

**Rust, Lynn**

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**From:** Don.Larson@faa.gov  
**Sent:** Friday, June 20, 2008 10:21 AM  
**To:** Gundersen, Heather; Rust, Lynn  
**Cc:** Carolyn.Read@faa.gov; Stan.Allison@faa.gov; Mike.Fergus@faa.gov; robert.van.haastert@faa.gov; Steve.Karnes@faa.gov; Diane.Fuller@faa.gov  
**Subject:** Columbia River Crossing - FAA comments on May 2008 draft EIS  
**Attachments:** Columbia Crossing EIS FAA Comments.doc; CRC EIS FAA Attachment.PDF



Columbia Crossing CRC EIS FAA  
EIS FAA Comm... tachment.PDF (26.

Signed original in the mail.

(See attached file: Columbia Crossing EIS FAA Comments.doc)(See attached file: CRC EIS FAA Attachment.PDF)

Don M. Larson  
Regional Capacity Program Manager  
Airports Division, ANM-615  
1601 Lind Ave. SW, #315  
Renton, WA 98057  
(425) 227-2615  
Fax: 227-1600  
don.larson@faa.gov

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U.S. Department  
of Transportation

**Federal Aviation  
Administration**

**Northwest Mountain Region**  
Colorado, Idaho, Montana  
Oregon, Utah, Washington,  
Wyoming

1601 Lind Avenue, S. W., Ste 315  
Renton, Washington 98057

June 20, 2008

Ms. Heather Gundersen  
CRC Environmental Project Manager  
Columbia River Crossing  
700 Washington Street, Ste. 300  
Vancouver, WA 98660

Dear Ms. Gundersen:

Interstate 5 Columbia River Crossing (CRC) Project  
Draft Environmental Impact Statement (EIS)

We have reviewed the May 2008 draft EIS for the CRC project. In accordance with the February 14, 2006, letter (Attachment 1) from the Federal Aviation Administration (FAA), Northwest Mountain Region Administrator, our review was limited to aeronautical-related issues. Specifically, FAA's interest in this project primarily concerns the potential effects of the proposed bridge structure, including temporary construction equipment (cranes), on the navigable airspace and navigational aids, especially those associated with Portland International Airport (PDX) and Vancouver's Pearson Field (VUO).

Previously, we had conducted an aeronautical feasibility study on three conceptual alternatives (see Attachment 2, June 14, 2006, determination letter) and had commented informally on the June 2007 draft Aviation Technical Report (see Attachment 3, partial email correspondence). Those attachments are included again for your convenience.

Our understanding of the alternatives is that none will penetrate the airport imaginary surfaces (14 CFR Part 77) any more than the existing bridge structures, and that the replacement alternatives would actually reduce the amount of penetration by removing existing bridge structures. From an aeronautical standpoint only, we would prefer a bridge option that would prevent or reduce airspace obstruction to the maximum extent practicable. Our specific comments on the draft EIS are as follows:

1. Page 2-17, last para. (also, page 5-27, para. 4) – We understand the trade-off between river- and air-navigation requirements and concur with the statements precluding tall towers and cable-stay or truss-type construction.
2. Page 3-93, para. 3 – As noted above, the replacement alternatives, 2 and 3, reduce airspace obstruction more than any alternatives leaving in place the existing bridge structures, and therefore are preferable for that purpose.
3. Page 3-93, para. 4 (also, page 5-68, para. 4) – The final design should seek to reduce the penetrations of the approaches/ramps (as well as the bridge structure itself) insofar as possible.
4. Page 3-95, para. 5 – Form FAA Form 7460-1, *Notice of Proposed Construction or Alteration*, will have to be filed with FAA for each temporary construction crane, indicating its maximum height and lateral extent of the boom. The form can be filed online; presently, the online filing address is: <https://oeaaa.faa.gov/oeaaa/external/portal.jsp>.

5. Page 3-96, para. 2 – We concur with the statements regarding obstruction lighting and the prevention of light glare that could affect air navigation.
6. Page 5-68, para. 5 – The aforementioned Form 7460-1 will also have be filed with FAA for the actual construction of the bridge structures. We recommend that it be filed at not later than a 10-percent design stage, or as soon as the footprint and elevation profiles are tentatively established.

If you have any questions, please contact me at (425) 227-2615.

Sincerely,

Don M. Larson  
Regional Capacity Program Manager

Enclosures

ATTACHMENT 1

U.S. Department  
of Transportation  
Federal Aviation  
Administration

Northwest Mountain Region  
Colorado, Idaho, Montana, Oregon  
Utah, Washington, Wyoming

1601 Lind Avenue, S. W.  
Renton, Washington 98055-4056  
Tel: (425) 227-2007  
Fax: (425) 227-1007

FEB 24 2006

Mr. R. F. Krochalis  
Regional Administrator  
Federal Transit Administration  
915 Second Ave., Ste. 3142  
Seattle, WA 98174

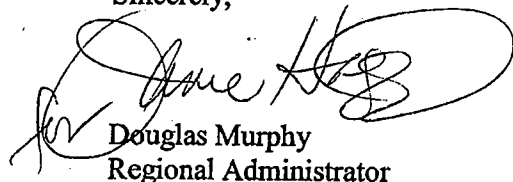
Dear Mr. Krochalis:

This is in response to your letter of December 14, 2005, regarding the I-5 Columbia River Crossing project. The Federal Aviation Administration (FAA), Northwest Mountain Region, accepts your invitation to serve as a cooperating agency in the National Environmental Policy Act (NEPA) environmental impact statement (EIS). FAA's interest in this project concerns the potential effects of the proposed bridge structure, including temporary construction equipment (cranes), on the navigable airspace and navigational aids, especially those associated with Portland International Airport (PDX) and Vancouver's Pearson Field (VUO). Our review and comments on this study's documents will be limited to aeronautical-related issues, and this should be outlined in a memorandum of understanding (MOU) between our agencies at the outset. Please provide a draft MOU for our review, or let us know if we should prepare it.

The Seattle Airports District Office (ADO) will be the lead for the FAA in this process, and will coordinate involvement of the other operating divisions (Air Traffic, Airway Facilities, Flight Procedures and Flight Standards) as necessary. In fact, we have already begun our advisory participation, as the Columbia River Crossing study team presented a briefing to FAA interdivisional staff here at the Regional Office on December 9, and received our initial feedback and interest in continued participation at that time. Our principal contact person will be Don Larson for airport/airspace planning and notice of proposed construction. Please feel free to contact him directly at (425) 227-2652.

