East and South Vancouver Barracks Draft Master Plan and Environmental Assessment December 2011

Chapter 1 Purpose and Need

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VANCOUVER BARRACKS

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CHAPTER 1 Purpose and Need

he National Park Service is preparing this *Draft Master Plan and Environmental Assessment (Environmental Assessment)* to establish clear direction for the future use and rehabilitation of the East and South Barracks at Fort Vancouver National Historic Site (NHS). As the early terminus of the historic Oregon Trail, these historic military barracks and their grounds represent critical aspects of the history of settling the Pacific Northwest and the United States. These resources tell nationally significant stories about American Indian history and culture, the Hudson's Bay Company (HBC), and more than 160 years of continuous U.S. military occupation.

In 2011, the U.S. Army will relinquish, and ownership of the East and South Barracks will transfer to the National Park Service, including the lands, buildings, and other improvements. This change will effectively end the longstanding military presence at the Vancouver Barracks, which was the first major U.S. Army post in the Pacific Northwest. At this important moment in the evolving history of the site, it is of the utmost importance that the National Park Service carefully plans for the preservation and reuse of the East and South Vancouver Barracks as part of an urban national park site.

The U.S. Department of Defense currently maintains management responsibility of the East and South Barracks for use by the U.S. Army. However, the U.S. Army has ceased its operations at Vancouver Barracks and is relinquishing ownership of the East and South Barracks to the National Park Service, in accordance with the 1961 legislation and the U.S. Department of Defense 2005 Base Closure and Realignment (BRAC) Commission recommendations. The National Park Service will assume responsibility for an additional 33 acres of land, featuring a variety of cultural and natural resources.

To plan for this considerable change, the National Park Service must integrate established guidance for the Fort Vancouver NHS with recent changes and new insights. Among relevant past public planning documents for the national historic site, the Fort Vancouver National Historic Site General Management Plan (2003) provides general guidance for the entire park. It also offers some recommendations for the reuse of the East and South Barracks, which are described later in this chapter. However, at the time the Fort Vancouver National Historic Site General Management *Plan* (2003) was developed, it was not yet certain when the U.S. Army would relinquish these barracks. Therefore, the environmental analysis and decision making that accompanied the Fort Vancouver National Historic Site General Management Plan (2003) could not thoroughly address an unknown set of circumstances and timing with respect to this area. In 2005, the timeline for the U.S. Army's relinquishment of the East and South Barracks became known. The National Park Service is now able to revisit the recommendations in the Fort Vancouver National Historic Site General Management Plan (2003) to determine their impacts in light of these changes. For this reason, this *Environmental Assessment* is an implementation level plan that responds to the Fort Vancouver National Historic Site General Management Plan (2003) and provides more focused management direction for the East and South Barracks.

The ultimate outcome of this master planning effort will direct the National Park Service, its partners, and the public on the desired future conditions for the East and South Barracks as an urban part of the national park system and the Vancouver National Historic Reserve (VNHR). The *Environmental Assessment* will also establish how these conditions may best be achieved and maintained over time. The plan is meant to provide relevant, flexible guidance for park managers for the next twenty years.

It is important to note, that while this *Environmental Assessment* reports a clear vision for the Barracks' future, it may take time to carry out the actions directed by this plan. Implementation of some actions may be delayed or prevented by NPS budget restrictions, broader market conditions, delays in the relinquishment process, or requirements for additional data or environmental compliance for site-specific actions.

PURPOSE AND NEED FOR THE PLAN

There are a number of reasons that this *Environmental Assessment* is needed. Currently there is no specific guiding document for managing the East and South Vancouver Barracks after the relinquishment has occurred. Planning documents such as the *General Management Plan for Fort Vancouver National Historic Site* (2003) and the *Cooperative Management Plan for the Vancouver National Historic Reserve* (2000) provide an overall vision for the project area, but they do not offer in-depth guidance on the public use and rehabilitation of the East and South Barracks. No other plan has addressed management for these Barracks to the level of detail needed. Following the relinquishment, the National Park Service will inherit management responsibility for an additional 33 acres of land, including nationally significant cultural resources.

Moreover, changes in the way visitors access, understand, and use the structures and surrounding lands are expected. As a military post, public access and use of the East and South Barracks is currently limited, but in the future, public access to and interpretation of the resources will be a high priority. Visitation to this portion of the park is expected to rise somewhat, which will also have implications for how visitors access and experience adjacent portions of the park and surrounding lands.

For all of these reasons, this area requires a strong, vibrant vision and framework for management, which this *Environmental Assessment* provides. This *Environmental Assessment* is also designed to be flexible, offering future managers the background and information that will be necessary to make knowledgeable decisions about how best to implement the spirit of this plan.

In summary, the purpose of this *Environmental Assessment* is to collaborate with partners, other agencies and the public in order to:

- establish a comprehensive vision for the rehabilitation and public use of the East and South Barracks,
- determine clear direction for future site design and development, and
- recommend new uses and activities for the site and its buildings that are compatible with the NPS mission, the purpose and significance of Fort Vancouver NHS, the mission and goals of the VNHR, and the character and needs of the surrounding community and region.

SCOPE OF THIS ENVIRONMENTAL ASSESSMENT

This *Environmental Assessment* was prepared pursuant to the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4341 et seq.), as amended in 1975 by P.L. 94-52 and P.L. 94-83, and analyzes three action alternatives and a no action alternative in order to determine their potential impacts on the human and natural environment. It fully describes both the existing conditions in the project area as well as the project alternatives, and it equally analyzes the effects of each project alternative on the environment. While the project area is specifically defined as the East and South Barracks, this plan is sensitive to the surrounding vicinity, including the entire Fort Vancouver NHS, the VNHR, the Columbia River, the city of Vancouver, and the larger metropolitan region. This *Environmental Assessment* is also intended to serve as an Assessment of Effect in compliance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended (16 U.S.C. 470). Certain topics are beyond the scope of this environmental assessment. They include issues surrounding the legal relinquishment of land and improvements, as well as the removal of U.S. Army management responsibilities for the property, and hazardous material remediation that the U.S. Army will undertake. Additionally, some additional environmental compliance would be required before implementation of certain actions proposed in the *Environmental Assessment*, as required by the NEPA, the NHPA, and other relevant legislation.

Several public comments suggested the *Environmental Assessment* include an analysis of the funding needed for implementation of recommendations contained within the *Environmental Assessment*. Financial feasibility has been deemed an important factor in developing and evaluating proposals contained in this plan. The *Environmental Assessment* contains cost estimates for deferred maintenance and major site improvements. Furthermore, findings generated by an outside firm regarding the financial feasibility of proposed building uses were a consideration in selecting the agency's preferred alternative. However, obtaining funding for project components of this *Environmental Assessment* is an NPS administrative action and does not relate to environmental impacts. As such, specific details about funding mechanisms are outside the scope of this planning effort and will not be included in the *Environmental Assessment*.

In addition, while this *Environmental Assessment* addresses management structure at a general level, specific details such as leasing arrangements and day-to-day responsibilities and operations for the park and partners is beyond the scope of this document. Rather, its focus is on the overall vision for the site, including physical site design, layout, and appropriate uses and activities that will preserve and enhance the special qualities of the East and South Barracks.

