



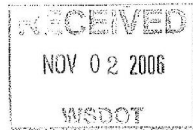
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, WA 98101

October 31, 2006

Reply To  
Attn Of: ETPA-088

Ref: 00-013-FHW

Mr. James Christian  
Federal Highway Administration  
Washington Division  
Suite 501 Evergreen Plaza  
Olympia, WA 98501-1284



Dear Mr. Christian:

The U.S. Environmental Protection Agency (EPA) has reviewed the draft Environmental Impact Statement (EIS) for the SR520 Bridge Replacement and HOV Project in King county, Washington (CEQ No. 20060342), in accordance with our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Section 309, independent of NEPA, specifically directs EPA to review and comment in writing on the environmental impacts associated with all major federal actions. Under our policies and procedures, we evaluate the document's adequacy in meeting NEPA requirements.

The draft EIS is proposing to replace SR 520's Portage Bay and Evergreen Point bridges and improve the existing roadway between I-5 in Seattle and Bellevue Way on the Eastside. Washington State Department of Transportation (WSDOT) evaluated the no action alternative, a four lane alternative and a six lane alternative. With the six lane alternative, WSDOT developed seven design options. Three of these design options are in the City of Seattle and four are on the east side of Lake Washington. WSDOT has not identified a preferred alternative.

**F-002-001** Based on our review and evaluation, we have assigned a rating of EC-2 (Environmental Concerns, Insufficient Information) to this Draft EIS (see Enclosure 1). EPA is particularly concerned about the Pacific Street Interchange option because there is potential for significant impacts to endangered species that might be corrected by either project modification or another alternative. Another major concern is with the South Kirkland Park and Ride - 108<sup>th</sup> Ave. NE design option; because this option does not appear to be the least environmentally damaging practicable alternative and other feasible alternatives exist. EPA's rating, and a summary of our comments, will be published in the *Federal Register*.

**F-002-001**  
**Comment Summary:**  
Format and Content

**Response:**  
See Section 23.1 of the 2006 Draft EIS Comment Response Report.

F-002-001

EPA's **detailed** comments on the draft EIS are attached. In addition to our primary concerns about the Pacific Street Interchange option, the South Kirkland Park and Ride – 108<sup>th</sup> Ave. NE option, **and** avoidable impacts to aquatic resources, we are also concerned about indirect and cumulative impacts, inconsistent information in the draft EIS, unequal evaluation of alternatives, **and the** format and organization of the document.

Thank you for the opportunity to review this draft EIS. If you would like to discuss these comments, please contact Krista Rave-Perkins at (206) 553-6686 or myself at (206) 553-1601.

Sincerely,  
  
Christine B. Reichgott, Manager  
NEPA Review Unit

Enclosures

cc: Paul Krueger, WSDOT  
Kitty Nelson, NOAA  
Emily Teachout, USFWS  
Terry Swanson, Ecology  
Teresa Eturaspe, WDFW  
Stewart Reinbold, WDFW  
Jack Kennedy, Corps of Engineers

**EPA's Detailed Comments  
SR 520 Bridge Replacement and HOV Project  
Draft Environmental Impact Statement**

F-002-002

**Pacific Street Interchange Option:**

EPA is concerned that the potential environmental impacts to aquatic resources are greater under the Pacific Street Interchange Option (PSIO) than presented in the draft EIS. Our concerns include the construction, column placement and the normal operation of an additional bridge structure to open water, near shore and wetland habitats, and the potential to significantly affect already struggling fish populations and endangered species, particularly salmon. In addition, EPA is concerned about the possible impacts to the Washington Park Arboretum, which is nationally and internationally recognized as valuable.

WSDOT briefly identifies possible construction impacts on fish species, including noise and vibration from pile driving that can result in outright fish kill (page 8-25). The additional impacts from temporary work bridges and platforms are a common element among the alternatives that include bridge structures. However, given the length and size of the PSIO, the magnitude of impact may be greater. In addition, the PSIO would shade approximately one more acre and would involve more pile driving. Barge mounted cranes would be used for both the PSIO and the Second Montlake Bridge. Again, because there is a significant difference in the length and size of the bridge structures, we would assume that the length of construction time would be much shorter for the Second Montlake Bridge than for the PSIO.

