which are shown in Figure 6, Hydrology. Analysis of wetland maps between 1983 and 2000 show no net loss or gain in wetlands. Significant wetlands still exist around Crockett Lake and Perego Lagoon. However, wetland analysis methods and categorization varies between years and actual changes in wetlands cannot be reliably shown. (Rottle 2003) (Refer to “Vegetation Related to Land Use, Wetlands 2000” and “Historic Vegetation” maps in Volume II.)

The Washington State Growth Management Act requires counties to protect critical areas such as streams, lakes, and wetlands from pollution. In the past, Island County has allowed landowners to follow the county’s best management practices (BMPs) instead of the stricter state laws. The Washington Growth Management Hearings Board rejected this and has required to county to come up with more stringent protection measures (Douthitt, August 23, 2000).

There would be no adverse impacts to wetlands since there are no general management plan actions being proposed in wetland areas. In addition, the Trust Board and Reserve staff would work with partners to encourage the protection of wetlands on non-federal property.

**Threatened and Endangered Species**

There would be no adverse impacts to threatened and endangered species. Initial consultation with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the Washington State Natural Heritage Inventory disclosed one plant—the golden paintbrush, and one bird—the bald eagle, that are threatened or endangered species within the Reserve. In addition, according to the U.S. Fish and Wildlife Service, the Bull Trout (Salvelinus confluentus) and the marbled murrelet (Brachyramphus marmoratus), may occur in ocean waters adjacent to the Reserve.

**Golden Paintbrush**

The Golden Paintbrush (Castilleja levisecta) is federally listed as threatened under the Endangered Species Act. There are only 13 occurrences remaining on earth, five on Whidbey Island. Of these, three are found within the Reserve, at Fort Casey State Park, the Bocker Environmental Preserve (at the Seattle Pacific University’s Whidbey Island campus), and on The Nature Conservancy’s property south of Ebey’s Landing. A population study was conducted in 1993 at all three sites. At two of the three sites, where similar studies were conducted previously, the populations have dropped significantly.

At Fort Casey, a previous survey in 1989 found more than 400 individuals, and in 1993 only 120 individuals were counted. At the Bocker Environmental Preserve, 1984 and 1985 surveys of a five by five-meter area found over 1200 and 2700 plants respectively. In 1993, 273 plants were counted in the same area. At the occurrence south of Ebey’s Landing, no previous study is known to have occurred. In 1993, a random transect sampling esti-
Environmental Consequences

Irreversible or Irretrievable Resource Commitments under Alternative B

Wetlands
The effects on wetlands would be the same as in Alternative A. In addition, the significant wetlands on the eastern side of Crockett Lake could be given added protection over time by including them in the Reserve’s boundary and encouraging landowner protection. Including the properties in the Reserve’s boundary would qualify owners for conservation easement purchases.

Reserve staff would determine how to best protect wetlands from visitor use impacts by the addition of boardwalks, viewing platforms, and signing on NPS-owned lands or by encouraging landowners to protect wetlands on private lands. The Reserve would also include education and information about the importance of wetlands in its interpretation programs. The Reserve staff and Trust Board would not take any actions on NPS-owned lands that would reduce or adversely impact the wetlands within the Reserve.

Threatened and Endangered Species
The effect on threatened and endangered species would be the same as in Alternative A.

Conclusion
The effects of proposed actions under this topic heading would not result in an impairment of Reserve resources or values.

Irreversible or Irretrievable Resource Commitments under Alternative C

Wetlands
The effect on wetlands would be the same as in Alternative B.

Threatened and Endangered Species
The effect on threatened and endangered species...
would be the same as in Alternative B.

**Conclusion**
The effects of proposed actions under this topic heading would not result in an nm of Reserve resources or values.

**Effects on Low Income and Minority Populations**
Executive Order 12898—Federal Actions to Address Environmental Justice in Minority and Low-Income Populations—focuses federal attention on the environment and human health conditions in minority and low-income communities, promotes nondiscrimination in federal programs, provides access to public information, and an opportunity to participate in matters that may affect these populations.

Island County typically has a lower median household income than the state average. In 1989, Island County had an estimated 6.6 percent of its population below the poverty level. The numbers of low and moderate income (80 percent or less of the median) households in unincorporated central Whidbey are projected to grow between the present and the year 2020. The unincorporated area of central Whidbey is projected to grow to 2,700 households through the year 2020. The unincorporated portion of central Whidbey is projected to need 1,090 additional households for the sector of the population below the 80 percent median income level through 2020 (Island County Island County Comprehensive Plan 1999: p.4-13 to 4-20).

There would continue to be no fees collected for entering the Reserve. However, fees would continue to be charged at the state parks (for parking at both Fort Ebey and Fort Casey state parks) and at the Island County Museum in Coupeville which serves as the Reserve’s visitor center. Island Transit would continue to provide free bus service within Whidbey Island. The Trust Board could explore ways to encourage other agencies and business to establish occasional free days at Reserve attractions that would be beneficial for those with low income. There would be no adverse impact on low income and minority populations under Alternative A. In addition, in Alternative B there would be no fee for entering the Reserve’s proposed visitor center/contact station which would be a short-term, direct, beneficial effect on low income populations. In Alternative C a small entrance fee may be required for the marine science center operated with partners to assist with operating costs which could be a minor direct impact to low income populations.

**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 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 CEQ 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.

Alternative A, while accurately describing the current management direction and the best efforts of the staff and the Trust Board, fails to satisfy the NEPA requirements outlined above. Shortage of funding for staff, programs, facilities, and services limits the Trust Board and existing staff to minimal operational effectiveness. The first two bullet statements are barely met, and can be threatened at any time by further development of key land parcels. The third and fourth bullets are unlikely to be attained without new direction, additional funding, and increased public support. Under Alternative A, the fifth provision remains a goal that seems unattainable due to population, development, visitor use, and economic pressures. The final sixth provision can best be met by Alternatives B and C.

The primary distinction between Alternatives B and C is a difference in management structure with the Commission replacing the volunteer Trust Board. Both Alternatives B and C clearly describe an enhanced visitor experience, with a stronger preservation and educational outreach mission. Under these alternatives, agriculture, natural resources, view sheds, aquifer recharge areas, wildlife habitat and the wide range of beneficial uses of the environment referred to in NEPA are addressed, and staff adequate to fulfill the mission is requested. The establishment of an overlay district in unincorporated areas of the Reserve would be a valuable and powerful tool in addressing NEPA provisions 3-6, above.

Depending upon site selection for NPS maintenance operations as described in Alternative B, and the ground disturbance and/or construction required, the rehabilitation and administrative use of the Reuble farmstead as described in Alternative C may have significantly reduced impacts on the environment.

Unlike Alternatives A and B, the lack of clear federal ownership, protection, stabilization and rehabilitation of the historic Rockwell House as described in Alternative C detracts from NEPA provisions 3 and 4, although any property exchange would protect the building somewhat by means of an easement; however, easements require management.

Under Alternatives B and C, the use of the Jacob Ebey House as a seasonal contact station could have strong public educational impacts and would address the full range of NEPA provisions.

Unlike Alternative B, under Alternative C the Reserve’s involvement in a marine science interpretation is addressed in a meaningful and creative way that addresses several of the NEPA provisions above.

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 in best realizing the six NEPA goals stated above; and while Alternative B is very similar in most respects, Alternative C overall provides a high level of protection of natural and cultural resources while attaining the widest range of neutral and beneficial uses of the environment without degradation, while integrating a wider and appropriate range of visitor uses into resource protection.
Summary of Public Involvement

In the spring of 1999, the National Park Service organized an interdisciplinary planning team to begin a new general management plan for the Reserve. The team included both the Reserve’s Trust Board (which included members from the NPS, Washington State, Island County and Town of Coupeville) and staff, and staff from the NPS Pacific West Region-Seattle Office in Seattle, Washington. On May 22, 2000, a Notice of Intent to prepare an environmental impact statement for Ebey’s Landing National Historical Reserve was published in the Federal Register (Volume 65, Number 99, pages 32122-321232).

The official public scoping process began in June 2000 when NPS staff produced and mailed a newsletter to approximately 650 people on the Reserve’s mailing list. In addition, over 2800 newsletter copies were distributed at local public places such as libraries, civic buildings, businesses, and parks.

The purpose of the newsletter was to encourage participation and comment on critical park issues that would be addressed in a new management plan. The newsletter described issues that the GMP would need to address for the park to carry out its mission of preservation and visitor use. It also mentioned the function of a general management plan and environmental impact statement, and provided a schedule of the planning steps including dates, time, and location for the public meetings.

Public Scoping Meetings

In June 2000, the planning team held a series of public scoping meetings. Included in the agenda was an overview of the Reserve, a review of the GMP planning process, and a discussion of issues or concerns. The first meeting occurred in Seattle, Washington on June 20, 2000 at the REI Building in downtown Seattle. Twenty-four people attended and signed in including a representative from the Washington Native Plant Society.

On June 21, 2000, the planning team held two additional meetings in Coupeville, Washington at the Recreation Hall. Twenty people attended the afternoon session. Representatives from Central Whidbey Trails Council, the Town of Coupeville, and members from Ebey’s Landing Trust Board attended. Thirty-three people, primarily property and business owners, neighbors, and farmers signed in. Organizations represented included Au Sable Institute, the Friends of Ebey’s, Whidbey Environmental Action Network, Coast Defense Study Group, and the Whidbey News-Times. In total, 141 verbal comments were recorded from the three meetings.

Individual scoping meetings were held between August 2000 and January 2001 to meet with organizations located within the Reserve to discuss issues of mutual interest. Representatives from the NPS planning team and the Reserve Manager met with the following groups: The Nature Conservancy, Au Sable Institute, Whidbey Audubon, Whidbey Environmental Action Network, Island County Planning Department, U.S. Navy (Outlying Landing Field), Seattle Pacific University (Bocker Environmental Reserve), Coupeville Planning Department, and Washington State Parks (Fort Ebey and Fort Casey state parks). Other meetings with additional organizations were scheduled. Scoping letters and comments were received until August 15, 2000.

Written Comments

The planning team received 36 letters during the official public scoping comment period. Some of these were comments were returned to the NPS on the “mail back form” in the scoping newsletter. Other comments were sent as individual letters, some several pages long. Fifteen were from the town of Coupeville, 9 from Whidbey Island, 9 from Western Washington, 1 from Eastern Washington, and 2 from other states (Pennsylvania and Arizona).
Summary of Comments
Both verba (from the public meetings) and written comments are grouped together under the following headings and are summarized.

Resource Protection

Cultural Resources
- Several commentors mentioned the importance of preserving historic buildings.
- Some suggested setting up an endowment fund for historic preservation or donating time and money and using volunteers.
- Others suggested using façade easements to help preserve historic buildings along with land easements.
- Someone asked how one finds the funding to maintain historic buildings, such as barns, that are no longer needed but contribute to the cultural landscape.
- As an added preservation strategy for historic properties, the Reserve should consider a tax abatement program at the town or county level, which would provide incentives to property owners through tax credits or other incentives. The Reserve should also explore the possibility of federal tax credits.
- The Reserve should provide technical support for owners who would like to upgrade their historic houses for energy efficiency, but in keeping with historic regulations.