BACKGROUND OF THE PARK AND HISTORIC RESERVE

Fort Vancouver National Historic Site

Fort Vancouver NHS is a unit of the national park system, located in southwestern Washington on the north bank of the Columbia River.

At the time of Lewis and Clark's expedition (1803-1806) down the Columbia River to the Pacific Ocean, the Vancouver-Portland Basin contained one of the densest populations of American Indians north of Mexico. It is thought that the resident population of approximately 4,000-5,000 Chinookan people would swell to nearly 10,000 during the seasonal salmon runs, when both riverine and interior peoples, including Chinook, Cowlitz, Klikitat, Taidnapam, Sahala, Kalapuya, and Molala, would congregate in the area.

In 1829, the HBC, a British chartered corporation whose primary interests were in the fur trade of northern North America, moved its palisade to this area, establishing the headquarters and principal supply depot for its operations west of the Rocky Mountains. It was the initial administrative center of the Puget Sound Agricultural Company, the enterprise that linked the various HBC outposts through the trade of agricultural commodities produced in the Pacific Northwest. In the 1830s and 1840s, Fort Vancouver was the largest Euroamerican settlement in the Pacific Northwest.

In 1846, a treaty between Great Britain and the United States established the northernmost boundary of the United States at the 49th parallel, placing HBC Fort Vancouver in U.S. territory. In 1849, the U.S. Army established the Vancouver Barracks to defend settlement of the Oregon Territory, and the U.S. Army has occupied Vancouver Barracks ever since. In order "to preserve as a national monument the site of the original HBC 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. 532 and the Senate Report on the legislation), Fort Vancouver National Monument was established on June 19, 1948.

In 1961, Congress passed legislation that today necessitates the development of the *Environmental Assessment*. On June 30, 1961, Congress passed an act (75 Stat. 196) to improve the conditions for achieving the legislative requirements of the park, re-designating the national monument as a national historic site. This legislation also enlarged the boundaries of the monument to include the East and South Barracks as well as other areas, adding a total of 130 acres of land "adjacent to, contiguous to, or in the vicinity of the existing monument." There are now approximately 209 acres within the authorized national historic site boundary, including the East and South Barracks.

Within the boundary of the historic site, the National Park Service currently owns and manages approximately 165 out of 209 total acres, while the U.S. Army, the state of Washington and the City of Vancouver manage the remainder (Figure 1). Once the relinquishment of the East and South Barracks is complete, this management structure will change, as the Department of Defense will no longer own or manage any portion of the barracks. In addition, although not a part of this *Environmental Assessment*, it should be noted that the McLoughlin House NHS, located in Oregon City, Oregon, was added by an act of Congress as a unit of Fort Vancouver NHS in 2003.

Vancouver National Historic Reserve

In 1996, the VNHR was established (Public Law 104-333, Section 502). Though not a unit of the national park system, the 366-acre VNHR includes all land within the legal boundary of Fort Vancouver NHS; thus, the national historic site is essentially a park within a park because of the legislatively established national historic reserve that surrounds it. The national historic site includes the reconstructed HBC Fort, the Parade Ground, the Pearson Air Museum complex, a portion of Pearson Field Airport, the Columbia River waterfront property, and the East and South Barracks. The VNHR includes national park lands, plus additional areas such as the City of Vancouver owned West Vancouver Barracks, the remaining portion of Pearson Field Airport, Officers' Row, and portions of the Columbia River waterfront.

The VNHR is an affiliated area cooperatively managed by a partnership between the National Park Service, the U.S. Army, the City of Vancouver, and the state of Washington. A partner in the management of the VNHR and a signatory agency to its cooperative management plan, the National Park Service is committed to communicate and coordinate its planning and operational activities within the context of the larger VNHR. The National Park Service also serves as the lead partner in education, interpretation, and cultural resources for the VNHR. In addition, the efforts of the National Park Service and other VNHR partners are supported by the work of the Fort Vancouver National Trust, the official nonprofit organization for the VNHR.

Although the East and South Barracks lie entirely within the boundary of Fort Vancouver NHS, the National Park Service has engaged VNHR partners and others throughout the development of this *Environmental Assessment*. Their involvement in this process is critical to the successful implementation of the recommendations contained within this *Environmental Assessment*.

Purpose and Significance of Fort Vancouver National Historic Site

Purpose of Fort Vancouver National Historic Site

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

- the site of the 19th century HBC's activities,
- settlement of the Oregon Country (which became Oregon Territory in 1848), and
- the establishment of the U.S. Army's Vancouver Barracks.

Aspects of the park's purpose are tied directly to the project area for the *Environmental Assessment*. Therefore, as the National Park Service assumes ownership of the East and South Barracks, the agency has a tremendous opportunity to more fully satisfy the intent of its legislated park purpose.

Significance of Fort Vancouver National Historic Site

During the development of the *Fort Vancouver National Historic Site General Management Plan* (2003), the significance of the national historic site was determined to be the following:

- From 1825 through 1846 Fort Vancouver was the site of the HBC'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 1860.
- 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 20th century.
- Fort Vancouver NHS contains extensive archeological resources, both *in situ* (in original location) and recovered, which provide important information about the physical relationships and the cultural and economic operation of the HBC and the U.S. Army.

Some of these statements of significance for the Fort Vancouver NHS relate directly to the project site for the *Environmental Assessment*. For example, there is a great opportunity to further interpret the Vancouver Barracks as the first military post in the Pacific Northwest, now that the National Park Service is assuming ownership of these historic barracks structures and their surrounding grounds.

PROJECT BACKGROUND

Over the last several decades, the U.S. Army has been scaling back its operations at Vancouver Barracks. In 1986, the City of Vancouver took title to buildings along Officers' Row through a federal surplus property transfer. Based on 2000 legislation, the U.S. Army deeded ownership of the West Barracks to the City of Vancouver in 2007. Both Officers' Row and the West Barracks are outside the authorized boundaries of the national historic site. Officers' Row and some of the

buildings within the West Barracks have been rehabilitated to accommodate residential, office, and public uses. Additional rehabilitation of the West Barracks is planned.

In 2005, the U.S. Department of Defense issued the recommendations of the BRAC Commission. Within that report, the commission recommended closing the Vancouver Barracks and relocating headquarters operations elsewhere. Later in 2005, the Department of the Interior approved the acquisition by the National Park Service of property that included the East and South Vancouver Barracks, which are located within the authorized park boundaries. The U.S. Army vacated the Barracks in September 2011 and will soon relinquish ownership of the East and South Barracks—including the lands, buildings, and other improvements—to the National Park Service.

The National Park Service has been working with the U.S. Army over the last five years to coordinate the relinquishment of the East and South Vancouver Barracks. With the support of VNHR partners and others, the National Park Service has attended numerous meetings with the U.S. Army to determine the details of the relinquishment. In addition, a number of assessments are being conducted to describe the condition of the resources. These include a historic structures report on the historic structures in the East and South Barracks, condition assessments of buildings, an environmental site assessment, and utilities studies, some of which are described on the following pages.

