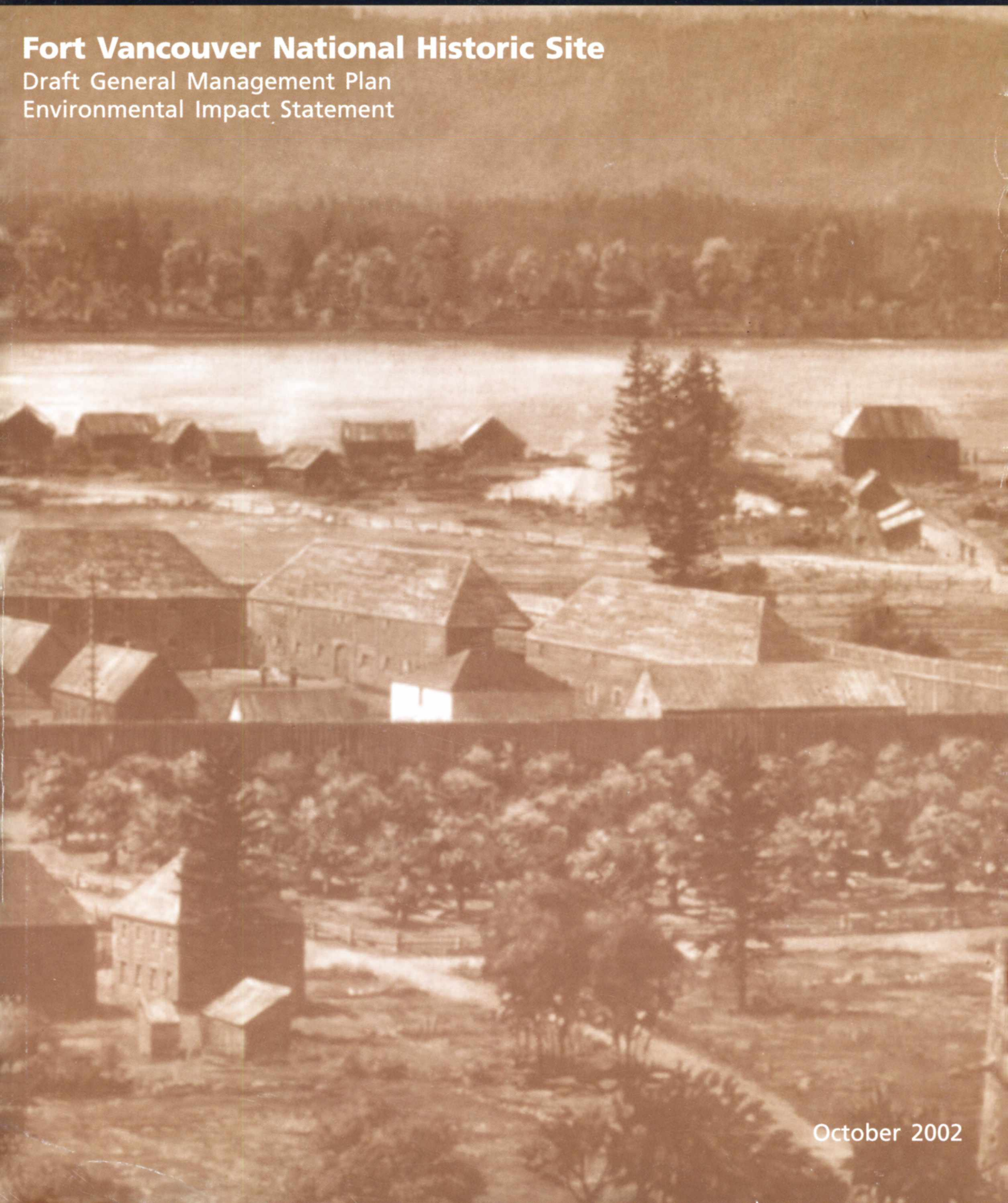
National Park Service
U.S. Department of the Interior

Fort Vancouver National Historic Site
Washington

Fort Vancouver National Historic Site

Draft General Management Plan
Environmental Impact Statement



October 2002

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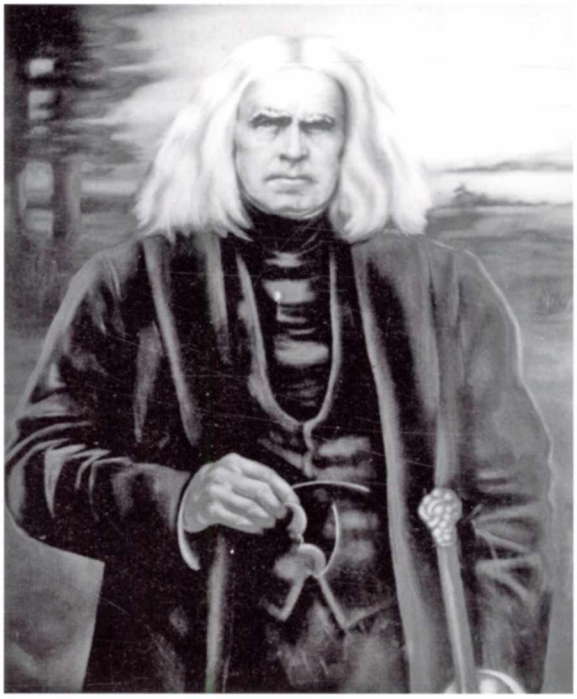
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Dr. John McLoughlin

Chief Factor, Fort Vancouver
Hudson's Bay Company Columbia Department
1784-1857

"Father of Oregon"

September 16th 1836
Doct McLoughlin promises to loan us enough to make a beginning,
& all the return he asks is that we supply other settlers in the same way.
He appears desireous to afford us every facility for living in his power.
No person could have received a more hearty welcome or be treated with
greater kindness than we have been since our arrival.

Narcissa Whitman, My Journal

Draft General Management Plan
Draft Development Concept Plans
Draft Environmental Impact Statement

for

Fort Vancouver National Historic Site

Prepared by
U.S. Department of the Interior
National Park Service

Three alternatives have been examined in this draft general management plan and environmental impact statement. They respond to both National Park Service planning requirements and to the issues identified during the scoping process. These alternatives address visitor use and the preservation of the cultural and natural resources that provide the environment in which the Hudson's Bay Company story is presented to the public. One of these alternatives, Alternative B, constitutes the Preferred Alternative of the National Park Service and, if approved, will become the general management plan for the park.

Alternative A constitutes the No Action alternative and assumes that existing programming, facilities, staffing, and funding, would generally continue at their current levels.

Alternative B, the Preferred Alternative, expands opportunities for the visitor to appreciate the broad sense of history that occurred at Fort Vancouver and its place in Northwest history. Specific actions include additional reconstruction or delineation of structures, and the establishment of wayside exhibits at the Fort, Village, Parade Ground, and Waterfront. The NPS would recommend cooperative sharing of administrative, maintenance, and visitor facilities with the other Vancouver National Historic Reserve Partners. The existing Fort Vancouver visitor center would be remodeled and become the Vancouver National Historic Reserve visitor center jointly managed by the Reserve Partners including the NPS. Also, in consort with the City of Vancouver and other Reserve Partners, a pedestrian overpass/land bridge would be constructed to link the Fort Vancouver Waterfront and the City of Vancouver's Old Apple Tree Park with the Fort and Village area. A shuttle system would be implemented by C-TRAN, the regional transportation authority. Additional educational outreach programs and new research facilities would be developed related to the Hudson's Bay Company and early U.S. Army period. The NPS would recommend that the McLoughlin House National Historic Site in Oregon City become a unit of Fort Vancouver National Historic Site administered by Fort Vancouver staff.

Alternative C proposes full reconstruction within the Fort and additional reconstruction or delineation elsewhere within the national historic site. The historic wharf would be reconstructed. The current visitor center would be renovated and retained for more detailed interpretation concerning Fort Vancouver, while a new location would be sought for a joint Vancouver National Historic Reserve visitor facility in conjunction with Reserve Partners.

The environmental consequences of all the alternatives are fully explained in the environmental impact statement. Also included are the results of initial public involvement, consultation, and coordination. For further information, or to send written comments on this draft plan, contact or write the Superintendent at Fort Vancouver National Historic Site, 612 East Reserve Street, Vancouver, Washington 98661; telephone: (360) 696-7655. All comments received will become part of the public record and copies of comments, 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. Requests to withhold names and/or addresses must be stated prominently at the beginning of the comments. Anonymous comments will not be considered. Submissions from organizations or businesses, and from individuals identifying themselves as representatives or officials of organizations or businesses, will be made available for public inspection in their entirety. In addition, this document will be available on the Internet at the Fort Vancouver NHS homepage at www.nps.gov/fova/news.htm.



Richard Covington, 1855 Illustration of Fort Vancouver

Summary

The story of Fort Vancouver is intertwined with the history of Pacific Northwest trade and settlement. It was here in present day Vancouver, Washington that several great nations, among them Great Britain, the United States, Spain and Russia, laid claim to the rich natural resources and economic opportunities of this scenic corner of the world.

It was certainly no accident then, that Great Britain and their "economic ambassador," the Hudson's Bay Company (HBC), chose the broad fertile river plain along the north bank of the Columbia River as the location for a fort. Fort Vancouver would grow into a thriving commercial operation of several thousand acres in size and from which the vast territory of the Columbia Department was managed.

Many in Great Britain felt that the international boundary between British Canada and the United States would be the Columbia River. However, after the 1846 Treaty of Oregon set the boundary at the 49th parallel, the United States Army immediately established U.S. presence in the Northwest at Vancouver Barracks and Fort Vancouver was soon abandoned.

It is these compelling stories that the National Park Service (NPS) tells at Fort Vancouver National Historic Site (NHS). These stories are told by the archaeological resources and historical documents, by the cultural landscape that remains and is being restored, through reconstruction of certain documented structures within the fort palisade, and through living history interpretation and educational programs.

This document is a draft general management plan and environmental impact statement for Fort Vancouver National Historic Site. It is intended to be a useful long-term decision-making tool to provide National Park Service managers with a logical and trackable rationale for decisions about the protection and public use of park resources. It has been 24 years since Fort Vancouver NHS management and staff have taken a comprehensive look at the long-range future needs of the park from a resource protection, operational, and visitor use perspective. The planning alternatives that follow provide a new perspective looking ahead 15-20 years and identify the actions necessary to realize the widely held vision of a fully functioning Fort Vancouver NHS.

The underlying premise of the alternatives is that the park is not complete. Additional reconstructions of fort structures are needed to better convey to the public the variety of functions that occurred at the Fort and to enrich the visitor experience. Additionally, the plan seeks to emphasize two aspects of the Hudson's Bay Company operations. First, the alternatives propose to better portray the diverse cultures and contributions of the people who lived in the Village next to the Fort. Second, the alternatives propose enhancements along the waterfront to address the fact that the Columbia River was the Interstate 5 of its day—alive with maritime commerce and trade. Additionally, the intertwined story of Hudson's Bay Company Chief Factor Dr. John McLoughlin and the early history of the Oregon Territory needs to be better told through a closer operational relationship between Fort Vancouver NHS and the McLoughlin House National Historic Site. Finally, the alternatives propose to better represent the early U.S. Army period at Vancouver Barracks in order to acknowledge the significant contribution this chapter in U.S. history had in the development of the Pacific Northwest and the nation.

Underscoring these proposed alternatives are partnerships. The NPS relies heavily on partnerships to achieve objectives that better serve the visitor and to protect park resources. First, the NPS is fully committed to cooperating with other partners in the Vancouver National Historic Reserve (Reserve). Second, the general management plan planning team is fully cognizant that the successful implementation

of the plan is contingent upon making even greater use of volunteers and partnership arrangements to implement the many provisions it includes.

The alternatives that follow were prepared with the understanding that this unit of the National Park System plays a vital role in its urban setting, tells a significant story in our nation's history, protects important resources associated with that history, and fully participates with our partners in the Reserve in conveying these stories to visitors from the region, from across the nation, and around the world.

At the beginning of the planning process, a series of public scoping meetings were held to present the purpose and significance of the NHS to the public, to outline desired future conditions, and to present issues that would be addressed in the plan. Input was solicited from the public and other governmental agencies to discern if there were other issues that needed to be addressed in the plan which were not initially listed.

For the future management, protection, and public use of the park, this plan presents three alternatives. The environmental consequences of each of these alternatives are also included in this document so that the reader is able to compare the environmental advantages and disadvantages of the various alternatives presented along with their associated costs.

Alternative A constitutes the No Action Alternative and assumes that existing conditions, including programming, facilities, staffing, and funding would generally continue at their current levels. This alternative would include fulfilling the existing commitments and relationships with the Reserve Partners and providing technical assistance to the McLoughlin House National Historic Site in Oregon City, Oregon, currently an affiliated unit of the National Park System.

Since park operations are not static, but often evolve and change over time, this alternative makes the assumption that there would be corresponding incremental increases, such as operational funding due to inflation. The current configuration of fort buildings would be retained and additional buildings would be reconstructed, as funding becomes available. The Parade Ground would be maintained as usual and there would be limited site interpretation of the Village. The Fort Vancouver Waterfront would continue to be used for passive recreation and river viewing. There would continue to be inadequate staff for natural resource programs needed for maintenance of the orchard, garden, and removal of noxious plants. Volunteerism would be expected to continue at current levels. Interpretation needs at the NHS would continue to increase as more buildings are reconstructed and as the NPS continues to lead the interpretation and education function at the Vancouver National Historic Reserve.

No new substantial facility or program initiatives would be proposed under this alternative. The NHS would continue to work with the City of Vancouver to extend the City's proposed Discovery Historic Loop Trail through the Village of the NHS and along East Fifth Street. In cooperation with the City of Vancouver and Washington Department of Transportation, the pedestrian overpass would be built over State Route 14 and the railroad to connect the Fort Vancouver Waterfront and the City's Old Apple Tree Park to link the Fort and the HBC Village. The current NHS visitor center would be retained in its current configuration and location, as would the current Vancouver National Historic Reserve visitor center situated in the historic General O.O. Howard House at the Vancouver Barracks.

Alternative B constitutes the Preferred Alternative of the National Park Service. This alternative contains several new elements for implementation that would result in expanded opportunities for the visitor to appreciate the broad sense of history that occurred at Fort Vancouver and its place in Northwest history. Specific actions include the reconstruction of nine Hudson's Bay Company period structures within the fort palisade and two at the Village. A research and education center would be developed within the fort. Interpretive components would be added including wayside exhibits and delineation of structures in

certain locations. Much of the historic landscape would be restored. The NPS would develop an interpretive area at the Waterfront by partially reconstructing the Salmon Store as an interpretive shed, and delineating several other historic HBC structures. The original location of the wharf would be simulated and the historic pond delineated with wetland plants. A portion of Columbia Way would be realigned to better accommodate visitor circulation and interpretation.

In cooperation with the City of Vancouver and the Washington Department of Transportation, the pedestrian overpass would be widened as a land bridge to allow for interpretation devices and vegetation. A local transit authority, in cooperation with NPS and other Reserve Partners, would implement a shuttle system to facilitate visitation. Other cooperative sharing would include administrative, maintenance, and visitor facilities with Reserve Partners. The NPS would recommend that one of the four buildings fronting the historic Parade Ground as determined excess by the Secretary of the Army be renovated as the joint administrative headquarters for the park and other Reserve offices. Maximum use would be made of existing structures including renovation of the existing Fort Vancouver visitor center as the Vancouver National Historic Reserve visitor center jointly managed by the Reserve Partners including the NPS.

Implementation of this alternative would result in the development of additional educational outreach programs and new research facilities related to the Hudson's Bay Company and early U.S. Army period. This alternative makes a recommendation that the McLoughlin House National Historic Site in Oregon City, Oregon become a unit of Fort Vancouver NHS and be managed by Fort Vancouver National Historic Site staff. An act of Congress would be required to implement this recommendation.

Alternative C contains much of the same actions that would be proposed for implementation under Alternative B with some noted changes. Full reconstruction within the fort palisade would occur, along with the reconstruction of the two historic School Houses and a barn to the north of the Fort. Additional delineation of structures would occur at the Waterfront and the Village. The historic Salmon Store would be reconstructed along the Columbia River shoreline, as would the historic wharf and other waterfront features. An ethnobotanical garden would be constructed to interpret the local historic uses of native plants. An opening in the railroad berm would be created to visually link the Fort to the Waterfront. To facilitate visitor use and interpretation, a portion of Columbia Way would be closed to vehicular traffic in cooperation with the City of Vancouver.

The current NHS visitor center would be renovated and retained for more detailed interpretation concerning Fort Vancouver, while a new location would be sought for a joint Vancouver National Historic Reserve visitor facility to provide the public with information and orientation to all the Reserve stories and venues. The location for this facility is yet to be determined, but priority would be given to rehabilitation of an historic structure within the Vancouver Barracks Historic District that is listed in the National Register of Historic Places. The research and education center would be located within the Vancouver Barracks portion of the Reserve.

For a comparison of the three alternatives, see "Summary of Actions for Each Alternative" chart at the end of the Alternatives chapter.

The 60-day public review period presents and in-depth opportunity for the interested public to review and comment on the document. A series of public workshops will be held in Vancouver, Washington and Oregon City, Oregon during this period to obtain oral comments of the draft plan.



Hudson's Bay Company's operations in western North America

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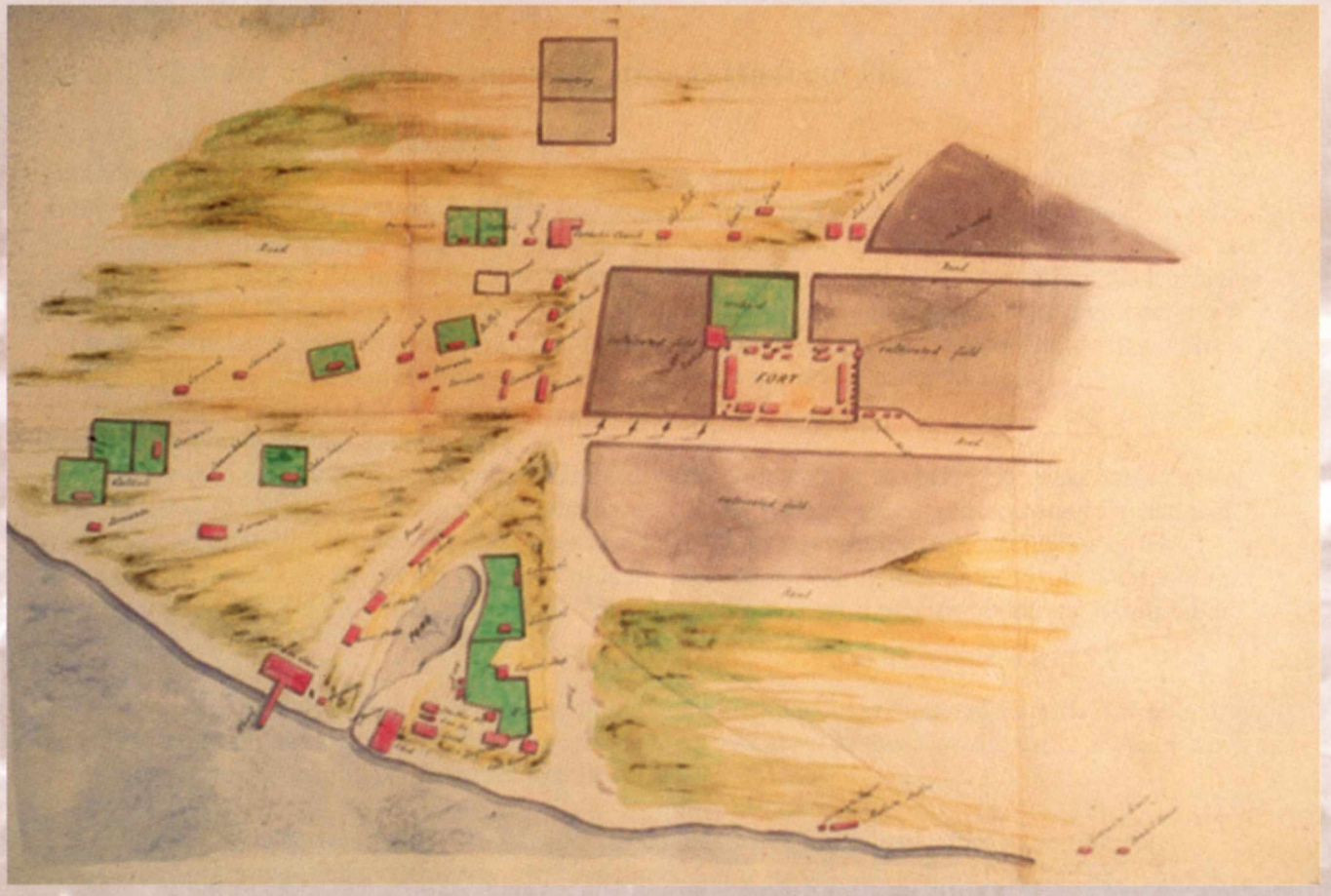
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Background of the Park

Map of Fort Vancouver
Watercolor by Richard Covington, 1846
Courtesy of Washington State Historical Society, Tacoma, Washington



Background of the Park

Fort Vancouver National Historic Site (NHS) is located in southwestern Washington on the north bank of the Columbia River. In 1829, the Hudson's Bay Company (HBC) moved its palisade to the present site, establishing headquarters and principal supply depot for its operations west of the Rocky Mountains. The national historic site is within Washington's third legislative district in Clark County and is located within the heart of Vancouver's Central Park. The authorized boundary of the NHS is defined by the Columbia River to the south, Evergreen Boulevard to the north, East Reserve Street to the east, and Fort Vancouver Way and Interstate 5 to the west. (See Figure 1, Willamette-Puget Trough Ecoregion.)

Background

Establishment of Fort Vancouver National Historic Site

Fort Vancouver National Monument
Fort Vancouver National Monument was established on June 19, 1948 "to preserve as a national monument the site of the original Hudson's Bay stockade (of Fort Vancouver) and sufficient surrounding land to preserve the historical features of the area" for "the benefit of the people of the United States" (62 Stat.352 and the Senate Report on the legislation). The Department of the Interior report on the legislation further stated that the lands so dedicated should fulfill "two essential requirements—the preservation of the historic stockade...and the preservation of the historic parade ground of the later United States Army Post." In addition, the total area of the national monument was not to exceed 90 acres.

Fort Vancouver National Historic Site
To improve the conditions for achieving the legislative requirements of the park, Congress passed an act June 30, 1961 (75 Stat.196), enlarging the boundaries of Fort Vancouver and redesignating the national monument as a national historic site. Congress also allowed for a revision of the boundaries of the monument to include an additional 130 acres of land "adjacent to, contiguous to, or in the vicinity of the existing monument" (U.S.C. Section 450ff-3). (See Appendix A, Fort Vancouver National Historic Site legislation.)

There are approximately 209 acres within the authorized Fort Vancouver National Historic Site boundary. The National Park Service (NPS) manages approximately 165 acres of this area and the U.S. Army, City of Vancouver, and Washington State manage the remainder of lands.

The authorized boundaries of Fort Vancouver NHS contain parcels obtained either by fee simple transactions or through federal property surplus actions. Some parcels are still part of the U.S. Army's Vancouver Barracks operations and may be available only if the Department of the Army determines that the parcels are "excess to their needs." This determination relates specifically to properties within what is referred to as the east and south barracks (note: the names "east barracks" and "south barracks" are used in this document to refer to properties located in the east or south portions of Vancouver Barracks within the authorized NHS boundary. The east barracks area includes that portion of Vancouver Barracks east of Fort Vancouver Way. The south barracks includes the area south of East Fifth Street.) (See Figure 2, Ownership.)

Establishment of McLoughlin House National Historic Site

On February 19, 1941, the John McLoughlin and Barclay houses in Oregon City, Oregon became a national historic site administered by the McLoughlin Memorial Association (Association) under a cooperative agreement with the Secretary of the Interior. The agreement requires the Secretary to regulate the way that the Association maintains the historic character of the McLoughlin House and to provide planning and technical advisory assistance as requested and possible within existing appropriations limits. The McLoughlin House National Historic Site is not directly managed by the NPS but is an affiliated unit of the National Park System.

In January 1966, the NHS officially took over responsibilities from the former NPS Portland, Oregon office including the annual inspection of the McLoughlin House. The amount of assistance by NHS staff has varied over the years. The City of Oregon City owns the land where the McLoughlin and Barclay houses are situated and is a "Charter Park". As a Charter Park, the City of Oregon City must maintain title to the land. The Association owns the McLoughlin and Barclay houses and contents. (See Appendix B for McLoughlin House National Historic Site Legislation.)

Actions Affecting Fort Vancouver NHS after Enabling Legislation

History of Reconstruction at Fort Vancouver NHS

The National Park Service's *Management Policies 2001* reaffirm a long-standing position on the practice of reconstruction within National Park Service sites. The policies (Reconstruction of Obliterated Landscapes 5.3.5.2.4) state:

> No matter how well conceived or executed, reconstructions are contemporary interpretations of the past, rather than authentic survivals from it. The National Park Service will not reconstruct an obliterated cultural landscape unless:
>
> - There is no alternative that would accomplish the park's interpretive mission;
> - Sufficient data exist to enable its accurate reconstruction, based on the duplication of historic features substantiated by documentary or physical evidence, rather than on conjectural designs or features from other landscapes;
> - Reconstruction will occur in the original location;
> - The disturbance or loss of significant archaeological resources is minimized and mitigated by data recovery; and
> - Reconstruction is approved by the Director. (National Park Service 2001: p.56)

The decision to reconstruct the stockade and key buildings at Fort Vancouver was made after years of discussion within the NPS and with public and private supporters of the national historic site. The discussion began with the earliest efforts by public groups in the years between 1915 and 1948 to establish a monument or memorial and reconstruct the stockade. It was complicated by conflicting land uses, including the presence of Pearson Airfield and its aviation easement that extended over the stockade site, limiting possibilities for both reconstruction and safe visitation. At the dedication of the monument in 1955, Secretary of the Interior Donald McKay, a descendent of Hudson's Bay Company employees, made it clear that:

> ...the reconstruction of the stockade and buildings is not favored. We would like to replant the orchard, fence in the fields and re-establish the old wagon roads now forgotten [but] the National Park Service does not favor reconstruction of historic structures, particularly when most or all evidence of the original building has disappeared (Merritt 1993: p.28).

In the earliest NPS planning for the site, Fort Vancouver was considered primarily as an archaeological site. The focus was on further archaeological investigations and a museum perched on the bench above the Fort that would utilize artifacts recovered from the site to interpret the Hudson's Bay Company era.



Legend

- Cities
- Significant Places
- Interstate
- State Highway
- U.S. Highway
- Streams
- Lakes & Rivers
- State Boundaries
- Counties
- National Park Service Units
- National Forests
- Indian Reservations
- Columbia River Gorge National Scenic Area

Figure 1

N W E S

25 0 25 50 Miles

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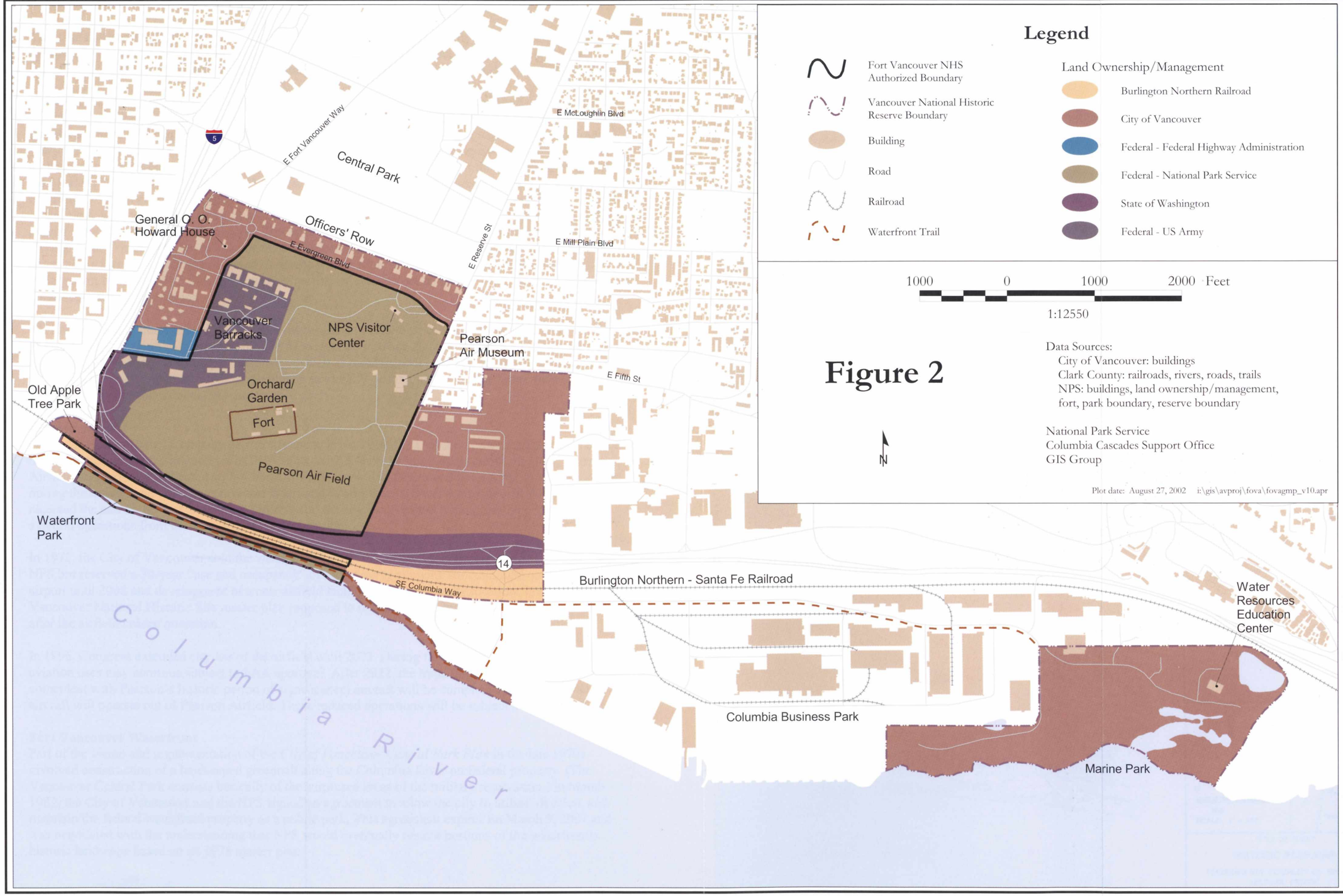
Data Sources:
ESRI: cities, counties
ESRI Digital Chart of the World: state boundaries, streams, lakes & rivers
Washington Department of Transportation: WA highways, Columbia River Gorge National Scenic Area
U.S. Census Bureau TIGER data: OR and ID highways
Interior Columbia Basin Ecosystem Management Project: National Forests, Indian Reservations
NPS: National Park Service Units

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Produced by the CCSO GIS Group Revised 8/26/02

Willamette – Puget Trough Ecoregion

Fort Vancouver NHS GMP/EIS



Legend

- Fort Vancouver NHS Authorized Boundary
- Vancouver National Historic Reserve Boundary
- Building
- Road
- Railroad
- Waterfront Trail

Land Ownership/Management

- Burlington Northern Railroad
- City of Vancouver
- Federal - Federal Highway Administration
- Federal - National Park Service
- State of Washington
- Federal - US Army

1000 0 1000 2000 Feet

1:12550

Figure 2

Data Sources:
City of Vancouver: buildings
Clark County: railroads, rivers, roads, trails
NPS: buildings, land ownership/management, fort, park boundary, reserve boundary

National Park Service
Columbia Cascades Support Office
GIS Group

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Land Ownership/Management
Fort Vancouver NHS GMP/EIS

The local community, however, continued to lobby for reconstruction, initially by supporting the re-designation of the monument as a national historic site. Such a designation, it was believed, would encourage NPS to interpret and develop the area under the authorities of the Historic Sites Act of 1935.

Ultimately, Congressional action determined that the reconstruction of the stockade and key structures would proceed. In 1965, with the concurrence of NPS Director Hartzog, Congresswoman Julia Butler Hansen arranged for an appropriation of $83,000 to reconstruct a portion of the stockade. In subsequent years, through the efforts of Congresswoman Hansen, Congress funded an extensive program of archaeological research and reconstruction. National Park Service planning for the Fort, beginning with the *Master Plan for Preservation and Use of Fort Vancouver National Monument, Mission 66 Edition,* reversed the initial course and cautiously endorsed reconstruction based on sound research and archaeological investigations and a clear identification of any resultant structures as "replicas." The 1969 *Master Plan* prepared by the park outlined reconstruction of the stockade, key structures to support "living history" interpretation (a keen interest of Director Hartzog), fields, pasture, and the "original surrounding forest environment." The most recent *Master Plan,* published in 1978 and scheduled for replacement by this general management plan, reaffirmed reconstruction as a priority, outlining a five-phase reconstruction program.

All future reconstruction at Fort Vancouver will continue to adhere strictly to the historical and archaeological research requirements of NPS *Management Policies 2001,* as cited above. The park will continue to work with qualified professionals, as well as build its own professional capabilities, to support these requirements. Guidelines will be developed to identify, justify, and prioritize future reconstructions, based on research, educational, and interpretive goals.

Pearson Airfield

When the Hudson's Bay Company departed Vancouver in 1860, the U.S. Army assumed management of the properties within the boundaries of the Vancouver Barracks Military Reservation. In 1925, Pearson Airfield was formally dedicated within Vancouver Barracks and functioned as an Army Air Corps station during the interwar period between World War I and World War II. Shortly after World War II, the NPS received the site of the Fort and Parade Ground and the city received the airfield for the purpose of aviation operations from the War Assets Administration.

In 1972, the City of Vancouver sold the western portion of the airfield (approximately 72 acres) to the NPS but reserved a 30-year "use and occupancy" of the property allowing for continued operations of the airport until 2002 and development of a new airfield facility at another county location. The Fort Vancouver National Historic Site master plan proposed to reestablish the historic HBC scene in this area after the airfield ceased operation.

In 1996, Congress extended city use of the airfield until 2022. During this extension period general aviation uses may continue subject to FAA approval. After 2022, the transition to historic (interwar era coincident with Pearson's historic period of significance) aircraft will be complete and only historic aircraft will operate out of Pearson Airfield. These reduced operations will be subject to NPS approval.

Fort Vancouver Waterfront

Part of the vision and implementation of the *City of Vancouver Central Park Plan* in the late 1970s involved construction of a landscaped greenbelt along the Columbia River on federal property. (The Vancouver Central Park consists basically of the surplused areas of the military reservation.) In March 1982, the City of Vancouver and the NPS signed an agreement to allow the city to utilize, develop, and maintain the federal waterfront property as a public park. This agreement expires on March 9, 2007 and was negotiated with the understanding that NPS would eventually restore portions of the waterfront's historic landscape based on its 1978 master plan.

Pearson Air Museum
In 1995, the City of Vancouver and the National Park Service jointly conducted an environmental assessment to site a proposed aviation museum on federal lands and in federal buildings within the national historic site. This action required an amendment to the 1978 park master plan to justify the use of federal land for a nonprofit public museum. Three historic aviation buildings comprise the principal structural components of the museum complex. Under the amended 1978 master plan, these buildings qualified as an approved element within the Fort Vancouver National Historic Site master plan since it provides for adaptive reuse of historic properties (these properties are recorded on the Washington State Register of Historic Places and are eligible for the National Register). Museum use is thematically linked with the historical interwar period of aviation and is one of the themes of the Vancouver National Historic Reserve.

A memorandum of agreement signed in November 1994 between the City of Vancouver and the NPS allowed for the development of the new museum within the national historic site. A December 1995 cooperative agreement authorized the City of Vancouver to act as the National Park Service's agent for historical interpretation of Pearson Air Museum.

Vancouver National Historic Reserve
Significant historical events occurring in Vancouver, Washington resulted in a rich collection of cultural resources, including sites such as Fort Vancouver, Vancouver Barracks, Pearson Airfield, the Columbia Riverfront, and Kaiser Shipyards. In 1990, (Public Law 101-523) Congress directed a commission to study the feasibility of establishing a Vancouver National Historic Reserve (Reserve). Five representatives served on the commission. A private citizen served as one representative and four were representatives from the following public agencies: the National Park Service, the Department of the Army, the City of Vancouver, and the Washington State Office of Archaeology and Historic Preservation. Completing its study in April 1993, the commission recommended establishment of the Reserve. Kaiser Shipyards was not included in the Reserve boundary.

The 366-acre Reserve was established in 1996 (Public Law 104-333, Section 502). Though not a unit of the National Park System, it is an affiliated area, making the Reserve eligible for technical and financial aid from the National Park Service. Congress gave national status to the area when it established the Reserve. As part of a public/private partnership, Congress provides support to the Reserve through annual appropriations that match other public and private funds. The Reserve is cooperatively managed by a partnership composed of the same four agencies that served on the commission. A cooperative agreement signed by the Reserve Partners provides for specific funding and program support for various Reserve functions. The National Park Service is the lead Reserve Partner for interpretation, education, and cultural resource protection. Leadership in these areas provides an important contribution in fulfilling the goals of the *Vancouver National Historic Reserve Cooperative Management Plan*.

Fort Vancouver NHS is essentially a park within a park because of the legislatively established Reserve that surrounds it. As a partner in the Reserve and a signatory agency to its cooperative management plan, NPS staff is committed to communicate and coordinate its planning and operational activities within the context of the larger Reserve.

Conveyance of West Portion of Vancouver Barracks
On October 30, 2001, Congress approved Public Law 106-398 [114 Stat.1654A], Section 2843. This section of the act authorized the conveyance of property situated within the Vancouver National Historic Reserve from the Secretary of the Army to the City of Vancouver, Washington. The property included 19 structures at Vancouver Barracks that are identified by the Army using numbers between 602 and 676 in the west barracks area.

structures at Vancouver Barracks that are identified by the Army using numbers between 602 and 676 in the west barracks area.

The city intends to actively pursue the adaptive reuse of these historic properties for a variety of public and private uses. Any reuse would be accomplished in adherence to the Secretary of the Interior's Standards and in the spirit of the preservation of the historic features of the Vancouver National Historic Reserve.

Purpose and Significance

Purpose of Fort Vancouver National Historic Site

The National Park Service Organic Act of 1916 established management criteria for all units of the National Park System. The stated 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 a manner and by such means as will leave them unimpaired for the enjoyment of future generations."

As interpreted though enabling legislation, the purpose of Fort Vancouver National Historic Site is to preserve and interpret the following:

- The site of the nineteenth century Hudson's Bay Company's activities
- Settlement of the Oregon Territory
- The establishment of the U.S. Army's Vancouver Barracks

Significance of Fort Vancouver National Historic Site

Through NPS staff workshops and public meetings the significance of Fort Vancouver NHS has been determined to be the following:

- From 1825 through 1849 Fort Vancouver was the site of the Hudson's Bay Company's administrative headquarters and supply depot west of the Rocky Mountains. As a result, the HBC greatly influenced the economic, political, and cultural development of the Pacific Northwest.
- Fort Vancouver was the Pacific Northwest center for fur trade and other commerce, agriculture, and industry between 1825 and 1849.
- Fort Vancouver was the first terminus of the Oregon Trail (water route along the Columbia River).
- Vancouver Barracks, established in 1849, was the first military post developed in the Pacific Northwest. It served as headquarters for the U.S. Army operations into the twentieth century.
- Fort Vancouver NHS contains extensive archaeological resources, both *in situ* (in original location) and recovered, that provide important information about the physical relationships and the cultural and economic operation of the Hudson's Bay Company and the U.S. Army.

Desired Future Conditions

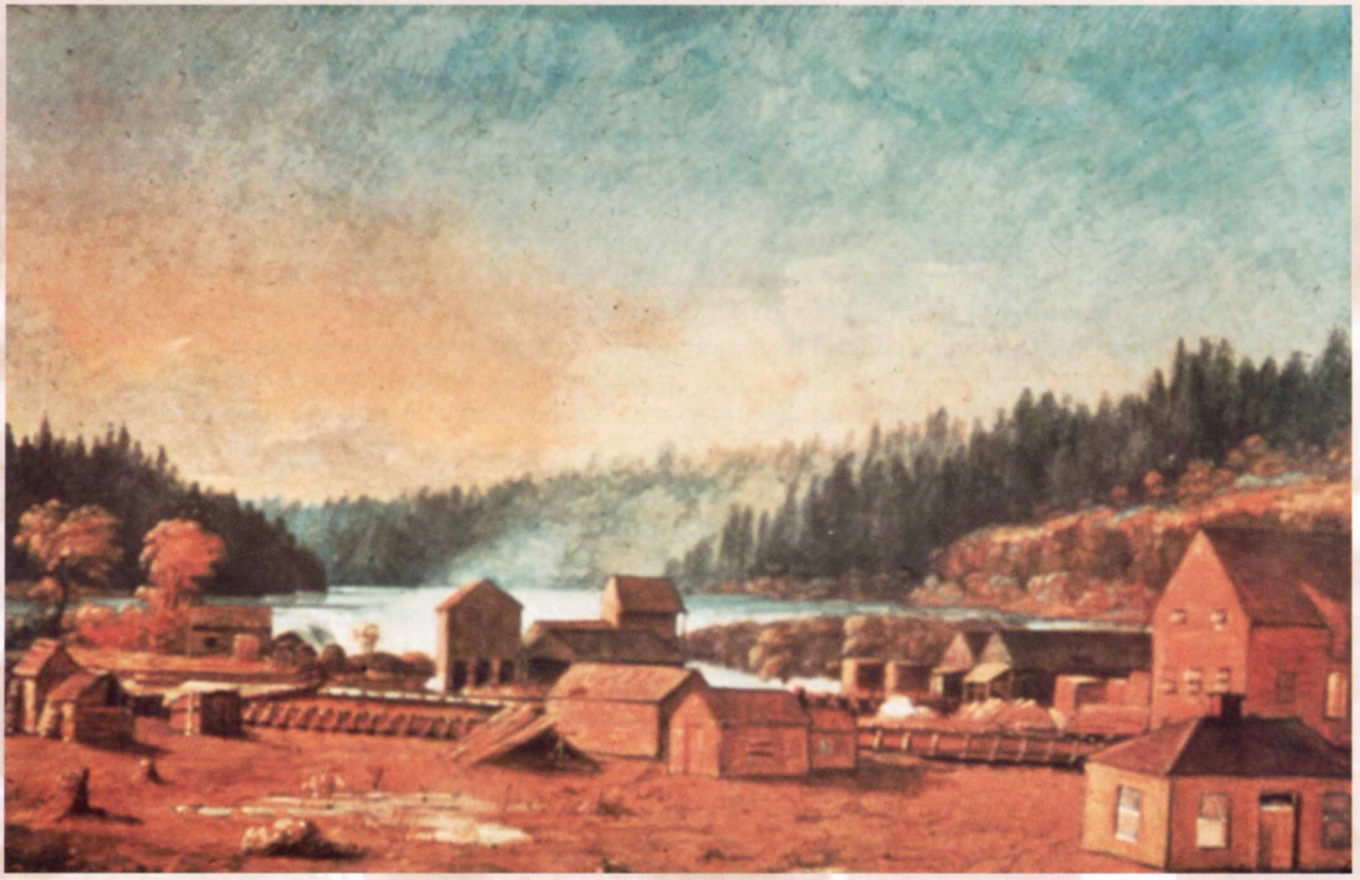
The following are desired future conditions or goals that management of the national historic site would strive toward:

- Through preservation, park resources are protected, restored, and maintained in accordance with NPS policies. These resources include recovered and *in-situ* archaeological resources, collections, and reconstructed structures and landscapes.

- Park visitors are provided effective interpretation, education, and orientation about the history and significance of the park resulting in a greater understanding of HBC and early U.S. Army resources and support for their preservation.
- Park visitors are able to safely enjoy park facilities and services.
- Formal partnership programs with Reserve Partners and others are established to assist in education, interpretation and in the conservation and preservation of park resources related to the HBC and early U.S. Army periods.
- The NHS assists the Reserve Partners in the interpretation and preservation of resources related to other Reserve themes.
- The most current management practices, systems, and technologies are used to accomplish these future conditions.

Purpose and Need for the Plan

The Mills of Oregon City
Painting by Paul Kane
Courtesy of Stark Museum of Art, Orange, Texas



Purpose and Need for the Plan

The purpose of this general management plan (GMP) is to protect park resources and manage visitor use at Fort Vancouver National Historic Site during the next 15 years. Successful implementation of the GMP would result in the preservation of natural and cultural resources and an enhanced visitor experience.

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 current 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:
>
> (1) measures for the preservation of the area's resources;
> (2) 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;
> (3) identification of an implementation commitment for visitor carrying capacities for all areas of the unit; and
> (4) indications of potential modifications to the external boundaries of the unit, and the reasons therefor.

While it is the policy of the NPS to prepare or revise a GMP for units of the National Park System every 15 years, the last general management plan (master plan) for Fort Vancouver National Historic Site was revised in 1978. The need for the GMP is to comply with Congressional mandates to provide a timely revision to the park's GMP. This plan will address the many issues that have changed since the previous master plan was written. Previous actions may need to be reevaluated based upon new information or circumstances. A discussion of these 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 Fort Vancouver National Historic Site.

Planning Issues and Concerns

Specific needs or challenges to be addressed in this GMP/EIS are reflected in the following array of issues specific to Fort Vancouver National Historic Site. These issues were developed by NPS staff and the public through the public participation process. They are listed by category. For a more detailed background of these issues, refer to "The Affected Environment" chapter of this document.

Issues Related to Cultural Resource Management

Cultural Landscape

Since 1966, fourteen structures have been reconstructed on their original locations at the fort site. The need exists to examine the purpose and extent of further reconstruction within the fort palisade, including staffing, interior building treatment, and phasing of construction, as well as other considerations. (See Figure 3, Fort Structures.)

By the end of 2002, the City of Vancouver will remove the former aviation museum building, T-hangars, and associated taxiways from federal property enabling the NPS to restore portions of the cultural landscape. This would include reexamining the circulation through the NHS, infrastructure needs, and orchard, garden, and agricultural fields management. The NPS staff also needs to address vehicle and pedestrian circulation and appropriate uses for the Fort Vancouver Waterfront and Village (also known as the Company Village or Kanaka Village). (See Figure 4, Cultural Landscape Features.)

The NPS is preparing a Cultural Landscape Report for the Vancouver National Historic Reserve which would help the Reserve Partners address landscape issues in a comprehensive manner and provide recommendations Reserve-wide.

Research and Education Center

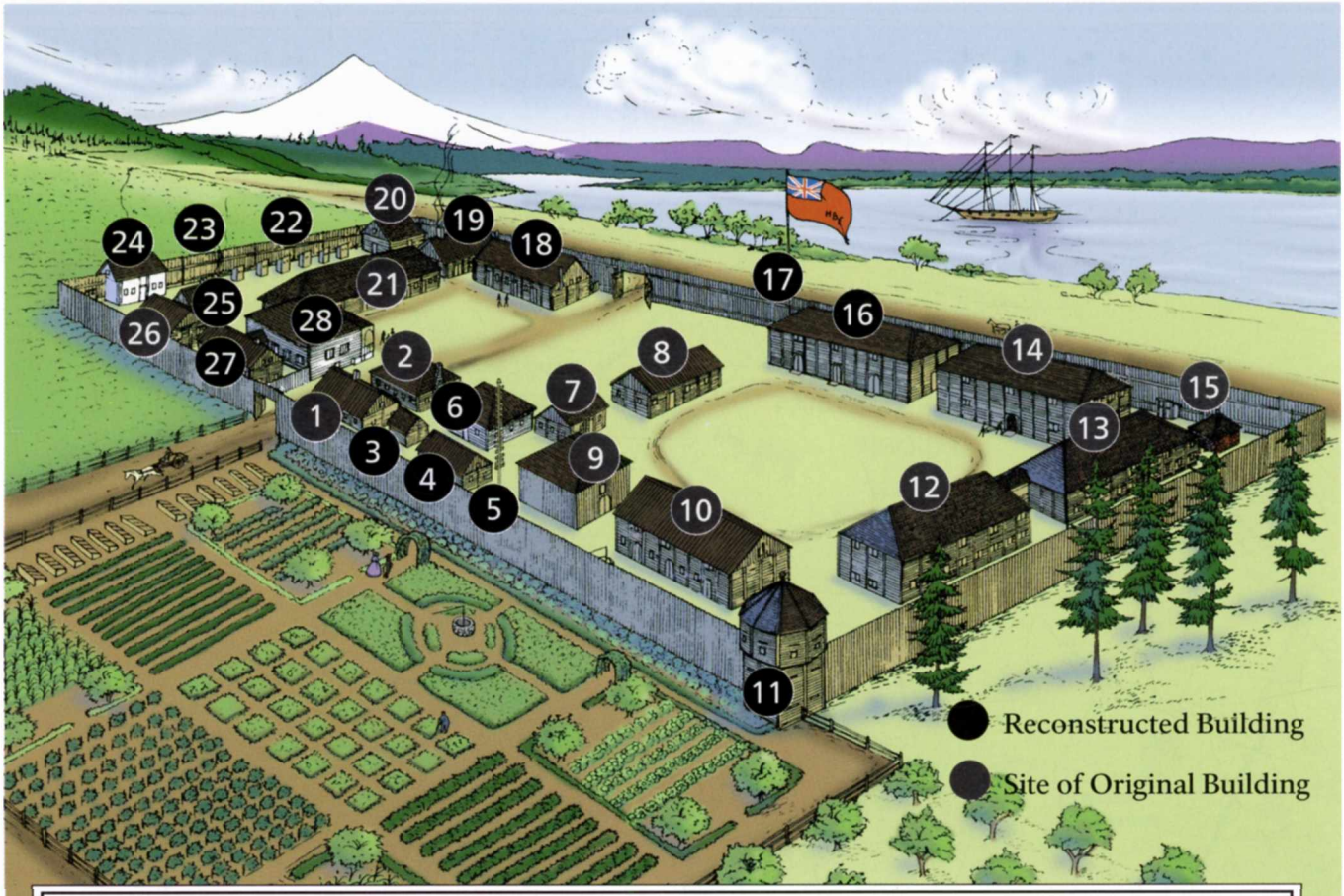
More than 1 million artifacts are currently being curated by the NPS and stored at Fort Vancouver NHS. The vast majority of them came from archaeological excavations at the site and from three other Hudson's Bay Company sites: San Juan Bellevue Farm, Fort Colville, and Fort Nez Perce in the Pacific Northwest. This number will continue to grow with incorporation of the Reserve's U.S. Army artifacts and other recovered HBC artifacts. With these unparalleled, site-specific resources, the park has the potential to be a major research and education center, documenting the early historical development of the Pacific Northwest.

The management approach for this collection needs to be developed, refined and documented. At issue is whether the NHS should function not only as a repository for the preservation, storage, and accountability of the collections, but whether it should also fill the demanding function of a research center. This determination significantly affects long and short-term planning for other activities and operations. Factors to be taken into consideration include accessibility and availability of collections, staffing, funding, interpretation, equipment and facility needs, among others. Also, the location, scale, and scope of the center need to be determined.

McLoughlin House National Historic Site

In 1941, the McLoughlin House National Historic Site (retirement home of Dr. John McLoughlin, Chief Factor at Fort Vancouver) in Oregon City, Oregon, was established as a national historic site. It is an affiliated unit of the National Park System. The McLoughlin Memorial Association owns the house, and the City of Oregon City owns the land of the historic site. The site interprets the important contributions that McLoughlin made in the early settlement and development of the Oregon Country. The superintendent of Fort Vancouver NHS serves as a liaison for the Department of the Interior with the Association which manages the site.

In recent years, due to lack of funds, the site has experienced shortfalls in both the maintenance and operating budget to adequately care for the national historic site and provide for public use and enjoyment. Given these circumstances, the Association approached the NPS to ascertain whether the Fort Vancouver NHS staff could provide greater assistance to the Association for both the short and long-term care of the site. The NPS needs to work with the Association staff to identify strategies that would help



Fort Structures: Figure 3

1. Owyhee Church
2. Priest's House
3. Jail
4. Carpenter Shop
5. Belfry
6. Counting House
7. Old Office
8. Catholic Church
9. Wheat Store
10. Beef Store
11. Bastion
12. Sale Shop
13. New Store
14. Store
15. Powder Magazine
16. Fur Store
17. Flagpole
18. Trade Shop, Dispensary, and Barclay Quarters
19. Blacksmith Shop
20. Iron Store
21. Bachelor's Hall
22. Privies
23. Well #2
24. Bakehouse
25. Wash House
26. Harness Shop
27. Kitchen
28. Chief Factor's House

Cultural Landscape Features

Fort Vancouver NHS GMP/EIS



Legend

- Authorized Park Boundary
- Historic Structure within Authorized Boundary
- Non-Contributing Structure within Authorized Boundary
- Pavement Edge
- Railroad
- Waterfront Trail
- Fence
- Approximate Historical Cemetery Boundary

500 0 500 1000 Feet

1 : 8000

Figure 4

N

Data Sources:
City of Vancouver: pavement edge, structures
Clark County: railroads, rivers, trails
NPS: cemetery, fences, fort, park boundary, pavement edge, structures

National Park Service
Columbia Cascades Support Office
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ensure the protection of the site. Also, given the direct link of the interpretive themes between Fort Vancouver NHS and the McLoughlin House National Historic Site, a determination is needed on how best to extend outreach and education between the two sites.

U.S. Army Property
The U.S. Army land may excess land in the future within the authorized boundary of Fort Vancouver NHS that would further help the park meet its mission. This excess land could include land that may be available for parking near the fort entrance, interpretive activities, and the protection of historic barracks structures. It is important that NPS staff work with adjacent landowners on protecting historic scenic views and cooperating with land use needs of other Reserve Partners. Additionally, development of any facilities would need to be done with the input from and support of the Reserve Partners.

Currently, the U.S. Army Reserve is considering developing a new Army Reserve and Washington National Guard training center in the south barracks and portions of the east barracks area within the authorized boundary of the NHS. Army Reserve staff is working closely with other Reserve Partners regarding issues related to the development of this new center. Some NHS or Reserve cultural resources may be affected by this action.

A portion of the east barracks area and a small portion of the west barracks contain the HBC cemetery and are currently managed by the U.S. Army. The portion of the east barracks area is within the authorized boundary of the NHS. This cemetery may still contain burials representing a number American Indians and native Hawaiian groups. At issue is how the NPS would address this area if the U.S. Army decides to excess land to NPS.

Vancouver National Historic Reserve
As part of the planning process, Fort Vancouver NHS needs to address its continuing role as a legislatively identified partner in the Vancouver National Historic Reserve. The NPS has been identified as the lead agency for interpretation, education, and cultural resource management within the Reserve. Issues such as staffing, administration, and budget demands on the NHS need to be explored, along with identifying specific implementation measures.

Issues Related to Interpretation, Education, and Outreach

Interpretation and Education
The Fort Vancouver NHS interpretive program goes beyond the walls of the reconstructed Fort. Many significant stories remain to be told involving the additional activities of the Hudson's Bay Company besides the fur trade. These activities include lumbering, milling, blacksmithing, coopering, shipbuilding, salmon preserving, and agriculture. The lifestyles of the workers, in particular those living in the Village west of the Fort, are important stories, as is the significant connection of the Fort to the Columbia River. In addition, the interpretive program should be more inclusive of nineteenth century military interpretive themes to comply with legislation and park purpose.

The interpretive program responsibilities of the NHS extend beyond the park boundary into the Reserve. In addition to interpretation of the HBC story and early U.S. Army history, the NPS has the lead interpretive role in telling the stories of the "One Place Across Time" themes of the Reserve. These primary interpretive themes consist of the following: Crossroads and Environment, Exploration and Discovery, Settlement and Development, and Work and Community.

Outreach

There are numerous opportunities to expand outreach programs to schools and the public through off-site programs and written media such as Internet presentations. Partnerships both within and outside the Reserve can enhance outreach efforts. The NPS needs to decide which opportunities should be further explored and determine the corresponding financial and staffing implications.

Issues Related to Park Facilities, Staffing, and Operation

Staffing

Actions recommended in the GMP have an impact on existing staffing levels. Some staffing considerations that need to be addressed include the disciplines of cultural and natural resource management, archaeology and research, interpretation, and administration to help in the additional responsibilities within the Reserve. Future staffing requirements will need to be compared with the existing permanent and seasonal workforce.

Facility Location

The GMP planning process will examine the location of facilities and the relationship between them within both the NHS and the larger Reserve. For example, additional storage is needed for equipment and materials at the maintenance shop and administrative building. Multiple functions occurring in the same workspaces create crowding and safety issues. The visitor center's theater is small and awkward. The relationship of the visitor center to the reconstructed Fort and the larger Reserve needs to be evaluated. The workspace at the Fort for staff and volunteers is inadequate. The location and adequacy of public and park operational spaces need to be addressed as part of the planning process.

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 Fort Vancouver National Historic Site.

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 that "...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 Historic Preservation Act (NHPA) 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. Therefore, the document 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 the NPS, the National Conference of State Historic Officers, and the Advisory Council on Historic Preservation.

Section 110
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
This section of law 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
This section of the law 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.

Fort Vancouver National Historic Site Legislation

On June 19, 1948, an act established Fort Vancouver National Monument, including the site of the old Hudson's Bay Company stockade, as a federal area of national historical importance for the benefit of the people of the United States (62 Stat. 532). An act of June 30, 1961, (75 Stat. 196) revised the boundaries and changed the name to Fort Vancouver National Historic Site. The purpose of the national historic site is to preserve and interpret this primary center of early economic, cultural, and military development in the Pacific Northwest and to interpret the important part played in the nation's westward expansion by the fur trade and other activities carried on at the Fort. (See Appendices for inclusive legislation.)

Vancouver National Historic Reserve Legislation

In 1996, Congress established the Vancouver National Historic Reserve to provide for the coordinated preservation, public use, and management of historic sites within Vancouver, Washington. The 366-acre Reserve includes Fort Vancouver National Historic Site, Vancouver Barracks, Officers' Row, Pearson Airfield, the Water Resources Education Center, and portions of the Columbia River waterfront. The legislation established a cooperative management partnership composed of four Reserve Partners. The cooperative management plan for the Reserve includes a statement of a shared vision emphasizing three principle goals: preservation of the historic structures and landscapes, education and interpretation of the area's history, and public use, and access to Reserve resources. Fort Vancouver National Historic Site, at approximately 209 acres, is the largest land manager in the Reserve and is an active partner working with the Reserve on many issues.

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 would 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) would be prepared that documents the rationale for determining that there would be no practicable alternative to locating in or impacting these areas. The SOF would 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 11987

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 NHS and provides the basis for the NHS 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 would 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 would be removed and may be replaced. While specimen trees or shrubs that need to be perpetuated are still healthy, their own progeny would 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, 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. Implementation of the GMP may then proceed.

Endangered Species Act

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). National Park

Service 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 Fort Vancouver NHS, 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. (National Park Service 2001: p.35)

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 would apply to any federally managed land within the Reserve including Fort Vancouver National Historic Site, the U.S. Army managed portion of Vancouver Barracks, and the Federal Highway Administration offices and grounds.

National Park Service Management Policies

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*, 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.

Included and tiering from these policies are Director's Orders issued periodically by the Director of the National Park Service. Detailed planning guidelines, called Director's Order 2 Park Planning, have been issued to guide the development of park planning, including general management plans. These overall management policies, and the accompanying Director's Order 2, guide general management planning.

Cultural Resources Management Guideline
Authority for cultural resource management activities derives from a variety of laws, including the 1916 NPS Organic Act. Also fundamental are the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation. The NPS *Management Policies* state basic principles governing the management of cultural resources in the National Park System, consistent with law and the Secretary's Standards and Guidelines for Archaeology and Historic Preservation, which are reproduced in the cultural resource management handbook issued pursuant to Director's Order 28. Director's Order 28 directs the NPS to follow the Cultural Resources Management Guideline relative to policy standards.

Natural Resources Management Guideline
The NPS Natural Resources Management Guideline, Director's Order 77, is a comprehensive guideline on natural resource management, combining existing guidance with documentation of unwritten practices and procedures of NPS resource management. It guides the actions of park managers so that natural resource 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 relationship 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 and park planners 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 which are utilized by park managers to guide the long-term preservation and public use of each national park unit.

The Affected Environment

Four Clackama Indians
Painting by Paul Kane
Courtesy of Stark Museum of Art, Orange, Texas



The Affected Environment

The purpose of "The Affected Environment" chapter is to provide the reader information necessary to understand the issues, the proposal, and the alternatives when a general management plan and environmental impact statement are being prepared. This chapter describes the cultural, natural, recreational, and scenic resources of the national historic site. In addition, it discusses the socioeconomic conditions, interpretation, visitor use, and existing NHS development and programs.

The Cultural Environment

Fort Vancouver NHS is a complex cultural landscape incorporating multiple layers of historic occupation, beginning in 1829 with the establishment of the second Hudson's Bay Company post, and continuing through successive eras of development under the occupation of the U.S. Army at Vancouver Barracks and the National Park Service. (The first HBC site was established in 1824 to the east of the second site.) At the time of the arrival of the Hudson's Bay Company, a Chinook Indian village named Ske-chew-twa was located to the southeast at the present-day site of the former World War II era Kaiser shipyards. Limited evidence of prehistoric occupation within the present boundaries of Fort Vancouver NHS has been recorded.