Natural Resources
- The Reserve needs to develop a workable technical assistance program for both natural and cultural resources.
- Several commentors mentioned the importance of hedgerows and the need to maintain them in cooperation with the county. Landowners who protect them could be offered financial incentives.
- The Reserve should protect botanical resources through easements and eliminate noxious weeds such as poison hemlock.
- A commentor mentioned the need to preserve or restore the existing prairie fragments. The Reserve should first identify them and then develop a plan to encourage landowners to preserve them.
- The Reserve needs a formal arrangement with Seattle Pacific University to continue to operate and maintain the tide gate. It needs to be repaired so that it operates properly.
- Someone asked about the role and management of fire.

Recreation
- Most of the recreational comments were concerned about trail use. Trails need to be carefully planned, implemented, and managed; people need to be educated about appropriate trail uses.
- Many would like to see the trail system enhanced with better signage.
- Trails could be developed across The Nature Conservancy’s property, and the north side of Crockett Lake (for bird watching).
- A continuous multi-use, non-motorized trail could link with existing Reserve, state, and county trails including Fort Ebey and Fort Casey state parks, the Kettles, Ebey’s Landing bluff, Crockett Blockhouse, Rhododendron Park and Coupeville.
- Some trails need to be relocated and some uses prohibited at certain locations (such as bicycling on the bluffs).
- The Reserve should establish a trail for people with disabilities.
- A few commentors were concerned about noisy activities on Penn Cove, specifically the use of personal watercrafts (jet skis) and floatplanes.
- Someone mentioned the need for better boat access to Penn Cove.

Indian Activities

• Several commentors would like to establish a tie to the Indian presence. Indian tribes should participate because they are important to the history of the area.

Staffing and Administration

• Most of the issues discussed involved the current inadequacy of staffing, but many commentors would not like to see the Reserve get “too bureaucratic.” The Reserve should find a way to share staff with other partnering agencies.
• Many commentors mentioned the need for additional staffing, volunteers, and funding.
• The Reserve needs a separate administrative office with educational displays.

Boundary and Land Protection

• Several respondents suggested that the existing Reserve boundary be expanded to include Smith Prairie, the Navy Outlying Landing Field, and the pheasant farm (former Washington State Department of Fish and Game property), and the proposed gravel mine. Another commentor suggested no boundary expansion.
• Many respondents see land protection directly connected with keeping agriculture viable.
• The Reserve should prioritize key areas for land acquisition.
• Someone suggested purchasing the Jenne farmstead for offices and a museum.
• One commentor suggested that the National Park Service should be directly involved in land negotiation, not the Reserve Trust Board or staff.
• Several comments were made regarding conservation easements—reducing the tax burden, acquiring specific lands more quickly and better managing the terms of the agreement.
• The Reserve needs a new land protection plan to help determine what lands to buy in fee and what lands to buy in easements.
• The Reserve should buy private property at Keystone Spit as it becomes available since it may be the last natural occurring spit on the island.

Parking and Transportation Issues

• Several commentors mentioned the need for more parking at Ebey’s Landing; others were concerned about the impacts of additional parking there. Many suggested not to expand the lot but to consider off-site parking for overflow at the Coupeville Park-n-Ride lot. The Reserve should encourage visitors to use a busing, shuttle system, or trail from town to the landing.
• Many respondents were concerned about vehicular traffic and its impacts; one commentor did not want to encourage large tour buses through the area.
• Someone mentioned that some roads are poorly maintained. The county should consider road enhancement projects.
• Someone suggested that the Reserve could approach wealthy individuals or groups to set up a land protection fund. Another suggested that land be put in a private land trust.
• The Reserve could provide an emergency-funding source for parcels in peril.
• The NPS budget needs to be increased to provide for a greater administrative role to maintain the historic setting. Money could be allocated to specific programs supporting agriculture, such as land lease subsidies and more development easement purchases.

Planning
• The town and county need to have compatible historic preservation regulations.
• One commentor stated that mobile homes should not be in the Reserve.
• The plan should ensure coordination of management of land within the Reserve between different owners.
• The Reserve should not overly restrict or regulate land.
• Someone asked what types of easements are available for land and buildings.
• One respondent suggesting extending the historic overlay district within town of Coupeville.
• One commentor perceived a contradiction between Reserve goals and the Washington State Growth Management Act. The town of Coupeville must absorb more growth within its town limits, but historic lots are larger and more appropriate than zoned smaller lots. If growth occurs outside Urban Growth Boundary, then there is loss of farmland.
• The plan should integrate the preservation efforts of the newly acquired Nature Conservancy property into the Reserve plan.

• There were many questions asking about the following: tax incentives, conservation easements, zoning restrictions, open space, tax debt, and different agency regulations.
• Other questions centered on the GMP and whether it would change types of uses, and what baseline surveys had been done.
• The plan should make recommendations for land protection that are outside the scope of NPS planning that could be implemented by others.
• Someone asked if preservation is reliant on local government administration or regulation then should not the Reserve have representation on local government boards and commissions.
• One commentor recommended strengthening land use laws within the Reserve.

Visitor Orientation and Experience
• Many of the commentors expressed the thought that the beauty of the Reserve should be protected and the land kept less developed and regulated. However, others stated that central Whidbey is reliant upon tourism—change will happen, visitor use will grow, and that growth will need to be accommodated in an acceptable and sensitive fashion.
• The Reserve could develop an information station or kiosk for visitors arriving by car or boat at the Reserve and display maps and brochures containing basic information on trails, lodging, and food.
• The Keystone Ferry dock restaurant could serve as an interpretive center to interpret the importance of Crockett Lake to migratory birds. Visitors could be encouraged to delay their ferry connection and tour the Reserve.
• A few respondents were concerned about people management issues, such as volume of visitors and the potential for trespass on private property. Someone suggested that better signage would help.

• Many mentioned the need for the agencies (partners) to work cooperatively together.

• Coupeville is part of the Reserve and a “living landscape”. The town could be used as the Reserve’s information center and a place to leave cars and rent bikes to explore the area. Commercial use should be focused in Coupeville.

• One commentor stated that people need solitude on the bluff trail.

• The Reserve needs to develop a constituency for public support.

• To disperse visitors and avoid crowding, the plan should locate any new facilities in outlying areas.

• Someone mentioned the need for a visitor survey and asked how many visitors visit the Reserve.

• The plan needs to look at carrying capacity for visitors and facilities; find a balance between preservation and recreation.

• Someone asked what the plans are for using concession businesses, promoting marketing, developing visitor centers, and rehabilitating the Ferry House in the Reserve.

• The Reserve could provide free bus tours beginning on weekends only and staffed with interpreters. The route could follow the route in the “Driving and Bicycling Tour” brochure.

• The Reserve needs to balance visitor needs to local populace needs.

• The visual impact of traffic is a concern to some commentors.

• One commentor suggested limiting “invasive” presence of docents, signs, fences, and paving, and to continue the dogs-on-leash policy.

**Interpretation and Education**

• Many commentors wrote or spoke about the new concept of a national “reserve”, how it differs from a traditional national park (“it’s a living landscape”), its complexity, and how it is interpreted and perceived by the public. Some mentioned the need to educate not only the local community but also national constituents as well about this new concept.

• There were many ideas about what to interpret the Reserve—the history, heritage of homesteaders, Native American use of the area, and native plants and animals—and many ideas of how to interpret the Reserve—more waysides, a museum, an amphitheater, discussion seminars, workshops, guided tour buses, interpretive beach walks, a farmer with horses tilling fields, informational plaques at significant sites for self-guided tourists, and interpretive signs for agricultural fields, trails, and historic structures.

• Several people mentioned the role of the local community in helping to establish the Reserve, the “pride of roots” and local heritage.

• Someone mentioned that current history has a role in future interpretation.

• There is a need to network with other Pacific Northwest historical institutions and communities and to collect oral histories.

• A few commentors suggested de-emphasizing signs and exhibits and voiced concern about providing interpretive facilities, interpretive rangers, visitor orientation space, and educational staff.

• The Reserve should have the Washington Native Plant Society prepare a plant list for the Reserve or at least the bluff area.

• One respondent suggested that the theme for the Reserve be “A Quiet Presence”.
• The Reserve could promote one-day workshops, which incorporate the goals and purpose of the Reserve with groups such as Whidbey Tilth Society or Island County Agriculture Extension Service, and work with organizations such as Au Sable Institute for educational and scientific purposes.

• The Reserve should promote its website.

**Agricultural**

• Most of the comments on agriculture stated the desire and need to keep Whidbey agriculture viable, the need to preserve farmland, and that doing so will preserve the history, beauty, and rural character of the area. Many spoke and wrote of the difficulty of living off the land because of the realities of economics, environmental, and regulatory issues.

• The Reserve should assist and support farmers and farming such as considering funding land leases to augment farming operations.

• Someone asked if the economic model of the Reserve needs to be evaluated. Can the Reserve survive in the face of changing economic conditions? Can it do this without NPS having a significant ownership role? The pressures on local farmers to sell out and local businesses to expand are only going to increase.

• Another commentator asked what would happen if there were an action affecting property that has two conservation easements from two different organizations on the same piece of property.

• The Reserve should consider the importance of farms located on other areas of the Reserve (north cove) in addition to Ebey’s Landing area.

• The Reserve should allow flexibility in converting historical agricultural buildings to other uses and in agricultural practices.

• Changing agricultural uses have occurred over time, creating an evolving landscape.

• Someone asked what types of agriculture or other land uses will be viable in the future to retain the agricultural scene.

• The Reserve is unique. Landowners are the real Reserve managers and farmers have an important role to play. More coordination is needed.

• Through education programs, the Reserve could help farmers establish a product mix including organic farming, fruit stands, ponds, and specialty items for restaurants.

• The Reserve should be involved to preserve historic farmland.

• What can the Reserve learn from other countries such as England?

• The Reserve plan should explore the applicability of the Midwest Soil Banking Program.

• If over time, there is a transition to all public lands within the Reserve how will that affect the agricultural community? The look of agricultural land is an important part of Ebey’s Landing.

• Someone asked how land would be managed in the Reserve if agriculture were no longer viable.

• It is important that the plan should strive to preserve the seamless quality between public and private lands.

• The Reserve plan should explore ways for the tax base to support agriculture. Taxes should support “paying for the view”.

• There is always potential for conflict between farming and other uses such as residential. The Reserve could have a role in educating people about farm practices.

• The Reserve should add more emphasis on agriculture. It is part of the history, character, economic viability, and draw of the landscape. The Reserve partners should include a statement on agriculture in the Reserve’s purpose and significance statements, interpretive themes, and desired future conditions.

• Someone asked if Island County has a “Right-to-Farm” ordinance to protect farmers.

• The Reserve Trust Board should continue to pursue acquisition of development rights and viewshed protection where there is a threat to the integrity of the Reserve.