PROJECT AREA DESCRIPTION

The authorized boundary of Fort Vancouver NHS is generally 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 (Figures 1 and 2). It should be noted that the project area discussed in this document is slightly larger than the formal boundaries of the land involved in the relinquishment of the East and South Barracks from the U.S. Army to the National Park Service. The formal boundaries being relinquished are shown in Figure 2, overlaid by the project area boundary. It is necessary to discuss this larger project area, rather than the formal boundaries of the relinquishment, due to the fact that the potential implementation of each of the alternatives presented in this document will have effects beyond the formal boundaries of the relinquishment. Located within walking distance of downtown Vancouver and within the city's Central Park district, Fort Vancouver NHS is a cherished part of a regional system of parks and open space throughout the Vancouver and Portland metropolitan areas. The national historic site is within Washington's Third Congressional District in Clark County.

In 2003, the national historic site boundaries were expanded to include the McLoughlin House NHS, located in Oregon City, Oregon.

Within the national historic site, the East and South Vancouver Barracks comprise the project area for this *Environmental Assessment* (Figure 2). The East Barracks lie just east of Fort Vancouver Way and north of East 5th Street. The South Barracks lie south of East 5th Street and are bounded by Interstate 5 to the west and parking for the reconstructed fort to the east.

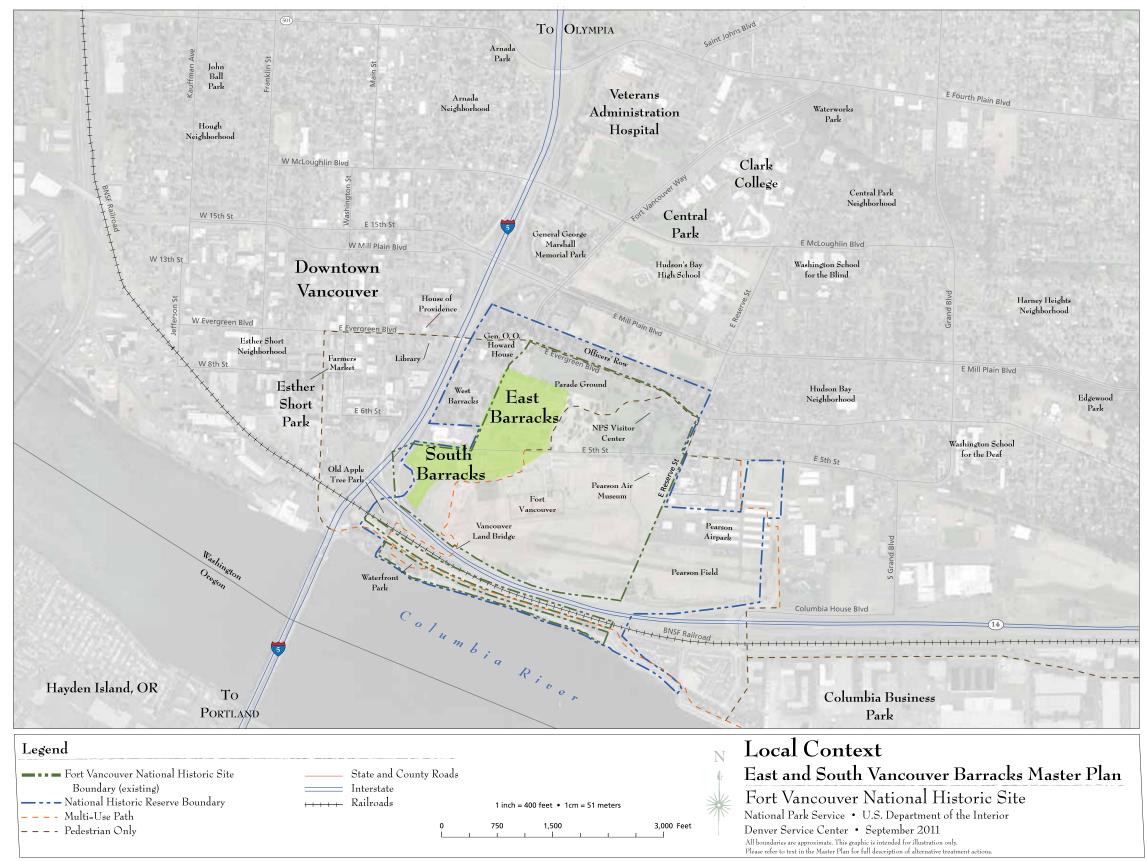


Figure 1. Local Context and Setting of the East and South Barracks

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Figure 2. Base Map of the East and South Barracks

This project area encompasses roughly 33 acres and includes twenty historic military buildings that are listed in the National Register of Historic Places (NRHP) as contributing resources of the VNHR National Historic District (Figure 2). Many of these buildings were constructed in the first half of the 20th century and, therefore, reflect a transition from 19th- to 20th-century military architectural styles. Fronting the historic Parade Ground along the northern boundary of the project area, four historic barracks make up an attractive cluster of buildings in relatively good condition. An historic gymnasium and a number of other military support structures in various states of repair comprise the remainder of the East Barracks buildings.

Six brick buildings in the South Barracks were built by the U.S. Army during the 1980s to house equipment and maintenance functions. These modern structures do not contribute to the historic significance of the VNHR National Historic District.

The East and South Vancouver Barracks are internationally appreciated for their history, architecture, and archeological resources. Many nationally and internationally recognized military personnel have been stationed at Vancouver Barracks at various points in their careers. These include General Ulysses S. Grant, General George C. Marshall (author of the Marshall Plan and recipient of the Nobel Peace Prize), General Oliver O. Howard (Commissioner of the Freedmen's Bureau), as well as a number of Civil War leaders from both the North and South.

The project site is also notable for its cultural landscape, which includes heritage trees and mature groves of Oregon white oaks, the only oak species native to the state of Washington. In addition, there are highly significant archeological resources associated with a cemetery that dates to the HBC period.

For the last century, the East and South Barracks have primarily accommodated U.S. Army activities and personnel. Public access into the heart of the East and South Barracks has been limited and restricted altogether in some areas. No public access into buildings has been allowed, other than in building 754, the Shoppette, a retail establishment managed by the Army Air Force Exchange System. Chain link fencing surrounds the majority of the South Barracks, and access into the East Barracks from the central green space to the east is limited by wood fencing. Fort Vancouver Way is heavily used to access the West Barracks, Officers' Row, the Federal Highway Administration facility, and the Clark County Veterans War Memorial located along the western border of the East Barracks at the HBC Cemetery. In addition, walkers, runners, and bikers often use the portion of East 5th Street that separates the East and South Barracks in order to access multiuse trails that cross the Fort Vancouver NHS.

PLANNING AND LEGAL FRAMEWORK

Relevant Plans

Within the last twelve years, the National Park Service and partners have developed a number of plans for Fort Vancouver NHS, the VNHR, and the surrounding vicinity that remain relevant to this planning effort. Some plans contain specific recommendations for the rehabilitation of the East and South Barracks. Other plans report the overall direction for management in the Fort Vancouver NHS and VNHR, as well as the desired conditions for the Vancouver Barracks as a whole. Some proposals contained within these plans have already been carried out, while others have not.

