

General comments for the secondary and cumulative impacts in 3.17.3.2.4 Wetlands section: It is not clear if the long term impacts associated with this project are considered significant or non-significant. As stated in the DEIS, by 1980 over 31% of the historic wetlands in Washington were lost. Aerial photography of the lower Puyallup River watershed reveals a noticeable increase in industrial and in some areas residential development from 1980 to present. Without conducting an extensive study of how much additional wetlands have been impacted or lost, it is U.S. EPA's estimate that losses of the historic wetlands could easily now exceed 40% in 2003 with an even higher loss in urbanizing areas, such as the proposed SR 167 project area. U.S. EPA believes that wetlands within the lower Puyallup River watershed have been impacted to a point that they are a resource at risk. U.S. EPA may classify them as an aquatic resource of national importance during the 404 permit review process based on their value to the fisheries. Any further degradation of the aquatic resources in the lower Puyallup basin could result in significant impacts to the environmental health of the region. In order to project an accurate evaluation of the cumulative and secondary impacts of the proposed project, an understanding of the condition of the existing environment is needed. This has not been accomplished in the DEIS.

Air Quality – Air Toxics

U.S. EPA is concerned about exposure to air toxics and particulate matter that may exist along roadways. Diesel emissions, which are a dominant source of these pollutants, and gasoline vehicle emissions containing air toxics will be emitted as a result of the proposed project, may affect receptors, and need to be disclosed. There needs to be adequate disclosure regarding air toxics and particulate matter pollution and known health effects thereof. A micro scale air toxics assessment should be considered for receptor locations, and construction mitigation measures should be included among the project commitments. The DEIS provides insufficient information about air toxics, does not include the emissions assessment, and does not include the use of low sulfur diesel fuel as a construction mitigation measure.

The project area borders the Tacoma Tidelands PM10 nonattainment area (page 3-140). Pierce County is within the 90th percentile for emission densities of diesel particulate matter (0.70 - 1.36 tons/year/square mile) and is adjacent to King County, which is in the 95th percentile, the highest category in the U.S. for emission densities (U.S. EPA/OAQPS, NATA National - Scale Air Toxics Assessment). The SR 167 project is intended to serve the Port of Tacoma to facilitate freight movement and will generate an unusually high amount of truck traffic and associated diesel emissions. The DEIS indicates that truck traffic is expected to double by 2014 from 300,000 to 600,000 trucks per year (page S-2), and the percentage of average daily traffic that is trucks is anticipated to be 30 to 40% (page 3-283). The proposed 6 mile, 6-lane new freeway will potentially affect receptors including residential areas, the Puyallup Recreation Center, long-term Tribal residential areas and land holdings, and schools.

The *National Air Toxics Assessment* (<http://www.epa.gov/ttn/atw/nata>) has revealed that air toxics and particulate matter from mobile sources, particularly diesel exhaust, are a serious human health hazard. A large number of human epidemiology studies show increased lung

F02-030

RESPONSE F02-030

This comment was selected as an action item during the June 23, 2003 meeting with EPA, FHWA, and WSDOT. Based on input from this meeting, indirect and cumulative impacts to wetlands has been clarified in sections 3.3.5 and 3.3.6 of the FEIS.

RESPONSE F02-031

FHWA has developed Interim Guidance on Air Toxic Analysis in NEPA Documents dated February 3, 2006. WSDOT has followed this guidance in analyzing Mobile Source Air Toxins (MSATs) for the SR 167 Final EIS. This guidance indicates that detailed assessment of air toxics is not necessary if the AADT threshold of 140,000 vehicles per day (vpd) is not exceeded. The project is anticipated to have only 100,000 vpd which is less than the AADT threshold that would trigger additional analysis. Therefore, no additional MSAT quantitative analysis has been conducted.

WSDOT will consider the use of ultra low sulfur diesel fuel at the time of construction depending upon sufficient availability and comparable cost with other diesel. Puget Sound Clean Air Agency is recommending a voluntary low sulfur diesel fuel program in the state of Washington.

F02-031

RESPONSE F02-032

Please see sections 3.5.3 through 3.5.5 of the FEIS for discussion of air quality impacts. In addition, the proposed project will facilitate the movement of trucks in and out of the Port of Tacoma by relieving congestion and taking trucks off local streets away from sensitive receptors. The number of trucks going in and out of the Port of Tacoma area are a function of the Port's operations and will increase with or without the SR 167 Extension project. The SR 167 Extension project will reduce congestion and improve truck mobility thereby reducing air quality impacts.