Thank you for the invitation to participate in this project as a cooperating agency.

Sincerely,



Douglas Murphy  
Regional Administrator



U.S. Department  
of Transportation

**Federal Aviation  
Administration**

**Seattle Airports District Office**  
1601 Lind Avenue, S. W., Ste 250  
Renton, Washington 98055-4056

June 14, 2006

Ms. Lynn Rust  
Columbia River Crossing Project  
700 Washington Street  
Suite 300  
Vancouver, WA 98660

Dear Ms. Rust:

Portland, Oregon – Vancouver, Washington  
Airspace Analysis Results for Feasibility Studies  
Columbia River Crossing Project

The Federal Aviation Administration (FAA) has completed its review of your request for feasibility studies, per FAA Order 7200-2E, para. 6-1-6, on three conceptual alternatives for a new bridge near Pearson Field (VUO), Vancouver, Washington, and over the Columbia River between Vancouver and Portland, Oregon, as shown on the plans attached to your *Notice(s) of Proposed Construction or Alteration* (FAA Form 7460-1) dated May 1, 2006. The findings and comments from these studies are consolidated into one report below.

**Aeronautical Study No. 2006-ANM-272-NRA – Downstream mid-level replacement bridge “RC-3”**

It has been determined that the critical location of this proposal is Point 309, an existing tower (to be removed with proposed demolition of the existing bridge), which penetrates the Part 77 transitional surface for Runway 8-26 at VUO by 66.6 feet. The future critical location would be Point 304, which would penetrate the VUO horizontal surface by 26.46 feet. The proposal would not penetrate any existing or future Part 77 surface for Portland International Airport (PDX).

**Air Traffic Division (AT) states:** This lat/long has PART 77 busts: horizontal by 63 feet and transition by 72 feet - a bit more than 27 feet identified; a formal obstruction evaluation (OE) aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

**Airway Facility Division (AF) states:** The bridge will penetrate the obstacle clear zone of Pearson's RW 08 visual approach slope indicator (VASI). (Peter Markus, 425-227-1450)

**Seattle Flight Procedure Office (SEA-FPO) states:** Current VUO RWY 26 instrument flight rules (IFR) departure procedure (DP) climb gradient is 650'/nautical mile (NM); and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' mean sea level (MSL) Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49'MSL @ 2975' from 30' elev threshold height—TH). 460'/NM for option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @

2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately 410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

**Aeronautical Study No. 2006-ANM-273-NRA – Upstream mid-level replacement bridge “RC-4”**

It has been determined that the critical location of this proposal is Point 309, an existing tower (to be removed with proposed demolition of the existing bridge), which penetrates the Part 77 transitional surface for Runway 8-26 at VUO by 66.6 feet. After removal of the existing bridge, no part of the replacement bridge would penetrate any existing or future Part 77 surface for either VUO or PDX.

**Air Traffic Division (AT) states:** This lat/long and elevation has PART 77 bust: VUO RWY 08 transition by 72 feet - a bit more than identified; a formal OE aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

**Airway Facility Division (AF) states:** Tech-Ops has no objection provided the associated traffic lights and freeway signs do not penetrate the obstacle clear zone of Pearson's RW 08 VASI. (Peter Markus, 425-227-1450)

**Seattle Flight Procedure Office (SEA-FPO) states:** Current VUO RWY 26 IFR DP climb gradient is 650'/NM; and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' MSL Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49' MSL @ 2975' from 30' elv TH). 460'/NM for option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @ 2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately 410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

**Aeronautical Study No. 2006-ANM-274-NRA – Upstream low-level supplemental bridge “RC-8”**

It has been determined that the critical location of this proposal is Point 801, which would penetrate the VUO transitional surface by 72.3 feet. The proposal would not penetrate any existing or future Part 77 surface for PDX.

**Air Traffic Division (AT) states:** This lat/long has PART 77 busts: horizontal by 69 feet and transition by 72 feet - a bit more than identified; a formal OE aeronautical study will need to be conducted after this feasibility study. (Robert van Haastert, 907-271-5863)

**Airway Facility Division (AF) states:** When the bridge is open for marine traffic, it will penetrate the obstacle clear zone of Pearson's RW 08 VASI (Peter Markus, 425-227-1450)

**Seattle Flight Procedure Office (SEA-FPO) states:** Current VUO RWY 26 IFR DP climb gradient is 650'/NM; and, is controlled by the existing I5 Bridge. If the existing I5 bridge were not present, the climb gradient would be 269'/NM with the 535' MSL Columbia River Crossing transmission line tower @453557N/1224312W becoming controlling. Approximate Climb Gradients: 435'/NM for option RC-3 (191.49' MSL @ 2975' from 30' elv TH). 460'/NM for

option RC-4 (approx 180' MSL @ 2700' from 30' elv TH). 710'/NM for option RC-8 (251' MSL @ 2500' from 30' elv TH) Even though RC-3 is higher than RC-4, it results in a lower climb gradient because it is further from VUO's TH. Suggest proponent explore the 180' msl design (ala RC-4) constructed on the West side of the existing I5 bridge. That gradient would be approximately 410'/NM (approx 180' MSL @ approx 2975' from 30' elv TH). (Vic Zembruski, 425-227-2224)

The **Flight Standards Division** stated "no objection" on all three alternatives. If you have any questions on the foregoing comments, please contact the specialists at the numbers listed. Once a final plan has been decided upon for the bridge, a *Notice of Proposed Construction or Alteration* (FAA Form 7460-1) must be submitted to FAA for a formal OE aeronautical study, preferably not later than at a ten-percent design stage. If you have any other questions please contact me at (425) 227-2652.

Sincerely,

**ORIGINAL SIGNED BY  
DON M. LARSON**

Don M. Larson  
Airport Planner

ATTACHMENT 3

Steve Karnes/ANM/FAA  
ATO, Western System Support  
Group

04/14/2008 12:49 PM

To Don Larson/ANM/FAA@FAA  
cc  
bcc  
Subject Fw: Columbia River Crossing - 2nd Feasibility Study Request  
& Draft Aviation Technical Report

Hi Don,

Here is the e:mail trail that Lynn last rec'd from Robert. I had a telephone conversation with her and that was all she needed. She did mention that they planned to have the Draft EIS ready by May 2nd.