• Someone in agricultural production should be on the Reserve Trust Board, or at least serve in an advisory capacity. Is there a role for the Board in local agriculture?

• It is critical that the Reserve Trust Board and staff communicate well with landowners.

• Communication is important between all agencies and landowners involved within the Reserve.
• One commentor suggested that the National Park Service should be directly involved in land negotiation, not the Reserve Trust Board or staff. The Trust Board should have a role in agricultural issues, involvement in agricultural education, promotion of new uses, and exploring grant opportunities.

• The plan should reconsider and reevaluate the role and function of the Trust Board. It may be possible and advantageous that some board members serve as representatives to other boards, including local government.

• One commentor stated that the NPS and Trust Board should advocate for the Reserve in other forums and take a stand on controversial issues. The Board should promote openness using e-mail, advisory groups, and agendas. The Board should be involved in the political process and lobby the county to strengthen design review.

• When board vacancies open, someone asked how this information is made public.

• The public needs to understand the function and role of the Trust Board and have better communication about Trust Board activities and board position openings.

• The Trust Board needs knowledgeable staff and an administrative site; the Board needs to get involved in issues early and to seek advice from others.

• The Trust Board should create an agricultural baseline inventory of what is important within the Reserve.

Though many new actions and ideas were suggested by the public during the public comment period, no new issues were identified.

**Land Protection Strategy Plan**

The purpose of the Plan is to assist Reserve staff in identifying methods, funding, and priorities for protecting significant properties within the Reserve. This will enable Reserve and NPS staff to act quickly when funding opportunities or development threats arise. The land protection strategy plan identifies the specific lands that are most valuable and most vulnerable; those lands containing the highest scenic, historic, agricultural, and natural resource integrity, that are also least protected by current controls. This plan was completed by contractors working for the Trust Board. It was approved by the Trust Board in 2004 and will give guidance to the subsequent NPS land protection plan for the Reserve. The NPS expects that this plan will be released to the public following publication of the *Ebey's Landing National Historical Reserve Draft General Management Plan/Environmental Impact Statement*.

**Public Meetings**

The public meetings provided a forum for the public to respond to draft criteria for determining land protection priorities. It also allowed the opportunity for the public to give written comment on what Reserve lands they thought were most important to protect.

Two public workshops were conducted by Reserve staff on the development of the land protection strategy plan for Ebey’s Landing National Historical Reserve. The first workshop was held on February 18, 2003 and focused on the entire Reserve. The second workshop, held on February 26, 2003, specifically addressed the town of Coupeville. Both workshops were held at the Recreation Hall in Coupeville. Thirty-three attended the first workshop and 42 people attended the second. Workshops were hosted by the Reserve Trust Board and staff. The public was asked to write comments on numbered sheets corresponding to Character Area maps. These Character Area maps, with corresponding public comment numbers, are
Public Notification

Written comments were also accepted by surface and electronic mail. Press releases were sent to local newspapers announcing the public meetings. In addition, letters were sent to the following groups:

- Agricultural Forestry Council
- American Farmland Trust
- Au Sable Institute
- Central Whidbey Fire District
- Civilian Conservation Corps
- Coupeville School District Board
- Crockett Lake Diking District
- Farm Service Agency
- Governor’s Office of Indian Affairs
- Island County Commissioners
- Island County Conservation Futures Fund Board
- Island County Economic Council
- Island County Marine Resources Committee
- Island County Parks
- Island County Salmon Recovery Lead Entity
- Island County Trails Council
- Port of Coupeville District
- Seattle Pacific University
- Sunnyside Cemetery District
- The Nature Conservancy
- Town of Coupeville
- Trust for Public Land
- U.S. Navy Recreation Department, Environmental Affairs Office
- Washington Department of Fish and Wildlife
- Washington Department of Natural Resources
- Washington Department of Transportation
- Washington Native Plant Society
- Washington State Parks
- Washington State University Beach Watchers
- Whidbey Audubon Society
- Whidbey Environmental Action Network
- Whidbey Camano Land Trust
- Whidbey General Hospital Board
- Whidbey Island Conservation District
- Whidbey Island Realtor Boards

Written Comments

Public comments were gathered over a public comment period from February 2003 through March 2003. A total of 264 comments were received. Comments were compiled for the purpose of incorporating public feedback into the land protection strategy plan for the Reserve.

Areas Outside the Reserve

- Several commentors recommended expanding the Reserve to include areas north and east of the current Reserve boundaries.

Coupeville Character Area

- Several commenters recommended protecting specific structures in the town as important historical features.
- Many commentors recommended protecting specific property areas as being of importance to the Reserve.
- Several people recommended expanding the town’s historic district.
- Several commentors recommended that cell phone towers not be permitted near the elementary school.

Crockett Prairie Character Area

- Many commentors stressed the importance of Crockett Lake and marshes as valued wildlife habitat and scenic views.
- Several commentors recommended greater protection for several areas in Crockett Prairie.
- One person recommended acquisition of the restaurant adjacent to the Keystone Ferry for use as a Reserve interpretive center.

Ebey’s Prairie Character Area

- Many commentors stressed the importance of protecting farmland in the prairie and the rural character of the entrances into Coupeville.
- Several people recommended increased protection for a number of specific natural features and areas.
Summary of Public Involvement

Trails and Public Access

• There were numerous recommendations addressing the importance of protecting public access to trails throughout the Reserve and developing a comprehensive trail network for hikers, cyclists and equestrians.

Agency Consultation and Coordination

The following discussion documents the consultation and coordination efforts undertaken by the NPS during the preparation of the draft GMP/EIS. Consultation is considered an on-going effort for development of a GMP/EIS. All local governments, tribal governments, and federal and state agencies with resource management responsibilities or interests in the Reserve were informed of the planning effort and encouraged to participate. Throughout the planning process, these agencies were updated with newsletter mailings to keep them informed of the status of the planning effort. The planning team also made several presentations at special interest group meetings, as well as provided information through newsletter mailings and personal calls. Congressional officials were kept updated by newsletter mailings. Appendices F, G, and H contain copies of letters exchanged during the agency consultation process.

Section 106 Compliance

Consultation with Native American Tribes

In keeping with the provisions of NEPA and NHPA, Native American Tribes within the vicinity of the Reserve were contacted. In October 2001, the Chairman for the Swinomish Tribal Community was contacted and informed about the initiation of the GMP. Subsequently, tribal staff have met with Reserve staff on several occasions to get further information and to provide comments and recommendations.

Consultation with the Washington State Historic Preservation Officer and the Advisory Council on Historic Preservation

The State Historic Preservation Officer (SHPO) and the Advisory Council on Historic Preservation must be consulted concerning any resource management proposals that might affect a cultural importance of protecting natural features.

Kettle and Pratt Woodland Character Area

• Several commentors addressed the need to protect various forested areas within this Character Area.
• Several participants addressed protecting shorelines along the coast and in Penn Cove from development pressures.
• Several commentors recommended developing trail networks in the woodlands and one recommended extending the boundaries of Fort Ebey State Park as much as possible.

Parker and Patmore Woodland Character Area

• Several people recommended protecting Native American population sites and archaeological areas and placing more emphasis on Native American human history in the Reserve.

Penn Cove Character Area

• A number of commentors recommended more protection for the sea life of the cove and the banning of jet skis.

San de Fuca Upland Character Area

• Several commentors recommended protecting various areas and historic structures.
• Several people stressed the need to protect various areas of the shoreline of Penn Cove to preserve them from development.

Smith Prairie Character Area

• Several commentors recommended specific areas for protection.

West Coastal Strip Character Area

• Many participants stressed the importance of these areas for public access and enjoyment and the need to protect the scenic views, natural features and plants along the bluffs.

• Several commentors stressed the need to protect types of flora.
• Several participants recommended specific projects within the area.

Fort Casey Uplands Character Area

• Many commentors stressed the importance of protecting natural features.

• Several commentors recommended the need to protect types of flora.
• Several participants recommended specific projects within the area.
property listed on or eligible for the National Register of Historic Places. Consultation with the Washington State SHPO and the Advisory Council for Section 106 of the National Historic Preservation Act, as amended, has been ongoing throughout the planning process. (See Appendix F: Letters for 106 Compliance-NHPA.)

Section 7 Consultation

Consultation with U.S. Fish and Wildlife Service

The Endangered Species Act of 1973, as amended, authorizes federal agencies to enter into early consultation with the USFWS to ensure that any federal action would not jeopardize the existence of any listed species or destroy or adversely modify its habitat. Consultation with the USFWS for species information relating to the Reserve was initiated in January 2000 and updated in April 2004. (See Appendix G: Letters for Section 7 Consultation-ESA.)

Consultation with Washington State Natural Resource Agencies

In addition to the USFWS, the NPS contacted the Washington State Department of Fish and Wildlife and the Washington Natural Heritage Program (within the Washington State Department of Natural Resources) in December 2000 for species information for the Reserve. This information was used in conjunction with the USFWS species information.

Consultation with Washington State Coastal Zone Management Program

Since the Reserve is located within the jurisdiction of the Washington State Coastal Zone Management Program, the NPS has been in contact with the Federal Consistency Coordinator to ensure that the GMP/EIS meets the federal requirements under the Coastal Zone Management Act (CZMA). This program is coordinated by the Washington State Department of Ecology. (See Appendix H: Federal Consistency–Washington State Coastal Zone Management Program.)

Coordination with Other Organizations and Groups

The planning team also made several presentations during the scoping period to special interest groups. These groups included the following:

- The Nature Conservancy
- Au Sable Institute
- Washington State Parks
- Town of Coupeville, Planning Department
- Island County, Planning and Community Development
- Island County Engineering
- Pacific Northwest Trail Association
- Washington Environmental Action Network
List of Preparers and Cooperating Entities

Planning Team Composition and Functions

Ms. Deanne Adams
Chief of Interpretation, NPS Pacific West Region, San Francisco, California; Interpretation Issues

Mr. Brett Bayne
Former Trust Board Member, Washington State Parks and Recreation Commission Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Capt. Marshall Bronson (U.S. Navy, retired)
Trust Board Member, Town of Coupeville Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Mr. Kermit Chamberlin
Former Trust Board Member, Island County Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

- Whidbey Audubon
- Washington State Department of Transportation
- Whidbey Camano Land Trust
- Naval Air Station—Whidbey (Ecologist)
- Seattle Pacific University, Planning, Facilities, and Guest Services divisions
- Island County Chamber of Commerce
- Island Transit
- Island County Economic Development Council
- American Farmland Trust, Washington Field Office
- Central Whidbey Trails

Following release of this draft GMP/EIS, there will be a 90-day public review period including public meetings, after which time the comments received will be gathered, analyzed, and used to complete the proposed plan and produce the final GMP/EIS. The proposed plan will then be released for a 30-day no-action period. A Record of Decision will be signed by the NPS Regional Director and a final plan will be released to the public. The plan is then implemented, subject to funding and additional environmental analysis for site-specific actions.
Mr. Theo K. Chargualaf
Landscape Architect, formerly with NPS Pacific West Region—Seattle Office, Seattle, Washington; Draft GMP/EIS Design and Production, Layout, and Review; Analysis of Related Plans; Newsletter Editing, Design, and Production

