

3-119: Surprise Lake Drain is variously described in the document as a cold, spring-fed stream and as a ditch with no vegetative cover and warm temperatures. Please clarify the condition of this stream, show the existing system and the proposed relocation on the maps, and describe the desired end result. The current location is difficult to discern on any of the maps, please highlight existing watercourses and proposed relocations on at least one map.

F01-038

3-121: The table 3.4-4 is inconsistent with the text that describes the Valley Ave. interchange removing up to 6 crossings and replacing 3 others. The table shows a maximum of one removed and up to three new crossings in addition to three crossings being modified.

F01-039

3-124: Is there any difference in endangered species impacts between any of the alternatives?

F01-040

3-126: In several places in the document there is an implication that the mitigation site will be 256 acres in size. The document describes the mitigation site as not currently containing any wetlands. Why will there only be 50 acres of wetland created on such a large site. Where on the site will they be created? How was the figure of 50 acres determined?

F01-041

3-253: Will the 41 acres of additional farmland required for stormwater control facilities impact any additional wetland areas?

F01-042

RESPONSE F01-039

This table has been corrected to be consistent with the text in the FEIS.

RESPONSE F01-040

There are two alternatives, build or no build. The build alternative contains minimal differences between interchange options, except for the impact to fish due to creek crossing structures. Please see tables 2-7, 2-8 and 2-10 in the FEIS.

RESPONSE F01-041

Please see response to comment F01-006.

RESPONSE F01-042

The Riparian Restoration Proposal (RRP) will enhance existing wetlands within the RRP area. However, there may be some temporary wetland impacts in the RRP area during construction of the RRP and relocation of Hylebos Creek and Surprise Lake Drain.

RESPONSE F01-033

The UPRR site presented in the DEIS is no longer the preferred Mitigation site. A suite of mitigation sites in the initial Conceptual Plan are currently being evaluated as to their positive and negative effects on wildlife and fish, not only at the Puyallup River, but at Hylebos and Wapato Creeks (see response to F01-020). No final sites have been selected, and none will be until the final design is nearly complete and it is known what wetlands are actually affected and what mitigation is required. It is intended that wetlands that best meet the goals and objectives of improving the project area and that can be connected and supported by the RRP would be those included in the project (see Figure 3.3-1).

RESPONSE F01-034

All affected wetlands have been analyzed and the potential impact of the project on them has been described in Section 3.3. & 3.3.4 of the FEIS. It is intended that compensatory mitigation for affected wetlands would occur on adjacent parcels first, then if not available, the encompassing sub-basin or watershed, and finally if nothing nearby or in the same sub-basin is available, off-site mitigation locations would be considered. If off-site mitigation sites are ultimately included in the project, additional documentation will be provided to explain why it was necessary to select them. Also, see response F01-007.

RESPONSE F01-035

Please see response to comment F01-004

RESPONSE F01-036

The wetland figures 3.3-1 through 3.3-3 have been revised in the FEIS.

RESPONSE F01-037

The Blue Heron has been evaluated in the Biological Assessment for this project and no adverse impacts to it have been identified. Please see comment F01-033. More than one large wetland site is being considered, and the larger area attributed to the RRP would also be available for the Great Heron as "foraging" territory.

RESPONSE F01-038

Surprise Lake Drain is a tributary to Hylebos Creek. It currently drains Surprise Lake (it is not a cold spring-fed stream) through a concourse of man-made ditches until it meets up with Hylebos Creek near I-5. The existing drain is in poor condition and has no vegetation cover which contributes to its warm temperature. It is proposed to improve this "drain" and replant vegetation to bring it back to a more natural condition. (See Figures A-3 and A-6 in Appendix A for the proposed location of Surprise Lake Drain.)



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

May 28, 2003

Reply To
 Attn Of: ECO-088

93-025-FHW

Mr. Steve Saxton
 Federal Highway Administration
 711 South Capitol Way, Suite 501
 Olympia, WA 98501

RECEIVED
 MAY 29 2003
 OLYMPIC REGION

Dear Mr. Saxton:

The U.S. Environmental Protection Agency (EPA) has reviewed the SR 167 Puyallup to SR 509 Tier 2 Draft Environmental Impact Statement (DEIS). We are submitting comments to you pursuant to our responsibilities under the National Environmental Policy Act (NEPA) and Section 309 of the Clean Air Act. Thank you for accepting our comments.