Steve Karnes  
X 4513

----- Forwarded by Steve Karnes/ANM/FAA on 04/14/2008 12:46 PM -----



"Rust, Lynn"  
<RustL@columbiarivercrossi  
ng.org>

04/14/2008 12:40 PM

To Steve Karnes/ANM/FAA@FAA  
cc  
Subject RE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study  
Request & Draft Aviation Technical Report

Lynn Rust  
Assistant Deputy Project Director  
I-5 Columbia River Crossing Project  
360-816-2177

**From:** robert.van.haastert@faa.gov [mailto:robert.van.haastert@faa.gov]  
**Sent:** Wednesday, January 09, 2008 8:59 AM  
**To:** Rust, Lynn  
**Cc:** Steve.Karnes@faa.gov  
**Subject:** RE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Hi Lynn,

Will an email work for you? If so, the FAA has no objections nor comments on the proposed Columbia River Crossing Draft Aviation Technical Report.

FAA point of contact: Steve Karnes, Western Service Area, System Support Group. Telephone: 425-917-6736; email: Steve.Karnes@faa.gov

Steve coordinated with the local FAA facilities and did all of the actual 'grunt' work.



When you have a final product, and if it is available in electronic format (pdf or word document), can you email us a copy or send a CD?

FAA / Western Support Group (AJO2-W2)

Attn: Steve Karnes  
1601 Lind Avenue, SW  
Renton, WA 98055

Robert van Haastert  
Obstacle Evaluation Service, Anchorage  
Specialist: AK, AZ, CO, ID, MT, OR, UT, WA, & WY  
phone: (907) 271-5863, fax: (907) 271-2850  
Sign up for email announcement of Public Notices at  
<https://oeaaa.faa.gov/oeaaa/external/searchAction.jsp?action=showSearchCircularizationForm>

"Rust, Lynn"  
<RustL@columbiarivercrossing.org>

01/09/2008 07:26 AM

To: Robert van Haastert/AAL/FAA@FAA  
cc

Subject: RE: FW: Fw: Columbia River Crossing - 2nd Feasibility Study Request & Draft Aviation Technical Report

Hello Robert,

I got your voice mail yesterday. Thank you. I like to here no objections. Did you have any comments on the tech report?

Are you or will you send us written correspondence to close the loop on this? Or an email?

Thanks again.

Lynn Rust  
Assistant Deputy Project Director  
I-5 Columbia River Crossing Project  
360-816-2177



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY****REGION 10**

1200 Sixth Avenue, Suite 900  
Seattle, Washington 98101-3140

July 1, 2008

Reply to  
Attn of: ETPA-088

05-052-FHW

Mr. John McAvoy, PE, Major Projects Manager  
Federal Highway Administration  
Western Federal Lands Building  
610 E. 5<sup>th</sup> St.  
Vancouver, Washington 98661

Ms. Linda Gehrke, Deputy Regional Administrator, Region 10  
Federal Transit Administration  
915 Second Avenue, Suite 3142  
Seattle, Washington 98174

Dear Mr. McAvoy and Ms. Gehrke:

The U.S. Environmental Protection Agency has reviewed the Interstate 5 Columbia River Crossing Project Draft Environmental Impact Statement (DEIS) and Draft Section 4(f) Evaluation. We are submitting comments in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act.

The Columbia River Crossing (CRC) DEIS is a bridge, transit, and highway improvement project proposed by the Oregon and Washington Departments of Transportation (ODOT and WSDOT), Southwest Washington Regional Transportation Commission (RTC), Metro, Clark County Public Transportation Benefit Area (C-TRAN), and Tri-County Metropolitan Transportation District (TriMet) to improve safety and mobility in the I-5 corridor between Portland, Oregon and Vancouver, Washington. The CRC project is focused on a five mile segment of the I-5 corridor from SR 500 in Vancouver to approximately Columbia Boulevard in Portland. The alternatives include the No Action alternative and four multi-modal action alternatives. The action alternatives each contain similar highway improvements, high capacity transit in the form of either Light Rail Transit (LRT) or Bus Rapid Transit (BRT) with several transit alignment and length options, and either replace or supplement the existing bridges over the Columbia River. Each action alternative also improves bicycle and pedestrian facilities, considers tolling on the bridges, and implements transportation system management and demand measures (TSM and TDM).

EPA is generally supportive of this project, however we have concerns about certain aspects of the project as represented in the draft EIS. EPA commends the project proponents for proposing a multi-modal project and tolling along with Transportation System Management and Transportation Demand Management (TSM/TDM) measures. These are positive steps to reduce single occupancy vehicle (SOV) travel as well as to expand, diversify, and help to fund the transportation system. We also appreciate being involved in the InterCEP process, where, to the extent resources allowed, we offered comments regarding several natural resource aspects of the project. Our scoping comment

letter of 12/14/05 identified additional points of interest for EPA. As a result of our review, we are primarily concerned about:

- The need for more information about potential impacts to groundwater and the Troutdale Sole Source Aquifer, particularly from pile driving activities in waters containing contaminated sediments, construction in hazardous materials sites, and routine excavation and construction activities.
- The need for project-related air quality analysis, particularly for near roadway concentrations of, human exposures to, and potential health effects from air toxics, diesel exhaust and particulate matter. Susceptible individuals and populations and sensitive receptor locations were not identified, and no mitigation is proposed.
- The need for identification, analysis, disclosure and mitigation for potential disproportionate environmental and human health impacts to low income and minority populations and communities residing in and near the project area.
- The need for more information regarding impacts to aquatic resources, including stormwater and construction-related impacts to water quality, 303(d) listed streams, and subsistence fishing uses.

We have additional concerns regarding the potential impacts resulting from land use changes and reduced travel times. More detailed discussion is provided in the enclosure. Based on the issues identified above, we have rated the EIS and each of its alternatives as EC-2, Environmental Concerns, Insufficient Information. An explanation of this rating is enclosed.

EPA thanks the Columbia River Crossing Environmental Office for meeting with us on June 10, 2008, and we thank the Federal Transit Administration, the Federal Highway Administration, and the CRC Office for the June 18, 2008 conference call with us to discuss environmental justice and related issues. We look forward to continued dialog to resolve outstanding issues. We are hopeful that our continued collaboration will result in a project that offers exceptional benefits for transportation as well as the human and natural environment.