Additional potential wildlife impacts to bird species are briefly mentioned on Page 8-26. Of particular concern is the "Broadmoor" Bald Eagle pair with three nests located in very close proximity to the construction area. While this impact would take place under most of the alternatives, the greatest impact would be from the PSIO. The draft EIS mentions that disturbance could effect the nesting success over 4-5 years. "However, the pair has demonstrated a tolerance to noise and urban conditions, and it is possible that they would tolerate the new disturbance." EPA is concerned that potential impacts to the Bald Eagle may be underestimated. The amount of noise that is generated by pile driving (which can be greatly magnified over water) is not the same type of noise as typical urban conditions.

As stated in an earlier correspondence to WSDOT (attached), EPA believes it is important to rigorously explore alternatives related to the Pacific Street Interchange option that would minimize possible severe adverse impacts to the environment. We are encouraged by WSDOT's recent attempts to begin discussions with government agencies to explore options to reduce impacts to fish, particularly salmon. We recommend that these discussions continue so that WSDOT will work with all resource agencies to develop an alternative that fully minimizes impacts to wildlife species and develop mitigation options to offset any remaining unavoidable impacts.

**F-002-002**

**Comment Summary:**

Pacific Street Interchange Option

**Response:**

See Section 1.2 of the 2006 Draft EIS Comment Response Report.

**F-002-003** | **Aquatic Resources:**  
Based on information in the draft EIS, it is difficult to conclude that there is overall benefit derived from either of the South Kirkland Park and Ride design options. Page 7-9 exhibit 7-6 shows an improvement to the 108<sup>th</sup> intersection and a negative effect on the 92<sup>nd</sup> Avenue NE/520 intersection. The 108<sup>th</sup> design option would fill approximately 1.4 additional acres of wetlands with no clear benefit. Therefore, EPA would recommend selection of the 6 Lane Alternative because it appears to be the least environmentally damaging practicable alternative. If additional information is provided that indicates a clear improvement to transit using one of the design options, EPA recommends the Bellevue Way design option because there is no increase in wetland fill.

**F-002-004** | The Bicycle/Pedestrian Path to the North is identified as having less wetland impacts than the 6 Lane Alternatives. It appears to us that this option would be the least environmentally damaging practicable alternative, because this alternative would decrease the overall impacts of wetland fill while still meeting the project's goal to increase mobility for people and goods.

**F-002-005** | In the draft EIS, WSDOT states "In Seattle, these effects would occur to high quality, lake fringe wetlands in the Arboretum/Foster Island area. This wetland type is rare in the Lake Washington watershed." (page 4-40) In addition, "The wetlands also filter sediments and pollutants from the water, produce organic matter that nourishes aquatic life and provide habitat for a variety of birds and other wildlife." EPA agrees and considers these wetlands to be critical to Lake Washington and the greater surrounding ecosystem. These wetlands play a crucial role for many endangered species, including Chinook salmon and Bull Trout for habitat and water quality. Because of this, EPA views these wetlands as aquatic resources of importance.

**F-002-006** | We would like to clarify that the Clean Water Act is administered by the EPA. While some programs, such as the stormwater program, have been delegated to the Washington Department of Ecology (Ecology), EPA retains an oversight role. Also, both EPA and the Corps of Engineers administer the wetlands program. We recommend that the final EIS correct the sections that discuss this information (e.g. page 3-39 and page 5-44).

**F-002-007** | We are concerned that construction of new bridges and approach structures could affect aquatic habitat for up to 5 years (page 4-39) which would be considered to be long term impacts. Also on page 8-25, WSDOT says that "some wetland vegetation could be removed temporarily during construction... these effects could be long term (although not permanent)." EPA recommends that the final EIS include mitigation for the temporal loss.

**F-002-008** | Pg 7-31, Wetlands, "The project team assessed potential wetland mitigation opportunities in the individual basins and determined that there is no undeveloped area of suitable size for mitigation available in any of the individual project basins, nor are there enough suitable areas across the basins to achieve the total acreage needed." However, EPA is aware that there are several potential mitigation sites within the project area, both in Seattle and on the Eastside. We would be happy to work with the project team to include these sites in the mitigation plan.

**F-002-009** | **Indirect and Cumulative Impacts:**

**F-002-003**

**Comment Summary:**

Eastside Concerns

**Response:**

See Section 24.0 of the 2006 Draft EIS Comment Response Report.

**F-002-004**

**Comment Summary:**

Eastside Concerns

**Response:**

See Section 24.0 of the 2006 Draft EIS Comment Response Report.

**F-002-005**

**Comment Summary:**

Wetland Regulations and Ratings

**Response:**

See Section 16.1 of the 2006 Draft EIS Comment Response Report.