During Tier 1, the roadway corridor was selected from three alternatives through the Puyallup River Valley. The Tier 2 document therefore presents only two alternatives – build and no build, and alignment options are presented for the interchanges at 54th Avenue, Valley Avenue, and at SR 161/SR 167. While the interchange options must be analyzed, from U.S. EPA's perspective, the most important aspects of the Tier 2 stage are the detailed technical analysis of the affected environment, environmental consequences, and mitigation for the overall project. This is because the SR 167 project will contribute to the conversion of the lower Puyallup River Valley from an environment of prime, environmentally significant farmland and floodplain, to an urban/industrial/residential environment. Thus, the magnitude of the direct, indirect, and cumulative impacts of the project could be substantial, particularly to water quality, water quantity, surface and subsurface hydrology, and aquatic habitat – including habitat for threatened and candidate fish and other sensitive species.

F02-001a

U.S. EPA believes that this project carries with it the potential of substantial environmental impacts, due to the road construction as well as to the subsequent development of the project area, that should be avoided. In addition, further site-specific and project area-wide analysis is needed to clarify the magnitude of environmental impacts that are likely to arise from this project. Accordingly, we have rated the Tier 2 DEIS as **EO-2, Environmental Objections, Insufficient Information**. An explanation of this rating is enclosed.

Substantial environmental impacts avoidance and minimization can be achieved through applying further analysis to improve project design, as well as through performing a collaborative and proactive alternative futures planning effort in the project area. The analysis of alternative development patterns, which incorporate varying degrees of low impact development, smart growth, transportation-oriented development, and other restoration and sensitive area protection strategies, can reveal ways to enable greater protection of open space, sensitive lands, resources, and ecological processes than would likely occur under a conventional development scenario. U.S. EPA has expertise in this area and would welcome the opportunity to work with the project proponents and other entities to make this happen.

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RESPONSE F02-001a

Land use in the lower Puyallup River Valley has traditionally been farming. However, the cities of Fife, Puyallup, and Milton have re-zoned the land in this area to a mix of industrial, commercial, and residential use. This land use conversion from agricultural to industrial/commercial/residential use is currently occurring and is expected to continue as planned by the cities' comprehensive plans developed in accordance with the Growth Management Act (GMA).

This project will incorporate approximately 189 acres of riparian habitat for stormwater flow control. The Riparian Restoration Plan (RRP) will help restore some open space and protect sensitive area.

Environmental objections and information needs – Detailed comments are enclosed.

Aquatic resources

The potential substantial impacts to aquatic resources that we believe should be avoided and minimized include alterations to surface and subsurface hydrology, polluted stormwater runoff, flooding, extensive wetlands losses, surface and groundwater quality degradation, diminished groundwater supplies and instream flows, and aquatic habitat that is further degraded and unable to support dependent species. The quality, quantity, and overall effectiveness of mitigation could improve with more information on sub-watershed based and reach-specific conditions coupled with site specific project impacts. We believe this will be necessary in order to comply with Clean Water Act (CWA) and Endangered Species Act (ESA) requirements, to protect underground sources of drinking water, and to uphold Tribal trust responsibilities.

Project-related wetlands impacts, which were stated to be eight acres of wetlands for Alternative 2 (the selected alternative) in the Tier 1 Final EIS, have increased to 30.2 acres in the Tier 2 DEIS. A major federal consideration in approving Alternative 2 to be carried forward into the Tier 2 EIS process was the acreage of wetlands impacted when compared to the other Tier 1 Alternatives 1 and 3, which had greater wetland impacts. For the Tier 2 Build Alternative, direct wetlands' impacts have doubled over what would have been affected by Alternatives 1 and 3. Because of this increase, U.S. EPA believes that the Tier 2 Build Alternative may not be the least damaging alternative that is available, and consequently, the Build Alternative may not be in compliance with the CWA Section 404(b)(1) guidelines. Additional wetland evaluations are needed to compare both direct and indirect wetlands' impacts of the Tier 2 Build Alternative with the Tier 1 Final EIS Alternatives 1 and 3 before a determination of compliance or non-compliance with the guidelines can be made.