F02-032

F02-033

RESPONSE F02-033

As noted above in Response F02-032 the proposed project is expected to improve quality by reducing congestion, taking trucks off local streets and improving region-wide truck mobility.

cancer associated with diesel exhaust and significant potential for non-cancer health effects, such as asthma, cardiopulmonary effects, respiratory infections, and birth weight and size effects. Also the *Control of Emissions of Hazardous Air Pollutants From Mobile Sources* Final Rule (66 FR 17230, March 29, 2001) listed 21 compounds emitted from motor vehicles that are known or suspect to cause cancer or other serious health effects.

Air toxics and particulate matter are of concern from the highway construction equipment, as well as from traffic/mobile sources emitting diesel and gasoline exhaust. There should be information in the EIS that discloses information regarding the increased emissions resulting from the project, the cancer and non-cancer human health effects associated with these pollutants, and the special vulnerability of specific populations to these pollutants, such as the elderly, school children, and people with respiratory conditions. This information should also be provided directly to the Puyallup Tribal community since they plan to establish long term residential areas for Tribal members on Tribal land that is adjacent to the proposed project.

The establishment of Mobile Source Air Toxics (MSAT) standards by U.S. EPA is not a prerequisite for disclosing environmental effects from MSATs. Please provide information from the U.S. EPA National Air Toxics Assessment, coupled with MSAT emissions and concentrations that result from the project for receptors. There are tools available for determining the significance of localized concentrations for MSATs. The Industrial Source Complex Model (ISC3), AERMOD, and CALPUFF are just a few examples of available models.

Regarding the construction mitigation measures for air toxics, while the Puget Sound Clean Air Agency's goal of early introduction of ultra low sulfur diesel is mentioned on page 3-145 of the DEIS, it is not included among the construction mitigation measures on pages 3-146 and 3-147. Using ultra low sulfur diesel is a recommended mitigation measure for construction vehicles. Using biodiesel B20 is another option for reducing emissions from construction equipment. If neither of these fuels are available, retrofitted construction equipment would be an appropriate way to reduce air toxic emissions. We highly recommend that a commitment is made to one or a combination of these construction mitigation measures.

Secondary and Cumulative Impacts

Our comments will address first the underlying assumption upon which the secondary and cumulative impacts assessment is based and, second, the nature of the analysis:

Underlying assumption

The DEIS asserts on page S-9 that there will be no secondary impacts from this project (however, on page 3-79, the DEIS implies that there will be secondary effects). The rationale is that all of the growth that will occur in the project area is planned growth under the State Growth Management Act and that it will all occur whether or not the proposed project is built. U.S. EPA disagrees with the assumption that the project will have no secondary impacts based upon the following:

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RESPONSE F02-034

See responses F02-031 and F02-032 above.

RESPONSE F02-035

The discussion of impacts of operation, including discussion of MSATs have been updated and include the FHWA interim Guidance on the analysis of MSAT's, please see sections 3.5.4 and 3.5.6 of the FEIS. Also, see responses F02-031 and F02-032 above.

RESPONSE F02-036

WSDOT will consider the use of ultra low sulfur diesel fuel at the time of construction depending upon sufficient availability and comparable cost with other diesel. Puget Sound Clean Air Agency is recommending this as a voluntary program in the state of Washington.

RESPONSE F02-037

Indirect 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).

F02-034

F02-035

F02-036

F02-037

Construction of the new roadway will have induced travel effects. These are well documented and acknowledged by the Transportation Research Board in their 1995 report entitled, *Expanding Metropolitan Highways: Implications for Air Quality and Energy Use*. The Draft EIS does not acknowledge or discuss the induced travel impact, and it is not disclosed whether or not induced travel has been factored into the traffic modeling analyses, growth projections, air conformity analyses, roadway stormwater pollutants, energy usage, and so on. If it has not, we ask that this be done.