If you have questions or would like to discuss our comments, please contact me at (206) 553-1601 or at [reichgott.christine@epa.gov](mailto:reichgott.christine@epa.gov), or Elaine Somers of my staff at (206) 553-2966 or at [somers.elaine@epa.gov](mailto:somers.elaine@epa.gov). Thank you for the opportunity to be involved in this important project.

Sincerely,

Christine B. Reichgott, Manager  
NEPA Review Unit

Enclosures

cc: Ms. Heather Gundersen, CRC Environmental Manager

**U.S. Environmental Protection Agency  
Detailed Comments on the  
I-5 Columbia River Crossing Draft EIS**

**Groundwater**

The CRC DEIS has limited information on the groundwater system underlying the proposed project, including information about the federally designated Troutdale Sole Source Aquifer and about groundwater underlying the Oregon portion of the project area. It is important to disclose in the EIS that for a designated Sole Source Aquifer, the Safe Drinking Water Act states that "...no commitment for federal financial assistance (through a grant, contract, loan guarantee, or otherwise) may be entered into for any project which the [EPA]Administrator determines may contaminate such aquifer through a recharge zone so as to create a significant hazard to public health, but a commitment for federal assistance may, if authorized under another provision of law, be entered into to plan or design the project to assure that it will not so contaminate the aquifer."

The Hydrology and Water Quality Technical Report mentions the Sole Source Aquifer and wellhead protection zones within the primary and secondary Areas of Potential Impact (APIs), and indicates that there may be temporary groundwater quality impacts from the construction of roadways or fixed guideways below-grade and close to the water table. The Report also states that the City of Vancouver has designated the entire area within the City boundary as a Critical Aquifer Recharge Area, and that no detailed analysis of the depth to water table within the project area has been conducted.

We are concerned that neither the Draft EIS nor the Technical Reports provide details regarding the physical environment of the aquifer and of the contamination risks. The discussion of potential groundwater impacts is equal in importance to the analysis of potential air and surface water impacts. It is important to provide this information in the EIS along with mitigating measures that will ensure the project is protective of the Sole Source Aquifer. As presented, the EIS does not enable EPA to make an informed evaluation of the potential impacts of the project on the groundwater resource.

*Recommendations:*

- In the Final EIS, include a section devoted specifically to groundwater, which includes the description of the Affected Environment, the impacts associated with the alternative and alignment options, and the environmental and human health effects of each.
- In the Affected Environment discussion for groundwater, describe the groundwater resources underlying the project area. In order to analyze potential impacts to groundwater and to the sole source aquifer in particular, the following information is needed: a figure that shows water level elevation contours of the area, cross sections depicting aquifer stratigraphy and water level depth, maps of any contaminant plumes known to exist in the area, and maps showing ground water flow directions. The project area should then be overlain on the figures and maps.
- We would suggest that the following information be included in the Environmental Consequences discussion for groundwater:
  - Maps of locations of all existing hazardous materials sites;

- Maps showing existing ground water contamination;
  - Maps showing existing soil contamination;
  - Indicate whether there is a potential for an existing plume of contamination to be transported to a deeper part of the aquifer system as the holes are dug for the bridge pilings or other structures, or otherwise exacerbate the groundwater contamination issues in the project area;
  - A description of the impacts of the placement of bridge and overpass piers and pilings (indicate if there is a potential for contaminants to be transported from the soil or sediments into the ground water at any of these sites);
  - A map of existing wells, both private and public, and a description of the anticipated impacts on the wells and on the wellhead protection areas.
- Evaluate the groundwater impacts from all the proposed alternatives, including cumulative effects. Include in the ground water evaluation the specifics of existing contamination plume locations and proposed mitigation measures.

### **Air quality, Mobile Source Air Toxics**

Operational impacts: The Draft EIS estimated operational emissions of all air pollutants from mobile sources for the four-county region and from four subareas or highway segments along the I-5 corridor. Based on the projected changes due to EPA regulations and fleet change over time, the EIS concludes (p. 3-277) that year 2030 emissions would be less than current conditions and the differences among alternatives would be unsubstantial. This regional scale air pollutant emissions discussion may be misleading since emissions at this scale do not necessarily correlate with ambient air quality. We believe that the Draft EIS needs to include additional information on the actual air quality effects of the project:

- The focus of the EIS should be on the change in air quality and clearly distinguish between project induced emission changes vs. changes caused by fleet turnover and more stringent new vehicle emission standards.
- The Draft EIS analysis focuses on emission trends that are not influenced by the project. It is difficult to provide meaningful disclosure of impacts of air pollutants through an evaluation of emissions alone. This approach dismisses the air quality impacts at the micro scale, meteorology and prevailing wind direction, topography, proximity of mobile sources to sensitive receptors, and the combined effects of other air pollution sources. The Portland Air Toxics Assessment demonstrates that there are tools available for this type of analysis.
- There is no analysis or disclosure of near roadway pollutants – their composition, concentrations, identification of the sensitive receptor locations and populations, and the associated potential human health effects<sup>1</sup>. This information would be particularly relevant to the communities and populations living within approximately 500 yards of the

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<sup>1</sup> A large number of recent studies have examined the association between living near major roads and different adverse health endpoints. Several well-conducted epidemiologic studies have shown associations with cardiovascular effects, premature adult mortality, and adverse birth outcomes, including low birth weight and size. Traffic-related pollutants have been repeatedly associated with increased prevalence of asthma-related respiratory symptoms in children. Also, based on toxicological and occupational epidemiologic literature, several of the MSATs, including benzene, 1,3-butadiene, and diesel exhaust, are classified as known and likely human carcinogens. Thus, cancer risk, including childhood leukemia, is a potential concern in near roadway environments. For additional information on MSATs, please see EPA's MSAT website <http://www.epa.gov/otaq/toxics.htm>.

roadway, although the distance may vary depending on traffic and environmental conditions, and are hotspot in nature when there are localized concentrations.

*Recommendation:* Provide an analysis of project related air quality impacts in the Final EIS that is responsive to the above comments.

Construction impacts: One of the important findings of the Portland Air Toxics Assessment was the impacts of construction sites on micro scale air quality. These air quality effects can be significant. Air toxics emissions, particularly diesel exhaust, are known or suspected to cause cancer or other serious health effects, such as respiratory, neurological, reproductive, and developmental effects.