In addition, there has been no sub-watershed based analysis of wetlands' losses in terms of acreage, functions, and processes. The proposed mitigation may not offset the locally important functions the impacted wetlands provide. U.S. EPA believes that additional analysis and efforts to avoid and minimize these wetlands' losses is essential, and that the mitigation should replace functions where they are most needed within each sub-watershed.

Air toxics

There is a heightened concern for human health from this project as a result of toxic air emissions and particulate matter from diesel exhaust. Because this is a Port of Tacoma related project, 30 to 40% of the average daily traffic on the proposed roadway is anticipated to be trucks (DEIS page 3-283). In addition, project construction is projected to span a 12-year period, wherein the operation of diesel powered construction equipment, increased traffic congestion, and a doubling of truck traffic to 600,000 per year will occur (DEIS page S-2). The DEIS does not provide hotspot analysis at receptor locations as requested by U.S. EPA. and additional construction mitigation measures that we have recommended should be included. Further analysis and disclosure are needed in the EIS to inform the public and decision maker regarding the potential impacts to human health and to design mitigation measures.

F02-001b

F02-001c

RESPONSE F02-001b

A Section 404(b)(1) Analysis has been completed for this project and is included as chapter 4 in the FEIS. The 404(b)(1) analysis demonstrates that "Alternative 2" from the Tier I FEIS is the least environmentally damaging practicable alternative (LEDPA). Through collaboration with your agency, the project re-examined wetland impacts associated with the corridor determination from Tier 1. This analysis is provided in section 4.1.3. All affected wetlands have been analyzed, and the potential impact of the project on them has been described in Section 3.3. & 3.3.4 of the FEIS. It is intended that compensatory mitigation for affected wetlands would occur on adjacent parcels first, then if not available, the encompassing sub-basin or watershed, and finally if nothing nearby or in the same sub-basin is available, off-site mitigation locations would be considered. If off-site mitigation sites are ultimately included in the project, additional documentation will be provided to explain why it was necessary to select them. Also, see response F01-007.

RESPONSE F02-001c

The hotspot analysis was updated, see Tables 3.5-3 and 3.5-4. Construction mitigation measures are listed in section 3.5.5.

Secondary and cumulative impacts

U.S. EPA disagrees with the conclusion in the DEIS that there are no secondary impacts from the proposed project. We would like to see an analysis using currently available methods and models for assessing both secondary and cumulative effects. The cumulative effects analysis, which is strictly qualitative, does present generic conclusions that water quality, hydrological alterations, and aquatic habitat conditions will worsen as the project area develops. While we can agree with these conclusions, the DEIS offers no quantitative analysis (such as using impervious cover as an index of impacts) that would support informed, targeted, and proactive strategies to avert the anticipated environmental decline. Only the standard local controls will be applied, which are inadequate to prevent degradation of aquatic habitat and water quality when total impervious cover exceeds certain thresholds (Booth, 2003; Center for Watershed Protection, 2003).

As described above, there are alternative futures analyses and strategies that can help to characterize the secondary and cumulative effects and design development in the project area in a manner that will avoid and minimize impacts and preserve the natural ecological functions. Additional protective measures, such as, riparian area, wetlands and buffers protection and restoration; protection and re-establishment of forest cover; low impact and zero impact development strategies; and open space acquisition can be implemented by the project proponent and/or by the project proponent in partnership with other entities. We would welcome meeting with the project proponent, FHWA, and local entities to discuss alternative futures analyses and other tools for designing development, as well as additional mitigation measures that preserve and restore some of the ecological functions and values of the area.

Effects to threatened species

The DEIS includes a preliminary effects determination under ESA of “likely to adversely effect” bull trout and Puget Sound chinook salmon, and of “likely to significantly impact” coho salmon. In light of these predictions, U.S. EPA believes that the above stated measures for mitigating these expected outcomes are also important for the lead agency to fulfill its obligations under Section 7(a)(1) of the ESA to conserve listed species. The greatest opportunity to do so is now – before the Puyallup River Valley is fully converted to commercial/ industrial/residential land uses.