The DEIS indicates that the new roadway is expected to accelerate development (page 3-326), and "...the proposed project could alter the rate, timing, and location of future growth and development within the corridor area as planned by local and regional jurisdictions." (DEIS, page S-11) Accelerated development means that planned development could occur sooner than anticipated in the land use plan. The consequences of achieving or approaching completion of all planned development generally are the demand for more developable land, more annexation, and more ensuing development.

The development of the area will occur hand in hand with construction of the roadway and will be influenced by the layout of the road and the number and location of access points. If the road avoids sensitive environmental areas and has no access near them, development in those areas will be less likely to occur and slower to occur. In this way the road can induce or avoid secondary impacts.

Nature of the analysis

We ask that these potential secondary effects be analyzed, such as with the use of the Delphi Method (an expert panel) or other methodology that examines alternative future development scenarios. This would be extremely helpful because the opportunity to protect and preserve sensitive areas, floodplain, open space, and to incorporate low impact development strategies to mitigate the effects of development, are most possible to achieve now, while these lands are yet undeveloped. In addition, regardless of local land use decisions and events, FHWA is responsible for analyzing and disclosing the effects of its actions and factor those effects into decision making and actions.

We believe the cumulative effects analysis is insufficient in that it cites no established methodology or guidance document, is strictly qualitative, and is based upon best professional judgement. While we agree with and appreciate the candid general conclusions, the analysis does not provide the information that is needed for decision making. The EIS must include a "useful analysis of the cumulative impacts of past, present, and future projects." This means the EIS must analyze the combined effects of the actions in sufficient detail to be "useful to the decision maker in deciding whether, or how, to alter the program to lessen cumulative impacts." [City of Carmel v. U.S. DOT, 123 F.3d 1142 (9th cir. 1997)]

RESPONSE F02-038

Please see Response F02-037 for discussion regarding secondary impacts.

RESPONSE F02-039

The cumulative impacts analysis has been revised. Section 3.1.2 of the FEIS describes the criteria examined in determining indirect and cumulative impacts.

F02-038

F02-039

There are several models and methodologies available to conduct secondary and cumulative impact analyses. We recommend alternative futures analyses as a valuable approach, and U.S. EPA has expertise that can help in this area. Models available for secondary and cumulative impact analyses, such as Community Viz and Smart Growth Index, include environmental metrics outputs, (imperviousness, stormwater runoff, total suspended solids, phosphorus, residential water and energy consumption and wastewater production, particulate matter, open space, and many more) that would be useful in determining the project effects upon water quality, aquatic habitat, and so on. The FHWA website includes more than 12 guidance documents for estimating the secondary and cumulative effects of transportation projects, including FHWA's own interim guidance, as well as a bibliography on the subject. We refer you to these tools and ask that an acceptable methodology be used.

F02-040

ESA Threatened and Candidate Species

The DEIS provides a preliminary Effects Determination that the project would be "likely to adversely affect" (LTAA) the listed chinook salmon and bull trout, and "likely to significantly impact" (LTSI) the candidate listing species coho salmon. We understand that the Services wish to analyze only one alternative, and since only one build alternative is presented in the Tier 2 EIS, we suggest there be no delay in consulting under ESA.

The consultation likely will provide essential information on water quality as well as identify needed mitigation measures – mandatory and/or voluntary – that will be needed for maintenance of designated uses under the Clean Water Act (CWA). The sooner this analysis takes place the greater the ability of the project proponent, local government, and other entities will be to take positive steps to protect undeveloped land, restore habitats, implement low impact development, and other strategies to prevent and minimize further environmental degradation.

F02-041

The plan to complete an ESA Section 7 consultation in the future does not absolve the project proponents from the requirement under NEPA to disclose the effects to ESA-listed species from the direct, indirect, and cumulative impacts of the proposed project.

Wildlife

The DEIS indicates (page 3-355), that the proposed roadway will impede east-west wildlife movement due to the road being placed on fill instead of bridge structure. We ask that new alignments not be constructed in a manner that creates such an impediment. To maintain terrestrial habitat connectivity, wildlife crossing structures should be incorporated into the design – preferably a bridge structure or at least an oversized, bottomless culvert – that will enable east-west movement in appropriate locations for species inhabiting the area. Similarly, wherever new or replacement bridge and culvert structures are installed, they should be designed to accommodate terrestrial species as well as aquatic species by spanning sufficient upland habitat as well as aquatic habitat.