The following summary describes these past plans and identifies the ways in which they contribute to the development of the *Environmental Assessment*. The *Environmental Assessment* assesses the applicability of these past recommendations to current circumstances in the East and South Barracks. It also builds on established direction and provides more focused guidance appropriate to a new set of circumstances.

Fort Vancouver National Historic Site General Management Plan (2003)

All national park units are required by law to have a general management plan. These comprehensive plans are meant to establish guiding visions for park units that effectively direct future management and resource stewardship in ways that fulfill the NPS mission and the park purpose. Adopted in 2003 and amended in 2007 to include the addition of the McLoughlin House Site in Oregon City, the *Fort Vancouver National Historic Site General Management Plan 2003* laid out this kind of broad guidance. It identified possible management actions for the East and South Barracks, in the event these buildings and grounds would later be deemed excess to the needs of the U.S. Army. These recommendations include restoring the Vancouver Barracks' cultural landscape, adapting and reusing existing historic buildings, providing additional parking, staging public transportation operations, and incorporating administrative functions into East Barracks buildings that front the Parade Ground. Other related General Management Plan proposals include recommendations to eliminate the temporary gravel parking area adjacent to the reconstructed Fort off East 5th Street, construct a replacement parking area (with a minimum of 30 spaces) within East or South Barracks, and resurface East 5th Street with a material such as decomposed granite that is compatible with the cultural landscape.

Anticipating the possibility that the U.S. Army would determine the East and South Barracks in excess of their needs, the *General Management Plan* included the barracks within a particular management zone called the "Historic Zone," in order to distinguish the kind of resource conditions and visitor experiences that could occur there once the National Park Service obtained ownership. In the Historic Zone, the management focus is on maintaining and protecting historic resources, restoring the cultural landscape, recreating elements of the historic scene, maintaining visitor facilities, and mitigating impacts from human use while providing for quality visitor experiences.

Cooperative Management Plan for the Vancouver National Historic Reserve (2000)

The *Cooperative Management Plan for the Vancouver National Historic Reserve* represents a vision shared by four public agencies and their partners for the coordinated preservation and management of the VNHR for public benefit. These agencies include the National Park Service, the U.S. Army, the Washington Department of Archeology and Historic Preservation (DAHP), and the City of Vancouver Washington. The plan recommends a continuing and active public/ private partnership in administering the shared assets of the VNHR, with support from the Fort Vancouver National Trust, a private nonprofit organization.

Adopted in 2000, the *Cooperative Management Plan* presents the following three broad goals for the VNHR:

- preservation of historic structures, physical assets, and cultural landscapes,
- education and interpretation of significance and history of area, and

• maintenance of public use of, and accessibility to, the VNHR.

Based on these goals, primary interpretive themes were then developed for the VNHR to guide interpretive and educational program development; one of these themes is particularly relevant to the rehabilitation and public use of the East and South Vancouver barracks:

• The 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 U.S. military operations in the region for the last half of the 19th century and into the 20th century. National mobilization efforts took place here, supplying lumber and ships for two world wars.

Although focusing on the West Barracks, the *Cooperative Management Plan* also describes desired future conditions for the Vancouver Barracks as a whole, which are applicable for the East and South Barracks. For example, it states that the Vancouver Barracks should be adaptively reused to accommodate a mix of public and private uses. It also suggests that interpretive areas be dedicated to the historic role of the U.S. Army, and to locate these areas in one or more of the historic barracks buildings.

Long-Range Interpretive Plan for Vancouver National Historic Reserve with Special Emphasis on Fort Vancouver National Historic Site and Vancouver Barracks (2004)

This long-range interpretive plan is essentially two documents in one, as it merges both the *Fort Vancouver National Historic Site Long-Range Interpretive Plan* with the *Vancouver National Historic Reserve Long-Range Interpretive Plan*. Developed cooperatively by the National Park Service, the VNHR, the Fort Vancouver National Trust, and others, this plan incorporates guidance from the *General Management Plan*, the *Cooperative Management Plan*, and other relevant planning documents to further define the interpretive stories to be told and the various experiences to be made available to visitors to the VNHR.

The plan places special emphasis on the West Barracks. No specific recommendations are made for the East and South Barracks; however, the plan does discuss the HBC Cemetery, which is located inside the project area for this *Environmental Assessment*. The *Long-Range Interpretive Plan* suggests installing a wayside exhibit that further interprets the history, configuration, and make-up of the HBC Cemetery. It also proposes allowing American Indians, Hawaiians, and other groups to visit, reflect, and hold ceremonies on the Cemetery grounds.

The site's long-range interpretive plan has also been updated to include the Village area, and highlights efforts to expand programs into the South Barracks area.

Cultural Landscape Report for Vancouver National Historic Reserve (2005)

The 2005 *Cultural Landscape Report for Vancouver National Historic Reserve* describes the historical development of the cultural landscape of the entire VNHR, including attention to the history of the East and South Barracks. The report identifies important features that contribute to the integrity of the Barracks' cultural landscape. It establishes a treatment plan that recommends the rehabilitation of historic pathways, circulation patterns, and buildings, as well as ornamental landscaping around the East Barracks buildings. The report also recommends the preservation of cultural landscape features such as site topography, spatial organization, and tree groves.

In 1992, the National Park Service developed a cultural landscape report for Fort Vancouver NHS that focused on the reconstruction of the HBC Fort. However, for this *Environmental Assessment*, the 2005 report regarding the VNHR provides more up-to-date and relevant information. Therefore, this *Environmental Assessment* gives primary consideration to the 2005 cultural landscape report.

Vancouver National Historic Reserve Long-Range Plan (2006)

This long-range plan for the VNHR was developed to provide vision and guidance for the growth and development of the VNHR over the 25 years following its adoption in 2006. The vision and guiding principles that it establishes are meant to direct the development of capital projects and operational/programmatic tasks to be completed in 5 years, 10 years, and 25 years.

The plan was jointly developed by the City of Vancouver, the National Park Service, and the Fort Vancouver National Trust—the three organizations that have primary responsibility for the day-to-day operation of the VNHR, in consultation with the Washington State Department of Archeology and Historic Preservation. At the time the plan was adopted, the fourth official partner, the U.S. Army Reserve, still occupied the East and South Vancouver Barracks, although they had announced their intention to leave the site. Extensive planning for this portion of the barracks was, therefore, not part of this plan.

The Village Development Concept Plan (2005)

Bordering the southeastern edge of the project area for the *Environmental Assessment*, the Village is an archeological site that was once occupied by HBC employees stationed at Fort Vancouver between 1825 and 1860. Members of the Village represented more than 30 different American Indian groups whose homelands spanned the continent, as well as Hawaii.

As directed by the *Fort Vancouver National Historic Site General Management Plan 2003*, the National Park Service recently reconstructed a portion of this historic Village. In preparation for that process, staff prepared the *Village Development Concept Plan* in 2005 to establish specific objectives for this reconstruction and restoration. Since that time, two homes, an accessible trail made of decomposed granite, and a split rail fence have been reconstructed. Opening ceremonies were held in June 2010.

