

**F-003-001**

Thank you for taking the time to submit your comments on the I-5 CRC DEIS.



**United States Department of the Interior**

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Washington, D.C. 20240**

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via Fax

Columbia River Crossing

To: **Ms. Heather Gundersen** Date: July 2, 2008

**CRC Env. Manager  
Vancouver, WA**

**FAX: 360-737-0294**

Pages: 16, including this cover sheet.

From: **ETHEL SMITH**

Subject: I-5 Columbia river Crossing Project, WA/OR [ER 08/452]

F-003-001 | Attached is the Department of the Interior's comments dated July 2, 2008, on subject project.



United States Department of the Interior

OFFICE OF THE SECRETARY  
Washington, DC 20240



ER 08/452

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PEP/NRM

Ms. Heather Gundersen  
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Dear Ms. Gundersen:

F-003-002

The Department of the Interior (Department) has reviewed the Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation for the I-5 Columbia River Crossing Project (CRC), Vancouver, Washington; and Portland, Oregon, and offers the following comments:

Five alternatives have been proposed for inclusion in this DEIS but a preferred alternative has not been identified. These include:

- Alternative 1. No build;
- Alternative 2. Replacement bridge with bus rapid transit;
- Alternative 3. Replacement bridge with light rail;
- Alternative 4. Supplemental bridge with bus rapid transit;
- Alternative 5. Supplemental bridge with light rail.

The replacement river crossing (Alternatives 2 and 3) would involve removing the existing I-5 north and southbound bridges and building two or three new bridges to the west of the existing alignment. Two new bridges would carry north and southbound traffic, with a third bridge carrying high-capacity bus or rail transit and an exclusive path for bicycles and pedestrians. Under the two replacement alternatives, there is also a "Stacked Transit/Highway Bridge" (STHB) design option that would require only two new bridges, rather than the three needed for the standard replacement crossing design. The STHB would include transit beneath the highway deck of the I-5 southbound bridge and would suspend the bicycle and pedestrian path under the eastern edge of the northbound I-5 bridge.

The supplemental river crossing (Alternatives 4 and 5), would include a new bridge to the west of the existing I-5 bridges, and would include two lanes or tracks for high-capacity transit and four lanes of southbound Interstate traffic. The supplemental river crossing would use both existing I-5 bridges to carry four lanes of northbound I-5 traffic, bicycles, and pedestrians.

F-003-002

Your description of the DEIS alternatives is accurate. Following the close of the 60-day DEIS public comment period in July 2008, the CRC project's six local sponsor agencies selected a replacement I-5 bridge with light rail to Clark College as the project's Locally Preferred Alternative (LPA). These sponsor agencies, which include the Portland City Council, Vancouver City Council, TriMet Board, C-TRAN Board, Metro Council, RTC Board, considered the DEIS analysis, public comment, and a recommendation from the CRC Task Force when voting on the LPA.

With the LPA, new bridges will replace the existing Interstate Bridges to carry I-5 traffic, light rail, pedestrians and bicyclists across the Columbia River. Light rail will extend from the Expo Center MAX Station in Portland to a station and park and ride at Clark College in Vancouver. Pedestrians and bicyclists would travel along a wider and safer path than exists today.

For a more detailed description of highway, transit, and bicycle and pedestrian improvements associated with the LPA, see Chapter 2 of the FEIS.

### Section 4(f) Comments

F-003-003

The Department appreciates the detail contained in the DEIS and in the Draft Section 4(f) Evaluation, especially in the maps. Overall, the Draft Section 4(f) Evaluation was thoughtfully written.

Generally, Section 4(f) requires the Department of Transportation to avoid the "use" of protected resources, including historical sites, wildlife refuges, and parks. If avoidance is not prudent and feasible, all possible planning to minimize harm must occur. Further, the new Section 4(f) Final Rule (March 2008) indicates that "the relative significance of each Section 4(f) property" must be considered in determining the alternative that causes the least overall harm. We consider the Fort Vancouver National Historic Site (FOVA), Fort Vancouver National Historic Reserve (VNHR), and the Lewis and Clark National Historical Trail (Trail) to be pre-eminent Section 4(f) resources in the area.

The Department prefers the option of shifting the replacement crossing alignment west to reduce harm to, or completely avoid, FOVA and the VNHR. However, we recognize that this option may not be feasible or cost-effective. We would support shifting the replacement crossing to an intermediate alignment (see page 5-65). We also tentatively support the supplemental crossing, but strongly encourage additional design refinements and mitigation measures.

F-003-004

For the FEIS and Final Section 4(f) Evaluation, it would be helpful to see not only the proposed acquisition and easement areas on maps, but also proposed new pavement areas within the acquired/easement areas. It would also be helpful to see ground-level photographs of all of the protected Section 4(f) park resources. In addition, it would be useful to have visual simulations of each of the build alternatives for each of the parks, so that it is possible to see how views will be impacted. Chapter 3.9: Visual and Aesthetic Qualities contained some visual simulations, but they were general and covered large areas. Without more specific visual simulations, it is difficult to fully understand the visual impacts that may occur. Finally, it would be helpful to re-state the total acreage of each protected 4(f) resource when there is discussion about how much area may be "used." Currently, the total acreages are only listed on [Exhibit 5.2-1: Summary Information About 4\(f\) Park and Recreation Resources Potentially Used by the Project](#) and the reader must continually refer to this chart.