Additional substantial impacts

We are concerned about project impacts to the Puyallup Tribe and the need for observing the requirements of consultation and government to government relations¹ with the Tribe. We also have concerns regarding loss of prime farmlands, noise, and lack of facilities for non-motorized travel and public transit (adequate dedicated pedestrian/bicycle trail network, roadside walkways

¹See, e.g., Memorandum, “Government-to-Government Relations with Native American Tribal Governments,” (April 29, 1994) [59 Fed. Reg. 22951 (May 4, 1994)]; Executive Order (No. 13084) on Consultation and Coordination with Indian Tribal Governments (May 14, 1998) [63 Fed. Reg. 27655 (May 19, 1998)].

RESPONSE F02-001d

F02-001d

Indirect (secondary) and cumulative impacts have been clarified in the FEIS. Resources that were expected to experience substantial cumulative change were identified as critical resources and those sections were updated to include both an indirect and cumulative impact analysis. Critical resources for the project are water resources (section 3.2); wetlands (section 3.3); wildlife, fisheries, and threatened and endangered species (section 3.4); land use, socioeconomics, and environmental justice (section 3.11); farmland (section 3.12); and cultural resources (section 3.16).

RESPONSE F02-001e

F02-001e

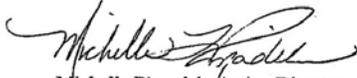
Section 7 consultation has been initiated with the U.S. Fish and Wildlife Service and NOAA National Marine Fisheries Service (NOAA Fisheries). The project’s commitments to the necessary performance measures, and terms and conditions of the Biological Opinion issued by the Services, will be included in the federal Record of Decision (ROD) for this project.

F02-001f

and bikeways, freeway overpasses, and park and ride lots), and lack of transportation demand management measures.

We support the riparian restoration proposal as a partial mitigation strategy for project impacts to aquatic resources. We believe that much more of this type of action will be needed to satisfactorily mitigate the impacts of the proposed project. U.S. EPA will continue our efforts to work with the lead agency so that a sufficient analysis and disclosure of impacts is produced. We ask that the lead agency work in a collaborative manner with U.S. EPA, other resource agencies, local governments, watershed-based groups, and the Puyallup Tribe to reduce these impacts. If you have questions, or would like to discuss these comments, please contact Elaine Somers of my staff at (206) 553-2966. Thank you for the opportunity to comment.

Sincerely,



Michelle Pirzadeh, Acting Director
Office of Ecosystems and Communities

Enclosures

F02-001f

RESPONSE F02-001f

WSDOT and FHWA worked closely with the Tribe to address issues of concern to the Tribe during the development of the Tier II FEIS. FHWA and WSDOT are committed to maintaining an open line of communication with the Tribe throughout the design and construction phases of this project.

As stated in response F02-001a: Land use in the lower Puyallup River Valley has traditionally been farming. However, the cities of Fife, Puyallup, and Milton have re-zoned the land in this area to a mix of industrial, commercial, and residential use. This land use conversion from agricultural to industrial/commercial/residential use is currently occurring and is expected to continue as planned by the cities' comprehensive plans. Developed in accordance with the Growth Management Act (GMA).

At the request of Pierce Transit, the proposed project includes two Park and Ride lots to complement local public transit needs in the corridor. The project also includes nearly two miles of a separated multi-use path which connects to the existing local bicycle and pedestrian network in the City of Fife and the westerly end of the Interurban Trail to destinations north through the City of Milton towards Seattle.

FEIS section 3.14.4 has been revised to include additional information on Transportation Demand Management measures.

Thank you for your support of the Riparian Restoration Proposal (RRP). We look forward to continued collaboration with your agency and other stakeholders as we refine the proposed project to avoid and/or minimize impacts to the greatest degree practicable.