**F-002-006**

**Comment Summary:**

Wetland Regulations and Ratings

**Response:**

See Section 16.1 of the 2006 Draft EIS Comment Response Report.

**F-002-007**

**Comment Summary:**

Wetland Effects During Construction

F-002-009

In the cumulative effects analysis, WSDOT has concluded that the mitigation required of transportation and development projects through regulations that protect critical areas and water quality would compensate for the impacts due to cumulative effects. However, there are additional impacts such as vegetation loss and non-endangered wildlife habitat loss, that would not be mitigated under this scenario. For this project, 47.7 acres of vegetated habitat will be lost. WSDOT identified the 47.7 acres of upland habitat as "relatively rare in the urban environment (page 4-40). These impacts are magnified due to impacts that have occurred from past, present and future known impacts. Impacts from reasonably foreseeable construction on 520 should be included in a cumulative effects analysis if they impact the same resources as this project. EPA understands is that plans are now being developed to widen SR520 from West Lake Sammamish Parkway to SR202 and improve ramps. We recommend that these plans be included in final EIS cumulative impacts section.

F-002-010

**Conclusion Statements and Inconsistent Information in the Draft EIS:**

The draft EIS contains conclusion statements that either lack support data or conflict with information found in the technical appendices. Consistency and technically sound information is necessary to provide a thorough and objective analysis. EPA has included several examples below.

On page 3-29, Evaluating the Pacific Street Interchange Option Box, the last paragraph says that WSDOT determined that the interchange south of Marsh Island was the best option. "It would have ...only slightly greater net effects on aquatic habitat compared to the 6 Lane Alternative or the interchange location along the East Montlake shoreline." EPA was unable to locate information in the draft EIS or in the appendices that supports the statement that there will be only slightly greater net effects. In addition, there is information available from other agencies indicating that additional columns would have a significant impact on aquatic habitat and native fish populations.

In the draft EIS (pg 4-35), a conclusion statement says "...in light of the overall benefits to low income populations from substantially decreased transit travel times, we have concluded that the project would not result in disproportionately high and adverse effects on minority or low income populations." The Environmental Justice Technical Appendices (pg 37) and the Addendum (pg 10) show significant adverse effects to low income populations unless mitigation measures are implemented. We recommend that the final EIS bring forward the conclusions and recommendations from the Appendices and Addendum.

The draft EIS, page 4-36, says "With mitigation measures in place, including measures described in the ecosystems sections of the Draft EIS, the project will not cause disproportionately severe and adverse effects on Native American fishing in the project area." EPA found no data that supports this statement. EPA recommends that the project team consult with the Muckleshoot Tribe about the potential impacts of the project to their fishing rights and appropriate mitigation.

On page 4-41, figure 4-17, the Pacific Street Interchange Option (PSIO) would have a combined total buffer effect of 6.6 acres. However, this is inconsistent with the Appendices E Addendum, Figure 7, which indicates buffer effects of 4.8 acres.

**Response:**

See Section 16.1 of the 2006 Draft EIS Comment Response Report.

F-002-008

**Comment Summary:**

Wetland Mitigation

**Response:**

See Section 16.1 of the 2006 Draft EIS Comment Response Report.

F-002-009

**Comment Summary:**

Indirect and Cumulative Effects Methods of Analysis

**Response:**

See Section 20.1 of the 2006 Draft EIS Comment Response Report.

F-002-010

**Comment Summary:**

Format and Content

**Response:**

See Section 23.1 of the 2006 Draft EIS Comment Response Report.

F-002-010

Page 7-31 states “In addition to improving water quality, stormwater control and treatment would enhance habitat for fish and other aquatic life.” EPA could not find any information that supports this statement. In fact, federal and state agencies tasked with Endangered Species Act jurisdiction believe that additional methods need to be put in place beyond traditional stormwater treatment.

F-002-011

**Alternatives Not Equally Evaluated in the Draft EIS:**

EPA is concerned that alternatives and the design options are not equally evaluated throughout the draft EIS. We understand that some alternatives may need additional explanation especially when there may be controversy or opposition surrounding an alternative. However, the draft EIS needs to compare all of the alternatives objectively and evaluate them using the same criteria.

On page 4-41, Exhibit 4-17, there is an important Wetland and Buffer Effects comparison table. One of the options, the South Kirkland Park and Ride – Bellevue Way design option is not included in the table. The Second Montlake Bridge option is included as a footnote. Even if these options do not result in additional wetland impact, they should be included in the table so that there is a true comparison chart for the draft EIS reviewer.