F-003-005

*Fort Vancouver National Historic Site and Fort Vancouver National Historic Reserve*

The United States Congress created FOVA in 1948 and expanded it in 1961. The Base Realignment and Closure Act authorize Vancouver Barracks to be transferred from the U.S. Army Reserve Command to the National Park Service (NPS). Transfer is expected to occur by 2012.

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### F-003-003

The relevant significance of the various 4(f) resources, including the significance of the portion of each 4(f) resource that would be impacted, and how that impact would affect the resource's relevant characteristics, are all part of the project team's analysis of project alternatives, potential measures to minimize harm, and ultimately the determination of the least harm alternative. We included such considerations in the Section 4(f) Evaluation and have updated them in the Final Section 4(f) Evaluation to reflect any revisions in the proposed action. The LPA has incorporated all reasonable measures to minimize harm, including the "intermediate I-5 alignment" that reduces impacts to the VNHR.

### F-003-004

Graphics in the Final Section 4(f) Evaluation show the proposed 4(f) property acquisitions as well as the project footprint within those acquisition areas.

The Section 4(f) Evaluation included with the DEIS included ground level photographs for all of the historic resources but not all of the park or recreation resources. We have included such photographs for all affected resources in the Final Section 4(f) Evaluation. The DEIS provided visual simulations where the visual and aesthetic impacts were thought to have the greatest potential impact, including the view from the Fort Vancouver ("Kanaka") Village. Other views, such as those from Leverich Park or the East Delta Park ball fields would be very minimally impacted, and therefore the project team did not invest in the simulations from these viewpoints.

The Final Section 4(f) Evaluation provides more references to the total acreages of the Section 4(f) resources when discussing how much area will be "used."

**F-003-005**

The NPS Organic Act of 1916, as well as the enabling legislation for FOVA, requires preservation and conservation of FOVA, including the natural, historical, and recreational resources therein, for the enjoyment of current and future generations.

Congress later created the VNHR in 1996. VNHR encompasses 366 acres and includes FOVA, Vancouver Barracks, and park areas managed by the City of Vancouver, including Officer's Row, the West Vancouver Barracks, and Old Apple Tree Park. VNHR is managed under a partnership of the NPS (represented by the Superintendent of FOVA), the City of Vancouver, the State of Washington, and the U.S. Army Reserve Command. The VNHR Trust serves as the official non-profit fundraiser for the VNHR partners. Today, over one million visitors come to the VNHR each year to learn more about the history of the Pacific Northwest region. The VNHR is an important cultural resource in the area for which losses cannot be easily mitigated.

We concur that all of the build alternatives, except those that completely avoid the VNHR, will adversely affect the VNHR Historic District, which includes the FOVA. It is highly likely that the CRC project will directly alter, destroy, or otherwise adversely affect the cultural landscape of VNHR, including FOVA, the setting of historically significant buildings, and significant, intact archaeological resources.

The Hudson's Bay Company Village/"Kanaka" Village is an archeological resource that is particularly threatened by the CRC project. The Kanaka Village site boundary includes the FOVA waterfront, Old Apple Tree Park, the area adjacent to the Confluence Project Land Bridge, and areas within FOVA that are currently managed by the U.S. Army Reserve Command. The Kanaka Village contains tangible remains of the multicultural, fur-trade-era village that formed a critical part of Fort Vancouver's and the Pacific Northwest's history, including foundations, cellars, and other architectural remains of houses, outbuildings, and fence lines, as well as objects of stone, glass, ceramic, wood, and metal. The Kanaka Village was inhabited by people from across the world, including American Indians representing many Pacific Northwest and other North American tribes, the Métis, Native Hawaiians, English, Scots, Irish, French-Canadians, and other ethnicities.

Adverse effects will also occur to the archaeological remains of the U.S. Army's Quartermaster Depot, which was the first of its kind in the Pacific Northwest, the first Post Cemetery, located on the western edge of Officer's Row, and other U.S. Army and Hudson's Bay Company archaeological deposits on the western edge of Vancouver Barracks.

**F-003-006**

The Barracks Hospital will be adversely affected by construction vibration and the presence of the new highway degrading the hospital's historical setting, as well

**F-003-007**

**F-003-005**

The Memorandum of Agreement (MOA) addresses the resolution of adverse effects to historic properties, pursuant to Section 106 of the National Historic Preservation Act. Studies to identify avoidance and minimization measures were conducted, and the reports of that discovery work are available with the FEIS and Final Section 4(f) Evaluation. Additionally, the project team partnered with the National Park Service (NPS) to ensure archaeological resources in the VNHR were identified and appropriately addressed during the course of project development.

**F-003-006**

Analysis of proposed construction activities has indicated that the Barracks Hospital would not be adversely affected by construction vibration. In addition, by restricting and monitoring vibration-producing activities, vibration from construction would be kept to a minimum. During construction the project will monitor activities that may produce vibration levels near structures, especially unreinforced masonry structures such as the Barracks Hospital. The noise and vibration technical analysis identifies no vibration impact at this location. Even so, due to the regional and national significance of these resources, the project is committed to a vibration monitoring program.

**F-003-007**

The Final Section 4(f) Evaluation has indicated that the impact on the Barracks Hospital would be a "use" (not a "constructive use") under Section 4(f); it would be an adverse effect under Section 106. There would be no constructive use of the non-commissioned officer's duplexes. While the project would have a small impact on views from these resources, those views and settings are already substantially altered compared to historic conditions. The project would also not impede views of the resources from other locations. See the MOA for the mitigation and enhancement measures.