The *Village Development Concept Plan* will be updated to include areas in the South Barracks, with particular emphasis on reestablishing landscape features and on interpreting the following sites:

- houses related to Native Hawaiian occupation in the Village,
- the house inhabited by an Iroquois employee (the only dwelling to which a specific American Indian occupant can be tied), and
- the corridor between buildings 404 and 405.

Fort Vancouver National Historic Site Museum Management Plan Addendum (2010)

A museum management plan is a park-specific document that focuses on assessing and developing a park's museum programs, which must meet two key purposes: making museum collections available to the public and preserving the collections. The museum management plan, a fundamental National Park Service resource management planning document, was previously

completed for Fort Vancouver NHS in 1998. Since that time, the park has expanded and greatly improved its museum management infrastructure and capabilities, along with its research and collection-related education programs. However, the park staff realized that an evolving regional museum management strategy and upcoming changes to the management structure of the VNHR required an update or an addendum to the park's plan.

The relinquishment of the East and South Barracks creates opportunities for park staff to expand and improve the overall museum management program, museum management-based public education and outreach activities, and resource-related partnerships. In addition, the museum management plan identifies future opportunities related to the U.S. Army relinquishment of the East and South Barracks, including opportunities for expanded interpretation and additional facilities for curation. For example, building 405 is identified as a prime location for a museum management facility. In consideration of these opportunities, the *Environmental Assessment* dovetails with the recommendations contained in this museum management plan.

West Vancouver Barracks Reuse Plan (2002)

In 2003, the U.S. Army deeded ownership of the West Barracks, which encompassed approximately 15 acres and 16 buildings between Interstate 5 and Fort Vancouver Way, to the City of Vancouver. Prior to this transfer, the firm E. D. Hovee and Company prepared the *West Vancouver Barracks Reuse Plan* for the City of Vancouver and the Fort Vancouver National Trust. This reuse plan established preferred uses, rehabilitation costs and the financial feasibility of the adaptive reuse of the western portion of the larger Vancouver Barracks. The plan recommended that the West Barracks accommodate a complementary mix of programs and services, including education, the arts, hospitality, and office and residential uses. Many of these proposals have been carried out to date.

City of Vancouver Central Park Plan Update (2008)

The *City of Vancouver Central Park Plan Update* represents an implementation strategy recommended by the *Vancouver Comprehensive Plan* 2003-2023 (City of Vancouver, 2008). The planning area for the Central Park Plan incorporates the VNHR, as well as City-owned properties to the north and the grounds of Clark College. Within this area, the plan recommends the development and enhancement of existing and new gateways, traffic calming, improved pedestrian crossings, multi-modal access and links to surrounding neighborhoods, as well as interconnecting trail networks. A key feature of the plan is the creation of a central promenade that would connect the VNHR with areas to the north, lead visitors to the reconstructed fort within the Fort Vancouver NHS, and provide a link to the Land Bridge to the south. The suggested alignment of this promenade would connect to the Fort Vancouver NHS via the park road.

Vancouver Barracks Historic Structures Report (August 2010)

This historic structures report provides documentary, graphic, and physical information about the history and existing conditions of buildings within the entire Vancouver Barracks area, including the East and South Barracks. Because the report identifies important contributing features for each structure, as well as the level of sensitivity that those features demonstrate with respect to alterations, it serves as an important guide for all potential changes made to these historic properties during future repair, rehabilitation, or restoration. It records the findings of research and investigation for future researchers, planners, designers, tenants, and contractors. For these reasons, this report serves as a critical and effective tool for proposing and evaluating potential reuse options for these historic structures.

Value Analysis Study Report Utility Upgrades: East and South Barracks, Fort Vancouver National Historic Site (2010)

The National Park Service has evaluated projects at Fort Vancouver NHS to address improvements and upgrades to bring the existing utilities into compliance with current codes and standards, as well as to meet the anticipated level of service (LOS). These improvements affect potable water, sanitary sewer, storm drain, and electrical/telecommunications utilities at the historic site. Due to the number of different utilities and alternatives within each utility that needed to be addressed in this value analysis study, each alternative was discussed and evaluated separately. The purpose of conducting a value analysis on these improvements is to ensure that discussion and design take into consideration the natural and historical significance, cost, and general constructability in order to find the alternative that best satisfies the project's goals and objectives. With respect to landscape treatments, the preferred alignment of utilities was generally considered in the development and analysis of alternatives for the *Environmental Assessment*.

Servicewide Laws and Policies

Many regulations and Executive Orders are typically addressed in NEPA documents. The following is a summary of guiding documents and regulations that are relevant to the *Environmental Assessment*. Other applicable regulations that were taken into consideration in the development of this *Environmental Assessment* and the analysis of the impacts are identified in Chapter 3.

National Park Service Organic Act

The National Park Service Organic Act of 1916 established management criteria for all units of the national park system. The act directs the National Park Service to manage units "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" (16 U.S.C. Sec. 1). Congress reiterated this mandate in the Redwood National Park Expansion Act of 1978 by stating that the National Park Service must conduct its actions in a manner that will ensure no "derogation of the values and purposes for which these various areas have been established, except as may have been or shall be directly and specifically provided by Congress" (16 U.S.C. Sec. 1 a-1).

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. National Park Service *Management Policies 2006* calls for each general management plan 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 also specifically directed the National Park Service to consider, as part of the planning process, what modifications of external boundaries might be necessary to carry out park purposes (16 U.S.C. la-7[b][4]).

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 National Park Service for park, monument, historic, parkway, recreational, or other purposes..." (16 USC lc[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 lc[b]), in addition to the various authorities relating generally to NPS areas, as long as the general legislation does not conflict with specific provisions.

National Historic Preservation Act of 1966

The National Historic Preservation Act of 1966 (as amended) requires that proposals and alternatives relating to actions that could affect cultural resources both directly and indirectly, and the potential effects of those actions, be provided for review and comment by the State Historic Preservation Officer, Tribal Historic Preservation Officer, and the Advisory Council on Historic Preservation (ACHP). Therefore, this *Environmental Assessment* will be submitted to the appropriate offices for review and comment according to the procedures in 36 CFR Part 800 and delineated in the 2008 Programmatic Agreement signed by the National Park Service, the National Conference of State Historic Officers, and the ACHP. Sections 106, 110, and 111 pertain to this project and are further described in the Environmental Consequences chapter.

Management Policies 2006

NPS *Management Policies* (2006) operates as the basic servicewide policy document of the National Park Service. This volume of policies includes direction for preserving and protecting cultural resources, natural resources, processes, systems, and values (National Park Service 2006). It is the goal of the National Park Service to avoid or minimize potential impacts to resources to the greatest extent practicable, consistent with management policies.

Secretary's Standards for Treatment of Historic Properties and Cultural Landscapes

The Secretary of the Interior has established a set of standards to guide the treatment of historic properties and cultural landscapes. These standards are neither technical nor prescriptive, but are intended to promote responsible preservation practices that help protect our nation's irreplaceable cultural resources. They cannot be used to make essential decisions about which contributing features of a cultural landscape should be retained and which can be changed. But once a specific treatment is selected, the standards can provide the necessary philosophical framework for a consistent and holistic approach for a cultural landscape project. All work done on contributing historic properties and landscape features within the planning area for the *Environmental Assessment* will be conducted in accordance with these standards.