Mr. Keith Dunbar
Chief of Planning and Compliance for the NPS Pacific West Region, Former Project Manager, Seattle, Washington

Mr. Bob Fisher
Former Trust Board Member, Washington State Parks and Recreation Commission Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Mr. Michael Hankinson
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Reserve Manager, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Park Management and Operations, Coordination with Ebey’s Landing National Historical Reserve Trust Board

Mr. Craig Holmquist
Trails Maintenance Supervisor, North Cascades National Park Service Complex, Sedro-Woolley, Washington; Historic Buildings and Trails Inventory Assistance

Ms. Barbara Holyoke
Realty Specialist, NPS Pacific West Region—Seattle Office, Seattle, Washington; Lands Issues

Ms. June Jones
Regional Web Coordinator, NPS Pacific West Region—Seattle Office, Seattle, Washington; Web Support for Public Information

Ms. Amanda Kaplan
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Mr. Jim Konopik
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Landscape Architect, NPS Pacific West Region—Seattle Office, Seattle, Washington; Project Manager, Visual Analysis Issues, Scenic Resources, and Public Involvement; Newsletter and GMP Editor and Coordinator

Mr. Jim Thomson
Archaeologist, NPS Pacific West Region—Seattle Office, Seattle, Washington; Archaeology Issues

Dr. Stephanie Toothman
Chief of Cultural Resources, NPS Pacific West Region—Seattle Office, Seattle, Washington; Cultural Resource Issues

Mr. Ron Van Dyk
Trust Board Member, Town of Coupeville Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Mr. Rick Wagner
Chief, Land Resources Program Center, NPS Pacific West Region—Seattle Office, Seattle, Washington; Analysis of Lands Issues and Boundary Modification Issues

Mr. George Lloyd
Trust Board Member, Island County
Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Mr. Bob Merrick
Trust Board Member, Town of Coupeville Representative, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Direct Park Management and Policy Issues

Mr. Richard Smedley
Prescribed Fire Specialist, NPS CCSO, Portland, Washington; Fire Issues

Mr. Leigh Smith
Resources Management Specialist, Ebey’s Landing National Historical Reserve, Coupeville, Washington; Natural Resource Issues

Ms. Gretchen Luxenberg
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GIS Specialist, NPS Pacific West Region—Seattle Office, Seattle, Washington; Spatial Analysis and Cartography

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Ms. Arlene Yamada  
Administrative Support Assistant, NPS Pacific West Region—Seattle Office, Seattle, Washington; Document Production Support

Mr. Fred York  
Anthropologist, NPS Pacific West Region—Seattle Office, Seattle, Washington; Consultation and Background Information on Tribal Issues

Consultants

Mr. Tom Belcher  
Facilities Manager, North Cascades National Park Service Complex, Sedro-Woolley, Washington; Facilities Maintenance Issues

Ms. Amy Cragg  
Landscape Architecture graduate student at the University of Washington, Seattle, Washington; Five-acre Zoning Build-out Scenarios (photo simulation) in Chapter 4.

Mr. Nathaniel Cormier  
Landscape Architect, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Agricultural Preservation Study

Mr. Craig Dalby  
GIS Specialist, NPS Pacific West Region—Seattle Office, Seattle, Washington; Spatial Analysis and Cartography

Mr. Steve Gibbons  
Natural Resources Section 7 Consultation under the Endangered Species Act, NPS Pacific West Region—Seattle Office, Seattle, Washington; Natural Resource Compliance

Mr. Mark MacKay  
Production Director, Northwest Interpretive Association, Seattle; Washington, Scoping Newsletter Design and Production

Ms. April Mills  
Landscape Architect Intern, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Cultural Landscape Project, GIS Specialist

Ms. Nancy Rottle  
Former Landscape Architect with Jones & Jones Architects and Landscape Architects, Seattle, Washington; Cultural Landscape and Agricultural Preservation Project Lead

Other Cooperating Entities

Ms. Harriet Allen  
Endangered Species Section Manager, Washington Department of Fish and Wildlife, Olympia, WA; Section 7 Consultation under the Endangered Species Act

Dr. Allyson Brooks  
Washington State Historic Preservation Officer, Olympia, Washington; 106 Compliance under the National Historic Preservation Act

Ms. Jane Crisler  
Historic Preservation Specialist, Advisory Council on Historic Preservation, Lakewood, Colorado; 106 Compliance under the National
Historic Preservation Act

Mr. John Engbrink
U.S. Fish and Wildlife Service, Lacey, Washington; Section 7 Consultation under the Endangered Species Act

Mr. Chris Gebhardt
NEPA Reviewer, Geographic Implementation Unit, U.S. Environmental Protection Agency, Region 10, Seattle, WA

Ms. Sandy Swope Moody
Environmental Coordinator, Washington Natural Heritage Program, Olympia, WA; Section 7 Consultation under the Endangered Species Act.

Ms. Linda Rankin
Federal Consistency Coordinator, Department of Ecology, SEA Program, Olympia, Washington; Federal Consistency Compliance under the Coastal Zone Management Act.

List of Agencies, Organizations, and Persons to Whom Copies of the GMP/EIS Were Sent

Federal Agencies and Officials
Advisory Council on Historic Preservation, Western Office of Project Review, Lakewood, CO
Coast Defense Study Group Coupeville, WA
Craters of the Moon National Monument, Arco, ID
Department of Interior, Office of Regional Solicitor, Portland, OR

Ebey’s Landing National Historical Reserve, Trust Board Members, Coupeville, WA
Fort Clatsop National Memorial, Astoria, OR
Fort Vancouver National Historic Site, Vancouver, WA
John Day Fossil Beds National Monument, Kimberly, OR
Klondike Gold Rush National Historical Park, Seattle, WA
Mount Rainier National Park, Longmire, WA
National Park Service, Pacific West Region, Seattle, WA
Naval Air Station Whidbey, Environmental Affairs, Oak Harbor, WA
Naval Air Station Whidbey, Morale, Recreation and Welfare, Oak Harbor, WA
Naval Air Station Whidbey, Public Affairs, Oak Harbor, WA
North Cascades National Park Service Complex, Sedro-Woolley, WA
North Cascades National Park Service Complex, Marblemount Field Office, Marblemount, WA
Oregon Caves National Monument, Cave Junction, OR
San Juan Island National Historical Park, Friday Harbor, WA
Whitman Mission National Historic Site, Walla Walla, WA
U.S. House of Representatives, Washington, D.C., 6th District, Honorable Norm Dicks, Tacoma, WA
U.S. House of Representatives, Washington, D.C., 2nd District, Honorable Rick Larsen, Everett, WA
U.S. Environmental Protection Agency, Region 10, Seattle, WA
U.S. Senate, Washington, D.C., Honorable Maria Cantwell, Seattle, WA
U.S. Senate, Washington, D.C., Honorable Patty Murray, Seattle, WA

**State and Local Agencies and Officials**

Coupeville Port District, Coupeville, WA
Department of Natural Resources Public Affairs, Olympia, WA
Fort Casey State Park, Coupeville, WA
Fort Ebey State Park, Coupeville, WA
Island County Board of Commissioners, Coupeville, WA
Island County Historical Advisory Committee, Coupeville, WA
Island County Parks Department, Coupeville, WA
Island County Planning and Community Development Department, Coupeville, WA
Island County Public Works Department, Coupeville, WA
Island Transit, Coupeville, WA
Office of Archaeology and Historic Preservation, Olympia, WA
Town of Coupeville Design Review Board, Coupeville, WA
Town of Coupeville, Mayor, Coupeville, WA
Town of Coupeville Planning Commission, Coupeville, WA
Town of Coupeville, Town Council, Coupeville, WA
Town of Coupeville, Town Planner, Coupeville, WA
Washington State Office of Archaeology, Olympia, WA
Washington State Parks and Recreation, Northwest Headquarters, Burlington, WA

Washington State Representative, 10th District, Honorable Kelly Barlean, Langley, WA
Washington State Representative, 10th District, Honorable Barry Sehlin, Olympia, WA
Washington State Senate, 10th District, Honorable Mary Haugen, Camano Island, WA
Whidbey Island Conservation District, Coupeville, WA

**Tribes**

Swinomish Indian Tribal Community, La Conner, WA

**Organizations**

American Farmland Trust, Puyallup, WA
Au Sable Institute of Environmental Studies, University of Wisconsin, Madison, WI
Central Whidbey Chamber of Commerce, Coupeville, WA
Central Whidbey Trails Council, Langley, WA
Clinton Chamber of Commerce, Clinton, WA
Continuum History & Research, Sedro-Woolley, WA
Coupeville Arts Center, Coupeville, WA
Coupeville Festival Association, Coupeville, WA
Freeland Chamber of Commerce, Freeland, WA
Greenbank Farm Management Group, Greenbank, WA
Island County Historical Society, Coupeville, WA
Island District Economic Development Council, Coupeville, WA
National Parks and Conservation Association, Seattle, WA
National Trust for Historic Preservation, Washington, D.C.
National Trust for Historic Preservation, San Francisco, CA
Northwest Interpretive Association, Seattle, WA
Oak Harbor Chamber of Commerce, Oak Harbor, WA
Pacific Forest Trust, Seattle, WA
San Juan Preservation Trust, Lopez, WA
Seattle Audubon Society, Seattle, WA
Skagit Island Builders Association, Burlington, WA
South Whidbey Historical Society, Langley, WA
The Conservation Fund, Southwest Representative, Green Valley, AZ
The Nature Conservancy, Washington Field Office, Seattle, WA
The Wilderness Society, Pacific Northwest Region, Seattle, WA
Trust for Public Land, Seattle, WA
Washington Native Plant Society, Seattle, WA
Washington Trails Association, Seattle, WA
Washington Trust for Historic Preservation, Seattle, WA
Whidbey Audubon Society, Langley, WA
Whidbey Camano Land Trust
Whidbey Environmental Action Network, Langley, WA
Whidbey Island Association of Realtors, Oak Harbor, WA
Whidbey Island South Association of Realtors, Langley, WA
Whidbey Tours, Coupeville, WA

**Business and Industry**
Clifton View Homes, Coupeville, WA
Coupeville Inn, Coupeville, WA
Eastman Company, Agoura Hills, CA
Fantastic Foods, Coupeville, WA
Oles, Morrison & Rinker LLP, Seattle, WA
Schaefer & Bratton, Coupeville, WA
VARGAS, Sedro-Woolley, WA
Wessen & Associates, Seattle, WA
Whidbey Island B & B Association, Langley, WA
Windermere/Center Isle Realty, Coupeville, WA
Yonkman Construction, Oak Harbor, WA

**Schools, Libraries, and Institutions**
Coupeville School District, Coupeville, WA
Coupeville Town Library, Coupeville, WA
Freeland Public Library, Freeland, WA
Langley Public Library, Langley, WA
Seattle Pacific University, Camp Casey, Coupeville, WA
Seattle Pacific University, Seattle, WA
Skagit Valley College, Whidbey Island Campus, Oak Harbor, WA
University of Wisconsin, Madison, WA

**Media**
Anacortes American, Anacortes, WA
South Whidbey Record, Langley, WA
Stanwood Camano News, Stanwood, WA
The Coupeville Examiner, Coupeville, WA
The Seattle Times, Seattle, WA
The Seattle Post-Intelligencer, Seattle, WA
Whidbey News Times, Oak Harbor, WA

**Individuals**
533 private individuals on the mailing list
Regional Context
Ebey's Landing National Historical Reserve GMP/EIS

Figure 1

- City
- Interstate Highway
- State Highway
- US Highway
- Stream
- Lake or River
- County
- Indian Reservation
- National Forest
- National Park Service Unit

Data Sources:
- ESRI: cities, counties, roads
- ESRI Digital Chart of the World: state boundaries, streams, lakes & rivers
- Interior Columbia Basin Ecosystem Management Project: National Forests
- NPS: National Park Service Units
- WA Department of Natural Resources: Indian Reservations

Plot date: June 16, 2005
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Figure 17

Produced by National Park Service, Pacific West Region Planning Program
Seattle, Washington
January 2003

Notes:
Aerial photograph was derived from NPS Geographic Information Systems. The overlay graphics were produced by Michael J. Hankinson using Photoshop 7.0.