Physical Development and Historic Significance (1825-1860)

The initial Hudson's Bay Company fort site, occupied from 1825-1828, was located about three-quarters of a mile from the river on the edge of a terrace. This location, 60 feet above the low-lying river plain, offered protection from floods and served as a strategic defensive position from the undetermined threat of native Chinook Indians. The earliest and first of three historic cemeteries at Fort Vancouver was established in association with the occupation of the initial Hudson's Bay Company fort during the 1820s. The first HBC stockade was near the present location of the Washington School for the Deaf at the intersection of Evergreen Boulevard and Grand Avenue. Three graves that were in the first HBC cemetery were encountered in 1935 when a basement was excavated for a new house on East Sixth Street. That location is outside of the present-day park and reserve. Further information on the exact location and extent of the first HBC cemetery is not known.

In 1829, with no significant threat materializing from the Chinook, the initial palisade was abandoned and a new site for the palisade was selected on the river plain known as Jolie Prairie and later as Fort Plain. Driving the move was the decision by HBC Governor George Simpson to make Fort Vancouver the headquarters for the HBC Columbia Department.

The Fort Plain site provided open land with rich soils suitable for cultivated fields and pasture, close to the river for access to fresh water and transportation, but above the flood zone. The dense conifer forest to the west and north provided a ready supply of timber, while the freshwater pond near the shore became the nexus for building and other industrial activities. Six miles to the east, streams provided a power source for the first grist and saw mills in the Pacific Northwest.

Between 1824-1849, Fort Vancouver, as headquarters and principal supply depot for the HBC Columbia Department, was an important center for the Northwest fur trade. In addition, it was the initial administrative center of the Puget Sound Agricultural Company, the agricultural enterprise that linked the Hudson's Bay Company outposts to Alaska, the Sandwich Islands (Hawaiian Islands), and points south

through the trade of agricultural commodities produced in the Pacific Northwest. It became the western terminus of the Oregon Trail, a destination and supply depot for weary American immigrants, who were supplied with provisions, such as clothing, household goods, and seeds at the direction of Chief Factor John McLoughlin. Missionaries, scientists, and adventurers, all with interest in the Pacific Northwest, found accommodation at the Fort.

At the height of its development on Fort Plain, 1844-1846, Fort Vancouver included the palisade at its core, with other landscape features radiating out from this center. (See Figure 5, Historic Base Map, Hudson's Bay Company ca. 1844-1846.) Cultivated fields, with prairie or pasture beyond, surrounded the palisade to the south, southeast, east and northeast. Directly north and west of the palisade were extensive gardens and orchards. Further to the west and southwest extended the employee village (Village), also known as Kanaka or Company Village, where numerous small dwellings and outbuildings housed the Company's employees. Other major features north of the palisade included St. James Mission, the second Hudson's Bay Company cemetery, school houses, and to the northeast, a complex of barns. Following the arrival of Catholic priests in late 1838 and the first burial they documented in 1839, the second HBC cemetery became part of or immediately adjacent to the St. James Mission cemetery. Southwest, clustered around a pond and extending to and along the riverfront, was a cluster of buildings and dwellings supporting the Fort's various enterprises, including boat sheds, tanning pits, cooper's shop, saw pit and salmon packing sheds.

The burial of a company employee described in a journal by the post physician William Tolmie in May 1833 documents the establishment of the second HBC cemetery in a new location. Archives of the Anglican Diocese of British Columbia then document eight burials at Fort Vancouver during 1837 and another four by September 21, 1838. French speaking Catholic priests arrived in late 1838 from Montreal to establish the St. James Mission near the fort. By January 1839, the first of over 200 burials that are documented in Catholic Church records took place in this burial ground area. The last burial that is documented in Catholic Church records took place in January 1856. Prior to and during the operation of the St. James Mission other burials took place in the second HBC/mission cemetery. Documentation on those burials does not equal the archival record established by the priests. Information is missing or, at best, fragmentary. It appears in sources such as the journals of HBC employees.

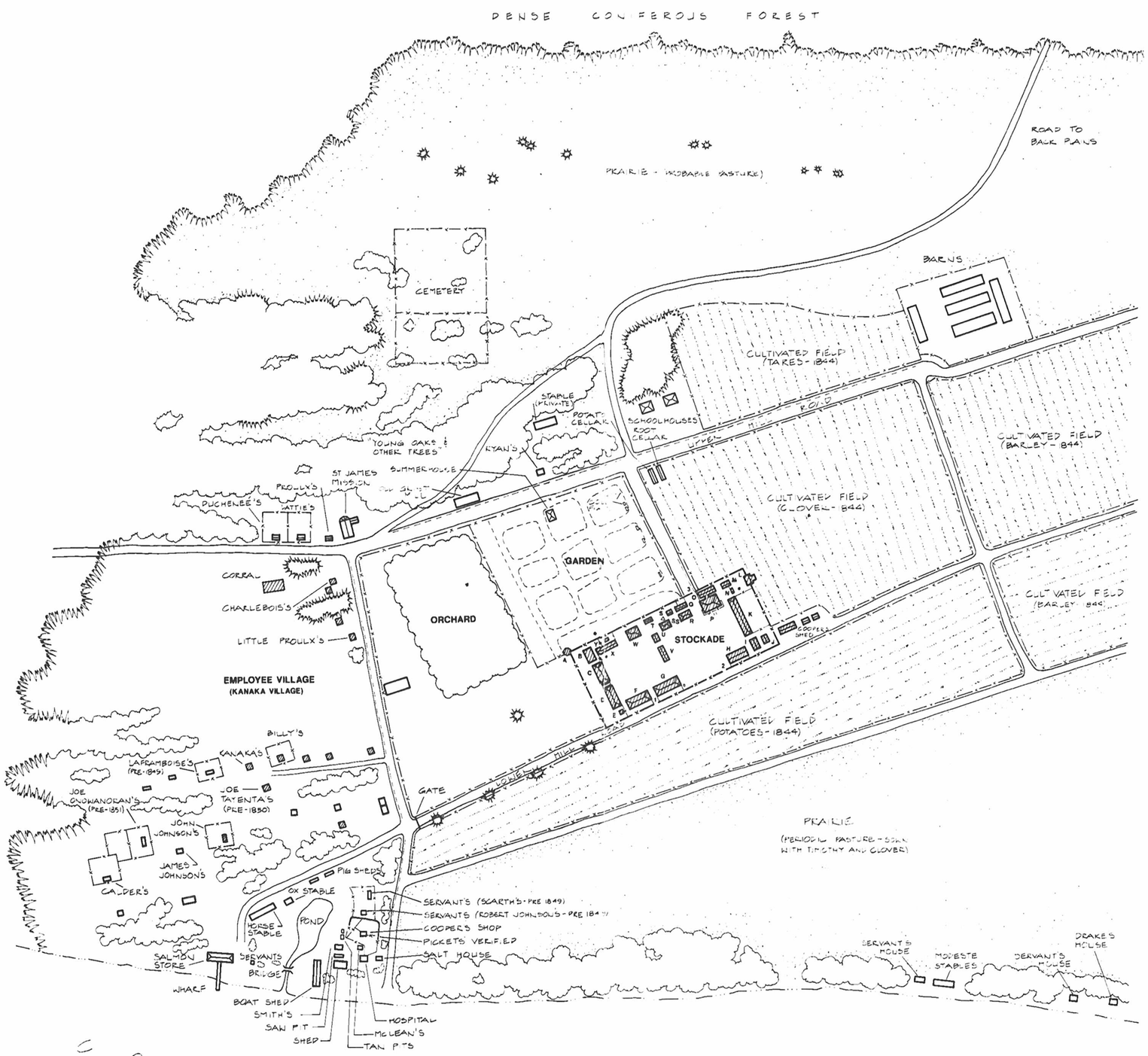
The aboveground, manmade features of the Fort have disappeared, leaving behind one of the richest and most significant historical archaeological sites in the Pacific Northwest. While a significant percentage of this resource lies within the authorized boundaries of the Fort, other key features were either destroyed or lie beneath modern twentieth century developments associated with the infrastructure of the railroad and highway system, Vancouver Barracks and Pearson Airfield, and the Waterfront. Extant or existing subsurface features may include portions of the Village, sections of the waterfront industrial area, St. James Mission, and the second HBC/St. James Mission cemetery.

Fifty years of historical and archaeological research have extensively documented the archaeological features of Fort Vancouver and provided information for the reconstruction of the palisade, which begin in 1966. Nine key structures were reconstructed between 1974 and 2001 within the palisade, beginning with the bastion and remaining palisade segment, and continuing, as appropriations became available, with the Bakehouse (1974); Chief Factor's House, Kitchen, and Wash House (1976); Indian Trade Shop and Blacksmith Shop (1981); Fur Store (1994), Carpenter's Shop (1997), and Jail (2001). Smaller scale structures, including privies, well, flagpole, and bell tower have also been reconstructed. All reconstructed structures, including the palisade, are included on the National Park Service's List of Classified Structures and managed as historic structures in accordance with the Secretary of the Interior's Standards for Historic Preservation Projects.

STOCKADE:

A BASTION
B GENERAL STORE IT
C SALE SHOP
D NEW STORE
E POWDER MAGAZINE
F PROVISION STORE (1ST FUR STORE)
G 2ND FUR STORE
H INDIAN TRADE STORE (DISPENSARY, MISSIONARY STORE)
I 2ND BLACKSMITH'S STORE
J IRON STORE
K BACHELORS QUARTERS
L 3RD BAKERY
M HARNESS SHOP (2ND BAKERY)
N WASH HOUSE
O 2ND KITCHEN
P CHIEF FACTORS HOUSE
Q ONYHEE CHURCH, SCHOOLHOUSE CHAPLAIN'S KITCHEN
R PRIEST'S HOUSE
S JAIL
SS NEW OFFICE
T 2ND CARPENTERS SHOP
U OLD OFFICE
V OLD CATHOLIC CHURCH
W WHEAT STORE
X BEEF STORE (GENERAL STORE B)
Y WELL
1 SOUTHWEST GATE
2 SOUTHEAST GATE
3 NORTH GATE

STOCKADE PLACES VERIFIED



NOTES:

- DEPICTING THE HISTORIC PERIOD AT ITS HEIGHT (1844/46) WAS DIFFICULT DUE TO THE SEPT 1844 FIRE. THIS MAP REFLECTS BOTH PRE-FIRE CONDITIONS (THE FARM COMPLEX, GARDEN & ORCHARD AT THEIR GREATEST EXTENT, AND POST-FIRE CONSTRUCTION (ST JAMES MISSION, RYAN'S, PRIVATE STABLE, ROADS, STOCKADE DEV, ETC). FEATURES ARE IDENTIFIED FOR 1844/46 USES OR OCCUPANTS UNLESS OTHERWISE NOTED.
- ALL STRUCTURES AND LANDSCAPE FEATURES DEPICTED ARE BASED ON A SYNTHESIS OF HISTORIC MAPS AND MATERIALS. WHENEVER POSSIBLE, ARCHEOLOGICAL EVIDENCE WAS USED TO VERIFY THE LOCATION OF NON-EXTANT FEATURES.
- THE LOCATION AND CONFIGURATION OF NON-EXTANT FEATURES IN KANAKA VILLAGE AND RIVERFRONT AREA WERE BASED PRIMARILY ON R. COVINGTON'S 1846 MAP, ARCHEOLOGICAL EVIDENCE AND DEPUTY SURVEYOR LEWIS VAN VLEET'S 1900 SURVEY (SHORELINE, SALMON HOUSE, POND, FIELDS/FENCE LINES).
- THIS MAP ILLUSTRATES THE WESTERN 1/3 (APPROX) OF FORT PLAIN.

SOURCES:

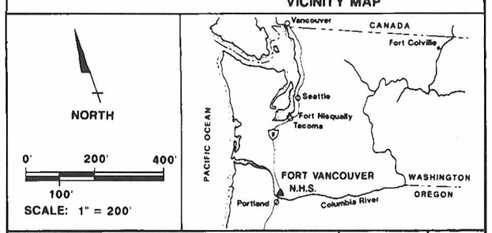
HISTORIC MAPS, DOCUMENTS AND PHOTOS ON FILE, FORT VANCOUVER N.H.S. ARCHEOLOGICAL REPORTS AND MAPS ON FILE, FORT VANCOUVER N.H.S. EXISTING CONDITIONS DOCUMENTATION AND FIELD INVENTORY (1991).

LEGEND:

- VERIFIED STRUCTURE
- STRUCTURE
- VERIFIED DIRT ROAD
- DIRT ROAD
- VEGETATION (COMPOSITION UNVERIFIED)
- CONIFEROUS TREES
- CULTIVATED FIELD
- PRAIRIE (NATURAL)
- STOCKADE PICKETS
- WOOD FENCE
- FLAGSTAFF (STOCKADE)
- WELL (STOCKADE)
- BELFRY (STOCKADE)
- SHORELINE
- PATH

Figure 5

VICINITY MAP



TITLE OF SHEET	DRAWING NO. 389/80030 — SHEET 2 OF 5
HISTORIC BASE MAP	DESIGNED:
HUDSON'S BAY COMPANY ca. 1844-1846 HISTORIC PERIOD	DRAWN: T. TAYLOR
CULTURAL LANDSCAPE REPORT: FORT VANCOUVER NATIONAL HISTORIC SITE	DATE: 10/92

Cultural Landscape (1825-1860)

The historical landscape of the fort era has been severely compromised by subsequent development. A railroad berm and highway corridors have effectively severed the physical and visual connections between the river and the reconstructed Fort. Pearson Airfield's paved landing strip hinders public access to the main south entrance of the palisade, further disrupts the connection between the Fort and the river, and is a modern visual intrusion on park land. To the east of the Fort are the structures associated with Pearson's operations and the Pearson Air Museum, with a light industrial park beyond. North of the Fort are the late nineteenth and early twentieth century structures associated with Vancouver Barracks, as well as the Mission 66 architectural style visitor center, and maintenance, residence, and administrative structures built by the National Park Service. The bridge over the Columbia River dominates the skyline to the west, and the twentieth century developments along the waterfront are visible on both sides of the Columbia River. Only in the immediate vicinity of the palisade has there been an effort to reconstruct and interpret the garden, orchards, and pastures that existed during the historic period.

Within the palisade, empty spaces, some marked by asphalt pads, indicate where fort structures have been documented by archaeological investigations. Twenty-six structures have been identified within the palisade; fourteen have been reconstructed. None of the fort buildings outside of the palisade have been reconstructed. The Fort Vancouver palisade site is a component landscape of the Vancouver National Historic Reserve cultural landscape.



Restored Fort Vancouver garden and fort entrance.



Fort Vancouver NHS recreated orchard and wayside panel interpreting the Village.



Reconstructed Chief Factor's house within fort palisade.



Recent reconstruction of the Jail within the fort palisade.



View south of the visitor center looking toward Pearson Air Museum.



View southwest of the Village from the Fort showing modern intrusions (railroad, highway, and I-5 bridge and suspension towers) into the historic scene.

Vancouver Barracks (1849 to Present)

Vancouver Barracks was established in 1849 to defend settlement of the Oregon Territory. From then until World War I, the post was the U.S. Army's principal administrative center in the Pacific Northwest. As headquarters of the Oregon Department, it served as a central command and supply post for actions associated with the Northwest region Indian wars of the mid-nineteenth century, including the 1877 Nez Perce campaign. The barracks was also the base for a number of significant military exploration and survey expeditions in the Northwest and Alaska in the latter part of the nineteenth century, and later served to police civil strife resulting from the depression of the 1890s. In the late-nineteenth and early-twentieth centuries, the post served as a recruitment, mobilization and training facility for the Spanish-American War and other foreign engagements. During World War I, Vancouver Barracks was the principal district for the U.S. Army Signal Corps' Spruce Production Division and the site of the world's largest lumber mill. In 1925, the Army established Pearson Airfield at the post, initiating a sustained role in aviation history. In the 1930s, the post became the district headquarters for the Ninth Corps of the Civilian Conservation Corps and played an important role in the enrollment, training, and supply of the Pacific Northwest's network of CCC camps. During World War II, the post served as a port of embarkation for the Pacific Theater. (See Figure 6, Historic Base Map, Vancouver Barracks ca. 1936.)

In 1849 U.S. Army troops arrived at Fort Vancouver and for the next 11 years shared the grounds in an uneasy coexistence with the Hudson's Bay Company. Initially, the Army camped in tents on the high ground behind the HBC Fort, constructing several log buildings to serve the company's needs. Officers and provisions were also housed in structures rented from the HBC both within the employees' village and the palisade.

In 1850, under an agreement with the HBC, the Army leased an eight-acre field north of the palisade. Twenty-six buildings were constructed on this site, their placement outlining the first parade ground. Additional buildings were constructed in the employees' village west of the palisade. On October 31, 1850, the army formally proclaimed the establishment of a military reservation of about four square miles that included the HBC palisade, land, and improvements, "subject only to the lawful claims of the Hudson's Bay Company" as guaranteed by the 1846 treaty. Two years later, in 1853, Congress reduced the reserve to 640 acres.

In 1860, the HBC closed down its operations at Fort Vancouver and departed for Victoria. The army burned and leveled the remaining palisade and buildings on lower Fort Plain, opening the area south of East Fifth Street for military uses. A quartermaster's depot was established on the site of the old employee village at the western edge of the reserve. The open fields were used at times as a polo field for the officers and, in the second decade of the twentieth century, for early aviation experiments by local aviators.

Burial markers, monuments and fences that once identified the second HBC/St. James Mission cemetery have disappeared and the above ground indicators have been replaced by various buildings, structures, and landscape features in the period since the 1860s. Historical maps and written descriptions of this cemetery nevertheless document its relative location and approximate extent for the period from the 1830s to the 1860s. The area is on land currently managed by the U.S. Army and within the authorized boundary of the NHS, as well as being within the Reserve. Human remains and coffin parts were encountered in this cemetery area during the excavation for one Army building in 1885 and during work on a water pipe in the basement of another in 1982.

Thomas Janhson was identified in the Catholic Church Records as the first American soldier in the U.S. Army to be buried in the second HBC/St. James Mission cemetery on August 18, 1850. A daughter of an

American serviceman was buried in 1854 and by 1855 four members of U.S. Army 4th Infantry were also buried in the same cemetery. At the same time, relationships between the HBC and the U.S. Army became increasingly strained. An HBC Fort Vancouver physician wrote between 1853 and 1858 that soldiers had removed some of the HBC/mission cemetery fences and grave markers for use as heating fuel. At that time, the authorities also put up a new fence that incorporated part of the old cemetery into the parade ground.

As surface evidence of the second HBC/mission cemetery was being obliterated in the mid to late 1850s, a third Fort Vancouver cemetery was established by the U.S. Army. The HBC left in 1860, and by 1866 Brevet Brigadier General James F. Rusling suggested relocating the remaining marked graves from the old cemetery to the new post cemetery. This new cemetery was located west of Officers' Row. It is outside of the park and within the western periphery of the Reserve. In 1866 it had some 20 graves and ultimately consisted of about four acres. Part of the land became the future site of the Interstate 5 corridor that now separates Fort Vancouver NHS from the city of Vancouver. When the interstate highway was under construction in the 1950s the fragmentary skeletal remains of about 10 individuals were encountered in an area that may have been part of the first military cemetery. Some of these human remains and other graves may have been relocated from the second HBC/St. James Mission to this first formal U.S. Military Cemetery at Fort Vancouver if Rusling's recommendations had been acted upon.

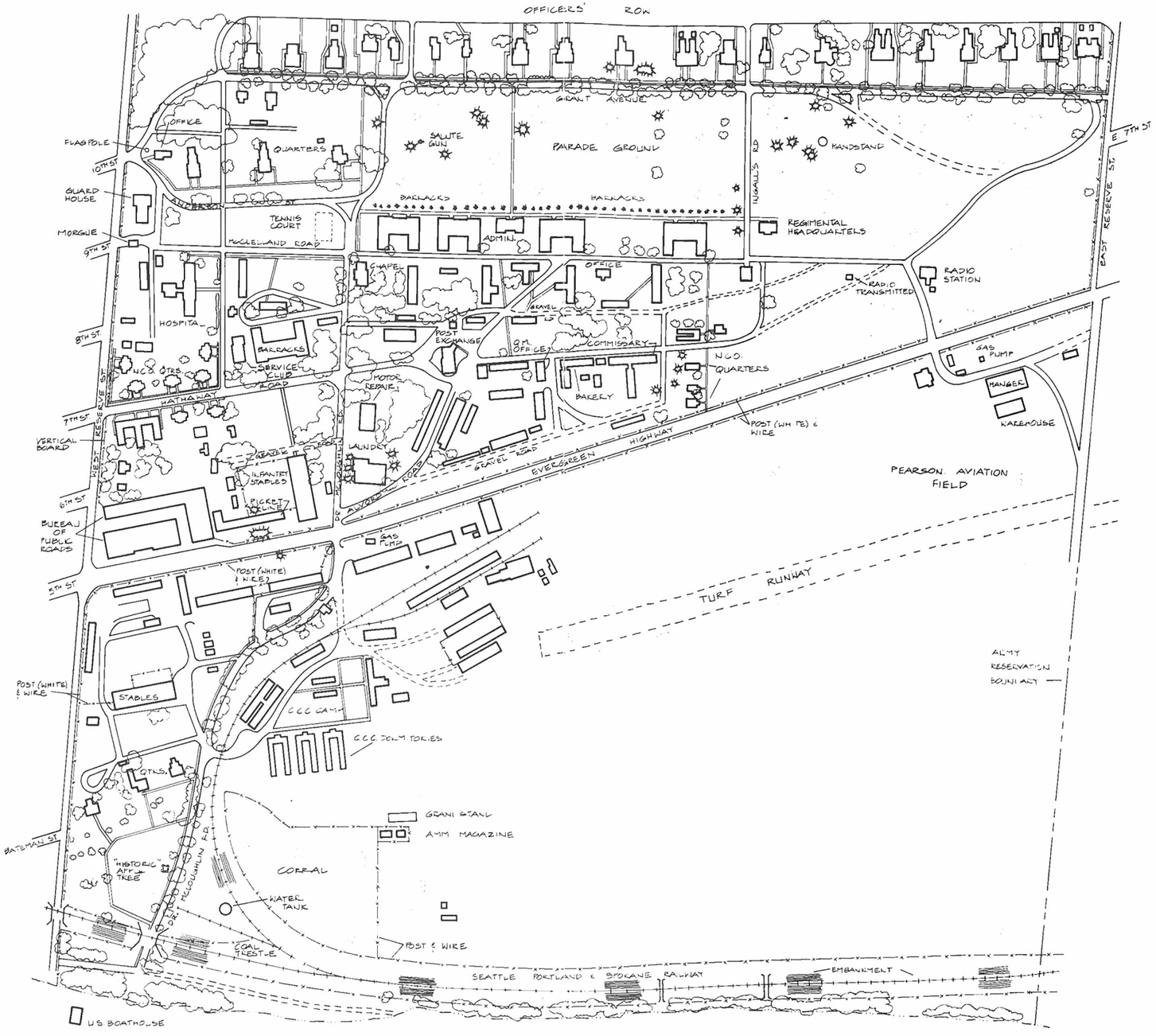
With expansion of Officers' Row to the west in 1883, the military contracted with a civilian to remove and relocate graves to a new military cemetery north of Fourth Plain Boulevard where it is still located. A portion of the new military cemetery, located outside of the park and reserve, was set aside for the remains of civilians, including those relocated from the first military cemetery used between 1855 and the early 1880s. Although above ground evidence of these two cemeteries no longer exists, graves may still be in place in both formerly active burial ground areas

During World War I, the northern edge of lower Fort Plain contained a large industrial facility—the spruce cut-up plant—supporting the Spruce Production Division. In the mid-1920s, after the cut-up plant was removed, the Army developed a military airfield dedicated in 1925 as Pearson Airfield. Adjacent to the airfield, the site contained temporary buildings and tent camps associated with the post's CCC program and, later, World War II operations as a primary Pacific Theater embarkation camp.

North of East Fifth Street, development of the complex of administrative, barracks, officers' housing, and support structures accelerated. The early log structures were replaced in the 1880s by more elaborate officers' housing, which drew on the era's popular Italianate, Queen Anne, and Victorian styles, and extended along the north side of the expanded Parade Ground. Officers' Row was formally listed on the National Register of Historic Places in 1972 and was adaptively rehabilitated by the City of Vancouver, which took title to the buildings through a federal surplus property transfer in 1986. These are presently leased to private businesses and other tenants.

The complex of structures west and south of the Parade Ground, including the barracks along the south edge of the Parade Ground, the gymnasium and the hospital, was primarily constructed during the first decade of the twentieth century. This construction followed standard Quartermaster plans and reflected the simplified Colonial Revival style common to military areas of the period. Subsequently, during both World War I and II, additional administrative and support structures—many intended to be temporary—were constructed north of East Fifth Street, following the general form of the earlier structures, but stripped bare of ornamentation. West of McLoughlin Boulevard (now Fort Vancouver Way), brick bungalows, also following standard Quartermaster plans, were constructed in the 1930s.

After World War II, the Army reduced its presence at Vancouver Barracks and surplused certain properties to the city, NPS, and other agencies. New modern infill structures were built in the southwest



NOTES:

- MAJOR CONSTRUCTION WAS SPURRED BY THE 1903 DECISION TO HOUSE A REGIMENT OF INFANTRY AND TWO ARTILLERY BATTERIES.
- FROM 1933-1942, VANCOUVER BARRACKS SERVED AS A CONDITIONING AND ENROLLEE DISTRIBUTION CENTER, AND SUPPLY DEPOT FOR THE CIVILIAN CONSERVATION CORPS (CCC).
- THE COLUMBIA RIVER SHORELINE APPEARS RELATIVELY UNCHANGED FROM THE 1860 SURVEY. HOWEVER, CONSTRUCTION OF THE SEATTLE PORTLAND & SPOKANE RAILWAY (1906-08) ALTERED RIVER ACCESS SIGNIFICANTLY.
- MAPLE TREES ON GRANT AVE. (EVERGREEN BLVD.) PLANTED CA 1880's.
- DOUGLAS-FIR TREES ON SOUTH EDGE OF PARADE GROUND PLANTED CA 1930's.
- THE TURF RUNWAY DRAWN FOR PEARSON AVIATION FIELD IS THE APPROXIMATE LOCATION OF A VAGUELY DEFINED TURF LANDING AREA AS DEPICTED ON 1936 AERIAL PHOTOGRAPHS.

SOURCES:

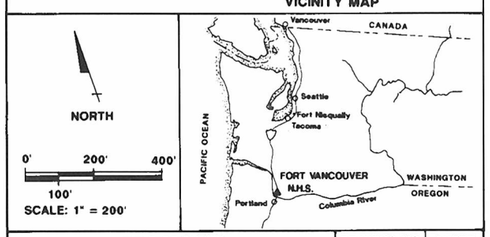
HISTORIC MAPS, DOCUMENTS, AND PHOTOS ON FILE, FORT VANCOUVER N.H.S. ARCHEOLOGICAL REPORTS AND MAPS ON FILE, FORT VANCOUVER N.H.S. EXISTING CONDITIONS DOCUMENTATION AND FIELD INVENTORY (1991).

LEGEND:

- STRUCTURE
- RAILROAD TRACKS
- ROAD
- SHORELINE
- INFORMAL ROAD OR PATH
- OPEN AREA - COVER VARIABLE (GRASSES OR BARE GROUND)
- VEGETATION (COMPOSITION UNVERIFIED)
- CONIFEROUS TREES
- FENCE
- RAILWAY EMBANKMENT

Figure 6

VICINITY MAP



TITLE OF SHEET: **HISTORIC BASE MAP** VANCOUVER BARRACKS ca. 1936	DRAWING NO. 389 / 80030 — SHEET 4 OF 5
CULTURAL LANDSCAPE REPORT: FORT VANCOUVER NATIONAL HISTORIC SITE	DESIGNED: — DRAWN: T. TAYLOR — DATE: 10/92

and northwest corners that compromised the integrity of the historic approaches to the Barracks. The construction of Interstate 5 cut-off alternative access routes to downtown Vancouver, effectively isolating the southwest corner of the reserve. Military reserve acreage involving land north of Evergreen Boulevard was transferred to the City of Vancouver as the foundation for Central Park. In 1961, the designated boundaries of Fort Vancouver NHS were overlaid on the Barracks, extending from McLoughlin Boulevard to the west, south of East Fifth Street to State Route 14, east to East Reserve Street, and north to Evergreen Boulevard, incorporating the old Parade Ground. A NPS Mission 66 visitor center and administrative, housing, and maintenance complex was built on the eastern edge of the Parade Ground across from Officers' Row and overlooking Fort Plain to the south.

Today, although the boundaries and surrounding scenery have changed significantly, the central core of the original Vancouver Barracks remains. The regular Army has formally departed and has recently transferred management of Vancouver Barracks to the U.S. Army Reserve. In 1986, the Vancouver Barracks Historic District was determined eligible for the National Register of Historic Places. Sixty-three of the historic buildings located within the district contribute to its eligibility. Features still intact include the historic clustering of functions; many of the original circulation features, including internal roads and sidewalks; and remnant plantings, as well as the interpreted historic landscape features of Officers' Row. Non-contributing features include the NPS Mission 66 complex, the reconstructed bandstand, and the modern structures in the northwest and southwest corners of the complex. South of East Fifth Street, separated from the core historic district, historic Pearson Airfield represents another historic remnant of Vancouver Barracks.

Vancouver Barracks/Pearson Airfield

In 1923, following the removal of the World War I era Spruce Production Division structures, an air-training field for the 321st Observation Squadron of the Ninety-Sixth Division of the Organized Reserves was established on the Fort Plain east of the palisade site. For 18 years Pearson Airfield operated as an intermediate field within the larger framework of Air Corps bases. In addition to Army operations, mail service and fire fighting support teams also operated from the field for brief periods.

Between 1923 and 1941, the airfield figured in several important events in aviation history. In 1924 four Douglas World Cruiser airplanes stopped at the Vancouver field on their way to Seattle, the starting point for the first around-the-world flight, sponsored by the Army. In 1929, a twin-engine ANT-4, *Land of the Soviets*, touring the United States on a goodwill trip unexpectedly landed at Pearson Airfield when the plane developed mechanical problems. In 1937, pilot Valery Chkalov and his crew were welcomed by Brigadier General George C. Marshall when they were forced to land following an attempt to break the long-distance world record on a route from Moscow to San Francisco over the North Pole.

Infrastructure associated with the airfield was limited to a few buildings, including an airplane hangar and a couple of buildings moved from the defunct Spruce Mill to be used for weapons storage, offices, and a pilots' lounge. A grass airstrip extended westward across the palisade site. To the east, on the other side of East Reserve Street, the City of Vancouver developed an early municipal airstrip to serve civilian needs.

Following World War II, when the War Department surplused the area below East Fifth Street, the City of Vancouver received the Pearson Airfield acreage and quickly combined the municipal and army fields into one larger municipal field. In 1972, the National Park Service purchased from the city the acreage west of East Reserve Street, including the structures associated with the historic airfield, granting the city a 30-year use and occupancy for the airfield. The airstrip was relocated and the aviation easement

restrictions removed, allowing for subsequent reconstruction of the remainder of the palisade and other structures.

The Pearson Airfield group of three structures within a seven-acre cluster was determined eligible for the National Register of Historic Places in 1992. In 1996, Congress extended general aviation use by the City of Vancouver for the portion of Pearson Airfield on NPS land until 2022. Airfield operations during this period are subject to FAA approval. Subsequent to 2022, continued use of the airfield will be limited to historic aircraft. With NPS approval and technical assistance, the city and the Pearson Field Historical Society developed the new Pearson Air Museum, adaptively reusing the three historic buildings including the remaining hangar and joining it to a newly constructed hangar housing the primary museum exhibit and educational facilities. In 2000, adaptive rehabilitation began on the former pilots' lounge and a weapons storage building to support additional administrative, curatorial, and museum needs. Also, in 2000, the city began the removal of outdated hangar structures from NPS property, with removal of all hangar facilities between the museum and the palisade to be completed by the end of 2002. The old metal museum building and a metal building to the south of the former museum will also be removed at this time.

Additional Reconstruction

Sale Shop and New Store

The National Park Service recently made the decision to reconstruct the 1845 Sale Shop and New Store, subject to availability of funds. Historically the Sale Shop and New Store were large warehouses connected by a second-story walkway at the west end of the fort complex. These buildings will be the first to be constructed on the western end of the courtyard and will balance the historic scene within the interior of the Fort.

The interior of the reconstructed building could be used for classroom and lecture space, museum exhibits, an expanded NHS research library (currently housed in the Indian Trade Shop), or an expanded state-of-the-art curation facility to manage related HBC collections and U.S. Army archaeological collections. Its location within the Fort would allow easy access to the site's premier archaeological collection of 1.5 million artifacts now housed in the Fur Store.

Historical Significance

The Sale Shop was distinct from the Indian Trade Shop at Fort Vancouver. The Sale Shop was a retail mercantile outlet where European manufactured goods and some "country-made" items and "country" produce were sold or traded to the fort's officers, lower class HBC employees and their families, missionaries, settlers, and other visitors. As the fur trade declined and large numbers of American emigrants settled the Oregon Country in the 1840s, the importance of the Sale Shop grew. The shop's operation provided a large percentage of the HBC's profits at the Fort and for the Columbia Department. The building contained a small retail room probably fitted with a wicket type window and counter where customers purchased goods. The Sale Shop's vast inventory of goods would not have been on display for customers.

The New Store was used as a general storehouse for the storage of provisions, dry goods, and hardware for the HBC's entire Columbia Department. Goods from Great Britain came in huge bales, barrels, and boxes. Another portion of the inventory came in smaller bales, boxes, and kegs that were sent out from Fort Vancouver to the HBC's interior posts in the Columbia Department after re-packing. The Sale Shop and the New Store were connected by a second floor walkway to facilitate the transfer of goods from one building to the other.

Research and Education Center
The need and idea for a research and education center has been discussed at the NHS for several years. As one of its recommendations in 1998, the *Fort Vancouver National Historic Site Museum Management Plan* stated the need for the NHS to decide if it would function solely as a repository for HBC related collections or as a research center for the early developmental history of the area. In 2000 shortly after initiation of the general management planning process, park management decided that in addition to its critical function as a repository, the park could also fill the role of a research and education center. The research and education center would need to include space for expanded collections from other sites in the Pacific Northwest. Though its function is currently being housed in the Fur Store, alternatives in this GMP discuss various locations for the research and education center.

The mission of the research and education center at the NHS is to foster the analysis, interpretation, and dissemination of information relating to archaeology and historic architecture. The foundations of the research center are the site's archaeological collections, the archaeological resources remaining *in situ*, and the existing historic architecture of the Reserve areas. These cultural resources form an unparalleled opportunity for researchers, students, and members of the public to study within the fields of archaeology, curation and collections management, museum studies, preservation and conservation, and historic architecture. Possible research topics would include, but are not limited to, fur trade sites, U.S. Army forts and related sites, logging camps and mill sites, and Civilian Conservation Corps camps. The mission of the research and education center will be accomplished through the following: ongoing archaeological excavations and field school, analysis of existing collections and data, expansion of archival materials, development of web-based educational tools, the fostering and publication of research papers, lectures and demonstrations on associated topics, programs that highlight the cultural resources professions, and intensive public research.

Counting House
A second building that will be reconstructed in 2002 is the Counting House (also known as the 1845 New Office) to interpret the life of Captain Thomas Baillie. Two of the rooms, the bedroom and front room, will be historically furnished. The third room will house modern, hands-on interpretive exhibits, designed to teach young visitors how we learn about the past through archaeology and historical research.

Historical Significance
The Old Office was one of the oldest structures in the Fort dating from 1829, so construction of a new Counting House began in 1845. Because living space inside the Fort was at a premium, clerks often had to room in their office when visitors filled Bachelors' Hall. Due to the overcrowding, on its completion the Counting House was given to Captain Thomas Baillie of *HMS Modeste* as his shore quarters. The Counting House became a lively place, the scene of frequent balls, plays, and parties hosted by Baillie. After he left in 1847, the contents of the Old Office were transformed and the building became the Counting House.

Archaeology

The whole of Fort Vancouver National Historic Site is an archaeological site. Fort Vancouver is recognized as the most important historical archaeological site in the Pacific Northwest. Any ground disturbance is likely to affect buried resources; therefore all planning and construction projects should first consider effects upon the park's archaeology.

Since its establishment as a monument in 1948, NPS professionals and scholars alike have accepted that the *in situ* archaeological resources, including foundations, artifacts and features, were one of the two most important park resources. The historic documentation of the Hudson's Bay Company in the

northwest has continually been strengthened and enhanced by the analysis of the data and artifacts resulting from excavations at Fort Vancouver. As a result of the archaeological investigations, the interpretive theme at the park is as much a celebration of the archaeological resources of the Fort as it is of the story of the Hudson's Bay Company.

A year before the establishment of the national monument in 1947, the first exploratory archaeological excavations were begun by NPS archaeologist Dr. Louis Caywood. The purpose was to provide spatial and artifact data to guide and assist in the reconstruction of the palisade of Fort Vancouver and its interior structures. Caywood excavated from 1947 through 1952, and delineated the palisade outline and the size and locations of several of the structures.

In 1966, contract archaeologists John Combes and Edward Larrabee conducted separate excavations of the north wall and northeast corner of the palisade prior to reconstruction of these features. Intensive excavations throughout the interior of the palisade area occurred from 1970 through 1974 conducted by NPS archaeologist Jake Hoffman and assisted by Lester Ross. These excavations produced twelve volumes of data to be used for reconstruction purposes, and a very large accumulation of artifacts and depositional data that has been used to reconstruct the material culture of the people who lived and worked at Fort Vancouver. In 1974, a partial excavation of the Sale Shop was conducted by the Oregon Archaeological Society (OAS) under the supervision of Harvey Steele and Lester Ross. In 1984 through 1988, the OAS partially excavated both the Counting House (New Office)(1845) and the Jail (1843-1845) with Charles Hibbs as principal investigator.

During this period there also occurred excavations conducted outside of the immediate palisade area. In 1961, NPS regional archaeologist Paul Schumacher conducted testing at the HBC barn complex. And beginning in 1968, a series of excavations were conducted in and around the Village, located west of the palisade. The first, begun in 1968, by Susan Kardas and Edward Larrabee, was a research effort to determine the location of the eastern boundary of the Village. The data and artifacts resulting from these and following investigations provide important data on the life and culture and the acculturation of this ethnically diverse community. Subsequent excavations at the Village site were prompted by the renovation of the interchange of State Route 14 and Interstate 5. To mitigate the effects on the Village site by the construction activities, archaeologists David and Jennifer Chance conducted excavations in 1974 and 1975. Several of the important features found and investigated were a village dwelling area, a boat building area and separate black smithy, and the historic pond used as a refuse dump for both the HBC and the U.S. Army. University of Idaho archaeologist Caroline Carley conducted a third season of excavations at the site in 1977. The objectives were to increase the information available about the palisaded hospital and the HBC boat building area, to determine the eastern boundary of the complex, and to augment the stratigraphic and artifact collections from the pond. In 1980 to 1981, Bryn Thomas and Charles Hibbs, Jr. of Eastern Washington University (EWU) concluded the archaeology for the right-of-way of the State Route 14 expansion by investigating U.S. Army properties with sites east of Interstate 5 and west of the NPS property line. These test excavations discovered the remnants of the 1850-1851 quartermaster's depot stable, clerks' quarters, an HBC depot corral, and five village dwelling areas.

In 1985, Thomas was asked to excavate the proposed utility corridor that was to follow a route outside the northeast palisade, opposite the Bakehouse, south to the southeast corner, and then west to the area just south of the Fur Store foundation remnants. The excavations revealed several exciting features, including the remains of the Cooperage just north of the southeast palisade, features and artifacts identified as associated with the Southeastern Bastion, and a pre-1841 servant's quarters and shop.

The utility corridor was dug to service the proposed reconstructed Fur Store. In 1991, EWU conducted data-recovery excavations on the remaining footings and features within the Fur Store foundation. The most notable recovery was that of the footing for the Fur Press which was used to compress furs into

bales for shipment to England. The completion of these excavations and the findings from the recovered artifacts and features allowed for the reconstruction of the Fur Store to interpret the historic storage of furs at the Fort and for its use as the Fort Vancouver NHS archaeology and curation facility.

In the summer of 1994, in anticipation of the reconstruction of the Carpenter Shop, the park hosted an archaeological field school. Dr. David Brauner of Oregon State University (OSU) conducted a six-week investigation of the east half of the Carpenter Shop. Due to the extensive intrusions to the site area since about 1860, Brauner found little recognizable evidence of the Carpenter Shop in his excavations. In 1996, Thomas at EWU finished the excavations of the west side of the Carpenter Shop, again finding no clear architectural evidence for the presence of the Carpenter Shop. However, the presence of carpentry related tools and the historical documentation of the structure provided the park with the data needed to reconstruct the Carpenter Shop.

In the fall of 1999, Dr. Douglas Wilson of Archaeology Consulting was contracted to finish excavating the area associated with the Counting House. These excavations, together with those by Caywood in 1952, and Hibbs in 1986 through 1988, have provided definitive evidence of the location and dimensions of the Counting House. This, together with the evidence provided by the recovered artifacts from these excavations, will likely result in the reconstruction of the Counting House during the summer of 2002. In the summer of 2000, Wilson (this time employed as NPS Reserve archaeologist) assisted by park archaeologist Robert Cromwell, completed the excavations of the Jail. These excavations concentrated on the north and west portions of the Jail, and definitive evidence for its location and dimensions were located in the form of wooden sill footings still *in situ*. The combined data from the 1984 to 1985 and 2000 excavations allowed reconstruction of the Jail during the fall of 2000.

As a result of over 50 years of archaeological investigations at Fort Vancouver NHS, a total of over 1.5 million artifacts have been retrieved and scores of scholarly reports have been produced and archived. The collection, which includes artifacts from other northwest HBC sites, such as Fort Nez Perce, Fort Colvile and the HBC Belle Vue Farm on San Juan Island, represents the largest recovered Hudson's Bay Company fur trade era artifact collection in the world. This historical array offers an incredibly rich resource for future research and interpretation of the many cultures that helped shape the modern northwest community. The park staff recognizes the importance of the collection not only to academic and historical scholars, but also to the lay community especially children in kindergarten through high school. Staff members of the research and education center are devising creative ways to offer increasing access to the collections by devising web access to digitized archaeological and historical reports, as well as maps, and will provide digitized photos of thousands of diagnostic artifacts.

Status of Archaeology Surveys

As of September 31, 2001, approximately 50% of the 209 acres within the NHS were adequately surveyed. Those portions of the NHS that have not been surveyed to date for subsurface archaeological resources will be surveyed, including areas within the authorized boundary transferred to NPS. The NHS staff will use geophysical and other types of remote sensing and subsurface shovel probes and shovel tests to determine the presence and extent of subsurface cultural deposits. This will help to determine their integrity and whether they likely contribute to the significance of Fort Vancouver.

To comply with Section 106 of the National Historic Preservation Act, survey work will focus on areas slated for park development and reconstruction, and then proceed to other park areas. Survey work will be integrated with the park's existing Geographic Information System. Additional archival research will be conducted to identify and preliminarily assess any intact and potentially contributing archaeological resources that are discovered. Interested and consulting parties, including the State Historic Preservation Officer (SHPO) and appropriate Native American Tribes will be consulted and notified about the proposed undertakings.

Survey work for areas of the Reserve outside of the NHS will be conducted in a similar fashion and on a similar priority schedule. Archaeological testing and evaluation will be conducted as needed to determine the significance of historical archaeological remains that could be impacted by a project. Wherever possible, reconstruction, trail and road development, and other planned projects, will seek to avoid archaeological resources that are intact and contribute to the significance of the NHS. If it is not possible to avoid significant archaeological deposits for a proposed undertaking, a data recovery or other mitigation plan will be developed and implemented. Artifacts collected during survey, testing, and evaluation work will be cataloged to the Secretary of the Interior's Standards and curated at the Fort Vancouver NHS curation facility.

Collections

The on-going archaeological investigations at Fort Vancouver NHS have produced one of the largest and most significant collections of Hudson's Bay Company and U.S. Army-related artifacts in the world, totaling approximately 1.5 million items. In addition, the NHS serves as a repository for archaeological material recovered from U.S. Army sites within the Reserve. The park's study/diagnostic collections consist of nearly 200,000 metal, ceramic, glass, bone, and brick artifacts. In addition, extensive collections from other HBC sites in the Pacific Northwest—Belle Vue Farm (San Juan Island National Historical Park), Fort Colvile (Lake Roosevelt National Recreation Area), and Fort Nez Perce (Whitman Mission National Historic Site)—have been transferred to the Fort Vancouver NHS facility. At present, the cataloging backlog estimated for these collections is about 635,000.

The NHS collection includes over 4000 historic objects, most of which are used as furnishings in the interpretive spaces of reconstructed buildings. The NHS also maintains archival collections, which include maps, photographs, and other documents that relate to the Hudson's Bay Company, Fort Vancouver, and the U.S. Army. The collection also contains the papers of John Hussey, an NPS Historian who conducted seminal historical research on Fort Vancouver. In addition, archaeological field records from over 50 years of excavations are housed here.

The preservation, management, and interpretation of this collection continue to be one of the most important cultural resource issues for the NHS. Representing the original fabric of Fort Vancouver and providing insight into the lives of its occupants, it is an internationally significant resource. An extensive curatorial processing area, offices, and exhibit spaces occupy the first floor of the Fur Store building. A glass wall between the interpretive corridor and the work area allows visitors to view the curatorial space and work in progress. On the second floor, collections are stored in a state-of-the-art facility.

Hudson's Bay Company Archival and Material Cultural Collections
Following is a list of repositories and institutions containing Hudson's Bay Company archival and material cultural collections:

- American Antiquarian Society, Philadelphia, Pennsylvania
- Bancroft Library, Berkeley, California
- Fort Nisqually Historic Site, Tacoma, Washington
- Glenbow-Alberta Institute, Calgary, Alberta
- Hudson's Bay Company Archives, Winnipeg, Manitoba
- Huntington Library, Pasadena, California
- Manitoba Museum of Man and Nature, Winnipeg, Manitoba
- McLoughlin House National Historic Site, Oregon City, Oregon
- National Archives of Canada, Ottawa, Ontario
- National Collections, Ottawa, Ontario

- Oregon Historical Society, Portland, Oregon
- Parks Canada, Department of Canadian Heritage, Regional Collections, Winnipeg, Manitoba
- Provincial Archives of Manitoba, Winnipeg, Manitoba
- Public Record Office, London, England
- Royal Engineers Library, Brompton Barracks, Chatham, Kent, England
- Royal Ontario Museum, Toronto, Ontario
- Royal Provincial Archives of British Columbia, Victoria, British Columbia
- U.S. National Archives, Washington, D.C.
- University of Washington Library, Seattle, Washington
- Washington State Historical Society, Tacoma, Washington
- Washington State Library, Olympia, Washington

Technology Options for Collection Availability

Currently, the Fort Vancouver NHS archaeological collection is available to the public through a variety of integrated, technological means. An "online collection" project uses several different features to make artifacts accessible to researchers and interested persons.

The Automated National Catalog System (ANCS+) used for recording artifact data has a function that allows a digital image to be attached to an electronic catalog record. Staff and volunteers at Fort Vancouver NHS have been producing several digital images for each object in the archaeological study collection, a grouping of approximately 200,000 artifacts. These are designed to show multiple views of an object, and a detail of any diagnostic traits. This entire process of digitizing the artifacts and importing the images into the cataloging software can be shown on a monitor in the interpretive corridor of the Fur Store. Visitors to the site can view the artifact image and catalog data as a Museum Technician or volunteer works on the project. During other times, the monitor shows a slide show of images so visitors can be introduced to items from the archaeological collection.

These data, the ANCS+ catalog records and related digital images, are used as the basis for the online collection. Re:discovery Software, in conjunction with the National Park Service Museum Management Program (MMP), has developed templates so that the data can easily be accessible through the World Wide Web. A visitor to this Web Catalog can browse the catalog records, view images, and compose searches and queries to sort or filter data according to their personal research needs.

In addition to the Web Catalog, which is hosted on a server managed by the NPS Museum Management Program, the Fort Vancouver website includes archaeological and curatorial features designed to increase the availability of the collection. Articles on current excavations are tied to artifact descriptions and images, highlighting the most recent additions to the collection. An online Research Guide introduces visitors to the collection and guides them to representative artifacts and archival references. Additional features illustrate conservation projects, and describe how the site cares for its collection.

Utilizing technology to increase the availability of the collection is an integral component of the transition to a research and education center. In addition to continuing the online collection project, several technology options will improve the availability of the Fort Vancouver NHS collection and other archaeological collections the park holds that are associated with Hudson's Bay Company material culture. One project could integrate the ANCS+ catalog records with GIS data, visually tying individual artifacts to the units and strata from which they were excavated. This would allow researchers more flexibility when looking at stratigraphic variety, distribution patterns, and other types of spatial analyses. Various software programs could make this visual representation accessible through the Web, and visitors to the website, or to a park kiosk, could interact with map layers (historical features, archaeological excavations, existing conditions) and corresponding artifacts from the collection. This would in essence place an artifact in time and space, giving visitors a historical context for an item from the collection.

Additionally, the World Wide Web could be more intensely utilized to promote the availability of the collection through virtual exhibits; interactive educational features based on cultural resources, and online versions of archival documents like archaeological reports and photos. Overall a research center would require online services that address collection availability for both visitors to the park and those who come via the website, and are capable of meeting the needs of researchers as well as visitors who desire an introductory or engaging view of the collection.

Historical Human Populations at Fort Vancouver

As the preceding portions of this section suggest, the complex cultural landscape and historic occupation of Fort Vancouver NHS was highly diversified socially and culturally. With the establishment of the first Hudson's Bay Company post in 1824, the region became integrated into the international political economy that the Company represented through its role in the British fur trade and other mercantile activities (Mackie 1997). At that time, many different native people already lived adjacent to the west coast of Canada and the United States, along the tributaries of the Cascade Mountain Range, and east of the mountains on the Plateau of the Interior. Near the site of the Hudson's Bay Company post, local natives, some of whom were known as Chinook Indians, had villages and interacted extensively with native people from elsewhere.

The London-based trading company operated in a vast geographical area throughout northern North America and at outposts in Hawaii and California. It is not surprising; therefore, that the indigenous ethnic diversity of the region surrounding the new HBC post was a foundation upon which people from many ethnic and national origins found fertile ground. As a result, the diversity and intermixture of the historical occupants of the post between 1824 and 1860 increased dramatically. Principals of the HBC were English and Scottish. They at first brought metis (persons of mixed non-Indian and Indian ancestry from Canada), French Canadians, and Native Americans from the northeast such as Iroquois and the Cree, and the Carrier and others from the northwest. To meet increasing needs for labor, "Kanakas" were brought from the Sandwich or Hawaiian Islands to Fort Vancouver and other posts. At Fort Vancouver, Hawaiians and natives from across North America resided at a post oriented community that came to be known as Kanaka Village.

During the early days of the HBC post, Chief Factors and officers led services for others that belonged to the Church of England. Employees such as the French Canadian carpenter, David Dompiere, held services for Catholics. For two years in 1830s, the Company provided a chaplain who was an Anglican priest. By 1838, the HBC promoted and supported the two Catholic priests from Montreal who arrived under the auspices of the church in Canada. The priests held services at existing structures within the post and began to maintain records on all baptisms, marriages, and burials at this post and at several other missions located from one to several days travel away.

The new cemetery that was used for Catholics and others between 1839 and 1856 was a short distance north of the HBC palisade. When the first Catholic Church was built in 1848 it was located between the palisades of the HBC post on the south and the cemetery in a wooded area to the north. The records of baptisms, marriages, and deaths that were maintained by the priests of the St. James Mission document the ethnic and national diversity of those that worked, lived, and died in the vicinity of the post. In addition to the Chinook, the presence of numerous other tribes, or "nations" as the priests referred to them, is documented in the church records. A few of the nations no longer exist as named groups. However, most of them were clearly ancestors of one or another constituent group in over a dozen contemporary American Indians tribes and several Canadian First Nations. The records also document extensive intermarriage among near and distant tribes, and between tribal members and other ethnic

groups and nationalities. Indeed, numerous examples of intermarriages between various Indians, Hawaiians, Europeans, and Canadians exist in the records (Warner and Munnick 1972).

Throughout the 1850s, the ethnic and national diversity characteristic of the HBC period at Fort Vancouver coexisted with the establishment of the Columbia Barracks by the U.S. Army beginning in 1852, and as the HBC continued its trading operations. At the same time, Columbia City, as the City of Vancouver was then called, became the leading center of commerce in Washington Territory. By 1860, however, the HBC moved out of Fort Vancouver. At the regional level, the decade of the 1850s was one of transition to social, political, and economic integration of the Pacific Northwest into the nation-state of the United States of America. The transition coincided with the establishment of treaties between the U.S. Government and the indigenous native people, the cession of certain lands by tribes and the "reservation" of other lands for their contemporary and future occupancy and use. Ultimately, tribal reservations were not established and maintained in the immediate vicinity of Fort Vancouver.

The local scene came to be dominated by the U.S. military base and the development of nearby Columbia City. The site of the former HBC post developed a social and cultural character that was more typical of other places in the American west that had a combination of military forts and centers of commerce. Ethnic and cultural diversity then became less evident at Fort Vancouver as a reflection of U.S. continental expansion and the implementation of the reservation system for American Indians in the Pacific Northwest. The numerous officers and enlisted men at Fort Vancouver Barracks reflected the ethnic and cultural makeup of American society at large. Exceptions included the incarceration of 33 members of the Red Heart Band of Nez Perce Indians for about seven months in 1877 and 1878 (Sinclair 1998).

The historical changes that took place at Fort Vancouver during the last 150 years displaced the tremendously diverse populations who were present during the time of Hudson's Bay Company operation. For the most part, changes in the cultural landscape (including the destruction, deterioration, and displacement of buildings and other material features) at Fort Vancouver have erased specific cultural and natural resources that were culturally important to resident populations in the past. Contemporary people may have interests and concerns about interments that may still be located at the site of the historical cemetery referred to above. However, it is not likely that any contemporary group of people (ethnic group, tribe, or nation) have knowledge about cultural resources from the HBC period that would continue to have special cultural significance to them. A discussion of potentially park-associated contemporary human populations appears in the "Socioeconomic" section of this document.

Sites Associated or Affiliated with HBC Activities in North America

Fort Nisqually Historic Site
Established in 1833 by Chief Trader Archibald McDonald at the south end of Puget Sound, Fort Nisqually served as a fur trading post. In the late 1830s, it became the headquarters for a subsidiary of the Hudson's Bay Company, the Puget Sound Agricultural Company, which had been formed to provide agricultural products for the HBC for export to Hawaii, Alaska, and California. This was one of the forts that Chief Factor John McLoughlin of Fort Vancouver was responsible for overseeing. Fort Nisqually closed in 1869. In the 1930s, the two surviving original buildings were moved to Point Defiance Park on land owned by the Metropolitan Park District of Tacoma. Additional buildings were restored, reconstructed and furnished to the period of the 1850s. The Metropolitan Park District of Tacoma administers Fort Nisqually Historic Site.

San Juan Island National Historical Park
The site commemorates the 1859 "pig" incident in which an American settler, Lyman Cutler, shot a pig belonging to the Hudson's Bay Company, operating at Belle Vue Farm on San Juan Island. The incident nearly precipitated a war between Great Britain and the United States. Military forces from both nations were stationed on San Juan Island from 1859-1874. The controversy over the pig incident and the boundary between the United States and Canada was eventually resolved peacefully by international arbitration under the auspices of the Emperor of Germany. In 1872, the emperor ruled in favor of the U.S., establishing the boundary line through the Haro Strait. The National Park Service administers San Juan Island National Historical Park.

Fort Victoria
Founded as Fort Victoria in 1843 on the southern tip of Vancouver Island, British Columbia, it was the headquarters of the Hudson's Bay Company's western department after 1849. No historic structures from the HBC period have survived. The modern city of Victoria encompasses the original site of Fort Victoria.

Champoeg State Park
Champoeg State Park is located on the east side of the Willamette River approximately 15 miles southwest of Portland, Oregon. On May 2, 1843, a vote taken here between American settlers and former employees of the Hudson's Bay Company established the first provisional American government of the Pacific Coast. This action may have been one of the factors leading to Oregon becoming an U.S. Territory in 1848. The Oregon State Parks Department administers this site.

The following six sites are administered by Parks Canada, Department of Canadian Heritage:

The Fur Trade at Lachine National Historic Site
Located to the west of the Island of Montreal, Lachine National Historic Site interprets the fur industry in the Montreal region of Canada in the late eighteenth and early nineteenth centuries. A stone warehouse was built under the direction of Alex Gordon, former clerk of the Northwest Company, in 1803 to store trade goods and furs. In 1833, the warehouse was taken over by the Hudson's Bay Company. Lachine, historically, occupied a strategic position on the fur route as a departure and arrival point for trading expeditions. It also served as an important center for storing the Montreal merchant's furs and trade goods.

Fort Langley National Historic Site
Fort Langley was established in 1827 by Hudson's Bay Company's Chief Factor James McMillan on the south side of the Fraser River in present British Columbia. The fort provided dairy products and large quantities of salmon for use by the HBC and for export.

Lower Fort Garry National Historic Site
Established by Governor George Simpson of the Hudson's Bay Company in 1830, Lower Fort Garry served as a retail, agricultural, and industrial center to supply outlying fur posts. It also served as a transshipment point for goods being shipped from York Factory on Hudson Bay.

Rocky Mountain House National Historic Site
Established by the Northwest Company in 1799 on the North Saskatchewan River as a fur trade post, the Rocky Mountain House was taken over by the Hudson's Bay Company in 1821. The post was closed briefly in 1822 and reopened in 1825. Rocky Mountain House was permanently abandoned by the HBC in 1861.

Fort St. James National Historic Site
Fort St. James National Historic Site was founded by Simon Fraser on Stuart Lake in 1806 as a Northwest Company post. It was taken over by the Hudson's Bay Company in 1821 and became the administrative headquarters for the New Caledonia fur district. From this post, the annual fur brigades to the Pacific Coast departed and returned, and supplies for the district were distributed from Fort St. James.

York Factory National Historic Site
Established by the Hudson's Bay Company in 1682 between the mouths of the Hayes and Nelson rivers, York Factory was the depot and headquarters of the HBC's Northern Department of Rupert's Land. All official correspondence, requisitions for trade goods and supplies, records of the Company's business activities for the previous outfit (business year) for Fort Vancouver, and all the posts in the Columbia Department were forwarded yearly to York Factory by way of the York Factory Express. There the records were sent by ship to London. York Factory was closed in 1957.

Sites Associated or Affiliated with Early U.S. Army at Vancouver Barracks

Fort Bellingham
Fort Bellingham, built 1856 is located in Bellingham, Washington. Originally a blockhouse, it later served as an U.S. Army post. The only remaining building is the home of Captain George Pickett who is best known for his involvement at the Battle of Gettysburg.

Fort Borst
Fort Borst was strategically located on the military road between Fort Vancouver and Fort Steilacoom. Originally built in 1856, the residual blockhouse is now located at Fort Borst Park in Centralia, Washington.

Fort Cascades
Completed in 1855, Fort Cascades was built to guard the portage road around the Cascades Mountains near present Bonneville Dam in Washington State. A walking tour is available of the old fort site located on U.S. Army Corps of Engineers land.

Fort Canby
Established as Fort Cape Disappointment, Fort Canby was renamed in 1875. Along with Ft. Stevens, Fort Canby was built to guard the Columbia River during the Civil War. Visitors can view the original battery gun emplacements and visit the adjacent museum, emphasizing the Lewis and Clark Corps of Discovery expedition. This site is near Ilwaco, Washington.

Fort Columbia
Fort Columbia (1896-1904) was established in 1899 during the turn of the century to compliment protection of the Columbia River at Fort Stevens and Fort Canby. It is now a Washington State park and includes original buildings, gun emplacements, and a museum.

Fort Lewis
Fort Lewis was established in 1917 as Camp Lewis and today is the largest active U.S. Army post in the Pacific Northwest near Tacoma, Washington. It includes the Fort Lewis Museum at the post.

Fort Lugenbeel, Fort Gilliam, Upper Cascades Townsite, and Fort Rains
These sites now exist only as archaeological sites on present U.S. Army Corp of Engineer land located west of Stevenson, Washington near the Bridge of the Gods. Fort Rains was built in 1856.

Fort Simcoe
Several original buildings, including the Commanding Officer's house, still exist at this 1856 fort site. It is now a Washington State park and has an interpretative center open part of the year.

Fort Spokane
Established in 1882, Fort Spokane served as the training ground for U.S. troops during the Spanish-American War, among other activities in Washington. Remaining there are several original buildings, including the Indian School dating from 1899-1929.

Fort Vancouver (Vancouver Barracks)
Fort Vancouver served as the former department headquarters for the Columbia Department and is presently home to U.S. Army Reserve units. It is the oldest active military post in the Pacific Northwest, begun in 1849 and is now part of the Vancouver National Historic Reserve in Vancouver, Washington.

Fort Walla Walla
Fort Walla Walla built in 1856-57 was a principal U.S. Army post east of Cascades Mountains. Several original buildings, parade ground, and the cemetery remain. A museum is open in the summertime after mid-April.

San Juan Island National Historical Park
Located on San Juan Island near the border of British Columbia, it is the NPS site of American and British camps during the boundary dispute between 1859 and 1872. British Camp has four historic buildings and a small garden that have been restored. At American Camp, two historic buildings survive along with the remains of an earthwork gun emplacement. There is a visitor center at American Camp and an orientation center in Friday Harbor, Washington.

Fort Dalles
Built in 1850, Fort Dalles was the principal U.S. Army post for the area above Great Falls in the Columbia River. One original building, a former surgeon's quarters which houses a museum, remains in Oregon.

Fort Hoskins
Fort Hoskins was established in 1856 to protect the Grand Ronde and Siletz Indian Reservations from encroachment. It is open to the public as a county park in Benton County, north of Philomath, Oregon.