Some examples in the draft EIS are misleading, such as the story about the commuter on page 4-5. The scenario is a woman traveling from Seattle I-5 interchange to 124<sup>th</sup> Avenue NE, with the Pacific Street Interchange design option reducing her commute time to a minute less than it is today. However, a commuter from I-5 would not use Pacific Street Interchange and there is no explanation as to why this interchange would improve the woman’s drive time. A one minute difference in travel time may be well within the range of error of a travel time analysis and so may be insignificant. In addition, there is no discussion about this scenario using the other alternatives in the draft EIS, such as taking the bus with the 6 Lane alternative and the improved transit assumed throughout this document.

In Chapter 7: Detailed Comparison of Alternatives – Eastside, the South Kirkland Park and Ride - Bellevue Way option is not included in tables on page 7-30, exhibit 7-17 or page 7-31, exhibit 7-18. The Bellevue Way design option is also not included in either the Addendum to Ecosystems Discipline Report, or the Addendum to the Indirect and Cumulative Effects Discipline Report. Again, if there are no impacts to Ecosystems under this design option, then that should be identified in the report in order to maintain an objective and thorough comparison.

In addition, the Addendum to the Indirect and Cumulative Effects Discipline Report identifies three of the design options to be discussed. The South Kirkland Park and Ride – 108<sup>th</sup> option is explained and then dropped from the remaining report.

F-002-012

**Draft EIS Format and Document Organization:**

The purpose of NEPA is not to generate excellent paperwork, but to foster excellent action. (National Environmental Policy Act Regulations, 1500.1 (c)). There is no question that many EISs have become overly long and difficult for readers to understand. In revising the EIS format, there is a balancing act between presenting information in a format to achieve

F-002-011

**Comment Summary:**

Format and Content

**Response:**

See Section 23.1 of the 2006 Draft EIS Comment Response Report.

F-002-012

**Comment Summary:**

Format and Content

**Response:**

See Section 23.1 of the 2006 Draft EIS Comment Response Report.

F-002-012

meaningful public participation and including enough detail and depth for decision makers and agencies with statutory jurisdiction. WSDOT has made a determined effort to make this draft EIS readable, accessible and understandable to the public. We applaud the effort and believe that you have succeeded, especially with the attractive graphics and tables and the question and answer format. Our comments on format are meant to be helpful to you in preparing the final EIS.

The alternatives Section, as the CEQ regulations conceived them, is the heart of the EIS, sharply defining the issues and providing a clear basis for choice. This draft EIS presents the alternatives, however it quickly becomes confusing. One solution is to develop a master table, or matrix, to provide a comparative overview of each alternative and design options. This would have been particularly helpful for this draft EIS because of the number of design options within the 6 Lane Alternative. We recognize that a summary matrix to show the differences between alternatives should never be used as the primary source of information about each alternative. But, it helps the reviewer organize and stay clear about each alternative and the tradeoffs associated with it.

EPA could not determine whether the Montlake Freeway Stop design option is a "stand alone" option under the 6 Lane Alternative. On page 3-29, in the description of this option, it is linked directly to both the Pacific Interchange design option and the Second Montlake Bridge design option. EPA was not able to find any additional information that discussed this option without including the other two Seattle design options. If this option would not happen without either one of the other two design options, then it should be eliminated as a stand alone option. If it does have the potential to be implemented on it's own, then that should be clarified.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10  
1200 Sixth Avenue  
Seattle, WA 98101

April 17, 2006

Reply to  
Attn Of: ECO-088

**MEMORANDUM**

**SUBJECT:** SR 520 Bridge Replacement and HOV Project  
Advisory Comments for Concurrence Point 2

**FROM:** Christine B. Reichgott  
Manager, NEPA Review Unit

**TO:** Paul Krueger  
WSDOT Project Manager

**F-002-013**

The following advisory comments are based on EPA's review of the information provided in the SR 520 Bridge Replacement and HOV Project Concurrence Point 2 Submittal of Feb 14, 2006 and two emails (4/11/06 and 4/6/06) from Paul Krueger. Should you have any questions or would like to discuss these advisory comments, please contact Patty Betts at 360-407-6925 or Krista Rave-Perkins at 360-553-6686.

Please also refer to EPA's advisory comments at the two previous Concurrence Point on Range of Alternatives. They are still relevant and should continue to be considered.