Information presented in this plan is based on the draft GMP.

Image showing a single-lane track, rural road leading to the Jacob Ebey House. This road could be converted into an accessible trail and also serve as a vehicle access route for NPS maintenance and the Nature Conservancy. The rural character of the two-track road should be maintained.

- Viewsheds
- NPS scenic easement lands
- Protected farmland that is leased or traded by the NPS for development rights elsewhere in the reserve or land that is owned by the NPS in fee.
- Development Concept Plan Proposals

Approximate scale in feet.
Development Concept Plan
Ebey’s Landing National Historical Reserve GMP/EIS

Figure 18

Produced by National Park Service, Pacific West Region Planning Program
Seattle, Washington
January 2005

Notes:
Map drawn by Michael J. Haukenson using Geographic Information Systems and Photoshop 7.0.
Information presented in this plan is based on the draft GMP.

Details on the Proposed Parking Zones

1. Typical staff dimension for 90-degree parking.
   Width: 9 ft. Depth: 30 ft. Buffer space behind parking spots and the private entry road: 30 ft.
2. Accessible parking spaces should be within 50 feet of the cottage.
3. The new driveway to the administrative parking area may be 12 feet in width.
4. Total area required to accommodate new parking is approximately 1,000 square feet.
Management Zoning: Alternative C
Ebeys Landing National Historical Reserve GMP/EIS

Management Zone
- Administrative
- Cultural and Natural Preservation
- Other Public Land (including Penn Cove)
- Private Land
- Special Use
- Visitor Use and Development

Figure 20

Data Sources:
- Island County: roads
- NPS: Coupeville boundary, flats, management zones, parcels, Reserve boundary, shaded relief, shoreline

Produced by:
- National Park Service
- PWRO-Seattle GIS Group

Plot date: June 16, 2005

Plot file: i:\gis\arcmapdoc\ebla\gmp\management_zoning_altc_v4.mxd
Development Concept Plan
Ebey’s Landing National Historical Reserve GMP/EIS

Proposed Prairie Profile Display
The location of this display will be determined in a new plan at a later date.

Possible trail linking to Au Sable building complex and linking to a trail to Coupeville.
All trail alignments on Au Sable property would be aligned in conjunction with the property owner.

Reestablish
Prairie
Kiosk and Trailhead
Possible interpretive trail through prairie.

Note:
All proposed features would be built in conjunction with Au Sable property owner.

Existent Landscape Character

The South Gateway is named to describe the property as State Route 26 (SR 26). Today, the surrounding landscape is largely open, with some patches of shrubs, trees, prairies, and buildings. The open spaces are characterized by the presence of trees, prairies, and buildings. The open spaces are characterized by the presence of trees, prairies, and buildings.

Development Concept Plan Proposals

0 25 50 100
Approximate scale in feet.
Build-Out Scenerio (Typical build-out scenario for five acre rural zoning)
Ebey’s Landing National Historical Reserve GMP/EIS

**Figure 12**

*Existing views over agricultural field within the Reserve.*

*Photo of the same area within the Reserve, but illustrating an example of potential building development in Rural (5-acre) Zoning District, using existing county regulations.*
Front Street in Coupeville, Whidbey Island, ca. 1999. NPS Photo.
Appendices

Appendix A: Ebey’s Landing National Historical Reserve Legislation
Appendix B: Interlocal Agreement for the Administration of the Reserve
Appendix C: Trust Board Members List
Appendix D: Vital Signs Workshop Project List
Appendix E: Analysis of Boundary Adjustment and Land Protection Criteria
Appendix F: Letters for 106 Compliance (National Historic Preservation Act)
Appendix G: Letters for Section 7 Consultation (Endangered Species Act)
Appendix H: Federal Consistency—Washington State Coastal Zone Management Program (Coastal Zone Management Act)
Appendix I: Supplemental Bibliography
Appendix J: Acronyms
Appendix A: Ebey’s Landing National Historical Reserve Legislation

NATIONAL PARKS AND RECREATION ACT,
1978, P.L. 95-625
EBEY’S LANDING NATIONAL HISTORICAL RESERVE

Sec. 508. (a) There is hereby established the Ebey’s Landing National Historical Reserve (hereinafter referred to as the "reserve"), in order to preserve and protect a rural community which provides an unbroken historical record from nineteenth century exploration and settlement in Puget Sound to the present time, and to commemorate --

(1) the first thorough exploration of the Puget Sound area, by Captain George Vancouver, in 1792;
(2) settlement by Colonel Isaac Neff Ebey who led the first permanent settlers to Whidbey Island, quickly became an important figure in Washington Territory, and ultimately was killed by Haidahs from the Queen Charlotte Islands during a period of Indian unrest in 1857;
(3) early active settlement during the years of the Donation Land Law (1850-1855) and thereafter; and
(4) the growth since 1883 of the historic town of Coupeville.

The reserve shall include the area of approximately eight thousand acres identified as the Central Whidbey Island Historic District.

(b) (1) To achieve the purpose of this section, the Secretary, in cooperation with the appropriate State and local units of general government, shall formulate a comprehensive plan for the protection, preservation, and interpretation of the reserve. The plan shall identify those areas or zones within the reserve which would most appropriately be devoted to --

(A) public use and development;
(B) historic and natural preservation; and
(C) private use subject to appropriate local zoning ordinances designed to protect the historical rural setting.

(2) Within eighteen months following the date of enactment of this section, the Secretary shall transmit the plan to the President of the Senate and the Speaker of the House of Representatives.

(c) At such time as the State or appropriate units of local government having jurisdiction over land use within the reserve have enacted such zoning ordinances or other land use controls which in the judgement of the Secretary will protect and preserve the historic and natural features of the area in accordance with the comprehensive plan, the Secretary may, pursuant to cooperative agreement --

(1) transfer management and administration over all or any part of the property acquired under subsection (d) of this section to the State or appropriate units of local government;
(2) provide technical assistance to such State or unit of local government in the management, protection, and interpretation of the reserve; and
(3) make periodic grants, which shall be supplemental to any other funds to which the grantee may be entitled under any other provision of law, to such State or local unit of government for the annual costs of operation and maintenance, including but not limited to, salaries of personnel and the protection, preservation, and rehabilitation of the reserve except that no such grant may exceed 50 per centum of the estimated annual cost, as determined by the Secretary, of such operations and maintenance.

(d) The Secretary is authorized to acquire such lands and interests as he determines are necessary to accomplish the purposes of this section by donation, purchase with donated funds, or exchange, except that the Secretary may not acquire the fee simple title to any land without the consent of the owner. The Secretary shall, in addition, give prompt and careful consideration to any offer made by an individual owning property within the historic district to sell such property, if such individual notifies the Secretary that the continued ownership of such property is causing, or would result in, undue hardship.

Lands and interests therein so acquired shall, so long as responsibility for management and administration remains with the United States, be administered by the Secretary subject to the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and in a manner consistent with the purpose of this section.

(e) If, after the transfer of management and administration of any lands pursuant to subsection (c) of this section, the Secretary determines that the reserve is not being managed in a manner consistent with the purposes of this section, he shall so notify the appropriate officers of the State or local unit of government to which such transfer was made and provide for a ninety-day period in which the transferee may make such modifications in applicable laws, ordinances, rules, and procedures as will be consistent with such purposes. If, upon the expiration of such ninety-day period, the Secretary determines that such modifications have not been made or are inadequate, he shall withdraw the management and administration from the transferee and he shall manage such lands in accordance with the provisions of this section.

(f) There is hereby authorized to be appropriated not to exceed $5,000,000 to carry out the provisions of this section.
Appendix B: Interlocal Agreement for the Administration of the Reserve

INTERLOCAL AGREEMENT FOR THE ADMINISTRATION OF EBBY'S LANDING NATIONAL HISTORICAL RESERVE

WHEREAS, the Act establishing Ebbey's Landing National Historical Reserve, hereinafter called “Reserve”, Public Law 88-615 (72 Stat. 597), authorized the Secretary of the Interior, pursuant to a cooperative agreement, to transfer management and administration of the Reserve to an appropriate unit of local government, and

WHEREAS, the Secretary has found that adequate zoning and land use controls to protect the historic and natural features of the area have been enacted by the State and local governments, and

WHEREAS, the Comprehensive Plan for the Reserve calls for a cooperative agreement between Island County; the Town of Coupeville; the Washington State Park and Recreation Commission (State Parks) and the United States Department of the Interior, acting through the Regional Director, National Park Service, Pacific Northwest Region, for the administration and management of the Reserve, and

WHEREAS, the Interlocal Cooperation Act (Chapter 39.34 REW) permits local governmental units to enter into joint powers agreements with each other, with State Parks and the National Park Service, NOW, THEREFORE,

IT IS HEREBY AGREED by Island County; the Town of Coupeville; State Parks and the National Park Service, as follows:

I. ESTABLISHMENT AND ORGANIZATION OF TRUST BOARD

1. A joint administrative board called the “Ebbey’s Landing National Historical Reserve Trust Board”, hereinafter called the “Trust Board”, is hereby created in accordance with the provisions of R.C.W. 39.34.400. The Trust Board shall consist of nine (9) members representing each agency as follows:

   Island County: Three representatives of Island County residing within the Reserve; One representative of Island County at-large;

   Town of Coupeville: Three representatives from the Town of Coupeville;

   State Parks: One representative of state Parks;

   National Park Service: One representative of the National Park Service.

   [Signatures]

   [Date: Jul 23 1990]
2. Representatives of Island County shall be appointed by and serve at the pleasure of the Board of Island County Commissioners. Representatives of the Town of Coupeville shall be appointed by and serve at the pleasure of the Town Council. The representative of State Parks shall be appointed by and serve at the pleasure of the Director of State Parks. The representative of the National Park Service shall be appointed by and serve at the pleasure of the Regional Director, National Park Service, Pacific Northwest Region.