Fort Klamath
Built in 1863, Fort Klamath was a principle U.S. Army post during the Modoc War (1872-1873). The site houses the graves of four Modoc Indians executed in 1873 and the original guardhouse now used as a museum.

Fort Stevens
Fort Stevens was one of two forts built in 1853-54 to guard the mouth of the Columbia River and was occupied by U.S. Army unit 1947. It is now an Oregon State Park and includes original gun emplacements and a museum.

Fort Umpqua
Fort Umpqua was a U.S. Army Post established in 1856. Today Fort Umpqua is an archaeological site located across the Umpqua River from Winchester Bay, Oregon.

Fort Yamhill
Fort Yamhill consisted of a Blockhouse built in 1855 which was expanded to a U.S. Army post in 1856. A young Philip Sheridan spent much of his early career here before the Civil War. The blockhouse was converted to a city park in Dayton City southwest of Portland, Oregon.

Camp Withecomb
Located near Estacada, Oregon, Camp Withecomb is the site of the Oregon Military Museum.

Fort Sherman
Fort Sherman was originally Camp Coeur d'Alene located east of Spokane, Washington, near Coeur d' Alene City Park.

The Natural Environment

Environmental Context and Setting

In 1824, George Simpson, governor of the Hudson's Bay Company's Northern Department, ordered the establishment of a new fur-trading post on the north side of the Columbia River. This post was named Fort Vancouver. During its existence between 1824-1860, Fort Vancouver was one of the most important settlements west of the Rocky Mountains.

Historically, the natural landscape of Columbia River's north shore was a mosaic of plains, coniferous forests, streams and lakes, with the Cascade Mountains visible in the distance. The Fort, the heart of the Hudson's Bay Company operations, was located on a low-lying river plain called Fort Plain that was six miles upriver from the confluence of the Columbia and Willamette rivers. Today, the park contains approximately 209 acres (in the authorized boundary of the NHS) and includes resources that relate to both the Hudson's Bay Company and the U.S. Army's Vancouver Barracks.

Air Resources

No baseline inventory or monitoring regarding air quality is being conducted by Fort Vancouver National Historic Site. However, the Washington State Department of Natural Resources does monitor air quality in Clark County. The park is located within the Portland, Oregon metropolitan airshed. Ambient air pollutant concentrations for the park are within national and state air quality standards.

The Southwest Air Pollution Control Authority indicates the Vancouver area was redesignated from a non-attainment area to a maintenance area for ozone and carbon monoxide, meaning the area has met the National Ambient Air Quality Standards and has plans in place to maintain the standard. High carbon monoxide levels typically occur in winter. High ozone levels occur during hot, dry periods with little or no wind. There have been no carbon monoxide violations in the Vancouver area since 1991. The old one-hour ozone standard had not been violated since 1992 until an ozone episode in 1998. The new eight-hour standard has not been violated; however, conditions could occur that may exceed the ozone standard in the future. The Southwest Air Pollution Control Authority issues nonmandatory "clean air action days" to help reduce ozone levels on such occasions.

This attainment status has been in existence since 1991. The park is located beneath the flight paths of Portland International Airport and adjacent Pearson Airfield. The park is also adjacent to major highways and rail lines subjecting park resources to potential air pollutants.

The U.S. Environmental Protection Agency has set health-based standards for seven air pollutants: carbon monoxide, ozone, fine particulate matter less than 10 micrometers in diameter (PM_{10}), sulfur dioxide, nitrogen dioxide, lead, and hydrocarbons. When ambient concentrations of these pollutants exceed the standards, health problems can result. The park is within a designated attainment area (specifically, concentrations below standards) for all criteria pollutants. This designation is based on representative ambient air quality monitoring from nearby monitoring stations. Air quality monitoring stations near the park are located at the following places: Mountain View High School – ozone; Hazel Dell and Fourth Plain and East Reserve – air quality and carbon monoxide; and Moose Lodge, Fourth Plain – particulate matter.

Climate

The City of Vancouver and Clark County have mild wet winters and warm dry summers with an average rainfall of 41.3 inches, snowfall of 6.5 inches, and a growing season of 218 days. Approximately 80% to 85% of the precipitation occurs in the months from October to May. Fog is common during the spring and fall months. Average monthly temperatures are shown in the following chart.

Average Monthly Temperatures

Month	High Temperatures	Low Temperatures	Precipitation
March	54.9°	36.4°	3.5"
June	71.8°	49.2°	1.5"
September	72.9°	47.1°	3.8"
December	45.2°	32.5°	7.6"

Seasons are distinct, yet temperatures are not severe. Summer temperatures of 80 and 90 degrees are common while winter frequently finds nights below 30 degrees Fahrenheit.

Prevailing winds during the summer are from the northwest averaging eight to nine miles per hour. Prevailing winter winds are from the southeast, with an average velocity of eight miles per hour. However, high winds do occur, and during the fall, winds from the southwest can exceed 60 miles per hour on occasion. The highest recorded wind was on October 12, 1962, at 106 miles per hour.

Geologic Resources

Topography

Fort Vancouver NHS is located in the Willamette-Puget Trough, a geographic basin formed by the Cascade and Coast ranges. The topography of Fort Vancouver NHS has been formed by floodplain deposits from the Columbia River to form low-lying bottomlands and a series of alluvial plains and terraces. The area within the park slopes gently from the north boundary down to the river, with elevations from 102 feet mean sea level at the north, to 24 feet mean sea level at the river. The site of Fort Vancouver lies on the first narrow floodplain of the Columbia River. The slope quickly rises to the second floodplain, known as Mill Plain. From here looking southward, the visitor can view the historic area as well as the far side of the Columbia River.

Geology

Clark County, Washington, exhibits traces of its geologic history including repeated inundation by fluctuating seas during glacial epochs, sedimentary processes of the Columbia River, volcanic activity, and periodic earthquakes. There is no evidence to suggest that these events have ended. Rivers are still eroding and transporting material to create new land areas. Land is still changing by slumping and

downwarping. The weathering of rocks is continuing to create soil. Landslides, earthquakes, and volcanic events can occur at anytime.

Fort Vancouver NHS is situated on alluvial deposits which underlie the southwestern third of Clark Country and form the plains and terraces of the park. These alluvial deposits are further categorized into three general types:

- Alluvial fan and associated deposits—These deposits have accumulated along streams and tributaries to the Columbia River. They consist of fine-grained sand and gravel. In the bottomlands these deposits are an important source of groundwater.
- Terrace deposits—These deposits are distinctive because they are re-worked portions of the Troutdale Formation and contain very coarse gravels in a sandy matrix.
- Recent alluvium deposits—These deposits are confined to the floodplains of the present streams and creeks. They consist primarily of silt, sand, and gravel.

Soils

The floodplain and the rising ground behind it consist of a fairly uniform gravelly loam 12 inches or more in depth over alluvial gravel. Surface runoff is quickly absorbed by these soils.

The major soil associations in the Vancouver urban area and the park are the Sauvie-Puyallup and the Lauren-Sifton-Wind River associations. Sauvie-Puyallup soils are found in the bottomlands while the Lauren-Sifton-Wind soils are found in the terraces.

Sauvie-Puyallup soils are poorly to excessively drained, moderate textures, nearly level to gently sloping alluvial soils of the floodplains of the Columbia River. Lauren-Sifton-Wind soils are excessively drained, gravelly, moderately textured, and nearly level to excessively sloping soils of alluvial deposits on the terrace along the Columbia River.

Water Resources

Surface Water Quality

While the park has not conducted a baseline inventory of monitoring regarding surface water quality within the park, the north shore of the Columbia River forms approximately 3600 feet of the southern boundary of the park. Water quality information for the Columbia River and its tributaries within the general vicinity of the park have been collected by the Oregon Department of Environmental Quality and the Washington Department of Ecology and are summarized in a report entitled *Baseline water quality data inventory and analysis: Fort Vancouver National Historic Site* (NPS Water Quality Division 2000). The north shore of the Columbia River forms the south boundary of the park, approximately 3,600 feet in length, at the mean high waterline. No other surface watercourses exist within the park.

Increased water temperatures, high levels of dissolved nitrogen, alga growth, and high bacteriological counts, have degraded the water quality of the Columbia River. These pollutants are primarily the result of natural processes, but can also be attributed to discharges by industrial, agricultural, and recreational activities.

The 1978 *Clark County Water Quality Management Plan* characterized the quality of water resources within Clark County as impacted in various degrees by nonpoint source pollution. As documented through a routine monitoring program, none of the waters tested at that time met the state's water quality standards. The overall state of water quality among Clark County's surface water resource today is uncertain due to the absence of a countywide monitoring program.

Ground Water Quality

The park obtains irrigation water using a well from a local aquifer. This aquifer lies within the alluvial deposits along the Columbia River lowlands and is recharged primarily by infiltration from the Columbia River. Water rights have been secured for this purpose. No monitoring is currently being conducted (except for monitoring conducted relating to the Safe Water Drinking Act) as to the water quality of this aquifer.

The management of water quality in Clark County is broad based with several agencies responsible for different aspects of the problem. The Southwest Washington Health District is responsible for water quality as it relates to septic tanks and water wells. Septic tanks can affect surface water and groundwater. There are no septic tanks within the NHS.

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 associated with the park's 3,600 feet of shoreline along the Columbia River.

Floodplains

Executive Order 11988, Floodplain Management, and the guidelines for implementing the Executive Order developed by the Water Resources Council published in the *Federal Register* in 1978, direct environmental analysis for proposed actions and alternatives located in floodplains to identify potential impacts associated with occupation and modification of floodplains. Although a portion of the park and Pearson Airfield is identified as a floodzone, existing zoning regulations are adequate to manage development. The waterfront area of the park is in the 100-year floodplain, but existing uses are compatible with the floodzone. (See Figure 7, Floodplain.)

Elevations within the park boundary extend from 102 feet at the northern boundary of the park along Evergreen Boulevard to 24 feet along the Columbia River. According to the U.S. Army Corps of Engineers, the 100-year floodplain level is 28 feet mean sea level while the 500-year floodplain level is 32 feet mean sea level. The average mean sea level elevation of the palisade area is 30 feet. The 100-year floodplain is the area that has a 1% chance of being flooded each year. Other on-site developments, dikes, and dams on the Columbia River have substantially altered the existing floodplain.

Vegetation

Vegetation is a critical component of the Fort Vancouver landscape because of the prominent role agricultural and subsistence activities played in the Fort's success and influence in the Pacific Northwest. The cultivated fields, garden, orchard, and livestock pastures were all significant landscape features during the historic period of the Hudson's Bay Company occupation of the site.

Today there are no known vegetative remnants or features introduced by the Hudson's Bay Company, within the park boundary. An interpretive orchard, planted in 1962, exists on the site of the historic garden and consists of approximately 70 fruit trees. There is also an interpretive period garden located northeast of the palisade on the site of what was historically a cultivated field. The field area within the palisade is currently maintained as turf.

The only documented vegetation existing from the Hudson's Bay Company period includes two Douglas fir trees at the east end of the Parade Ground, and the apple tree in the city's Old Apple Tree Park. Two large Oregon oak trees on the Parade Ground may date from the 1850s, and a pear tree located north of

Floodplain

Fort Vancouver NHS GMP/EIS



Legend

Floodplain
- 100-Year Floodplain
- 500-Year Floodplain

Authorized Park Boundary

Building

Pavement Edge

Railroad

Waterfront Trail

Fence

500 0 500 1000 Feet

1 : 8000

Data Sources:
City of Vancouver: buildings, pavement edge, railroads
Clark County: rivers, trails
FEMA: floodplains
NPS: buildings, fences, fort, park boundary

Figure 7

N

National Park Service
Columbia Cascades Support Office
GIS Group

Plot date: August 27, 2002 i:\gis\avproj\fova\fovagmp_v10.apr

East Fifth Street appears to be an old variety, although its location does not correspond to the known development of the Hudson's Bay Company.

To date, while no other vegetation dating from the historic period exists in the park today, the landscape character of some areas surrounding the palisade is still indicative of the vegetation associated with the historic period. For example, during the Hudson's Bay Company period, the undeveloped area north of Upper Mill Road consisted of Oregon oaks and Douglas fir trees scattered across a natural prairie. Today, Douglas fir and Oregon oak trees scattered across the manicured lawn of the parade ground retain the general character of the historic period. Several of the trees on the Parade Ground date from early in Vancouver Barracks's history (1861-1947). Clumps of Oregon oaks that are spread across the Vancouver Barracks portion of the park (many of which are within the park's legislated boundary) were also common in this area during the HBC and Vancouver Barracks periods as part of the oak savannah transition zone between the conifer forest and the plain.



Preliminary research indicates other trees in the Vancouver Barracks portions of the park may have historic integrity, for example, the large deciduous trees, including oaks, located along the southwest side of the park in the Reserve (see photo above). These trees were planted in 1883 along both sides of McLoughlin Boulevard (now known as Fort Vancouver Way), a Vancouver Barracks depot road leading from East Fifth Street to the riverfront, which dated from the early 1850s. Significant vegetation located outside the park boundaries includes the maple trees on both sides of Evergreen Boulevard that were planted in front of Officer's Row in the 1880s. These trees create a strong visual edge to the north side of the parade ground and the park's northern boundary.

The vegetation along the river historically consisted of native riparian trees and shrubs. Today, the majority of the Fort Vancouver Waterfront consists of native riparian vegetation, masses of black cottonwoods, willows, and alders. The open fields north of State Route 14 are similar to the open-space character of the pasture and fields of the Hudson's Bay Company period. However, the overall visual character of the area lacks historic detail and diversity, due to the lack of crops and the associated grids and patterns created by fields and rows of crops.

The structures and features associated with the Pearson Airfield development significantly impact the open character of the historic cultivated fields. Currently, the Airfield consists of grasses and a variety of weeds.

Wildlife

In 1993, Fort Vancouver NHS conducted its first park-wide inventory of wildlife species which included mammals, birds, and fish. Invertebrates, reptiles, and amphibians were not inventoried; however, this inventory was not completed. A baseline plant and animal inventory has yet to be conducted to document species occurrence and record scientific names.

The NHS is surrounded by commercial, industrial, and residential developments. The widespread expansion of the activities that the Hudson's Bay Company started nearly 180 years ago has left little room for native wildlife, but some species persist in this highly altered environment. The park's inventory lists species either observed or known to inhabit the Vancouver area for which there is habitat within the park. These species include 18 species of mammals, 82 species of birds, and 28 species of fish. According to a national inventory by the U.S. Fish and Wildlife Service, the geographic area surrounding the national historic site has suitable habitat for two species of reptiles, and one amphibian.

Given the urbanized nature of the habitat of the park, terrestrial habitat for wildlife is somewhat limited. The trees, meadows, orchard, garden, and waterfront areas each provide limited habitat for wildlife generally passing through the area of the park.

Mammals

Common mammal species using the park include possum, raccoon, skunk, coyote, Western gray squirrel, beaver, deer mouse, mole, and brush rabbit. Fox may be found within the area. No large mammals have been identified within the park. (According to park staff there have been deer sightings, but none within the last few years.)

Birds

Tall grasses, blackberries, shrubs, and occasional groves of trees characterize the area west of the palisade, along the north side of State Route 14, and the Fort Vancouver Waterfront. These areas contain the greatest diversity of wildlife including birds. Resident and migratory birds that have been observed in the area include waterfowl, gallinaceous birds, pigeons, woodpeckers, hummingbirds, raptors, and passerines. Among the raptors are red-tailed hawk, Cooper's hawk, and American kestrel. The passerines that use the area include swallows, sparrows, finches, jays, chickadees, robins, blackbirds, wrens, starlings, crows, and ravens. Recently this area has been mowed to control noxious weeds.

Common waterbirds and shorebirds that use the area include blue heron, mallard, common merganser, western grebe, pied-billed grebe, double-crested cormorant, and killdeer. Common gallinaceous birds in the area include mourning dove and rock dove. The northern flicker, ring-billed gull, and herring gull also use the area.

Reptiles and Amphibians

A systematic inventory of reptiles and amphibians in the park has not been conducted. Common reptiles and amphibians in the area include western toad, Pacific tree frog, racer, common garter snake, western terrestrial garter snake, and northwestern garter snake.

Invertebrates

Invertebrates are common throughout the park, but data on populations is limited due to lack of studies.

Fisheries

The southern park boundary stretches approximately 3,600 feet along the Columbia River. The Columbia River supports a varied fish community in the waters adjacent to and along the NHS. Fish species may be

seen from the bluff above the river, as carcasses along the waterfront, or the catch of people fishing. Some of the species observed have been sockeye salmon, chum salmon, coho salmon, Chinook salmon, walleye, channel catfish, European carp, black crappie, and largemouth bass.

Threatened, Endangered, Rare Species, and Species of Concern

The Endangered Species Act of 1973 (Section 7) as amended requires an examination of impacts of projects on all federally listed or proposed threatened or endangered species or critical habitat. Consultation with the U.S. Fish and Wildlife Service and the Washington State Natural Heritage Inventory disclosed no threatened or endangered species within the park, though the bald eagle (Haliaeetus leucocephalus) and the bull trout (Salvelinus confluentus) may occur in the vicinity of the park. A proposed species, stocks of sea-run coastal cutthroat trout (Oncorhynchus clarki clarki) may occur in the vicinity of the park.

The National Marine Fisheries Service's website identified certain stocks of the following anadromous salmon species migrating through the Columbia River adjacent to the park as species of concern. They are chinook salmon (*Oncorhynchus tshawytscha)* listed as threatened, coho salmon (*Oncorhynchus kisutch*) listed as a candidate species, chum salmon (*Oncorhynchus keta)* listed as threatened, steelhead (*Oncorhynchus mykiss*) listed as threatened, sea-run cutthroat trout (*Oncorhynchus clarki clarki*) proposed threatened. In addition, the sockeye salmon (*Oncorhynchus nerka)*, native to the upper Salmon River in Idaho, are listed as endangered on the Snake River and must migrate through the Columbia River to reach its spawning areas.

For listed mammals, the NMFS website shows the Stellar sealion (*Eumetopias jubatus)* as threatened.

The following are species of concern that have been documented in Clark County. These species or their habitat could be located on or near the NHS: Cascade frog (*Rana cascadae*), Larch Mountain salamander (*Plethodon larselli*), Long-eared myotis (*Myotis evotis*), Long-legged myotis (*Myotis volans*), Northern goshawk (*Accipiter gentilis*), Northwestern pond turtle (*Clemmys marmorata marmorata*), Olive-sided flycatcher (*Contopus cooperi*), Pacific lamprey (*Lampetra tridentata*), Pacific Townsend's big-eared bat (*Corynorhinus townsendii townsendii*), Peregrine falcon (*Falco peregrinus*), River lamprey (*Lampetra ayresi*), Slender-billed, white breasted nuthatch (*Sitta carolinensis aculeata*), Tailed frog (*Ascaphus truei*), Van Dyke's salamander (*Plethodon vandykei*), Western toad (*Bufo boreas*).

The American peregrine falcon (*Falco peregrinus anatum*) is a likely visitor to the area. Two candidate mollusks, the California floater *Anodonta californiensis*) and the Columbia River pebble snail (*Fluminicola [=Lithoglyphus] columbiana*), may also occur along the shoreline of the park boundary. The USFWS does not list any critical habitat.

No threatened or endangered plant species are known to occur within the park boundary. The Washington Natural Heritage Program currently has no records for rare plants or high quality ecosystems in the vicinity of Fort Vancouver National Historic Site. However, the Washington Natural Heritage Program does have a record of tall bugbane (*Cimicifuga elata*), a state threatened plant and a federal species of concern, occurring about 1.5 miles from the park.

Interpretation

Interpretation at the site has continued to evolve over the past 15 years since the completion of the park's Interpretive Prospectus and as more buildings are reconstructed. In addition, new information about the

lives of all people associated with the Fort has also influenced interpretation. With the inclusion of Fort Vancouver NHS as part of the Vancouver National Historic Reserve, opportunities exists for telling the nationally significant stories of the NHS and the Reserve.

In addition to the primary interpretive themes developed for the NHS during the course of the GMP process, a companion effort was undertaken by the Reserve Partners to develop a comprehensive Interpretive Plan for the entire Reserve. The NHS staff facilitated this process since the NPS serves as the lead in interpretation, education, and cultural resources. All of the NHS's primary themes fit well within some of the broader interpretive themes of the Reserve. These interpretive themes are currently under development and will be shared with the public by the Reserve Partners during the summer of 2002. The four primary themes for the Reserve are Crossroads and Environment, Exploration and Discovery, Settlement and Development, and Work and Community.



Primary Interpretive Themes

Interpretation of the site has primarily been classified from the NPS publication, *National Survey of Historic Sites and Buildings*, to the theme of "Westward Expansion and the Extension of the National Boundaries to the Pacific, 1830-1898," "The Fur Trade." Breaking these out into site specific themes provides for the following:

- Crossroads – The Fort Vancouver area lies at the junction of the Columbia River and the Cascade Mountain Range. The area is rich in natural resources that provided abundant sustenance for American Indians and immigrants. The river served as a primary route of exploration, travel, and trade, and the fertile land has supported major agricultural production.
- Fur Trade and Commerce – Fort Vancouver's diverse and extensive mercantile operations and advantageous location on the Columbia River enabled it to be the center for Northwest fur trade and international commerce.
- A Mix of Cultures – Fort Vancouver was a "melting-pot" of diverse human cultures of many American Indian, Hawaiian, American, and European peoples. This mix of cultures, and how people lived and worked together, is an important story in the life of the fort and in the development of the region.
- Settlement – Fort Vancouver was the commercial, agricultural, and social center of the Pacific Northwest. The resources in the area supported further settlement. Fort Vancouver also served as the first terminus of the Oregon Trail and provided large amounts of provisions and supplies to thousands of American settlers. Though the British Hudson's Bay Company dominated the area for decades, international events provided for the territory to be peacefully annexed by the United States.
- Military – Vancouver Barracks was the first U.S. Army Post in the Pacific Northwest and served as the headquarters for the vast Department of the Columbia. Vancouver Barracks was a center for United States military operations in the region for the last half of the nineteenth century and into the twentieth century.
- Archaeological Research and Resources – Through research, archaeological resources at Fort Vancouver NHS enable us to learn about the past and tell an accurate story about Fort Vancouver.
- National Park Service Preservation and Education – The National Park Service is responsible for preserving the nation's outstanding natural and cultural areas and for providing engaging educational programs for all people.

Secondary themes that may be interpreted by the park would include the CCC development in the Village and the Spruce Mill. In addition to the park themes, interpretive staff at the NHS are responsible for interpreting the themes for the Reserve articulated in the Reserve's cooperative management plan.

Interpretive efforts (both personal and non-personal) should relate to one or more of the interpretive themes that have been established based upon the purpose, significance, and mission goals of Fort Vancouver NHS. Each theme should be addressed by some part of the overall interpretive program.

Visitor Experience Goals

The intent of NPS management in offering interpretive programs and services at Fort Vancouver NHS is to provide an opportunity for visitors to experience the site's special history. In this regard:

- Visitors will be able to obtain interpretive information in a variety of ways and to the level of complexity and detail they desire.
- Visitors will be able to visualize life at the Fort and in its surroundings, as it would have been in 1845.
- Visitors will be able to experience a vestige of the sights and sounds of the Fort.
- Visitors will be able to understand the scale and scope of fort operations in the middle nineteenth century.
- Visitors will be able to understand the value of cultural resource preservation as exhibited at Fort Vancouver NHS.
- Visitors will be able to understand the value of the diverse cultures of people involved with the Fort.
- Visitors will understand the central role played by the Hudson's Bay Company and the Columbia River in the development of this area and the region.
- Visitors will experience the seamless story of "One Place Across Time" theme within the Vancouver National Historic Reserve.
- Visitors will understand the significance of this site in Pacific Northwest history.
- Visitors will be able to experience the life of the early soldier at the Vancouver Barracks.
- Visitors will be able to understand the role the U.S. Army played in the development of the Pacific Northwest.

Fort Vancouver National Historic Site Visitor Center

Visitor Center Lobby

The visitor center is currently open to the public every day except Thanksgiving, December 24, December 25, December 31, and January 1. Hours are 9:00 a.m. to 5:00 p.m. March through October, and 10:00.a.m. to 4:00 p.m. November through February (with some variation during the Fourth of July and Candlelight Tour events).

Visitors enter the visitor center from the parking area. Inside the lobby (approximately 25 feet by 35 feet) staff and volunteers provide important information to visitors from an information desk. The Northwest Interpretive Association (NWIA), a cooperating association, operates a sales area. Available for purchase are a wide variety of national historic site related books, as well as a wide variety of goods related to the fur trade and Fort Vancouver, such as blankets, tin cups, beads, and Spodeware. Historic Reserve items are also sold through this outlet. Staff and volunteers conduct sales of NWIA items. The park brochure and other park handouts, such as event schedules and bookmarks, are available to the public. The *Fort Vancouver Handbook*, a NPS publication was reprinted in 2001 and is available for purchase.

In addition to the information desk, the lobby also contains a large painting (5 feet by 8 feet) in a case that illustrates how the Fort and immediate surroundings would have looked in 1845. It is accompanied by a visitor activated taped message of approximately two minutes. While viewing the painting, visitors are

able to look out the window of the visitor center down to the Fort site some 300 yards away. The lobby also contains a temporary exhibit on "Whose Fur Am I?" a tactile exhibit aimed at children to illustrate the difference among animal furs.

Visitor Center Exhibits and Video
The visitor center exhibit room (approximately 35 feet by 35 feet) contains displays of fur trade items, fort building cutouts, a diorama, models, a variety of flat panel displays, and other items. These exhibits describe a variety of related stories, from the role of the first steamship in the Pacific Northwest to the technique of trapping beaver. An audio component of fort voices, in several languages of the Fort, plays continually in the background. These exhibits were installed in 1975 and have received repair, and updating. The exhibits are well executed but do not adequately tell the primary stories of the national historic site.

The Portland, Oregon public television station, as part of a series on Northwest forts, produced the park video in 1986. It is 12 minutes long and outdated. Upon request, it is shown to visitors on a large screen (26-inch screen) television. Originally produced on videotape, it was converted to laser disc in 1997. The auditorium seats 40 people.

Interpretation at Fort Vancouver National Historic Site

Interpretation North of East Fifth Street
This area contains the park's picnic shelter, visitor center, and maintenance and administrative areas on approximately 40 acres of maintained turf area with interspersed trees. About 12 acres of this is the historic Parade Ground. The only interpretive wayside in this area is at the historic anchor, adjacent to the visitor center parking lot. It is an outdated routed aluminum sign. It is currently to be replaced as part of a wayside project that will also provide for a wayside on the Parade Ground.

Upon leaving the visitor center, visitors can drive the park road, or walk the 300 yards to the Fort. Some visitors choose to walk across the turf, while others walk the shoulder of the narrow park road.

Interpretation South of East Fifth Street
The Fort is reached by parking at a temporary gravel parking lot on the south side of East Fifth Street. From the parking lot, it is a 75-yard walk to the north gate of the Fort. During fee season (May through September) fees are collected at the contact station inside the north gate. Leaving the Fort's parking lot, visitors have the option of walking through the one acre recreated formal English garden or taking a parallel path along the historic north road. On the north road is a wayside on the Village, where fort workers, including a large number of Hawaiians (called Kanakas) lived. Nearby there are two additional waysides—one located near the entrance to the garden interpreting the Fort Vancouver farm, the other on the north road interpreting the HBC's "workers of many nations."

The garden has some plant identification signs and interpretation is occasionally provided during the summer months but seldom provided during the winter months. To the west of the garden is the orchard, covering approximately three acres. To the east of the garden are fields, one of which the park has recently revegetated due to removal of four T-hangars located on federal property. Two existing waysides, recently placed near the entrance of the Fort, tell the story of agriculture and agricultural workers at the Fort.

Fort Palisade and Structures
The 1845 era fort palisade and 14 structures inside the Fort have been reconstructed since 1966. There is a non-historic structure (contact station) located inside the palisade where visitor fees are collected and

orientation occurs. A wide variety of personal and non-personal interpretive elements are located within the palisade.

Waterfront
Fort Vancouver National Historic Site is responsible for managing approximately nine acres on the Columbia River. Currently the City of Vancouver, under a cooperative agreement with NPS, maintains this property as a city park with green spaces and parking facilities. Fort Vancouver NHS staff occasionally provide roving interpretation here and at times have presented evening interpretive programs. Five wayside exhibits interpreting the Fort Vancouver Waterfront were installed in January 2001. Some of these interpret the Oregon Trail. A sixth wayside to complete the waterfront story was installed in the fall of 2001.

Other Programs

School Programs
The national historic site is very popular with local and regional schools. Some 600 groups containing approximately 24,000 students visit the Fort throughout the year, with highest concentrations in the spring. Both HBC and early Army stories are told through this program which also incorporates findings from archaeological research. A teacher's guide was produced in 1996 and over 400 copies were distributed free of charge to local schools, but it is currently out of print. Tours for school groups are adapted to meet the educational needs of the groups. When requested NPS staff will provide a staff member or volunteer to do off-site visits to schools or other educational groups as staffing allows.

Junior Ranger Program
This program is called the Northwest Explorers Program. The park offers a booklet of activities for children to perform. If completed, the children earn a Junior Ranger badge while at the Fort. This is part of a cooperative effort with three other related sites: McLoughlin House National Historic Site (a NPS affiliated unit), Champoeg State Historical Park (Oregon State Parks), and Fort Nisqually Historic Site (Washington State Parks). The program also includes opportunities for children to explore U.S. Army history and other Reserve stories.

Archaeology Field School
Portland State University and the National Park Service conduct a field school for college students at the Fort Vancouver National Historic Site in the summer. Students are given a "hands-on" opportunity to learn about archaeology specific to HBC Native American occupation, and the U.S. military presence in the Pacific Northwest. During this time, the public can visit the excavation areas and speak with participants. In addition, an archaeology lecture series accompanying the field school is open to the public featuring local and national experts in the fields of history and archaeology.

Public Archaeology Program
In addition to the field school and public lectures, the NHS staff conducts archaeology walking tours, tours of the reconstructed fort buildings, and tours of the archaeological collection. Interactive "kids digs" are offered to children to introduce them to the subject of archaeology.

Web Site
Fort Vancouver NHS has recently upgraded its web site to contain a wide variety of information on history, activities, and schedules of programs for the NHS, and Reserve. It also displays basic park administrative documents. It is now possible to print out group reservation forms on the website. It is envisioned that the web site will continue to expand and improve.

Volunteers in Parks Program

The site has approximately 200 active volunteers who donate in excess of 20,000 hours of service each year, primarily in interpretation of both the NHS and the Reserve. Volunteers are involved in all aspects of interpretive services from the garden and blacksmith shop to fort tours and off-site presentations and special events.

General O.O. Howard House and Vancouver National Historic Reserve

Currently, an NPS interpretive staff of five to six people (4.3 full time equivalents) supervised by Fort Vancouver NHS staff, work at the General O.O. Howard House visitor center to provide visitor information and interpretive services to the NHS and the Reserve. Serving as the Reserve visitor center, the General O.O. Howard House visitor center operates on the same schedule as the Fort Vancouver NHS visitor center. Walks and talks are offered daily with several annual and recurring special events and presentations. Fort Vancouver NHS and the General O.O. Howard House interpretive staff also regularly participate in the conceptualization, planning, and implementation of partner interpretive events and activities, serving as consultants, co-hosts, and presenters. Fort Vancouver NHS and the General O.O. Howard House staff also serve on a variety of committees involved in a wide range of Vancouver National Historic Reserve functions, from marketing to providing sponsor support. It is anticipated that the demand for additional activities and NPS involvement in Reserve planning and programs will continue to increase.

Workshops and Seminars

The park's staff hosts and conducts a variety of workshops, seminars, and training sessions. These are usually associated with special anniversaries of the Fort's establishment or other commemorations, such as Archaeology Month.

Library

A park research library is maintained and available for use by staff, volunteers, and the public. Checkout of materials is limited to staff and volunteers. Information is available at the library regarding the NHS, U.S. Army, and Reserve.

Regional Theme-related Sites

McLoughlin House National Historic Site

The McLoughlin House National Historic Site, located in Oregon City, Oregon, includes the McLoughlin and Barclay houses. In 1941, under a cooperative agreement worked out with the Secretary of the Interior, the property became a national historic site (0.63 acres) in nonfederal ownership administered by the McLoughlin Memorial Association (Association). The houses are situated on a Charter Park owned by the City of Oregon City. The neighborhood surrounding the houses is a local historic district and part of McLoughlin's original plat.

There is a strong historical connection between the McLoughlin and Barclay Houses and Fort Vancouver NHS. John McLoughlin was the Chief Factor of Fort Vancouver from 1825-1846. During his tenure there, the Fort grew to become the political, economic, and social center of the entire region. Through his leadership, the first agricultural enterprise, grist and lumber mills, and trade industries were developed in the Pacific Northwest. His greatest legacy was his contribution to the settlement of the Oregon Country. He earned the title "Father of Oregon" for his humanitarian role in providing assistance to American immigrants arriving at the end of the Oregon Trail. When McLoughlin left the Hudson's Bay Company in 1846, he retired to the house he had built in Oregon City, and as a new American citizen cemented his significant place in national history. Here he lived with his wife Marguerite and other family members until his death in 1857.

Forbes Barclay was Fort Vancouver's physician under John McLoughlin. Like McLoughlin, he retired from the HBC and moved to Oregon City. Barclay served as the city's mayor, and was an important community figure for the rest of his life. Though their wives are not as prominently featured in the historical record, Marguerite McLoughlin and Maria Barclay were remarkable women who influenced and supported their husbands. Both came from families of mixed European and American Indian ethnicity. They characterize the complex position of women in the fur trade culture and the transition to active members of a settled American community.

In 1909, the McLoughlin Association saved the house from demolition and moved it from its original location below the falls to its present location on a bluff overlooking the Willamette River. It has been restored to its approximate appearance during McLoughlin's occupancy and contains a number of original McLoughlin furnishings.

As an affiliated unit of the National Park System, this agreement requires the Secretary of the Interior to regulate the way that the Association maintains the historical character of the McLoughlin House and to provide planning and technical advisory assistance. This has included an annual site inspection by the NPS and consultation with staff at the site. In 1966, Fort Vancouver National Historic Site officially assumed responsibilities for providing technical assistance to the McLoughlin House under a cooperative agreement with the Secretary of the Interior.



McLoughlin House National Historic Site in Oregon City, Oregon.



Location map of McLoughlin House National Historic Site.

Tamastslikt Cultural Institute
The Tamastslikt Cultural Institute is located four miles east of Pendleton, Oregon on the Umatilla Indian Reservation. This facility opened in 1998 and presents the visitor with an opportunity to share and participate in the dramatic chronicle of the meetings of two vastly different cultures. It is the only Indian-owned interpretive facility on the Oregon National Historic Trail and the only one that tells the story from the indigenous or native point of view. The institute provides a brief overview of the Oregon Trail but concentrates on the Cayuse, Umatilla, and Walla Walla tribes and their traditional culture.

Oregon Historic Trails Program
Fort Vancouver National Historic Site shares interpretive themes with the Oregon Historic Trails Program recognized by the state of Oregon. This program is coordinated by the Oregon Historic Trails Advisory Council (formerly the Oregon Trail Coordinating Council), whose objective is to "establish Oregon as the nation's leader in developing historic trails for their educational, recreational, and economic values. The Oregon Historic Trails Program, when fully implemented, will help preserve and leverage existing heritage resources while promoting rural economic development and growth through heritage tourism" (Executive Order No. EO-98-16, Office of the Governor, State of Oregon).

National Historic Oregon Trail Interpretive Center
The National Historic Oregon Trail Interpretive Center is located in Baker City, Oregon. It was among the first centers to open on the Oregon Trail. The center interprets the experience of pioneer families who traveled the 2,000-mile Oregon Trail. There are several displays of realistic dioramas and historical exhibits. Visitors can also visit nearby wagon ruts still visible from the pioneers' wagons. In addition to this center, there are two others along the Oregon Trail in Oregon: Four Rivers Cultural Center in Ontario, and the Columbia Gorge Discovery Center and Wasco County Historical Museum in the Dalles.

End of the Trail Interpretive Center
Oregon City, Oregon marked the end of the Oregon Trail for those traveling to the fertile farmland in the Willamette Valley. This center interprets stories through living history of the decisions and preparations that were made for the trip out West and the ensuing adventures. The building is comprised of three 50-foot high covered wagons.

Visitor Use

Visitor Use Patterns

The NPS Cooperative Park Studies Unit in Corvallis, Oregon conducted the most recent visitor survey in 1986 entitled, *1986 Fort Vancouver Visitor Study*. It was conducted during a three-day weekend in August 1986 and showed that 25% of the visitors were 12 years old or younger, 20% were between 30 and 39 years old, and 13% were 60 years old or older. In addition, 46% were males and 54% were women. Over 50% were employed, approximately 20% were homemakers, 4% were students, 9% were retired, 2% were unemployed and 14% were in an "other" category.

Trends showed most visitors to be in a family group, well educated, and predominately from the Vancouver-Portland metropolitan area. Most were first time visitors who stayed an average length of approximately two hours. An updated visitor survey is needed to see how visitation has changed at the national historic site and how visitation has been affected by development of the Vancouver National Historic Reserve. Since this survey, the population of the Portland metropolitan area has changed and according to data, has seen an increase in the amount of international residents and others with limited English speaking ability (Langford, 2000: pp.24-26).

According to the NPS Socioeconomic Services Division in Denver, in 2000 the visitation to the national historic site was 376,688 with approximately 70,000 visitors entering the Fort. Overall visitation for the last ten years has shown a slow steady increase of approximately 3% to 5% per year. Inside the Fort, visitation has been steady at approximately 65,000 to 70,000 per year. This trend is expected to continue. Overall visitation figures do not take into account use of the grounds after evening closure of the park, general recreational use, or use of the NPS waterfront property. It is believed that "after hour" and use along the Fort Vancouver Waterfront would increase overall visitation numbers by 25% to 40%. A table showing visitation for the last ten years follows:

Fort Vancouver National Historic Site
Yearly Visitation 1991 - 2000

Year	Total Visitation	Fort Visitation
1991	245,417	80,707
1992	291,458	73,695
1993*	306,568	85,148
1994	318,366	65,694
1995	310, 309	64,389
1996	352,769	66,127
1997	360,637	60,437
1998	365,326	68,077
1999	377,650	68,854
2000	376,688	72,000

* Visitor counting methods were changed in 1993

Broken down monthly, July has the highest visitation due to the Fourth of July Celebration. The month with the second highest visitation is August with May and June close behind. The lowest visitation occurs in the months of January and December.

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 compliment the purposes of the NHS and its management objectives. Both physical constraints and the more subjective perceptions of what constitutes a quality visitor experience affect it.

Physical limitations at the NHS are defined as the following: maximum seating capacity of the auditorium (present capacity at 40 visitors), total number of parking spaces (present total parking capacity at 144 spaces), total number of picnic tables (7 picnic tables) in the picnic area, and by the size of the public restrooms. Due to the urban setting of the NHS, visitors can access additional parking lots within the Reserve on Evergreen Boulevard (Officers' Row), south Barracks, and at Pearson Air Museum. Visitors can also walk the relatively short distances from Vancouver downtown district or arrive by public transportation. During special events at the NHS, such as Christmas at Fort Vancouver and the Fourth of July, visitation can meet and exceed carrying capacity of the park. However, during regular visitation periods, the NHS is at or below the maximum carrying capacity.

The visitor center lobby and museum exhibit room also have a finite space, but the number of people that these rooms can hold is governed more by what visitors and the NHS staff regard as crowding, and by the possibility of damage to the exhibits that could occur from excessive numbers of people. Even though a reservation system is used, the visitor center can become crowded during spring mid-week mornings for

school groups. During this time, non-school groups often do not get adequate service. The visitor center and auditorium can accommodate approximately 75-100 school children or visitors.

No visitor use management plan currently exists at the NHS. A visitor use management plan needs to be prepared to define the desired resource and social conditions within the visitor center during the school group visitation season of April and May and set the level of acceptable use that will maintain those conditions. With the paved walks that lead from the visitor center, resource damage and excessive concentrations of visitors outside the visitor center does not seem to be a problem.

Park Special Uses

The national historic site's large attractive open grassy areas are inviting to a variety of community groups hoping to conduct private and public events. As the park's visibility in the region has grown, , the demand for events has grown. In fiscal year (October through September) 1996, 17 events were permitted, in 1997 there were 23, in 1998 there were 25, in 1999 there were 19, and in 2000 there were 25. Along with the increase in overall numbers of events, many of these have become larger and more complex events, necessitating significant staff time for review, planning, monitoring, and administration. This trend is expected to increase as groups attend or hear about events conducted at the site and as the public's knowledge of the Reserve grows.

Recreation Fee Demonstration Program

The National Park Service is participating in a program called the Recreation Fee Demonstration Program (Public Law 104-134 and amended by Public Law 104-208). The program allows parks to retain generated income from fees through 2004 and to use them for their own park operation and maintenance until 2006. This is a pilot program that may become permanent in the future. The NHS is currently participating in this program. Proceeds have been used for digitizing images of park objects in the archaeology study program.

Socioeconomic Factors

Location and Access

Fort Vancouver National Historic Site is located within the city limits of Vancouver, in southwestern Washington on the north shore of the Columbia River. It is immediately north of the city of Portland, Oregon, and 106 river miles from the Pacific Ocean. Major road approach routes are Interstate 5 from the north and south, and Interstate 84 from the east. Seattle is 165 miles north, Olympia is 100 miles north, Portland is 8 miles south, Eugene is 110 miles south, Pendleton, Oregon is 215 miles east, and Astoria, Oregon is 105 miles west.

The site is in Congressional District #3 of the state of Washington. Fort Vancouver NHS is situated in Clark County.

Regional Setting

Historically, the natural landscape was a mixture of plains, coniferous forests, streams, and lakes, with the Cascade Mountains visible in the distance. The fort palisade, the heart of the Hudson's Bay Company operations, was located on a low lying river plain called Fort Plain, approximately six miles upriver from

the confluence of the Columbia and Willamette rivers. The abundant natural resources and strategic position on the Columbia River made possible the site's political and economic importance beginning with the British HBC and continuing with the U.S. Army's occupation and American settlement of the Pacific Northwest. Today, the national historic site contains approximately 209 acres and includes resources that relate to both the HBC occupation and the U.S. Army's Vancouver Barracks.

The City of Vancouver is part of the greater Portland/Vancouver Metropolitan area. The adjacent urban areas of Vancouver and Portland are on opposite shores of the Columbia River. The Willamette River at the foot of the Willamette Valley bisects Portland. The area is bordered on the east by the Cascade Mountains and on the west by coastal mountains.

Land Use and Ownership Patterns

All lands within the boundary of Fort Vancouver National Historic Site were park-zoned by the NPS as "historic" in the 1978 *Fort Vancouver National Historic Site Master Plan* and are listed on the National Register of Historic Places. Two subzones are identified on the existing Land Management and Use map for present nonhistoric uses. One is a development subzone in the northeast corner of the NHS where the visitor center, residence, administration, and maintenance facilities are accommodated.

A second subzone is a special use subzone for permits and leases which are in effect with the City of Vancouver for an airfield, and a right-of-way for the Burlington Northern Railroad for a track line. These special land uses occur in the southern portion of the NHS immediately adjacent to the reconstructed Fort. The NPS has entered into a Memorandum of Understanding with the City of Vancouver, which allows the city to use the Fort Vancouver waterfront property until the year 2007. In return, the city has agreed to maintain the property.

Fort Vancouver is situated in an urban setting within the boundaries of Vancouver's Central Park. A growing and vibrant downtown, Vancouver is situated west of the NHS across Interstate 5 right-of-way. The national historic site is immediately bordered on the south by the Columbia River, on the west by the U.S. Army's Vancouver Barracks, on the north by the City of Vancouver's Officers' Row and on the east by the city's Pearson Airfield and private residences. The NHS is bisected east to west on its southern end by a city street right of way, a double track railroad berm, and State Route 14. The City of Vancouver also maintains a right of way for East Fifth Street, which bisects east to west, the northern two-thirds of the site.

Fort Vancouver NHS is located within the recently established 366-acre Vancouver National Historic Reserve. The Reserve is a mixture of management and ownership between the federal government and the City of Vancouver. The Reserve includes the following: Fort Vancouver NHS (owned by the federal government and managed by the National Park Service); Vancouver Barracks (owned by the federal government and managed by the U.S. Army); Officers' Row (owned and managed by the City of Vancouver); Pearson Airfield (portions owned by the federal government and the City of Vancouver); and the Water Resources Education Center, a marine park and portions of the Columbia River waterfront (owned by the City of Vancouver). (Refer to Figure 2, Ownership).

Pedestrian Overpass

Washington Department of Transportation (WSDOT) is planning to construct a pedestrian overpass above State Route 14 in mitigation for the construction of the Interstate 5/State Route 14 interchange improvements. The proposal is to construct an elevated walkway above State Route 14 connecting the City of Vancouver's Old Apple Tree Park with the Village area at the NHS. The proposed structure is envisioned to be a circular ramp 100 feet in diameter on NHS property that would elevate the 10 foot side

pedestrian/bicycle crossing about 17 feet above State Route 14. Another ramp on the south side of would be constructed at Old Apple Tree Park. Construction would include grading, draining, surfacing, paving, and landscaping.

Fort Vancouver NHS was listed on the National Register of Historic Places in October 1966. Old Apple Tree Park was determined eligible for inclusion in the National Register in March 1981. In compliance with Section 106 of the National Historic Preservation Act, testing was undertaken to conduct excavations in the project area.

Contemporary Tribal Communities

In spite of the centuries long occupation of the Vancouver, Washington and metropolitan Portland, Oregon areas by American Indians prior to the arrival of Euro-Americans in the early nineteenth century, the closest tribal reservation communities are about 50 miles away from Fort Vancouver. Such tribal communities are located in both the states of Washington and Oregon in the form of reservations that are occupied by members of federally recognized tribes. In Washington, these reservation communities include Shoalwater Bay to northwest of Fort Vancouver, Chehalis to the north and Yakama to the northeast. In Oregon, these reservations include Warm Springs to the southeast and the Grand Ronde and Siletz reservations to the southwest.

In addition to the tribal reservations noted above, other tribal communities in the vicinity of Fort Vancouver include members of the Chinook Indian Tribe/Chinook Nation whose acknowledgment as a federally recognized tribe in early 2001 is currently under review by the present federal administration. Although the Chinook do not have reservation lands, they represent a contemporary tribal community that lives among non-Indians in the area surrounding Fort Vancouver. Likewise, in this ethnically diverse area of Washington and Oregon there are dispersed Native Americans who may constitute both American Indian and Native Hawaiian communities who have interests in and historical connections with Fort Vancouver.

Population Trends

Until the recent recession, Clark County was one of the most rapidly developing of Washington's 39 counties, accounting for 5.1% of the state's population in 1993. Last year widespread layoffs occurred in manufacturing and high-tech industries in Clark County. Thus, unemployment has risen faster here than any other urban county in Washington State. According to the Labor Department, Washington State now has the highest unemployment in the nation (Bernton 2001: p.A1).

The southwest portion of the county contains the largest share of the population. Clark County is one of five counties included in the Portland Consolidated Metropolitan Statistical area and represents 16.4% of the metropolitan total in 1992 (Clark County 1997: pp.7-2). (Note that the statistical figures represented in this section were available up to the year 2000 and do not represent the latest economic downturn that began in Clark County in late 2000.)

Population Statistics

Year	Washington State	Clark County	Vancouver
1980	4,132,353	192,227	42,834
1990	4,866,693	238,053	46,380
2000	5,803,400	345,000	137,500

From 1980 to 1990, Vancouver's population increased approximately 9% and Clark County's population grew by 24%. By comparison, the state's population during this same period rose approximately 2%. However, rapid growth occurred from 1990 to 2000 when Vancouver's population increased approximately 196%. (Part of this growth was in 1997, when Vancouver gained an estimated 55,000 new residents through the largest annexation in state history.) During this same period Clark County's population increased 45%, 10,839 additional people as a result of net migration. Washington State's population increased approximately 19%, 553,827 a result of net migration and 382,910 from natural increase (Washington State Office of Financial Management 2000: Internet, no page number).

The City of Vancouver offers a mix of specialty retail and business services that support the financial and professional center of the community. Downtown Vancouver's largest employers include publishing, telecommunications, hospitality, public services, and finance. Large manufacturing firms are also located near the downtown core, which is entering into a period of major redevelopment. Vancouver is currently undergoing growth in both commercial and residential development, with major employers in such fields as health care, the high-technology industry, paper manufacturing, retail, professional and service businesses, and regional and corporate headquarters (Vancouver Chamber of Commerce 2001).

Clark County is one of the faster growing counties in the greater Portland metropolitan market and has seen a population increase of over 33% since 1990. Clark County's economy has remained stable because of its economic diversity, which may help it through the country's latest downturn. Such internationally known firms as Hewlett-Packard, Kyocera Industrial Ceramics, Fort James, Sharp Micro-Electronics, WaferTech, and Farmers Insurance lead the economy. The county's work force is educated and noted for its strong work ethic. More than 90% of adults in the county have completed high school or gone on to higher education; 56% have attended college, graduated or pursued advanced degrees (Vancouver Chamber of Commerce 2001).

The projected high 2012 county population based on the Washington State Office of Financial Management allocation is 416,071. It is also projected that consistent with national trends, the percentage of elderly persons will increase to 17.5% of the total population by 2013. Approximately 90% of county population growth over the next 20 years is expected to occur in designated urban growth areas (Clark County 1997: pp.2-3).

Demographics

Washington State	Total	White/ Caucasian	Black/ African American	Indian, Eskimo, and Aleut	Asian and Pacific Islander	Hispanic Origin
1990	4,866,692	4,411,407	152,572	87,259	215,454	214,570
1999	5,757,400	5,107,571	198,670	109,509	341,650	356,464

Clark County	Total	White/ Caucasian	Black/ African American	Indian, Eskimo, and Aleut	Asian and Pacific Islander	Hispanic Origin
1990	238,053	226,940	3,022	2,368	5,723	5,872
1999	337,000	314,457	5,476	3,543	13,525	11,942

Clark County's minority populations increased from 4.8% in 1980 to 5.4% in 1990. In the City of Vancouver's urban area, minorities increased from 5.5% in 1980 to 7.0% in 1990. Asians were the largest minority group, followed by Hispanic, Black, American Indian, and others. Hispanic populations

accounted for the greatest gain, doubling within this ten-year period (City of Vancouver and Clark County, Volume I: p.62). In recent years, there has been an influx of immigrants from Eastern Europe and Russia into Clark County and while not racial minorities, they are a distinct ethnic community (Clark County 1997: pp.4-5).

Medium Household Income

Year	State	Annual Increase	Clark County	Annual Increase
1989	31,183		31,800	
1990	31,798	2.0%	32,498	2.2%
1991	33,686	5.9%	34,324	5.6%
1992	34,980	3.8%	34,909	1.7%
1993	36,344	3.9%	36,846	5.5%
1994	37,166	2.3%	38,694	5.0%
1995	38,089	2.5%	39,794	2.8%
1996	39,899	4.8%	42,365	6.5%
1997	41,999	5.3%	44,326	4.6%
1998	44,134	5.1%	45,448	2.5%
	Per Annum	3.9%	Per Annum	4.0%

Medium income is defined as the mid-point of all the reported incomes. The county median household income is close to the statewide medium (Clark County 1997: pp.5-6).

The City of Vancouver is characterized by a diverse economy having several large employers producing a wide variety of products and services. The state's median household income increased approximately 41% from the period 1989 to 1998. Clark County's income for the same period increased approximately 43%.

Economically Disadvantaged Demographics
No survey or interview data exist for the percentage of NHS visitors whose income is below the poverty line.

Fort Vancouver National Historic Site Agreements and Legislative Mandates

The following agreements are existing legal agreements and legislative mandates that influence both planning and operations at Fort Vancouver National Historic Site:

- Statutory Warranty Deed dated April 4, 1972 to April 3, 2002. The deed is a land purchase by the NPS with rights to the City of Vancouver to conduct aviation activities on approximately 75 acres.
- Memorandum of Understanding (MOU) between the City of Vancouver and NPS signed May 29, 1987. This MOU is an agreement in which both parties recognize a mutual interest in the use and maintenance of the bandstand. The agreement lays out individual responsibilities for five years. (This agreement needs updating.)
- Memorandum of Understanding between the City of Vancouver and the NPS signed March 10, 1982. This MOU allows for development and maintenance of NPS waterfront property by the City of Vancouver for the utilization of the area as a public park. This agreement is for a 25-year period and expires on March 9, 2007.
- Memorandum of Understanding between the City of Vancouver and the NPS, signed November 4, 1994. It states that both parties endorse the findings of the final *Vancouver National Historic Reserve Feasibility Study and Environmental Assessment.*

- Amendment to the 1978 *Fort Vancouver National Historic Site Master Plan* signed September 5, 1995. This action adopted the *Site Plan and Environmental Assessment for the M.J. Murdock Aviation Center* that approved the construction and rehabilitation of structures and landscapes at Pearson Airfield on NPS property.
- Cooperative Agreement between the City of Vancouver and the NPS, signed in December 1995. This agreement allows for city activities (such as Pearson Air Museum) to be conducted on approximately seven acres of NPS land. This 30-year agreement expires in December 2025 and serves as an amendment to the 1978 *Fort Vancouver National Historic Site Master Plan.*
- Interior Appropriations Bill rider for Fiscal Year 1996 signed in March 1996. The rider states that the National Park Service "...shall permit general aviation on its portion of Pearson Airfield in Vancouver, Washington until the year 2022, during which time a plan and method for transitioning from general aviation aircraft to historic aircraft shall be completed; such transition to be accomplished by that date..."
- Establishing legislation for Vancouver National Historic Reserve, signed November 11, 1996. The legislation called for a cooperative management plan to be prepared for the Reserve and provided for funding authorization.

Land Use Documents, Related Plans, and Programs

Clark County Documents

Clark County 20-Year Comprehensive Growth Management Plan
This plan, revised in December 1997, was developed to manage the county's growth in ways that would result in a better quality of life by protecting and conserving natural, financial, and human resources. The plan has three major components: an introduction, the community framework plan, and a 20-year comprehensive growth management plan.

The Comprensive Growth Management Plan is divided up into the following 11 elements (eight required by law and three others that the county found important to the future success of growth management in the county): Land Use, Transportation, Rural and Natural Resources, Housing, Capital Facilities and Utilities, Economic Development, Parks and Open Space, Historic Preservation, Community Design, Annexation, and Procedures for Planning. County-wide policies are presented for each.

Clark County Trails and Bikeway System Plan
The 1992 plan is a comprehensive plan for a non-motorized trail and bikeway system within Clark County. It focuses on providing trails and bikeways for non-motorized travel by pedestrians, bicyclists, and equestrians and providing a system that links major points of interest throughout the county to meet recreation, fitness, and commuting needs.

The Columbia River Waterfront Trail crosses Fort Vancouver NHS at the Columbia River. This right-of-way trail is part of the City of Vancouver's Columbia River Renaissance Project—a 12 mile trail stretching along the waterfront between Frenchman's Bar to Interstate 205 interchange—with linkages to other city destinations. Designed for both pedestrians and bicyclists, the objectives for the trail are:

- To promote and facilitate the highest possible level of public participation in the development, operation and maintenance of a continuous pedestrian bicycle trail along the Columbia River corridor, with the results to be:
  - 1) Strong public support for a natural, greenspace corridor contiguous to the Columbia River and its affiliated lowlands;
  - 2) Increased awareness and use of alternative forms of transportation; and

- 3) Increased public demand for, and willingness to support new trails and bikeways throughout the county (Clark County 1992: pp.18-19).

The Vancouver Lake Corridor is part of a regional system of trails that stretch between State Route 501 north to Ridgefield. The southern portion of this trail will connect to the Columbia River Renaissance Project trail system. The goal is to develop a north-south trail and bikeway system connecting south of Vancouver Lake to Ridgefield. Its objectives are:

- Coordinate with the City of Vancouver Renaissance Project and Mill Plain Extension projects to develop trail and bikeway connections from the City of Vancouver Columbia River Waterfront to the Vancouver Lake Corridor.
- Prepare a detailed plan for trails and bikeways for the Vancouver Lake Corridor. Continue acquisition of missing rights-of-way links.
- Develop initial trails to link Salmon Creek, Burnt Bridge Creek, Vancouver Lake Park, the proposed Frenchman's Bar Regional Park and the City of Vancouver Renaissance Project (Clark County 1992: p.23).

A description of Fort Vancouver NHS is mentioned on page 34 of the report as a point of interest along the trail.

Clark County Parks, Recreation and Open Space Plan

This plan was produced in 1994 as the "parks" element of the Comprehensive Land Use Plan. It is the county's blueprint for acquiring, developing, and maintaining parks, trails, recreation facilities and open space. It is also used to guide the provision of recreation services and programs throughout the country. A general description of Fort Vancouver NHS is given under the heading of "Other Agency Facilities" (Clark County 1994: p.20).

City of Vancouver Documents

City of Vancouver Central Park Plan (A Park for Vancouver: A Concept Plan)

This plan was prepared for the City of Vancouver by Management and Planning Services (The NBBJ Group) in February 1979. The area consists of 640 acres of open space and public use areas adjacent to downtown Vancouver. Once part of a four-mile military reservation, it was reduced to one square mile or 640 acres by an order from the U.S. Secretary of State in 1853. It is defined by Interstate 5 on the west, Fourth Plain Boulevard on the north, the Columbia River on the south and East Reserve Street on the east. The entire Fort Vancouver NHS is within the Central Park Plan boundary. Through recent legislation, this plan has essentially been replaced by the 1999 *Vancouver National Historic Reserve Cooperative Management Plan* for that portion of Central Park located within the Reserve.

Thirteen federal, state, and local agencies own land within the site along with a few private entities. The City of Vancouver has responsibility for the major street and infrastructure systems. Because of this ownership pattern, one of the goals of the plan was to provide coordinated and comprehensive development. The plan is directed to promote the cultural, historical, and recreational assets of the area, while providing an employment and public service base to the community. One aspect of the plan is to implement the city and county foot trail and bikeway system for Central Park.

Recommended actions throughout the document that would affect the national historic site included the following:

- Designation of Fort Vancouver as a National Historic Park with expanded scope to include aviation, military history and the performing arts.
- Revision of Fort Vancouver's master plan to include more facilities on the Columbia River—historic Salmon Store, wharf, small pond, and boat house.

- Increase priority of NPS to commit funds to complete park improvements, such as the Fort, Village, Fort Vancouver Waterfront, orchard, and fields.
- Construction of a pedestrian overpass to be included as part of the reconstruction of the Interstate 5 interchange by Washington State Department of Transportation.
- Construction of a landscaped greenbelt along the riverfront on NPS property.
- Realignment of Columbia Way (with the railroad realignment) to allow for a widened greenbelt area.
- Removal of the Pearson Airfield hangars from NPS leased land and the exchange of control of land below East Fifth Street from the U.S. Army to the National Park Service for development of the Village.
- Restoration of the bandstand on the Parade Grounds.
- Preservation of buildings for an Air Museum.

In addition to the development of the master plan, development guidelines were also developed for the area. An advisory commission was established to review and approve any proposed area development with the understanding that not all agencies, by law, have to conform to local zoning and building codes and would not have to comply with local design review procedures.

City of Vancouver Comprehensive Plan: Visions for the Vancouver Urban Area

In 1990, the state of Washington adopted the Growth Management Act. The act directed counties and cities over a certain size to prepare comprehensive plans to guide growth for the next twenty years. Vancouver's Comprehensive Plan was adopted in 1994 and contains four volumes: the Resource Document, the Growth Management Plan, the Technical Supplement, and the Implementation Program. The Resource Document contains the background information upon which the plan was based. The Resource Document indicates that Fort Vancouver NHS is part of the Central Park downtown character district (see *City of Vancouver Central Park Plan*). Fort Vancouver is mentioned several times both in the "History" and "Historic Property" sections.

City of Vancouver Zoning

The City of Vancouver provides land use regulations through Chapter 20, the City's zoning code. The zoning code is intended to protect the public's health, safety, and welfare and to encourage the most appropriate use of the land. The zoning code and map indicate that Fort Vancouver NHS is in the Vancouver Central Park District. All development in this district must comply with the Vancouver Central Park Design Guidelines. Though the City of Vancouver, through its zoning powers, does not have jurisdiction over federally owned lands, Fort Vancouver NHS management has endorsed the Central Park Plan.

City of Vancouver Columbia River Renaissance Vision and Planning Process Documents

The *Columbia River Renaissance Vision* was prepared in January 1993 followed by the *Columbia River Renaissance Planning Process Document* in May 1993. Both provide a comprehensive, coordinated, and long-range strategy for development of the urban waterfront along the Columbia River. The planning documents are efforts by the City of Vancouver to address past incompatible landuses, detrimental environmental impacts, and diminishing public access. The three goals of the vision are:

- Develop an attractive, vital, and safe urban waterfront
- Facilitate contiguous public access and enjoyment of the Columbia River
- Preserve, promote, and interpret the historical and environmental importance of the Columbia River Basin (City of Vancouver 1993: p.1)

The Columbia River Renaissance encompasses five key elements that should be considered together to balance the overall strategy of the Columbia River Renaissance vision. These are exceptional urban design, protection and interpretation of historic resources, economic development, environmental stewardship, and recreational opportunities (City of Vancouver 1993: p.1).

