Attachment 5: Comments and Responses

In this attachment, we present the written comments received via email, on EA public hearing forms, and as letters. During the April 22, 2008 public hearing, attendees had the opportunity to make formal oral comments; however, no one presented oral comments for recording. We have copied the written comments received during the comment period in their entirety and presented them according to the index below. Our corresponding responses follow each letter.

Index to Written Comments and Responses

City of Renton

King County Department of Transportation

Muckleshoot Indian Tribe

U.S. Department of the Interior

Comment AT-1: City of Renton

CITY OF RENTON

Denis Law, Mayor

Public Works Department
Gregg Zimmerman P.E., Administrator

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MAY 27 2008

URBAN CORRIDORS OFFICE

May 22, 2008

Mr. William Jordan
I-405 Environmental Manager
Washington State Department of Transportation
I-405 Project Office
600 108th Avenue NE, Suite 405
Bellevue, WA 98004

Subject: **I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 - Phase 2) Environmental Assessment (EA) Comments**

Dear Mr. Jordan:

Previously, the City of Renton provided scoping comments, dated June 2006, for consideration when preparing the subject Environmental Assessment (EA). As noted in our scoping comments, the City of Renton and WSDOT have signed several letters of concurrence regarding the I-405 Master Plan for the segment between I-5 and SR 169.

Continuing in our collaborative efforts on the planning and design of improvements to the I-405 corridor, the City of Renton submits the following comments for consideration with regard to the I-405, Tukwila to Renton Improvement Project (Phase 2) Environmental Assessment.

APPENDICES

1 We recommend that the letters of concurrence noted above be included or referenced in Appendix B – Agency and Tribal Correspondence.

CHAPTER 3 – DEVELOPING THE ALTERNATIVES

2 The EA notes the cantilever of I-405 over Main Avenue South. The City would like the EA to note what, if any, unique impacts this may cause to the ownership, operations, and maintenance of different rights-of-way stacked in airspace. It is expected that during future project development, the City and WSDOT will need to develop ownership, operations, and maintenance agreements.

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CHAPTER 5.2 – NOISE

3 The City recommends that noise walls be included to mitigate impacts to the City's Tri-Parks complex, the City's historical museum, and the City's main library. The EA identifies that these parks, the museum, and library already exceed the noise level, and in the case of Cedar River Park, the noise level will increase.

4 Development of the Cedar River Vicinity Charette was based on the understanding that in order for the northbound I-405 to SR 169 off-ramp to be moved significantly closer to the Renton Community Center, this ramp would include a noise wall.

CHAPTER 5.3 – COMMUNITIES, BUSINESSES, AND PUBLIC SERVICES

5 The EA should address impacts to private houses on Mill Avenue South where the proposed stacked Mill Avenue is proposed, such as subterranean impacts.

CHAPTER 5.4 – RECREATIONAL AND CULTURAL RESOURCES

6 The Cultural Resources discipline report should have an additional description regarding the protection of the Renton Coal Mine Hoist Foundation, located between Benson Road and the I-405 southbound off-ramp to SR 515. The text should not indicate that the mine hoist foundation will be removed.

7 The City requests the Cultural Resources discipline report evaluate the Longacres horsetrack monuments located underneath I-405 just east of the BNSF railroad tracks. Regardless of the results of this analysis, the City would like WSDOT to commit to cooordinating with the City in the future regarding the protection or relocation of these monuments.

8 The Panther Creek Wetlands Open Space, as identified in the City of Renton 2003 Long-Range Park, Recreation, and Open Space Plan, shows this area to be developed in the future to include a boardwalk with interpretive materials, viewpoints and trails systems. In addition, the City's adopted Trails Master Plan designates this area as a trail location connecting west to the Springbrook Trail and east to the Cascade Trail. While not currently open to the public, this will be a major connection to trails to the east and west. The City requests the EA identify this connection under SR 167. This should be designated as a 4(f) property.