3. The Trust Board shall select from its membership a Chairman and Vice-Chairman, and such other officers as its members deem necessary to carry out its purposes hereunder.

4. The Trust Board shall adopt rules of procedure, consistent with this agreement, for calling and conducting its meetings and for carrying out its purposes hereunder, including frequency of regular meetings. The proposed rules of procedure for the Trust Board shall not be effective until approved by all parties to this agreement. The Trust Board shall comply with the provisions of the Open Public Meetings Act, Chapter 42.30 R.C.W., as now or hereafter amended.

5. Members of the Trust Board shall be enrolled as Volunteers in Parks (VIP) pursuant to the Act of July 29, 1978 (64. 56A.473), 16 U.S.C. Sections 138-139, and will perform such duties as assigned by the Regional Director of the National Park Service or his designated representative.

II. POWERS AND RESPONSIBILITIES OF THE TRUST BOARD

The Trust Board shall be responsible for management of the Reserve as generally provided in the comprehensive plan for the Reserve, and in accordance with the Cooperative Agreement between the Trust Board and the National Park Service;

Administration and protection of sites, facilities and interests in land acquired and retained by the National Park Service and, by mutual written agreement between the Trust Board and a landowner, other lands within the Reserve;

Administration of programs within the scope of the Reserve purposes;

Monitoring and evaluation of compliance with and effectiveness of various conservation measures being used within the Reserve;

Participation in the land use review process of both Island County and the Town of Coupeville, to assure protection of valuable resources of the Reserve;

Cooperation with town and county departments and staff to assure awareness and protection of valuable resources of the Reserve during routine governmental activities.
entering into contracts to provide necessary materials and services to develop and maintain facilities and enhance and protect the resources of the Reserve;

entering into contracts with individuals, private organizations, and local community and governmental bodies to protect, research, enhance, document and interpret the resources of the Reserve;

The Trust Board shall have the authority to accept and expend funds from the parties to this agreement and from other public and private sources for activities and purposes related to the operation of the Reserve, subject to the limitations established by the granting authority, organization or individual.

III. TRUST BOARD AUTHORITY TO ACQUIRE, HOLD AND DISPOSE OF PROPERTY

1. Real Property - The Trust Board is not authorized to acquire, hold or dispose of real property or real property rights.

2. Personal Property - The Trust Board may acquire, hold and dispose of personal property necessary to carry out its duties and responsibilities subject to funding limitations. The Trust Board in acquiring, holding and disposing of personal property shall comply with all applicable federal laws, rules, Washington state laws, Island County ordinances and Coupeville Town ordinances.

3. Distribution of Personal Property upon Termination of Agreement - Upon termination of this agreement, all personal property held by the Trust Board for the management and administration of the Reserve, unless by grant agreement or other agreement, the property must be disposed of another way, shall be transferred to the Secretary of the Interior or unit of local government that will assume the management and administration of the Reserve.

IV. METHOD OF FINANCING THE TRUST BOARD AND ESTABLISHING AND MAINTAINING A BUDGET

The Trust Board shall prepare an annual budget showing proposed revenues and expenditures for each fiscal year. The Trust Board shall observe the fiscal year as defined for the U.S. Government. Budget requests shall be submitted jointly to the Regional Director of the Pacific Northwest Region of the National Park Service, and to the Island County Commissioners not later than July 1st for the fiscal year beginning the following October 1st. Expenditures for each fiscal year shall not exceed amounts provided from all revenue sources. Funds provided to the Trust Board by the parties to this agreement shall be maintained as a separate fund in the County Treasury designated "Operating Fund of the Ebey's Landing National Historical Reserve Trust Board". These funds, pursuant to R.C.W. 43.09.388, will be subject to the same audit and fiscal control as other accounts held by the Island County Treasury.
The Secretary of the Interior and the Comptroller General of the United States, or any of their duly authorized representatives, shall have access to any books, documents, papers, and records of the Trust Board regarding the administration of the Reserve for the purpose of making audits, examination, excerpts, and transcripts as provided in OMB Circular No. A-110. State Parks, Island County and the Town of Coupeville shall have similar access to the above described books, documents, papers and records.

V. DUTIES AND RESPONSIBILITIES OF CONTRACTING PARTIES

1. National Park Service

The parties to this agreement recognize that the acquisition of land and construction of interpretive wayside exhibits, highway pull-offs, and viewing platforms may not have been completed at the time this agreement is executed. It is understood that the National Park Service will, as funds are available, continue the acquisition of land and construction of facilities as outlined in the Comprehensive Plan for Ebey’s Landing National Historical Reserve.

The National Park Service will use the comprehensive plan as a planning tool for the Reserve.

The U.S. Department of the Interior through the National Park Service shall request an appropriation through customary budgetary procedures to defray a portion--not to exceed 25%--of annual operational costs of the Reserve. The remaining costs, which may consist of direct financial contributions or in-kind services, will be provided for from other sources.

The Regional Director of the National Park Service’s Pacific Northwest Regional Office will provide advice, information and guidance as needed to the Trust Board. Each year, the Service will conduct an appraisal of the management and operation of the Reserve under the requirements of Paragraph 4(e), Section 603 of P.L. 96-625.

2. Island County

Island County will use the Comprehensive Plan for Ebey’s Landing National Historical Reserve as an element of the Island County Comprehensive Plan. The County will annually provide direct and in-kind financial support up to one-half of the operating costs of the Ebey’s Landing National Historical Reserve subject to the limitation of amounts annually appropriated in the County’s budget.
3. **TOWN OF COPEVILLE**

The Town of Copeville will use the Comprehensive Plan for Ebey's Landing National Historical Reserve as an element of the Town's comprehensive Plan. The Town of Copeville annually will provide in-kind financial support such as maintenance of wayside exhibits enclosed within Town limits, and may provide either direct or indirect financial support.

4. **State Parks**

State Parks will use the comprehensive Plan for Ebey's Landing National Historical Reserve as a planning tool for projects and facilities within the Reserve. State Parks may provide financial assistance through public grants or other financial support, including in-kind contributions to the Trust Board, and shall consult with the Trust Board in exercising its responsibilities and authority within the Reserve.

VI. **LIABILITY/CONTRIBUTION/INSURANCE**

1. To the extent as provided by law, the parties to this agreement will each contribute equally in payment of any award of damages and/or the costs of legal defense in any legal action, or equitable action brought upon alleged wrongful acts or omissions of the Trust Board in carrying out the terms of this agreement. The parties may mutually agree to settle a claim and pay sum of money or agree to other relief prior to or after judgment is rendered. Any insurance policies described in paragraph VII below will be subtracted from the total amount due before calculation of the equal portions to be paid by each party.

The liability of the United States shall be determined in accordance with the applicable provisions of the Federal Tort Claims Act, 28 U.S.C., Sections 2671-2680 (1982 ed.).

2.a. The Trust Board and its members will be named as additional insureds by one of the parties to this agreement, or the Trust Board will secure and maintain automobile insurance coverage insuring the Trust Board, its individual members and employees, if any, for automobile liability incurred while carrying out the duties and responsibilities of this agreement, for property damage and bodily injury of not less than $1,000,000 combined single limit.

2.b. In addition, the Trust Board and its members will be named as additional insureds by one of the parties to this agreement, or the Trust Board will secure and maintain insurance for Comprehensive General Liability including errors and omissions insurance, insuring the Trust Board, its individual members and employees, if any, in the amount of not less than $1,000,000 combined single limit.
c. Any separate insurance policies obtained by the Trust Board shall name the parties to this agreement as additional insureds.

Copies of the insurance policies and declaration page(s) shall be delivered within 120 days of the effective date of this agreement to the parties to this agreement. All renewed or replacement policies shall be delivered to the parties to this agreement within 10 days of issuance.

VII. EARLY TERMINATION OF AGREEMENT

If the secretary of the interior or his designated representative determines that the Reserve is not being managed in a manner consistent with the purposes of P.L. 95-625, he shall give notice to the appropriate officials and provide for a ninety-day period to make such modifications in applicable laws, ordinances, rules and procedures as will be consistent with such purposes. If upon the expiration of such ninety-day period the secretary determines that such modifications have not been made or are inadequate, he shall withdraw the management and administration from the parties to this agreement, and he shall manage such lands in accordance with P.L. 95-625.

VIII. WITHDRAWAL FROM AGREEMENT

Any party to this agreement, upon 90 days written notice to all other parties, may withdraw as a participant in this agreement. The agreement shall continue in full force and effect as to the remaining parties.

IX. DURATION OF AGREEMENT

Except as provided in paragraph VII above, this agreement shall remain in effect from the date that all parties have signed, unless otherwise terminated by agreement of the parties.

X. OFFICIALS NOT TO BENEFIT

No member of or delegate to Congress, or resident Commissioner shall be admitted to any part of this agreement or to any benefit that may arise therefrom; but this provision shall not be construed to extend to this agreement if made with a corporation for its general benefit.
ISLAND COUNTY

Gordon H. Rosby, Chairman
Board of Commissioners

July 21, 1988

Approved as to Form:

Deputy Prosecuting Attorney

TOWN OF COQUILLE

Bette Cooney, Mayor

July 21, 1988

Approved as to Form:

Town Attorney

STATE OF WASHINGTON

Lee Terlouw
Jan Iveten, Director
Parks & Recreation Commission

July 10, 1988

Approved as to Form:

For the Attorney General

NATIONAL PARK SERVICE

Charles Ogleby
Regional Director

July 11, 1988

Contracting Officer

TRUST BOARD

Approved as to Form:

Alan R. Harris
Attorney for Trust Board

7/22/88
## Appendix C: Trust Board Members List

**TRUST BOARD (4-year terms)**

**EBEY’S LANDING NATIONAL HISTORICAL RESERVE**

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Appendix D: Vital Signs Workshop Project List

Monitoring Questions from Ebey’s Landing Vital Signs Workshop (Revised 10/27/04)

Air/Climate

Monitoring questions:

· What is the spatial and temporal variability in meteorology and climate in the Reserve?
· What are the status and trends of visibility impairment as a result of air pollutants?
· What are the status and trends of N/S deposition and ozone within the Reserve?
· What are the status and trends of the lightscape?

Water Resources (Freshwater and Marine Aquatic ecology, aquatic vegetation, water quality & quantity)

Monitoring questions:

· Is there a shift in species richness and abundance in intertidal and subtidal (nearshore) habitats, including eelgrass and kelp beds?
· What are the status and trends of the principal structure of the shoreline?
· What are the status and trends of the amount of large woody debris on beaches?
· Are the species composition, distribution and abundance of freshwater fish changing?
· Is the species composition and distribution of freshwater invertebrates changing?

Terrestrial Plant Communities

Monitoring questions:

· What are the status and trends of state and federally listed rare plants and species of local concern?
· Are land use cover types-including hedgerows-within the Reserve changing?
· What are invasive exotic flora population distribution and abundance trends?
· Are levels of native vegetation harvesting changing?
· Is the status of native plant communities associated with coastal beaches and berms changing?
· Are the structure and composition of native forests changing?
· Is recreational use impacting native vegetation?
· What are the status and trends of weedy species at *Castilleja levisecta* (CALE) population sites?