The study area comprises 12 miles of waterfront from Vancouver Lake and Frenchman's Bar to the Interstate 205 interchange. It includes residential, commercial, industrial, sea port and conservation lands, and major surface transportation routes. The waterfront section, managed by Fort Vancouver NHS and leased to the city, is within the boundaries of this plan. The map (separate poster) included with the plan provides the following information and proposals for Fort Vancouver NHS and Waterfront Park. It is mentioned as a public/private partnership among the city, WSDOT, and NPS:

> Fort Vancouver National Historical Site [sic] interprets the Hudson's Bay Company and subsequent trading on the Columbia River. Waterfront Park is part of the Washington's front door, visible from the Interstate Bridge, and provides a riverside experience close to downtown. Columbia Promenade connects Vancouver Landing, the fishing pier, and the Captain Vancouver Monument with Old Apple Tree Park and Columbia Shores. Includes beach access ramps for the disabled. Planned pedestrian overpass of SDR 14 connecting Fort Vancouver with Old Apple Tree and Waterfront Parks, Waterfront trolley. Remove, lower or open views through railroad berm and provide additional pedestrian and bicycle crossings over railroad and SR 14 (see poster).

Vancouver Downtown Transportation System Plan, Historic Reserve Area Analysis

This report published in November 1999 summarizes the transportation analysis of the Vancouver Historic Reserve Area, conducted as part of the *Downtown Vancouver Transportation System Plan*. The study area is defined by Interstate 5 on the west, Mill Plain Boulevard on the north, State Route14 on the south and Reserve Street on the east. It focuses on traffic operations and parking capacity, future street, bicycle and pedestrian system improvement needs.

The city has zoned all land within the study area as "Vancouver City Park," though a number of current non-park uses occur. C-TRAN provides daily and weekend bus transit with connections both to downtown and greater Vancouver area on Evergreen Boulevard and Columbia Way surrounding the NHS. State Route 14 is designated a commuter route. In addition, the Marshall Center shuttle bus operates for free along Reserve Street and Evergreen Boulevard.

Part of the plan includes provision for inter-neighborhood linkages with emphasis on non-motorized travel. To enhance this, the plan recommends additional bicycle lanes, vehicle and bicycle shared lanes, and multi-use paths for bikes and pedestrians. Immediately adjacent to the NHS, projects would include a reconstruction for Fort Vancouver Way (south of Evergreen Boulevard) to safely accommodate vehicles, bicycles, and pedestrians. In addition, bike lanes would be added to Evergreen Boulevard. A multi-use path is planned along East Fifth Street, through the NHS and over a proposed overpass linking Old Apple Tree Park (as part of the Discovery Historic Loop Trail) to the existing multi-use path along the waterfront (Columbia River Trail). The Discovery Trail is an urban trail system formed in 1968 to link recreation and historic sites in the city and county.

Vancouver Greenspaces Program

Vancouver Greenspaces is part of the Metropolitan Greenspaces, a cooperative regional system of natural areas, open space, urban forests, trails, and greenways for wildlife and people. It is coordinated by the Portland region's Metropolitan Service District (METRO). The program involves four counties, Clark, Multnomah, Washington, and Clackamas within the Vancouver-Portland region. The Columbia River and protected areas such as Burnt Bridge Creek, Blandford Drive Canyon, and Vancouver Lake serve as critical links to the character of the Greenspaces natural resources protection plan. The progam seeks active ways to involve local citizens in forever protecting natural areas, including parks, recreational trails, greenways, open spaces, and other natural areas, preserving wildlife habitat and creating greenway corridors for plants, wildlife, and people. Local citizens are encouraged to create backyard wildlife sanctuaries to create linkages to these larger conservation areas.

Related National Park Service Plans

Vancouver National Historic Reserve Cooperative Management Plan
The Reserve was established as a result of a study by the congressionally chartered Vancouver Historical Study Commission. The commission's April 1993 report recommended the establishment of the Reserve to preserve, protect, enhance, enjoy, and use significant historic, cultural, natural, and recreational resources in this area.

The establishing legislation directed that a management plan be prepared for the Reserve. In November 1999, the NPS produced the final *Vancouver National Historic Reserve Cooperative Management Plan* in cooperation with the City of Vancouver, the U.S. Army, and the Washington State Office of Archaeology and Historic Preservation. These four public agencies, referred to as the Reserve Partners, are responsible for the coordinated preservation and management of the historic reserve for the public's benefit. The plan's recommendations include an active public/private partnership in administering the shared assets of the Reserve with support from the Vancouver National Historic Reserve Trust, a private nonprofit organization. The 366-acre Reserve encompasses Fort Vancouver National Historic Site, Vancouver Barracks, Officers' Row, Pearson Airfield, the Water Resources Education Center, a marine park, and portions of the Columbia River waterfront.

The three broad goals presented in the CMP can be summarized as follows:
- Preservation of historic structures, physical assets, and cultural landscapes.
- Education and interpretation of the significance and history of the area for public benefit.
- Public use of and accessibility of the Historic Reserve (National Park Service 1999: p.iii).

The overlapping goals will be reached through public/private partnerships and by seeking economic balance and sustainability between public and private funding sources for all new endeavors. Public use and enjoyment will be encouraged and supported by an active interpretive and educational program, based on research and on the preservation of the areas historic structures and landscapes.

The final cooperative management plan states that a general management plan has begun for Fort Vancouver NHS. It goes on to state that the GMP would be consistent with the Reserve CMP and would address the following specific issues raised during the Reserve planning process:
- Continued reconstruction of Fort Vancouver consistent with NPS policy and interpretive objectives
- Options for the visitor center
- Relocation of parking for the Fort to a less obtrusive area
- Expansion of interpretive activities at the Village
- Expanding and partially restoring the orchard, garden, and other cultural landscape features (National Park Service 1999: p.27)

As mentioned in the CMP, the National Park Service would serve as the lead agency in interpretation for the Reserve. As part of this responsibility, the NPS staff would coordinate and train interpreters and volunteers. In addition, the NPS would develop and coordinate an ongoing evaluation of the Reserve's interpretive program.

Among its many provisions, the cooperative management plan called for each Reserve partner with land management responsibility to manage its land within the cooperative framework of the approved version of the plan and existing policies and regulations. The Reserve partnership and legislation was established fully respecting the authorities and jurisdiction of each of the partners. The plan also specified that Fort Vancouver National Historic Site would continue to be managed by the NPS consistent with its mission and with its laws, policies, and regulations. Therefore, the NPS maintains its responsibilities for the

management and implementation of the national historic site. The superintendent at Fort Vancouver NHS serves as the National Park Service's representative as one of the Historic Reserve partners.

Cultural Landscape Report: Fort Vancouver National Historic Site
This report contains two volumes documenting the cultural landscape of the national historic site. Volumes I and II were written in 1992 by Terri Taylor of the NPS Columbia Cascades Support Office, and Patricia C. Erigero, Project Historian.

This report serves as a technical document to supplement future planning processes. The intent of the project was to identify and evaluate all significant cultural landscape resources and provide management recommendations for the preservation and enhancement of the 1845 historic scene at Fort Vancouver. The study investigated and documented a range of treatments for reestablishing key landscape components and features that contribute to interpreting a full spectrum of HBC operations and activities. Fort Vancouver NHS staff propose a reassessment of this plan during the GMP process.

The final design recommendations and cultural landscape plan for the Cultural Landscape Report were based on NPS resources after the year 2002 when the city would have vacated the Pearson Airfield property. Vacation has recently been extended by legislation to the year 2022.

Whitman Mission National Historic Site General Management Plan
The NPS recently completed a new general management plan for Whitman Mission NHS in May 2000. An act established the site to be a public national memorial to Marcus and Narcissa Whitman, who established an Indian mission and school to minister to the Cayuse Indians until their deaths in 1847.

Fort Vancouver National Historic Site and Whitman Mission National Historic Site share the same period in history. Many travelers stopping at Whitman Mission were on their way to Fort Vancouver to pick up supplies and ultimately to settle in Oregon's Willamette Valley. The Whitmans and Spauldings spent their first winter in the Northwest at Fort Vancouver. Several park themes are shared as well, such as the expansion of the nation's boundaries to the Pacific Ocean and agricultural developments located at the northwest corner of the country.

Establishment of the 1968 National Trail System Act gave added significance to the site. In 1978, the Oregon National Historic Trail was established and Whitman Mission was recognized as a historic site along the Oregon Trail.

Nez Perce National Historical Park and Big Hole National Battlefield General Management Plan
The NPS completed an updated general management plan for Nez Perce National Historical Park in September 1997. The park was created to facilitate protection and provide interpretation of sites in the Nez Perce Country of Idaho that have exceptional value in commemorating the national history. This includes sites relating to early Nez Perce culture, the Lewis and Clark expedition, the fur trade, missionaries, gold mining, logging, the Nez Perce War of 1877, and others that depict the role of the Nez Perce country in the westward expansion of the nation.

Of a total 38 sites that comprise the park, two sites are specifically associated with the missionary period—Lapwai Mission, where the first Spalding mission was located, and Spalding where Henry Spalding had his second mission. (The Spalding Unit is 11 miles east of Lewiston, Idaho.) Both Dr. Marcus Whitman and Henry Spalding arrived together in the Northwest at Fort Vancouver to begin their missionary work among the Indians. Their missions were approximately 100 miles apart or two to three days by horseback.

Comprehensive Management and Use Plan Update, Oregon and Mormon Pioneer National Historic Trails

This August 1999 plan serves as an update to the 1981 *Comprehensive Management and Use Plan for Oregon Trail* prepared by the NPS. Fort Vancouver is mentioned as a destination on the Oregon Trail on page 36:

> The overland portion of the trail ended at The Dalles until 1846, when the Barlow Road was opened. Before that time, the emigrants built rafts to travel down the Columbia River to Fort Vancouver, and then up the Willamette River to Oregon City. After 1846 most emigrants preferred to head south from The Dalles to Tygh Valley and then west across the southern shoulder of Mount Hood on the Barlow Road. They then crossed the Cascade Range at Barlow Pass and descended into Oregon City.

The management plan identified high-potential sites and segments as required by the National Trails System Act. Fort Vancouver is identified as a high-potential site. According to the National Trails System Act, high-potential historic sites are defined as the following:

> Those historic sites related to the route, or sites in close proximity thereto, which provide opportunity to interpret the historic significance of the trail during the period of its major use. Criteria for consideration as high potential sites include historic significance, presence of visible historic remnants, scenic quality, and relative freedom from intrusion (National Park Service 1999: p.4).

In Appendix H, the description for Fort Vancouver as a high-potential site is stated as follows:

> Founded by the Hudson's Bay Company in the winter of 1824-25 as a fur trading post and supply depot, Fort Vancouver was the most important settlement in the Pacific Northwest for more than 20 years. Dr. John McLoughlin, Chief Factor of the post until 1845, greatly assisted the exhausted, penniless emigrants who arrived at his doorstep. He helped them with transportation, lodging, subsistence, and even extended credit for supplies obtained at the post until they could raise their first crops. When John Boardman arrived on November 3, 1843, he was "well received by Doct. McLaughlin, who charged nothing for the use of his boat sent up for us, nor for the provisions, but not satisfied with that sent us plenty of salmon and potatoes furnished us house room, and wood free of charge, and was very anxious that all should get through safe." The First Regiment of Mounted Riflemen arrived at Fort Vancouver on October 4, 1849, after their long march overland from Fort Leavenworth and established the first U.S. Army base in the Pacific Northwest. Today, Fort Vancouver is operated as a National Historic Site and includes a replica of the original Hudson's Bay Company post (National Park Service 1999: p.312).

According to the superintendent of the Long Distance Trails Office, the McLoughlin House, which was not included during the original planning process, will be added as an amendment to the comprehensive management plan as a high-potential site.

Lake Roosevelt National Recreation Area General Management Plan

The final general management plan for Lake Roosevelt National Recreational Area (NRA) was produced by the NPS in September 1999. The legislative purpose of the NRA is to provide opportunities for outdoor recreation for the public; to preserve the integrity of natural, cultural, and scenic resources; and to provide opportunities to enhance public appreciation and understanding about the area's significant resources.

American and British fur traders built posts at Fort Spokane (1810), Fort Okanogan (1811), and Fort Colvile (1825). When the Grand Coulee Dam was constructed, the valley floor was inundated and most historic sites were destroyed. However, these sites are interpreted as part of the overall interpretive program at the NRA.

San Juan Island National Historical Park General Management Plan
The last general management plan for San Juan Island National Historical Park was completed in 1979. A new GMP is in progress in cooperation with the NPS Columbia Cascades Support Office. The purpose of San Juan Island NHP 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.

From 1853-1859 there were various disputes on San Juan involving the HBC and it's British citizens. The Hudson's Bay Company farmsite "Belle Vue" was located south of American Camp and was a successful sheep and livestock farm employing about 20 people. A tense situation climaxed in 1859 when an American settler on the island killed a hog belonging to a HBC officer because it was routing in his garden. This resulted in the "Pig War," a stand off between British and United States forces, but ended peacefully with eventual arbitration placing the San Juan Archipelago within the boundary of the United States.

Lewis and Clark National Historic Trail Comprehensive Plan for Management and Use
The National Parks and Recreation Act of 1978, Public Law 95-625, amended the National Trails System Act to include the new category of national historic trails and designated the Lewis and Clark Trail as one of four national historic trails. National historic trails are considered units of the National Park System and have as their purpose the identification and protection of historic routes and their remnants and artifacts for public use and enjoyment. The comprehensive plan, produced in January 1982, recommends the development of opportunities for retracing nearly all portions of the historic expedition route, either as a water trail, a land trail, or a motor route. The entire Columbia River is a water trail of the Lewis and Clark National Historic Trail and runs adjacent to Fort Vancouver National Historic Site.

Fort Vancouver is mentioned as a national site along the Columbia River on page 76 of the document:

> Fort Vancouver National Historic Site is located in the city of Vancouver, Washington, near the Columbia River waterfront at mile 107 (Map 43), National Park Service. Although the establishment of this Fort postdates the Lewis and Clark Expedition, the site has an indirect relationship to the Expedition and has the potential to provide some Lewis and Clark interpretation. Just as one purpose of the Expedition was to strengthen U.S. claims to at least a part of the Oregon country, the establishment of Fort Vancouver in 1824-25 by the Hudson's Bay Company was designed to strengthen Britain's claim. In addition, Lewis and Clark's reports had a significant influence on the expansion of the fur trade to the Northwest, an area of commerce which the Hudson's Bay Company very successfully exploited. These relationships to Lewis and Clark should be developed at Fort Vancouver.

Though Lewis and Clark are not currently interpreted at the NHS, park staff have begun discussions on potential projects with the local representatives of the Lewis and Clark National Committee.

Recreational Resources

Clark County and surrounding areas offer a wide range of outdoor recreation opportunities to residents and visitors. The county presents a variety of environments from the Columbia River to the forests of the Cascade Mountains. There is a notable mix of urban walking and biking trails located throughout the Vancouver area. Federal, state, county, and city areas provide a wide variety of recreational choices.

Types of Recreational Use

Forests and Wildlife Refuges
Gifford Pinchot National Forest is located to the northeast of Vancouver. Visitors can reach the national forest from Vancouver in approximately one hour. Recreation opportunities available include camping, hiking, cross-country skiing, and hunting. Ridgefield National Wildlife Refuge, located approximately 20 miles to the northwest of Vancouver, provides visitors with boating opportunities on the Columbia River, as well as hunting for waterfowl and bird watching.

State Parks
Battle Ground Lake State Park and Paradise Point State Park both offer camping, fishing, hiking and picnicking. Both are located in Clark County approximately 45 minutes from the NHS.

Boating and Fishing
There are several access points for boating on the Columbia River from Vancouver's Marine Park and Frenchman's Bar Park to private marina and boat launch areas. There is canoeing at Vancouver Lake Park and Lacamas Lake Park. The Lewis River that serves as the county's northern boundary is also popular with both motorized and human powered boaters. Each of these water bodies offers a variety of fishing opportunities.

Golf, Tennis, and Other Sports
There are many golf courses and driving ranges, both public and private, in the county. Both public and private tennis courts and clubs are available. The Vancouver-Clark Parks and Recreation Department maintains a large number of public parks which offer a wide variety of organized group and individual sports, as well as playgrounds and ball-fields for public use.

Local Historical Sites
Besides Fort Vancouver National Historic Site and the Vancouver National Historic Reserve, other county historic sites include Pomeroy Living History Farm, Clark County Historical Museum, Cedar Creek Gristmill, Covington House and the Parkersville Site as evidence of the rich historical interpretation of the area. Also notable is the Cathlapotle Archaeological Site, which is the location of a large and significant Indian village, at the Ridgefield National Wildlife Refuge.

Scenic Resources

The NHS is located on the historic core development area of the Hudson's Bay Company operations. Early visitors and HBC employees often commented on the natural beauty of the country noting the lush, dense forests, carpets of wild flowers, extensive prairies, views of the Columbia River, and snow-capped Mount Hood in the distance. Once a beautiful natural setting of forest and plain, the area is now an urban one rich in historic and scenic resources.

There are three primary visitor destinations presently within the park—the visitor center area, the Fort, and the Fort Vancouver Waterfront.

Visitor Center to Fort Vancouver

The visitor center provides an important orientation for the visitor on the role of the HBC in the Northwest. The primary vehicular entry to the visitor center is near the northeast corner of the site along

Evergreen Boulevard. The visitor center is designed in the Mission 66 architectural style and is sited on a gentle rise above the Fort Plain.

The original intent of the design was to capture the commanding view of the Fort and Columbia River behind it, and to separate modern development from the historic setting. The visitor center is surrounded by manicured lawn with widely spaced native and non-native deciduous and coniferous trees planted in 1962. The visual affect is a "park-like" open space setting. To the northeast of the visitor center is a parking lot, maintenance and administrative area. Immediately to the southeast is a covered picnic shelter and playground area.

To the north of the visitor center across Evergreen Boulevard are the Victorian houses of Officers' Row, historically part of Vancouver Barracks. Though not part of the park (it is part of the Reserve), it forms the northern edge of the NHS. Maple trees, planted in the 1880s, line the street creating a strong visual edge north of the park.

Visitors approach the Fort from the visitor center by traveling southwest along a paved road (the historic road to Back Plains) or by randomly walking across the lawn down the hill to the Fort. Traveling along this road, the visitors pass east of the Parade Ground, a broad open expanse of lawn, and by the reconstructed bandstand. Several of the trees in this area date to the early HBC era.

The road turns south along the eastern edge of the historic U.S. Army buildings within the east Vancouver Barracks area. These historic structures consist of 19 buildings within the authorized boundary of the NHS. The U.S. Army continues to manage these properties which were built by the Army in the early 1900s.

Fort Vancouver and Environs

The road continues south and crosses East Fifth Street which is the historic alignment of Upper Mill Road. This is a visually critical intersection because it is the point of transition to the historic scene. At this elevation, the river is no longer visible due to the Burlington Northern Santa Fe railroad berm, which bisects the NHS south of the Fort. The Columbia River Interstate 5 bridge suspension towers are still visible to the southwest.

At this intersection, the view immediately to the south is toward the Fort, the primary HBC resource, and the recreated orchard and garden. To the west and southwest of the palisade is an open field (part of the historic Village), a NPS maintenance area, and remainder of a Civilian Conservation Corps road developed at Vancouver Barracks in the mid-1930s. Beyond that, but still within the foreground view, is the south barracks located at the western edge of the orchard. The close proximity of the more modern buildings visually impacts the historic HBC setting.

To the east and southeast is Pearson Airfield, a general aviation airport, which is currently operated by the City of Vancouver. (The western portion of the airfield is located on federal property. The City of Vancouver owns the eastern portion of the airfield.) In the visitor's foreground view there are four remaining T-hangars and an old metal aviation museum building scheduled to be removed by the end of 2002. When this happens, the visitor's view in the foreground will be restored to a landscape compatible with the Hudson's Bay Company era. Pearson Air Museum (part of the Reserve) is visible in the distance. On clear days Mount Hood is visible to the east in the sky above Pearson Air Museum.

A temporary parking lot is located immediately off East Fifth Street north of the Fort. Though convenient to visitors and employees, it has a visual impact on the historic scene as the visitor must pass directly by it to arrive at the north gate of the Fort.

Once inside the fort palisade, the visitor is drawn back to 1845. Since the south gates of the Fort are kept closed, the visitor is unable to see the visual impacts of the Pearson runway, State Route 14, or the railroad berm that prevents visual access to the Fort Vancouver Waterfront. The only visual intrusions of the twenty-first century seen from within the Fort are the Columbia River Interstate 5 Bridge suspension towers, and commercial aircraft approaching or taking off from Pearson Airfield or Portland International Airport and buildings in downtown Vancouver.

Fort Vancouver Waterfront

Currently, visitors access the Fort Vancouver Waterfront using Columbia Way from downtown Vancouver. Getting there involves driving to the area and parking in one of the waterfront parking lots. Also, the visitor can access the Waterfront from the Fort by walking or cycling south along East Reserve Street. A pedestrian overpass is proposed over State Route 14 and the Burlington Northern Santa Fe right-of-way connecting the Village area of the NHS to Old Apple Tree Park.

Cottonwoods, willows, and alders dominate the Waterfront along a rather steep bank. Canoe Landing Beach is the only access point to the water along Columbia Way between downtown Vancouver and the Columbia Shores development to the east. Though no interpretive structures exist, the Waterfront is a critical visual and historic link to the establishment and operations of the Fort. The river was the avenue of commerce at the time of Hudson's Bay Company operations at Fort Vancouver and today presents excellent opportunities for interpretation of the important relationship between the river and the Fort.

Existing Park Development and Programs

The total acreage of Fort Vancouver NHS within the authorized Fort Vancouver National Historic Site boundary is approximately 209 acres. The NPS managed area contains approximately 165 acres. The remaining acreage includes land managed by the U.S. Army, City of Vancouver, and Washington State.

Roads and Parking

The park has approximately seven-tenths mile of paved surfaces including roads and five parking lots. The visitor center and administration parking lot can hold a total of 43 cars (including two that are accessible for persons with disabilities), 3 buses, and 3 recreation vehicles. Sidewalks follow and connect the south edge of the parking lot with the visitor center, administration building, and the maintenance shop. Plans for additional ADA (Americans with Disabilities Act) site access are currently being implemented by park staff to include two new curb cuts, new signage, and one additional van accessible parking space.

The temporary gravel-surface parking lot at the Fort can hold a total of 34 cars (including two spaces for persons with disabilities) and 4 buses. The lot is gated.

The three parking lots at the Fort Vancouver Waterfront have a total of 64 delineated parking spaces plus three allocated space for persons with disabilities (one space for each lot).The west parking lot has 27 spaces, the middle parking lot has 24 parking spaces, and the east parking lot has 16 parking spaces.

There are 214 signs for safety and interpretation purposes located throughout the national historic site on roads, trails, and at boundaries.

Boundaries

The following roads partially establish the boundary through and around the national historic site. Evergreen Boulevard borders the park on the north and is approximately four-tenths of a mile; Fort Vancouver Way borders the park on the west and is one-tenth of a mile; East Fifth Street borders the park on the south and is four-tenths of a mile; and East Reserve Street borders the park on the east and is two-tenths of a mile long. All of these roads are used for public access to the national historic site. Two of these roads are gated—Evergreen Boulevard and East Fifth Street—and lead to the visitor center parking lot and to the fort parking lot respectively, bisecting the national historic site.

Private residential areas border the national historic site on the east. The Vancouver National Historic Reserve borders the park on the north, south, and west. The waterfront property of Fort Vancouver NHS is bordered by the Columbia River to the south and by Columbia Way to the north. The City of Vancouver manages and maintains all boundary roads, sidewalks, paths, and landscaped areas along the park borders.

Trails

There are approximately 0.2 miles of concrete paths and 0.6 miles of decomposed granite trails within the NHS. An unpaved administrative road leads from East Fifth Street to a maintenance storage area in the Village in the southwest corner of the NHS. There are approximately 0.7 miles of concrete sidewalk along Columbia Way that borders the Fort Vancouver Waterfront area and 0.34 miles of concrete/asphalt sidewalk within the national historic site waterfront parcel.

Buildings and Facilities

The park has sixteen major structures managed by the National Park Service. At the administrative area of the national historic site there are four buildings: the visitor center, administration building, employee residence, and maintenance shop. There are 14 structures at the Fort including: the fort palisade, the Bastion, Chief Factor's House, Kitchen, Bakehouse, Blacksmith Shop, Indian Trade Shop, Fur Store, Wash House, Jail, Carpenter Shop, Belfry, Flagpole, and Wellsweep. (For building relationships within the Fort refer to Figure 3, Fort Structures.)

A determination of eligibility for the National Register of Historic Places will be conducted for the four NPS Mission 66 architectural style structures located at the park. This includes the visitor center, administrative building, employee residence, and maintenance shop. If determined eligible for the National Register, the general management plan will address appropriate preservation or mitigation strategies for these structures including, but not limited to, adaptive reuse options which further the purposes of either Fort Vancouver National Historic Site or the Vancouver National Historic Reserve.

Visitor Center
The visitor center is a 4,903 square foot building constructed in 1961 in the NPS Mission 66 architectural style. Approximately 3,513 square feet on the first floor is used for public space which includes the lobby with sales area, museum, a multi-purpose auditorium, interpretive displays, and outside ADA accessible public restrooms. The remaining area contains staff space for offices, kitchen, staff restroom, and utility areas.

Administrative Headquarters Building
Also built in 1961 in the Mission 66 style, the 1,800 square foot administration building contains a reception area/office, a meeting room, two offices, kitchen/office supply storage area, and a unisex ADA accessible bathroom. It is presently used as the park headquarters building. The attached garage is used for maintenance/administration storage.

Employee Residence
The 1,800 square foot seasonal employee residence has three bedrooms, one and a half baths with a kitchen, utility room, and attached garage. It is designed in the Mission 66 architectural style and constructed in 1961. It is presently used for maintenance storage.

Maintenance Shop
The original part of the maintenance shop was designed in the Mission 66 style and constructed in 1961, but has since been added onto. The 2,700 square foot maintenance shop contains three garages, a break room with a unisex bathroom, and an office.



Mission 66 architectural style administrative headquarters (in foreground) and employee residence.



Mission 66 architectural style maintenance building.

The Fort Palisade
The 4,522 linear feet of reconstructed palisade (fort wall) surrounds the following ten reconstructed historic structures.

Bastion
The attached bastion (projecting part of the palisade) located in the northwest corner of the palisade was reconstructed in 1972 and is 1,272 square feet. It has a ground floor and two additional floors accessible by a stairway.

Chief Factor's House
The Chief Factor's House was reconstructed in 1976 and is 6,825 square feet. The first floor contains furnished historic spaces that interpret the Chief Factor's residence and mess hall functions.

Kitchen
Located north of the Chief Factor's House, the Kitchen is 2,896 square feet and was reconstructed in 1976. The Kitchen is on the ground floor of a one and a half story reconstructed building and is connected to the Chief Factors House by a breezeway. The kitchen contains a pantry, larder, laundry room with a servant's bedroom, and cooking area with a fireplace and oven. The upstairs was remodeled in the summer of 2000 and contains the period clothing storage room, staff changing rooms, clothing checkout office, and additional storage.

Bakehouse
The Bakehouse, reconstructed in 1974, is 2,375 square feet and is located at the northeast corner of the palisade. It has one room containing two brick ovens and a loft.

Blacksmith Shop
The Blacksmith Shop is 1,226 square feet and located in southeast corner of palisade. Reconstructed in 1981, it has a single room which houses four forges and accompanying blacksmith tools.

Indian Trade Shop
The Indian Trade Shop is 5,600 square feet and is located west of the Blacksmith Shop. Reconstructed in 1981, the front of the building contains historic furnished spaces interpreting Indian trade, medical, and hospital functions at Fort Vancouver. The rear and second floor of the building contain the interpretive staff meeting areas, offices, the NHS library, and storage.

Fur Store/Curation Facilities and Collection Storage Building
The Fur Store/Curation Facilities and Collection Storage Building is located in the south central interior of the palisade. The building was reconstructed in two phases. The second phase was completed in 1994. It is 8,000 square feet and contains the Baling Room where the 1845 fur processing and storage at Fort Vancouver is interpreted, the archaeological interpretive corridor where the public can view on-going archaeological cateloging, curation rooms, offices, and collection storage facilities on the second floor.

Wash House
The 468 square foot Wash House was reconstructed in 1976 and is used for public restrooms and for utility/storage space. The Wash House is fully ADA compliant.

Carpenter Shop
The Carpenter Shop, reconstructed in 1997, is located in the north central interior of the palisade. It is 628 square feet and has one room which is used to intepret historic carpentry at Fort Vancouver.

Jail
The reconstructon for the 450 square foot Jail was completed in January 2001.

All of the fort buildings underwent a retrofit in accordance with ADA guidelines. Current additions to ADA accessibility at the park are pending due to ADA agency assessment in the summer of 2000. These will include installation of additional ramps, alternative forms of interpretive signs and programs, and automatic door openers at the visitor center.

Other Site Structures

Additional structures are found within the national historic site. In the fort area, a tool shed with four compost bins is located 80 feet north of the palisade in the historic garden. Inside the Fort there is a non-functioning grated historic well between the Bakehouse and the Kitchen. A 45-foot tall bell tower rises to the west of the newly constructed Jail. Public washrooms (a 487 square foot building) are located between the Kitchen and Bakehouse. Built in 1976, the washrooms are ADA accessible and house one men's and one women's washroom with a utility room in the center.

Located just within the Fort at the north gate is the non-historic contact station (628 square feet). Built in 1976, its one room serves as a visitor orientation center containing plat panel exhibits and an indoor meeting area as well as an area from which to collect fees. Opposite the north gate and located behind the Indian Trade Shop is one hazardous materials storage (HAZMAT) shed for the Blacksmith Shop and another to the west of the Maintenence Shop.

Within the administrative area southeast of the visitor center are a well house (48 square feet) and a seven-table picnic shelter (1,988 square feet and ADA accessible). To the south of the picnic shelter exists a small playground. This playground was rebuilt in 1990 to replace a playground originally located north of East Fifth Street.

The maintenance area includes a vehicle and equipment fueling station including above-ground tanks, and the park's recycling center. A HAZMAT shed is located west of the Maintenance shop. The bandstand (1,000 square feet) is located on the Parade Ground northeast of the visitor center across from the Grant's House on Officers' Row.

Site Vegetation

The visitor center and administrative buildings were landscaped in 1962 with native and non-native deciduous and coniferous trees and shrubs. Species include Mugo pines, Douglas firs, maples, oaks, and a variety of ornamental shrubs. Thirty-year old rhododendrons surround the administrative building and employee residence.

The vegetation in the area surrounding the visitor center and administrative area consists of a multi-species lawn that is green-mulched and chemical-free. Clusters of non-native hydrangea, holly, locust, and camellia, as well as native coniferous trees, are located within the lawn. A trimmed arbor vitae hedge has been added to partially block public view of the administrative and maintenance areas.

Tree species located around the northern border of the site include red maples, sugar maples, sequoias, blue spruces, Douglas firs, cherries, pines, and horse chestnuts. Southwest of the visitor center is a combination of trees planted in 1962. Trees in this area include American hollys, Lawson cypress, western red cedars, Oregon oaks, Douglas firs, sequoias, and Pacific dogwoods. The Parade Ground is an open area of multi-species lawn. A few large native Oregon oak and Douglas fir trees are found here as

well. Several of these trees have been dated to the early Vancouver Barracks and the Hudson's Bay Company era.

Maple and English walnut trees line both sides of Evergreen Boulevard. These were planted in front of Officers' Row in the 1880s and create a strong visual edge to the north side of the Parade Ground. A large number of Oregon oaks exist in Vancouver Barracks north of East Fifth Street. Clumps and small groves of Oregon oaks were common in the area during the HBC and Vancouver Barracks eras. A row of Douglas fir trees in front of the barracks was likely planted in the 1930s.

On the north side of the Fort, vegetation consists of an interpretive period garden and an interpretive orchard planted in 1962 on the site of the original HBC garden. The 1962 Completion Report of construction projects at Fort Vancouver National Historic Site lists thirteen species of fruit trees planted in the interpretive orchard. Currently, there are 30 trees remaining of the orchard's original 71 trees and these are in poor condition. In addition, the trees reflect a twentieth century orchard and not a nineteenth century orchard. The existing trees are reaching life expectancy and the area will eventually be restored to the historic garden of 1845.

The field area east of the historic north gate road has recently been seeded with red clover and is currently under rehabilitation after removal of four airport T-hangars. The remaining four T-hangars adjacent to this field are scheduled for future demolition in 2002. The field may eventually be restored to historic agricultural use.

Interpreters, volunteers, and maintenance staff maintain the existing historic garden. Its decomposed granite paths are ADA accessible as well as aesthetically pleasing. The garden is planted with a variety of heirloom vegetables and herbs which include pumpkins, Indian corn, melons, mints, chives, leeks, beets, carrots, potatoes, onions, beans, lettuce, tomatoes, cardoon, hops, apples, poppies, hollyhock, roses, pennyroyal, fennel, chrysanthemums, dahlias, iris, lilac, lilies, strawberries, clover, horseradish, lavender, rosemary, thyme, and nasturtiums.

The Village area west of the fort palisade consists of unmowed grasses, weeds, vetches, and a few daffodils, with large masses of blackberries and scotch broom. Some fruit trees have been discovered, as well as two wild heirloom climbing rose bushes. The trees and shrubs appear to be remnants of the plantings associated with the Civilian Conservation Corps development at Vancouver Barracks in the late 1930s and early 1940s. Recently the site of the historic orchard is being cleared of the non-native species of Himalayan blackberry, Scotch broom, European holly, and native poison oak. Currently the park is under agreement with the City of Vancouver to leave the native long grasses west of the palisade unmowed to provide historic groundcover.

The NPS property on the Columbia River has been landscaped by the city of and includes lawn and planting beds with ornamental trees and shrubs. The remaining undeveloped waterfront consists of natural riparian vegetation including masses of black cottonwoods, willows, and alders.

Pearson Air Museum

Pearson Air Museum is operated and maintained by the City of Vancouver. Currently the city has contracted for operation of the museum with the Pearson Field Historical Society. The site consists of approximately seven acres of federally owned land within the authorized boundaries of Fort Vancouver National Historic Site. Three historic structures exist on the site: the U.S. Army Hangar (commonly referred to as the white hangar), the U.S. Army (World War I) Squadron Building (circa 1918), and the U.S. Army Weapons Storage Building (circa 1904). All are recorded on the Washington State Register of

Historic Places. Restored according to the Secretary of the Interior's Standards, they are eligible for listing on the National Register.

The museum consists of a 26,398 square foot building (restored historic hangar and a reconstructed hangar building), with approximately one acre of paved surfaces and five acres of landscaping. The parking lot has 49 parking spaces. Ingress to the site is off East Fifth Street and egress is off East Reserve Street. To reflect the Golden Era of Aviation (1920s and 1930s), a grass field will replace a portion of the airfield tarmac. A memorandum of agreement signed on November 1994 between the City of Vancouver and the NPS allowed for the development of the museum. A cooperative agreement signed in December 1995 specifically states the operational and responsibility details between the city and NPS.

Pearson Airfield

The City of Vancouver publicly operates Pearson Airfield on approximately 134 acres. The Airfield has one paved runway and conducts general aviation service. The City of Vancouver owns approximately 62 acres of the eastern portion of the site. The remaining 72 acres, the western portion were sold by the City of Vancouver to the NPS in 1972. The facilities on NPS land include a runway, a parallel taxiway, the historic aviation museum buildings (Pearson Air Museum), and a Russian monument.

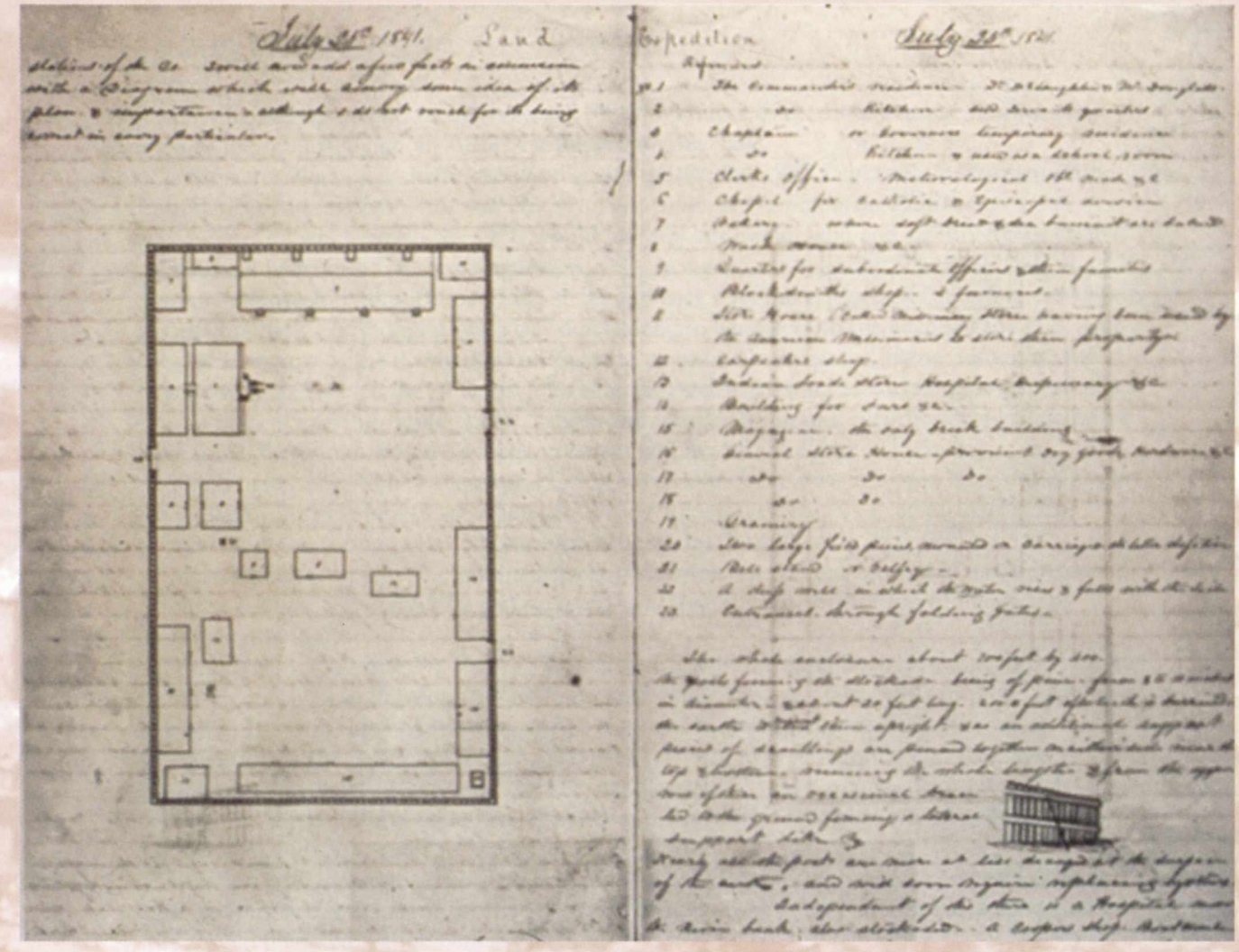
A Statutory Warranty Deed, dated April 4, 1972 to April 3, 2002, allows the city to conduct aviation activities on the NPS portion of the site. An Interior Appropriations Bill rider for Fiscal Year 1996 signed in March 1996 stated that the National Park Service would continue to permit general aviation on its portion of Pearson Airfield in Vancouver until the year 2022.

Utility Systems

Electricity to the park is provided by Clark County Public Utilities. The GTE/Qwest and General Service Administration provide telephone service. The City of Vancouver provides the domestic water supply and sewer service. Two fire hydrants are located near the administration, maintenance, and seasonal residence area and another two fire hydrants are located near the visitor center and picnic shelter area. Three fire hydrants are located around the palisade walls at the fort site.

Alternatives

Sketch
George Emmons ,1841
Courtesy of Yale Collection of Western Americana, Beinecke Rare Book and Manuscript Library



Alternatives

Three alternatives are described in this plan which respond to both NPS planning requirements and to issues identified during the scoping process. The alternatives 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. Alternative C is an additional alternative that builds upon elements included in Alternative B by providing additional actions that expand the visitor experience and appreciation of resources. (For a comparison of the three alternatives, see "Summary of Actions for Each Alternative" chart at the end of this chapter.)

Actions Common to All Alternatives

The following actions would be taken by the NPS regardless of the final alternative ultimately selected as the proposed action within the Record of Decision:

- Air Museum Plan—The NPS staff would incorporate the 1995 *Pearson Air Museum Plan* into the *Fort Vancouver National Historic Site General Management Plan.*
- U.S. Army excess lands—The NPS would identify additional land and facility needs related to national historic site management from U.S. Army excess property. The NPS staff would administer any and all portions of the south and east Vancouver Barracks area that are already within the park's authorized boundary determined to be excess to the needs of the U.S. Army by the Secretary of the Army. Use of this area would include the following: to restore the Vancouver Barracks cultural landscape, adapt and reuse existing historic buildings, provide for additional parking, stage public transportation operations, and incorporate administrative functions. Decisions would be made in consultation with the Reserve Partners.
- Historic landscape—The agricultural fields around the fort palisade would be restored as part of the HBC historic landscape when the City of Vancouver vacates Pearson Airfield T-hangars and the former aviation museum building by the end of the year 2002.
- Waterfront agreement—The NPS staff would develop a new land use waterfront agreement with the City of Vancouver for public use of the area after the expiration of the current agreement in 2007.
- Comprehensive Interpretive Plan—The park staff, with the assistance from the NPS Harpers Ferry Center, would develop new comprehensive interpretive plans (CIP) for Fort Vancouver National Historic Site and the Vancouver National Historic Reserve (Reserve) with cooperation of the Reserve Partners. The park CIP would be integrated into the Reserve CIP.
- Research and education center—The NPS staff would develop an operational research center plan to facilitate cultural resources research and education. This plan would address the scope, size, location, and staffing needs of the center.
- Collection management—The NPS Fort Vancouver cultural resources staff would provide full collection management for the Vancouver National Historic Reserve Partners as part of the research and education center function.
- Visitor interpretation and resource management—The National Park Service staff would serve as the lead governmental agency for the Reserve Partners in the areas of visitor interpretation and resource management. As funding, staffing, and opportunities permit, Fort Vancouver NHS staff and volunteers would work closely with the Reserve Trust and Reserve

Partners in the development of educational programs in a variety of settings and educational experiences.

- Reserve responsibilities—The NPS staff would seek funding to add additional staff, office space, and equipment in order to more properly fulfill its responsibilities to the Reserve in areas of education, interpretation, historic preservation, and resource management.
- Vancouver National Historic Reserve Trust—The NHS will work cooperatively with the Reserve Trust, a 501(c)(3) nonprofit, created to support the mission of the Reserve.
- Park infrastructure improvements—Improvements would be made to park infrastructure including communications, electricity, and other utilities. As funding permits, the NPS would participate in utility upgrades and streetscape improvements for those portions of the south and east Vancouver Barracks that are declared excess to the needs of the Secretary of the Army and for which the NPS has determined an operational need. This would be done in cooperation with the Reserve Partners.
- Standardization of design features—When possible, in coordination with the Reserve Partners and others, the NHS staff would standardize design features on signs, trails, and roads both within the NHS and the Reserve.
- Integrated Pest Management Program (IPM)—The NPS staff would develop and implement IPM actions to protect park structures, cultural landscapes, native vegetation, and visitors.
- Plant and animal species inventory—A complete baseline plant and animal species inventory would be conducted and mapped for the entire NHS.
- Diversity outreach—The NHS staff would promote stronger outreach opportunities to diverse groups and under-served populations within and outside the Portland-Vancouver Metropolitan Area.
- Interpretive links—The NHS staff would provide a stronger interpretive link to the Oregon Trail and the McLoughlin House.
- Educational programs—Working with partners (City of Vancouver, Water Resources Education Center, Pearson Air Museum, and others) the NPS would facilitate and coordinate educational programs related to the rich history of the Hudson's Bay Company, the early U.S. Army presence at the Vancouver Barracks, and other historical themes.
- Continued general aviation use—The NPS staff would continue to work with the City of Vancouver to determine the appropriate agreement and conditions for continued general aviation use at Pearson Airfield and to develop a new agreement beyond 2002 for Pearson Airfield through 2022.
- Playground—The playground and picnic shelter located adjacent to the visitor center would remain available to public use.

Alternative A—No Action Alternative

General Description

Alternative A is the No Action Alternative and would involve a continuation of existing policies. No significant changes would be proposed in park operations, staffing, visitor services and facilities, resource stewardship or land protection under this alternative. However, the No Action Alternative does assume that incremental changes would still occur.

Management Zones

The existing management zoning is based on the 1978 *Fort Vancouver National Historic Site Master Plan*. All of the lands within the boundaries of Fort Vancouver NHS are presently zoned as historic and are listed on the National Register of Historic Places.

In addition, two special use subzones are identified for non-historic uses. One is a Development Subzone in the northeast corner of the park where the visitor center, employee residence, administrative headquarters, and maintenance facilities are located. The second is a Special Use Subzone for permits and leases with the City of Vancouver for Pearson Airfield and a permit to the Burlington Northern Santa Fe Railroad for a track line. (See Figure 8, Management Zoning: Alternative A.)

Cultural Resource Management

Fort

The current configuration of fort buildings would be retained. Additional buildings would be reconstructed, as funding becomes available. Construction for the Counting House (also referred to as the 1845 New Office) will begin in 2002. The Wellsweep (located between the Wash House and Third Bakehouse), Jail, and Carpenter Shop have recently been reconstructed. (For additional information on historic buildings, see *Historic Structures Report, Volume I,* by John Hussey, 1972 and the *Fort Vancouver National Historic Site, Cultural Landscape Report, Volume I*, by Terri Taylor, 1992.) In addition, plans are being made to reconstruct the Sale Shop and New Store (two warehouses connected by a second-story walkway). If additional money is available to construct, maintain, and operate other structures, then additional buildings or substitute buildings may be reconstructed.

Parade Ground

The Parade Ground would continue to be maintained as usual. Special events, such as 1860s Vintage Baseball, the Soldiers' Bivouac, the Fourth of July, Veterans Day, and other "Celebrate Freedom" events would continue to be allowed.

Village and Environs

Under this alternative, there would be limited site interpretation of the Village.

Fort Vancouver Waterfront

The NPS would continue, under written agreement with the City of Vancouver, to provide the federally owned portion of the Columbia River waterfront to be used for passive recreation and river viewing. The current cooperative agreement is in effect until 2007. Beyond maintaining

existing waysides, no additional interpretive exhibits or facilities would be provided under this alternative.

Research and Education Center
The national historic site would continue to serve in a limited capacity as the central repository for HBC sites in the Pacific Northwest and for archaeological material recovered from U.S. Army sites within the Reserve. In addition, the NHS would continue to function as a research center for the early history of the area. As a research center, the NHS would develop special projects, either on its own or in collaboration with partners to disseminate knowledge about HBC operations and the U.S. Army period as evidenced in the archaeological record. The research and education center would be accessible to the public and linked to a variety of related research institutions. Under this alternative, the center would continue to be located in the existing Fur Store.

McLoughlin House National Historic Site
The McLoughlin House National Historic Site would remain an affiliated area of the National Park System. The NPS staff would continue to assist the McLoughlin Memorial Association in managing their collection of objects related to the HBC and John McLoughlin. As possible, NPS staff would continue to provide modest assistance in site maintenance. The NPS staff would also continue to encourage Fort Vancouver NHS visitors to visit the McLoughlin House to broaden the visitor's interpretative experience. No NPS staff or funding would be dedicated to the McLoughlin House National Historic Site under this option.

Natural Resource Management

The natural resources management duties would continue to be accomplished by the chief ranger, who also has responsibilities in supervising interpretation and resources management and conducting law enforcement. Other natural resource programs would continue. The garden would remain managed with collateral duty staff and a cadre of volunteers.

Recreational Resource Management

Passive recreation would continue to be enjoyed by visitors within the NHS, including walking, biking, picnicking, and photography.

In coordination with the City of Vancouver, the NPS staff would provide a link for the City's Discovery Historic Loop Trail (Discovery Trail) through the national historic site. The proposed route would follow the existing Columbia Waterfront Trail along the river, north through Old Apple Tree Park and over a proposed pedestrian overpass across State Route 14 and the railroad. It would continue along the western edge of the NHS in the Village and connect to East Fifth Street. The proposed trail would run adjacent to East Fifth Street along the north side of the road past Pearson Air Museum to East Reserve Street where it would split to continue north or eventually turn south to Columbia Shores Drive and the Waterfront. This trail is a non-motorized multi-use trail that is part of the city's urban trail system formed in 1968 to link recreation and historic sites in the city and county.

The trail would be placed above ground level to minimize impacts to natural resources and potential archaeological sites. If lighting the trail becomes necessary, low level photovoltaic lighting would be recommended. The City of Vancouver is presently conducting an environmental analysis of impacts on the design and construction of the Discovery Historic Loop Trail.

Management Zoning: Alternative A

Fort Vancouver NHS GMP/EIS



Legend

Management Zone
- Historic
- Park Development
- Special Use
- Authorized Park Boundary

- Building
- Fort
- Pavement Edge
- Railroad
- Fence

500 0 500 1000 Feet

1 : 8000

Data Sources:
City of Vancouver: buildings, pavement edge
Clark County: railroads, rivers
NPS: buildings, fence, fort, management zones, park boundary

Figure 8

N

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Scenic Resource Management

Restoration of the historic scene would continue as permitted. Four additional T-hangars, another tin hangar structure, and the old metal aviation museum building on federal land on the northeast side of the fort palisade are in the process of being removed from federal land by the end of 2002. This is in accord with an amendment to the 1978 *Fort Vancouver National Historic Site Master Plan* signed September 5, 1995 and would allow for the restoration of the foreground historic view as seen from the fort palisade.

The trail surface would be treated with natural sand or other material instead of the exposed concrete surface that has been used by the city for the Discovery Trail elsewhere. This treatment would help the trail look more rustic and natural, and help it to blend into the historic setting. The design of the lighting fixtures would be coordinated with NHS staff to be historically compatible.

Interpretation, Education, and Outreach

Interpretation needs at the national historic site would continue to increase as more buildings are reconstructed. The exhibits at the visitor center would be upgraded. With the inclusion of Fort Vancouver NHS as part of the Vancouver National Historic Reserve, opportunities exist for sharing additional nationally significant stories. The NPS would continue to provide technical assistance such as interpretation of the army story at the Vancouver Barracks, through waysides, brochures, and media. Recently enhanced interpretive programs on the Parade Ground, Village, Fort and other sites within the NHS would continue.

As part of the research and education center function, the NHS would serve as an on-site laboratory and preservation "field school" in coordination with other institutions. The NHS would establish several student internships and offer to host short courses on specific subjects.

Park Facilities

Fort Vancouver Visitor Center
The current visitor center would be retained as the Fort Vancouver NHS visitor center. The exhibits in the current building would be upgraded and necessary building improvements would occur from time to time as funding permitted.

Administrative Facilities
In Alternative A, Fort Vancouver NHS headquarters and administrative facilities would remain in their present location. Currently, one of two Mission 66 residences is used for administrative headquarters and administrative storage. Additional administrative space is located within reconstructed buildings in the fort palisade.

Maintenance Facilities
Under this alternative, park maintenance operations would remain in their present location in a Mission 66 building adjacent to East Reserve Street. Maintenance operations are currently housed in a maintenance shop. A Mission 66 residence used for seasonal housing is also used for maintenance storage. Functions in the maintenance area include painting, sign-making, vehicle repair, covered vehicle storage, covered materials storage, lunch room, and maintenance offices.

Development Cost Estimates of Implementing Alternative A
There are no facility development costs associated with Alternative A.

Park Operations

Staffing

The NHS currently has 22 authorized FTE (Full Time Equivalent) staff. However, due to current budget limitations, the NHS staff employs an average of 14 staff (permanent, seasonal/term positions) during the course of any one fiscal year. No seasonal staff are base funded, though a few positions have been funded through project dollars when available.

Current Authorized Staffing under Alternative A for Fort Vancouver National Historic Site

Administration	Maintenance	Interpretation	Resource Management*	Total	FTE
3 Permanent	6 Permanent	6 Permanent	2 Permanent	17	
0 Seasonal	0 Seasonal	0 Seasonal	0 Seasonal	0	
3 Total	6 Total	6 Total	2 Total	17	22

* Resource Management refers to both cultural and natural resources

In addition to the staff serving the NHS, the NPS provides staff support for interpretive and cultural resource management programs for the Vancouver National Historic Reserve. Funding for this staff comes from separate annual appropriations to the Reserve which historically have included statutory aid and program support. Currently, this supports 6 to 7 seasonal/term NPS positions. Staff time is also allotted to the McLoughlin House National Historic Site for various services, but only as funding and time permit.

Estimated Operating Costs

Estimated net operating costs in fiscal year 2001 were $960,000. An additional $173,000 was provided for term and seasonal positions in support of Reserve-wide programs funded through a statutory aid account.

Fees

Fee collection would continue in this alternative. There is a fee for entering the Fort at the NHS between the months of May and September. Fees are collected at the contact station inside the fort palisade and there are no charges for school or other educational groups. On August 25, NPS Founder's Day, the Fort is free to all visitors. In addition, there is no fee charged for entering the visitor center.

Some fee income is retained at the park and has been used for park programs. At present the park is participating in the NPS Fee Demonstration Program.

Park Hours and Seasons of Operation

Under Alternative A, the visitor center and the fort palisade at the NHS are open the following hours and seasons:

- 9 a.m. to 5 p.m. during the summer season
- 9 a.m. to 5 p.m. during the fall and spring seasons
- 10 a.m. to 4 p.m. during the winter season

These hours may be subject to change. Visitors would be allowed to remain at the park outside the Fort and visitor center until dusk.

Parking, Access, and Circulation

Fort Vancouver Visitor Center Parking
The current visitor center and administration parking lot (total of 43 cars, 3 buses, and 3 recreational vehicles) would continue to be utilized for visitors and staff.

Fort Visitor Parking
The temporary gravel parking area (total of 34 cars and 4 buses) adjacent to the Fort, south of East Fifth Street, would continue to be utilized for visitors to the fort area.

East Fifth Street
East Fifth Street would continue to be open to general vehicular traffic as a paved street linking Fort Vancouver Way to East Reserve Street. In addition, there would continue to be some parallel parking spaces available along East Fifth Street between the fort parking lot and Fort Vancouver Way.

Fort Vancouver Waterfront
A total of three parking lots with a capacity of 67 cars would be retained under this alternative. No spaces for buses, large recreational vehicles (RVs) or trailers are currently available in these areas.

Carrying Capacity

Under Alternative A, the present carrying capacity of the NHS is defined as the maximum numbers of people allowed in the visitor center, the maximum number of cars at the five existing parking lots, and an optimal number of visitors within the fort palisade. In addition, visitors may park at other venues in the Vancouver National Historic Reserve (such as at Pearson Air Museum) adjacent to the NHS.

At present, the visitor center is crowded during spring mornings when school groups frequent the park and on Fourth of July. The NHS staff attempts to manage potential crowding from school groups through a reservation system, but often non-school group visitors do not get adequate service when crowding does occur.

The current maximum use is as follows:
- Capacity of the auditorium: 40 persons
- Existing capacity of the visitor center: 75 – 100 visitors
- Capacity at Fort Vancouver visitor center parking lot: 43 cars (2 for persons with disabilities), 3 buses, and 3 RVs
- Capacity at temporary fort area parking lot: 34 cars (2 for persons with disabilities) and 4 buses
- Capacity at three Fort Vancouver waterfront parking lots: Total 67 cars (3 for persons with disabilities)
- Picnic area capacity: 7 tables under shelter (with adjacent playground)
- Reconstructed buildings within Fort: tours are limited to approximately 15-25 people depending upon individual buildings

Park Boundary and Land Protection

There are approximately 209 acres in the authorized Fort Vancouver National Historic Site boundary but not all of this is National Park Service managed land. The NPS managed area contains approximately 165 acres and the remainder is managed by the U.S. Army, City of Vancouver, and Washington State. Though there would be no change in the NPS authorized boundary, lands within the authorized boundary that may be determined excess by the Secretary of Army (specifically south or east barracks) would be considered for transfer to NPS administration.

Opportunities for Regional Cooperation and Partnerships

The NHS staff would continue to cooperate with ongoing partnerships related to the operation of the Vancouver National Historic Reserve and the McLoughlin House National Historic Site.

Action Plan Items

- Develop baseline inventory for plant and animal species.
- Develop space allocation plan for staff (space and equipment).
- Revise historic furnishing plans for the existing fort buildings.

Actions Requiring Cooperation with Reserve Partners

No new actions would be required.

Alternative B—Preferred Alternative

General Description

Alternative B constitutes the Preferred Alternative by the National Park Service. Several actions are proposed under this alternative which would provide for the protection and enhancement of cultural, natural, and scenic resources. Some actions involve the enhancement of visitor facilities and interpretive programming; others enhance administrative and operational capabilities both in terms of facilities and staffing. Finally, specific measures are proposed that if implemented, would coordinate planning and design efforts within both the park and the surrounding Vancouver National Historic Reserve.

Management Zones

All lands within the boundary of Fort Vancouver National Historic Site are listed on the National Register of Historic Places. Therefore, regardless of the individual zoning classification emphasis, due consideration would be given to any park action that may affect the qualities for which the listing was made. At present, management zoning does not affect U.S. Army Reserve managed lands within the authorized boundary. In the event that the U.S. Army Reserve determines portions of the south and east barracks excess to their operational needs, the management zones noted in these areas would apply as NPS assumes management responsibilities.

Management zones vary according to the kind of resource conditions that exist within the park and the type of visitor experiences that can occur there. Alternative B has five zones: the Historic Zone, the Columbia River Waterfront Zone, Park Development Zone, Pearson Air Museum Zone, and a Special Use Zone. (See Figure 9, Management Zoning: Alternative B.)

Historic Zone

Resource Condition or Character

The management focus in this zone would be on maintaining and protecting historic resources, restoring the cultural landscaping, recreating elements of the historic scene, maintaining visitor facilities, and mitigating impacts from human use while providing for quality visitor experiences. Additional historic buildings and associated structures would be reconstructed, delineated (defining the silhouettes of buildings and rooflines), or defined by marking the corners of foundations to allow for increased understanding and interpretation of the HBC and early U.S. Army period. Evidence of educational activity, research, and resource preservation would be visible to visitors. The setting within this zone would be predominantly historic, keeping a high integrity of historic resources. The historic scene and the recreated landscape would be managed to protect the archaeological resources of the NHS and to restore the cultural landscape of the HBC and early Army period whenever possible. This landscape would also be managed to support visitor use and enjoyment of park resources to the extent that park resources would remain protected. This zone would include the fort area, the Village, Parade Ground, and portions of the Fort Vancouver Waterfront where the HBC interpretive area would be located. If the U.S. Army transfers all or a portion of the south and east Barracks area to the National Park Service, this area would be incorporated into this zone. Some aspects of the natural and cultural landscape would be modified to accommodate visitor use such as trail construction and providing for landscaping and new exhibits.

Visitor Experience
Though surrounded by an urban setting, visitors would be immersed in an outdoor, recreated historic environment that is rich in architectural and cultural history. Interpretive and education opportunities would be great in this zone and opportunities would exist for visitors to experience both natural and cultural resources. The visitor experience would be further enhanced through a range of approaches to interpret historic HBC structures within the Fort, Village, and at the Waterfront. This could include additional reconstruction of structures, delineation of the silhouettes of buildings, or defining the corners of foundations. Visitor activities would occur in both structured (such as interpretive walks and "living history" presentations) and unstructured ways (self-guided tours and waysides). The possibility of encountering other people and NPS staff would be high, but at certain times of the day or season, opportunities could exist to experience relative solitude.

At all times, visitors would be encouraged to act in a manner that respects other visitors' use and enjoyment of the site. Certain areas would be established for on-going research with limited access to the general public. Visitors should expect moderate to severe intrusions to the natural soundscape and viewshed by cars, trains, airplanes, other visitors, and modern structures.

Appropriate Types of Activities or Facilities
Appropriate visitor activities could include learning about the park's natural and cultural resources and its ecological and historical relevance, bird watching, photography, jogging and bicycling (along the City's Discovery Historic Loop Trail), walking, and picnicking. A range of interpretive, educational, and orientation programs would be provided, with orientation and interpretation of resources taking place onsite. Additional educational and recreational opportunities would be available to visitors in other venues within the Vancouver National Historic Reserve.