*Recommendation:* Include in the air quality section additional information on the duration, nature of, and special extent of construction impacts on air quality. Include a discussion of potential health impacts. Identify the affected populations and sensitive receptor locations.

There are now many opportunities to reduce the effects of project construction. Please see the Clean Construction USA website at <http://www.epa.gov/otaq/diesel/construction/>. At this website are examples of construction mitigation measures not included in the Draft EIS. The website also includes case studies and examples of institutional arrangements for implementing this mitigation.

*Recommendation:* Augment the construction mitigation measures listed in the Draft EIS to include additional mitigation measures listed on this website, and commit to their implementation.

There is also a Construction Sector within the West Coast Collaborative at <http://www.westcoastdiesel.org>, which is a public private partnership to reduce diesel emissions. The Construction and Distributed Generation Workgroup explores opportunities to share information and/or seek funding for a variety of projects including: using the NEPA review process to require construction emissions mitigation plans; contractual incentives, and providing incentive funding for smaller companies for pollution controls. Projects such as the Columbia River Crossing are encouraged to participate in this Workgroup.

*Recommendation:* Participate in the Construction and Distributed Generation Workgroup to share information, and help to advance additional means to mitigate construction emissions.

Correction to text: A correction is needed on page 3-274, where the text states that “No regional conformity analysis is required for the Vancouver area.”

*Recommendation:* Revise the above language to state, “No regional emissions analysis for conformity is required for the Vancouver area.”

## Environmental Justice

The CRC project would potentially result in direct and indirect impacts to project area residences, businesses, and neighborhoods, which meet the criteria under Executive Order 12898 on Environmental Justice as being inhabited predominantly by low income and minority populations. Affected neighborhoods also include those that have unusually high populations of elderly and disabled residents. Children are also present throughout these communities, but they do not appear to have been accounted for in the demographic analysis of the EIS. Due to the diverse, largely disadvantaged, multi-cultural, and multi-lingual characteristics of the affected populations, neighborhoods, and communities, and because the project has the potential to exacerbate conditions that are currently affecting human health and well being in the project area, EPA believes that extra measures may be necessary to ensure effective public participation and sufficient and appropriate mitigation for project impacts.

We have environmental justice concerns primarily related to human health and safety, which are both project specific and cumulative in nature. These include air quality, noise, and neighborhood safety, particularly for children, the elderly, and the disabled. We also note potential impacts to community resources and the disproportionate economic burden to low income, elderly, disabled, and minority communities posed by current and potential future property impacts, potential human health effects, taxes, and tolls. We believe that that the potential mitigation concepts presented in the Draft EIS may not go far enough to address the magnitude and scope of potential impacts to these disadvantaged neighborhoods.

Our Environmental Justice concerns with the Draft EIS are that:

- The direct and indirect environmental, human health, social, and economic project impacts would likely affect the low income, minority, elderly, and disabled populations disproportionately as compared to populations that reside outside the project area and throughout the region.
- Some potential impacts, that could be significant, are not identified in the EIS.
- Analysis, disclosure, and mitigation for many impacts of the proposed project appear insufficient. As a result, the project may exacerbate conditions that are currently affecting human health and well being in the project area (such as air pollution, noise, financial stress, construction zone traffic, safety hazards, and health effects, potential contamination of drinking water and subsistence food supplies);
- Citizen allegations and documentation indicate that there is concern that the public participation process, while extensive in nature, may not have fully engaged and informed affected populations so that they feel they are well informed, involved, heard, and responded to in project development, implementation, and operation.

Census demographics: Two vulnerable populations are identified in the census demographics exhibit, “disabled” and age 65 or older. There has been no mention of children. The schools, (but not the childcare centers), in the project area were identified but there was no indication of how these vulnerable populations might be impacted by air pollution, noise, diesel construction vehicles, increased traffic, and other activities. Key to the vulnerable population



discussion is health information. For example, the asthma rate for the school age population should be disclosed. Specific information of this nature with details on potential impacts can provide a better sense of where the impacts are actually occurring and who, which racial minority, for example, might be disproportionately impacted.

*Recommendations:*

- In the Final EIS, expand the demographic analysis to include children that would potentially be affected by the proposed project.
- Characterize/provide a baseline description of the existing health within the potentially affected communities and neighborhoods. For example, the following types of information would be relevant and useful: the asthma rate for children and adults, information about the rates of cardio-vascular disease, other respiratory impairments, and premature deaths.

Public involvement: There is not sufficient information in the Environmental Justice (EJ) Section of the Draft EIS to determine the extent and quality of the public involvement efforts. In our discussions with CRC Environmental Managers on June 10, 2008, we became aware of the depth and breadth of outreach and involvement efforts that were not described in the draft EIS. It was clear that an initial mailing of hundreds of post cards informing residents of possible displacements produced surprisingly few attendees at the subsequent public meeting on that subject. While later meetings reportedly saw improved participation, it is not yet clear whether affected individuals were adequately informed or involved. The fundamental question is whether or not the community members are satisfied with the level of participation, quality of information and the responsiveness of the CRC project proponents to their input. We would also like to know more about how the Community and Environmental Justice group evaluates the quality and effectiveness of its interactions and outreach efforts.

*Recommendations:*

- In the Final EIS, disclose more information about the participation levels and cross neighborhood representation at the various meetings, the concerns of the residents, what was learned in the process of trying to reach and involve diverse communities, and indicate how public input was incorporated into the project and decision making.

Cumulative impacts: Given the importance of cumulative impacts to EJ communities and other on-going and anticipated projects in the CRC project area or nearby, such as expansion of rail infrastructure, port expansions, and other road improvements and projects, a thorough analysis specifically dealing with EJ implications of cumulative impacts is warranted. The cumulative impacts discussion in the EIS for EJ (p. 3-427) mentions only tolling as a possible negative effect on the affected communities, and implies that because the construction of I-5 in the early 1960s divided neighborhoods and displaced residents that were composed of more minority and low income persons than in Portland and Vancouver as a whole, that the CRC related impacts are comparatively minor and can therefore be dismissed. We do not agree that past impacts of greater magnitude should negate the current and potential future impacts of the communities affected by the CRC project. The E.O. 12898 was issued specifically to address these injustices, with the intent to fully confront the impacts and give a voice to those similarly affected in the future.