Guiding Laws, Policies and Regulations Specific to Fort Vancouver National Historic Site Fort Vancouver National Historic Site Legislation

On June 19, 1948, an act established Fort Vancouver National Monument, including the site of the HBC stockade, as a federal area of national historical importance for the benefit of the people of

the United States (62 Stat. 532). An act on June 30, 1961 (75 Stat. 196) revised the boundaries and re-designated the protected area as Fort Vancouver NHS. In advance of NPS ownership, this 1961 legislation deliberately added the East and South Vancouver Barracks to the NHS, thus recognizing their national significance. This legislation is a critical driver for this *Environmental Assessment*.

On July 29, 2003, President George W. Bush signed Public Law 108-63 (known as H.R. 733), which authorizes the Secretary of the Interior to acquire the McLoughlin House NHS in Oregon City, Oregon for inclusion in Fort Vancouver NHS. The National Park Service now manages this site.

Vancouver National Historic Reserve Legislation

In 1996, Congress established the VNHR to provide for the coordinated preservation, public use, and management of historic sites within Vancouver, Washington. The 366-acre VNHR includes Fort Vancouver NHS, Vancouver Barracks, Officers' Row, Pearson Field Airport, the Water Resources Education Center, and portions of the Columbia River waterfront. The legislation established a cooperative management partnership composed of four VNHR partners, including the National Park Service, the City of Vancouver, the U.S. Army, and the state of Washington.

Vancouver National Historic Reserve Conservation District

Incorporated into Section 20.640.040 of Vancouver's municipal code, the Vancouver National Historic Reserve Conservation District includes the Vancouver Barracks, Fort Vancouver NHS, Pearson Field Airport, Jack Murdock Aviation Center, and Waterfront Park. The code lays out the following purpose for the District: *The federally designated Vancouver National Historic Reserve is unique in its cultural and historic resources. The purpose of this section is to establish standards that protect those resources and the historic character of the [Historic] Reserve. To do so, the city is establishing an area of special regulation in the Vancouver Central Park Plan District. The Historic Reserve Conservation District is intended to result in a seamless environment that provides overall design and development standards while reflecting area and era specific standards within the Conservation District.*

The Defense Base Realignment and Closure Act of 1990

The Defense Base Realignment and Closure Act of 1990, Public Law 101-510, as amended, established the legal basis for the transformation that the U.S. Department of Defense is currently undergoing in order to reorganize the number and nature of its bases. In 2005, the Department of Defense updated statutory requirements related to this process and produced a set of recommendations for the realignment and closure of certain bases. In the 2005 Defense BRAC Commission report, the Department of Defense recommended closing Vancouver Barracks and relocating the 104th Division to Fort Lewis, Washington (recommendation #54). This recommendation to close these Barracks triggered the need for this *Environmental Assessment*.

THE PLANNING PROCESS AND PUBLIC INVOLVEMENT

Public Involvement

The National Park Service hosted numerous internal planning meetings with an interdisciplinary team (IDT) from the National Park Service, City of Vancouver, and Fort Vancouver National Trust, to obtain preliminary ideas on the scope of the plan as well as potential issues and impact topics (Figure 3). Following that process, the park conducted public scoping from March 20 through May 1, 2010.

Because the East and South Barracks are treasured by the general public and the 26 federally recognized American Indian tribes and Native Hawaiian groups affiliated with the Fort Vancouver NHS, public involvement is essential to planning for this area. The National Park Service made every effort to engage these agencies, organizations, and members of the public during the development of the *Environmental Assessment*. This planning process continues to emphasize open and inclusive communications to engage the public and to understand their desires and concerns. Completing the *Environmental Assessment* will require ongoing consultation and coordination with the many entities involved in planning and implementation.

During the public scoping phase of the planning process, the National Park Service conducted several public meetings in April 2010 to gather the public's ideas on what the plan should address. These meetings were designed to promote a high level of interaction between the public and the planning team. National Park Service staff set up listening stations at the meetings where the background, issues, and vision and goals for this project could be discussed in depth. Maps, posters, and handouts presented this material in a visual format and helped guide discussion. Materials were made available online at a website specifically established for this project (http://parkplanning.nps.gov/fova). NPS staff also led walking tours of the project site in order to familiarize attendees with the East and South Barracks. The National Park Service also announced the opportunity to be involved via the project website, a scoping newsletter and postcard, as well as at the park visitor center. Public comments received during this time greatly influenced the development of the *Environmental Assessment*.

The planning process and public involvement are described in further detail in the "Consultation and Coordination" portion of this document.



Figure 3. The planning process for this *Environmental Assessment* included public meetings, where public comments were sought and collected. (National Park Service)

Vision and Goals for the East and South Vancouver Barracks

The planning team developed vision and goals to help guide development of the *Environmental Assessment*. These statements served as an important point of reference throughout the planning process. One reason for developing a vision and goals was to synthesize the relevant guidance contained in established plans such as the cooperative management plan for the VNHR the *Fort Vancouver National Historic Site General Management Plan 2003* for Fort Vancouver NHS, and other documents. In addition, the vision and goals incorporate new insights of the planning team. Taken together, these statements communicate key values that should be preserved and perpetuated, and they articulate important aims of management and site design. The vision and goals were presented for review at the public scoping meetings.

VISION STATEMENT

Located in a thriving metropolitan area along the Columbia River, the Vancouver Barracks is a nationally significant resource and a treasured part of its local community. An intricate mosaic of stories and well-preserved structures, landscapes, and archeological resources, the Barracks provides rare opportunities to engage diverse audiences in the dynamic history of the Pacific Northwest. Through the adaptive reuse of historic military structures and a lively mix of educational, commercial, recreational, and cultural activities, the Vancouver Barracks models environmental and cultural stewardship and fosters deep connections between people and place.

Although the East and South Barracks is the subject of this *Environmental Assessment*, team members felt it was important to develop a vision statement that addressed the Vancouver Barracks as a whole. In this way, the statement emphasizes the important relationship that the project area maintains with its immediate surroundings. This vision statement expresses in very broad terms what the Vancouver Barracks should be like in the future, and what planners hope to achieve there.

Using the vision statement as a guide, the team then developed goals for specific topics. Goals are descriptive, open-ended statements of desired future conditions. While still very broad, they provide a finer level of direction than the vision. Goals define general targets in support of the vision and the park purpose. They also helped define the criteria by which the planning team could evaluate the success of the different alternatives in order to select an agency-preferred alternative (described in Chapter 2).

The following goals reflect input received throughout the internal and public scoping phases:

Cultural Resources

Historic Structures: Historic structures should be preserved through adaptive reuse. All rehabilitation will be conducted in accordance with the *Secretary of the Interior's Standards*

for the Treatment of Historic Properties (36 CFR Part 68. 1995). Public access to and enjoyment of historic buildings will be prioritized, with an emphasis on uses that are compatible with historic themes, function, design, and economic viability. The strategic removal of select structures may be considered, following appropriate compliance procedures.

Cultural Landscapes: Rehabilitation of the cultural landscapes will proceed in accordance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*—with an emphasis on preserving historic features. Site design will retain historic landscape patterns and features to the extent possible, such as spatial organization, views, circulation, and vegetation. Addition of new features will be compatible with the historic character of the Barracks.