Pearson Air Museum Zone

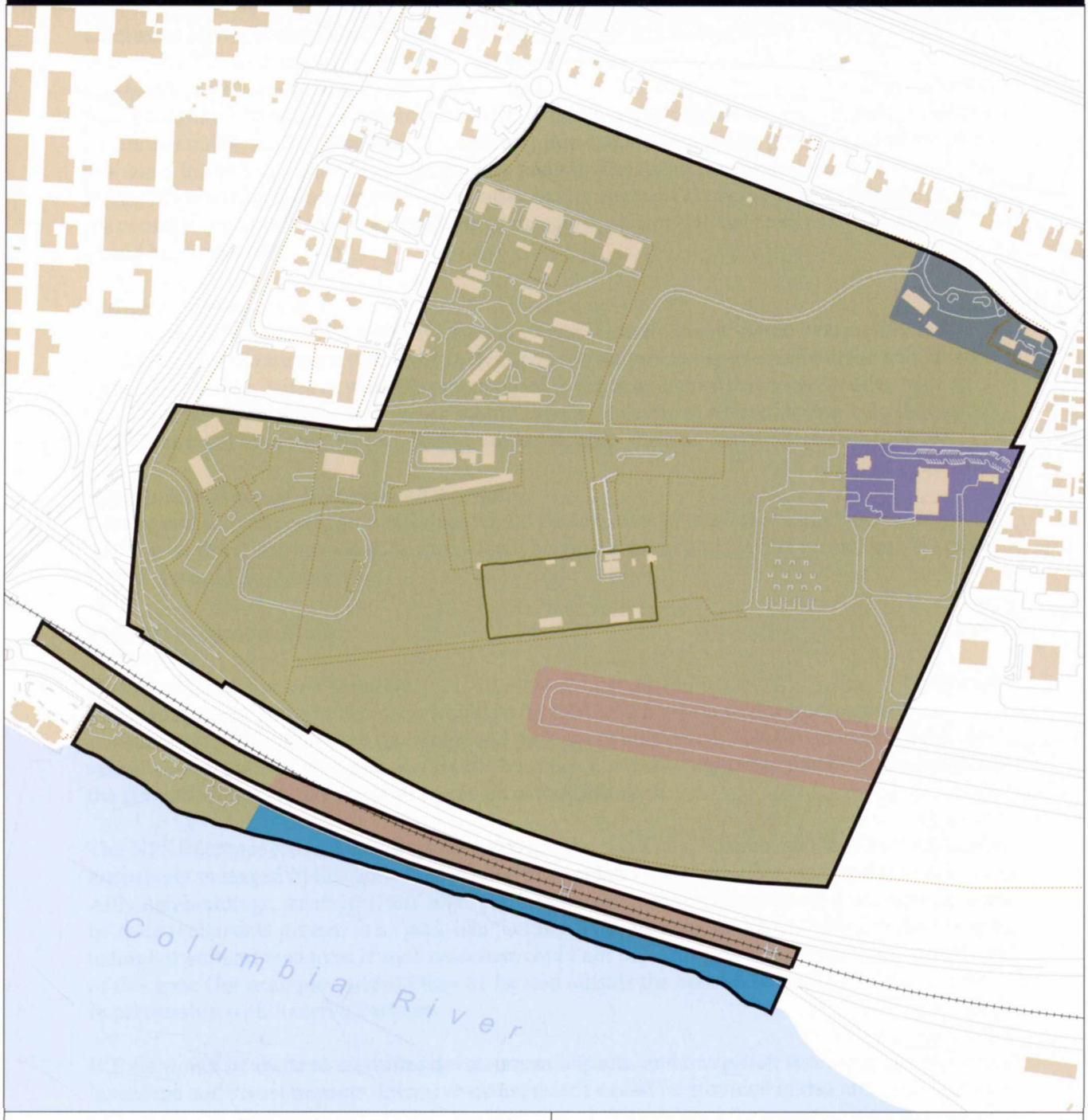
Resource Condition or Character
The management focus in this zone would be the similar to the Historic Zone, but specifically on maintaining the cultural resources commemorating aviation history. Emphasis would be on the interwar period and the Army Air Corps. This zone encompasses approximately seven acres that are operated and maintained by the City of Vancouver through a cooperative agreement. It is thematically related to the broader interpretation of the Vancouver National Historic Reserve. The historic scene would be managed by the Pearson Field Historical Society to maximize their integrity and to support visitor use. The visitor probably would not be aware that this land is federally owned land within the authorized boundaries of Fort Vancouver National Historic Site.

Visitor Experience
Visitor activities would occur in predominately structured ways within the aviation museum, and less structured ways touring around the other historic aviation buildings. The possibility of encountering other people and Pearson Field Historical Society staff would be high. At all times, visitors would be encouraged to act in a manner that respects other visitors use and enjoyment of the site. Visitors should expect moderate to severe intrusions to the natural soundscape and viewshed by cars, trains, airplanes, other visitors, and modern structures.

Appropriate Types of Activities or Facilities
Appropriate visitor activities could include learning about aviation during the interwar period, the associated cultural resources and their historical relevance. Photography, walking and sightseeing would be encouraged. A wide range of interpretive and educational programs would be provided

Management Zoning: Alternative B

Fort Vancouver NHS GMP/EIS



Legend

Management Zone
- Columbia River Waterfront
- Historic
- Park Development
- Pearson Air Museum
- Special Use
- Authorized Park Boundary

- Building
- Fort
- Pavement Edge
- Railroad
- Fence

500 0 500 1000 Feet

1 : 8000

Figure 9

N

Data Sources:
City of Vancouver: buildings, pavement edge
Clark County: railroads, rivers
NPS: buildings, fence, fort, management zones, park boundary

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Columbia Cascades Support Office
GIS Group

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within the aviation museum, including possible onsite interpretation of the U.S. Army hangar, the U.S. Army (World War I) Squadron Building, and the U.S. Army Weapons Storage Building.

Columbia River Waterfront Zone

Resource Condition or Character
The management focus of this zone would be on managing the natural resources and providing for certain public recreational uses. Though wayside exhibits and paved paths would be located in this zone, the setting would be predominately natural. The natural scene and landscape would be managed to maximize the integrity of the riparian environment along the banks of the Columbia River and to support visitor use. Evidence of management activity and resource preservation would be visible to visitors.

Visitor Experience
Visitors would experience a relatively natural riverside environment. Some interpretive and educational opportunities would exist in this zone for visitors to experience both the natural and cultural resources. Visitors would be encouraged to act in a manner that respects other visitors' use and enjoyment of the site. Visitors should expect moderate to severe intrusions to the natural soundscape and viewshed by cars, trains, airplanes, other visitors, and modern structures.

Appropriate Types of Activities and Facilities
Passive and active recreational activities would predominate in this zone, including jogging or walking on the Discovery Historic Loop Trail, bicycling, photography, and picnicking. No main facilities would be located here.

Park Development Zone

Resource Condition or Character
The management focus in this zone would be on interpretation and visitor management. Resources would be modified for visitor and park operational needs. This zone includes the visitor center, parking, and adjacent shuttle bus stop. Until administrative functions are relocated, the current administrative use area would be part of this zone.

The NPS tolerance for resource degradation would be moderate. Visitors and facilities would be intensively 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. 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 parking) may be located outside the park on adjacent Reserve property, in partnership with Reserve Partners.

Efforts would be made to minimize development impacts, and mitigation would minimize landscape and visual impacts. Intensive management would be provided in this area to ensure resource protection and public safety. Resources could be modified for essential visitor and park operational needs.

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 NPS staff would be very high.

Appropriate Types of Activities and Facilities
This zone would include visitor and park operation facilities. Paved paths, roads, parking, and other walkways connecting facilities would be appropriate. Passive recreational experiences such as picnicking and non-motorized trail use would occur in this zone.

Special Use Zone

Resource Condition or Character
The management focus in this zone would be on allowing the City of Vancouver to provide for general aviation at Pearson Airfield through 2022 subject to FAA approval. Cultural and natural resources are modified to support general aviation use. A statutory warranty deed allowed use in this zone in 1972 until 2002. Congress legislatively extended general aviation use of this area until 2022. The NHS staff does not control this zone. Visitors may not be aware that this land is located on federally owned property.

This zone would also include the Burlington Northern Santa Fe Railroad track and berm parallel to State Route 14. Cultural and natural resources are modified to support rail transportation use. Visitors may not be aware that this land is located on federally owned property.

Visitor Experience
This zone is dedicated specifically to general aviation by the City of Vancouver and transportation use by Burlington Northern Santa Fe Railroad and is not controlled by NPS staff. The NPS staff would be diligent to provide visitor safety information to keep visitors off the active runway. This would be accomplished through education, informational signing, fencing, and casual observation. Visitors are discouraged from crossing the railroad track by the existing elevated railroad berm and signage.

Appropriate Types of Activities and Facilities
These types of activities and facilities would not be coordinated by the NPS, but park staff would have input and some oversight with what activities and facilities may occur on federal land according to federal law and legislation.

Cultural Resource Management

Fort
The NPS would seek additional public and private funding for the reconstruction of nine additional structures within the fort palisade. Proposed fort buildings and structures for reconstruction include the Sale Shop and New Store (two buildings connected by a walkway), Counting House (also referred to as 1845 New Office), Powder Magazine, Owyhee Church, Priests House, Iron Store, Wheat Store, and Store (sometimes referred to as Receiving Warehouse or Provision Store).

Each of these structures historically had different functions that would provide the visitor with a broader understanding and experience of fort life than is presently available. If additional money is available to reconstruct, interpret, furnish, and operate other structures, then additional buildings or substitute buildings may be reconstructed. (Refer to Figure 3, Fort Structures.)

Some reconstructed buildings would have both external and internal interpretive uses for fort staff and volunteers to convey to the public. The NPS staff proposes that the original function of certain structures be interpreted to the public primarily outside the building, and that inside, space

would be adaptively used to assist the NHS in resource stewardship and partnership activities. This includes providing space in the reconstructed Sale Shop and New Store for the research and education center, collections storage, park library, and education center, complete with classroom space for school groups. In these instances, the original function of the buildings could be interpreted by recreating the historic interior space or by using other NPS interpretive programs and media.

Any reconstruction or delineation of structures would occur only where archaeological research can demonstrate accurate locations as required by NPS management policies. Additional NPS interpretive and volunteer staff would be necessary to assist the public in an appreciation of the functions that historically occurred in those reconstructed buildings opened for public visitation, and for resource stewardship and educational activities occurring within adapted space.

The existing asphalt pads marking some of the building foundations would be carefully removed. The NPS archaeological staff would monitor the removal on-site. Some of the pads are incorrectly located and not all the building foundations have been marked. It is recommended that some type of corner marker be used to mark all the foundations of unreconstructed buildings.

In addition, historic trails within the fort palisade would be reestablished.

Parade Ground
The cultural landscape of the Parade Ground would be delineated and restored. In addition, the future use of the Parade Ground for special events would be determined.

Village and Environs
Though the village area has been impacted by modern elements on adjacent lands, much remains available for interpretation. Modern structures would be screened as much as possible. The historic landscape including pathways, roads, and fences would be reestablished in much of the Village. Certain historic fields would be reestablished as cover crops, cultivated mechanically or perhaps eventually with oxen.

Reconstruction is proposed for two village residences and associated gardens to evoke the typical scale and use of structures within the Village. The NHS staff would reconstruct William Kaulehelehe's (Kanaka Billy's) residence with furnishings and use audio or other appropriate interpretation to provide a glimpse into nineteenth century living conditions in the Village. A second reconstructed house could serve as an interpretive shelter with exhibits about village life.

A delineation that silhouettes the exterior dimensions and approximate roofline would occur for several village residences where archaeological research can demonstrate accurate locations. Another option for interpretation could include only delineating the corners of foundations. (See Figure 10, Development Concept Plan: Alternative B and Figure 11, Development Concept Plan, Waterfront, Fort, and Village Site Components: Alternative B.)

New self-guided interpretive media and wayside exhibits would be developed to enhance public understanding of the site. Modern structures, such as Interstate 5, State Route 14, and modern buildings in the south barracks, would be screened as possible through use of native vegetation in order to enhance the village setting and visitor experience. For additional enhancement of the village setting, tents, fire pits, a privy, and various props such as carts, would be added to the scene for interpretive value. The historic village gate leading to the fort palisade has been reconstructed. The historic south gate of the palisade that served as the southwest entrance to the

Fort would provide alternative access to the Village. Historic fencing and informational signing would be used to keep the public away from Pearson Airfield aircraft operations.

Contingent upon the site redevelopment needs of the U.S. Army Reserve, a portion of the orchard northwest of the Fort would be recreated and restored to its original location. Seeds from an original HBC apple tree now located in Old Apple Tree Park would be used as seed source to establish new apple trees in the recreated orchard. The historic pattern of the orchard would be replicated where possible. In addition, the reconstruction of the Summer House may also be possible. A portion of the historic pond would be delineated possibly with native wetland vegetation or some other means in both the Village and at the Waterfront.

Historic paths and roads would enhance visitor non-motorized access to the area, along with the establishment of the multi-use Discovery Historic Loop Trail. In coordination with the City of Vancouver, this non-motorized trail would be developed around the western periphery of the site on NPS managed land directly adjacent to U.S. Army property in the south barracks area. The proposed route would link Fort Vancouver and the Vancouver Barracks areas of the Reserve by a proposed pedestrian overpass/land bridge (crossing of Washington State Route 14 and the Burlington Northern Santa Fe Railroad berm) to the interpretive area at the Fort Vancouver Waterfront.

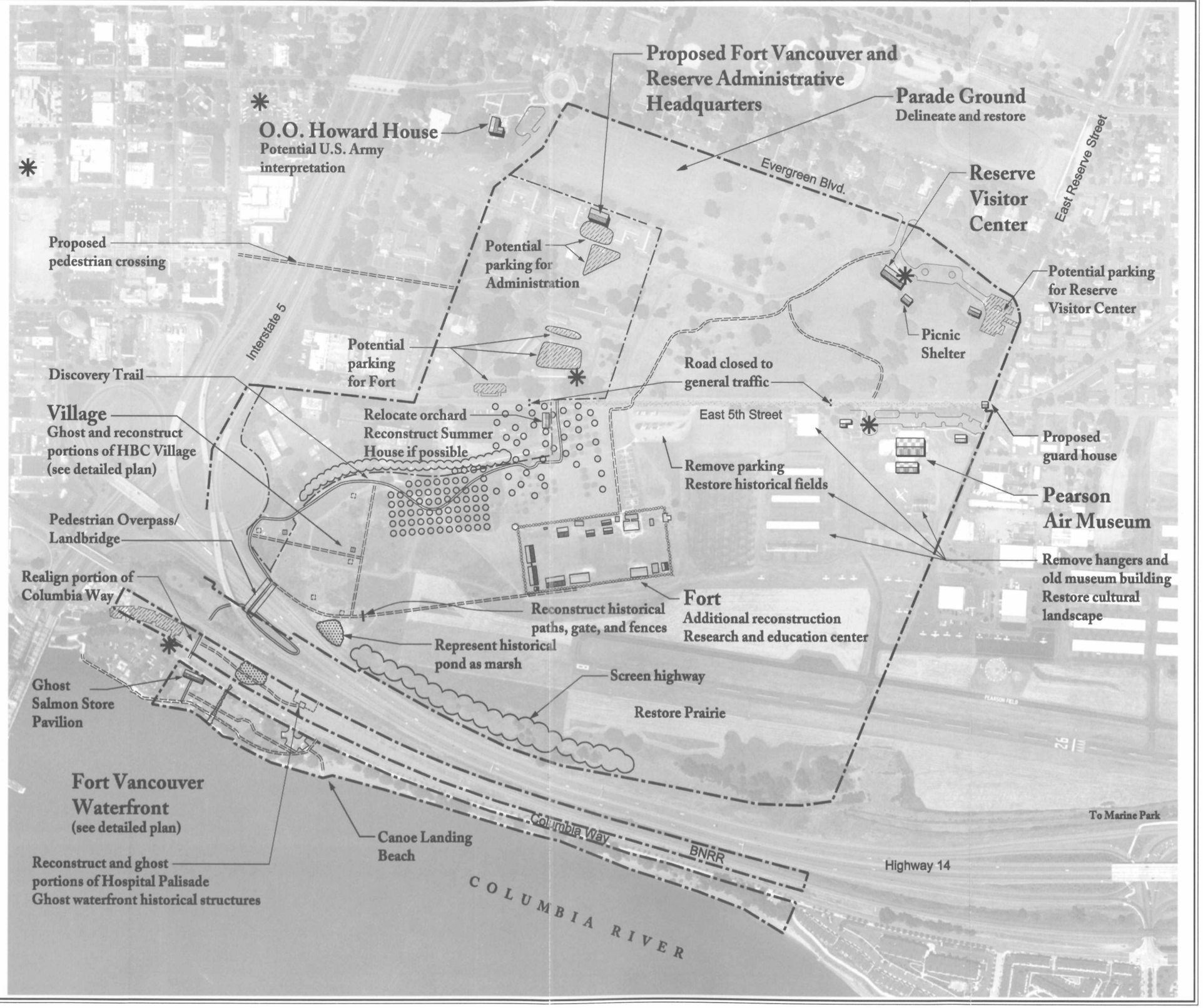
Fort Vancouver Waterfront

In addition to existing passive recreational uses along the NPS managed portion of the Columbia River waterfront, the importance of the role of the waterfront to Fort Vancouver as the avenue of commerce would be highlighted through new interpretive exhibits, improved public access, and the delineation of historic structures. The Salmon Store would be partially reconstructed as an interpretive shed. Restrooms, kiosk, and an interpretive area would be included within and around the structure. The adjacent boat shed would be delineated in order to provide the public with an understanding of the spatial relationship. In addition, the wharf would be simulated on land at the location of the historic shoreline and include a Columbia or other appropriate boat to convey the maritime theme of trade and commerce. As space and funding permit, other structures, such as the hospital and palisade, would be delineated along this section of the waterfront and within Old Apple Tree Park with the permission of the City of Vancouver.

A natural bermed amphitheater with seating for 100-150 people would be constructed overlooking the Columbia River to provide space for park interpretive talks and other programs, including space for appropriate community and Reserve Partner activities.

Non-motorized access to the Fort Vancouver Waterfront from the Fort and Vancouver Barracks would be greatly enhanced by a proposed pedestrian overpass/land bridge over State Route 14 and the Burlington Northern Santa Fe Railroad berm. The pedestrian overpass proposed in Alternative A would be widened as a pedestrian overpass/land bridge to accommodate both bicycles and pedestrians along with interpretive panels and other devices concerning Fort Vancouver and the Fort Vancouver Waterfront. Vegetation would be used as a transitional element.

To open up as much of the valuable waterfront land to public open space and use as possible, much of the parking would be removed from the waterfront area south of Columbia Way and relocated north between the railroad berm and the road. Pedestrian crossings would be established to help provide safe access for visitors from the parking area to the Waterfront. Additionally, a Reserve shuttle bus drop-off and pick-up areas would be incorporated into the design of waterfront improvements to assist in moving people to and from the site.



DEVELOPMENT CONCEPT PLAN

Alternative B (Preferred)

- Authorized NHS Boundary
- Managed by U.S. Army Reserve
- Discovery Trail Connections
- Pedestrian Circulation
- Parking
- Potential Parking
- Potential Shuttle Stop
- Special Road Surfacing

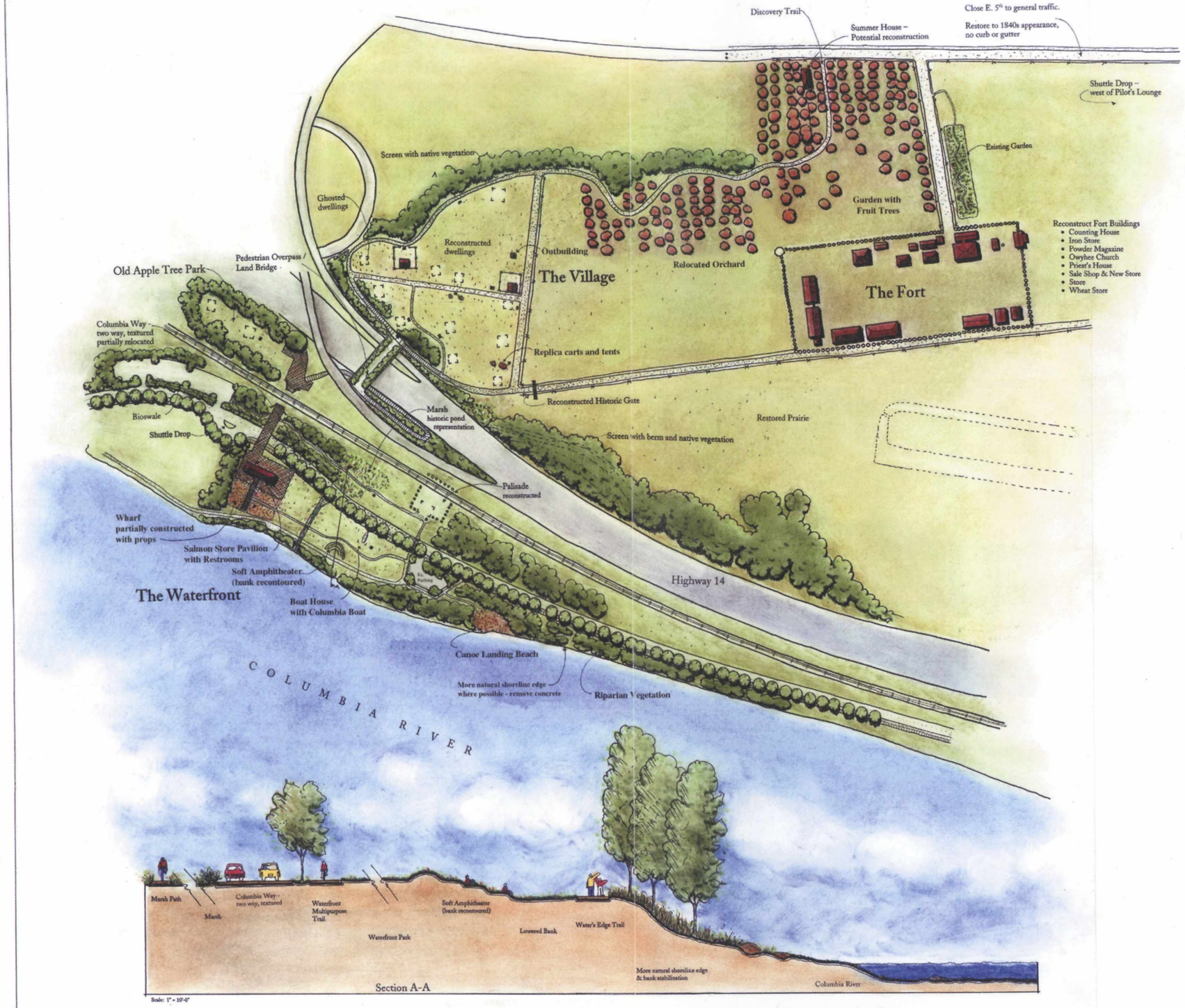
Fort Vancouver National Historic Site

Figure 10

General Management Plan

0 200' 300' 400'

Summer 2002



DEVELOPMENT CONCEPT PLAN

Waterfront, Fort, and Village Site Components

Alternative B (Preferred)

Figure 11

Legend

- Reconstructed Structures
- Ghosted Structures
- Existing Structures
- Fire Pit
- Wayside
- Hardened Earth Path
- Fences

Fort Vancouver National Historic Site

General Management Plan

0 100 200 ft

Summer 2002

Columbia Way would remain a two-way road, but it is proposed to change surface texture and lower speed levels near the historical and interpretive area. In addition, Columbia Way would be partially realigned on the west end of the NHS boundary to allow for more efficient use of the waterfront area. Cooperation with the City of Vancouver would be sought to establish and enforce load limits and to discourage commercial truck traffic from this section of the road. Instead, commercial truck traffic and other through traffic would be encouraged to utilize State Route 14 via the Columbia Way interchange to the east of the site.

Research and Education Center
The research and education center would receive greater emphasis under this alternative. The scale, scope, and location of this function would change. The center would move from the Fur Store to the Sale Shop and New Store when these buildings are reconstructed. The interiors of the buildings would be primarily devoted to center functions. The exterior façades could interpret the original function of the buildings. The new location would provide additional space for the research and education center, and include collections storage, a park library, and an education center. The center would also provide classroom space for school groups.

McLoughlin House National Historic Site
Under Alternative B, the NPS would support legislation to authorize the McLoughlin House National Historic Site to be administered as a unit of Fort Vancouver National Historic Site. The site is currently an affiliated area. The McLoughlin unit would retain its identity to reflect the fact that Congress established this site as a national historic site in 1941, several years before Fort Vancouver National Monument was established in 1948.

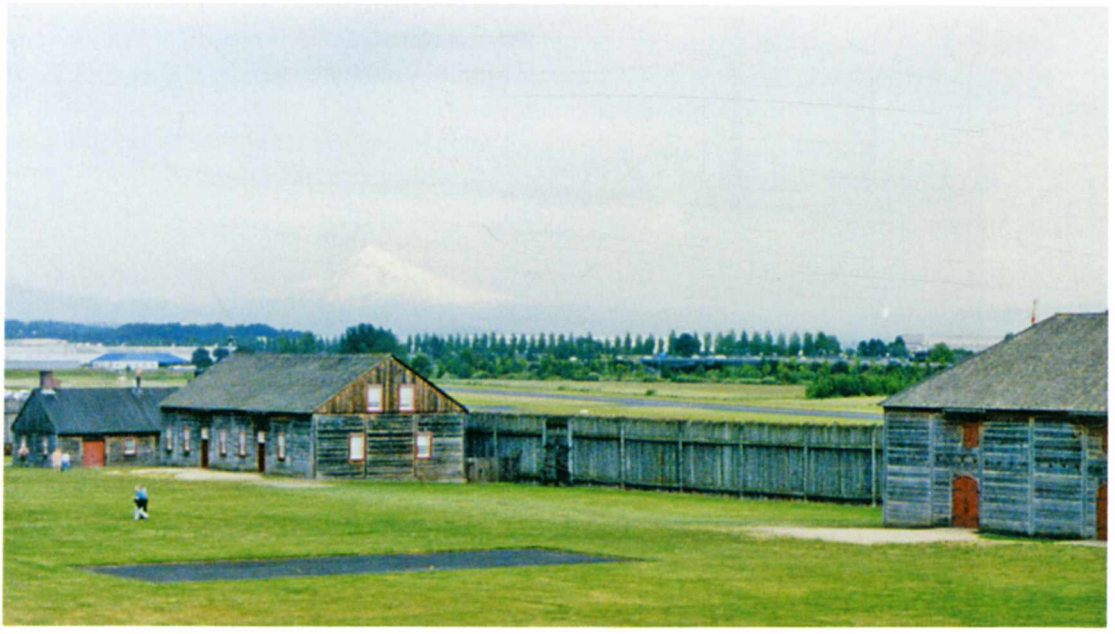
Since the land occupied by the McLoughlin and Barclay houses is owned by the City of Oregon City, Oregon, an easement is proposed for donation by Oregon City to the NPS which would provide for NPS maintenance and protection of the site for public use. A vote of the people of Oregon City was required to allow for this donation. On May 15, 2001, the public voted in favor of the donation that would allow for this transfer if authorized by Congress through new enabling legislation. Additionally, the McLoughlin Memorial Association would, under willing seller provisions, be encouraged to sell the McLoughlin and Barclay houses to the NPS in order to allow for direct NPS management and maintenance of the structures. A NPS site manager and staff would administer the site, and the NPS would provide various enhancements. Support for a volunteer cadre to assist the NPS in site operations would be actively pursued. (See Appendix C, Analysis of Boundary Adjustment and Land Protection Criteria.)

The McLoughlin Memorial Association would assist the Fort Vancouver NHS superintendent and site manager. Additionally, the Association with their 501(c)(3) nonprofit status would pursue private sector support for educational programming, site preservation, and other activities, which would support and benefit the site. It is intended that some of the proceeds from the sale of the two historic properties to the NPS would be used to establish an endowment fund administered by the McLoughlin Memorial Association Board of Directors. The endowment fund would be available to assist in the long-term preservation and public use of the site and the development of various educational programs throughout the community and the Portland/Vancouver metropolitan region.

The NPS would propose the following actions for the site: accession and catalogue the entire McLoughlin House collections; write and implement a scope of collection statement for the collection; determine collection management needs; determine the maintenance needs of the McLoughlin and Barclay houses; plan, design, and develop any necessary interpretive media; develop a volunteer program; provide for year-round site interpretation for the public; and

maintain the grounds surrounding the historic buildings. To address these necessary actions an amendment to this general management plan would be prepared subsequent to authorization by Congress for NPS administration of the area.

Sufficient administrative space for site staff would be secured in the Oregon City area, preferably within the local historic district. Initially, some administrative space could be provided in the Barclay House until other suitable space was secured.



Asphalt pads within the palisade would be removed and historic building locations noted with corner markers. Additional reconstruction would occur within the fort palisade.



The cultural landscape of the Parade Ground would be delineated and restored.



A view of the Columbia River showing approximate location of the Fort Vancouver Waterfront interpretive area.



The non-historic contact station inside the fort palisade would be removed and eventurally housed in a newly reconstructed Owyhee Church.

Natural Resource Management

Important habitat for flora and fauna would be maintained. Existing asphalt areas in the Village, remnants of former U.S. Army operations, would be removed or covered and the area would be restored to historical conditions. The former prairie area south of the fort (approximately 13 acres) would be restored outside the safety zone for Pearson Airfield. A portion of the historic pond (at both the Village and Waterfront) would be delineated using native wetland plants.

The NPS staff would work with other partners to enhance the natural condition along the Columbia River waterfront, including restoration of the riparian vegetation, where able, and creating a more natural shoreline edge. Existing concrete fill along the riverbank, in proximity to the canoe landing area, would be removed and natural methods of erosion protection would be utilized. Coordination with other agencies would be required to implement this action.

In cooperation with the U.S. Army Reserve, NPS staff would recommend preservation of the existing remnant grove of mature Garry oak trees, also called Oregon white oaks (*Quercus garryana*) within the east barracks of the authorized boundary of the NHS. The NPS staff would also encourage the Army Reserve and the City of Vancouver to adapt Integrated Pest Management practices in the east, west, and south barracks.

Recreational Resource Management

Management of recreational resources would be the same as in Alternative A. In addition to the historic trails that would be reconstructed within the Village and fort palisade, a non-historic trail would be established linking the visitor center and the Fort. This non-motorized path would provide an alternative to walking down the existing paved street between the visitor center and the Fort.

Scenic Resource Management

Scenic resource management for Alternative B would be the same as in Alternative A. In addition, the restoration of portions of the cultural landscape, reconstruction of additional fort buildings, and delineation of several structures at both the Village and at the Waterfront would provide for a more accurate historic scene.

The existing fort temporary parking lot would be removed and the historic fields restored surrounding the Fort. Where appropriate, NHS staff would screen modern elements, particularly along the western edge of the south barracks, the Interstate 5 bridge, and the north edge of State Route 14 within the historic scene through the use of compatible native vegetation.

Interpretation, Education, and Outreach

New exhibits would be produced, designed, and installed in the Vancouver National Historic Reserve visitor center jointly managed by the Reserve Partners including the NPS. A new audio-visual program would be designed and produced for showing in the redeveloped visitor center auditorium/theater.

New exhibits, media, and interpretive programs would be developed in conjunction with reconstructed or delineated structures within the Fort, Village, and the Waterfront. Opportunities for self-guided interpretive walks and bicycling tours, enhanced potentially by audio technology,

would be explored. Additionally, as funding and staffing permit, opportunities to provide the public with guided interpretive walks by park rangers and volunteer staff would be actively pursued.

Living history interpretation would be increased within the Fort, and provided at the Village and Waterfront through increased permanent and seasonal staff and an increase in park volunteers. This could expand to other areas of the Reserve in cooperation with Reserve Partners. A park volunteer coordinator would be hired to assist the park staff in maintaining and increasing a viable and well-trained volunteer cadre for Fort Vancouver NHS and at the McLoughlin House National Historic Site in Oregon City. This volunteer coordinator would also be expected to work cooperatively with other Vancouver National Historic Reserve venues in helping to meet volunteer staffing needs. This could include maintenance of the Fort Vancouver garden and encouraging teen and college youth interpretation programs.

The proposed pedestrian crossing would be widened and designed to incorporate exhibits that would educate and visually reinforce the interpretive themes both for the visitor crossing on the bridge and by drivers traveling along State Route 14. The pedestrian overpass/land bridge could potentially exhibit art installed on the sides of the bridge for easy viewing.

The NPS staff would provide interpretation to educate visitors about on-site archaeology activity when occurring at the Village or at the Waterfront. The archaeology program at the NHS would be expanded. Archaeology walking tours, curatorial tours of reconstructed buildings, and collection facility tours would be expanded. Programs for children would be enhanced, and NHS staff would offer additional archaeological seminars and events. The archaeology field school jointly conducted by Portland State University and NPS, and perhaps other future partners, would continue to host college students at the NHS and offer a lecture series that the public could attend.

The NPS staff would also provide a walking tour using waysides and NPS interpreters in all areas of Fort Vancouver NHS and adjacent areas within the Reserve.

Park Facilities

Fort Vancouver NHS Visitor Center
The current Fort Vancouver NHS visitor center would become the primary visitor center for the Vancouver National Historic Reserve which is currently located in the O.O. Howard House within the Reserve. This remodeled facility would offer orientation and information to the public about the Reserve. Since the O.O. Howard House is representative of the Army period, the NPS recommends that portions of the first floor of the O.O. Howard House remain available for public use. The upper floor could continue to be used as office space.

Extensive remodeling, including some enlargement of the space configuration within the existing Fort Vancouver visitor center would be anticipated to accommodate new Reserve exhibits. Initial orientation and information about the Reserve would be provided, along with general interpretation about each major venue within the Reserve. The existing auditorium/theater within the visitor center complex would be redesigned to accommodate larger groups. Various media, including films, would be developed and shown in the new theater. These programs would highlight the principal historical themes present in the Reserve. The NHS video would be updated.

More detailed Fort Vancouver NHS interpretation now provided in the current visitor center would be moved to the Fort, Village, Parade Ground, and the Waterfront. Within the palisade the existing non-historic structure would be removed and the proposed reconstructed Owyhee Church would serve as the initial contact for visitors entering the Fort. Here the visitor would receive general information and orientation about the Fort and learn about HBC religious life. Consideration would be given to relocating the Northwest Interpretive Association sales and education area from the visitor center to a location within the palisade. This would offer visitors to the Fort an opportunity to buy sales items.

Administrative Facilities
Fort Vancouver NHS administrative headquarters and certain other administrative operations in the fort palisades would be relocated to one of four buildings fronting the historic Parade Ground subject to a determination by the Secretary of the Army that space is excess to the needs of the U.S. Army Reserve. Reserve Partners and the Reserve Trust would also be encouraged to co-locate their administrative offices to this building. It would be expected that this physical relationship would assist the Reserve Partners in numerous ways, while providing Fort Vancouver NHS with the necessary enhancement in the administrative space needed for NHS operations.

Many Mission 66 structures in national parks are now over 50 years old and are eligible for listing on the National Register of Historic Places. A determination of eligibility for the National Register would be made regarding the two Mission 66 buildings presently being used as administrative headquarters and as an employee residence. If determined not eligible for the National Register, these structures would be removed, once administrative and maintenance replacement is secured. The area vacated by the structures would be made available for additional visitor parking and shuttle bus operations connected to the proposed Reserve visitor center. If the structures are determined eligible for the National Register, they could be retained and various adaptive reuse options for the buildings would be considered. Additional parking and shuttle options for shuttle staging would then need to be explored.

Maintenance Facilities
Under the Preferred Alternative, maintenance facilities would be relocated to another site within the south or east barracks area of the Vancouver Barracks subject to a determination by the Secretary of the Army that space is excess to the needs of the U.S. Army Reserve. Fort Vancouver NHS maintenance staff would explore possibilities to partner with other Reserve Partners in the location and function of maintenance services.

Opportunities should also be explored for the NPS to cooperate with the other non-military Reserve Partners in the maintenance of other areas in the Vancouver National Historic Reserve. This includes former U.S. Army buildings and grounds slated for adaptive reuse by the City of Vancouver. Partnering opportunities may include sign shop, supply and storage, equipment maintenance, mowing and grounds maintenance, road maintenance, and other areas.

A determination of eligibility for the National Register of Historic Places would be made regarding the Mission 66 maintenance shop. If determined not eligible for the National Register, the structure would be removed and made available for visitor parking and shuttle bus operations connected to the new Reserve visitor center. If the structure is determined eligible for the National Register, the building could be retained and various adaptive reuse options for the building would then be considered.

Development Cost Estimates of Implementing Alternative B

The following costs are estimates for implementing Alternative B. It is assumed that meeting the long-range development needs of the NHS will not only rely upon federal appropriated funds. A wide variety of other public and private sector funding sources will be sought to assist in implementation efforts over the next 15-20 years. This is underscored in the NPS participation in the Vancouver National Historic Reserve, where Reserve Partners share the vision for the future of Fort Vancouver NHS. As has been evidenced in the past, some development costs assigned to certain actions, such as Fort reconstruction, 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 and supplemental services.

Development Action	**Total Estimated Costs**
Fort Vancouver NHS	
Expand visitor center parking	$80,000
Remodel existing visitor center	$1,048,000
Upgrade visitor center exhibits and A/V program upgrades and new theater	$1,886,000
Relocate and renovate administrative facility in Reserve	$2,203,000
Relocate and renovate maintenance facility in Reserve	$900,000
Reconstruct buildings and trails within fort palisade and trails at Parade Ground	$2,627,000
Relocate portion of orchard	$240,000
Resurface East Fifth Street	$300,000
Add interpretive features at Fort, Village, and Waterfront	$1,200,000
Delineate structures at Village and Waterfront and restore surrounding cultural landscape	$900,000
Plant screening in village area and along SR 14	$180,000
Restore prairie south of Fort	$120,000
Realign portion of Columbia Way*	TBD
Reconfigure parking on Waterfront *	TBD
Implement shoreline improvements	$240,000
Estimated Total Costs	**$11,924,000**

* FHLP (Federal Highways Lands Program) funded project. Preliminary site design/cost estimates not completed.

These costs are based upon general class "C" estimates of site development under this alternative. These estimates are provided to allow for a comparison of alternatives and are not intended to be used for budgetary purposes. Prior to submitting funding requests for the design and construction phases, class "B" estimates would be required, based upon detailed site design that would provide decisions about facility size and cost. Costs are expressed in 2002 dollars and phased over 15-20 years.

Development Action	**Total Estimated Costs**
McLoughlin House National Historic Site	
Restore McLoughlin and Barclay houses	$1,560,000
Develop interpretive program for site	$360,000
Preserve site collections	$120,000
Enhance parking adjacent to site	$120,000
Estimated Total Costs	**$2,160,000**

Park Operations

Staffing

Under the Preferred Alternative, the NHS would have a total of 28 authorized FTE staff and an average of 29 staff (permanent, seasonal/term positions) during the course of any one fiscal year. Alternative B would have a total of 6 FTE over existing authorized levels. Alternative B would add 5 permanent positions and 7 seasonal workers to the staff over Alternative A. In addition, a total of 6 FTE would be assigned to staff the McLoughlin House National Historic Site. An additional 10 FTE would be needed to support the interpretive and resource management needs of the broader Vancouver National Historic Reserve.

Proposed Staffing under Alternative B for Fort Vancouver National Historic Site

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
4 Permanent	6 Permanent	7 Permanent	5 Permanent	22	
0 Seasonal	4 Seasonal	3 Seasonal	0 Seasonal	7	
4 Total	10 Total	10 Total	5 Total	29	28

Estimated Operating Costs (2002 Dollars)

Operating base: $960,000
Additional 12 staff: $307,000
Total: $1,267,000

The difference in operating costs between Alternative A (current base) and Alternative B is $307,000.

Proposed Staffing under Alternative B for NPS Operations within Vancouver National Historic Reserve

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
1 Permanent	0 Permanent	7 Permanent	2 Permanent	10	
0 Seasonal	4 Seasonal	1 Seasonal	0 Seasonal	5	
1 Total	4 Total	8 Total	2 Total	15	10

Estimated Operating Costs (2002 Dollars)

Operating base: $0
Additional 15 staff: $643,000
Total: $643,000

If funding for NPS support to the Reserve is institutionalized by an increase to the Fort Vancouver NHS's annual operating base, an additional $643,000 would be required to support these positions.

Proposed Staffing under Alternative B for NPS Operations at the McLoughlin House National Historic Site

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
2 Permanent	1 Permanent	2 Permanent	2 Permanent	5	
0 Seasonal	1 Seasonal	1 Seasonal	0 Seasonal	2	
2 Total	2 Total	3 Total	2 Total	7	6

Currently, legislation is pending in Congress that would establish the McLoughlin House National Historic Site as a unit of Fort Vancouver National Historic Site. Language being considered would retain McLoughlin House National Historic Site in name but administered by staff at Fort Vancouver NHS. In this event, staffing would be required to adequately provide support for site administration, maintenance, interpretation, and resource management. Estimated operating costs to implement this alternative would need to increase accordingly.

Estimated Operating Costs (2002 Dollars)

Operating base:	$0
Additional 9 staff:	$285,000
Total:	$285,000

Fees

Collection of fees would be the same as in Alternative A. In addition, in cooperation with the Reserve Partners the NPS would work toward the development of a "heritage pass" or other similar program. Under this concept, visitors could obtain a single pass and pay one fee to gain entrance to multiple Reserve venues. This could include a single pass for entrance to Fort Vancouver, the Pearson Air Museum, the Water Resources Education Center, a potential U.S. Army museum in the O.O. Howard House, and other public and private nonprofit venues within the Reserve that may be developed.

Park Hours and Seasons of Operation

Under Alternative B, the visitor center and the fort palisade would be open the same hours and seasons as in Alternative A.

Parking, Access, and Circulation

Fort Vancouver Visitor Center Parking

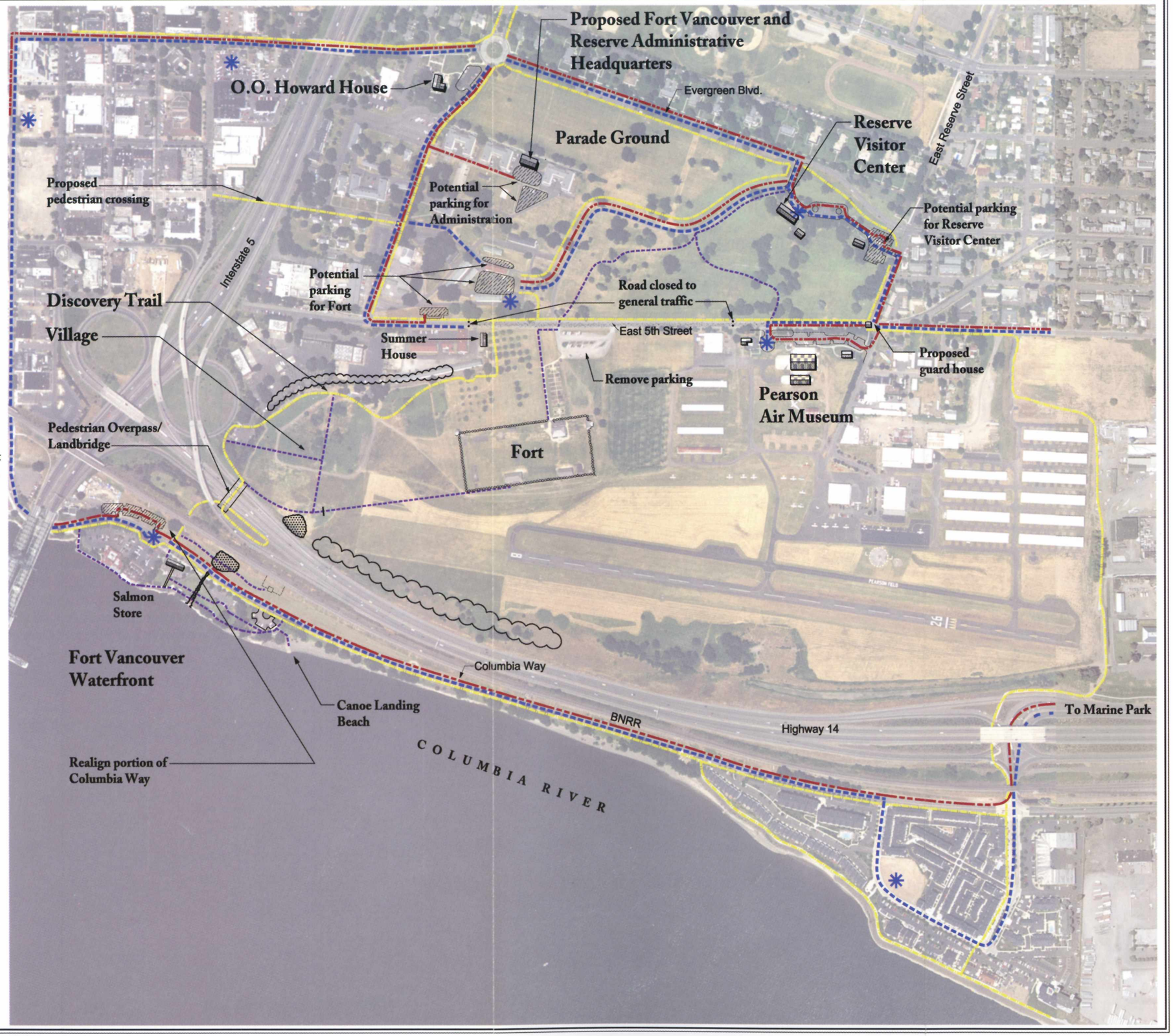
The existing Fort Vancouver visitor center would serve as the joint visitor center for the Reserve. Actions would be taken to enlarge the existing parking lot for additional parking (an additional 28 parking spaces and 3 pull-throughs) and shuttle bus operations. To accomplish this, the existing Mission 66 architectural style maintenance shop, employee residence, and administrative headquarters building would be removed. If these structures were determined eligible for the National Register of Historic Places various adaptive reuse options for the buildings would be considered and visitor parking would be retained in its current location. (See Figure 12, Circulation Plan: Alternative B.)

Fort Visitor Parking

The temporary gravel parking area adjacent to the Fort off East Fifth Street would be eliminated, and a new parking area (minimum 30 parking spaces) constructed within the south or east barracks contingent upon coordination and agreement with the U.S. Army. Opportunities to partner with the U.S. Army Reserve would be fully explored to allow for joint use of the Reserve parking area by park visitors and U.S. Army Reserve personnel on drill weekends. (Usually two to three weekends per month are involved with Army Reserve activity.) The existing parking area would be fully restored as part of the cultural landscape of the fort environs, including agricultural fields that historically occupied the area.

East Fifth Street

East Fifth Street would be closed to general vehicular traffic between the entrance to the Pearson Air Museum administrative offices and a point east of Fort Vancouver Way in proximity to the



CIRCULATION PLAN

Alternative B (Preferred)

- Pedestrian Circulation
- Multi-purpose Circulation
- Vehicle Circulation
- Possible Shuttle Route
- Parking
- Potential Parking
- Potential Shuttle Stop
- Soft or Textured Road Surfacing

Fort Vancouver National Historic Site

Figure 12

General Management Plan

0 200' 300' 400'

Summer 2002

Fort Vancouver orchard. Concrete curbing and sidewalks would be removed in this area, the street narrowed to a two-lane width, and the current pavement surface changed to a surface texture evocative of the nineteenth century HBC period. Potentially a rolled crushed stone, soil cement, or treatment similar to the historic appearance would be considered. A shuttle stop would be established at each end. Closure of East Fifth Street to vehicular traffic in the area in front of the Fort could allow for consideration of horse-drawn wagons or other interpretive uses on the road. The Federal Highway Administration and Army Reserve personnel would access their areas by driving either Fort Vancouver Way or the frontage road paralleling Interstate 5.

Close cooperation with the City of Vancouver, the U.S. Army Reserve, and other partners would be required to implement this action. This section of East Fifth Street would continue to be available to emergency fire, police, and medical personnel, and to military use in the event of a national emergency.

Non-motorized uses of this portion of East Fifth Street would continue, including bicycle and pedestrian use. Development of a segment of the Discovery Historic Loop Trail would occur along the north side of East Fifth Street through this section.

Fort Vancouver Waterfront Parking
Two of the three existing parking lots would be removed. The small parking lot with 16 parking spaces adjacent to Canoe Landing Beach would be retained. One new lot (approximately 60 parking spaces) west of the proposed Salmon Store would be constructed adjacent to the railroad berm. This would result in approximately 10 additional parking spaces. Also, a shuttle stop would be integrated west of the Salmon Store.

Vancouver National Historic Reserve Shuttle System
As described in the *Vancouver National Historic Reserve Cooperative Management Plan* a shuttle system is recommended to assist in moving visitors throughout the various venues within the Reserve. Implementation of this system is an important component of the overall visitor experience to the NHS and provides a fuel-efficient and reliable alternative to the use of private vehicles to access various portions of the park. It is recommended that park staff coordinate with C-TRAN and the City of Vancouver in the establishment of this system. It is further recommended that use of energy efficient alternative fuel vehicles be fully explored for the shuttle system.



In Alternative B, the visitor center parking lot would be enlarged and reconfigured. Staging for Reserve shuttle operations would occur here.



A trail would be constructed from the visitor center to the Fort as a safer alternative to walking down the road.



The City's Discovery Historic Loop Trail would continue through the national historic site with minor compatible design changes.



One of the buildings in the east barracks fronting the Parade Ground would become the joint NPS/Reserve administration building.



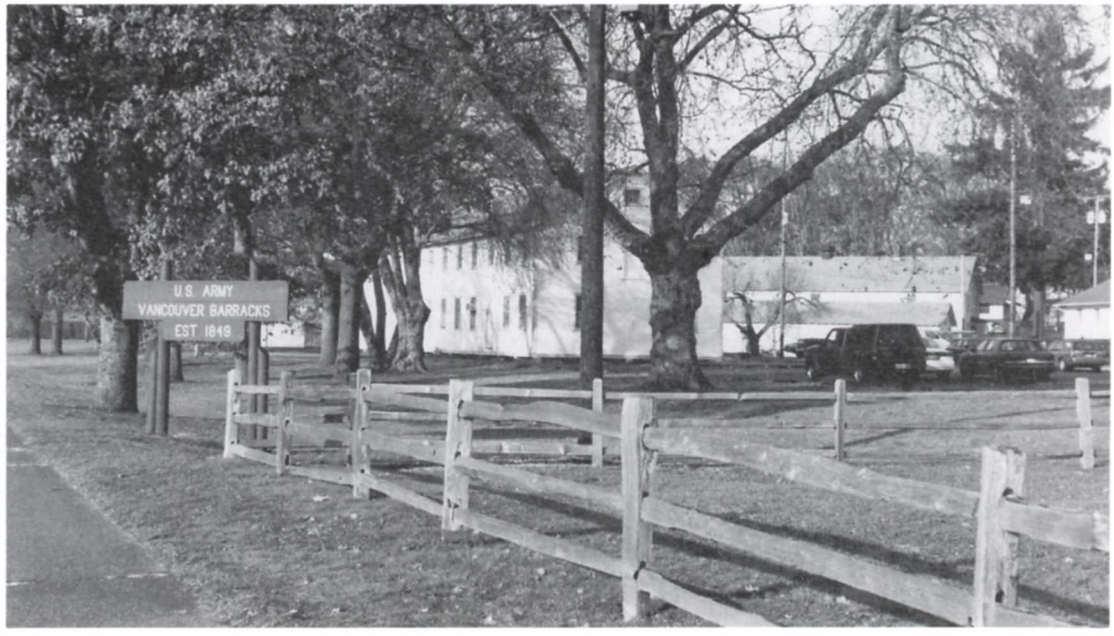
East Fifth Street would be closed to all motorized traffic, except emergency vehicles and the street narrowed. The pavement surface would be changed to a texture evocative of the nineteenth century HBC period. A shuttle stop would be established at each end of the closed section of road.



A gatehouse (similar to this one) would be established on East Fifth Street near Pearson Air Museum.



The fort's temporary parking lot would be removed and the historic fields restored.
The two metal museum buildings and four T-hangars (in background) will be removed by the end of 2002.



Shared parking would be recommended between the U.S. Army Reserve
and the NHS in the south and east barracks area.



The pedestrian overpass/land bridge would land on the south end in Old Apple Tree Park.



Parking at the Waterfront would be moved adjacent to the railroad berm to allow for more interpretive and visitor use space along the river shoreline.

Carrying Capacity

Under Alternative B, the present carrying capacity of the NHS is defined as the maximum numbers of people allowed in the visitor center, the maximum number of cars at the five parking lots, and in the optimum number of visitors within the fort palisade.

The current maximum use is as follows:

- Capacity of the redesigned auditorium: 125 visitors
- Capacity of the redesigned visitor center: 250 visitors
- Enlarged Fort Vancouver visitor center parking lot: 71 cars (28 additional spaces), 3 buses/RV spaces
- New parking area replacing existing fort parking lot: approximately 30 spaces (2 for persons with disabilities) with additional parking in south and/or east barracks.
- New Fort Vancouver Waterfront parking: 60 cars (2 for persons with disabilities)
- Existing Canoe Landing Beach parking: 16 cars
- Picnic area capacity: 7 tables under shelter (with adjacent playground)
- Reconstructed buildings within the Fort: tours are limited to approximately 15-25 people depending upon individual buildings

Parking is not expected be a problem at the Village and along the Waterfront due to the underutilized nature of these two areas. However, crowding could present a problem on certain visitation days within the fort palisade or at the visitor center. When this occurs, people would be encouraged to take public transportation, a self-guided tour, take a later tour, visit other venues such as Pearson Air Museum, or return at a later date.

The proposed Reserve shuttle system could bring more people from downtown to surrounding venues within the NHS and Reserve. If one area of the Reserve is busy, visitors have the ability to catch the shuttle and go to another venue. The system would also lessen the need for on-site parking at the visitor center and at the Fort.

Park Boundary and Land Protection

Within the authorized boundary, the NPS recommends that the south and east barracks remain in federal ownership. The Secretary of the Army would administratively transfer any property declared excess by the U.S. Army to the Secretary of the Interior. Receiving these lands means that some important HBC cultural sites, like the HBC cemetery, would be protected and interpreted by NPS.

Under this preferred alternative, Congress would authorize the addition of McLoughlin House National Historic Site as a unit of Fort Vancouver National Historic Site with continued cooperation with the McLoughlin Memorial Association. (See Appendix C: Analysis of Boundary Adjustment and Land Protection Criteria.) A portion of Oregon City Block 40 would be transferred to NPS administration as the McLoughlin House National Historic Site unit of the park. The federal government would receive title to McLoughlin and Barclay houses from the Association by fee purchase. In addition, an easement would be donated by the City of Oregon City to enable NPS to manage and administer the site. However, the city would retain ownership of the land itself since it is a Charter Park. Through this legislation, the NPS would be able to further partnership opportunities with the City of Oregon City, the local community, and volunteers.

Opportunities for Regional Cooperation and Partnerships

As mentioned in the *Vancouver National Historic Reserve Cooperative Management Plan,* a portion of the Vancouver Barracks could function as a center to provide educational opportunities involving historical research, events, seminars, and educational institutes. This center would focus on the time period of the Reserve and the "One Place Across Time" theme. The Fort Vancouver NHS research and education center's emphasis on HBC and the early U.S. Army period would enable the NPS to provide speakers, research, and other expertise into the broader based Reserve center. Partnership opportunities would be fully explored with the City of Vancouver, the Reserve Trust, and others.

Both current and enhanced research functions within the fort palisade would be expected to network with other historical archaeological sites throughout the Pacific Northwest and North America, providing significant partnering opportunities. In conjunction with the City of Vancouver and the day-to-day property management entity for the Vancouver Barracks, some existing housing within the barracks area could potentially provide housing for researchers, visiting archaeologists, and students.

Additionally, the use of the national historic site in promoting the NPS Parks as Classrooms program to elementary to high school students could promote a better understanding of the area's geography, the science of archaeology, and Pacific Northwest history. This could be expanded to college and graduate level students throughout the greater Portland/Vancouver metropolitan region. Emphasized subjects could include the following: the history of Fort Vancouver and Hudson's Bay Company in the Northwest, early pioneer settlement of the Oregon Territory, the establishment of U.S. Army presence in the Pacific Northwest at the Vancouver Barracks, the World War I Spruce Mill, the Civilian Conservation Corps complex, and the science of archaeology.

Through active involvement and coordination with our Reserve Partners and the Reserve Trust, the wealth of educational opportunities at other venues through the "One Place Across Time" theme would be encouraged and explored. This would include other Reserve venues such as the Pearson Air Museum, the Water Resources Education Center, Marine Park, and the former World War II Kaiser Shipyards. The Parks as Classrooms concept could be extended to these other venues.

During summer months, "history camps" for kids could be established with the Vancouver Barracks to immerse elementary and junior high school students in local history.

In addition to elementary to high school student educational opportunities, Fort Vancouver NHS staff and volunteers have seemingly limitless opportunities to become involved in other Reserve activities related to education and interpretation. These include involvement with programs such as Elderhostel, expanded curriculum of area colleges and universities, and post-graduate studies in history, archaeology, anthropology, and other social sciences. These and other programs offer a wealth of opportunity to share and learn about the rich history of the Vancouver area and the Pacific Northwest.

All of these potential staff and program partnership opportunities seek to reinforce the important relationship among the Reserve Partners and the Reserve Trust in positively engaging the various education and research aspects of the Vancouver National Historic Reserve.

Through joint marketing approaches, significant opportunities exist to acquaint the traveling public, along with residents of the Portland-Vancouver Metropolitan Area, with the numerous opportunities that exist at Fort Vancouver NHS and throughout the Reserve.

The NPS would participate with the Center for Columbia River History to provide historical research and develop historical and informational materials. In addition, the NPS would partner with local institutions, including colleges and universities, to develop archaeology field schools and other educational initiatives.

The NPS, in cooperation with the Association for Washington Archaeology (AWA), would provide training on the use of ARPA (Archaeological Resources Protection Act) and state cultural resources law as a technique in local and federal law enforcement. Curricula developed by AWA and NPS would be used to train county and city law enforcement officers and prosecutors in the state of Washington on cultural resources laws and techniques of enforcement. Programs could also be developed through the Oregon Archaeological Society or the Association of Oregon Archaeologists for Oregon law enforcement personnel.

Action Plan Items

The following actions would have to occur to implement all of Alternative B. Some of these items would require additional special project funding or increases to the operating base to accomplish them:

- Develop baseline inventory for plant and animal species.
- Develop space allocation plan for staff (space and equipment).
- Revise historic furnishing plans for the existing fort buildings.
- Develop maintenance facility study (storage, location, partnering).

Actions Requiring Cooperation with Reserve Partners

There are certain actions proposed in Alternative B that would occur both at the NHS and off-site on property managed by the Reserve Partners. Those instances where cooperation and discussion would need to occur between the NHS and the Reserve Partners are listed below.

Education/Assistance

- In coordination with the Reserve Partners, NPS staff could utilize the barracks for educational programming directed at educational purposes, including classrooms, offices, and auditorium, meeting and field laboratory space, and lodging.
- In coordination with the Reserve Partners, and a determination of excess need by the Secretary of the Army, NPS staff could utilize portions of the south and east barracks for administrative offices and maintenance facilities.
- The NPS with support from the Reserve Partners would provide ongoing collaborative training and workshops for Reserve staff and interns.

Transportation/Parking

- The NPS staff would work with the City and U.S. Army Reserve to close a portion of East Fifth Street adjacent to the Fort to vehicular traffic except for emergency services.
- The Reserve Partners would be encouraged to use a shuttle system (public transportation loop) to move people around to various sites within the Reserve.
- The NPS staff would work with the City and other Reserve Partners to reroute a minor portion of Columbia Way around the NPS interpretive area east of the Interstate 5 bridge.

- The NPS and Reserve Partners would integrate parking and transportation planning for the entire Reserve, including the potential for shared parking at the south and east barracks to serve visitors at the Fort and U.S. Army Reserve activities.
- The Reserve Partners would be encouraged to explore the possibility of traffic calming devices along Evergreen Boulevard.
- Downtown public parking for a shuttle system would be recommended and considered by Reserve Partners.

Law Enforcement

- The NPS staff and Reserve Partners would work together to coordinate law enforcement and security issues throughout the Reserve.

Design

- The NPS would work with the Reserve Partners to standardize modern design features for signs, roads, and trials. This could involve examining signing for the entire Reserve and include regional signing to highways Interstate 5, Interstate 205, and other road networks.

Resources

- The NPS staff would work with the U.S. Army for the administrative conveyance of excess Army property in the east and south barracks area to the Secretary of the Interior to be managed by the NPS as part of Fort Vancouver NHS.
- The NPS would help develop historic design guidelines appropriate for the Reserve aided by the cultural landscape report including lighting, trails, and signs.
- As part of the lead responsibility in cultural resources for Vancouver National Historic Reserve, NPS staff would assist with cultural resource preservation and management for Pearson Air Museum as requested and desired, as well as other areas within the Reserve.
- The NPS staff would provide assistance on Reserve wetland issues.

Maintenance

- The NPS staff would seek to consolidate maintenance policies, and operations where warranted, among Reserve Partners.

Alternative C

General Description of Alternative C

Alternative C continues much of the same actions that would be proposed for implementation under Alternative B with some proposed changes. All buildings within the Fort would be reconstructed. Additional reconstruction and delineation of structures would occur at the Village and Waterfront. Other actions strive to create a stronger link between the Fort and the Waterfront. In addition an off-site location within the Reserve is recommended for the jointly managed Vancouver National Historic Reserve visitor center and the NHS research and education center.

Management Zones

Management zoning for Alternative C is the same as in Alternative B. (See Figure 13, Management Zoning: Alternative C.)

Cultural Resource Management

Fort
All buildings within the fort palisade would be reconstructed. This would include an addition of 14 historic structures including the following: the Sale Shop and New Store (two buildings connected by a walkway), Counting House (also referred to as 1845 New Office), Powder Magazine, Owhyee Church, Priest House, Iron Store, Wheat Store, Store (sometimes referred to as Receiving Warehouse or Provision Store), Old Office, Catholic Church, Beef Store, Bachelors'Hall, and Harness Shop. Prior to reconstruction, the existing asphalt pads in the Fort would be carefully removed and construction monitored on-site by appropriate archaeological staff. In addition to reconstruction, historic trails within the fort palisade would be reestablished.

Some reconstructed buildings would have both external and internal interpretive uses for NHS staff and volunteers to convey to the public. The NPS staff proposes that the original function of certain buildings would be interpreted to the public outside the building, and that inside, space would be adaptively used to assist the NHS in resource stewardship and partnership activities. The original function of the buildings could also be interpreted in other ways through NPS interpretive programs and media.