U.S. EPA's Detailed Comments
SR 167 Puyallup to SR 509 Tier 2
Draft Environmental Impact Statement (DEIS)

Aquatic Resources

A thorough analysis of the hydrological functions and project impacts is necessary in order to minimize the direct, secondary, and cumulative effects of this project. The description of the affected aquatic environment requires detailed information with respect to sub-watershed based surface water and ground water hydrology, reach specific conditions and use by fish and other biota for various life stages, and limiting factors. The environmental consequences should couple the waterbody/reach-specific impacts that are anticipated from project construction, operation, and maintenance with these descriptions of the affected environment. In this way, the environmental limitations and vulnerabilities will be revealed in order to maximize opportunities for avoidance, minimization, and compensatory mitigation. Important refugia need to be protected, hydrological connectivity maintained, and habitat and water quality maintained or improved. Any compensatory mitigation will also require monitoring for performance and effectiveness, and contingency plans, which makes an accurate assessment of baseline conditions necessary.

F02-001g

The DEIS sections on affected environment, environmental consequences, and mitigation should be organized on a sub-watershed basis. This will ensure that impacts are adequately mitigated in each sub-watershed. The impacts of concern are effects of stormwater runoff, flooding, water quality degradation, decreased groundwater recharge, groundwater pollution, aquatic habitat degradation, and overall alterations to hydrological functions. Specifically, the EIS should include, preferably in tabular format, on a sub-watershed basis, (1) the resource impacted (wetland, floodplain, stream channel, buffers, etc.); (2) the area of impact; (3) the functions affected, (4) quantification of the impact, e.g., acre-feet of stormwater discharge that requires treatment and storage; and (4) the mitigation type, functional goals, location, and amount that is intended to compensate for each listed impact.

F02-002

Washington State Department of Transportation (WDOT) has developed an advanced mitigation watershed assessment methodology (Richard Gersib, Lead), which has been tested, peer reviewed, and is ready for additional testing and use. U.S. EPA recommends that this methodology be used to develop, for the overall project, what the baseline conditions are in the affected sub-watersheds, and what the most complete, cost effective, and environmentally beneficial mitigation package might be for the SR 167 project. We accept and appreciate that the mitigation package will include the proposed riparian restoration and stream relocations for Hylebos Creek and Surprise Lake Drain. We also expect, per verbal assurance by WDOT (Neil Campbell, 12/17/02 meeting with U.S. EPA), that riparian restoration for Wapato Creek will also occur. However, there is likely more that should be done, some of which WDOT could perform, and some of which could be accomplished in partnership with local government, the Puyallup Tribe, local watershed groups, and others. These include, but are not limited to,

F02-003

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RESPONSE F02-001g

The project team has conducted additional analyses including hydrologic modeling of the Hylebos sub-basin (MGS et al. 2004). This comprehensive study analyzed the project's effects on hydrology, channel hydraulics, and geomorphology to assure that we address the impacts of the project on the watershed.

In addition, existing conditions of water resources (including physical characteristics, aquatic species use, and limiting factors) and wetlands, as well as anticipated project impacts to these resources, have been analyzed per sub-basin, and sections 3.2 and 3.3 of the FEIS were updated to include this information. We have also developed a Conceptual Mitigation Plan that describes compensatory mitigation measures, and includes preliminary monitoring information.

RESPONSE F02-002

To the extent possible, the water resources; wetlands; and wildlife, fisheries, and threatened and endangered species sections (sections 3.2, 3.3 and 3.4) of the FEIS have been reformatted to describe impacts to the affected environment on a sub-basin basis.

RESPONSE F02-003

The methodology referred to in your comment is entitled "Wetland Functions Characterization Tool for Linear Projects (WSDOT 2000)." This methodology was used to identify and assess wetlands affected by the SR 167 project and is described in the "Wetland Discipline Report" prepared for the project. The results of the assessment and survey using the prescribed methodology are summarized in Section 3.3.1 of the FEIS. Mitigation for impacted wetlands is outlined in Section 3.3.7 of the FEIS. The wetlands affected by the project are described by sub-basin, including Hylebos Basin (which includes Surprise Lake Drain), Wapato Basin, and the lower Puyallup Basin. The Puyallup Tribe, Friends of Hylebos Creek, and the project Technical Advisory Group (TAG) have all been consulted during the preparation of the Draft and Final EIS. Work to further delineate, characterize, and categorize existing wetlands is occurring. The additional information being collected is being incorporated into the project design to avoid and minimize impacts to wetlands, as well as to prepare a Wetland Mitigation Plan.