Environmental Justice views traditional environmental concerns, such as water quality, open space, and wildlife as connected to social, cultural, and economic life. There should be information in the EJ section that attempts to portray a holistic picture of the impacts on diverse communities.

*Recommendation:* In the Final EIS, discuss the following issues and any other pertinent examples:

- How the project might impact subsistence fishing by local residents in the project area;
- Whether there is any information on the extent of this kind of activity given the Russian, Vietnamese and African-American populations, the poverty levels and the proximity of shoreline in the project area;
- Whether there are urban creeks in the neighborhoods (such as Burnt Bridge Creek);
- How communities value and use these resources; and
- How this information has been incorporated into our understanding of impacts.

Mitigation: For impacts that primarily affect the neighborhoods and communities adjacent to I-5 and within the project area, particularly the populations of low income, minority, elderly, and or disabled, the potential mitigation measures do not appear sufficient to offset project impacts that are largely born by the most disadvantaged populations in order that substantial public benefits may be derived. Thus, in addition to other mitigation recommendations included in our CRC Draft EIS comments, we suggest a number of ways in which mitigation might be strengthened:

To mitigate the impacts to disadvantaged neighborhoods in the project area, the DEIS discusses potential relocations, such as displaced homes, businesses, and facilities. However, there is no mitigation discussed for impacts associated with partial takings that do not result in full displacement, or for impacts such as encumbered home sales and business leases due to potential project impacts. A means to mitigate these impacts should be discussed and developed with those affected.

For noise impact mitigation, residential sound insulation is mentioned as an FTA-allowed measure, but not traditionally funded by FHWA. Only noise walls were deemed feasible and reasonable by FHWA and appear as the only likely mitigation to be offered. We recommend including the FTA residential sound insulation mitigation measures, and other measures that would be appropriate and feasible, including, but not limited to, the planting of vegetation.

The potential mitigation listed for CRC tolling impacts do little to alleviate these financial impacts. Reduced rate transponders are not very helpful for those who cannot afford to own a car. Considering the scope of current and additional impacts being borne by the affected neighborhoods, it would seem appropriate to offer the low income residents free fare transit passes, and reduced fare passes to other affected residents.

The Delta Park transportation project in Oregon provided the affected low-income and minority communities with community enhancement funding. The communities do not administer the funds, but they select the projects that would be of benefit to their respective

communities. This is a positive form of mitigation that could be provided in the affected Vancouver and Portland neighborhoods.

Disabled and elderly individuals could be especially impacted by project construction within their neighborhoods, and by increased traffic accessing Park & Ride facilities located in or near their communities. To mitigate safety hazards to disabled and elderly pedestrians, it would be helpful and appropriate to provide shuttle services to meet their transportation needs both during project construction and to access public transit once the project is operational.

*Recommendation:* Adopt these mitigation measures and/or others not listed here that are recommended by concerned individuals and organizations, to lessen the existing CRC project-related, and cumulative impacts on the affected communities.

### **Aquatic resources**

Water quality and stormwater: The DEIS states (p. 3-384,385) that between 35 to 38 acres of untreated impervious surface would remain for each build alternative, and refers the reader to the CRC Conceptual Design Stormwater Report for a discussion of applied guidelines. It would be helpful to include an explanation as to why the remaining 35-38 acres would be untreated. It would also be helpful to know how stormwater would be treated and managed on the replacement or supplemental bridges.

The DEIS also states (p. 3-385) that Burnt Bridge Creek and the Columbia Slough could have increases in certain pollutants as a result of the CRC project compared to current conditions. The existing conceptual stormwater design would result in increased loads of dissolved copper in both of these 303(d) listed water bodies, and it is not stated whether or not other pollutant loadings would also be increased. On page 3-386, pollutant loadings are provided but effects on water quality and pollutant concentrations in water bodies are not quantified/estimated.

Construction impacts and stormwater pollutants would further degrade Burnt Bridge Creek, which flows into Vancouver Lake. Area residents, particularly people of low income, commonly fish in Vancouver Lake for subsistence. The DEIS does not disclose this or discuss the potential human health effects from this potential environmental consequence of the proposed project.

#### *Recommendations:*

- Provide a description of the stormwater treatment/management design in the Final EIS. Disclose the fate of stormwater from the remaining 35 to 38 acres of impervious surface, and describe how stormwater would be managed on the new proposed bridges.
- Disclose the environmental consequences of project specific and cumulative stormwater pollutants upon all project area water bodies, including Burnt Bridge Creek, Columbia Slough, and Vancouver Lake. Discuss the potential human health effects from swimming and fishing activities in Burnt Bridge Creek and Vancouver Lake from project specific and cumulative pollutants.

Wetlands and waters of the U.S: The DEIS, page 3-367, states that the Stacked Transit Highway Bridge (STHB) design would avoid more wetland acres of fill than the replacement design and would have 18% less structure in the Columbia River, although more smaller piers may be added to support this design (p. 3-372). The STHB design would also decrease the pollutant load in stormwater slightly more than the other bridge alternatives. It appears that the STHB design could potentially be considered to be the Least Environmentally Damaging Practicable Alternative (LEDPA), but the DEIS does not address this issue.

*Recommendation:* Consult with the Corps of Engineers and EPA to ensure that proposed actions will comply with legal requirements, including the Section 404(b)(1) guidelines, determination of the LEDPA, and to discuss conceptual mitigation plans. Include a discussion of these issues in the Final EIS.

The Draft EIS (p. 3-336) states that the Vanport wetlands connect to a wildlife corridor to the west that has few development interruptions. These wetlands are connected to other large remnants of the floodplain wetland system, which increases its value to wildlife needing larger habitat areas. Currently, large numbers of ducks, geese, swallows, and other migrating birds use this habitat.

*Recommendation:* Due to their high value wetland functions and connectivity, impacts to the Vanport wetlands and to their connections within the floodplain wetland system should be avoided.

Impacts to the Columbia River: The Draft EIS provides little information regarding the logistics and impacts involved with demolition and/or construction of new bridges and other project components on the Columbia River. Consequently, the impacts of construction and the need for mitigation are not sufficiently disclosed in the EIS.

*Recommendation:* In the Final EIS, disclose the nature, timing, and duration of any habitat modifications or impacts, such as dewatering, loss of riparian areas, bank hardening, debris and pollutant loadings, or other impacts, that would be necessary or likely as a result of project construction and demolition activities.