Additional NPS interpretive and volunteer staff would be necessary to assist the public in an appreciation of the functions that historically occurred in those reconstructed buildings opened for public use and for resource stewardship and educational activities occurring within adapted space.

Parade Ground
Treatment of the Parade Ground would be the same as in Alternative B.

Village and Environs
Treatment for the Village and the area surrounding the Fort would be the same as in Alternative B. In addition reconstruction or delineation of other village structures would occur as archaeology and site resource data permit. This alternative would emphasize the restoration of the cultural landscape including reconstruction of the historic barn, traditional cultivation of crops, and reintroduction of livestock to the historic scene for special events. Subject to future plans of the U.S. Army Reserve facilities, the orchard would be established at its original location and

expanded to its original size, as possible. Seeds from an original HBC apple tree now located in Old Apple Tree Park would be used as a seed source to establish new apple trees in the recreated orchard. The historic pattern of the orchard would be replicated where possible. In addition, reconstruction of the two schoolhouses north of present-day East Fifth Street would be proposed. (See Figure 14, Development Concept Plan: Alternative C and Figure 15, Development Concept Plan, Waterfront, Fort, and Village Site Components: Alternative C.)

Contingent upon the extent of property declared excess in the south barracks area by the Secretary of the Army, the Summer House would be reconstructed. This action would also allow the orchard to be restored to its historic size and location.

Fort Vancouver Waterfront

The Fort Vancouver Waterfront would be treated the same as in Alternative B with the following changes. Subject to approval by the City of Vancouver, Columbia Way would be closed to all vehicular traffic along the section of Fort Vancouver Waterfront involving the proposed historical and interpretive features. Parking areas, shuttle bus drop-offs, and vehicle turnarounds would be provided at both the east and west ends of the closed road. All through traffic would be directed onto State Route 14 for access to the Columbia Shores and Columbia Business Park located to the east. Public vehicular access would continue to be maintained from downtown Vancouver to the two restaurants located just east of the Interstate 5 bridge.

In addition to the interpretive facilities included in Alternative B, the Salmon Store would be fully reconstructed. The boat shed would be roofed and the fort hospital and six other buildings would be delineated in some manner. Portions of the hospital palisade would be reconstructed, and a portion of the historic pond would potentially be reestablished using water and wetland vegetation. Depending upon the exact location of the pedestrian overpass/land bridge, a berm opening could be made through the railroad embankment visually connecting the fort area to the Waterfront.

If feasible, taking into account present shipping patterns, environmental impacts, and currents, the wharf would be reconstructed into the Columbia River. This could allow historic boats to visit and temporarily anchor there along with tour boats serving multiple sites along the Columbia and Willamette rivers.

The opportunity to provide a limited food service would be explored.



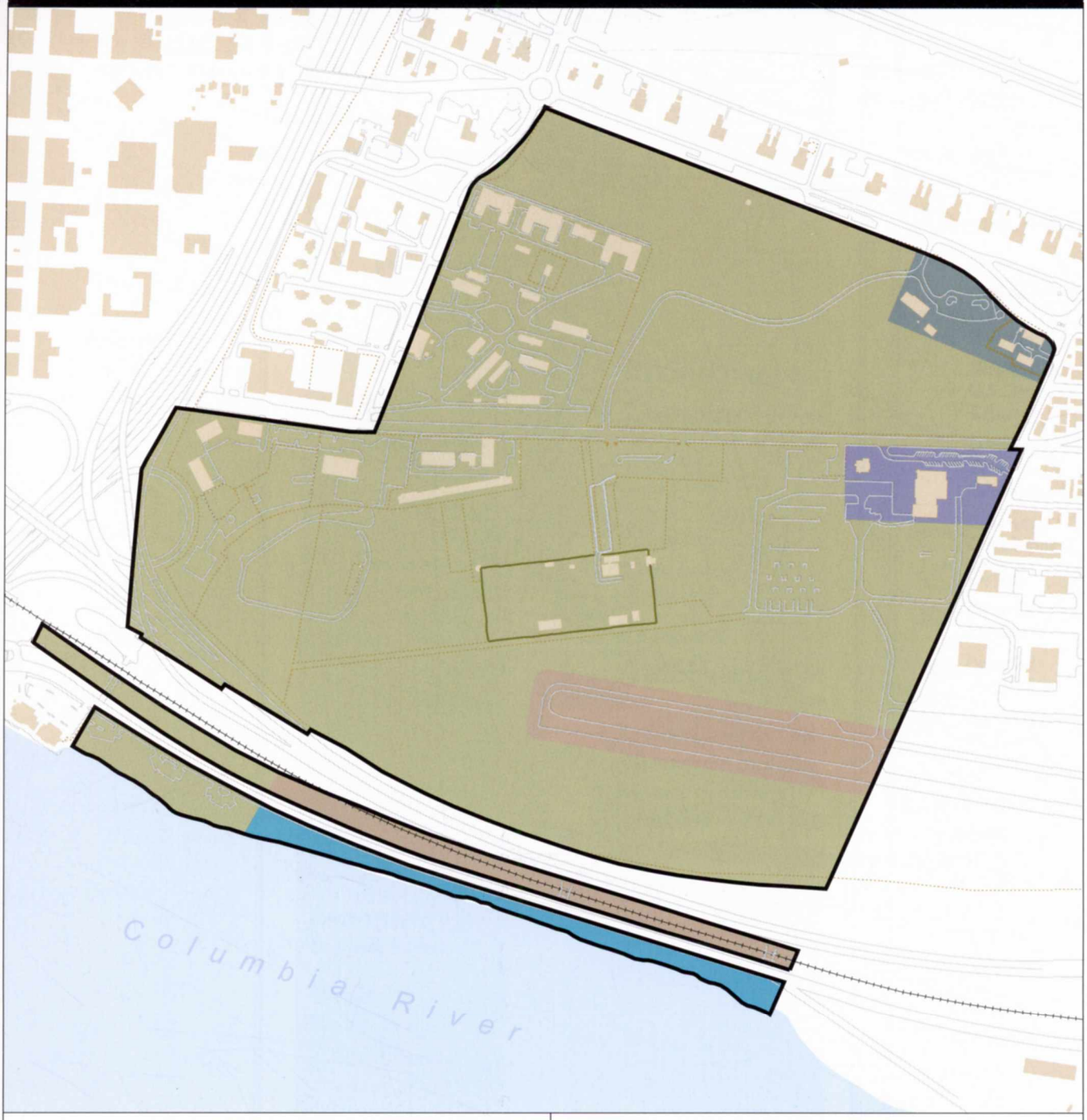
Approximate location of historic Waterfront wharf

Research and Education Center

The scope and scale of the research and education center would be the same as Alternative B; however, instead of being located within the Fort, the research and education center function would be located within a historic structure within the Vancouver Barracks. The building would be adaptively reused for this purpose. Coordination with the City of Vancouver and other Reserve Partners would be required to implement this concept.

Management Zoning: Alternative C

Fort Vancouver NHS GMP/EIS



Legend

Management Zone
- Columbia River Waterfront
- Historic
- Park Development
- Pearson Air Museum
- Special Use
- Authorized Park Boundary

- Building
- Fort
- Pavement Edge
- Railroad
- Fence

500 0 500 1000 Feet

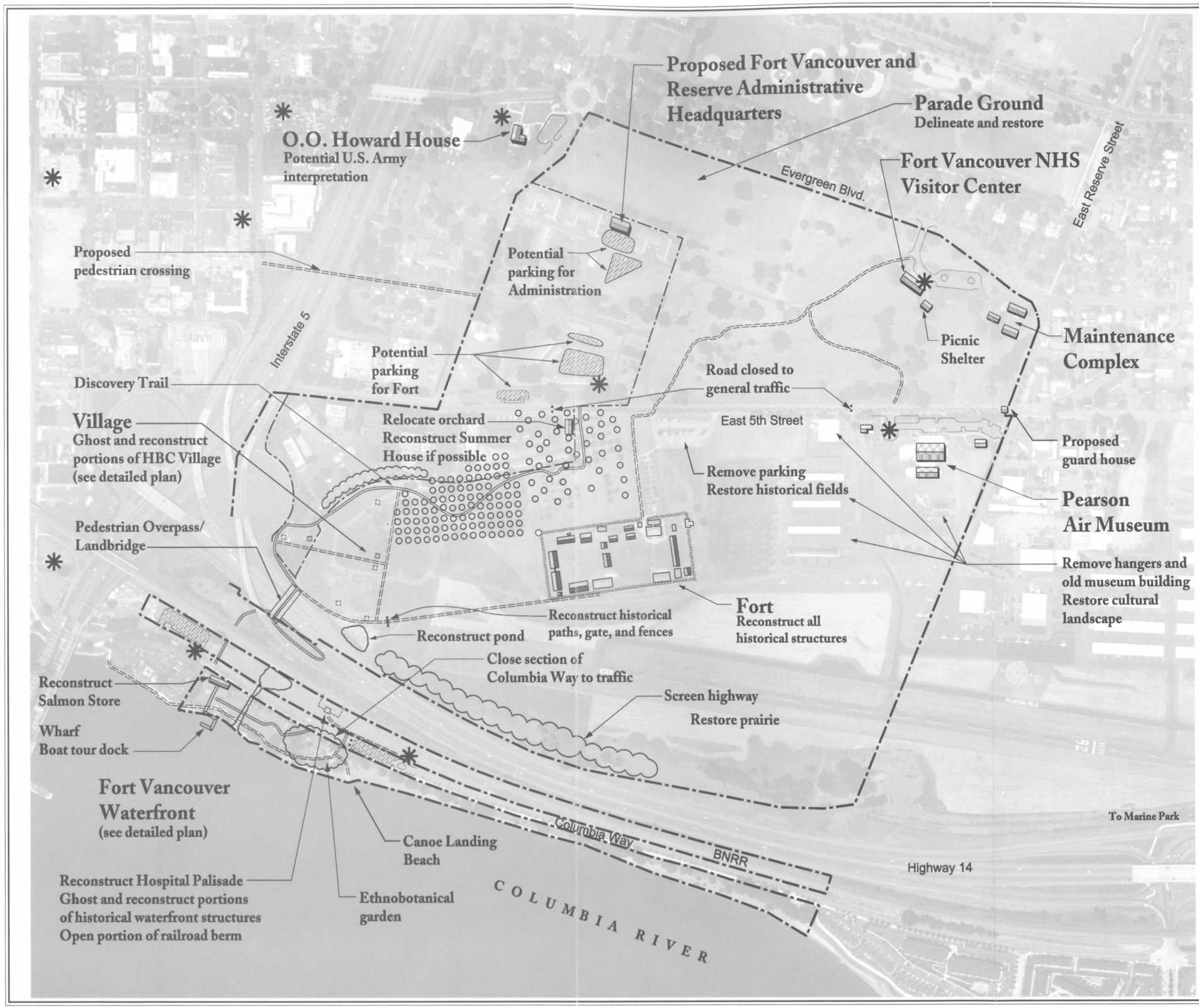
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Figure 13

Data Sources:
City of Vancouver: buildings, pavement edge
Clark County: railroads, rivers
NPS: buildings, fences, fort, management zones, park boundary

National Park Service
Columbia Cascades Support Office
GIS Group

Plot date: August 27, 2002 i:\gis\avproj\fova\fovagmp_v10.apr



DEVELOPMENT CONCEPT PLAN

Alternative C

- Authorized NHS Boundary
- Managed by U.S. Army Reserve
- Discovery Trail Connections
- Pedestrian Circulation
- Parking
- Potential Parking
- Potential Shuttle Stop
- Special Road Surfacing

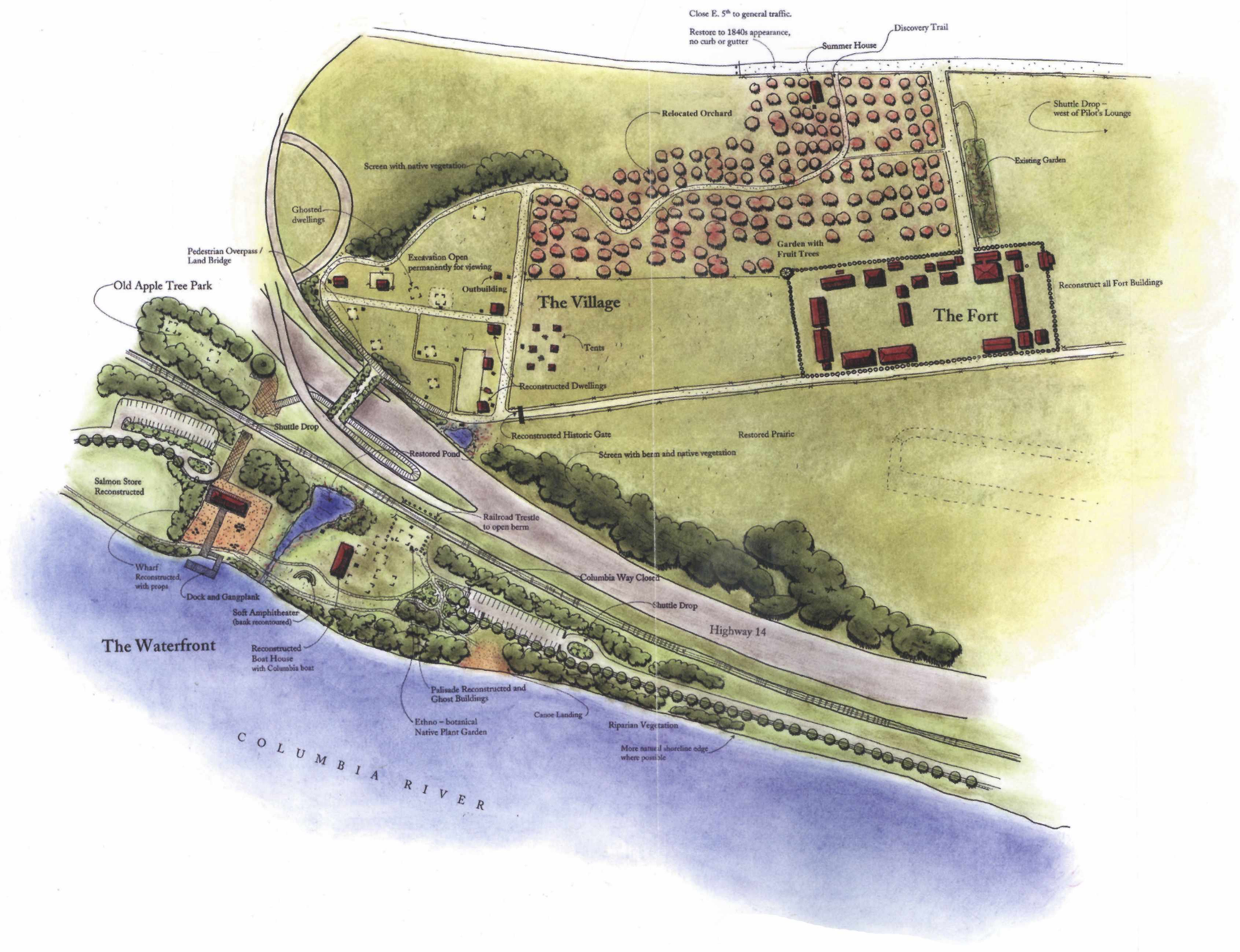
Fort Vancouver National Historic Site

Figure 14

General Management Plan

0 200' 300' 400'

Summer 2002



DEVELOPMENT CONCEPT PLAN

Waterfront, Fort, and Village Site Components

Alternative C

Figure 15

Legend

- Reconstructed Structures
- Ghosted Structures
- Existing Structures
- Fire Pit
- Wayside
- Hardened Earth Path
- Fences

Fort Vancouver National Historic Site

General Management Plan

0 100 200 ft

Scale: 1" = 100' - 0"

Summer 2002

McLoughlin House National Historic Site
Treatment of the McLoughlin House National Historic Site would be the same as in Alternative B.

Natural Resource Management

An ethnobotanical garden approximately one acre in size would be established at the Waterfront east of the interpretive area. This garden would provide park visitors with a glimpse of some of the natural flora that was used by different ethnic groups through time and were present on the site prior to the Hudson's Bay Company period.

In addition, the historic pond would be reconstructed and filled with water and native wetland plants at both the Village and at the Waterfront.

Recreational Resource Management

Treatment of recreational resources would be the same as in Alternative B.

Scenic Resource Management

Treatment of scenic resources would be the same as Alternative B. In addition, an opening would be made through the railroad embankment to visually connect the Fort to the Waterfront.

Through additional reconstruction and delineation of structures, more of the historic scene would be available for interpretation to the public.

Interpretation, Education, and Outreach

Interpretation, education, and outreach would be treated the same as in Alternative B, with the following changes. Additional new exhibits and programs would be developed to interpret additional reconstruction of the two School Houses, barn, and other reconstructed or delineated structures in the Village and at the Waterfront.

In addition, a permanent stratigraphy exhibit would be created for interpretation purposes. The stratigraphy exhibit would show the layers of the earth and the features and artifacts related to each historical period of interest at the site. This would give the visitor a direct view of the "layers" of history at the site and the nature of archaeological deposits.

The present exhibits in the Fort Vancouver NHS visitor center would be revised to reflect the broader interpretive message concerning the breadth of scope, scale, and diversity of functions and activities of the HBC. Also, additional exhibits concerning early settlement of the Oregon Territory and the role that Fort Vancouver and John McLoughlin played in assisting settlers to Oregon Territory would be added to the visitor center.

Park Facilities

Fort Vancouver NHS Visitor Center
Under this alternative, the current visitor center would be retained and remodeled as the Fort Vancouver NHS visitor center. New and revised exhibits would be designed and installed

emphasizing the broader role of the HBC within the Pacific Northwest. The breadth and diversity of Fort Vancouver operations would also be highlighted, as well as the special and functional relationships of the various activities at the Fort. As with Alternative B, the auditorium/theater would be redesigned to accommodate larger groups and a new audio-visual program would be developed for the public.

A new jointly managed Vancouver National Historic Reserve visitor center would be developed elsewhere within the Reserve, potentially within the Vancouver Barracks, or at another location in close proximity to the Reserve. Various site options for this jointly managed facility would be explored with the Reserve Partners and the Reserve Trust. As with Alternative B, the emphasis would be on providing the Reserve visitor with an overview of each of the major Reserve venues, with more in-depth interpretation occurring at each venue.

Until a new facility is developed, the current Fort Vancouver NHS visitor center would be utilized during an interim period. Exhibits could be installed reflecting the breadth of the historical themes present within the various venues of the Reserve. In this intervening period, a more detailed interpretation of the Hudson's Bay Company would occur within the fort palisade, Village, and at the Waterfront.

When the existing Reserve visitor center is moved from the O.O. Howard House (which due to its limited size was identified as an interim visitor center in the Reserve's cooperative management plan), the NPS recommends that the first floor of the structure remain available for public use.

Administrative Facilities
Treatment of administrative facilities would be the same as in Alternative B.

Maintenance Facilities
The maintenance function would remain in its present location. With administrative functions moving into the east Vancouver Barracks adjacent to the Parade Ground, the two Mission 66 buildings—the administrative headquarters and employee building—would be incorporated into the maintenance complex subject to historical compliance and clearances. The easternmost house would be removed and converted to covered storage. The westernmost house and current administrative office could be converted to maintenance offices, lunchroom, and storage. Current maintenance offices would be converted to additional shop space.

A determination of eligibility for the National Register of Historic Places would be made regarding the Mission 66 employee residence that is adaptively being reused for maintenance storage. If determined not eligible for the National Register, the structure would be removed and the area made available for covered parking and storage. If the structure is determined eligible for the National Register, then various adaptive reuse options for the building could be considered.

Development Cost Estimates of Implementing Alternative C

The following costs are estimates for implementing Alternative C. It is assumed that meeting the long-range development needs of the NHS will not only rely upon federal appropriated funds. A wide variety of other public and private sector funding sources will be sought to assist in implementation efforts over the next 15-20 years. This is underscored in the NPS participation in the Vancouver National Historic Reserve, where Reserve Partners share the vision for the future of Fort Vancouver NHS. As has been evidenced in the past, some development costs assigned to certain actions, such as Fort reconstruction, may prove to be less expensive when donated materials, labor, and other support are forthcoming.

Development Action	Total Estimated Costs
Fort Vancouver NHS	
Upgrade visitor center exhibits and A/V program upgrades/theater	$1,886,000
Relocate and renovate administrative facility in Reserve	$2,203,000
Renovate maintenance complex	$600,000
Reconstruct buildings and trails within fort palisade and trails at Parade Ground	$5,488,000
Relocate and expand orchard	$460,000
Establish ethnobotanical garden	$120,000
Resurface East Fifth Street	$300,000
Add interpretive features at Fort, Village, and Waterfront	$1,200,000
Delineate or reconstruct structures at Village and Waterfront and restore surrounding cultural landscape	$3,217,000
Plant screening in village area and along SR 14	$180,000
Restore prairie south of Fort	$120,000
Close portion of Columbia Way*	TBD
Reconfigure parking on Waterfront *	TBD
Implement shoreline improvements, including wharf	$240,000
Estimated Total Costs	**$16,014,000**

* FHLP (Federal Highways Lands Program) funded project. Preliminary site design/cost estimates not completed.

These costs are based upon general class "C" estimates of site development under this alternative. These estimates are provided to allow for a comparison of alternatives and are not intended to be used for budgetary purposes. Prior to submitting funding requests for the design and construction phases, class "B" estimates would be required, based upon detailed site design that would provide decisions about facility size and cost. Costs are expressed in 2002 dollars and phased over 15-20 years.

Development Action	Total Estimated Costs
McLoughlin House National Historic Site	
Restore McLoughlin and Barclay houses	$1,560,000
Develop interpretive program for site	$360,000
Preserve site collections	$120,000
Enhance parking adjacent to site	$120,000
Estimated Total Costs	**$2,160,000**

Park Operations

Staffing

The NHS would have a total of 30 authorized FTE staff and an average of 31 staff (permanent, seasonal/term positions) during the course of any fiscal year. Alternative C would add 6 permanent positions and 8 seasonal workers to the staff. In addition, a total of 6 FTE would be needed to staff the McLoughlin House National Historic Site if authorized by Congress. An additional 12 FTE would be needed to provide NPS staff functions to support interpretive and resource management needs of the broader Vancouver National Historic Reserve.

Proposed Staffing under Alternative C for Fort Vancouver National Historic Site

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
4 Permanent	6 Permanent	8 Permanent	5 Permanent	23	
0 Seasonal	5 Seasonal	1 Seasonal	2 Seasonal	8	
4 Total	11 Total	9 Total	7 Total	31	30

Estimated Operating Costs (2002 Dollars)

Operating base: $960,000
Additional 14 staff: $381,000
Total: $1,341,000

The difference in operating costs between Alternative A (current base) and Alternative C is $381,000.

Proposed Staffing under Alternative C for NPS Operations within Vancouver National Historic Reserve

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
1 Permanent	0 Permanent	6 Permanent	4 Permanent	11	
1 Seasonal	5 Seasonal	1 Seasonal	0 Seasonal	7	
1Total	5 Total	7 Total	4 Total	18	12

Estimated Operating Costs (2002 Dollars)

Operating base: $0
Additional 18 staff: $721,000
Total: $721,000

Proposed Staffing under Alternative C for NPS Operations at the McLoughlin House National Historic Site

Administration	Maintenance	Interpretation	Resource Management	Total	FTE
1 Permanent	1 Permanent	2 Permanent	1 Permanent	5	
0 Seasonal	1 Seasonal	1 Seasonal	0 Seasonal	2	
2 Total	2 Total	3 Total	2 Total	7	6

Currently, legislation is pending in Congress that would establish the McLoughlin House National Historic Site as a unit of Fort Vancouver National Historic Site. Language being considered would retain McLoughlin House National Historic Site in name but administered by staff at Fort Vancouver NHS. In this event, staffing would be required to adequately provide

support for site administration, maintenance, interpretation, and resource management. Estimated operating costs to implement this alternative would need to increase accordingly.

Estimated Operating Costs (2002 Dollars)

Operating base:	$0
Additional 9 staff:	$285,000
Total:	$285,000

Fees
The treatment of fees would be the same as in Alternative B.

Park Hours and Seasons of Operation
Under Alternative C, the visitor center and the fort palisade would be open the same hours and seasons as in Alternative A.

Parking, Access, and Circulation

Fort Vancouver Visitor Center Parking
Parking for the Fort Vancouver visitor center would be the same as in Alternative A.

Fort Visitor Parking
Parking for the Fort would be the same as in Alternative B.

East Fifth Street
Parking, access, and circulation for East Fifth Street would be the same as in Alternative B.

Fort Vancouver Waterfront Parking
A section of Columbia Way would be closed to vehicular access between the NHS boundary next to the Interstate 5 bridge to west of the Columbia Shores residential development. Two new parking lots would be developed east and west of the NPS interpretive area and include a shuttle stop at each lot. These two lots would contain approximately 110 parking spaces. (See Figure 16, Circulation Plan: Alternative C.)

Vancouver National Historic Reserve Shuttle System
Treatment for the Reserve's shuttle system would be the same as in Alternative B, with a slight change in shuttle route based upon the closure of a section of Columbia Way.

Carrying Capacity

Under Alternative C, the present carrying capacity of the NHS is defined as the maximum numbers of people allowed in the visitor center, the maximum number of cars at the four parking lots, and the optimal number of visitors within the fort palisade.

The current maximum use is as follows:

- Capacity of the redesigned auditorium: 125 persons
- Capacity of the redesigned visitor center: 185 visitors
- Capacity at Fort Vancouver visitor center parking lot: 43 cars, 3 buses, and 3 RVs
- New parking area replacing temporary fort parking lot: approximately 30 spaces (2 for persons with disabilities) with additional parking in the south or east barracks.
- Two reconfigured Columbia River parking lots: approximately 110 parking spaces

- Picnic area capacity: 7 tables under shelter (with adjacent playground):
- Reconstructed buildings within the Fort: tours are limited to approximately 15-25 people depending upon individual buildings.

Parking is not expected be a problem in the Village and at the Waterfront due to the underutilized nature of these two areas. However, crowding could present a problem on certain visitation days within the fort palisade or at the visitor center. When this occurs, people would be encouraged to take a self-guided tour, take a later tour, visit other venues, or return at a later date.

The proposed Reserve shuttle system could bring more people from the off-site Reserve visitor center and downtown to surrounding venues within the NHS and Reserve. If one area of the Reserve is busy, visitors have the ability to catch the shuttle and go to another venue. The system would also lessen the need for on-site parking at the visitor center and at the Fort.

Park Boundary and Land Protection

Park boundary and land protection issues are the same as Alternative B.

Opportunities for Regional Cooperation and Partnerships

Opportunities for regional cooperation and partnerships would be the same as Alternative B.

Action Plan Items

- Develop baseline inventory for plant and animal species.
- Develop space allocation plan for staff (space and equipment).
- Revise historic furnishing plans for the existing fort buildings.
- Develop maintenance facility study (storage, location, partnering).
- Consider downtown public parking with shuttle system.
- Conduct feasibility study for construction of wharf addressing environmental issues, currents, and shipping patterns.
- Conduct archeological study to determine the presence of remnants of the historic wharf.

Actions Requiring Cooperation with Reserve Partners

There are certain actions proposed in Alternative C that would occur both at the NHS and off-site on property managed by the Reserve Partners. Those instances where cooperation and discussion would need to occur between the NHS and the Reserve Partners are listed below.

Education/Assistance

- In coordination with the Reserve Partners, NPS staff could utilize the barracks for educational programming directed at educational purposes, including classrooms, offices, and auditorium, meeting and field laboratory space, and lodging.
- In coordination with the Reserve Partners and a determination of excess need by the Secretary of the Army, NPS staff could utilize the barracks for the location of the research and education center.
- In coordination with the Reserve Partners and a determination of excess need by the Secretary of the Army, NPS staff could utilize portions of the east and south barracks for administrative offices.



CIRCULATION PLAN

Alternative C

- Pedestrian Circulation
- Multi-purpose Circulation
- Vehicle Circulation
- Possible Shuttle Route
- Parking
- Potential Parking
- Potential Shuttle Stop
- Soft or Textured Road Surfacing

Fort Vancouver National Historic Site

Figure 16

General Management Plan

0 200' 300' 400'

Summer 2002

- The NPS with support from the Reserve Partners would provide ongoing collaborative training and workshops for Reserve staff and interns.

Transportation/Parking

- The NPS staff would work with the City and the U.S. Army Reserve to close a portion of East Fifth Street adjacent to the Fort to vehicular traffic except for emergency services.
- The NPS staff would work with the City and other Reserve Partners to close a portion of Columbia Way to vehicular traffic between the NHS boundary next to the Interstate 5 bridge to west of the Columbia Shores residential development.
- The Reserve Partners would be encouraged to use a shuttle system (public transportation loop) to move people around to various sites within the Reserve.
- The NPS and Reserve Partners would integrate parking and transportation planning for the entire Reserve, including the potential for shared parking at the south and east barracks to serve visitors at the Fort and U.S. Army Reserve activities.
- The Reserve Partners would be encouraged to explore the possibility of traffic calming devices along Evergreen Boulevard.
- Downtown public parking for a shuttle system would be recommended and considered by Reserve Partners.

Law Enforcement

- The NPS staff and Reserve Partners would work together to coordinate law enforcement and security issues throughout the Reserve.

Design

- The NPS would work with the Reserve Partners to standardize modern design features for signs, roads, and trials. This could involve examining signing for the entire Reserve and include regional signing to highways Interstate 5, Interstate 205, and other road networks.

Resources

- The NPS staff would work with the U.S. Army for the administrative conveyance of excess Army property in the east and south barracks area to the Secretary of the Interior to be managed by the NPS as part of Fort Vancouver NHS.
- The NPS would help develop historic design guidelines appropriate for the Reserve aided by the cultural landscape report including lighting, trails, and signs.
- As part of the lead responsibility in cultural resources for Vancouver National Historic Reserve, NPS staff would assist with cultural resource preservation and management for Pearson Air Museum as requested and desired, as well as other areas within the Reserve.
- The NPS staff would provide assistance on Reserve wetland issues.

Maintenance

- The NPS staff would seek to consolidate maintenance policies, and operations were warranted, among Reserve Partners.

Alternatives Considered but Rejected

- No Reconstruction – An alternative was considered which would have halted or prevented all new reconstruction within the Fort palisade, Village, and at the Waterfront. Instead of constructing additional buildings, the concept would have promoted greater use of interpretive wayside exhibits, and in some cases delineate the outline of key structures on the ground for public understanding. The NPS staff rejected this alternative because the continued development of the interpretive mission of the park through additional reconstruction is a goal which is common to all alternatives and was deemed important to the public understanding of the HBC period and fort life. Even under the No Action Alternative, some additional reconstruction is assumed, as donated materials, volunteers, and partners, contribute to reconstruction efforts for interpretive purposes. All reconstructions meet NPS policies and are completed based on accurate historic information regarding location, building function, and architectural form. Though building sites are excavated prior to reconstruction, structures are constructed in a manner that does not adversely impact surrounding archeological resources.
- Restore entire historic pond – Total restoration of the historic pond is not feasible due to State Route 14 and the Burlington Northern Santa Fe Railroad alignment.
- Restore natural riverbank to historic alignment – Restoration of the riverbank is not possible due to navigation, dams, and costs.
- Establish floating historic replica ships and dock facility at Fort Vancouver Waterfront – This action is not feasible due to its location in the navigation channel of the Columbia River.
- Full reconstruction (at the Village, Waterfront, Fort, and Parade Ground) – Full reconstruction is not possible at this time due to the associated high costs and portions of land already occupied with other uses.
- Reconstruct all farm buildings for livestock, such as the granary, barns, and other structures – This action presents significant maintenance problems and associated costs. Also the size of the area needed precludes other existing activities.
- Use reconstructed School Houses or other new building in or near the Fort for a visitor center – This option has some viability, but the School Houses are not as centrally located for visitor functions and would require additional funding to develop the site.
- Relocate visitor center in or near the Fort and relocate the Reserve visitor center elsewhere – It was determined that visitor orientation and information functions are best suited for another location and that the space within the Fort is more suitable for interpretation and living history presentations.

Summary of Actions for Each Alternative

Actions	Alternative A	Alternative B	Alternative C
Cultural Resource Management			
Fort	Retain 14 current buildings and reconstruct additional buildings as able, including Sale Shop and New Store, and Counting House.	Seek private and public funding to reconstruct 9 additional historic structures. Reconstruct historic trails within Fort and remove asphalt foundation pads.	Reconstruct 14 remaining historic structures within fort palisade for full fort build-out. Reconstruct historic trails within Fort and remove asphalt foundation pads.
Parade Ground	Maintain site as usual with special events under special permit.	Determine the appropriate future use for increasing number of special events.	Same as Alternative B.
Village and Environs	Retain in current condition and provide limited on-site interpretation and improvements.	Reconstruct 2 village residences, and associated gardens. Delineate houses where accurate locations are known. Restore cultural landscape where possible. Relocate portion of orchard to historic location. Reconstruct Summer House if possible.	Same as Alternative B, plus reconstruct or delineate additional village structures as able. Create ethnobotanical garden at Waterfront. Restore cultural landscape and reintroduce livestock to site. Restore historic orchard to original size and location, as able. Reconstruct Summer House, 2 historic School Houses, and historic barn.
Fort Vancouver Waterfront	Maintain site as city park under agreement with City of Vancouver. Provide no on-site interpretation or major improvements. Construct pedestrian overpass to connect Fort and Village to Waterfront and Apple Tree Park.	Partially reconstruct Salmon Store as interpretive shed. Delineate structures such as boat shed, hospital, and palisade. Simulate original location of wharf on dry land. Delineate portions of historic pond. Construct natural amphitheater. Construct pedestrian overpass/land bridge to link Fort to Waterfront and provide interpretation. Realign portion of Columbia Way.	Same as Alternative B with following changes: fully reconstruct Salmon Store; close portion of Columbia Way; restore portions of historic pond; delineate 6 structures including hospital and palisade; reconstruct wharf into Columbia River; and open berm through railroad embankment.
Research and Education Center	Research center function remains in Fur Store. Continue to serve as central repository to disseminate knowledge about HBC operations and early U.S. Army sites within the Reserve.	Expand scope and scale of center function. Locate facilities within Sale Shop and New Store.	Expand scope and scale of center function. Locate facilities in adaptive reuse structures within Vancouver Barracks. Partner with City and other Reserve Partners.
McLoughlin House National Historic Site	Continue technical assistance to McLoughlin House National Historic Site as able.	McLoughlin House National Historic Site directly administered by Fort Vancouver NHS. Congressional authorization required.	Same as Alternative B.

Actions	Alternative A	Alternative B	Alternative C
Natural Resource Management			
	Retain current management.	Restore portion of prairie south of Fort. Enhance natural shore condition of Columbia River. Recommend preservation of Reserve's mature Garry oak stands. Encourage Reserve to adopt Integrated Pest Management practices.	Same as Alternative B.
Recreational Resource Management			
	Coordinate with City for placement of multi-use Discovery Historic Loop Trail.	Same as Alternative A, plus establish non-historic trail from visitor center to Fort.	Same as Alternative B.
Scenic Resource Management			
	Remove remaining T-hangars, tin hanger, and metal museum building and restore historic scene by end of 2002.	Same as Alternative A, plus enhance historic setting. Remove temporary fort parking lot. Screen modern structures where possible with compatible native plants.	Same as Alternative B, plus provide opening through railroad embankment to visually connect Fort to Waterfront.
Interpretation, Education, and Outreach			
	Develop CIP for park and Reserve. Establish preservation "field school" at NHS. Provide internships and host short courses on specific topics.	Same as Alternative A, plus produce new exhibits for Reserve visitor center. Design new exhibits at Fort, Village, and Waterfront. Develop one "heritage pass" for Reserve venues. Increase "living history" interpretation at Fort and add to Village and Waterfront. Hire volunteer coordinator for the NHS and McLoughlin House National Historic Site. Provide on-site archaeology interpretation when occurring.	Same as Alternative B, plus develop new exhibits relating to additional reconstructed or delineated buildings. Create permanent stratigraphy exhibit for interpretation purposes.
Park Facilities			
Fort Vancouver NHS Visitor Center	Retain visitor center in current location. Upgrade exhibits as able.	Remodel and enlarge as jointly managed Reserve visitor center by Reserve Partners and NPS. Feature interpretive program as overview of all venues with new exhibits. Utilize Fort, Waterfront, Parade Ground and Village for detailed NHS interpretation. Redesign auditorium/theater.	Remodel existing facility as jointly managed visitor center in interim. Redesign auditorium/theater. Relocate long-term Reserve visitor center in other location within Reserve or proximity. Retain existing visitor center as fort visitor center with new exhibits.

Actions	Alternative A	Alternative B	Alternative C
Administrative Facilities	Retain current facilities.	Move administration to one of four buildings fronting the Parade Ground for joint use with Reserve Partners. Remove two existing Mission 66 structures, if possible, to expand visitor parking lot and provide shuttle drop-off.	Same as Alternative B.
Maintenance Facilities	Retain current facilities	Move maintenance facilities off-site to south or east barracks and possibly co-locate with U.S. Army Reserve. Remove existing Mission 66 maintenance building, if possible, to expand visitor center parking lot and provide a shuttle drop-off.	Retain maintenance function in present location. Vacate administrative headquarters and employee housing and incorporate into maintenance complex.
Development Cost Estimates (2001 Dollars)			
Total Costs	$960,000	$11,924,000	$16,014,000
Park Operations and Staffing for Fort Vancouver National Historic Site			
Total Staff	17 (14 on average)	29	31
Total FTE[1]	22	28	30
Additional Vancouver National Historic Reserve Staff			
Total Staff	6-7	15	18
Total FTE	—	10	12
Additional McLoughlin House National Historic Site Staff			
Total Staff	0	7	7
Total FTE	0	6	6
Fees			
	Collect fee inside the fort palisade.	Same as Alternative A, plus develop a "heritage pass" for Reserve venues.	Same as Alternative B.
Park Hours and Seasons of Operation			
	Retain current hours and seasons of operation.	Same as Alternative A	Same as Alternative A
Parking, Access, and Circulation			
Fort Vancouver Visitor Center Parking	Retain current parking for staff and visitors.	Enlarge existing parking lot and add shuttle bus drop-off by removing Mission 66 structures, if possible.	Same as Alternative A.
Fort Visitor Parking	Retain temporary gravel parking lot in front of Fort.	Construct new parking lot in south or east barracks area in proximity to East Fifth Street. Pursue partner opportunities with Army Reserve. Restore temporary parking lot to historic fields.	Same as Alternative B.

[1] Full-time equivalent

Actions	Alternative A	Alternative B	Alternative C
East Fifth Street	Retain paved surfaces and parallel parking spaces. Keep street open to all traffic.	Close East Fifth Street to general traffic between Pearson Air Museum and U.S. Army Reserve area with cooperation with City. Narrow road width. Convert surface to rolled stone or other surface and remove concrete curbing. Provide for emergency vehicle access. Establish section of Discovery Historic Loop Trail on north side of road. Consider horse-drawn wagon use of road.	Same as Alternative B.
Fort Vancouver Waterfront	Retain three parking lots with no spaces for buses and recreational vehicles. Continue agreement with City for public use of Fort Vancouver Waterfront for passive recreational purposes.	Remove 2 of the 3 existing waterfront lots. Add 1 new lot north of Columbia Way adjacent to the railroad berm at current pedestrian crossing west of Old Apple Tree Park. Keep or increase current parking capacity and integrate shuttle stop.	Close Columbia Way from western edge of NHS boundary to a point east of the NPS Waterfront interpretive area. Remove the 3 existing parking lots and replace with 2 new ones east and west of the NPS interpretive area. Keep or increase current parking capacity and integrate shuttle stops.
Carrying Capacity			
	Retain current carrying capacity.	Increase capacity of auditorium by 85 persons. Increase capacity of visitor center by 150-175. Increase parking capacity by 33 plus cooperative use of Reserve parking areas.	Increase capacity of auditorium by 85 visitors. Increase capacity of visitor center 65 less than Alternative B. Increase parking capacity by additional 39 over Alternative B, plus cooperative use of Reserve parking areas.
Park Boundary and Land Protection			
	Retain authorized boundary in current configuration.	Add through legislation McLoughlin House National Historic Site as a unit of Fort Vancouver National Historic Site. Administratively transfer any excess Army property in south and east barracks from Secretary of Army to the Secretary of the Interior. Retain some use of land for park operations (parking, administration, etc.) with most going to adaptive reuse cooperating with partners in accordance with barracks reuse master plan.	Same as Alternative B.

Actions	Alternative A	Alternative B	Alternative C
Regional Cooperation and Partnerships			
	Implement Reserve Cooperative Management Plan. NPS plays key role in interpretation, education, and cultural resource preservation and management.	Same as Alternative A, plus portion of barracks area could function as a center for Reserve interpretation of cultural and natural resources for Vancouver, the lower Columbia River and Pacific Northwest environs. NPS education and research center complements Reserve center function. Establish "Parks As Classrooms" and "history camps." Partner opportunities with area schools, colleges and universities, Elderhostel, Center for Columbia River History, and other groups.	Same as Alternative B.

Environmental Consequences

Fort Vancouver
Hand colored lithograph by Henry J. Warre, 1845
Courtesy of National Archives of Canada, Ottawa, Ontario



Environmental Consequences

This chapter presents the analytic basis for the comparison of alternatives described in the "Alternatives" chapter. It identifies the probable consequences, or the effects (impacts), of each alternative on selected environmental components. These components include the issues that were identified during the scoping sessions and that are discussed in the "Purpose and Need for the Plan" chapter. As such, the environmental components collectively define the human environment relevant to Fort Vancouver National Historic Site. The following categories are presented in this chapter:

- Cultural Resources
- Natural Resources
- Recreational Resources
- Scenic Resources
- Interpretation, Education, and Outreach
- Park Facilities
- Park Operations
- Parking, Access, and Circulation
- Carrying Capacity
- Socioeconomics
- Park Boundary and Land Protection
- Regional Cooperation and Partnerships
- Cumulative Impacts
- Unavoidable Adverse Impacts
- Short-term Use vs. Long-term Productivity
- Irreversible or Irretrievable Resource Commitments
- Permanent Impairment of Park Resources

Effects Common to All Alternatives

- Air Museum Plan—Since the air museum is located on federal property and within the authorized boundary of Fort Vancouver NHS, incorporating the air museum plan into the *Fort Vancouver National Historic Site General Management Plan* would add support to this existing use on NPS lands.
- U.S. Army excess lands—By receiving excess lands and facilities from the Army Reserve within the authorized boundary of Fort Vancouver NHS, the NPS would be able to administer and restore the historic scene of the former HBC and early U.S. Army periods. Lands within the authorized boundary have already been determined to be historically significant. This action would allow visitors the opportunity to more fully understand these historic periods. Administering additional lands would require additional NPS funding. This would be partially offset by entering into a long-term lease agreement with the City of Vancouver where much of the property would be available to private or public sector entities for adaptive reuse.
- Historic landscape—Removing the aviation T-hangars and former aviation museum building and restoring the historic surrounding agricultural fields would allow visitors an opportunity to visit the Fort without the visual intrusion of adjacent modern structures in the foreground views.
- Waterfront agreement—Providing a new waterfront agreement between the City and the NPS would be beneficial to each party by providing an updated management plan for the Fort Vancouver Waterfront. Visitors could benefit from the agreement through the results of coordinated planning efforts.

- Comprehensive Interpretive Plan—Using the NPS Harpers Ferry Center to prepare both the NHS and Reserve comprehensive interpretive plans would allow for an overall coordinated approach in interpretation planning. The public would benefit from the coordinated efforts through enhanced interpretive programs, media, and services. Improved operational efficiencies could result in a more cost-effective use of staff and budget and provide the public with quality interpretation and education products.
- Research and education center—Developing a research and education center plan would help guide overall planning and focus limited funds and efforts.
- Collection management—The public and academic scholars would benefit from having the HBC collection in one centralized location and under one management. Housing and managing the larger collection would require additional funding sources.
- Visitor interpretation and resource management—The National Park Service is known for its expertise in visitor interpretation and resource management. In agreement with the recommendations from the *Fort Vancouver National Historic Reserve Cooperative Management Plan*, the NPS would take a lead role in telling the stories and educating the public about this special place. Visitors would benefit from the increased emphasis on education and interpretation along with additional funding sources that the NPS could provide. Additionally, since the NPS has been assigned a leadership position by the Reserve Partners regarding preservation and conservation of cultural resources throughout the Reserve, the NPS is able to apply its varied preservation expertise to the protection of these historic resources. This includes the protection of archaeological resources, historic buildings, and cultural landscapes.
- Reserve responsibilities—The public would benefit from having an additional source of federal funding, staff, and equipment dedicated to the Reserve.
- Vancouver National Historic Reserve Trust—Partnering activities would infuse private sector dollars into programs and facilities into all areas of the Reserve.
- Park infrastructure improvements—Improvements to park infrastructure for appearance, safety, security, and operation reasons would be beneficial to both staff and visitors using the facilities.
- Standardization of design features—Standardization of design would make it easier for visitors to find their way around the NHS and Reserve and reduce visual clutter resulting from different types and sizes of signs.
- Integrated Pest Management Program—Implementing this program would call for reduced use of pesticides, using an integrated approach to pest management. This is positive effect for the environment and beneficial to visitor's health and safety as well.
- Plant and animal species inventory—Conducting a baseline plant and animal species inventory would set parameters that would enable park managers to document change occurring to species over time.
- Diversity outreach—Providing stronger outreach opportunities to diverse groups and under-served populations would have a positive impact by allowing NPS staff and programs to reach a broader cross-section of the population.
- Interpretive links—Interpreting the Oregon Trail and McLoughlin House would allow the NPS staff to tell two important pieces of the story of the Hudson's Bay Company. It would result in a better understanding and appreciation of the story to park visitors.
- Educational programs—Coordination and facilitation of educational programs would prevent duplication that might exist within the educational goals of the partners. It also would provide a unified approach that focuses available staff and funding.
- Continued general aviation use—Working with the City of Vancouver to determine the appropriate agreement and conditions for continued general aviation use at Pearson Airfield, the NPS would develop a new agreement beyond 2002 through 2022 for Pearson Airfield.
- Playground—Keeping the playground and picnic shelter adjacent to the visitor center for public use provides a convenient location at the NHS for small children to play and an existing use to continue.

Alternative A—No Action Alternative

Effects on Cultural Resources under Alternative A

As funding becomes available, additional reconstruction within the fort palisade would result in increased interpretive opportunities and in a better understanding of the significance of the Hudson's Bay Company in the Pacific Northwest. Any future archaeological investigations, including those sites proposed for reconstruction, would follow the highest standards for scientific investigations using state of the art remote sensing and excavation techniques. It is through scientific investigations of the archaeological resource that information is learned about the material culture of the Fort as well as providing specific information for the proposed reconstructions. Reconstruction activities would comply with NPS management policies and must be supported by sufficient data and occur in the original location. (5.3.5.2.4 Reconstruction of Obliterated Landscapes) (National Park Service 2001: p.56).

Reconstruction disturbance, or loss of significant archaeological resources *in situ,* would be mitigated through excavation and cataloging the items into the archaeological collection at the NHS. The NPS staff would leave other structures undisturbed to be excavated in the future.

Visitors would lose the opportunity for additional interpretation and enhanced understanding of the Village, Parade Ground, and Waterfront by not providing any additional interpretation or exhibits.

The existing asphalt pads marking some of the buildings in the Fort would remain in place. Not all of the building foundations have been marked which may lead to some visitor confusion. Also, it is now known that the location of some of the pads is not accurate.

As a central repository for Hudson's Bay Company sites in the Pacific Northwest, the research and education center would allow for the continued preservation of the HBC collection and the early Army period in one location. The function of the center helps the NHS to ensure the preservation, storage, and accountability of the collections. Current space is limited for this function within the Fur Store and thus restricts capabilities of NHS staff to implement programs and activities. The establishment of the research center would be beneficial to the local economy by bringing in researchers and others that would need food, lodging, and other services during their stay at Fort Vancouver National Historic Site.

Adverse impacts could occur to cultural resources within the McLoughlin House National Historic Site due to the need for the McLoughlin Memorial Association to consistently raise funds to administer the site. Certain resources have been sold in the past and could be done again without additional funding support. Since no changes in current management practices would occur, no adverse impacts would be expected to occur related to curatorial resource management and cataloguing of collection items.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Natural Resources under Alternative A

There would be no adverse impacts to natural resources. Natural resource activities would continue to be reactive and sporadic, depending upon issues that arise and as funding becomes available. There would be continued encroachment of undesirable, noxious plants into the NHS. There would be no full, or significant collateral-duty resource management personnel. The orchard would continue to be inadequately maintained and no real system would be established to properly develop and maintain the

agricultural fields or potentially restore the prairie. The Fort Vancouver garden would remain managed with collateral duty staff and a cadre of volunteers.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Recreational Resources under Alternative A

There would be no adverse impacts on recreational resources. Continuation of the City of Vancouver's Discovery Historic Loop Trail through the NHS would provide the visitor with a multi-use recreational opportunity. The trail would be designed to accommodate bicyclists and joggers through the site with some interpretation available. This trail would follow the Columbia River shoreline, the western perimeter of the Village within the NHS, and along East Fifth Street.

The section of the Discovery Trail within the NHS would be a concrete trail approximately 4,200 linear feet and 12 feet wide. The trail would be placed above ground level to minimize impacts to natural and archaeological resources in accordance with NPS management policies (Archaeological Resources 5.3.5.1) (National Park Service 2001: p.55).

Constructing the Discovery Trail with light fixtures through the Village and along East Fifth Street would introduce a modern feature into the historic village setting. However, lighting the trail would be consistent with the other segments of the trail on city managed property and would make it safer for the visitor. If lighting is provided, minimal impact lighting would be utilized and light fixtures would be shielded. All lighting would comply with NPS management policies (4.10 Lightscape Management) (National Park Service 2001: p.44).

An archaeologist would be on-site during construction of the trail to monitor activities for Section 106 National Historic Preservation Act compliance. The contractors for the City would use a sod-cutting machine to cut and stockpile the existing grass and store it in a healthy condition on-site. After the trail is constructed, the existing turfgrass would be replanted. The contractor would remove any noxious weeds, such as Himalayan blackberry, in accordance with NPS management policies (Introduction of Maintenance of Exotic Species 4.4.4.1) (National Park Service 2001: p.37). The trail would be located so as to avoid any tree removal or adverse impacts to existing NHS trees. The City of Vancouver is presently conducting an environmental analysis of impacts on the design and construction of the Discovery Historic Loop Trail (The JD White Company, Inc. 2001).

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Scenic Resources under Alternative A

Planned removal of the four remaining T-hangars, an additional hangar on federal land, and the metal museum building adjacent to the Fort would have a positive effect by removing modern intrusions. This action would allow NHS staff to implement the cultural landscape plan for the area surrounding the Fort. The federal land within the foreground view of the Fort would be restored to reflect the HBC historic period.

Leaving the Village and Waterfront areas in their current condition would not allow visitors to envision and experience what those areas looked like in the nineteenth century. The temporary parking lot at the Fort would not be removed and the historic scene would not be recreated.

Placing lighting along the Discovery Trail would introduce a modern feature into the recreated HBC village setting. However, lighting the trail would be consistent with the other segments of the trail on city managed property and consistent with city's policies. In addition, lighting the trail would make it safer for the visitor. In keeping with management policies (Lightscape Management 4.10), minimal impact lighting would be utilized and light fixtures would be shielded to prevent light pollution. (National Park Service 2001: p.44).

To address the visual compatibility of the Discovery Trail within the historic Village, the concrete trail surface would be treated with native Columbia River sand (or another similar additive) instead of the exposed concrete surface that has been used by the City for the Discovery Trail elsewhere. This treatment would help the trail look more rustic and natural and help it to blend into the historic setting. The design of the lighting fixtures would be coordinated with NHS staff to be historically compatible.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Interpretation, Education, and Outreach under Alternative A

Upgraded exhibits at the visitor center would result in a better experience for visitors. Some duplication of the visitor center exhibits currently exists since new buildings and structures within the fort palisade have been reconstructed and are being interpreted on-site. In addition, recent information about the lives of all people associated with the Fort presents the opportunity to update park interpretation programs and exhibits. However, the staff capability to accomplish ongoing interpretive programming would continue to be limited due to budget shortfalls and ongoing responsibilities for Reserve interpretation.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Facilities under Alternative A

Adverse impacts to staff and park operations, such as inadequate employee space and inadequate storage for administrative supplies and files, would be expected to continue due to insufficient headquarters and administrative facilities.

Park maintenance operations would continue to be negatively impacted by inadequate space. Certain long-term functions would eventually have to be relocated.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Operations under Alternative A

Funding for current staffing levels is inadequate to meet the increased interpretation and administration role given to the NHS staff in the administration of the Vancouver National Historic Reserve. To cover the basic interpretation needs of the Reserve, the park has not been able to meet some existing program needs at the NHS. In addition, the NHS staff has allocated limited services to the McLoughlin House National Historic Site, when funding has been available, to provide planning and technical advisory assistance as instructed by the 1941 cooperative agreement with the Secretary of the Interior.

Other than staffing, there would be no adverse impacts on park operations, including fees and park hours of operation.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Parking, Access, and Circulation under Alternative A

The temporary parking lot at the Fort would not be removed and the historic scene would not be restored.

Continuation of East Fifth Street as it currently exists would prevent opportunities to establish interpretive uses of the historic road and to recreate the Hudson's Bay Company aesthetics of the mid-nineteenth century. Also, continuation of traffic along East Fifth Street would make establishment of the Discovery Historic Trail Loop less safe for visitors using the trail for interpretation and recreation opportunities.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Carrying Capacity under Alternative A

No adverse impacts on carrying capacity are anticipated within the NHS. Visitation would probably gradually increase as additional buildings are reconstructed within the Fort enhancing the visitor experience. Crowding in the fort palisade would not be expected to occur except on special event days. Tours for buildings would be limited in number to 15 to 25 visitors and would help prevent crowding on tours.

The visitor center is currently crowded during spring mornings when school groups frequent the NHS and on the Fourth of July. The NHS staff would attempt to manage potential crowding from school groups through a reservation system, but often non-school group visitors do not get adequate service when crowding does occur. This would be expected to continue. The parking lots currently are not at capacity except on special event days. The Parade Ground, Village, and Waterfront areas are currently underutilized except during special events.

As the Vancouver National Historic Reserve continues to develop and becomes better known, visitation is expected to increase. Without a shuttle system to easily move visitors from venue to venue, crowding at certain locations and times would likely occur.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Socioeconomics under Alternative A

Providing stronger outreach opportunities to diverse groups and under-served populations would have a positive impact by allowing the NPS staff to reach a broader cross-section of the population. These outreach programs would require additional funding.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Boundary and Land Protection under Alternative A

There would be no adverse impacts on the park boundary since there would be no change to the present boundary. The south and east barracks area would remain under U.S. Army Reserve management. The U.S. Army would address any federal compliance for this portion. However, if the U.S. Army determined additional lands within the authorized boundary of Fort Vancouver NHS as excess, these would be considered for transfer to NPS. The impacts of this action are primarily fiscal. Funds would be needed to maintain, upgrade, and operate the existing buildings and landscape, including utilities. The impact of not receiving these lands would mean that some of the important HBC cultural sites, like the HBC cemetery, would not be managed and interpreted by NPS staff. These sites could be preserved and interpreted by the Army to the public.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Regional Cooperation and Partnerships under Alternative A

Ongoing cooperation among Reserve Partners would continue to benefit all in relation to operation of the Vancouver National Historic Reserve and Fort Vancouver NHS.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Cumulative Impacts under Alternative A

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources or values.

Unavoidable Adverse Impacts under Alternative A

No unavoidable adverse impacts are expected under Alternative A. Since there are no adverse impacts, there would be no impairment of park resources or values.

Short-term Use vs. Long-term Productivity under Alternative A

During reconstruction of historic buildings within the Fort, there would be some temporary minor impacts to air quality during construction. Construction related noise would be an impact during construction. Ground disturbance would impact archaeological resources in that the resources would not remain *in situ* but would be removed, cataloged, analyzed, and added to the Fort Vancouver collection. However, actions would be taken to protect remaining archaeological resources from construction, including on-site monitoring.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Irreversible or Irretrievable Resource Commitments under Alternative A

Effects on Wetlands, Floodplains, and Threatened and Endangered Species under Alternative A

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 associated with the park's 3,600 feet of shoreline along the Columbia River. There would be no adverse impacts to wetlands since there are no actions being proposed within the riparian areas along the Columbia River.

There would be no adverse impacts to threatened and endangered species. Consultation with the U.S. Fish and Wildlife Service, National Marine Fisheries Service, and the Washington State Natural Heritage Inventory disclosed no threatened or endangered species within the park. Since the bald eagle and the bull trout may occur in the vicinity of the park, NHS staff would continue to monitor for the presence of threatened and endangered species.

There would be no adverse impacts to floodplains. The city would continue to lease and manage the waterfront area of the NHS as a "day-use only" city park.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Low Income and Minority Populations under Alternative A

There would be no adverse impact on low income and minority populations. As reconstruction continues within the Fort, fees may need to be raised to recapture the cost of construction and provide for extra staff for interpretation purposes. To mitigate this cost, August 25, Founder's Day would continue to be provided by the park staff as a free visitation day during the fee collection season between May and September. School and educational groups would continue to visit free. The NHS staff could explore other mitigation measures.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Permanent Impairment of Park Resources under Alternative A

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources.

Alternative B—Preferred Alternative

Effects on Cultural Resources under Alternative B

Opportunities for interpretation and preservation of resources would occur with the reconstruction of nine additional buildings and trails within the fort palisade. Any future archaeological investigations, including those sites proposed for reconstruction, would follow the highest standards for scientific investigations using state of the art remote sensing and excavation techniques. Reconstruction activities would comply with NPS management policies and must be supported by sufficient data and occur in the original location. (5.3.5.2.4 Reconstruction of Obliterated Landscapes) (National Park Service 2001: p.56). As much of the actual archaeological resources as possible would be left *in situ*. However, the archaeological data recovered by excavation provides architectural information, interpretive artifacts, and data on the historical lifeways of the building's original occupants. (A past example of this involved reconstruction of the Fur Store. The replica fur press is placed exactly over the site where the archaeologists found the remains of the base of the fur press.) Data like this is valuable to interpreters, historians, and visitors.

In the past, the entire foundation and footings were removed before reconstruction. With more modern structural support members and architectural design, the NHS staff has been experimenting with partial excavation and building over the remaining footings and foundations. When the Sales Shop and New Store on the west end of the stockade is reconstructed, NHS staff would attempt to excavate only enough of the foundation wall and footings to provide support for the building. As many as possible of the features will remain undisturbed.

Visitors would enjoy seeing the buildings as they were in the nineteenth century and, internally, space would be provided for the repository, park library, and research and education center with classrooms available for school groups. The negative impacts would be the additional financial support needed to construct and interpret these structures. The NPS would seek donations and partnership opportunities for building materials and funding.

As a central repository for Hudson's Bay Company sites in the Pacific Northwest, the research and education center would allow for the continued preservation of the HBC collection and the early Army period in one location. In addition, a park library and classrooms would be provided. This would be beneficial to scholars studying the collection, and the library would be accessible to the public. An increase in staffing and funding would be required and additional security and fire protection would be needed. In addition, funding for relocating the center to a reconstructed Sale Shop and New Store would be needed. The function of the center helps the NHS to ensure the preservation, storage, and accountability of the collections. The establishment of the research center would be beneficial to the local economy by bringing in researchers and others that would need food, lodging, and other services during their stay at Fort Vancouver National Historic Site.

The cultural landscape at the Parade Ground would be restored giving visitors a greater understanding of the use and function of the Parade Ground and the early U.S. Army period. Treatment of the cultural landscape would follow NPS management policies and be based on sound preservation practices to enable long-term preservation of a resource's historic features, qualities, and materials (5.3.5.2 Cultural Landscapes) (National Park Service 2001: p.56).

Determining the future use of special events there would be necessary for guiding future planning requests and would follow NPS management policies (8.6.2 Special Events) (National Park Service 2001: p.90).

Historic pathways, roads, and fences would be reconstructed in the Village, providing an enhanced historic experience for visitors to the area. Educational and interpretive opportunities would be provided in an area of the park that has not been previously interpreted. Visitors would experience seeing delineated village structures and gardens to evoke a sense of employee life and culture in the Village in the mid-nineteenth century. An interpretive shelter with exhibits about village life and self-guided interpretive media and wayside exhibits would enhance visitor understanding of the site.

Structures would be delineated at the Waterfront. A natural earth-bermed amphitheater would be constructed at the Waterfront and a wharf would be simulated on dry land by the Salmon Store. An archaeologist would be on-site during construction for monitoring any earth disturbances and would take appropriate actions if necessary. Any future archaeological investigations, including those sites for proposed reconstruction would follow the highest standards for scientific investigations.

Construction staging and material storage would occur inside the Fort and at the parking lots at the Fort, Waterfront, and visitor center. Limited electrical and phone service for contractor offices would be provided here. This would result in short-term adverse impacts to the historic scene. Construction time would vary, depending upon available funding. There would be no disruptions to visitor traffic during construction and construction activities would have limited affect to visitor use of the NHS. Construction activities could impact visitors on special event days due to the unusually high number of visitors on these days.

Removal of the asphalt pads delineating some of the building foundations and replacing them with accurately located cornerstones would present to the visitor a clearer and more accurate picture of the fort setting.

Vegetative screening of modern intrusions and the use of tents, fire pits, a privy, and various props such as carts would add to the visitor's enjoyment and sense of employee life in the Village at the time. Historic paths and roads would provide visitors with non-motorized access to the area.