**F-003-007**

as the setting of the two non-commissioned officers duplexes south of the Barracks Hospital that are closest to I-5. We consider the adverse effects to both the Barracks Hospital and the duplexes to be a "constructive use" under Section 4(f) for the replacement river crossing option, which would bring the right-of-way to within 14 to 16 feet of the hospital building, and similarly close to the duplexes. See 23 C.F.R. § 774.15(e)(2), which states that FHWA has determined that a constructive use occurs when "The proximity of the proposed project substantially impairs esthetic features or attributes of a property protected by Section 4(f), where such features or attributes are considered important contributing elements to the value of the property. Examples of substantial impairment to visual or esthetic qualities would be the location of a proposed transportation facility in such proximity that it obstructs or eliminates the primary views of an architecturally significant historical building, or substantially detracts from the setting of a Section 4(f) property which derives its value in substantial part due to its setting...."

In addition to the CRC project implementing or funding landscaping and mature vegetative screening, we believe that upgrading the buildings to meet seismic standards and connecting downtown with the Reserve through a Seventh Street pedestrian access would mitigate for adverse effects. Retrofitting the buildings would preserve their structural integrity throughout the CRC project and connecting people to the Reserve, including the Barracks Hospital, would facilitate education and appreciation of this important historical area.

**F-003-008***Old Apple Tree Park and Heritage Apple Tree*

As mentioned above, Old Apple Tree Park is part of the VNHR. Heritage Apple Tree, located within the park, is a protected historical resource. It is also part of the Kanaka Village/Fort Vancouver Village. This should be more clearly stated throughout the FEIS and Final 4(f) Evaluation.

**F-003-009**

The dual-loop I-5/SR 14 interchange under the replacement bridge crossing alternatives would require 0.27 acres of this 1.3-acre park or 35% of the park for an elevated ramp. See page 5-28. The area of acquisition dissects the park. There will be increased shading to the Heritage Apple Tree. Additional information regarding shading should be provided in the Final Section 4(f) Evaluation, including whether shading would kill the tree and therefore be an irretrievable loss.

**F-003-010**

This park is also an entrance to the Confluence Land Bridge. There should be more discussion in the FEIS of how Old Apple Tree Park contributes to the experience of the land bridge.

Finally, the Heritage Apple Tree is protected by the Federal Lands to Parks (FLP) Program (see below) and separate/additional mitigation, pursuant to this program, may be required.

**F-003-008**

We have more clearly documented that the Old Apple Tree Park and the Heritage Apple Tree are part of the VNHR and the Fort Vancouver ("Kanaka") Village in the FEIS and Final Section 4(f) Evaluation.

**F-003-009**

The SR-14 Interchange designs evaluated in the DEIS have since been refined as the project team has worked to successfully avoid impacts to the Old Apple Tree Park and the Heritage Apple Tree. The design refinements to that interchange place the I-5 northbound to SR-14 eastbound ramp further north and west. As documented in the Final Section 4(f) Evaluation, the LPA would have no use of Apple Tree Park and no impact on the Old Apple Tree.

**F-003-010**

The FEIS Parks and Recreation Technical Report contains information about Old Apple Tree Park serving as an entrance to the Land Bridge. As the LPA does not use the Old Apple Tree Park, an expanded discussion in the Final Section 4(f) Evaluation was deemed unnecessary.

Resources protected by the FLP program are discussed in Section 3.7, Parks and Recreation, in the FEIS. Necessary mitigation for impacts to these resources is being coordinated through the National Park Service FLP program contact, as suggested. The LPA will have no impact on the FLP-protected Heritage Apple Tree.

**F-003-011**

*Lewis and Clark National Historic Trail*

The Trail, which is defined as the outbound and return route of the 1804-1806 Corps of Discovery Expedition, was authorized in the 1978 amendment to the National Historic Trails Act. Under this law, NPS administers the Trail, and has as its purpose the identification and protection of the historic route and its historic remnants and artifacts for the public enjoyment. The Organic Act of 1916 also guides NPS management of the Trail; NPS is required to manage the Trail in such a way as to preserve and conserve the natural, historical, and recreational resources for the benefit of current and future generations.

The majority of Lewis and Clark's travels were by water along the Missouri and Columbia Rivers drainages. On October 18, 1805, the Expedition began its journey down the Columbia River. A Lewis and Clark campsite is located just outside and east of the Columbia River Crossing project area on the north bank of the Columbia River. The Expedition camped here on their return route on March 30, 1806.

The DEIS and Draft 4(f) Evaluation fail to address any potential impacts to the Trail, even though the NPS alerted the Columbia River Crossing Project that the Trail is within the vicinity of the proposed project in a letter dated September 26, 2007, please see attachment). The Department requests acknowledgment of the location of the Trail along the Columbia River in the project area and consideration of potential impacts to the Trail in developing the FEIS and Final 4(f) Evaluation.

**Section 6(f) Comments**

**F-003-012**

Section 6(f) of the Land and Water Conservation Fund (LWCF) Act protects recreational sites developed or acquired with LWCF money from conversion. There are no anticipated impacts to Section 6(f) sites.