Noise and vibration – impacts on fish and aquatic wildlife: The DEIS, p. 3-314, indicates that noise from pile driving in deep water at 150 ft from the source can reach 190 dB, and that fish are killed or injured at 180 dB and above. While attenuation is quicker in shallow water, there is no explanation of how deep is deep, or how shallow is shallow. There is also no disclosure about the likely effects on the protected species and species of concern listed on p. 3-340 of the Draft EIS, which includes numerous fish species and two species of marine mammals, or on diving birds, from the project construction. Mitigation measures such as bubble curtains are mentioned, however, there is no explanation of the effectiveness of mitigation.

*Recommendation:*

- Include in the Final EIS information about the anticipated impacts on fish and wildlife in the project area, and beyond the project area, from noise and vibration during project construction, operation, and maintenance.

- Discuss potential mitigation measures and their effectiveness, and include mitigation commitments.

### **Impacts of Land Use Changes and Reduced Travel Times**

The DEIS indicates that land use changes and growth are anticipated, both as a result of local planning and as a result of this project. Some growth will be concentrated near transit stations (transit-oriented development or TOD) and some growth may occur at the margins of urban growth boundaries as a result of reduced travel times. Neither the Land Use section nor the Cumulative Impacts Section discuss the potential impacts of growth on natural resources such as air and water quality.

Replacement Crossing Alternatives propose to double the number of highway lanes from six to twelve. EPA is concerned that roadway expansion of this magnitude, even with tolls and transit, may stimulate travel demand for use of privately owned vehicles (POVs), and may contribute to pressures for dispersed development.

In the Land Use Section (p. 3-135), the DEIS indicates that the analysis of potential induced growth was performed using a comprehensive literature review and comparative analysis of case studies. While this can be a helpful approach, we believe that additional analysis is merited for a project of this magnitude and importance for the region. We could agree in principle with the conclusions of the analysis that having a centralized urban core with good public transit, zoning, and transit oriented development would tend to foster maintenance of the urban centers and help to minimize dispersed development. However, the recent and current trends in land use and growth, particularly in the Vancouver area (see *The Columbian*, 5/16/08 article by Michael Andersen: “Growth board rules in favor of preserving farmland”), provide a stronger indication of the growth pressures and patterns that may be expected with the significant transportation improvements proposed by the CRC project, and in combination with other significant transportation improvements along I-5 and near the project area that are listed in the Draft EIS. We think more work is needed to evaluate the travel and land use change that would be stimulated by these individual and cumulative projects, and their associated impacts upon air, water, and land resources, as well as their socio-economic and human health effects.

Stimulated travel, dispersed development, and loss of natural resource lands may also be at odds with the Oregon and Washington Governors’ goals for reducing greenhouse gas emissions. While tolls and transit would soften these effects, there is insufficient analysis and disclosure in the DEIS to compare the Supplemental (8 traffic lanes) and the Replacement (12 traffic lanes) Alternatives with respect to their potential to stimulate travel and growth and their associated impacts to air, water, and land resources, including climate change. It seems logical to expect that some degree of congestion, such as may result from the more moderate I-5 expansion proposed in the Supplemental Alternatives, would likely encourage greater use of alternative travel modes (which is anticipated in the Supplemental Alternatives as proposed), and affect discretionary travel decisions.

*Recommendations:*

- In the Final EIS, include a discussion of potential impacts of growth on air and water quality.
- Consult the FHWA web page for additional methodologies to evaluate the indirect effects of stimulated travel and growth. Results should reveal changes in travel behavior and the likely destinations/locations of eventual land use change.
- Seriously consider selecting a preferred alternative that places less emphasis on the expansion of I-5 and more emphasis on the provision and use of public transit, bicycle and pedestrian modes, and on TDM and TSM strategies.

**Ecological connectivity, wildlife**

We fully agree with the statement on page 3-336 of the DEIS that I-5 is an important barrier to wildlife passage for land-based species, and that the existing underpasses and stream crossings on I-5 provide for some connectivity, but they are not well-suited to or designed for wildlife movement. Substantially widened highway and bridge facilities with higher traffic volumes and speeds would present additional safety hazards for motorists and wildlife, and would exacerbate and the impassable nature of I-5. To improve human and wildlife safety and prevent wildlife-vehicular collisions, maintain biodiversity, and provide corridors that contribute to regional adaptation to climate change, we believe that all possible opportunities be taken to improve the permeability of I-5. For the same reasons, it is important to take this opportunity, as suggested on page 3-353 of the DEIS, to re-establish or improve riparian features along the Columbia River and its associated water bodies wherever feasible as a form of mitigation for past and current project-related environmental impacts.

Ecological connectivity is a broader concept than wildlife movement in the landscape. It includes the connections and interactions between land and water, the transfer of water, wood, soil, nutrients, genes, species, and related processes. For example, ecological connectivity is impaired when a stream is channelized and separated from its flood plain; when shoreline structures or bank armoring block sediment flows and shoreline enrichment processes; when dams are built or culvert installation block fish passage; when wetland fills or impervious surface prevent ground water aquifer recharge; when hillslope cuts breach seepage areas, springs, or underground aquifers; and when aquatic habitat hydrological alterations and development interfere with surface water/ground water interactions and riverine hyporheic zones. Environmental impact assessments need to focus much more on identifying these connections and the consequences of severing them; project design should incorporate the means to preserve and restore them.

As discussed in the DEIS, bridges also provide habitat for wildlife, such as the swallows and peregrine falcons that inhabit the existing bridges. Replacement or supplemental bridge design could and should also incorporate features that would provide needed wildlife habitat.

*Recommendations:*

- Consult with ODFW and WDFW, USFWS, and NOAA Fisheries, tribes, and interested/concerned non-governmental organizations regarding the opportunities, needs, locations, number, and design of wildlife crossing features and improved hydrological and fish passage structures that could be incorporated into the design of the CRC project.
- Consult with these same entities and other relevant landowners regarding the potential for riparian area re-establishment and improvement along the Columbia River and its associated water bodies as a form of environmental mitigation for project-related impacts.
- Consult with the above agencies and relevant interest groups, such as Bats International, Audubon Society, and other wildlife organizations regarding bridge and highway design features that would provide wildlife habitat. Include discussions regarding management of roadside vegetation to either attract or detract wildlife from the roadways and guideways as appropriate.