Archeological Resources: The *in-situ* preservation of archeological sites and materials will be a top priority. When the removal of materials is necessary, excavation and analysis will employ the latest archeological methodologies in consultation with interested parties and partners. All recovered archeological artifacts will be catalogued and curated to federal standards. Responsive site design and maintenance will take seriously the preservation of archeological resources.

Museum Collections: As museum collections expand due to archeological discoveries and other sources, the tangible history of Vancouver Barracks will be further preserved, interpreted, and researched. Appropriate items for acquisition are defined in the Fort Vancouver NHS approved Scope of Collection statement, and may include photographs, documents, clothing, personal items and other materials associated with the Barracks buildings, soldiers and their families, and other relevant stories.

Transportation, Access and Circulation

Management should promote universal access and alternative means of transportation to the Barracks, including pedestrian, bike, and public transit. Site design will provide the appropriate level of parking, while minimizing harmful effects on natural, cultural, and scenic resources. Circulation networks would be informed by historic conditions and will emphasize connectivity within the VNHR and to the surrounding community.

Public Use and Enjoyment

Public use would enliven the East and South Barracks through a wide range of visitor opportunities appropriate to the historic setting. Public use and enjoyment of the Barracks will foster appreciation for their significance within the larger park and VNHR, and underscore the National Park Service's continuing relevance to diverse audiences.

Education and Interpretation

Education and interpretation should be part of every visitor's experience. The experience of the Barracks will be linked to clear interpretive themes, such as prehistoric settlement of the site, the HBC, and U.S. Army occupation. Wayside exhibits, publications, and digital media will encourage a self-guided, contemplative experience of the site, which will connect visitors to its resources and stories.

Development Character

New development—which may include historical reconstructions—will be limited, and proposed only if it is essential to public use, enjoyment, and understanding. Design should

integrate with historic themes, taking inspiration from historical precedent. Design of signs and other features throughout the Vancouver Barracks will be consistent, facilitating a seamless experience of the entire setting.

Environmental, Social, and Economic Sustainability

Rehabilitation of the Vancouver Barracks should promote a sustainable natural, social, and economic environment. New facilities will embody environmentally friendly practices such as on-site stormwater management and the responsible use of materials and energy. A vibrant Barracks will provide tangible, long-term benefits to the surrounding community.

Park Operations

Existing and new facilities in the East and South Barracks will support the operations of the National Park Service and other VNHR partners. Administrative and maintenance functions will be sited with consideration for their impacts on the setting, including factors such as visibility, public access, and adjacent land uses.

ISSUES AND IMPACT TOPICS

As mentioned above, the National Park Service conducted both internal and public scoping to define potential issues and impact topics. An issue is defined as an opportunity, conflict or problem regarding the use or management of public lands. The list of issues was then refined by NPS staff, the general public, and representatives from local, state and federal agencies, American Indian tribes, and various organizations.

Issues and Impact Topics Retained For Analysis

Alternatives presented later in this *Environmental Assessment* provide strategies for addressing these issues within the context of the park purpose, significance and special mandates. These issues formed the basis for the impact topics that are carried forward and discussed in Chapters 3 and 4 of this *Environmental Assessment*. Impact topics identify the resources or values that would be affected by the alternatives. This *Environmental Assessment* will analyze the following impact topics: Historical Structures; Cultural Landscapes; Archeology; Museum Collections; Climate Change/Air Quality, Visitor Experience; Traffic, Circulation and Parking; Park Operations; Socioeconomic Factors and Land Use; and Health and Safety.

The issue statements and corresponding impact topics developed by the IDT are presented below.

Ground-disturbing activities involved in building and landscape rehabilitation have the potential to affect archeological materials, which are abundant throughout the site. The project site includes resources associated with the HBC Cemetery and buried resources are likely to be present. There are 26 federally recognized tribes that maintain ties to Fort Vancouver and many groups feel strongly that burial remains must be respected. These issues will be addressed under the *Archeological Resources* impact topic.

The Vancouver Barracks are rich with cultural resources and contain many layers of history. Most buildings within the East Barracks are on the NRHP. The alternatives propose the rehabilitation of existing historic structures and removal of historic buildings. Many structures contain distinctive features that must be preserved as part of the rehabilitation and accessibility improvements. These issues will be addressed under both

Historic Structures and Cultural Landscapes.

The Vancouver National Historic Reserve Cultural Landscape Report (National Park Service 2005) describes the Vancouver Barracks as a "component landscape" within the "parent landscape." Prior plans as well as public comment suggested the cultural landscape be restored, particularly in the South Barracks. Activities and functions in the Barracks must be appropriate to the historic setting. Changes to buildings, circulation, vegetation, roads, and paths could all have effects on this cultural landscape and visual character of the East and South Barracks area. Alternatives also vary in their ability to weave together the character of the East and South Barracks with the rest of the VNHR. This will be addressed under *Cultural Landscapes*.

The U.S. Army will turn over archival information to the National Park Service for curation, and other objects found during construction may be collected. Construction of additional curatorial space is an opportunity that is included in the alternatives. These issues will be addressed under *Museum Collections*.

As a result of the relinquishment, the types of use in the East and South Barracks will change; military use will cease and the Barracks will be adaptively re-used for public and private uses. These changes could possibly provide economic and other benefits to the community such as employment opportunities as well as additional rental real estate. Activities and functions in the Barracks must support the mission of the National Park Service and the VNHR, and be financially viable for the long-term. These topics will be addressed under *Socioeconomic Factors and Land Use*.

Public use and access is a high priority for the East and South Barracks; however, many buildings are not universally accessible. Universal access must be addressed in a way that respects the historic character of the buildings and structures. Accessibility will be addressed under *Visitor Resources* and *Historic Structures*.

The existing road network is somewhat confusing and haphazard. Some road segments are contributing historic resources because they follow the paths of historic roads and other routes. Other road segments and parking areas developed incrementally during the second half of the 20th century. The *Environmental Assessment* presents an opportunity to improve the vehicular, pedestrian and bicycle circulation network as well as remove some excess asphalt in the barracks. Parking will also be reorganized in the barracks and additional parking will be needed to accommodate the new uses. The *Environmental Assessment* will address connections with other portions of the park, VNHR, and community. These issues will be addressed under *Traffic, Circulation and Parking* and *Visitor Experience*.

Climate change presents significant risks and challenges to the National Park Service and actions in the East and South Barracks directly and indirectly contribute to this issue. In 2009, a joint National Park Service and Environmental Protection Agency's Climate Friendly Parks workshop (National Park Service 2010c) was conducted to develop plans to reduce greenhouse gases and criteria air pollutants through the climate friendly management of park operations, and increased outreach and education efforts. The acquisition of 28 additional buildings creates a challenge for the park to maintain the NPS goals for sustainability and reduction of its carbon footprint. Further, the existing buildings and infrastructure are energy-inefficient and outdated and upgrades are necessary to improve efficiency and environmental sustainability. This issue will be further discussed under *Air Quality/Climate Change, Park Operations*, and *Historic Structures*.