**F-003-013**

**Federal Lands to Parks Program**

The following sites within the vicinity of the CRC project are protected by the FLP Program, which may require replacement property for conversion to a non-recreational use:

- College Park
- Marshall Community Park
- Heritage Apple Tree
- Vancouver Barracks

Please note that a conversion may occur due to indirect impacts, such as aesthetics and noise. Coordination should occur with the contact person below to

**F-003-011**

Per guidance provided by the Section 4(f) Policy Paper, Item #14 (FHWA, March 1, 2005), the Lewis and Clark Historic Trail is not protected by Section 4(f) and is therefore not mentioned in the Draft or Final Section 4(f) Evaluation. According to the Policy Paper: "Public Law 95-625 provides that, no land or site located along a designated national historic trail or along the Continental Divide National Scenic Trail shall be subject to the provisions of Section 4(f) of the Department of Transportation Act (49 U.S.C. 1653(f)) unless such land or site is deemed to be of historical significance under appropriate historical site criteria, such as those for the National Register of Historic Places. Only lands or sites adjacent to historic trails that are on or eligible for the National Register of Historic Places are subject to Section 4(f). Otherwise (pursuant to Public Law 95-625), national historic trails are exempt from Section 4(f)." The Lewis and Clark Historic Trail has been added to the Parks and Recreation Section of the FEIS but is not a part of the Final Section 4(f) Evaluation. Impacts to this resource would be similar to impacts occurring to the Lower Columbia River Water Trail, which was included in the DEIS, and mimics the conceptual path of the Lewis and Clark Historic Trail through the CRC project area.

**F-003-012**

Since the DEIS, updated constructability analysis indicates that some land in East Delta Park would be temporarily used during construction. Less than one acre of the 80+ acre East Delta Park would be temporarily occupied during the reconstruction of the Marine Drive Interchange. This temporary use, which would occur at the northernmost corner of the park, would result in the temporary displacement of some vegetation. This area would be occupied for less than 180 days. No Section 6(f) conversion would be required for this temporary occupancy. This impact is discussed in Section 3.7, Parks and Recreation, of the FEIS as well as the Section 4(f) Evaluation in Chapter 5.

F-003-013

determine whether there is a conversion and whether any separate mitigation is required under the FLP program.

**Fish and Wildlife Coordination Comments**

F-003-014

On January 25, 2006, the Fish and Wildlife Service (FWS) signed the Interstate Collaborative Environmental Process group (InterCEP) agreement. Through this agreement, certain resource agencies, including the FWS, have established early coordination and collaboration on this project DEIS through meeting attendance, written advisory comments and formal concurrence points. The FWS has worked closely with the InterCEP group in early agency coordination with the goal to effectively implement the policy of avoidance, minimization, and mitigation of impacts to affected resources (Appendix A, page 2). As project planning continues, the FWS looks forward to working with the InterCEP group and through its authorities with the Endangered Species Act of 1973, as amended, (16 U.S.C. § 1531 *et seq.*) and recommendations and coordination with the Fish and Wildlife Coordination Act (48 Stat. 401), as amended, to further this goal.

F-003-015

The proposed project site is within a heavily developed corridor with degraded environmental conditions. Riparian habitat quality along both the north and south banks of the Columbia River is poor. Much of the historical habitat was forested wetlands and uplands. In Oregon, the shoreline was once part of a large active floodplain. Currently, urban, industrial, commercial, recreational, and residential development occupies most of the land around the proposed CRC project.

The DEIS alternatives analysis is based primarily on conceptual designs (e.g., the stormwater treatment system) and not final designs, therefore, the Department's comments reflect that level of detail. We will not be commenting at this time on the effects of alteration or removal of terrestrial or wetland habitat because the DEIS states that wetlands have already been avoided to the extent practicable, alteration or removal varies little between the action alternatives, and the preferred alternative has yet to be determined. The FWS will continue to work on these alternative specific environmental items through the InterCEP process.

F-003-016

The Department is particularly concerned about two environmental issues regarding the proposed project: water quality from roadway stormwater runoff and hydrologic changes from bridge piers. These two issues have the potential to have long term project-related effects to aquatic natural resources depending on the alternatives selected.

Water quality is currently being limited by elevated temperature, industrial and agricultural contaminants, and dissolved contaminants such as copper from stormwater runoff. Upstream hydroelectric dams impound water raising its temperature, making fish passage difficult. Untreated roadway stormwater runoff from the existing I-5 bridges currently runs directly into the Columbia River

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**F-003-013**

As documented in Section 3.7, Parks and Recreation, the project would require a small acquisition of land from Marshall Community Park. This resource is identified as protected by the FLP Program, per DOI guidance. Necessary mitigation for impacts to this resource is being coordinated through the National Park Service FLP program contact, as suggested.

**F-003-014**

The project team values USFWS and InterCEP input.

**F-003-015**

The project team appreciates your input on this matter.

**F-003-016**

Through on-going coordination with USFWS, NMFS, WDFW and ODFW, the project team has further developed and refined storm water treatment, pier design and in-water construction approaches. Related impacts and mitigation for the LPA are described in FEIS Sections 3.14 Water Quality and Hydrology, 3.15 Wetlands and Jurisdictional Waters, and 3.16 Ecosystems. While the existing highway in this section of I-5 currently has over 200 acres of untreated, pollutant-generating impervious surfaces (PGIS), the LPA will treat the runoff from all PGIS in this section of I-5.