Creation of a nineteenth century orchard in the original location would provide a more accurate historic setting for the Fort. Many of the existing trees in the twentieth century orchard are unhealthy and will be removed in the near future. Reestablishing the orchard at a new location would allow many of the unhealthy trees to be culled and replaced with healthy ones planted as a nineteenth century orchard in the appropriate location. This action could be done over a period of time to lessen the impact of removing fruit trees around the historic Fort. Seeds from an original HBC apple tree located in Old Apple Tree Park would be used as seed source to establish new apple trees in the recreated orchard. Replicating the historic pattern of the orchard would be positive by illustrating the form of orchards during the historic period.

The southwest gate of the Fort was the primary entrance to the Fort from the Waterfront. Using it as an alternative access to the Village would restore the original circulation pattern at the Fort. Visitor safety would be a concern to NPS staff since Pearson Airfield is still in operation. Fencing and signing would help guide visitors away from the safety zone and direct them to the Village.

Visitor experience at the Waterfront would be enhanced by interpretive exhibits, improved public access, and delineated historic structures that tell the story of the role of the Columbia River in trade and commerce during the mid-nineteenth century. Visitors would benefit from interpretive talks and other programs presented in the proposed amphitheater. The amphitheater would be available to Reserve Partners to use for other activities that would benefit the public.

The McLoughlin House National Historic Site would become a unit of Fort Vancouver National Historic Site. The City of Oregon City would keep ownership of the land itself, thus keeping the property as a

chartered City Park. The City would donate an easement to the National Park Service ensuring that the historic values of the properties are preserved in perpetuity. National Park Service ownership and expertise, as well as having a manager and staff on site, would likely provide greater protection to the McLoughlin House and resources therein. Fiscal resources provided by the McLoughlin Memorial Association through private sector support likely would provide further opportunity for preservation and protection.

Having the McLoughlin Memorial Association maintain a formal relationship with the NPS and Fort Vancouver NHS through a written cooperative agreement would create continuity and allow local involvement and enhance partnership opportunities. The voluntary sale of the two houses and contents by the McLoughlin Memorial Association to the NPS would create an endowment fund administered by the Association director. This action would serve to create an additional funding source for the long-term site preservation and public education about the site, key historic figures, and early Oregon pioneer history.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Natural Resources under Alternative B

As an urban park, the national historic site is somewhat limited in the number of wildlife species that utilize it. However, for a small park, Fort Vancouver contains many species as noted in "The Affected Environment" chapter. Construction activities may cause some disturbance to animal species, including birds, but this would be limited and short-term, especially in the Fort since reconstruction would take place primarily within the fort palisade. Animals would probably avoid the site during the period of construction, but most would probably return once construction was completed. Activities should not have any appreciable affect on future populations of animals in the vicinity.

The largest impact would be in the Village since that area is primarily undeveloped now. Proposed actions to reconstruct and delineate structures would remove existing brush piles now used as animal habitat and would bring many more visitors there. Consequently, there would be some long-term habitat loss for resident species currently using the habitat in the Village, including rabbits, coyotes, and some birds. Since the tall grasses, blackberries, and shrubs in the Village (approximately two acres) contain a diversity of wildlife, removing this brush pile to implement Alternative B would impact these species. However, this would be partly mitigated by using native plants for screening along the perimeter of the park and along SR 14. Removing the asphalt areas within the Village would allow rain penetration into the soil and encourage plant growth, but could be costly. It would remove a petroleum-based product from the site but any petroleum leaching would probably have already occurred. Covering the asphalt with soil may be more cost effective. The soil over the asphalt would need to be at a minimum 4-8 inches deep and would limit the types of plants that could grow to ground covers. The soil potentially could be displaced by heavy rains or flooding. Breaking up the asphalt and leaving it in place would enable larger shrubs and trees to be planted since plant roots could reach around the asphalt into the subsoil.

Restoring a portion of the original prairie, approximately 13 acres south of the Fort, would attract wildlife, including birds and possibly amphibians, associated with these plant types. Though the remnant prairie would be too small to work as a functioning ecosystem, it may attract small mammals and reptiles, which can hide in the taller grasses. Other species, such as birds, may be attracted to the taller grasses to feed on the plants or nest there or to search for small mammals. It may have a positive impact on the federally listed bald eagle by potentially increasing the small mammal and bird populations that bald eagles feed on.

The native prairie grasses would be managed and maintained by burning or mowing. Mowing may be required on a periodic basis (about once a year), but may be more conducive to an urban environment. It may require the purchase of special mowing equipment and result in some minor air pollution from machine operations. If burning is used, the burning would occur on a regular basis every one to three years until established. During the prescribed burn activities, air quality may be affected. There would be an increase in particulates that disperse quickly. However, particulate emissions would meet or be below the state standards. Burning may be more cost effective than mowing once the grasses are initially established.

Enhancing the natural condition along the Columbia River shoreline and planting native vegetation in accordance with NPS management policies (Management of Altered Plant Communities 4.4.2.5) (National Park Service 2001: p.36) could also provide a habitat for native plant species. The NPS staff would plant native understory species such as willows, salal, sedges, and grasses. Removing the existing concrete fill material (approximately 530 linear feet) at the water's edge would clear the shoreline of debris. The NPS staff would check to see if fish or other animals are using the fill area as habitat. In this case, suitable natural habitat, such as root wads, could be substituted. Coordination and compliance would be required to implement this action. Concrete removal along the shoreline would be monitored for affects on archaeological resources and erosion control.

Delineation of portions of the historic pond with wetland plants could, in time, provide an urban habitat for animals, especially birds. This would provide a more accurate historic setting at both the Waterfront and in the Village. Any archaeological artifacts in or beneath the pond surface would need to be protected through lining or capping below any introduced plants. In addition, the nature and condition of the archeological resources would be assessed.

The native Garry oak groves, also called Oregon white oaks (Quercus garryana), found within both the national historic site and the Vancouver Barracks area of the Reserve are on the Priority Habitats and Species List and the Species of Concern List with the Washington Department of Fish and Wildlife. The oaks are important statewide but are a declining plant species. It is the only native oak in Washington and British Columbia. This existing remnant stands appear old and are historically important as well. Protecting the remaining oak groves would be beneficial to wildlife that feed on the acorns and use the trees for shelter and nesting.

Encouraging the Reserve to use Integrated Pest Management (IPM) practices would be beneficial. Though not prohibiting pesticides, the IPM program uses an integrated approach to pest management using mechanical, physical, cultural, biological, and chemical means to manage pests.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Recreational Resources under Alternative B

Treatment of recreational resources would be the same as in Alternative A. In addition, reestablishment of historic paths and trails within the Fort and elsewhere would provide visitors with non-motorized access.

Providing a non-motorized path from the visitor center to the Fort would allow a safe walk for visitors between the two attractions without encountering vehicular traffic. The path would be a substitute to walking on the lawn and provide a more stable and even surface.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Scenic Resources under Alternative B

Effects on scenic resources would be the same as in Alternative A. In addition, extra reconstruction and delineation of structures within the fort palisade, the Village, and the Waterfront would result in increased interpretive opportunities and result in a better understanding of Hudson's Bay Company and mid-nineteenth century life for visitors.

The removal of the temporary fort parking lot and the restoration of that area to historic fields would remove a modern element from the fort entrance. Screening modern structures with native plants would allow the park staff to more accurately portray the historic setting.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Interpretation, Education, and Outreach under Alternative B

Visitors would benefit from more detailed interpretation of Fort Vancouver NHS in the visitor center, fort palisade, Parade Ground, Village, and Waterfront. Self-guided and guided interpretive walks and talks led by park rangers and volunteer staff would provide a level of interpretation to the visitor not previously enjoyed at Fort Vancouver. The need for additional staff and volunteers to conduct those programs would have a budgetary and staffing impact on NPS.

Increasing "living history" presentations within the fort palisade, at the Village, and along the Waterfront would greatly increase the enjoyment for the visitor. The need for additional staff to perform "living history" would have budgetary impacts for NPS. However, establishing a volunteer coordinator position to ensure a trained and qualified cadre of volunteers could offset this.

Use of the current Fort Vancouver NHS visitor center for the co-located Reserve visitor center would provide visitors an opportunity for interpretive overview of Reserve resources in a central location. An expanded Reserve visitor center would permit more visitors to benefit from interpretive programs on the "One Place Across Time" theme presented in the facility. Exhibits, media, and interpretive programs developed for the Reserve visitor center would enhance visitor experiences by telling the stories of the various events in the Reserve and providing historical background and information. Visitors to the Reserve would benefit from the use of the O.O. Howard House for interpretation of the U.S. Army and Vancouver Barracks and the public would benefit by having the building remain in public use.

Opportunities for interpretation would occur with reconstruction of nine additional structures within the fort palisade. The actual excavation of the site offers an opportunity to show visitors the process of retrieving data for interpretation while mitigating the affect of the reconstruction. Visitors would enjoy seeing the buildings as they were in the nineteenth century and, internally, space would be provided for the Hudson's Bay Company repository, park library, and research and education center with classrooms available for school groups.

Historic pathways, roads, and fences would be reconstructed in the Village, providing enhanced experience for visitors to the area. Educational and interpretive opportunities would be provided in an area of the park that has not been previously interpreted. Visitors would experience seeing delineated and reconstructed village structures to evoke a sense of employee life in the nineteenth century. Exhibits about

village life and self-guided interpretive media and wayside exhibits would enhance visitor understanding of the site. Vegetative screening of modern structures and the use of tents, fire pits, a privy, and various props such as carts would add to the visitor's enjoyment and sense of employee life in the Village at the time. Restoration of the orchard to its original location would provide visitors with a glimpse of some of the fruit trees that were present during the nineteenth century.

Visitor experience would be enhanced by interpretive exhibits, improved public access, and delineated historic structures along the Waterfront that tell the story of the role of the Columbia River trade and commerce during the nineteenth century. Exhibits incorporated into the pedestrian overpass/land bridge would be used to educate the visitor about the HBC Village and Fort Vancouver Waterfront story. Visitors would benefit from interpretive talks and other programs presented in the proposed amphitheater. The amphitheater would be available to Reserve Partners to use for other activities that would benefit the public.

Visitation to the McLoughlin House National Historic Site is likely to increase over time and would be enhanced by additional interpretation and education opportunities. Revenue from the fee sale of the McLoughlin and Barclay houses to the McLoughlin Memorial Association would provide for additional educational opportunities to a broader range of visitors.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Facilities under Alternative B

The Fort Vancouver visitor center would be remodeled and expanded. It would become the primary visitor center for the NHS and the Vancouver National Historic Reserve. Impacts from construction would be the same as those discussed in the "Effects on Cultural Resources under Alternative B" section including the need for extensive archaeological monitoring. Any addition to the visitor center would be consistent with the existing Mission 66 architecture. Making the Fort Vancouver visitor center the primary Reserve visitor center would be a positive action. The visitor center would be located in the center of the Reserve and all the Reserve venues would be a relatively easy walk. Since the most visited attraction in the Reserve at this time is Fort Vancouver, most visitors would probably be able to visit the Reserve visitor center at this new location.

Many of the exhibits are outdated. Remodeling the exhibits within the visitor center to interpret the Reserve themes and updating feature films would allow for a better representation of interpretive themes. Redesign of exhibits could help with space allocation. Some Fort Vancouver NHS interpretation would be moved on-site to new exhibits within the Village, Parade Ground, Waterfront, and Fort. Enlarging the auditorium would allow for more visitors to use the theater at a time. Construction activities would be disruptive in the short-term to visitors using the area causing the visitor center to be closed for approximately six months to accommodate the improvements.

Removing the Reserve visitor center out of the O.O. Howard House would be a positive action. The space could be used for public purposes or to house the interpretation of the U.S. Army that is not presently being interpreted. The available space in the O.O. Howard House is not adequate for expanded Reserve exhibits.

The move of headquarters and administrative facilities to a larger U.S. Army building in the east barracks would benefit park staff and Reserve Partners and provide better communication and more efficient and effective operation and communications. Park administration, as well as offices for the Reserve Partners

and Reserve Trust, could benefit from co-locating administrative facilities in same building. Cost savings to NPS and Reserve Partners could occur from sharing of administrative resources such as copy machines and other large office equipment. Funding would be sought to upgrade the administrative building facilities and utilities. Other Reserve Partners could share some of this funding. Adaptive reuse of the Army building would be in compliance with the Secretary of the Interior Standards. Site specific actions would require additional compliance. Locating park offices in historic buildings would meet the National Historic Preservation Act [16 USC 470h-2(a)(l)] and NPS management policies (5.3.5.4.Historic and Prehistoric Structures) (National Park Service 2001: p.58-59).

Two existing Mission 66 buildings comprising the maintenance building and an employee residence would be removed to make way for an expanded visitor center parking lot. Various adaptive reuse options for the structures would be considered off-site. If after evaluation for the National Register these structures are determined eligible, they may not be removed in which case the visitor center parking lot would not be expanded and other parking and shuttle options would be explored. Other options would need to be explored.

Relocation of maintenance facilities to a site in either the south or east barracks would provide park staff with additional space needed to perform necessary maintenance functions. Both NPS and the U.S. Army Reserve could benefit from co-locating facilities, creating budgetary and staffing efficiencies. Similar positive impacts would also result from partnering with other Vancouver National Historic Reserve Partners in maintenance functions.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Operations under Alternative B

The number of FTEs would increase by 6 for Fort Vancouver NHS over Alternative A and would require a substantial funding increase in the operating park budget. An additional 10 FTE would be needed to pay for additional NHS staff now working at the Vancouver National Historic Reserve on Reserve issues since its establishment. Once the McLoughlin House National Historic Site becomes a unit of the NHS more staff would be needed.

A "heritage pass" program would allow the visitor the convenience of paying the admission price once with access to all the venues in the Reserve. There would be no adverse impacts on park hours or seasons of operations.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Parking, Access, and Circulation under Alternative B

At the Waterfront, construction of a parking area, a shuttle stop, and provision of pedestrian crossings across Columbia Way would enhance safety and be convenient for the visitor. Construction of the parking area would have a negative budgetary impact on the NPS, but the construction for shuttle and pedestrian crossings would be funded through other partners. There would be short-term negative impacts due to construction including noise, dust, and temporary traffic reroutes and slow-downs.

Though a new lot (approximately 60 parking spaces) would be constructed at the Waterfront, it would be in an already disturbed area. Two of the three existing waterfront lots would be removed to maximize and

utilize land along the Waterfront for interpretive purposes. The lot adjacent to Canoe Landing Beach would be retained providing 16 spaces and an area for launching small watercraft. Overall, this would result in an addition of approximately 10 new parking spaces at the Waterfront.

Non-motorized access from the Fort to the Waterfront using the pedestrian overpass/land bridge across State Route 14 would provide a recreational and interpretive experience for visitors using exhibits. The bridge would be approximately 40 feet wide by 200 feet long. Construction would have a minimum impact on the NPS budget since the Department of Transportation would fund most of this cost.

Changing the surface texture of Columbia Way through the interpretive area at the Waterfront would enhance the visitor's safety by slowing vehicles. Requiring lower speed limits and establishing load limits to discourage commercial truck traffic through the interpretive area by rerouting would not have negative impacts. State Route 14 is the designated transportation route for trucks. The intent of developing the Interstate 5 interchange with State Route 14 was to prevent trucks from using Columbia Way as an avenue of commerce.

If the two existing Mission 66 residences near the visitor center are not determined eligible for the National Register and are removed, this location would provide convenient and adequate parking and shuttle bus operations for visitors going to the proposed Reserve visitor center. If these structures are not removed, it would limit the ability to expand the visitor center parking lot (an addition of approximately 28 spaces plus 3 pull-throughs for recreational vehicles) and other options would need to be considered.

The temporary fort parking lot would be removed and, if approved by the U.S. Army Reserve, visitors would park in a parking area to the northwest of the Fort in the east or south barracks area. Some impact to the historic landscape setting of the early Army period would occur. However, partnering opportunities to share parking with the Army Reserve (who use the existing parking areas two to three weekends per month) would decrease the number of areas disturbed to provide for new parking spaces. Positive impacts would result from restoration of the temporary parking area as part of the cultural landscape of the fort environment. Site specific actions would require additional compliance (NEPA and Section 106 of the National Historic Preservation Act).

Establishment of the Discovery Historic Loop Trail for interpretive opportunities, as well as recreational opportunities would enhance visitors' experiences. Establishment of the trail would also provide a multi-use non-motorized route for visitors to access the Waterfront from the Fort and the Vancouver National Historic Reserve. Restoration of East Fifth Street to a time evocative of the mid-nineteenth century would be a positive interpretive opportunity for the Fort and Reserve visitors. Closure of East Fifth Street would be a negative impact for those who use the street for vehicular access to the area. This includes employees of the Federal Highway Administration and the U.S. Army Reserve personnel. However, the impact would be mitigated by the availability of other access roads including Fort Vancouver Way and the frontage road adjacent to Interstate 5.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Carrying Capacity under Alternative B

No adverse impacts on carrying capacity are anticipated within the NHS under this alternative. Visitation would gradually increase as nine additional structures were reconstructed within the fort palisade. Tours for the buildings would be limited in number to 15 to 25 visitors, which would prevent crowding on tours.

As in Alternative A, crowding within the fort palisade would not be expected to occur except on special event days.

In Alternative B, the visitor center's redesigned auditorium/theater would be able to accommodate 85 additional visitors and would be able to accommodate larger school groups. The redesigned visitor center would double in its capacity from 75-100 to 250 visitors.

In addition, the capacity for parking at the NHS would increase 33 total parking spaces. The proposed Reserve shuttle system would bring more people from the visitor center and downtown to surrounding venues within the NHS and Reserve. If one area of the Reserve is busy, visitors have the ability to catch the shuttle and go to another venue. The system would also lessen the need for on-site parking at the visitor center and at the Fort.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Socioeconomics under Alternative B

By becoming a unit of Fort Vancouver National Historic Site, the McLoughlin House National Historic Site would be eligible for staff and funding. Some of the proceeds from the sale of the two historic properties to the NPS would be used to establish an endowment fund administered by the McLoughlin Memorial Association Board of Directors. The endowment fund would be available to assist in the long-term preservation and public use of the site and the development of various educational programs throughout the community and the region. Increased visitation to McLoughlin House could provide stimulus to the local economy. National Park Service funds for staffing, supplies, site maintenance, housing, and other expenses would inject public funds into the local economy.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Boundary and Land Protection under Alternative B

If the U.S. Army deemed additional lands within the NPS authorized boundary as excess to their needs, these lands would be considered for transfer to NPS. The impacts of this action are primarily fiscal. Funds would be needed to maintain, upgrade, and operate the existing buildings and landscape, including utilities. The impact of not receiving these lands means that NPS staff would not manage some of the important HBC cultural sites, like the HBC cemetery. However, these sites could still be preserved and interpreted to the public by the U.S. Army.

If excessed, the NPS would make available to the City of Vancouver portions of the east barracks under a long-term lease to manage coincidentally with west barracks. There would be minor NPS operations costs to administer the lease. Primary focus would be on adaptive reuse of historic Army buildings adhering to the Secretary of the Interior Standards. Site specific actions would require additional compliance (NEPA and Section 106 of the National Historic Preservation Act).

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Regional Cooperation and Partnerships under Alternative B

Numerous partnership opportunities with Reserve Partners exist, all of which would benefit or enhance visitors to the site and the public in general. Partnership efforts that share resources provide efficiencies and economies to all. Partnering with local schools and universities, such as the Portland State University/NPS field school, would provide opportunities to benefit students in the fields of education, archaeological research, anthropology, historic preservation, and other social sciences.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Cumulative Impacts under Alternative B

Cumulative impacts in this alternative would result in a better public understanding of HBC and early U.S. Army periods and their related social and economic conditions. Implementation of the Reserve shuttle system throughout the park and Reserve would provide for reliable, safe, and energy efficient transportation for the general public, removing cars from within the NHS and Reserve.

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources or values.

Unavoidable Adverse Impacts under Alternative B

No unavoidable adverse impacts are expected to occur under Alternative B. Since there are no adverse impacts, there would be no impairment of park resources or values.

Short-term Use vs. Long-term Productivity under Alternative B

During reconstruction of nine additional historic structures within the Fort, there would be some temporary minor impacts to air quality during construction. Construction related noise would be an adverse impact during construction. Ground disturbance would not likely impact any additional archaeological artifacts. However, on-site monitoring would need to be done during construction. Construction for new trails would need to have archaeological monitoring as well.

There would be some long-term loss of previously undeveloped land in the Village under this alternative. However, there would be a long-term benefit to visitors by recreating the historic scene at Fort Vancouver.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Irreversible or Irretrievable Resource Commitments under Alternative B

Effects on Wetlands, Floodplains, and Threatened and Endangered Species under Alternative B
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 identified as wetlands the NHS's 3,600 feet of riparian wetlands along the Columbia River.

There would be no adverse impacts to wetlands along the Columbia River. Removing the concrete fill and Himalayan blackberry along the shoreline could cause some minor immediate disturbance prior to planting with native species, but over the long-term, removing the foreign material would have a positive impact. The bank would be assessed for erosion before removing the fill. The NPS staff would check to see if fish or other animals are using the fill area as habitat. In this case, suitable natural habitat, such as root wads, could be substituted. Establishing native trees along the shoreline would have a positive impact, adding to the plant overstory in the riparian wetland area.

Wetland plants would be established in portions of the historic pond at both the Waterfront and Village. In time, other associated wetland plants and animals may naturally locate to this area. Before recreating the pond, the nature and condition of the archaeological resources would be addressed.

There would be no adverse impacts to threatened and endangered species since consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Washington State Natural Heritage inventory disclosed no threatened or endangered species within the park. Since the bald eagle and the bull trout may occur in the vicinity of the park, NHS staff would continue to monitor for the presence of threatened and endangered species.

The objectives of Executive Order 11988, Floodplain Management, are to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains (100-year floodplain or 500-year for critical actions). The waterfront area of Fort Vancouver NHS along the Columbia River is presently leased to the City of Vancouver and used as a "day-use only" city park. The proposed development in Alternative B along the Fort Vancouver Waterfront would be in the 100-year floodplain.

In this alternative, structures within the floodplain would not be fully reconstructed The Salmon Store would be constructed as an interpretive shed silhouetting the exterior dimensions and constructing a roof. Restrooms would be attached to the Salmon Store. This building would be most susceptible to damage in a flood event. Other delineated structures at the Waterfront may not sustain much damage during occasional flooding, as waters would pass around and through the building's outlined forms. However, they could be destroyed by debris carried by fast flowing water.

According to Vancouver's City Engineer (Swanson, phone conversation: 2001) the last major flood event occurred in February 1996 (the flooding event before that was in the 1940s). Though the Bonneville Dam has been successful in controlling floodwaters, snow melted by warming temperatures and heavy rains caused widespread flooding. During this time floodwaters inundated the entire 100-year floodplain. Little debris was deposited at the waterfront area of Fort Vancouver. It is speculated that the trees lining the shore helped to limit debris deposits and protected the shoreline from erosion and undercutting. The action to restore shoreline vegetation in this alternative would help during flood events.

To reduce possible fiscal loss, it is recommended that the delineated structures be made of wood or other natural material, so that they might be replaced, if necessary. If possible, the NPS staff could construct some structures to be removed in advance of potential flooding.

The NPS Floodplain Management Guideline states that certain federal actions are exempt from additional compliance. The proposed construction in Alternative B along the waterfront is exempt because the proposed structures are historic sites whose location is critical to their significance, and because the restrooms and the parking lots would be for day-use only.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Low Income and Minority Populations under Alternative B
The effects on low income and minority populations are expected to be the same as in Alternative A.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Permanent Impairment of Park Resources under Alternative B

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources.

Alternative C

Effects on Cultural Resources under Alternative C

The impacts in this alternative would be the same as in Alternative B, except that many more structures would be delineated or reconstructed. Within the fort palisade, all the remaining original structures would be fully reconstructed (14 structures instead of 9 as in Alternative B). This would add to additional understanding of a what a fully functioning Hudson's Bay Company fort would be like. A negative impact would primarily be the additional financial support needed to construct and interpret these structures. The NPS would seek donations and partnership opportunities for building materials and funding.

Any future archaeological investigations, including those sites proposed for reconstruction, would follow the highest standards for scientific investigations. Reconstruction activities would comply with NPS management policies and must be supported by sufficient data and occur in the original location. (5.3.5.2.4 Reconstruction of Obliterated Landscapes) (National Park Service 2001: p.56). As much of the actual archaeological resources as possible would be left *in situ*. However, the archaeological data recovered by excavation provides architectural information, interpretive artifacts, and data on the historical lifeways of the building's original occupants. (A past example of this involved reconstruction of the Fur Store. The replica fur press is placed exactly over the site where the archaeologists found the remains of the base of the fur press.) Data like this is valuable to interpreters, historians, and visitors.

In the past, the entire foundation and footings were removed before reconstruction. With more modern structural support members and architectural design, the NHS staff has been experimenting with partial excavation and building over the remaining footings and foundations. When the Sales Shop and New Store on the west end of the stockade is reconstructed, NHS staff would attempt to excavate only enough of the foundation wall and footings to provide support for the building. As many as possible of the features will remain undisturbed.

As a central repository for Hudson's Bay Company sites in the Pacific Northwest, the research and education center would allow for the continued preservation of the HBC collection and the early Army period in one location. In addition, a park library and classrooms would be provided. This would be beneficial to scholars studying the collection, and the library would be accessible to the public. An increase in staffing and funding would be required and additional security and fire protection would be needed. Since the research and education center is located in adaptively reused structures within the Vancouver Barracks under this alternative, the relocation of this function is contingent upon both the availability of a suitable structure and adequate funding to renovate the building for this use. The function of the center helps the NHS to ensure the preservation, storage, and accountability of the collections. The establishment of the research center would be beneficial to the local economy by bringing in researchers and others that would need food, lodging, and other services during their stay at Fort Vancouver National Historic Site.

Within the Village and at the Waterfront, additional village structures would be delineated to show the skeletal form of the structure to assist in historical interpretation. Relocating and enlarging the orchard and reconstructing the Summer House would be contingent upon the U.S. Army declaring that portion of the south barracks excess, then transferring it to the NPS for management. The reconstruction of the two historic School Houses north of the Fort would provide visitors with a more fully reconstructed historic scene, but would require additional funding.

Reconstructing portions of the historic pond at the Village and Waterfront would provide a more accurate historic setting at both the Waterfront and in the Village. Any archaeological artifacts beneath the pond would be protected through lining or capping below established native plants.

Reconstructing the historic barn would be dependent upon having the U.S. Army excess land in the east barracks and would require additional funding for reconstruction. This action would introduce livestock to the scene during special events. Additional staff with livestock knowledge would need to be hired to manage and care for the animals. To control animal movement, areas within the national historic site would need to be fenced. In addition, cooperative agreements would need to be arranged with farmers in the area to lease and transport the animals.

The cultural landscape at the Parade Ground would be restored giving visitors a greater understanding of the use and function of the Parade Ground and the early U.S. Army period. Treatment of the cultural landscape would follow NPS management policies and be based on sound preservation practices to enable long-term preservation of a resource's historic features, qualities, and materials (5.3.5.2 Cultural Landscapes) (National Park Service 2001: p.56).

At the Fort Vancouver Waterfront, reconstructing the wharf into the Columbia River would require a feasibility study addressing environmental issues, currents, and shipping patterns. In addition, an underwater archaeological study would be needed to determine the presence of remnants of the historic wharf. The construction of a wharf would allow for historic boats and tour boats to temporarily anchor providing a waterfront visitor experience not offered in the immediate area. It could also facilitate tourism to other theme-related waterfront sites along the Columbia and Willamette rivers. The cost of planning and construction could be offset through partnering with the City or other interested parties.

The possibility of providing limited food service would require contracts for vendors or concessionaires who might be interested in providing some type of service at the Waterfront. Cooperating with other Reserve Partners could offset the cost of providing this service.

The effects on cultural resources for the McLoughlin House National Historic Site would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Natural Resources under Alternative C

The impacts on natural resource management would be the same as in Alternative B. In addition, the restoration of portions of the historic pond at the Waterfront and in the Village could in time, provide a habitat for animals, especially birds. Any archaeological artifacts in or beneath the pond surface would need to be protected through lining or capping below any introduced plants. In addition, the nature and condition of the archeological resources would be assessed. The water feature, however, could become a potential safety issue for visitors with small children who might be attracted to the water.

In Alternative C, the ethnobotanical garden would be established at the Waterfront. The creation of the garden would provide a natural habitat for native wildlife species. Given the relatively small size of the garden (approximately one acre), the area would not require significant staff and time to construct and maintain it. This garden would provide park visitors with a glimpse of some of the natural flora that was used by different ethnic groups through time and were present on the site prior to the Hudson's Bay Company period.

The Columbia River is not a pristine river and is highly used for recreation and commerce. Constructing a wharf into the Columbia River would allow visiting historic boats to temporarily anchor along with tour boats serving multiple sites along the Columbia and Willamette rivers. A feasibility study would need to be conducted to study currents and traffic patterns. Impacts would include driving of piles to support the wharf, potential leaking of fuels, and possible dredging of the intertidal area. The NHS staff would need to acquire permits from the U.S. Army Corps of Engineers for any construction into the river. In addition, an underwater archaeological study would be needed to determine if any remnants of the historic wharf still exist.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Recreational Resources under Alternative C

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 park resources or values.

Effects on Scenic Resources under Alternative C

Impacts on scenic resources would be the same as in Alternative B. In addition opening a section of the railroad berm would allow the visitor to see a portion of the Waterfront from the Fort, allowing an important visual connection between the two visually separated sections of the NHS.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Interpretation, Education, and Outreach under Alternative C

Visitor experience would be enhanced due to new exhibits related to Hudson's Bay Company and Fort Vancouver operations. Moving the jointly managed Reserve visitor center to a new location (out of the O.O. Howard House) within the Reserve would provide additional exhibit space that would give visitors the opportunity to learn more about the history of the U.S. Army and Vancouver Barracks than could be interpreted in the more limited space available at the O.O. Howard House. The visitor experience would be enhanced with additional and detailed interpretation provided. However, having two visitor centers—a jointly managed Reserve visitor center and a Fort Vancouver visitor center—at different locations may be inconvenient to some visitors wanting to visit both.

Interpretation within the fort palisade would be enhanced since many more buildings would be physically available for interpretive purposes. The actual excavation of the site offers an opportunity to show visitors the process of retrieving data for interpretation while mitigating the affect of the reconstruction. Additional interpretive staff would be required.

Interpretation of the historic scene within the Village and outside the fort palisade would be enhanced with the delineation of additional structures. Reconstruction of the historic barn would allow for interpretation of farming with traditional cultivation of crops and associated livestock for special events. The reconstruction of the historic School Houses would allow for discussing the role of education at the HBC headquarters. The Salmon Store and the wharf would be fully reconstructed, allowing for

interpretation of nineteenth century waterfront trade and commerce. Reconstructing the wharf would allow for visiting boats to temporarily wharf, adding to the interpretation of the waterfront HBC activities.

The creation of a permanent stratigraphy exhibit for interpretation would allow the visitor a direct view of the "layers" of history at the site and the nature of archaeological deposits.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Facilities under Alternative C

Locating the jointly managed visitor center for the Reserve outside the NHS near the perimeter of the Reserve would lessen potential future crowding impacts at the Fort Vancouver visitor center. However, depending upon the location selected, the visitor center may be somewhat removed from the Reserve venues and a visitor at the NHS may not want or have the time to travel to both facilities.

With maintenance facilities remaining in their current location, additional space would be used in the other two Mission 66 structures—the administrative building or the employee residence. Some of the positive impacts resulting from sharing maintenance with Reserve Partners would be lost. However, if the structures were determined to be eligible for the National Register, using them for maintenance would have a positive effect.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Operations under Alternative C

The number of FTEs (full-time equivalent) would increase over Alternative A by 8 and would require a substantial funding increase in the operating park budget. An additional 12 FTE would also be needed to pay for additional NHS staff since the establishment of the Vancouver National Historic Reserve. Once the McLoughlin House National Historic Site becomes a unit of the NHS, it would need its own staff.

A "heritage pass" program would allow the visitor the convenience of paying the price of admission once with access to all the venues in the Reserve.

There would be no impacts to park hours or seasons of operations.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Parking, Access, and Circulation under Alternative C

Impacts on the Fort Vancouver visitor center parking would be the same as in Alternative A.

Impacts on visitor parking at the Fort would be the same as in Alternative B.

Impacts on East Fifth Street parking would be the same as in Alternative B.

Closure of a portion of Columbia Way to all vehicles would not be expected to have negative economic impacts to several businesses since local traffic would still have full access to State Route 14. However,

there may be some social impacts to numerous individuals that currently use Columbia Way on a regular basis. Removing traffic would enhance the recreational experience along the waterfront for the visitor. Construction of parking areas, shuttle bus drop-off, and vehicle turnarounds would have a budgetary impact on the NPS construction program though funding would come from other sources as well. Closure of this section of Columbia Way would enhance the visitor experience by eliminating traffic from the prime waterfront interpretive area and providing a safe place for visitors to walk.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Carrying Capacity under Alternative C

No adverse impacts on carrying capacity are anticipated within the NHS. Visitation would gradually increase as all the structures (14 additional structures) were reconstructed within the fort palisade. Tours for the buildings would be limited in number to 15 to 25 visitors, which would prevent crowding on tours. As in Alternative A, crowding in the fort palisade would not be expected to occur except on special event days.

In this alternative, the visitor center remains the visitor center for the NHS. As in Alternative B, the visitor center's redesigned auditorium/theater would be able to accommodate 85 additional visitors and would be able to accommodate larger school groups. The redesigned visitor center would increase in capacity from 75-100 (Alternative A) to 185 visitors but 65 less visitors than Alternative B.

In addition, the capacity for total parking at the NHS would increase 39 additional parking spaces over Alternative B. Locating the joint visitor center off-site would alleviate some potential future crowding impacts at the Fort Vancouver visitor center.

The proposed Reserve shuttle system could bring more people from the visitor center and downtown to surrounding venues within the NHS and Reserve. If one area of the Reserve is busy, visitors have the ability to catch the shuttle and go to another venue. The system would also lessen the need for on-site parking at the visitor center and at the Fort.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Socioeconomics under Alternative C

Effects on socioeconomics would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Park Boundary and Land Protection under Alternative C

Effects on park boundary and land protection would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Regional Cooperation and Partnerships under Alternative C

Impacts on partnership opportunities would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Cumulative Impacts under Alternative C

The cumulative impacts of actions under Alternative C would be the same as in Alternative B.

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources or values.

Unavoidable Adverse Impacts under Alternative C

No unavoidable adverse impacts are expected under Alternative C. Since there are no adverse impacts, there would be no impairment of park resources or values.

Short-term Use vs. Long-term Productivity under Alternative C

The short-term use vs. long-term productivity under Alternative C would be the same as in Alternative B.

Irreversible or Irretrievable Resource Commitments under Alternative C

Effects on Wetlands, Floodplains, and Threatened and Endangered Species under Alternative C
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 identified wetlands as the park's 3,600 feet of riparian wetlands along the Columbia River.

There would be no adverse impacts to wetlands along the Columbia River. Removing the concrete fill and Himalayan blackberry along the shoreline could cause some minor immediate disturbance prior to planting with native species, but over the long-term removing the foreign material would have a positive impact. The NPS staff would check to see if fish or other animals are using the fill area as habitat. In this case, suitable natural habitat, such as root wads, could be substituted. Establishing native trees along the shoreline would be a positive impact, adding to the plant overstory in the riparian wetland area.

Alternative C proposes building an L-shaped wharf approximately 50 feet out into the Columbia River. This portion of the Columbia River is not pristine and is highly used for commerce and recreation. There would be short-term disturbance within the 3,600 foot riparian zone to drive piles to support the wharf. This would result in short term turbidity from disturbing river-bottom sediments. This would be constructed by a barge and involve a narrow width of intertidal zone (approximately 100 feet wide). After construction, potential leaks or fuel spills from visiting boats could impact the riparian wetlands. The wharf location would be at the historic location (or in close proximity) of the former HBC wharf and former U.S. Coast Guard dock.

There would be no direct adverse impacts to threatened and endangered species since consultation with the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, and the Washington State Natural Heritage inventory disclosed no threatened or endangered species within the park boundaries

itself. However, indirect effects could be of concern since listed and proposed threatened and endangered species are found within the park's vicinity. The Columbia River is used primarily as a migration corridor with nominal habitat for out-migrating adult and juvenile salmonids. The NHS abuts a portion of the Columbia River that is used as a gateway to both adult and juvenile migration of listed anadromous fish. Wharf building activities and its subsequent siting could potentially conflict with these fish.

In addition, the Stellar sealion (*Eumetopias jubatus*) can be found along this portion of the river. The NHS staff would continue to monitor for the presence of threatened and endangered species. If the action to build a wharf becomes part of the preferred alternative, then preparation of a biological assessment would be required and conducted for all listed and proposed threatened and endangered species and critical habitat. Consultation would also occur with the appropriate agencies.

Wetland plants would be established in portions of the restored historic pond at both the Waterfront and Village. In time, other associated wetland plants and associated wildlife may naturally locate to this area.

Executive Order 11988, Floodplain Management, states that federal agencies are to avoid, to the extent possible, the long and short-term adverse impacts associated with the occupancy and modification of floodplains (100-year floodplain or 500-year for critical actions). The waterfront area of Fort Vancouver NHS along the Columbia River is presently leased to the City of Vancouver and used as a "day-use only" city park. The proposed development in Alternative C along the Fort Vancouver Waterfront would be in the 100-year floodplain.

In this alternative, the Salmon Store would be fully reconstructed. Other waterfront structures would be delineated which would silhouette the exterior dimensions and approximate roofline of structures. The reconstructed Salmon Store and other structures would be vulnerable to flood damage. The delineated structures may not sustain as much damage during occasional flooding, as waters would pass around and through the forms. However, they could be destroyed by debris carried by fast flowing water.

According to Vancouver's City Engineer (Swanson, phone conversation: 2001) the last major flood event occurred in February 1996 (the flooding event before that was in the 1940s). Though the Bonneville Dam has been successful in controlling floodwaters, snow melted by warming temperatures and heavy rains caused widespread flooding. During this time floodwaters inundated the entire 100-year floodplain, but little debris was deposited at the waterfront area of Fort Vancouver. It is speculated that the trees lining the shore helped to limit debris deposits and protected the shoreline from erosion and undercutting. The action in this alternative to restore shoreline vegetation would help during flood events.

The chance of sustaining more damage, future repairs, and costs for NPS from flooding exists in Alternative C. To reduce possible fiscal loss, it is recommended that the delineated structures be made of wood or another natural material, so that they might be replaced, if necessary. If possible, the NPS staff could construct some structures to be removed in advance of flooding.

The NPS Floodplain Management Guideline states that certain federal actions are exempt from additional compliance. The construction along the Waterfront is exempt because the proposed structures are historic sites whose location is integral to their significance, and because the structures, restrooms, and parking lots would be for day-use only.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Effects on Low Income and Minority Populations under Alternative C
The effect on low income and minority population would be the same as in Alternative B.

The effects of proposed actions under this topic heading would not result in an impairment of park resources or values.

Permanent Impairment of Park Resources under Alternative C

The cumulative affect of all the actions proposed under this alternative would not result in an impairment of park resources.

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.

The largest change to the biological environmental would be the development of the Village. Presently the Village is undeveloped and therefore infrequently visited at this time. Because of this, the area serves as open space in a city environment and is frequented by a number of wildlife species. Both Alternatives B and C propose actions that modify this habitat and increase visitation. Certain displaced species (such as coyotes) probably would not return.

There are many actions common to both Alternatives B and C that would protect and preserve the historic, cultural, and natural resources over the No Action Alternative. Both these alternatives would restore a portion of historic prairie south of the Fort and enhance the natural shore conditions along the Columbia by planting native trees and shrubs and removing concrete fill. In both alternatives cultural resources are protected and preserved.

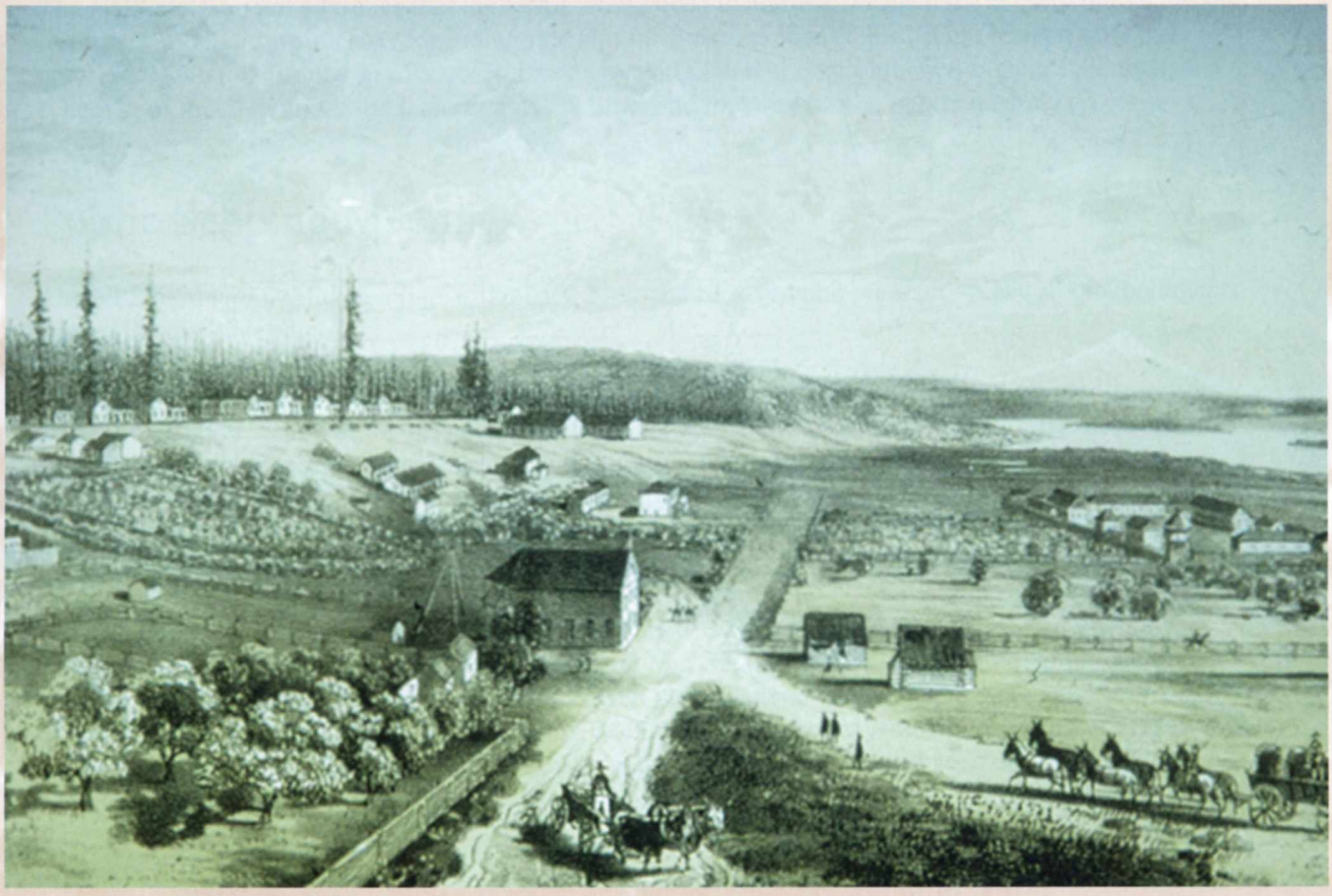
In Alternatives B and C historic resources are enhanced to varying degrees. In Alternative C, more structures are reconstructed or delineated in the Village, Fort, and at the Waterfront. Additional actions proposed in Alternative C that enhance the historic scene include closing Columbia Way around the interpretive area, reconstructing the wharf, and introducing livestock to the historic scene.

However, in enhancing historic resources, Alternative C would initiate more development in the 100-year floodplain including constructing a wharf within a designated riparian wetland corridor. The proposed construction of the wharf into the Columbia River would have potential environmental impacts, including pile driving, dredging of the intertidal area, and possible fuel leakage.

The National Park Service would consider Alternative B as the environmentally preferred alternative over the No Action Alternative and Alternative C.

Summary of Public Involvement

Fort Vancouver, W. T.
Lithograph by Gustavus Sohon, 1854
Courtesy of National Park Service



Summary of Public Involvement

A Notice of Intent to prepare an environmental impact statement for Fort Vancouver National Historic Site was published in the *Federal Register* on January 7, 1999 (Volume 65, Number 5, page 1171). In the spring of 1999, the National Park Service organized an interdisciplinary planning team consisting of staff at Fort Vancouver National Historic Site and the NPS Columbia Cascades Support Office in Seattle, Washington to begin a new general management plan for the NHS. The last master plan for the park was prepared in 1978.

The official public process began in December 1999 when the NPS produced and mailed a newsletter to approximately 600 people on the park's mailing list. The purpose of the newsletter was to encourage participation and comment on critical park issues that should be addressed in a new management plan. The NHS staff described issues that the GMP would need to address for the park to carry out its mission of preservation and visitor use. Providing relevant information about the national historic site, the newsletter stated the function of a general management plan and environmental impact statement, and a schedule of the planning steps including dates, time, and location for the public meetings.

Public Scoping Meetings

The NPS held two public meetings in January 2000 and received and recorded over 150 oral comments during the two meetings.

The first meeting was located in Vancouver, Washington on January 12, 2000 at the Water Resources Education Center. Some of the organizations represented include the following: the City of Vancouver, the Vancouver National Historic Reserve Trust, Clark County Historic Preservation Commission, Washington Trust for Historic Preservation, Vancouver Community Theatre, Downtown Vancouver Association, Fort Vancouver Historical Society of Clark County, and the American Volkswalkers Association. Forty-one people attended.

The second meeting was held the next day on January 13, 2000 at the Barclay House, in Oregon City, Oregon. (Oregon City is the location of the historic McLoughlin House, John McLoughlin's home after retiring as Chief Factor at Fort Vancouver.) Eleven people attended as interested citizens or as representatives of the following organizations: McLoughlin Memorial Association, Oregon City Historic Landmarks Commission, Oregon City Tourism, and Oregon City Parks and Memorials. The Mayor of Oregon City also attended.

Written Comments

Page three of the December 1999 Scoping Newsletter had a "return form" for writing comments which could be mailed back to the NPS. National Park Service staff received a total of 42 letters, some several pages long. Of these, 29 were written from residents of Washington State (25 were from Vancouver); 9 letters were from Oregon; and single letters came from Minnesota, Massachusetts, and Pennsylvania. There was also one letter from Canada.

Summary of Comments

A second newsletter was produced and mailed to the public in October 2000. The purpose of this newsletter was to summarize both the written and verbal comments received during the scoping period.

Comments have been divided into four topic areas and address issues within the authorized boundary of Fort Vancouver NHS. In addition, some of the comments addressed issues for the Vancouver National Historic Reserve and the City of Vancouver. Copies of these letters were forwarded to the City of Vancouver and the Reserve Partners. Following is a summary of these comments.

Reconstruction, Re-use, Archaeology, and Access
The continuation of building reconstruction within the Fort was emphasized by many. There was a suggestion for reconstructing 20 buildings in and around the Fort, and another suggestion that the number of existing reconstructed buildings (ten key buildings have been reconstructed) should be at least doubled. Buildings would not necessarily have to be fully reconstructed, but could be partially reconstructed for interpretive purposes and visual effect. One idea mentioned was the use of interpretive plaques or other features to identify buildings not yet built, but where the building foundation is identifiable.

One respondent mentioned reconstructing the gristmill, Lattie's, and Ryan's houses. The author of one letter mentioned completing the New Office building and including interpretation on Commander Thomas Baillie of *H.M.S. Modeste* and the Hudson's Bay Company maritime service. Another idea included the reconstruction of the Wheat Store, another Store Warehouse, and Beet Store and potentially use them as a visitor center and museum. One idea mentioned was to reconstruct features outside the Fort, including the Village with roads, fences, and other historic landscape features. It was suggested that the airstrip be removed so that the historic landscape could be restored, including the historic pond and creek.

It was also recommended that St. James Catholic Church and Cemetery, which were part of the Hudson's Bay Company historic period, be included in the NHS boundary. (Note: it is currently inside the NHS authorized boundary but managed by the Department of the Army as part of Vancouver Barracks). Several people wrote that they might have ancestors buried in the cemetery and expressed concerns for the cemetery's future. They suggested that NPS to preserve the cemetery and commemorate all the Hudson's Bay Company men buried there with a marker.

One participant mentioned that the fort site could be better integrated with its historical surroundings of the Vancouver National Historic Reserve. Some people expressed interest in seeing a portion of the historic Waterfront restored and to include an interpretive structure there. Many stated that they consider the Fort Vancouver Waterfront a historical asset equal to the Fort. A number of people also noted that the railroad is a visual barrier to the waterfront.

Several participants mentioned that archaeological collections should be more accessible to researchers, excavations should be continued, and artifacts displayed at the Fort. In addition, there could be consistent and regular hours for public viewing of artifacts (to help facilitate trips). Archaeology and history students could get extra credit for volunteering.

One participant mentioned that the Old Post Headquarters building in the East Barracks could be a new administrative building for the NPS and the 1919 Motor Pool building could be readapted as a maintenance building. Other buildings could be used for regional NPS training. It was also mentioned that the East Barracks section of the NHS should be preserved since it is a primary area of fort archaeological resources that are not currently preserved by the NPS and which tells much about the original residents of the Fort.

For better access, moving the visitor center closer to the Fort was proposed. A suggested location was the site of the former historic schoolhouses. Another mentioned removing the existing Mission 66 visitor center from the historic scene. Some saw the need for convenient parking near the Fort including the addition of benches. One person proposed using Old Apple Tree Park on city property for additional fort parking. An open-air, sight-seeing bus was proposed along with a water taxi to access the NHS and other key points along the river, including a stop at Oregon City, Oregon. A pedestrian overpass could connect the Fort to the Waterfront. It was suggested that an internal pedestrian and bike trail system be developed to connect the Fort with the city's regional bike trail system (eventually connecting it to a larger national trail system). Many mentioned the need for improving the signage from the highway to the site, as well as within the National Historic Reserve, and to increase the appeal of key entrances.

Tourism, Outreach, and Community Involvement

Some participants mentioned the need to emphasize regional history, to publicize events, and to keep commercialization low. There was a suggestion to connect the Fort to its natural history by interpreting the life and work of the botanist David Douglas and other naturalists. Many others mentioned the need to maintain community involvement and commitment, to build on partnerships, to include more living history, and the possibility of utilizing local theatre groups. More outreach was suggested to regional garden groups, with the prospect of marketing heritage garden aspects to the public. Some people asked whether the NPS and the City of Vancouver could develop a more cooperative partnership given their different philosophies and missions. How could the city best advise and assist Fort Vancouver NHS with its mission?

One proposal suggested that programs be taken outside the Fort to community centers and schools and placed on the Internet. There was a proposal to pursue establishing a research center (not just a repository for artifacts) in cooperation with universities. The NPS could reconstruct the remaining warehouses and use them for the research center. It was also noted that the Columbia River serves as a physical barrier to visitation to the Fort from the Portland area.

Greater effort needs to be made to attract visitation especially during the low visitation months. The city could develop key historic sites in the city to encourage visitation across the freeway. Another participant suggested working with commercial map producers to get Fort Vancouver on the maps as an attraction. Others suggested that major special tourist events and programs could be organized (brigade, encampment, candlelight tours, and reenactments) as many as 12 times a year. Some suggested that no entrance fee or a low fee be charged.

Some participants suggested that the NPS could make special events less crowded by making them last for a longer duration. Merchants could advertise with posters and banners downtown. Pushcart vendors could sell food and drinks. Another suggestion to attract more visitors would be to hold a preview at the mall with people in period dress. Other special events could be organized and include a summer camp and a pioneer cooking school. One suggestion was to charge a fee all year, but to have special events free during good economic times. Another respondent suggested asking the Air National Guard to reschedule practice flights to avoid disturbing special events.

Some wanted to see the garden expanded. Many mentioned the importance of open space at the park to visitors. Others wanted to see adequate visitor services provided, such as food service, drinking fountains, and restrooms. Since the Columbia River was the center of commerce, some participants advised that the NHS should emphasis the natural history and the reasons why the Fort was located near the waterfront. Some people mentioned the desire to bring tourists to Vancouver for the upcoming Lewis and Clark celebration.

There were some concerns about promoting concession facilities and problems with unleashed pets. One letter mentioned reducing air traffic over Pearson Airfield due to visitor safety issues. Suggestions were made for marketing and developing local history products, such as board games and calendars, to be sold in the visitor center and throughout the city.

Interpretation and Education

Proposals regarding interpretation included expanding the interpretive message to include a broader time period and to incorporate additional interpretive methods such as slide shows and art galleries. There was a suggestion for more multicultural presentations about the roles of different cultures reflected at the Fort, including African-American, Hawaiian, American Indian, British, and French. One participant recommended installing an interpretive sign illustrating a map of North America showing routes of fur brigades and the HBC's maritime trade. Other respondents suggested establishing better facilities, exhibits, and visual aids at the visitor center and along walkways and at the Waterfront. Several participants mentioned the importance of linking the NHS with other historically related sites, such as the McLoughlin House, Fort Clatsop National Memorial, and Whitman Mission National Historic Site. Another idea is to facilitate connections with historic neighborhoods near the Fort.

Some requested more personal interpretation using volunteers as well as rangers. One participant suggested a broader, more creative curriculum for fourth graders and others studying Washington State history. Other suggestions included using reenactments to tell stories and to increase hands-on educational experiences for adults and children. This could include bringing oxen in for an annual event. Music could play at the bandstand everyday and costumed musicians could play music from the past. The NPS could allow "pow-wows" in the orchard. The NHS could provide staff and volunteers so that the Carpentry and Blacksmith shops have period dress actors every day.

Additional tours were suggested to include an archaeological tour for middle school students and the public. The NPS could produce a booklet of quotations from journals and historic letters and republish the NPS handbook on Fort Vancouver (this handbook has recently been reprinted). In addition, a new comprehensive film could be produced on the history of the Fort and the role of the fur trade in the exploration and settlement of North America. The NPS could also provide training for living history volunteers.

Travelling exhibits could be made to increase educational outreach. There is a perceived need to interpret not just the HBC story but also the Army to AirCorps story using separate interpretive staff expertise. It was emphasized that Fort Vancouver NHS depicts a unique period in American history that is seldom interpreted elsewhere. The NPS could look at establishing an endowment program for funding buildings and educational programs.

There was interest to involve through the Internet more schools and visitors outside Vancouver. Someone suggested establishing a historical certification program for teachers and volunteers. Environmental education was also mentioned as important, such as what practices were used then which apply today. There was a suggestion to use Vancouver National Historic Reserve facilities for interpretive venues, and not have the Reserve overshadow the importance of Fort Vancouver. A new interpretive plan and visitor survey needs to be prepared by the NHS. Another interesting idea was to convert the existing visitor center into a multi- agency site for information on other federal agencies in the Pacific Northwest since the location is ideally suited near the Interstate.

Staffing and Other Comments

Several respondents addressed the need for additional staff. Another participant suggested adding an assistant superintendent to deal with Vancouver National Historic Reserve issues, adding a full-time archaeologist, and studying the need to provide NPS law enforcement staff on site.

A commenter suggested that land ownership information needs to be updated including the 25 year-old agreement with the city for leasing the NPS waterfront property. There was a question about the Army land disposal and preparing an environmental impact statement.

McLoughlin House

Some people mentioned the desire for the site in Oregon to become a full unit of the NPS administered by Fort Vancouver National Historic Site. (It is now an "affiliated" unit, which means it is not federally owned or directly administered by the NPS, but it can utilize NPS technical or financial assistance when available.) Another mentioned the desire to coordinate planning of the McLoughlin House with Fort Vancouver NHS with help from the NPS support office in Seattle. At the same time there was concern about the site maintaining its own identity. Some participants stressed the importance of finding alternative funding sources for staff, interpretive program development (including use of the Internet), and new activities to enhance tourism and raise public awareness. There was also an expression of support for NPS technical assistance in the area of building preservation and the proper care and display of site artifacts. There were some concerns about the existing NPS fee policy and national passes and what implications that would have on income at McLoughlin House site. It was also suggested that interpretive exhibits be developed emphasizing John McLoughlin's role in representing the U.S. interest against the British.

Though many new actions and ideas were suggested by the public during the public comment period, no new issues were identified.