F02-042

RESPONSE F02-040

WSDOT met with EPA, USFWS, and WDFW three times between May 2002 and October 2002 to discuss methods and information used for cumulative and secondary effects analysis. Despite specific requests by WSDOT for appropriate models to use, Community Viz and Smart Growth Index were not identified. Models acceptable for use in cumulative and secondary effects analysis should be referenced in guidance documents. The FEIS includes limited additional analysis (e.g. corridor imperious surface analysis) as well as reformatting the information in the FEIS.

RESPONSE F02-041

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 regarding the project.

RESPONSE F02-042

The addition of low-cost wildlife crossings and the use of over-sized culverts or clear-spanning structures, will be considered at appropriate locations.

In addition, while it appears that WDOT intends to do so, we would like to emphasize the importance of and our support for using native plants in all roadside and other site restoration areas, as well as riparian and wetland mitigation sites to provide needed habitat and connectivity in the landscape for wildlife, and to minimize clearing of native vegetation as much as possible in construction and staging areas. We urge that the principles of context sensitive design be applied, particularly whenever new alignment is being constructed.

Multi-modal aspects

The project Purpose and Need states that the project is to “serve multimodal local and port freight movement and passenger movement” between the two project endpoints. We find that the multimodal aspects of this project – namely transit, pedestrian, and bicycle accommodations – are not well developed. Considering the magnitude of this project, the safety and air pollution health hazards for pedestrians and bicyclists, the growing communities in the project area, the notable lack of facilities for them, and the Puget Sound Regional Council (PSRC) multi-county planning policies (RT-8, RT-8.14, RT-8.22, RT-8.38) that call for improving non-motorized transportation, public transit, and transportation demand management, the project should include much more to address these needs.

Transit

While there are various transit routes serving the area, there are no commitments to provide Park and Ride lots (page 3-281). Pierce Transit has recommended two lots, and the DEIS states that this will be studied further when the project moves into design phase. Tier 2 is the design phase, and is the best and most cost effective time to establish the lots before the land is all developed. We recommend that the project proponents, in concert with the land use planning entities, establish the lots and consider doing so in a manner that supports transit-oriented and low impact development. This approach would serve to supply needed transportation infrastructure and modal choice, decrease traffic on roadways, and minimize stormwater runoff.

Pedestrian/bicycle facilities

The DEIS states that pedestrian use of the area is light due to low density land uses and the lack of adequate pedestrian facilities. Sidewalks are relatively nonexistent or discontinuous in the project area and travel to the Puyallup Recreation Center is auto-dominated. We believe that if pedestrian facilities were provided, they would invite more pedestrian usage. We recommend that there be a firm commitment to provide the pedestrian/bicycle overpass, in one way or another.

We commend the project proponent for the separate multi-use trail proposed along Hylebos Creek between SR 99 and 54th. However, we believe this trail needs to be extended farther to better serve the area to maximize its usefulness and service to area destinations, including the Puyallup Recreation Center. It should also be connected to other area trails as is proposed in the DEIS with the Interurban Trail.

Puyallup Recreation Center

F02-043

RESPONSE F02-043

The principles of context sensitive design will be applied wherever possible. Roadside plantings will be done in accordance with WSDOT’s *Roadside Classification Manual*. Native plants will be used for the Riparian Restoration Proposal (RRP).

F02-044

RESPONSE F02-044

The description of multimodal aspects of the project including HOV lanes and pedestrian and bicycle accommodations has been updated, see section 3.15 of the FEIS.

F02-045

RESPONSE F02-045

The project now includes two park-and-ride lot locations, one at the Valley Avenue interchange and one near the SR 161 interchange. Please see sections 3.14.2 and 3.14.3 of the FEIS.

F02-046

RESPONSE F02-046

An over-crossing at the Recreation Center was evaluated, and was determined to be unreasonable because of low recorded non-motorized demand. The preferred (Urban) SR 161 interchange includes an overcrossing east of the Recreation Center, see figure 2-7.

F02-047

RESPONSE F02-047

WSDOT is not proposing an extension of the separate use path beyond SR 99. The project will accommodate the Interurban Trail and re-establish public access connection to the trail in the vicinity of 70th Avenue East and I-5. The relocated portion of the trail will be ADA accessible, a separated Class I or II non-motorized path linking to the City of Fife’s bicycle and pedestrian facilities.