As you noted, of the build alternatives in the DEIS, alternatives 2 and 3 would have the least overall fill in the Columbia River, and the STHP (stacked transit highway bridge option - also known as the 2-bridge option) would further reduce the number and volume of piers in the water. The LPA analyzed in the FEIS is a variation on alternative 3 and incorporates the 2-bridge option in order to reduce fill in the river. Since

the DEIS, the estimated size of these piers has been further reduced, as reflected in the FEIS, Biological Assessment and Biological Opinion.

**F-003-016**

impacting water quality. The existing I-5 bridges currently have no stormwater management and retrofitting them with a collection and treatment system will have limited effectiveness because of the lift spans.

All of the build alternatives would improve existing stormwater treatment over existing conditions. With the no-build alternative, the stormwater runoff from the existing I-5 crossing and much of the highway would continue to flow untreated to the Columbia River and other surface waters. As traffic and congestion continues to increase in the future, pollutants like copper, would likely increase (page 3-385). The adverse impacts of stormwater runoff from the bridges are best minimized in Alternatives 2 and 3.

The I-5 crossing structure influences aquatic habitat conditions in the main channel and North Portland Harbor. Bridge piers in the river provide refuge from the current for both predatory fish and juvenile salmon and provide very low quality habitat and may increase predation rates on salmon. In addition, seismic upgrades to the existing piers would be necessary. Alternatives 4 and 5 would include retrofitting the 10 piers of the existing bridges, increasing their area by a total of 0.5 acres and their volume by a total of approximately 3,800 cubic yards. The supplemental bridge would consist of six additional piers, adding approximately 1.14 acres in area and approximately 33,000 cubic yards in volume. Retrofitting the existing bridges for seismic upgrade could include extensive in-water temporary structures and would result in large permanent piles surrounding the existing piles. A conceptual design is illustrated in Exhibit 2.3-4 (page 2.22). The cumulative increase in number and size of piers would likely cause changes in water velocities and may further increase predation on juvenile salmon. The alignment of the new and old piers could also affect hydrology, however, it would seem that for safety and navigability purposes, aligning the piers would be crucial thus this may not be an issue.

Alternatives 2 and 3 would have six piers for each bridge (totaling 18 piers) in the Columbia River. Fewer piers would be located in water less than 20 feet deep, where juvenile fish are more likely to congregate and contribute to increased predation. Reduction in total piers for the replacement crossing would be an improvement over existing, no-build, and supplemental crossing conditions. The STHB option for Alternative 2 and 3 also have six piers per bridge in the Columbia River (totaling 12 piers) which further reduces the number of piers in the river over existing, supplemental, or standard-design replacement crossings. This option would put approximately 18 percent less structure in the water, assuming 96-inch vertical piles are used to support the piers. It may however, result in additional smaller piers in shallow-water habitat near the south shore of the Columbia River main channel, which may negatively impact fish (page 3-349).

**F-003-017**

In addition to the long term concerns with stormwater management and increased inwater structure, Alternatives 2 and 3 could be operational within 3

**F-003-017**

The LPA includes bridge design and bridge construction techniques that help to reduce the anticipated number of seasons that in-water work will be required. This is reflected in the FEIS and the Biological Opinion. In addition, construction-related best management practices and other minimization measures are discussed in the FEIS and Biological Opinion.



**F-003-017**

years, with the river crossings and adjacent interchanges completed within about 4 years. All in-water construction and associated interchange construction from Alternatives 4 and 5 would not be finished for about 5 and one half years (Exhibit 2.4-1, page 2-43). This reduction in in-water construction would reduce the duration of negative temporary effects. The Department will not comment on specific construction-related impact minimization further because accepted best management practices to reduce temporary construction impacts (e.g., to reduce turbidity) are anticipated to be employed and will be further addressed when final designs are developed.

**F-003-018****F-003-019**

#### Mitigation Measures

While it is difficult to accurately compare the environmental impacts of alternatives based on conceptual designs, based on the information presented in the DEIS, the Department supports Alternative 2 or 3, particularly with the STHB option, to minimize impacts to FOVA, the VNHR, the Trail, and aquatic natural resources, especially native salmonids. The Department strongly supports shifting the replacement bridge crossing to the west as it would reduce impacts to the VNHR and area natural resources. We would also support shifting the replacement crossing to an intermediate alignment.

Alternatives 2 and 3 have the potential for long term benefits to aquatic natural resources because they would result in less structure in the water and provide the best options for stormwater management. Alternatives 2 and 3 would also have the fewest short and long term impacts to the aquatic resources in terms of construction timing and future bridge maintenance (Exhibit 27, page S-31). The stacked bridge design would reduce the footprint of the project, and most impacts to natural resources, by eliminating the separate bridge for transit use. Together, the replacement bridge designs and environmental impact minimization features associated with Alternatives 2 and 3, with STHB option, appear to improve environmental conditions over the existing bridge for numerous native salmon populations and bull trout (*Salvelinus confluentus*) in the Columbia River.

**F-003-020**

The existing bridges with their lift towers already introduce a disruptive feature on the viewshed, as observed from FOVA (see Exhibit 3.9-7, p.3-259). The supplemental bridge crossing alternatives would introduce a second, incongruent element that would further disrupt the intactness of the view. Although the replacement bridge crossing alternatives include dual bridges higher and wider than the existing spans, the overall impact on the viewshed would be less disruptive due to the cleaner lines and symmetry of modern construction.