Range of Alternatives

1. EPA is concerned about the potential environmental impacts to aquatic resources associated with the Pacific Street Interchange option. Our concerns include construction and operation impacts to open water, near shore, and wetland habitats and species. Montlake Cut and its connection to adjacent bays are a sensitive area for fish migration. Work and infrastructure in this area has the potential to significantly affect already struggling fish populations. We believe the construction and operation impacts to these resources need to be understood and mitigated to the fullest extent possible. Marsh Island is another area with important ecological and social functions and values (e.g. wetlands, near shore habitats, aesthetics, and recreation).

As the agencies work to select appropriate alternatives for analysis in the DEIS, we believe it is important to rigorously explore alternatives related to the Pacific Street



**F-002-013**

**Comment Summary:**

Pacific Street Interchange Option

**Response:**

See Section 1.2 of the 2006 Draft EIS Comment Response Report.



- F-002-014** 5. In order to be ready for CP#3, EPA will want to have pre FEIS information, in the form of either a PFEIS to review or the PFEIS information and responses to relevant DEIS comments. CP#3 includes concurrence on the preferred alternative and is based on the revised analysis. DEIS comments normally influence the environmental information, resulting in revised or new environmental information that is used to determine the preferred alternative and mitigation plan.
- F-002-015** 6. The CP#3 Mitigation Plan is an aquatic resource mitigation plan that should address short term, long term, direct and indirect impacts to aquatic resources and the functions that they provide.
- We would be interested in a mitigation plan that supports improving and protecting the overall watershed condition. As part of the impact analysis, we encourage consideration of the impacts and possible mitigation in context with overall watershed health.

**F-002-014****Comment Summary:**

Format and Content

**Response:**

See Section 23.1 of the 2006 Draft EIS Comment Response Report.

**F-002-015****Comment Summary:**

Fish and Wildlife (Mitigation)

**Response:**

See Section 16.2 of the 2006 Draft EIS Comment Response Report.

F-002-016

A. Section 1502.14 requires the EIS to examine all reasonable alternatives to the proposal. In determining the scope of alternatives to be considered, the emphasis is on what is "reasonable" rather than on whether the proponent or applicant likes or is itself capable of carrying out a particular alternative. Reasonable alternatives include those that are practical or feasible from the technical and economic standpoint and using common sense, rather than simply desirable from the standpoint of the applicant.

2b. Must the EIS analyze **alternatives outside the jurisdiction** or capability of the agency or beyond what Congress has authorized?

A. An alternative that is outside the legal jurisdiction of the lead agency must still be analyzed in the EIS if it is reasonable. A potential conflict with local or federal law does not necessarily render an alternative unreasonable, although such conflicts must be considered. Section 1506.2(d). Alternatives that are outside the scope of what Congress has approved or funded must still be evaluated in the EIS if they are reasonable, because the EIS may serve as the basis for modifying the Congressional approval or funding in light of NEPA's goals and policies. Section 1500.1(a).

6a. **Environmentally Preferable Alternative.** What is the meaning of the term "environmentally preferable alternative" as used in the regulations with reference to Records of Decision? How is the term "environment" used in the phrase?

A. Section 1505.2(b) requires that, in cases where an EIS has been prepared, the Record of Decision (ROD) must identify all alternatives that were considered, ". . . specifying the alternative or alternatives which were considered to be environmentally preferable." The environmentally preferable alternative is the alternative that will promote the national environmental policy as expressed in NEPA's Section 101. Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative which best protects, preserves, and enhances historic, cultural, and natural resources. The Council recognizes that the identification of the environmentally preferable alternative may involve difficult judgments, particularly when one environmental value must be balanced against another. The public and other agencies reviewing a Draft EIS can assist the lead agency to develop and determine environmentally preferable alternatives by providing their views in comments on the Draft EIS. Through the identification of the environmentally preferable alternative, the decisionmaker is clearly faced with a choice between that alternative and others, and must consider whether the decision accords with the Congressionally declared policies of the Act.

6b. **Who recommends or determines** what is environmentally preferable?

A. The agency EIS staff is encouraged to make recommendations of the environmentally preferable alternative(s) during EIS preparation. In any event the lead agency official responsible for the EIS is encouraged to identify the environmentally preferable alternative(s) in the EIS. In all cases, commentors from other agencies and the public are also encouraged to address this question. The agency must identify the environmentally preferable alternative in the ROD.

F-002-016

**Comment Summary:**

Alternatives Development

**Response:**

See Section 1.1 of the 2006 Draft EIS Comment Response Report.