Terrestrial Wildlife

Monitoring questions:

· What are the status and trends of species composition, abundance and distribution of amphibians?
· What are the status and trends of species composition, abundance, and distribution of breeding birds?
· What are the status and trends of species composition, abundance, and distribution of mammals?
· Are shorebird/wading bird assemblages changing across the annual migration period?
· Are populations of nesting diurnal raptors changing?
· Are changes in habitat types affecting breeding landbirds?
· Is the assemblage of plant reproduction-enhancing pollinators changing?
· Is the distribution and abundance of native and nonnative mammal populations changing?
· Is the species composition and distribution of terrestrial invertebrates changing?

Geology & Soils / Landscape Processes

Monitoring questions:

· What are the status and trends of soil fertility?
· What are the status and trends of shoreline bluff stability?
· What are the status and trends of prairie soil erosion?

Research Questions from Ebey’s Landing Vital Signs Workshop (Revised 10/27/04)

Air/Climate

Research questions:

· What component of sea spray influences deposition of chemicals; what are reference values?
· What are the deposition effects of the pulp plant in Pt. Townsend?
· What are reference values for tropospheric ozone?
· Are airborne toxic substances present in aquatic resources, soils, and biota?

Water Resources (Freshwater and Marine Aquatic ecology, aquatic vegetation, water quality & quantity)

Research questions:

· Are toxic substances present in aquatic resources, soils, and biota?
· Are ground water reserves being depleted?
· Is the ground water impaired?
· To what extent are ground water reserves being contaminated by saline intrusion?
· Is the marine water quality impaired?
- What is the degree of stratification of water in Penn Cove; what is the location and extent of dissolved oxygen zone?

- What is the current distribution and abundance of coastal fish and marine invertebrate species?

- What is the seasonal and spatial distribution of harbor seals, orcas and gray whales in Penn Cove?

- Are the intertidal communities attended by normal use or by catastrophic events?

- Are forage fish spawning on the shores of the Reserve?

- What is the distribution and abundance of nonnative aquatic species?

- Are red tide blooms and algal blooms consistent from year to year?

- Has water quantity changed in relation to changes in land use practices?
- Is the water quality of surface waters impaired?
- Are freshwater systems becoming eutrophic?
- Is the number and distribution of ponds changing across the landscape?
- What was the historic and prehistoric distribution of streams and ponds?

**Terrestrial Plant Communities**

**Research questions:**

- What are the chemical, physical, and biological characteristics and process-interactions of key wetlands?
- What role do hedgerows play in maintaining species abundance, richness, distribution and biodiversity?
- What are the mechanisms by which fire affects Castilleja levisecta (CALE)?
- What are the rates at which individual native shrub species are encroaching on populations of CALE and the degree to which each species influences the presence and/or vigor of CALE?
- What are effective methods of controlling competing vegetation without negatively affecting CALE?
- To what extent and by what species is herbivory negatively affecting CALE populations?
- What are the critical aspects of CALE biology, and what are the population dynamics?
- What is the nature and distribution of genetic variation within CALE populations?
- What is the pollination biology of CALE, including the necessity of cross-fertilization, and the pollinators of CALE, including their habitat requirements?
- Using standardized rare plant search methods, identify and search potential habitat for undiscovered CALE populations, and conduct a systematic inventory, including a spatial database that documents negative searches as well.
- What necessary baseline information, including site characteristics and environmental processes, is necessary for the successful establishment of new CALE populations?
· Determine whether, and/or under what circumstances, CALE requires a host plant to survive/reproduce.

**Terrestrial Wildlife**

**Research questions:**
· What are natural ranges of variation in amphibian community composition and abundance?
· What species or groups of amphibian taxa can be used as indicators of degradation?
· What are the long-term trends of amphibian populations, health, and distribution?
· How do long-term trends of amphibian populations correspond to climatic variation and other environmental factors?
· How do ground-dwelling invertebrates contribute to soil health?
· What impacts do eastern cottontail rabbits have on native vegetation and crop species?
· How are land use practices affecting the suite of native mammal species?

**Geology & Soils / Landscape Processes**

**Research questions:**
§ How is land use changing within the Reserve?
§ If soil quality is changing, can changes in soil quality be tied to land use?
§ Where are the prairies? (locate the delineation of the prairies by soil survey and land form mapping)

*In what areas is soil erosion (sheet, rill and concentrated flow) and compaction caused by agricultural practices and recreation?*
Appendix E: Analysis of Boundary Adjustment and Land Protection Criteria

Analysis of Boundary Adjustment and Land Protection Criteria

As one of the provisions of Public Law 95-625, the National Parks and Recreation Act of 1978, Congress directed that the National Park Service consider, as part of a planning process, what modifications of external boundaries might be necessary to carry out park purposes. Subsequent to this act, Congress also passed Public Law 101-628, the Arizona Desert Wilderness Act. Section 1216 of this act directs the Secretary of the Interior to develop criteria to evaluate any proposed changes to the existing boundaries of individual park units. Section 1217 of the act calls for the NPS to consult with affected agencies and others regarding a proposed boundary change, and to provide a cost estimate of acquisition cost, if any, related to the boundary adjustment.

The NPS management policies (3.5 Boundary Adjustments) state that the NPS will conduct studies of potential boundary adjustments and may make boundary revisions for the following reasons:

§ to include significant resources or opportunities for public enjoyment related to the purposes of the park

§ to address operational and management issues such as boundary and identification by topographic or other natural features

§ to protect park resources critical to fulfilling park purposes

National Park Service policies instruct that any recommendation to expand park boundaries be preceded by determinations that the added lands will be feasible to administer considering size, configuration, ownership, cost, and other factors, and that other alternatives for management and resource protection have been considered and are not adequate.

The following is a review of the criteria for boundary adjustments as applied to Ebey’s Landing National Historical Reserve. This analysis is included as supporting documentation for the Alternatives B (Preferred Alternative) and Alternative C of the GMP/EIS, which include recommendations for boundary changes to the national historical reserve. Four land areas, involving 20 parcels, are proposed for addition to the Reserve boundary.

§ Bell Farm (private ownership)—five parcels

§ Smith Prairie, Au Sable Institute (nonprofit)—one parcel

§ Outlying Landing Field, U.S. Navy (federal government)—eight parcels

§ Crocket Lake wetlands—six parcels

Four parcels in the Crockett Lake wetlands area are owned by Island County. Another parcel, the Outlying Landing Field (OLF), is owned by the United States and managed by the U.S. Navy as part of the operations of the Naval Air Station—Whidbey. All property owners proposed for inclusion in the Reserve boundary have been notified in advance and consulted prior to the public release of
Significant Resources or Opportunities for Public Enjoyment Related to the Purpose of Ebey’s Landing National Historical Reserve

The boundary addition achieves several purposes that greatly benefit the Reserve, its protection of resources and increased opportunities for public use and enjoyment. The addition of Bell Farm, an important farm property to the boundary in the northern and western portion of the Reserve, adds a highly valuable scenic, undeveloped, and agriculturally viable parcel of land to the boundary. This addition would help contribute toward the viability and “critical mass” of agricultural lands in central Whidbey Island, which are needed to help maintain a viable agricultural economy in the area. The inclusion of Bell Farm in the Reserve boundary would make the property eligible for consideration for protection by conservation easements. The addition of the four parcels at the east end of Crockett Lake would help provide for the complete protection of Crockett Lake and its wetlands. The addition of the remainder of the non-profit Au Sable Institute property provides for additional protection of some rapidly vanishing and pristine prairie ecology at the north end of Smith Prairie. Only a portion of the U.S. Navy Outlying Landing Field (OLF) is now within the boundary of the Reserve. The proposed boundary change would modify this oversight, and place the entire OLF within the Reserve. Certainly no change to Navy operations at the OLF is proposed, but being within the Reserve provides the future assurance of continue public stewardship of this valuable open space and resource within Smith Prairie should the U.S. Navy ever declare the OLF excess to their needs.

Operational and Management Issues related to Access and Boundary Identification by Topographic or other Natural Features

With the exception of the OLF, which is already in Federal fee title ownership, none of the parcels or areas proposed for inclusion in the Reserve boundary would be recommended for fee title purchase by the National Park Service. The acquisition of conservation easements or other protective measures on these lands would present minimal management or operational issues to the Trust Board or the National Park Service. There would be some staff time needed to monitor any easements that may be acquired in the future. However, the time and cost of easement management of these additional parcels taken in context to the entire Reserve area would be expected to be nominal.

Protection of Park Resources and Fulfillment of Park Purpose

The protection of scenic, open space, agricultural lands, prairie habitat and the protection of wetland areas, which are represented by the proposed additions to the Reserve boundary under Alternatives B and C, help to fulfill the purposes of the national historical reserve. The future protection of the areas also assists the Trust Board and the National Park Service in meeting the resource protection goals of the general management plan and the intent of the enabling legislation. If these areas are added and protection of these areas is forthcoming, the Reserve will enhance its ability to secure more of the valued cultural landscape of the Reserve for future generations. In addition, two of the OLF parcels are part of one of the original Donation Land Claim parcels. This is the only historic Donation Land Claim parcel outside the existing Reserve boundary. (Refer to Figure 3, Cultural Landscape Features, for delineation of original Donation Land Claim parcels.)
Feasibility to Administer the Lands Added through Boundary Adjustment

It is feasible for the National Park Service/Trust Board to administer the land parcels being proposed for addition to the Reserve boundary. Most of the parcels would be proposed for protection via the acquisition of conservation easements. No extensive operational commitment would be required by Reserve or NPS staff to administer and manage these conservation easements. There would not be a need for any Trust Board staff to be specifically assigned to these lands or public facilities located on these lands. Therefore, the addition of the proposed land areas to the Reserve boundary would be feasible to administer.

Protection Alternatives Considered

If the areas proposed for addition to the Reserve boundary were not included, they would continue to be subject to the land use regulatory process of Island County. While zoning and subdivision regulations of the County do provide for some protection of land, the private lands proposed for addition are in zoning classifications that allow for residential building lots of five to ten acres in size with the exception of the OLF, which is federal land and therefore not zoned by Island County. These local land use protections, taken alone, would not provide for the protection of agricultural and other lands. Additional measures, such as the acquisition of conservation easements by local land trusts would need to augment county protections if these valued cultural landscapes and lands with high open and scenic character were to be protected. Also, since these lands are not now within the boundary of the Reserve, that would preclude local land owners of having the option of conveying a conservation easement interest to the NPS and Reserve.

If the remainder of the OLF were not included in the boundary and the U.S. Navy determined at some point in the future that these lands were excess to their needs, special legislation would then be required to transfer U.S. Navy managed federal lands to the NPS. Lacking this legislation, the lands would then likely go into surplus disposition by the General Services Administration, and there would be no guarantee concerning their future disposition. If transferred to the NPS, these lands would be managed with the protection of the natural resources and landscape of the Smith Prairie and the central Whidbey Island aquifer as stewardship priorities. The NPS would seek Congressional action to authorize transfer of the remainder of the OLF lands to the Reserve.