**F-003-021**

For park, historical, cultural, and archeological resources, we recommend the following additional mitigation measures to lessen the impacts to resources protected by the National Park Service Organic Act of 1916, enabling legislation for FOVA, the National Historic Trails Act, Section 106 of the National Historic Preservation Act, and Section 4(f) of the Department of Transportation Act:

**F-003-018**

Various aspects of the LPA help to reduce impacts to aquatic species. As noted, the LPA is a variation on alternative 3 from the DEIS and incorporates the STHB (2-bridge) option, thus reducing the number and volume of piers in the water compared to other build alternatives. The LPA also incorporates various measures to reduce impacts to the VNHR. These include the "intermediate alignment" for I-5 through downtown Vancouver, modifications to the SR14/I-5 interchange, and other minimization measures as described in the Section 4(f) Evaluation.

**F-003-019**

Thank you for your comments on this matter. See the response to comment F-003-018 above.

**F-003-020**

Thank you for your input. The Park Service's position on the visual impacts of the lift towers contributed to the selection of the Replacement Bridge as the Locally Preferred Alternative.

**F-003-021**

Various mitigation measures have been incorporated into project design and are documented in the Final Section 4(f) Evaluation. In the Memorandum of Agreement for Section 106 impacts, the project has also committed to providing financial support for the development of a curation and museum facility within the VNHR.

**F-003-021**

- It is anticipated that the bulk of artifacts recovered north of the Columbia River will be curated at FOVA. The Department strongly encourages the CRC project to provide support to NPS for the development of a facility within FOVA, as listed in Section 3.8.5, p. 3-252, for the appropriate storage, testing, and interpreting of artifacts and cultural resources information. The facility will house artifacts collected from the CRC project under agreement between Washington State Department of Transportation (WSDOT) and NPS, as well as artifacts from previous WSDOT and FHWA/FTA projects. This facility would also complement and augment the existing FOVA Fur Store curation facility within the reconstructed Fort Vancouver site.

**F-003-022**

- The Department supports mitigation for construction vibration impacts and visual impacts to Barracks Hospital, including those listed in Section 3.8.5 of the DEIS on page 3-252. Mitigation of impacts to the Barracks Hospital through seismic stabilization or retrofitting should also occur to minimize vibration impacts during construction. Further, the Department strongly favors the development of a community connection between downtown Vancouver and the VNHR that would lessen the negative impacts on the visual setting of the Barracks Hospital.

**F-003-023**

- As noted in the list in Section 3.8.5 of the DEIS, resources should be provided to NPS, through an MOA with WSDOT, to prepare interpretive panels that will describe the historic resources of the VNHR and downtown Vancouver, including the Lewis and Clark National Historic Trail. These resources will assist the VNHR partners in developing consistent interpretation that complements the existing interpretive displays and interpretation plans already developed for the Confluence Project Land Bridge and other facilities of the VNHR.

**F-003-024**

- NPS supports the Community Connection, specified in Section 3.8.5 of the DEIS on page 3-252, which will provide "improved connections between downtown Vancouver and the VNHR, including the construction of an expanded overpass/cover-connector between Evergreen Boulevard and 5<sup>th</sup> street." This Community Connection should include sound walls in its design for the two non-commissioned officers' duplexes closest to I-5 south of the Barracks Hospital and, as noted above, should attempt to minimize the effects to the historic setting of the historical buildings (duplexes and Barracks Hospital).

**F-003-025**

- Through an MOA with the NPS, the CRC project should provide support to design landscaping buffers that are consistent with and complement current Development Concept Plans for the Kanaka Village cultural landscape, and are consistent with the FOVA General Management Plan and the VNHR cultural landscape inventory. Landscaping should be

**F-003-022**

By restricting and monitoring vibration-producing activities, construction vibration damage would be avoided. The construction contract specifications will contain a section specific to vibration that will require vibration monitoring of all activities that may produce vibration levels at or above 0.5 inch per second whenever there are structures located near the construction activity, and especially near un-reinforced masonry structures such as the Barracks Hospital. Additional construction and operational vibration analysis will be performed during final design. The Community Connector is a proposed element of the project. However, since the release of the DEIS, both the NPS and Washington Department of Archaeology and Historic Preservation have indicated that they do not consider the connector itself to be historic resource mitigation.

**F-003-023**

Through consultation and coordination since receipt of this comment letter, the NPS has indicated that mitigation for impacts to the VNHR should be realized through the development of a new curation and exhibition facility within the VNHR, as described in the MOA.

**F-003-024**

Thank you for partnering with us in the development of suitable treatments along the very significant properties adjacent to the Interstate. The project's commitment to the Community Connector, noise mitigation, and avoidance and minimization of historic impacts represents our collective understanding of the local, regional, and national significance on the VNHR.

**F-003-025**

The final mitigation plan has been based on the impacts of the LPA, and on input from the VNHR partners including the NPS. Mitigation at the

**F-003-025**

complementary to the Community Connection design. This will help to mitigate adverse visual and aesthetic impacts indicated on page 3-268 under Section 3.9.3.

**F-003-026**

- Through an MOA with NPS, and in cooperation with its VNHR partners and academic partners (Portland State University and Washington State University Vancouver), the CRC project should support ethnohistoric, cultural anthropology, and oral history efforts to better understand tribal connections to the VNHR and FOVA history.