List of Preparers

Oregon City on the Willamette River
Oil on canvas by John Mix Stanley, ca . 1850-1852
Courtesy of Amon Carter Museum, Fort Worth, Texas



List of Preparers and Cooperating Entities

Planning Team Composition and Functions

Ms. Deanne Adams
Chief of Interpretation, Pacific West Region, NPS, Oakland, California; Interpretation Issues

Ms. Linda Baker
Former NEPA Compliance Program Leader, Columbia Cascades Support Office (CCSO), NPS, Seattle, Washington; Environmental Impact Statement and NEPA Compliance Coordinator

Mr. Gary Bickford
Chief of Maintenance, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Maintenance Issues

Mr. Keith Dunbar
Team Leader, Planning and Partnerships, CCSO, NPS, Seattle, Washington; Project Manager

Mr. Gregg Fauth
Former Chief Ranger, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Interpretation, Recreation, Visitor Use, Socioeconomic, and Natural Resource Issues

Ms. Tracy Fortmann
Superintendent, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Direct Park Management and Policy Issues

Mr. Erv Gasser
Natural Resource Specialist, CCSO, NPS, Seattle, Washington; Natural Resource Issues

Mr. David Hansen
Park Curator/Historian, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Cultural Resource Issues

Ms. Elaine Huff
Administrative Officer, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Administrative Issues

Ms. Theresa Langford
Museum Technician, Fort Vancouver National Historic Site, NPS, Vancouver, Washington; Visitor Use, Technology Options for Collections Information, Cultural Information, Graphics Assistance

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Landscape Architect, CCSO, NPS, Seattle, Washington; Environmental Impact Statement and NEPA Compliance, Visual Analysis Issues, Scenic Resources, and Public Involvement; Draft GMP/EIS Layout, Design, Production, and Editor; Newsletter Editor and Producer

Mr. Jim Thomson
Archeologist, CCSO, NPS, Seattle, Washington; Archeology Issues

Dr. Stephanie Toothman
Chief of Cultural Resources, CCSO, NPS, Seattle, Washington; Cultural Resource Issues

Mr. Rick Wagner
Chief, Land Resources Program Center, CCSO, NPS, Seattle, Washington; Analysis of Lands and Boundary Modification Issues

Dr. Douglas Wilson
Vancouver National Historic Reserve Archaeologist, Vancouver, Washington; Cultural Resource Issues, Discovery Trail Coordination

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Administrative Support Assistant, CCSO, NPS, Seattle, Washington; Document Production Support

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Mr. Steve Gibbons
Natural Resources Section 7 Coordinator, CCSO, NPS, Seattle, Washington; Natural Resource Compliance

Ms. Jan Harris
Outdoor Recreation Planner, Denver Service Center, Denver, Colorado; Workshop Facilitator

Mr. Jere Krakow
Superintendent, Long Distance Trails Office, Salt Lake City, Utah; Oregon Trail Issues and Coordination

Ms. Gretchen Luxenberg
Cultural Resources 106 Compliance Coordinator, CCSO, NPS, Seattle, Washington; Cultural Resource Compliance

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Production Director, Northwest Interpretive Association, Seattle, Washington; Newsletter Design and Production, Graphics Project Assistance

Mr. Allen McCoy
GIS Specialist, CCSO, NPS, Seattle, Washington; Spatial Analysis and Cartography

Ms. Emily McLuen
GIS Specialist, CCSO, NPS, Seattle, Washington; Spatial Analysis and Cartography

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Former Landscape Architect Intern, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Development Concept Plans for Waterfront and Village

Mr. Ben Nechanicky
IT Manager, Northwest Interpretive Association, Seattle, Washington; Graphics Project Assistance

Ms. Nancy Rottle
Landscape Architect, formerly with Jones & Jones Architects and Landscape Architects, Seattle, Washington; Lead for Development Concept Plans for Waterfront and Village, Site Circulation Plans

Mr. Alex Schwartz
Landscape Architect, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Pedestrian and Land Bridge Concept Design, Site Circulation Plan

Ms. René Senos
Landscape Architect, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Development Concept Plans and Site Circulation Plans

Mr. David Sorey
Landscape Architect, Jones & Jones Architects and Landscape Architects, Seattle, Washington; Development Concept Plans and Site Circulation Plans

Mr. Imre Szarvas
Former Graduate Student, Daniel J. Evans School of Public Affairs, University of Washington, Seattle, Washington; Analysis of Public Comment and Graphics Production

Dr. Fred York
Anthropologist, CCSO, NPS, Seattle, Washington; Background Information on Tribal Groups

Other Cooperating Entities

Ms. Allyson Brooks
Washington State Historic Preservation Officer, Olympia, Washington

Mr. Michael Carrier
Oregon State Historic Preservation Officer, Salem, Oregon

Ms. Jane Crisler
Historic Preservation Specialist, Advisory Council on Historic Preservation, Lakewood, Colorado

Mr. David DiCesare
Former Partnership Representative, Vancouver National Historical Reserve, City of Vancouver, Vancouver, Washington

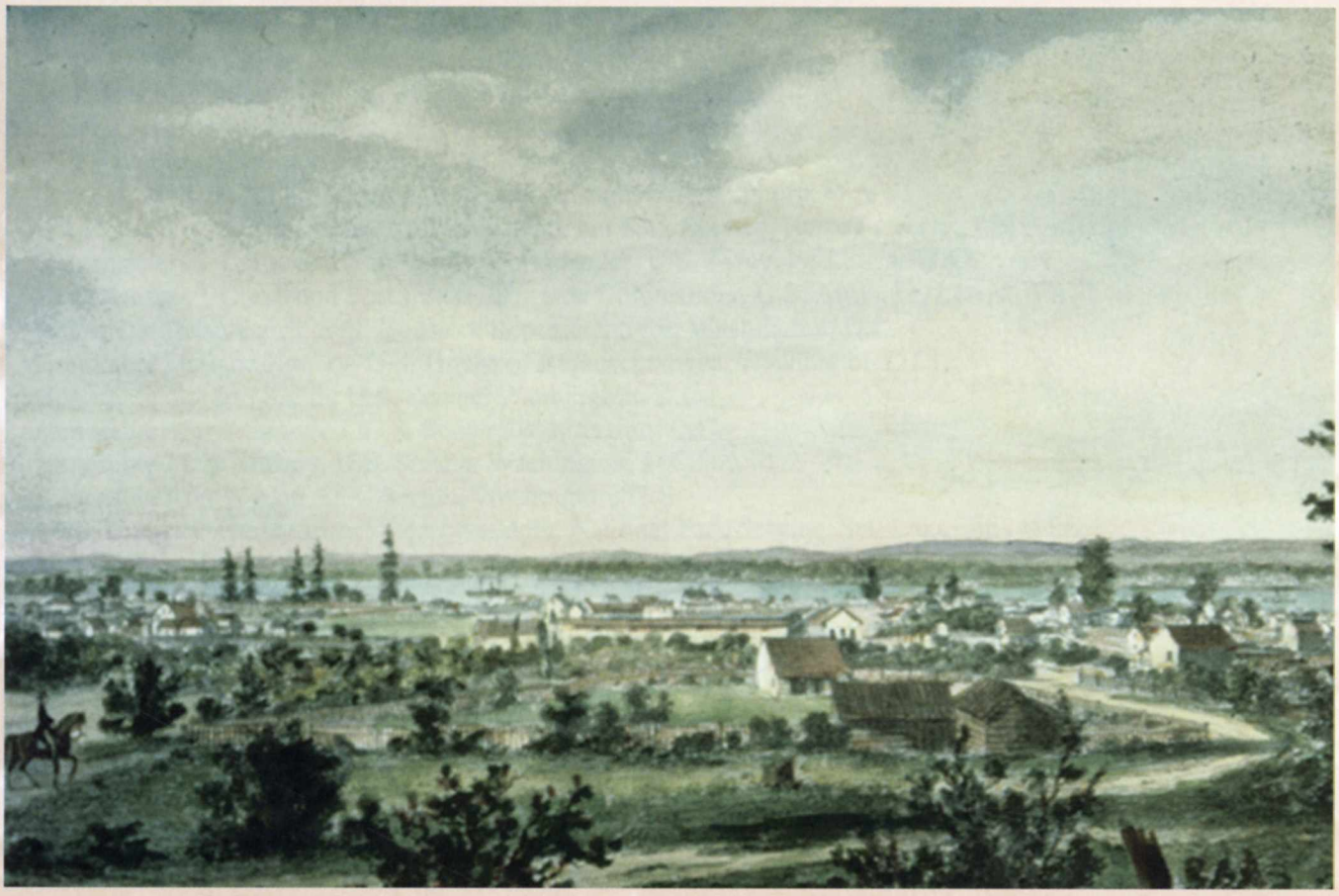
Mr. Paul McGuff
Cultural Resource Program Manager, I Corps and Fort Lewis, U.S. Army, Vancouver, Washington

Mr. John Williamas
Mayor of Oregon City, Oregon

Board Members from the McLoughlin Memorial Association, Oregon City, Oregon

Lists of Agencies, Organizations and Persons

Vancouver, Clark County, W.T.
Lithography by Kuchel and Dressel, 1858
Courtesy of National Park Service



List of Agencies, Organizations, and Persons to Whom Copies of the GMP/EIS Were Sent

Federal Agencies and Officials

70th Regional Support Commander, U.S. Army, Community Planner, Fort Lawton, WA
Advisory Council on Historic Preservation, Western Office of Project Review, Lakewood, CO
Bonneville Power Administration, Portland, OR
Bureau of Indian Affairs, Regional Director, Portland, OR
Bureau of Land Management, Regional Director, Portland, OR
Civil Air Patrol, Vancouver, WA
Columbia Cascades Support Office, National Park Service, Seattle, WA
Columbia River Gorge National Scenic Area, National Park Service, Manager, Hood River, OR
Department of Interior, Office of Regional Solicitor, Portland, OR
Federal Aviation Administration, Regional Director, Renton, WA
Fort Vancouver National Historic Site, National Park Service, Vancouver, WA
General Services Administration, Regional Administrator, Auburn, WA
Harper's Ferry National Historical Park, National Park Service, Harper's Ferry, WV
Headquarters 1 Corps and Fort Lewis, Commander, U.S. Army, Ft. Lewis, WA
Headquarters 1 Corps and Fort Lewis, Garrison Commander, U.S. Army, Ft. Lewis, WA
Honorable Brian Baird, U.S. House of Representatives, Washington, D.C.
Honorable Darlene Hooley, U.S. House of Representatives, Washington D.C.
Honorable Gordon Smith, U.S. Senate, Washington, D.C.
Honorable Maria Cantwell, U.S. Senate, Washington, D.C.
Honorable Patty Murray, U.S. Senate, Washington, D.C.
Honorable Ron Wyden, U.S. Senate, Washington, D.C.
Long Distance Trails Office, Superintendent, National Park Service, Salt Lake City, UT
McLoughlin House National Historic Site, Director, Oregon City, OR
Mt. St. Helens National Volcanic Monument, U.S. Forest Service, Amboy, WA
Pacific Great Basin Support Office, National Park Service, San Francisco, CA
U.S. Army Corps of Engineers, Regional Director, Portland, OR
U.S. Department of Transportation, Highway Engineer, Vancouver, WA
U.S. Department of Transportation, Federal Highway Administration, Vancouver, WA
U.S. Fish and Wildlife Service, Regional Director, Portland, OR
U.S. Geological Society, Regional Director, Tacoma, WA
Vancouver Barracks, Commander, U.S. Army, Vancouver, WA
Whitman Mission National Historic Site, Superintendent, National Park Service, Walla-Walla, WA

State and Local Agencies and Officials

C-TRAN, Vancouver, WA
Certified Local Government, Vancouver, WA Representative
Certified Local Government, Oregon City, OR Representative
City of Vancouver, Accounting Division Manager, Vancouver, WA
City of Vancouver, City Attorney, City Hall, Vancouver, WA
City of Vancouver, City Engineer, Vancouver, WA
City of Vancouver, City Council Member, Vancouver, WA

City of Vancouver, Office of Attorney General, Vancouver, WA
City of Vancouver, Parks and Recreation Department, Vancouver, WA
City of Vancouver, Planning Department, Vancouver, WA
City of Vancouver, Public Information Division, Manager, Vancouver, WA
Clackamas County, Oregon City, OR
Clark County Community Development, Vancouver, WA
Honorable Bill Fromhold, 49th District Representative, Vancouver, WA
Honorable Don Carlson, 49th District Senator, Vancouver, WA
Honorable Gary Locke, Washington State Governor, Olympia, WA
Honorable Kathy Lowe, 40th District Representative, Oregon City, OR
Honorable Kurt Schrader, 39th District Representative, Oregon City, OR
Honorable Royce Pollard, Mayor, Vancouver, WA
Honorable Val Ogden, 49th District Representative, Vancouver, WA
Honorable Vern Duncan, 20th District Senator, Oregon City, OR
METRO, Portland, OR
Multnomah County, Office of Planning, Portland, OR
Oregon State Historic Preservation Officer, Salem, OR
Oregon Parks and Recreation Department, Director, Salem, OR
Vancouver-Clark Parks and Recreation Department, Vancouver, WA
Washington County, Administrative Office, Hillsboro, OR
Washington Department of Fish and Wildlife, Southwest Region, Vancouver, WA
Washington Department of Natural Resources, Southwest Region, Castle Rock, WA
Washington Department of Transportation, Southwest Region, Vancouver, WA
Washington State Historic Preservation Officer, Olympia, WA
Washington State Patrol, Vancouver, WA

Tribes

Affliated Tribes of Northwest Indians, Portland, OR
Chinook Tribal Council, Chairman, Chinook, WA
Cowlitz Tribal Council, Chairman, Longview, WA
Nez Perce Tribal Executive Commission, Chairman, Lapwai, ID
Yakima Tribal Council, Chairman, Toppenish, WA

Organizations

Airport Green Neighborhood Association, Vancouver, WA
Arch Council of Catholic Women, Gladstone, OR
Aurora Colony Historical Museum, Aurora, OR
Bowman Historical Museum, Prineville, OR
Buffalo Soldiers, Pacific Northwest Chapter, President, Portland, OR
Canby Historical Society, Canby OR
Center for Columbia River History, Vancouver, WA
Champoeg Interpretive Center Museum, St. Paul, OR
Clackamas County Historical Museum, Oregon City, OR
Clark County Heritage Trust, Vancouver, WA
Clark County Historical Museum, Vancouver, WA
Clark County Historical Society, Vancouver, WA
Cowlitz County Museum, Kelso, WA
Daughters of American Colonists, Portland, OR

Dubois Neighborhood, Vancouver, WA
Friends of Fort Vancouver, President, Yacolt, WA
Fort Vancouver Historical Society, Vancouver, WA
General O.O. Howard House, Vancouver, WA
Grant House, Vancouver, WA
Historical Preservation League of Oregon, Portland, OR
Hoover-Minthorn Museum, Newberg, OR
Hudson's Bay Neighborhood Association, Vancouver, WA
International Affairs Commission, Chairman, Vancouver, WA
JZH Historical Society, Estacada, OR
Lewis and Clark Trail Heritage-Grant House, Executive Director, Vancouver, WA
Marion County Historical Society, Salem, OR
Marshall House, Vancouver, WA
McLoughlin Memorial Association
Milwaukie Historical Society, Milwaukie, OR
Mission Mill Museum, Salem, OR
Montieth Historical Society, Albany, OR
Murdock Charitable Trust, Vancouver, WA
National Park Trust, Butler, PA
National Society of Colonial Dames, Milwaukie, OR
Northwest Quilters, Portland, OR
Oregon City Woman's Club, Oregon City, OR
Oregon Historical Society, Executive Director, Portland, OR
Oregon Military Museum, Clackamas, OR
Oregon Trail Foundation, Oregon City, OR
Pearson Field Historical Society, Executive Director, Vancouver, WA
Pittock Mansion Museum, Portland, OR
Pomeroy Living History Farm, Director, Yacolt, WA
Sons and Daughters of Oregon Pioneers, Portland, OR
Tillamook County Pioneer Museum, Tillamook, OR
Vancouver Bridge Club, President, Vancouver, WA
Vancouver National Historic Reserve Trust, Executive Director, Vancouver, WA
Washington State Historical Society, Tacoma, WA
Water Resources Education Center, Vancouver, WA

Business and Industry

Ballon's at the Crossing, Vancouver, WA
Blair, Schaefer, Hutchinson, and Wolf, Vancouver, WA
Downtown Vancouver Association, Vancouver, WA
E.E. Howee and Company, Vancouver, WA
Financial Advisors, Vancouver, WA
First Independent Bank, Vancouver, WA
Jones & Jones, Architects and Landscape Architects, Seattle, WA
Key Properties, Vancouver, WA
Oregon City Antique Mall, Oregon City, OR
Realvest Corporation, Vancouver, WA
Schwabe, Williamson, and Wyatt, Portland, OR
Second Nature Software, Vancouver, WA
Tears of Joy Theatre, Vancouver, WA

The Ed Lynch Company, Vancouver, WA
The J.D. White Company Incorporated, Vancouver, WA
Threshold Incorporated, President, Vancouver, WA
Vancouver Visitors and Convention Bureau, Vancouver, WA
Video Producer, CVTV, Vancouver, WA
William Byrd and Associates, Vancouver, WA
Wilson/Wright Properties, Vancouver, WA

Schools, Libraries, and Institutions

Clark College, Vancouver, WA
Clark College, English Department, Vancouver, WA
Fort Vancouver Regional Library, Vancouver, WA
Institute for Policy Research, Northwestern University, Evanston, IL
Multnomah County Library, Portland, OR
Oregon State Library, Salem, OR
University of Minnesota, Forestry Library, St. Paul, MN

Media

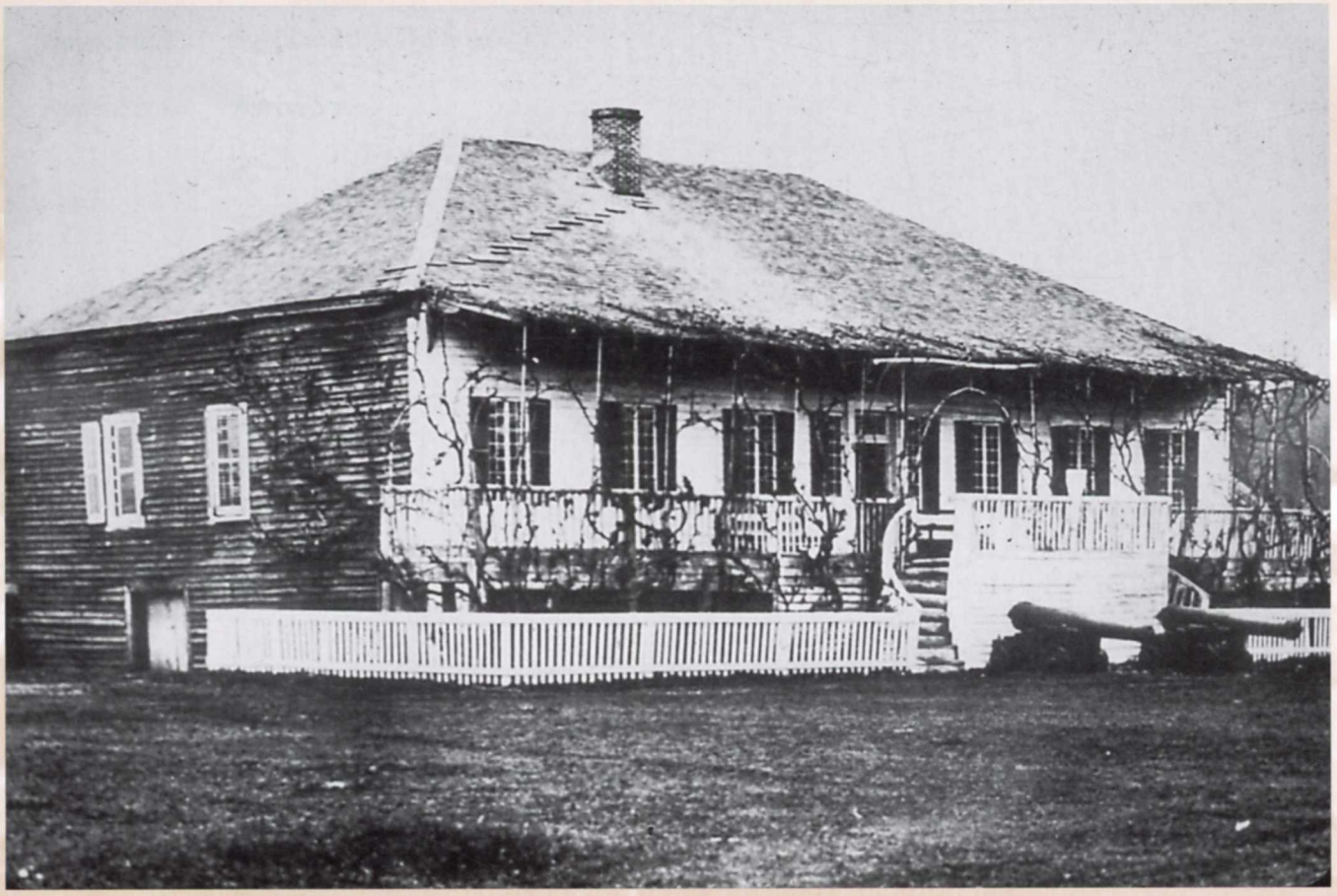
The Columbian, Publisher, Vancouver, WA
The Oregonian, Portland, OR
Vancouver Business Journal, Vancouver, WA

Individuals

32 private individuals on the mailing list

Appendices

Mess House, Hudson's Bay Company, Fort Vancouver, Washington Territory Operations, 1860-61
North American Boundary Commission
Courtesy of National Archives of Canada, Ottawa, Ontario



Appendices

Appendix A: Fort Vancouver National Historic Site Legislation

Appendix B: McLoughlin House National Historic Site Legislation

Appendix C: Analysis of Boundary Adjustment and Land Protection Criteria

Appendix D: Letters for 106 Compliance with Washington and Oregon State Historic Preservation Offices and Advisory Council on Historic Preservation

Appendix E: Letter for Section 7 Consultation with U.S. Fish and Wildlife Service

Appendix F: Supplemental Bibliography

Appendix G: Acronyms

Appendix A: Fort Vancouver National Historic Site Legislation

10. Fort Vancouver National Historic Site

		Page
Establishment as national monument; transfer of lands by War Assets Administration and Secretary of the Army to Secretary of the Interior authorized	Act of June 19, 1948	355
Boundaries revised and monument redesignated "Fort Vancouver National Historic Site"	Act of June 30, 1961	356

An Act To provide for the establishment of the Fort Vancouver National Monument, in the State of Washington, to include the site of the old Hudson's Bay Company stockade, and for other purposes, approved June 19, 1948 (62 Stat. 532)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of establishing a Federal area of national historical importance for the benefit of the people of the United States, to be known as the "Fort Vancouver National Monument", the Administrator of the War Assets Administration and the Secretary of the Army are authorized to transfer to the Secretary of the Interior, without exchange of funds, administrative jurisdiction over such federally owned lands and other property, real or personal, under their jurisdiction, including the site of the old Hudson's Bay Company stockade in the State of Washington, as they shall find to be surplus to the needs of their respective agencies, such properties to be selected, with their approval, by the Secretary of the Interior for inclusion within the national monument. (16 U.S.C. § 450ff.)

Ft. Vancouver National Monument, Wash.

SEC. 2. The total area of the national monument as established or as enlarged by transfers pursuant to this Act shall not exceed ninety acres. Establishment of the monument shall be effective, upon publication in the Federal Register of notice of such establishment, following the transfer to the Secretary of the Interior of administrative jurisdiction over such lands as the Secretary of the Interior shall deem to be sufficient for purposes of establishing the national monument. Additional lands may be added to the monument in accordance with the procedure prescribed in section 1 hereof, governing surplus properties, or by donation, subject to the maximum acreage limitation prescribed by this Act, upon publication of notice thereof in the Federal Register. (16 U.S.C. § 450ff-1.)

Total area.

Additional lands.

SEC. 3. The administration, protection, and development of the aforesaid national monument shall be exercised under the direction of the Secretary of the Interior by the National Park Service, subject to the provisions of the Act of August 25, 1916 (39 Stat. 535), entitled "An Act to establish a National Park Service, and for other purposes", as amended. (16 U.S.C. § 450ff-2.)

Administration, etc.

16 U.S.C. §§ 1–4, 22, 43.

An Act To revise the boundaries and to change the name of Fort Vancouver National Monument, in the State of Washington, and for other purposes, approved June 30, 1961 (75 Stat. 196)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, for the purpose of preserving certain historic properties associated with the Fort Vancouver National Monument, established pursuant to the Act of June 19, 1948, chapter 546 (62 Stat. 532; 16 U.S.C. 450ff–450ff–2), the Secretary of the Interior may revise the boundaries of the monument to include therein not more than one hundred and thirty additional acres of land adjacent to, contiguous to, or in the vicinity of the existing monument. (16 U.S.C. § 450ff–3.)

Fort Vancouver National Monument, Wash.

Land acquisition.

SEC. 2. The Secretary of the Interior may acquire in such manner as he may consider to be in the public interest the non-Federal lands and interests in lands within the revised boundaries. (16 U.S.C. § 450ff–4.)

Transfer authority.

SEC. 3. The heads of executive departments may transfer to the Secretary of the Interior, without exchange of funds, administrative jurisdiction over such federally owned lands and other property under their administrative jurisdictions within the revised boundary as may become excess to the needs of their respective agencies for inclusion in the Fort Vancouver National Monument. (16 U.S.C. § 450ff–5.)

Redesignation.

SEC. 4. Fort Vancouver National Monument is redesignated Fort Vancouver National Historic Site. (16 U.S.C. § 450ff–6.)

Appendix B: McLoughlin House National Historic Site Legislation

8. McLoughlin Home National Historic Site

Page

Designation of certain lands to comprise the site: Order of June 27, 1941..... 86

ORDER DESIGNATING THE MCLOUGHLIN HOME NATIONAL HISTORIC SITE,[1] OREGON CITY, OREG.

[June 27, 1941—6 F. R. 3299, 3357]

WHEREAS, the Congress of the United States has declared it to be a national policy to preserve for the public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States; and

WHEREAS, the McLoughlin Home, located in the public park known as "McLoughlin Park" in the municipality of Oregon City, State of Oregon, is recognized as possessing national significance as the home of Dr. John McLoughlin, a distinguished, influential, and humanitarian leader in the settlement of the Oregon Territory; and

WHEREAS, a cooperative agreement has been made between the McLoughlin Memorial Association, the Municipality of Oregon City, and the United States of America, providing for the preservation and use of the McLoughlin Home as a national historic site:

NOW, THEREFORE, I, W. C. Mendenhall, Acting Assistant Secretary of the Interior, under and by virtue of the authority conferred upon the Secretary of the Interior by Section 2 of the Act of Congress approved August 21, 1935 (49 Stat. 666), do hereby designate the following described lands, together with all historic structures thereon and all appurtenances connected therewith, to be a national historic site, having the name "McLoughlin Home National Historic Site":

All that tract of land in Block Forty (40) of Oregon City, in Clackamas County, Oregon as shown on the Town Plats, Clackamas County, Volume 1, Page 2, dated December 8, 1850, bounded by Center Street, Seventh Street, Singer Hill Road, and Eighth Street, containing .8394 acres, and known as "McLoughlin Park."

The administration, protection, and development of this national historic site shall be exercised in accordance with the provisions of the above-mentioned cooperative agreement and the act of August 21, 1935, *supra.*

Warning is expressly given to all unauthorized persons not to appropriate, injure, destroy, deface, or remove any feature of this historic site.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the official seal of the Department of the Interior to be affixed, in the city of Washington, this 27th day of June 1941.

[SEAL]

W. C. MENDENHALL,
Acting Assistant Secretary.

Appendix C: Analysis of Boundary Adjustment and Land Protection Criteria

Boundary Adjustment and Land Protection Under Alternatives B and C

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) (National Park Service 2001: p.25) state that the NPS will conduct studies of potential boundary adjustments and may make boundary revisions to:

- Protect significant resources and values, or to enhance opportunities for public enjoyment related to park purposes;
- Address operational and management issues, such as the need for access or the need for boundaries to correspond to logical boundary delineation's such as topographic or other natural features or roads; or
- Otherwise protect park resources that are critical to fulfilling park purposes.

NPS 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 Fort Vancouver National Historic Site. This analysis is included as supporting documentation for the proposed action which includes a recommendation for a boundary change to add the McLoughlin House National Historic Site in Oregon City, Oregon, to the boundary of Fort Vancouver National Historic Site in Vancouver, Washington. The McLoughlin House National Historic Site includes the McLoughlin and Barclay houses. In 1941, under a cooperative agreement worked out with the Secretary of the Interior, the property became a national historic site (0.63 acres) in nonfederal ownership administered by the McLoughlin Memorial Association (Association). The houses are situated on a Charter Park owned by the City of Oregon City. The neighborhood surrounding the houses is a local historic district and part of McLoughlin's original plat. This boundary change would require congressional legislation since the site is an affiliated area of the National Park System and the National Park Service does not currently operate the McLoughlin House National Historic Site.

Significant Resources or Opportunities for Public Enjoyment Related to the Purpose of Fort Vancouver National Historic Site

The story of Hudson's Bay Company Chief Factor Dr. John McLoughlin and his relationship to both his management of the HBC Northwest operations from Fort Vancouver and his subsequent role in aiding Oregon Trail pioneers to the point of being known as the "Father of Oregon", are inextricably linked. This makes the boundary change to add the McLoughlin House National Historic Site to Fort Vancouver National Historic Site a value to the American people and provides continuity for NPS operations and interpretation.

Operational and Management Issues related to Access and Boundary Identification by Topographic or other Natural Features

Given the current financial and operational concerns of the nonprofit McLoughlin Memorial Association for the long-term care and management of the historic resources and the future protection and public use of the National Historic Site cannot be assured. Shifting the day-to-day operations and site management to staff at Fort Vancouver National Historic Site would provide a improved opportunity for public enjoyment and appreciation of the site, and allow for the application of NPS maintenance, resource management, interpretive and other programs.

Under the proposal, the NPS would acquire the McLoughlin House and Barclay House improvements and their historical collections that relate to the houses and their role in the operation of the HBC Fort Vancouver. Proceeds from the sale of the houses would be invested by the McLoughlin Memorial Association to create an endowment to assist in the long-term maintenance of the site and to support educational opportunities within the community and region. Since the site is a Charter Park of the City of Oregon City, the municipality would retain fee title to the property itself, but would donate a perpetual easement to the NPS to allow for site operations, public use, site maintenance, and resource protection.

Protection of Park Resources and Fulfillment of Park Purpose

The proposed boundary adjustments to Fort Vancouver National Historic Site help the park protect important resources related to one of the most important individuals related to the HBC and Fort Vancouver story, Dr. John McLoughlin. It also helps the park fulfill its primary purpose and mission, that being the protection and public commemoration of the historic resources related to Fort Vancouver and the Hudson's Bay Company, and related history. It also assists the NPS in telling part of the early settlement of the Oregon Territory in conjunction with the Oregon National Historic Trail. Oregon City in the Willamette Valley is considered the terminus of the Oregon Trail.

Feasibility to Administer the Lands Added through Boundary Adjustment

The proposed addition of the McLoughlin House National Historic Site to Fort Vancouver NHS is feasible to administer. The NPS is already providing increased technical assistance to the site through resource management and maintenance programs as staffing and funding permit. However, being an affiliated area of the National Park System instead of part of an established NPS unit, the Fort Vancouver NHS staff is unable to take full advantage of the support and programs that would be available if the McLoughlin House NHS were legislatively added to the park. This would include added capabilities in the areas of resource management, interpretation, maintenance, and administration. The NPS also enjoys good relations with both the City of Oregon City and the members and Board of Directors of the McLoughlin Memorial Association. This sound partnership relationship would be expected to not only continue, but flourish under a management scheme whereby Fort Vancouver NHS staff were providing the day-to-day administration of the site.

Protection Alternatives Considered

An alternative was considered to increase technical assistance to the site, but not add the McLoughlin House NHS to the Fort Vancouver NHS boundary. The planning team examined the limitations placed on park staff and the NPS in general in assisting an affiliated area of the National Park System versus being an authorized area of the system. It was determined that the programmatic advantages of direct and sustained site administration, maintenance, interpretation, and resource management far outweighed the more limited opportunities presented by retaining and increasing ongoing technical assistance by the park staff to the site if left in an affiliated area status.

Proposed Additions to the Park Boundary and Other Adjustments

Under the proposed action, approximately one-acre of land in Oregon City, Oregon occupied by the McLoughlin House National Historic Site would be added to the boundary of Fort Vancouver National Historic Site. The two houses would be acquired from the McLoughlin Memorial Association at fair market

value under a willing seller provision. The underlying fee ownership of the property would be held by the City of Oregon City, Oregon as a Charter Park site. However, an easement would be donated to the Federal Government from Oregon City, Oregon conveying such interest in land necessary for the NPS and Fort Vancouver NHS staff to carry out the administration, operation and protection of the site on a daily basis. The cost of the improvements is estimated to not exceed $500,000 from appropriated Land and Water Conservation Fund sources. The cost of annual administration of the McLoughlin House National Historic Site to the NPS and the Department of the Interior is estimated to be approximately $285,000 per year in 2002 dollars. Since the site is already a Charter Park site, and given the tax exempt status of nonprofit ownership of the site improvements, there would not be any property tax implications to the City of Oregon City, Oregon in the transfer of the site improvements to the United States. In addition, through this legislation, the NPS would be able to further partnership opportunities with the City of Oregon City, the local community, and volunteers.

Appendix D: Letters—106 Compliance with Washington and Oregon State Historic Preservation Offices and Advisory Council on Historic Preservation

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

Reply to: 12136 West Bayaud Avenue, #330
Lakewood, Colorado 80226

January 23, 2001

Keith Dunbar
National Park Service
Columbia Cascades Support Office
909 First Avenue
Seattle, WA 98104-1060

RE: *Development of a General Management Plan for Fort Vancouver National Historic Site, WA*

Dear Mr. Dunbar:

Thank you for notifying our office about the referenced planning initiative and providing us with a copy of your executed project agreement for the preparation of a General Management Plan (GMP) at Fort Vancouver National Historic Site. We look forward to providing you with our views concerning management issues as they relate to this very significant historic property and regarding the resulting compliance matters under the National Historic Preservation Act and the 1995 Nationwide Programmatic Agreement among the Council, NPS, and National Conference of State Historic Preservation Officers.

We are pleased to see that you have received a great deal of public interest in this endeavor to date. As the planning process moves forward and alternatives are developed we would appreciate future opportunities to provide our comments on the draft plan and any adverse effects, as defined by 36 CFR Part 800, that may result from the proposed GMP.

Again, we appreciate being informed about this important planning initiative. If you have any questions regarding this matter, please contact Jane Crisler in our Denver Office at (303) 969-5110. Thank you for your continued cooperation.

Sincerely,

Don L. Klima
Director
Office of Planning and Review

Appendix E: Letter—Section 7 Consultation with U.S. Fish and Wildlife Service

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Western Washington Fish and Wildlife Office
510 Desmond Drive SE, Suite 102
Lacey, Washington 98503
Phone: (360) 753-9440 Fax: (360) 534-9331

FEB 2 0 2002

Dear Species List Requester:

We are providing the information you requested to assist your determination of possible impacts of a proposed project to species of Federal concern. Attachment A includes the listed threatened and endangered species, species proposed for listing, candidate species, and/or species of concern that may be within the area of your proposed project.

Any Federal agency, currently or in the future, that provides funding, permitting, licensing, or other authorization for this project must assure that its responsibilities section 7(a)(2) of the Endangered Species Act of 1973, as amended (Act), are met. Attachment B outlines the responsibilities of Federal agencies for consulting or conferencing with us (U.S. Fish and Wildlife Service).

If both listed and proposed species occur in the vicinity of a project that meets the requirements of a major Federal action (i.e., "major construction activity"), impacts to both listed and proposed species must be considered in a biological assessment (BA) (section 7(c); see Attachment B). Although the Federal agency is not required, under section 7(c), to address impacts to proposed species if listed species are not known to occur in the project area, it may be in the Federal agency's best interest to address impacts to proposed species. The listing process may be completed within a year, and information gathered on a proposed species could be used to address consultation needs should the species be listed. However, if the proposed action is likely to jeopardize the continued existence of a proposed species, or result in the destruction or adverse modification of proposed critical habitat, a formal conference with us is required by the Act (section 7(a)(4)). The results of the BA will determine if conferencing is required.

The Federal agency is responsible for making a determination of the effects of the project on listed species and/or critical habitat. For a Federal agency determination that a listed species or critical habitat is likely to be affected (adversely or beneficially) by the project, you should request section 7 consultation through this office. For a "not likely to adversely affect" determination, you should request our concurrence through the informal consultation process. For a "no effect" determination, we would appreciate receiving a copy for our information.

Candidate species and species of concern are those species whose conservation status is of concern to us, but for which additional information is needed. Candidate species are included as an advance notice to Federal agencies of species that may be proposed and listed in the future. Conservation measures for candidate species and species of concern are voluntary but recommended. Protection provided to these species now may preclude possible listing in the future.

ATTACHMENT A **February 15, 2002**

LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES, CRITICAL HABITAT, CANDIDATE SPECIES, AND SPECIES OF CONCERN THAT MAY OCCUR WITHIN THE VICINITY OF THE PROPOSED FORT VANCOUVER NATIONAL HISTORIC SITE PROJECT IN CLARK COUNTY, WASHINGTON

(T2N R1E S26-27, 34-35,39)

FWS REF: 1-3-02-SP-0650

LISTED

Wintering bald eagles (*Haliaeetus leucocephalus*) may occur in the vicinity of the project. Wintering activities occur from October 31 through March 31.

Bull trout (*Salvelinus confluentus*) occur in the vicinity of the project.

Major concerns that should be addressed in your biological assessment of the project impacts to listed species include:

1. Level of use of the project area by listed species,

2. Effect of the project on listed species' primary food stocks, prey species, and foraging areas in all areas influenced by the project, and

3. Impacts from project construction (i.e., habitat loss, increased noise levels, increased human activity) that may result in disturbance to listed species and/or their avoidance of the project area.

PROPOSED

Coastal cutthroat trout (*Oncorhynchus clarki clarki*) may occur in the vicinity of the project.

CANDIDATE

None

CRITICAL HABITAT

None

SPECIES OF CONCERN

The following species of concern have been documented in the county where the project is located. These species or their habitat could be located on or near the project site. Species in **bold** were specific occurrences located on the database within a 1 mile radius of the project site.

Cascade frog (*Rana cascadae*)
Larch Mountain salamander (*Plethodon larselli*)
Long-eared myotis (*Myotis evotis*)
Long-legged myotis (*Myotis volans*)
Northern goshawk (*Accipiter gentilis*)
Northwestern pond turtle (*Clemmys marmorata marmorata*)
Olive-sided flycatcher (*Contopus cooperi*)
Pacific lamprey (*Lampetra tridentata*)
Pacific Townsend's big-eared bat (*Corynorhinus townsendii townsendii*)
Peregrine falcon (*Falco peregrinus*)
River lamprey (*Lampetra ayresi*)
Slender-billed, white breasted nuthatch (*Sitta carolinensis aculeata*)
Tailed frog (*Ascaphus truei*)
Van Dyke's salamander (*Plethodon vandykei*)
Western toad (*Bufo boreas*)

December 28, 2000

WASHINGTON STATE DEPARTMENT OF
Natural Resources

JENNIFER M. BELCHER
Commissioner of Public Lands

Keith Dunbar
National Park Service
Columbia Cascades Support Office
909 First Avenue
Seattle WA 98104-1060

SUBJECT: Fort Vancouver National Historic Site General Management Plan and EIS (T02N R01E S26, 27)

We've searched the Natural Heritage Information System for information on significant natural features in your project area. Currently, we have no records for rare plants or high quality ecosystems in the vicinity of Fort Vancouver NHS. However, we have a record of *Cimicifuga elata* (tall bugbane), a state threatened plant and a federal species of concern, occurring about 1.5-miles away in the SE quarter of Section 25, T02N R01E and the SW quarter of Section 30, T02N R02E. For more information, I have enclosed a rare plant species list for Clark County.

The information provided by the Washington Natural Heritage Program is based solely on existing information in the database. In the absence of field inventories, we cannot state whether or not a given site contains high quality ecosystems or rare species; there may be significant natural features in your study area of which we are not aware.

The Washington Natural Heritage Program is responsible for information on the state's rare plants as well as high quality ecosystems. We have begun to add information to our database on selected groups of animals of conservation concern, such as freshwater mussels, butterflies and bats. However, the authority for protection of animal species in Washington rests with the Department of Fish and Wildlife. To ensure that you receive information on all animal species of concern, please contact Priority Habitats and Species, Washington Department of Fish and Wildlife, 600 Capitol Way N, Olympia, WA 98501-1091, or by phone (360) 902-2543.

If you have the opportunity, visit our website at http:// www.wa.gov/dnr and click on *Conservation/Protection.* Please call me at (360) 902-1667 if you have any questions.

Sincerely,

Sandy Swope Moody

Sandy Swope Moody, Environmental Coordinator
Washington Natural Heritage Program
PO Box 47014
Olympia WA 98504-7014

Enclosure

1111 WASHINGTON ST SE ▮ PO BOX 47000 ▮ OLYMPIA, WA 98504-7000
FAX: (360) 902-1775 ▮ TTY: (360) 902-1125 ▮ TEL: (360) 902-1000
Equal Opportunity/Affirmative Action Employer

RECYCLED PAPER

Washington Natural Heritage Information System
Endangered, Threatened, and Sensitive Vascular Plants of Washington
October 2000

Clark County
Page 1 of 1

Scientific Name	Common Name	State Status	Federal Status*	Historic Record**
Bolandra oregana	Bolandra	Sensitive		H
Castilleja levisecta	Golden paintbrush	Endangered	LT	H
Cimicifuga elata	Tall bugbane	Threatened	SC	
Corydalis aquae-gelidae	Clackamas corydalis	Threatened	SC	
Epipactis gigantea	Giant helleborine	Sensitive		
Eryngium petiolatum	Oregon coyote-thistle	Threatened		
Howellia aquatilis	Howellia	Threatened	LT	
Lathyrus torreyi	Torrey's peavine	Threatened	SC	H
Lindernia dubia var anagallidea	False-pimpernel	Review		
Lomatium bradshawii	Bradshaw's lomatium	Endangered	LE	
Montia diffusa	Branching montia	Sensitive		H
Oxalis suksdorfii	Western yellow oxalis	Sensitive		H
Poa nervosa	Wheeler's bluegrass	Sensitive		
Polemonium carneum	Great polemonium	Threatened		H
Ribes oxyacanthoides ssp irriguum	Idaho gooseberry	Sensitive		H
Sidalcea hirtipes	Hairy-stemmed checker-mallow	Endangered		
Trillium parviflorum	Small-flowered trillium	Sensitive		

* LE = Listed Endangered, LT = Listed Threatened, PE = Proposed Endangered, PT = Proposed Threatened, C= Candidate for listing, SC = Species of Concern (an unofficial status)
** H = Known only from historic record

Appendix F: Supplemental Bibliography

Supplemental Bibliography

- Meeting notes for orientation at Fort Vancouver National Historic Site March 16-18, 1999.
- *Vancouver National Historical Reserve Feasibility Study and Environmental Assessment, Final Report*, by the Vancouver Historical Study Commission, April 1993.
- *Vancouver National Historical Reserve Feasibility Study and Environmental Assessment, Final Draft Report,* by the Vancouver Historical Study Commission, October 30, 1992.
- *Vancouver National Historical Reserve Feasibility Study and Environmental Assessment, Final Draft Report, Supplemental Information*, by the Vancouver Historical Study Commission, October 30, 1992.
- "Fort Vancouver National Historic Site, Washington," Unigrid Brochure, U.S. Department of the Interior, National Park Service, Harper's Ferry Center (no date).
- *Fort Vancouver National Historic Site Land Protection Plan*, U.S. Department of the Interior, National Park Service, March 1984.
- *Fort Vancouver National Historic Site Resource Management Plan and Environmental Assessment*, U.S. Department of the Interior, National Park Service, July 2, 1985.
- *Landscape/Cleanup of Waterfront Area Fort Vancouver National Historic Site, Environmental Assessment,* 1982.
- *Fort Vancouver National Historic Site Statement for Management*, U.S. Department of the Interior, National Park Service, Fort Vancouver National Historic Site, Vancouver, Washington, September 1992.
- *The Administrative History of Fort Vancouver National Historic Site*, Jane T. Merritt, U.S. Department of the Interior, National Park Service, Pacific Northwest Region, Seattle, Washington, 1993.
- *Fort Vancouver National Historic Site Museum Management Plan*, U.S. Department of the Interior, National Park Service, Columbia Cascades Support Office, Seattle, Washington, 1998.
- *Proposed Site Plan for the M. J. Murdock Aviation Center, Environmental Assessment*, City of Vancouver, Washington, Proposed Master Plan Amendment Fort Vancouver National Historic Site, Vancouver, Washington May 10, 1995.
- *Catalog of Historic Preservation Publications*, U.S. Department of the Interior, National Park Service, Cultural Resources Program, Washington, D.C., 1992-94.
- "Oregon Trail," Unigrid Brochure, U.S. Department of the Interior, National Park Service, Harper's Ferry Center (no date).
- "General O.O. Howard House,"(brochure) (no publisher, date).
- "Vancouver U.S.A. 1998 Map" Sixth Edition (no date).
- "Vancouver National Historic Reserve, City of Vancouver, U.S. Army, State of Washington, and National Park Service," Unigrid Brochure, U.S. Department of the Interior, National Park Service, Harper's Ferry Center (no date).
- "McLoughlin House National Historic Site, Oregon," Unigrid Brochure, U.S. Department of the Interior, National Park Service, Harper's Ferry Center (no date).
- "Historic Columbia River Highway, Corbett to Dodson," Columbia River Gorge National Scenic Area, printed by Friends of Multnomah Falls (map)(no date).
- "Columbia River Gorge National Scenic Area," U.S. Department of Agriculture, Forest Service, Hood River, Oregon (map)(no date).
- "Historic Talks and Walks from O.O. Howard House," (pamphlet)(no date).
- "Heritage Weekend at Vancouver National Historic Reserve," May 8-9, 1999, City of Vancouver, Washington. (pamphlet).
- *Fort Vancouver National Historic Site Master Plan*, U.S. Department of the Interior, National Park Service, Pacific Northwest Region, Seattle, Washington, February 1978.

- *Fort Vancouver National Historic Site Master Plan,* U.S. Department of the Interior, National Park Service, Pacific Northwest Region, Seattle, Washington, June 1968.
- *1986 Fort Vancouver Visitor Study,* Marty E. Lee, Donald R. Field, and Glenn Baker, National Park Service, Cooperative Park Studies Unit, College of Forestry, Oregon State University, Corvallis, Oregon, (CPSU/OSU 87-2, 1986).
- Video of public scoping meeting at the Water Resources Education Center in Vancouver, Washington, January 12, 2000.
- Video of public scoping meeting at the McLoughlin House National Historic Site/Barclay House in Oregon City, Oregon, January 13, 2000.
- *Diversity at Fort Vancouver National Historic Site: Processes of Diversification in Historical Interpretation, Visitor Services, and Workforce Management,* by Theresa E. Langford, a thesis submitted to Oregon State University May 5, 2000.
- *Draft Kanaka Village: "The Prettiest Congregation of Nations"*, by Tracy Fortmann, Fort Vancouver National Historic Site, NPS (no date), Vancouver, Washington.
- Fort Langley National Historic Site (http://www.harbour.com/parkscan/fl/servicee.htm) (This website has includes all types of information on Fort Langley.) 29 pages.
- *Trails and Bikeway System Plan*, Clark County Parks and Recreation Division, Vancouver, Washington, 1992.
- *Clark County Parks, Recreation and Open Space Plan*, draft, Vancouver, Washington, June 1994.
- *Columbia River Renaissance Vision*, Vancouver Planning Commission, Jones & Jones Consultants, Vancouver, Washington, January 1993.
- *Columbia River Renaissance Planning Process Document*, Vancouver, Washington, January 1993.
- Meeting notes for purpose and significance at Fort Vancouver National Historic Site, May 5-6, 1999.
- "They Did Not Go to War," Chief Red Heart's Band and Native American Incarceration at Fort Vancouver Barracks, 1877-1878, Donna Sinclair, *Columbia*, Fall 1998.
- "One Place Across Time: 97/98," Vancouver National Historic Reserve (pamphlet).
- *Northwest Bastion, The U.S. Army Barracks at Vancouver, 1849-1916*, Ted Van Arsdol, Heritage Trust of Clark County, Vancouver, Washington, 1991.
- "M.J. Murdock Charitable Trust 29th Anniversary Report," 1994.
- "Vancouver Barracks, Maintenance and Repair Manual for Historic Structures," U.S. Army Corps of Engineers, Seattle District, Prepared by Walter Greissinger Architects, (contract number DAC A67-86-C-0129).
- *Portland-Vancouver Metropolitan Area Metro Regional Data Book* (Facts and Figures, Employment, Population, Income, and Much More), Metro, Regional Growth Management Services, Data Resource Center, 1997 edition.
- *Vancouver Central Park Design Guidelines*, City of Vancouver, Vancouver, Washington, (no date).
- "Vancouver Greenspaces," (part of Metropolitan Greenspaces, a cooperative regional system of natural areas, open space, trails and greenways, for wildlife and people), brochure is part of the Take Pride in Vancouver program and the national Take Pride in America project, Vancouver, Washington, (no date).
- "An archaeology Overview of Fort Vancouver, Vancouver Barracks, House of Providence, and the World War II Shipyard, Clark County, Washington," Bryn Thomas, Archaeological and Historical Service, Eastern Washington University, Cheney, Washington, (CX-9000-8-0008 National Park Service, Pacific Northwest Regional Office, Seattle, Washington), 1992.
- "Columbia River Survey Boat Replica Project," Douglas Brooks, (brochure on proposal to guild a replica of a longboat, used by Lt. Charles Broughton in 1792) (no date).
- "Vancouver may get own 1792 flagship to mark event," Leverett Richards, *The Oregonian*, March 10, 1992.
- "Captain George Vancouver Monument," sponsored by Captain George Vancouver Monument Committee, Vancouver Rotary Club, (brochure), no date.
- "Champoeg State Park, Oregon" (online at: http:k//www.gegoux.com/fohc).

- *An Archaeological Overview of Fort Vancouver, Vancouver Barracks, House of Providence and the World War II Shipyard, Clark County Washington* by Bryn Thomas, Archaeological and Historical Service, Eastern Washington University, Cheney, Washington, 1992 (CX-9000-8-0008, National Park Service, Pacific Northwest Regional Office, Seattle, Washington).
- "Reconstruction of Sale Shop and New Store and Creation of a Research and Education Center," Fort Vancouver National Historic Site, National Park Service, Department of Interior, 2001.
- "Vancouver, Wash., reels as downturn kills jobs," Hal Bernton, *The Seattle Times*, November 23, 2001.

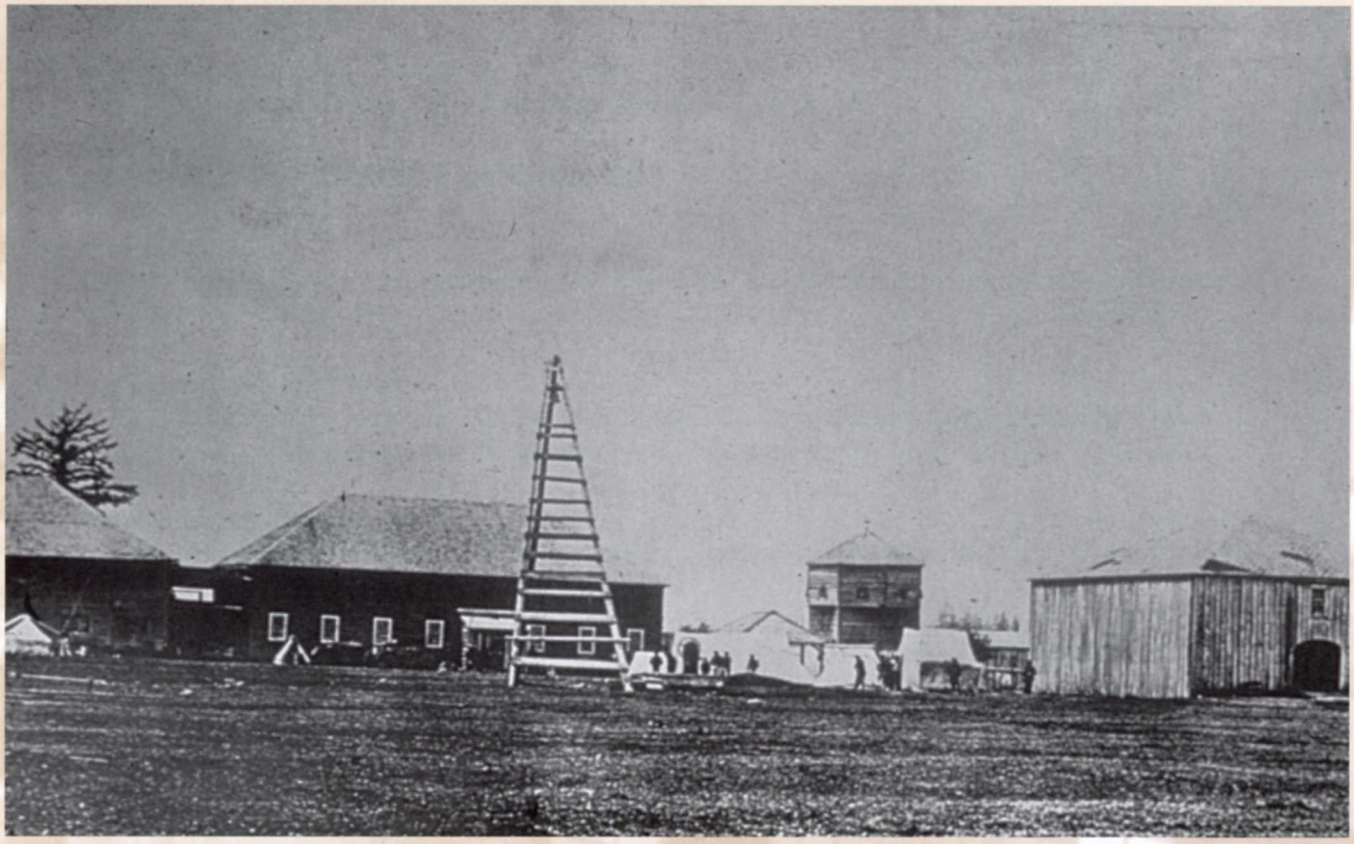
Appendix G: Acronyms

Acronyms

ADA	Americans with Disabilities Act
AIRFA	American Indian Religious Freedom Act
ANCS+	Automated National Catalog System
ARPA	Archaeological Resources Protection Act
Association	McLoughlin Memorial Association
A/V	Audio-visual
AWA	Association for Washington Archaeology
CCC	Civilian Conservation Corps
CCSO	Columbia Cascades Support Office, NPS, Seattle, WA
CIP	Comprehensive Interpretive Plan
CMP	Reserve Cooperative Management Plan
DCP	Development Concept Plan
EWU	Eastern Washington University
EIS	Environmental Impact Statement
FTE	Full Time Equivalent
Fort Vancouver NHS	Fort Vancouver National Historic Site
GIS	Geographic Information System
GPRA	Government Performance and Results Act
GMP	General Management Plan
HAZMAT	Hazardous materials storage
HBC	Hudson's Bay Company
In-situ	In its original location
IPM	Integrated Pest Management
MMP	Museum Management Program
MOU	Memorandum of Understanding
NAGPRA	Native American Graves Protection and Repatriation Act
NHS	National Historic Site
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NPS	National Park Service
NRA	National Recreational Area
NRCS	Natural Resource Conservation Service
NWIA	Northwest Interpretive Association
OAS	Oregon Archaeological Society
OSU	Oregon State University
Reserve	Vancouver National Historic Reserve
RV	Recreational vehicles
SHPO	State Historic Preservation Office
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Society
WDFW	Washington Department of Fish and Wildlife

Bibliography

Camp of the Commission, Fort Vancouver, Washington Territory, U.S.A. Operations, 1860-61
North American Boundary Commission
Courtesy of National Archives of Canada, Ottawa, Ontario



Bibliography

Chapter 1: Background of the Park

Merritt, Jane T.
1993 *The Administrative History of Fort Vancouver National Historic Site,* National Park Service, Pacific Northwest Region, Seattle, Washington.

National Park Service, U.S. Department of Interior
2001 *Management Policies 2001,* December 2000,Washington, D.C.

Chapter 2: Purpose and Need for the Plan

National Park Service, U.S. Department of Interior
2001 *Management Policies 2001,* December 2000,Washington, D.C.

Chapter 3: The Affected Environment

Bernton, Hal
2001 "Vancouver, Wash., reels as downturn kills jobs," Hal Bernton, *The Seattle Times*, November 23, 2001.

City of Vancouver, Washington
1979 *A Park for Vancouver, A Concept Plan* (*A Plan for Central Park*), prepared for the City of Vancouver by Management and Planning Services, Vancouver, Washington.

City of Vancouver, Washington
1979 *Vancouver Central Park, Design Guidelines*, Vancouver, Washington.

City of Vancouver, Washington
1993 *Columbia River Renaissance Planning Process Document*, Vancouver, Washington.

City of Vancouver, Washington
1993 *Columbia River Renaissance Vision*, Vancouver, Washington.

City of Vancouver, Washington
1994 *Visions for the Vancouver Urban Area: Community Vision 2010, Volume I Resource Document* (20-Year Comprehensive Plan for the Vancouver Urban Area), City of Vancouver and Clark County, Vancouver, Washington.

City of Vancouver, Washington
1994 *Visions for the Vancouver Urban Area: Community Vision 2010, Volume II Growth Management Plan* (20-Year Comprehensive Plan for the Vancouver Urban Area), City of Vancouver and Clark County, Vancouver, Washington.

City of Vancouver, Washington
1994 *Visions for the Vancouver Urban Area: Community Vision 2010, Volume III Technical Supplement* (20-Year Comprehensive Plan for the Vancouver Urban Area), City of Vancouver and Clark County, Vancouver, Washington.

City of Vancouver, Washington
1994 *Visions for the Vancouver Urban Area: Community Vision 2010, Volume IV Implementation Program* (20-Year Comprehensive Plan for the Vancouver Urban Area), City of Vancouver and Clark County, Vancouver, Washington.

City of Vancouver, Washington
1995 *Downtown Design Guidelines Manual, City of Vancouver, Washington*, adopted by City Council: December 18, 1995, Vancouver, Washington.

City of Vancouver, Washington
1995 *Zoning Ordinance of the City of Vancouver*, adopted by Ordinance M-3188, June 12, 1995 as amended, Vancouver, Washington.

City of Vancouver, Washington
1999 *Vancouver Downtown Transportation System Plan, Historic Reserve Area Analysis*, produced by the JD White Company for the City of Vancouver, November 1999.

Clark County, Washington
1978 *Clark County Water Quality Management Plan*, Vancouver, Washington.

Clark County, Washington
1992 *Trails and Bikeway System Plan*, Clark County Parks and Recreation Division, Vancouver, Washington.

Clark County, Washington
1994 *Parks, Recreation and Open Space Plan*, Vancouver, Washington.

Clark County, Washington
1997 *20-Year Comprehensive Growth Management Plan*, revised December 1997, Clark County, Vancouver, Washington.

Langford, Theresa, E.
2000 *Diversity at Fort Vancouver National Historic Site: Processes of Diversification in Historical Interpretation, Visitor Services, and Workforce Management*, Oregon State University thesis, Corvallis, Oregon.

Lee, Marty E., Donald R. Field, and Glenn Baker
1986 Fort Vancouver Visitor Study, National Park Service, Cooperative Park Studies Unit, Oregon State University, Corvallis, Oregon (CPSU/OSU 87-2).

Mackie, Richard Somerset
1997 *Trading Beyond the Mountains: The British Fur Trade on the Pacific: 1793-1843*, University of British Vancouver Press, Vancouver, BC, Canada.

Merritt, Jane T.
1993 *The Administrative History of Fort Vancouver National Historic Site,* National Park Service, Pacific Northwest Region, Seattle, Washington.

National Marine Fisheries Service
2000 "Fisheries Northwest Region Table 2: Endangered and Threatened Marine Mammals and Sea Turtles under the Jurisdiction of the National Marine Fisheries Service That May Occur in Washington and Oregon," website updated February 2, 2000; verified by phone January 29, 2002, [www.nwr.noaa.gov/1seals/marmamlist.html] for marine mammals.

National Marine Fisheries Service
2000 "Northwest Region Species List: Endangered, Threatened, Proposed, and Candidate Species under National Marine Fisheries Service Jurisdiction that Occur in Oregon, Washington, and Idaho," website updated February 2, 2000; verified by phone January 29, 2002, [www.nwr.noaa.gov/1habcon/habweb/list.nwr.htm] for anadromous fish.

National Park Service, U.S. Department of Interior
1959 *The National Survey of Historic Sites and Buildings* Theme XV Westward Expansion and the Extension of the National Boundaries to the Pacific 1830-1898, The Fur Trade, National Park Service, [Washington, D.C.].

National Park Service, U.S. Department of the Interior
1969 *Fort Vancouver National Historic Site Master Plan*, National Park Service, Pacific Northwest Region, Seattle, Washington, January 1969.

National Park Service, U.S. Department of the Interior
1978 *Fort Vancouver National Historic Site Master Plan*, National Park Service, Pacific Northwest Region, Seattle, Washington, February 1978.

National Park Service, U.S. Department of Interior
1979 *San Juan Island National Historical Park General Management Plan*, Washington, prepared by the Pacific Northwest Region, National Park Service, Seattle, Washington.

National Park Service, U.S. Department of Interior
1982 *Lewis and Clark National Historic Trail, Comprehensive Plan for Management and Use*, January 1982.

National Park Service, U.S. Department of Interior
1992 *Cultural Landscape Report Volume 1*, by Terri Taylor, prepared by the Pacific Northwest Region, Cultural Resources Division, National Park Service, Seattle, Washington.

National Park Service, U.S. Department of Interior
1996 *Resource Management Plan*, Fort Vancouver National Historic Site, Vancouver, Washington.

National Park Service, U.S. Department of Interior
1997 *Environmental Assessment, Reconstruction of 1845 "New Office"*, Fort Vancouver National Historic Site, Vancouver, Washington.

National Park Service, U.S. Department of Interior
1997 *Nez Perce National Historical Park and Big Hole National Battlefield General Management Plan,* prepared by the Denver Service Center, National Park Service, Denver, Colorado.

National Park Service, U.S. Department of Interior
1999 *Comprehensive Management and Use Plan Update, Oregon and Mormon Pioneer National Historic Trails*, prepared by the Long Distance Trails Office, National Park Service, Salt Lake City, Utah.

National Park Service, U.S. Department of Interior
1999 *Lake Roosevelt National Recreation Area General Management Plan*, prepared by the Denver Service Center, National Park Service, Denver, Colorado.

National Park Service, U.S. Department of Interior
1999 *Vancouver National Historic Reserve Cooperative Management Plan*, Clark County, Washington, in cooperation with the City of Vancouver, Washington, the U.S. Army, and the state of Washington, Office of Archaeology and Historic Preservation, prepared by the Denver Service Center, National Park Service, Denver, Colorado.

National Park Service, U.S. Department of Interior
2000 *Baseline water quality data inventory and analysis: Fort Vancouver national Historic Site,* Technical Report NPS/NRWRD/NRTR-99/238, prepared by NPS Water Quality Division, Fort Collins, Colorado.

National Park Service, U.S. Department of Interior
2000 *Whitman Mission National Historic Site General Management Plan*, Walla Walla, Washington, prepared by the Columbia Cascades Support Office, National Park Service, Seattle, Washington, May 2000.

Sinclair, Donna
1998 "They Did Not Go To War: Chief Red Heart's Band and Native American Incarceration at Fort Vancouver Barracks, 1877-1878," *Columbia,* Fall, pages 24-33.

Thomas, Bryn and Linda Freidenburg
1997 *A Review of Data Pertaining to Cemeteries, Human Remains, Burials, and Grave Markers Associated with Fort Vanocuver and Vancouver Barracks, Clark County, Washington*, principal investigator, Jerry R. Galm, submitted to the NPS, Seattle (Contract No. 1443-CXX9000-93-011; Order No. 1443-PX9000-95-067), Short Report 543 Archaeological and Historical Services, Eastern Washington University, January 1997, revised August 17, 1998.

U.S. Fish and Wildlife Service, U.S. Department of Interior
1993 *Fort Vancouver National Historic Site, Wildlife Resources Report* by Paul Benvenuti, U.S. Fish and Wildlife Service, Vancouver, Washington.

Vancouver Historical Study Commission
1993 *Final Report, Vancouver National Historical Reserve Feasibility Study and Environmental Assessment*, Vancouver, Washington.

Vancouver, Washington Chamber of Commerce
[http://www.vancouverusa.com].

Warner, Mikell De Lores Wormell and Harriet Duncan Munnick
1972 *Catholic Church Records of the Pacific Northwest: Vancouver, Volumes I and II and Stellamaris Mission*, French Prairie Press, St. Paul, Oregon.

Washington State
Office of Financial Management Forecasting Division, April 1 Population Estimates of Cities, Towns, and Counties, July 2000 Update, [http://www.ofm.wa.gov/countypop/countytoc.htm]

Chapter 4: Alternatives

National Park Service, U.S. Department of Interior
1972 *Historic Structures Report, Volume I,* John Hussey, Denver Service Center, Denver, Colorado.

National Park Service, U.S. Department of Interior
1992 *Fort Vancouver National Historic Site, Cultural Landscape Report Volume 1*, by Terri Taylor, prepared by the Pacific Northwest Region, Cultural Resources Division, National Park Service, Seattle, Washington.

Chapter 5: Environmental Consequences

JD White Company, Inc.
2001 "Discovery Historic Loop Trail, Urban Design," prepared by The JD White Company, Inc. for the City of Vancouver, October 31, 2001 (includes trail design features, landscaping impacts, and views and aesthetic impacts)

National Park Service, U.S. Department of Interior
2001 *Management Policies 2001,* December 2000,Washington, D.C.

Swanson, Mike
Phone conversation with City Engineer for the City of Vancouver on November 19, 2001 regarding floodplain and flooding around Fort Vancouver NHS.

Washington Department of Fish and Wildlife
"Fish and Wildlife Habitats and Species Map for Township: T02R01E," January 8, 2001.

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Painting commissioned by Harpers Ferry Center
Courtesy of National Park Serivce



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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural resources. This includes fostering sound use of our land and water resources; protecting our fish, wildlife and biological diversity; preserving the environmental and cultural values of our national parks and historical places; and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and worked 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.

NPS-D-98 October 2002

United States Department of the Interior
National Park Service
Fort Vancouver National Historic Site
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