Visitor access is generally limited in the Barracks due to use by the U.S. Army. Many scoping comments expressed a clear desire for expanded public use of the buildings and interpretation of the history of the Barracks. Each of the alternatives in this *Environmental Assessment* addresses this issue in a different way. The alternatives also address improvements to the visitor experience by way of circulation and access through the Barracks, the rest of the VNHR, and downtown Vancouver as well as improve accessibility. In the short-term, noise, dust, construction traffic, or restricted access could reduce current visitors' enjoyment. These issues will be discussed under the *Visitor Experience* impact topic.

The alternatives propose a variety of landscape treatments in the Barracks, including restoration of the HBC Orchard and the historic Maple Allée as well as tree removal. Further, there is a stand of Oregon white oak (*Quercus garryana*) in the project area which is listed as a Priority Habitat by the Washington Department of Fish and Wildlife. These topics will be addressed under *Cultural Landscapes*.

There is contamination from lead, asbestos and other hazardous substances in the East and South Barracks, as well as the potential for unexploded ordinance in the South Barracks. This will be addressed under *Health and Safety*.

Actions proposed for the East and South Barracks may alter utility/infrastructure needs which are currently energy inefficient and outdated. Building upgrades are necessary to improve efficiency and environmental sustainability. Proposed actions would have effects on water use and supply, stormwater and wastewater collection. The type of use will change, requiring changes to operation and maintenance of these areas. Adaptive reuse of buildings could fulfill park curatorial and administrative needs and as well as other partner functions. These issues will be addressed under the *Park Operations* topic.

Impact Topics Considered but Dismissed

The following impact issues are identified as typical topics for analysis in a NPS environmental assessment. The National Park Service determined that the resources associated with these topics would not be affected, or impacts of the alternatives would be negligible or minor. Minor to negligible effects are localized impacts that would be below or at the lowest level of detection and barely measurable, relative to existing conditions, and would have no appreciable consequences. Therefore, these impact topics issues were dismissed from further analysis. The rationale for dismissal is given below.

Geology, Soils, and Geohazards

Utility improvements and other construction activities will disturb native soils. However, the project is not expected to result in any substantial loss or gain of soil or change the geologic character of the site. Utility work and changes to the circulation would occur primarily in previously disturbed areas. There are no unique geologic features that would be impacted by the project, nor would the project increase erosion, as construction work would implement mitigations to ensure that soils remain on-site to the greatest extent possible. These measures are included in the list of mitigations in Chapter 2. Based upon the *Seismic Hazard Evaluation Report of Findings*, (Collins Engineers, Inc. 2010), the project would not contribute to any threats from geohazards or seismic activity, and the project will include actions to retrofit buildings as appropriate during rehabilitation efforts. Since impacts are anticipated to be short-term, localized, and minor, this issue and impact topic was dismissed from further analysis.

Visual Resources

The visual quality of the East and South Barracks will be improved under all action alternatives. Any proposed changes to the buildings will be addressed under *Historic Structures*, and changes to vegetation, circulation patterns or overall appearance of the Barracks will be addressed under *Cultural Landscapes* and *Vegetation*.

Vegetation

The vegetation within the project area is an integral component to the cultural landscape. Thus it is analyzed under the *Cultural Landscapes* topic and not discussed separately.

Ethnographic Resources

Ethnographic resources are defined as any site, structure, object, landscape, or natural resource feature assigned traditional legendary, religious, subsistence, or other significance in the cultural system of a group traditionally associated with it (National Park Service 1998). None of the federally recognized tribes and other groups that maintain ties to Fort Vancouver identified any ethnographic resources in the project area. Resources with traditional importance, such as the HBC Cemetery, are addressed under *Archeology*.

Floodplains/Wetlands

Executive Order 11988, NPS *Management Policies 2006*, and DO-77-2 require examination of impacts to floodplains and the potential risks involved in placing facilities within floodplains. Executive Order 11990, NPS *Management Policies 2006*, and DO-77-1 direct that wetlands be protected and that wetlands and wetland functions and values be preserved. The project area does not contain any floodplains or wetlands; therefore, there would be no impacts to either resource. Based upon the current projections of global climate change and the understanding of the current water table, it is not anticipated that there is any immediate threat of an increased potential risk of seasonal inundation of the East and South Barracks area due to a raised water table. Because there would be no impact to wetlands under the no action or preferred alternative, this topic was dismissed from further evaluation in this *Environmental Assessment*.

Wildlife/Special Status Wildlife Species

In February 2011, the National Park Service conducted a survey to assess the presence or absence of special status species, as well as provide information about the general palette of plants and animals in the East and South Vancouver Barracks. It was determined that there are no unique wildlife species, or threatened or endangered wildlife species or critical habitat within the project area. The southern edge of the project area is approximately 905 feet from the north bank of the Columbia River and therefore won't affect salmonid species in the river.

Natural Soundscapes

In accordance with NPS *Management Policies* (2006) and Director's Order #47, Sound Preservation and Noise Management, an important part of the NPS mission is preservation of natural soundscapes associated with national park units. Natural soundscapes exist in the absence of human-caused sound. The natural ambient soundscape is the aggregate of all the natural sounds that occur in park units, together with the physical capacity for transmitting natural sounds. The current ambient sound environment in the general East and South Barracks area is comprised of noise by motor vehicles traveling on State Route 14 and Interstate 5, freight trains on the Burlington Northern Santa Fe (BNSF) Railway and frequent aircraft overflights from Portland International Airport, (and less frequently from Pearson Field Airport).

During scoping, the public noted that the *Environmental Assessment* should balance commercial uses with the quiet, historic character of the current site. Maintaining the character of the site was considered during development of the alternatives. None of the proposed uses for the barracks would produce measurable effects on the natural soundscape of the Barracks. New uses would generate sounds compatible with the existing uses in the park and the VNHR. As such, the issue of natural soundscapes will not be addressed further. Short-term noise impacts would occur during construction and will be addressed under *Visitor Experience*.

Lightscape Management

In accordance with *NPS Management Policies (2006)*, the National Park Service strives to preserve natural ambient landscapes, which are natural resources and values that exist in the absence of human-caused light. Additional street lights may be installed as part of the improvements in the barracks. Any new lights would be compatible with the cultural landscape and shielded so that light is directed downwards to prevent light pollution of the night sky. No other light sources would be constructed and there would not be any night construction. For these reasons, impacts to the night sky from lighting are expected to be negligible and for these reasons, this issue is not evaluated in this document.

Wilderness

No designated wilderness areas are located within the study area; therefore this issue is not evaluated.

Prime and Unique Farmlands

No lands qualifying as prime or unique farmlands are found within the project area so this issue is not evaluated.

Wild and Scenic Rivers

No designated wild and scenic rivers are located within the study area so this issue is not evaluated.

Environmental Justice

Executive Order 12898 requires federal agencies to evaluate the potential for disproportionate environmental, social or economic effects on minority and low income opportunities. Actions proposed in this *Environmental Assessment* would not create disproportionately high or adverse human health or environmental effects on minority or low-income populations of the surrounding community, but rather, would expand recreational and educational opportunities to them as well as the general population. Any changes to employment or income are expected to affect all segments of the population equally.