Proposed Additions to the Park Boundary and Other Adjustments

Under Alternative B (Preferred Alternative) and Alternative C, approximately four areas totaling approximately 702 acres, involving 20 parcels of land, would be added to the boundary of the Reserve. Regarding property tax revenue implications to Island County, four of the parcels are already in county ownership, the OLF is in federal ownership, and one is owned by a private non-profit institution. The goal of the Trust Board for these lands would be to secure a conservation easement and not fee title purchase. Thus, the private lands proposed for inclusion in the Reserve boundary would remain in private ownership and continue to pay property taxes to Island County based upon their valuations as agricultural land with the easement restrictions limiting the development potential of the land.
Appendix F: Letters for 106 Compliance (National Historic Preservation Act)

United States Department of the Interior
NATIONAL PARK SERVICE
Columbia Cascades Support Office
909 First Avenue
Seattle, Washington 98104-1060

IN REPLY REFER TO:

H30(CCSO-CR)

JAN 27 2003

Ms. Jane Crisler
Historic Preservation Specialist
Advisory Council on Historic Preservation
12136 West Bayaud Avenue, #330
Lakewood, Colorado 80226

Dear Ms. Crisler:

In accordance with our responsibilities under the National Historic Preservation Act of 1966 and the amended Programmatic Agreement between the National Park Service, the National Conference of State Historic Preservation Officers, and the Advisory Council on Historic Preservation, this letter is to inform you of the National Park Service’s intent to prepare a General Management Plan (GMP) for Ebey’s Landing National Historical Reserve (Reserve) on Whidbey Island in Washington state.

The GMP will set forth the basic management philosophy for the Reserve and will provide strategies for addressing issues relevant to natural and cultural resources management, visitor use, and interpretation of those resources. We invite your office to attend any or all of the meetings of the planning team preparing the GMP.

Enclosed is a copy of the draft project agreement proposed for the GMP. It was prepared by the Park Planning and Partnerships team within the Columbia-Cascades System Support Office, in conjunction with the Trust Board of Ebey’s Landing. The Trust Board is the unit of local government that manages the Reserve for the NPS. Any comments you have on this draft agreement are welcome at this time.

The NPS held public scoping meetings in the Central Whidbey Island area and Seattle during June 2000 and is in the process of developing alternatives. This plan will be particularly challenging given the nature of this non-traditional park unit: the Reserve is managed by a Trust Board that represents a partnership of local, state, and federal governments which will all need to adopt this plan into their comprehensive planning processes to ensure adequate implementation.
We encourage your involvement in this important planning process. If you have any questions, please do not hesitate to contact me at 206-220-4104. We look forward to working with you and your staff on this endeavor.

Sincerely,

Keith Dunbar
Chief of Planning

Enclosures 3

cc:
Rob Harbour, EBLA Reserve Manager
Rory D. Westberg, Superintendent, CCSO
Gretchen Luxenberg, NPS Liaison to EBLA Trust Board, CCSO
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We encourage your involvement in this important planning process. If you have any questions, please do not hesitate to contact me at 206-220-4104. We look forward to working with you and your staff on this endeavor.

Sincerely,

Keith Dunbar
Chief of Planning

Enclosures 3

cc:
Rob Harbour, EBLA Reserve Manager
Rory D. Westberg, Superintendent, CCSO
Gretchen Luxenberg, NPS Liaison to EBLA Trust Board, CCSO
Appendix G: Letters for Section 7 Consultation (Endangered Species Act)

United States Department of the Interior
FISH AND WILDLIFE SERVICE
Western Washington Fish and Wildlife Office
518 Desmond Dr. NE, Suite 102
Lacey, Washington 98503

Dear Species List Requester:

Due to reductions in staffing, we will no longer be able to respond to your requests for species lists for individual projects. We ask that you obtain your species list on our web site at http://western.washington.fws.gov/EndeN3List/endangered_species.asp.

To assist you in evaluating the effects of your project, site-specific information of listed species occurrences in Washington State may be obtained from the Washington Department of Fish and Wildlife Priority Habitat and4 Species Program at (360) 903-2543, or their website www.wdfw. wa.gov/hab/hbpage.htm and the Washington Department of Natural Resources Natural Heritage Program at (360) 903-3497 or their website at www.dnr.wa.gov/nhp/.

When you submit a request for section 7 consultation, we request that you include your downloaded species list, and the date it was downloaded, as an attachment. This will document your compliance with 50 CFR 402.12 (c).

We apologize for any inconvenience this may cause. If you have any questions regarding this issue, please contact Tammi Hallock at (360) 733-4322 or John Christensenburger (360) 733-6044.

Sincerely,

[Signature]
Kim K. Harp, Manager
Western Washington Fish and Wildlife Office

Take Pride in America
June 8, 1994

This Chargualaf
National Park Service
Pacific West Region
909 First Avenue – Fifth Floor
Seattle WA 98104-1060


We’ve searched the Natural Heritage Information System for information on rare plants and high quality native wetland and terrestrial ecosystems in the vicinity of your project area. A summary of this information is enclosed. In your planning, please consider protection of these significant natural features. Please contact us for consultation on projects that may have an effect on these rare species or high quality ecosystems.

The information provided by the Washington Natural Heritage Program is based solely on existing information in the database. There may be significant natural features in your study area of which we are not aware. These data are being provided to you for informational and planning purposes only - the Natural Heritage Program has no regulatory authority. This information is for your use only for environmental assessment and is not to be redistributed. Others interested in this information should be directed to contact the Natural Heritage Program.

The Washington Natural Heritage Program is responsible for information on the state’s rare plants as well as high quality ecosystems. For information on animal species of concern, please contact Priority Habitats and Species, Washington Department of Fish and Wildlife, 400 Capitol Way N, Olympia WA 98501-1081, or by phone (360) 902-2541.

Please visit our internet website at http://www.dnr.wa.gov/nhp for more information. Lists of rare plants and their status, as well as rare plant fact sheets, are available for download from the site. Please feel free to call me at (360) 902-1687 if you have any questions, or by e-mail at sandra.suepe@wadnr.gov.

Sincerely,

Sandra Suepe-Moody
Environmental Review Coordinator
Washington Natural Heritage Program

Enclosures

Asset Management & Protection Division, PO Box 3604, Olympia WA 98504-1001
FAX 360-962-1799

1111 Transmission Ave E • PO Box 3604 • Olympia, WA 98504-1001
TEL: 360-962-1000 • FAX: 360-962-1799 • TTY: 360-962-1127

Emergency Dispatch/Information: 911
Appendix H: Federal Consistency–Washington State Coastal Zone Management Program (Coastal Zone Management Act)

United States Department of the Interior

NATIONAL PARK SERVICE
Pacific West Region
909 First Avenue, Fifth Floor
Seattle, Washington 98104-1060

IN REPLY REFER TO:
File code
D18

July 15, 2005

Loree Randall
Federal Consistency Coordinator
SEA Program
Department of Ecology
P.O. Box 47600
Olympia, WA 98504

Dear Ms. Randall,

Enclosed is a copy of the Ebey’s Landing National Historical Reserve DRAFT General Management Plan/Environmental Impact Statement, Volume I. The purpose of a General Management Plan is to set the management direction for the Reserve for the next 15-20 years. Preparation of this plan is consistent with legislation creating the Reserve and the National Park Service Organic Act of 1916, providing for protection of the Reserve’s natural and cultural resources while inviting appropriate visitor use. Three alternatives have been developed by the National Park Service (NPS), Reserve staff, and Trust Board as part of this planning effort.

**Alternative A** constitutes the No Action alternative and assumes that existing programs, facilities, staffing, and funding, would generally continue at their current levels. The NPS would dispose of NPS-owned and managed farms within the Reserve to the private sector after placing conservation easements on them.

**Alternative B** is the NPS Preferred Alternative. The Reserve’s Trust Board, and the NPS, in cooperation with partners, would enhance existing programs and resources management, as well as administrative, maintenance, and visitor services within the Reserve. To maintain and protect the rural landscape, the NPS would continue to purchase conservation easements on priority properties based upon a new Land Protection Plan. The NPS would exchange NPS-owned farms to private farm owners for additional protection on other properties within the Reserve. Historic buildings would be rehabilitated to the Secretary of the Interior’s Standards. The county is encouraged to develop a zoning overlay for the Reserve to aid in land use control. In addition, a minor boundary adjustment would be recommended. To orient and inform the visitor about the Reserve, three gateway kiosks would be developed along State Route 20 and a visitor center/contact station would be sited in an historic building in Coupeville or within the historic district. Three development concept plans for three sites are included at the end of this alternative.
Alternative C changes the management structure of the Reserve from a Trust Board of volunteers to a paid Commission structure. Many actions are similar to Alternative B but with some distinctions. Approximately five acres of NPS-owned land at Farm II would be retained for administrative and maintenance use before exchanging the remaining farmland to a private farm owner for additional protection on other properties within the Reserve. One of the three gateways would be in a historic building in the north of the Reserve. The Reserve would partner for a visitor contact facility at a proposed marine science center.

None of the actions proposed in the Preferred Alternative B impact the coastal zone within the Reserve and central Whidbey Island. Alternative B does propose a state or county designation to protect coastal waters adjacent to the Reserve. This plan will meet the Washington State Coastal Zone Management Program requirements for compliance with the Coastal Zone Management Act to the fullest extent possible.

As Federal Consistency Coordinator for the Washington State Department of Ecology, we would appreciate your review of this document.

Sincerely,

Rory D. Westberg
Deputy Regional Director
Appendix I: Supplemental Bibliography

Supplemental Bibliography

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Appendix J: Acronyms

Best Management Practices  BMP
Code of Federal Regulations  CFR
Community Supported Agriculture  CSA
Department of Ecology  DOE
Ebey’s Landing National Historical Reserve  Reserve
Environmental Impact Statement  EIS
Environmental Protection Agency  EPA
General Management Plan  GMP
Integrated Pest Management  IPM
Island County Noxious Weed Control Board  ICNWCB
Island County Public Transportation Benefit Area Transit or Island Transit  PTBA
Land and Water Conservation Fund  LWCF
National Ambient Air Quality Standards  NAAQS
National Park Service  NPS
Naval Air Station  NAS
Non-governmental organizations  NGOs
North Coast and Cascades Network  NCCN
Northwest Air Pollution Authority  NWAPA
Outlying Landing Field  OLF
Recreation Vehicle  RV
The Nature Conservancy  TNC
Threatened and Endangered Species  T&E
Total Suspended Particulates  TSP
Trust for Public Land  TPL
United State Department of Agriculture  USDA
Urban Growth Areas  UGA
Volunteers in the Park  VIP
Washington State Department of Fish and Wildlife  WDFW
Washington State Department of Natural Resources  DNR
Washington State Department of Transportation  WSDOT
Washington State Ferries  WSF
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**Chapter 5: Environmental Consequences**

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