**F-003-027**

- Through an MOA with NPS, and in consultation with its VNHR partners and institutional partners, including Portland State University and Washington State University Vancouver, the CRC project should support CRC-related Section 106 testing and data recovery excavations. These should include the development of research designs, cataloging and curation plans, and other studies for impacts that cannot avoid VNHR archaeological resources and related cultural deposits within the existing WSDOT right-of-way.

**F-003-028**

- Through an MOA with NPS, and in consultation with its VNHR partners and institutional partners, including Portland State University, Washington State University Vancouver, Clark College, and ESD-112, the CRC project should support the development of interpretive and educational exhibits and materials that build on existing programs at the VNHR. These programs should build on the existing long-range educational plan of the VNHR and should be geared to teaching the history and prehistory of the Pacific Northwest, including transportation history, from the unique standpoint of the VNHR. The CRC project should provide support to NPS to develop educational materials and exhibits related to the scientific exploration of cultural and natural resources, including sustainability, the reconstruction of past cultures, and environmental/ social consequences of leadership and policy.

**F-003-029**

- NPS supports returning historic properties affected by construction to their original condition and mitigating noise from construction during special events at the VNHR, including the site's Candlelight Tour, Brigade Encampment, and special events in the Vancouver Barracks, the Hudson's Bay Company Village, in Old Apple Tree Park, and on the Confluence Project Land Bridge.

**F-003-030**

Contact Information

For questions concerning FOVA and VNHR, please contact:

VNHR is being closely coordinated with the NPS. Appropriate elements of the final mitigation plan have been incorporated into the Final EIS and the Section 106 MOA.

**F-003-026**

The project team has invited each of the eleven consulting tribes (and offered to provide reimbursement for their efforts) to prepare their oral histories regarding, among other things, traditional uses within the general CRC Project area. To date, two of the tribes have accepted the invitation. These oral histories will help the tribes maintain a record of traditional uses of the area, and help further define the ethnohistoric and cultural anthropology of the area.

**F-003-027**

The project team has coordinated with consulting parties as identified under Section 106 of the Historic Preservation Act, including the NPS and its partners, to fulfill the Section 106 process. We have made commitments to appropriate evaluation, cataloguing, and mitigation for impacts after avoidance and minimization efforts have been exhausted. All archaeological and cultural resources are being addressed through the Section 106 process (36 CFR 800).

**F-003-028**

The DEIS listed a variety of measures to consider as potential mitigation and enhancement for historic resources. The final set of mitigation documented in the Section 106 Memorandum of Agreement has been developed with input from VNHR partners including agreement from the NPS.

**F-003-029**

Minimization and mitigation measures may contribute to appropriate rehabilitation of directly impacted resources. Regarding construction

**F-003-030**

Ms. Tracy Fortmann  
Superintendent  
Fort Vancouver National Historical Site  
612 E. Reserve St.  
Vancouver, WA 98661-3897  
(360) 816-6205

For questions concerning the Lewis & Clark Trail, please contact:

Mr. Dan Wiley  
Chief, Resources Stewardship  
National Park Service  
601 Riverfront Drive  
Omaha, NE 68102  
(402) 661-1830

For questions concerning Section 4(f), please contact:

Ms. Kelly Powell  
Regional Environmental Coordinator  
National Park Service  
168 S. Jackson St.  
Seattle, WA 98104-2853  
(206) 220-4106

For questions concerning the FLP Program, please contact:

Mr. David Siegenthaler  
Project Manager  
1111 Jackson St.  
Oakland, CA 94607-5807  
(510) 817-1324

For questions regarding United States Fish and Wildlife concerns, please contact:

Ms. Kathy Roberts  
Oregon Fish and Wildlife Office  
2600 SE 98<sup>th</sup> Avenue, Suite 100  
Portland, OR 97266  
(503) 231-6179

noise, we understand the need, for example, to have a historically appropriate setting for significant public events such as Brigade Encampment, Campfires and Candlelight, and the like. We will work with NPS programming leads to minimize impacts to these events.

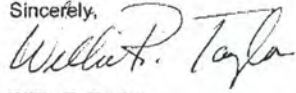
**F-003-030**

The project has benefitted from continued discussions with DOI throughout the development of the FEIS both through our ongoing coordination with state and federal regulatory agencies through the InterCEP group, and separately as needed through meetings with DOI staff. Please contact us with any thoughts about our intended approach to addressing your issues and concerns as outlined in this letter.

F-003-030

Thank you for the opportunity to provide these comments.

Sincerely,



Willie R. Taylor  
Director, Office of Environmental  
Policy and Compliance

Attachment



United States Department of the Interior

NATIONAL PARK SERVICE  
Pacific West Region  
909 First Avenue, Fifth Floor  
Seattle, Washington 98104-1060



IN REPLY REFER TO:  
PWRO-EC

September 26, 2007

Mr. Doug Ficco  
Project Director  
Columbia River Crossing Project  
700 Washington Street, Suite 300  
Vancouver, WA 98660

Dear Mr. Ficco:

F-003-031

The National Park Service, Pacific West Regional Office in Seattle, Washington, recently received a copy of Environmental Manager Heather Gunderson's letter addressed to the National Park Service, Fort Vancouver National Historic Site ("FOVA"), dated May 29, 2007, and of FOVA's response, dated June 28, 2007. Ms. Gunderson's letter solicited assistance from FOVA on identifying an appropriate "Area of Potential Effects" ("APE") as part of the National Historic Preservation Act's required Section 106 consultation process for the Columbia River Crossing ("CRC") project. We are responding directly to you as Project Manager and will copy in Ms. Gunderson.