**Financial analysis**

The EIS provides helpful discussion of economic and financial related issues. There remain a few items that we believe would contribute to a better understanding of the project's impacts and feasibility:

Ensuring fair distribution of benefits and adverse effects: Mitigation for tolls is discussed in the EIS (p. 3-179), however that mitigation should be strengthened to provide meaningful mitigation for adverse financial effects to low income residents (see comments on Environmental Justice above). The impact from potential sales and property taxes to the affected populations in general, and particularly to those segments of the population that would fall within the Environmental Justice discussion, have not been addressed.

*Recommendation:* Include a discussion of potential sales and property taxes that may be imposed to finance components of the CRC project. Disclose what these taxes would be used for, and what the potential economic impacts would be, particularly for low income communities and residents. Express the economic impacts in relevant terms, such as, per capita costs per year.

Finance plan: In Section 4.2.1 the EIS states that "A finance plan will be developed during the FEIS stage and will incorporate both the FHWA and FTA methodologies." An issue relevant to the inclusion of a finance plan is a project's financial feasibility, as mentioned in the DEIS's Project Abstract (p. iii). We note that this approach does not allow reviewers and the public the opportunity to compare alternatives' financial feasibility at the DEIS stage in order to inform the choice of alternatives.

We believe that sufficient information should currently be available, with the necessary caveats and assumptions, that can form the basis for a Draft EIS stage Financial Plan appendix, for the purpose of addressing project financial feasibility issues. The project's four action alternatives lend themselves to facilitating the inclusion of a preliminary financial feasibility analysis in that there is little substantial variability among them. The analysis could also use sensitivity analysis to address issues where variability would have to be considered

*Recommendation:* Include sufficient and necessary financial information, if possible, in a document for public review prior to issuing the FEIS. This could be accomplished by using the approach and formats suggested in FTA's *Guidance for Transit Financial Plans*. The *Guidance* is based on currently available information.

Business mitigation measures: Loss of revenue to a displaced business is an adverse effect resulting from the project, particularly within the low income and minority communities. These impacts should be evaluated and steps should be taken to mitigate these impacts.

*Recommendation:* Include in Section 3.4.5 a discussion of loss of revenue to businesses and what mitigation could be anticipated as part of the relocation assistance program.

Hazardous Materials: The DEIS (p. 3-406) indicates that 427 potential hazardous materials sites were identified within 500 ft of the project area. Of these, 31 sites ranked as potentially high risk. The Marine Drive south alignment is located adjacent to the Harbor Oil Superfund site on North Force Avenue where petroleum, PCBs, pesticides, and other hazardous materials are located. In the Draft EIS, it is unclear whether the identification, site assessment, liability investigations, and clean up of hazardous materials sites have been factored into construction schedules and cost analyses. Detailed investigations have not occurred, but are needed to estimate environmental hazards, human health risks, cost and time needed for clean up and subsequent project construction.

*Recommendation:* Disclose whether the project construction schedule and cost estimates have factored in the site assessment, liability investigations, and clean up of the hazardous materials sites that would be encountered during project construction. If not, provide an estimate of time and costs associated with the cleanup of these sites and include these in the project financial analysis.

### **Tribal consultation**

We commend the CRC project for their efforts to consult with Native American tribes, and for being responsive to their request to avoid upriver bridge placement to avoid potential burial grounds. We also commend the project proponents for their discussions with tribes regarding plants and animals of cultural significance as traditional food, craft, and medicinal sources. The DEIS, however, does not indicate whether anything would be done to protect or enhance these resources.

*Recommendation:* Clarify in the Final EIS how the information provided by the tribes regarding traditional food, craft, and medicinal sources will be used in project planning and implementation.

### **EIS Document Design**

Unusual features of the CRC DEIS are that it provides only a rudimentary Table of Contents, but at the beginning of chapters, provides a listing of chapter subjects and sections.



We think that a more traditional approach of providing a complete Table of Contents would facilitate the review of this large EIS. The reader is also frequently referred to the Technical Reports on each subject for more information, as the analytical information in the DEIS often seems minimal to cursory. It is customary to include all important information, including a description of assessment methodologies, in the main document, the EIS, and reserve unnecessary details for the appendices for those who simply desire more detailed information. By relying heavily on the readers' use of the Technical Reports for each subject, the EIS may not sufficiently inform the reader as a stand-alone document, and through its reliance on the Technical Reports may become "encyclopedic" in nature.

*Recommendations:*

- Include a complete Table of Contents in the Final EIS.
- Incorporate more information from the Technical Reports to sufficiently inform the public and decision maker about the assessment and analytical methodologies and results in order to sufficiently support conclusions made in the EIS.



# United States Department of the Interior

## OFFICE OF THE SECRETARY Washington, D.C. 20240

**OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE**  
1849 C STREET, NW, Room 2342-MIB  
Washington, DC 20240  
PHONE: 202/208-4169  
FAX: 202/208-6970

**RECEIVED**  
JUL 02 2008  
*via Fax*  
Columbia River Crossing

**To:** Ms. Heather Gundersen **Date:** July 2, 2008  
**CRC Env. Manager**  
**Vancouver, WA** *STET*  
**FAX: 360-737-0294** *[Signature]* **Pages: 16**, including this cover sheet.

**From:** **ETHEL SMITH**

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

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

JUL 2 2008

9043.1  
PEP/NRM

Ms. Heather Gundersen  
Environmental Manager  
Columbia River Crossing  
700 Washington Street, Suite 300  
Vancouver, WA 98660  
Fax: 360-737-0294

Dear Ms. Gundersen:

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.

### **Section 4(f) Comments**

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.

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.

#### *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.

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.

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

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.

#### *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.

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.

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.

### *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**

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.

### **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

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

### **Fish and Wildlife Coordination Comments**

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.

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.

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



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).

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

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.

### 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.

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.

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:

- 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.
- 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.
- 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.
- 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).
- 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

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.

- 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.
- 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.
- 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.
- 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.

#### Contact Information

For questions concerning FOVA and VNHR, please contact:

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

Thank you for the opportunity to provide these comments.

Sincerely,

A handwritten signature in black ink that reads "Willie R. Taylor". The signature is written in a cursive style with a large, prominent initial "W".

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:

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.

TAKE PRIDE  
IN AMERICA 

**ATTACHMENT**

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.



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