In addition to FOVA, another unit of the National Park System ---the Lewis and Clark National Historic Trail ("Lewis & Clark Trail")---is within the vicinity of the proposed CRC project. There is a campsite near the southeast corner of Fort Vancouver. Any Section 106 consultation that may be required for the Lewis & Clark Trail should be directed to:

Mr. Dan Wiley  
Chief, Resources Stewardship  
National Park Service  
601 Riverfront Drive  
Omaha, NE 68102  
(402) 661-1830

The following parks in Washington State are protected under Section 6(f) of the Land and Water Conservation Funds ("LWCF") Act:

Arnold Park  
Washington Department of Fish and Wildlife fishing access sites along the Columbia River  
Burnt Bridge Creek Trail

Under the LWCF Act, a conversion may occur if the project results in a change of outdoor public recreational use of the protected area. The NPS must approve the conversion, and the project proponent must provide replacement property of equal fair market value and reasonable equivalent usefulness and location.



ATTACHMENT

F-003-031

See responses to comments in the preceding letter. Thank you for submitting this documentation.

**F-003-031**

In Oregon, East Delta Park is protected by Section 1010 of the Urban Parks and Recreation Recovery ("UPARR") Act, which has similar approval and conversion requirements to the LWCF Act.

The contact for Washington parks protected by the LWCF Act and for all parks protected by the UPARR Act is:

Heather Ramsay  
LWCF & UPARR Project Manager  
National Park Service  
Pacific West Region, Partnership Programs  
909 First Avenue, Floor 5  
Seattle, WA 98104-1060  
(206) 220-4123

Finally, the following parks in the CRC project area are protected by NPS through the Federal Lands to Parks ("FLP") program:

College Park  
Marshall Park  
Dr. McLoughlin's Apple Tree  
GSA Park  
Vancouver Barracks  
East Delta Park

The contact for the FLP program is:

David Siegenthaler  
Project Manager  
1111 Jackson St  
Oakland, CA 94607-4807  
(510) 817-1324

Section 106 mitigation for resources within Fort Vancouver National Historic Site's boundary and that of the Vancouver National Historic Reserve should be coordinated with Ms. Tracy Fortmann, Superintendent. Mitigation for recreational impacts to any FLP, LWCF, and UPARR site within FOVA is separate from and in addition to any Section 106 mitigation, and should be coordinated through Ms. Ramsay or Mr. Siegenthaler, as appropriate. However, Superintendent Fortmann will continue to be the NPS lead and involved in all cultural resource issues within the National Park and the Vancouver National Historic Reserve.

Please note that Section 4(f) of the Department of Transportation Act applies and requires avoidance of Section 4(f)-protected areas, unless there are no feasible and prudent alternatives. If no feasible and prudent alternative exists, then all possible planning to minimize harm must occur. Per the Federal Highway Administration's guidance on Section 4(f), the alternative that results in the least amount of harm to Section 4(f)-protected resources must usually be chosen, although non-4(f)-protected resources, such as wetlands or endangered species, may factor into choosing an alternative that results in more harm to 4(f)-protected resources.

F-003-031

Finally, under the Redwood National Park Expansion Act of 1978, the NPS has authority to address activities occurring outside a park unit that impact the park. In short, there is extensive protection over national and local parks, including cultural and historical resources, within the CRC project area. We appreciate the efforts already taken by the CRC project to identify an adequate APE in order to account for all potentially affected historic, archaeological, and traditional cultural properties. Even at this early stage, however, we note that the preliminary APE seems to suggest that all CRC project alternatives will be concentrated near the FOVA and other protected park areas. We strongly urge the CRC project administrators and project managers to make every effort to avoid impacts to these areas. We are enclosing a copy of Superintendent Fortmann's recent letter to Ms. Heather Gunderson for your additional information.

All reasonable and prudent alternatives must be considered that would provide an option to taking such a large swath through the I-5 corridor and its associated adverse impacts on the historic components of the Vancouver National Historic Reserve and of Fort Vancouver National Historic Site.

Ms. Kelly Powell reviews Section 4(f) analyses contained in various environmental planning documents on behalf of the NPS for projects proposed in Washington, Oregon, and Idaho. Please follow the enclosed environmental review process for the Department of the Interior. For your convenience, Ms. Powell's contact information is as follows:

Kelly Powell  
Environmental Compliance Specialist  
National Park Service  
168 S. Jackson St., 2<sup>nd</sup> Floor  
Seattle, WA 98104-2853

We appreciate the opportunity to provide these comments and look forward to your working cooperatively with us to ensure the protection of these naturally significant resources.

Sincerely,



Rory D. Westberg  
Deputy Regional Director

Enclosures

cc: Heather Gunderson, CRC Environmental Manager  
Tracy Fortmann, NPS, Superintendent, Fort Vancouver, NHS  
Dr. Doug Wilson, NPS, PWR Historical Archaeologist  
Kelly Powell, NPS, PWR Environmental Compliance Specialist  
David Siegenthaler, NPS, PWR FLP Project Manager  
Heather Ramsay, NPS, PWR LWCF & UPARR project Manager

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