9 The Cedar River Natural Area was acquired with Washington Wildlife and Recreation Program (WWRP) funding administered by the Resource and Conservation Office (RCO) along with the NARCO property. This was completed as one acquisition; $500,000 was granted by the RCO. This property should be listed as a 4(f) parcel throughout the EA.

10 The EA defines a "constructive use," and on page 5-48 indicates that noise, visual quality, and air quality studies were completed for the Tukwila to Renton Project EA and the studies found that the project would not have constructive uses at any of the recreational properties. The City

disagrees with this conclusion. The City requests noise barriers to be constructed to reduce the increased impacts and noise to the City's Tri-Park complex, museum, and library.

Chapter 5.5 – Visual Quality

11 The EA should also include text regarding the significant effect on visual quality caused by the cantilever of I-405 over Main Avenue South.

Chapter 5.6 – Water Resources

12 WSDOT needs to work out a schedule to provide the City with the requested information and relevant studies depending on project funding.

13 The City's existing underground utilities in the Tri-Parks vicinity will be severely impacted by the project, especially by the new ramp and support structures. The EA should identify these impacts and WSDOT's commitment to relocate the City's existing utilities, including but not limited to: water mains, sanitary and storm sewer mains, chemical lines for water treatment, telemetry and power conduits, and vaults. The EA should identify that WSDOT will commit to relocation of these utilities prior to any condemnation and/or conversion of acquired City-owned property to limited access right-of-way. As part of the EA, WSDOT should identify the need for the acquisition of a new utility corridor for the relocation of the existing City utilities impacted by the project.

Should you have any questions or concerns, please contact Keith Woolley, the City's I-405 coordinator, at (425) 430-7318.

Sincerely,

Gregg Zimmerman

Gregg Zimmerman, P.E.
Administrator

cc: Peter Hahn, Deputy Public Works Administrator – Transportation
Terry Higashiyama, Community Services Administrator
Lys Hornsby, Utility Systems Director
Leslie Betlach, Parks Director
Jim Seitz, Transportation Planning and Programming Supervisor
Abdoul Gafour, Utility Engineering Supervisor
File

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Responses to Comment Letter AT-1: City of Renton:

1. These concurrence letters can be found in the project's Scoping Report, issued January 2007, and are part of the project record.

2. Maintenance, operation, and ownership agreements and acquisitions will be coordinated with the City prior to construction of the project as determined through WSDOT policy.

3. The project noise analysis demonstrates that while these resources are currently above the FHWA noise abatement criteria, noise barriers are either not feasible or are not reasonable. The museum and the library receive most of their noise from local surface streets and are at a distance from I-405 that makes noise reduction techniques less effective. The Tri-Park area does receive noise from I-405. However, as referenced in the Noise Discipline Report included in the EA as Appendix N, a noise barrier is not reasonable under WSDOT's feasible and reasonable criteria as defined by WSDOT's *Traffic Noise Analysis and Abatement Policy and Procedures,* which is consistent with FHWA noise policy.

4. This assumption is not documented in the Cedar River Vicinity Charrette Report, nor the resulting concurrence letters signed between WSDOT and the City. However, as part of this project, WSDOT analyzed potential noise effects to the Tri-Park vicinity and found that the size of the barriers needed to reduce noise would exceed what is allowed under WSDOT's noise abatement criteria for reasonableness.

5. Subterranean easements will be negotiated with the landowner. There are currently no planned acquisitions for residents along Mill Avenue South.

6. This feature is one element of the Renton Coal Mine as described in the Cultural, Historic, and Archaeological Technical Memorandum. The Washington State Historic Preservation Officer concurred with our findings through the Section 106 Consultation process. This concurrence memorandum can be found in Appendix B of the EA. The SR 515 Interchange Project, which is part of the current funded project, will not remove the hoist foundation. However, full project build-out may remove the hoist foundation.

7. These monuments were presumably placed after 1992, when the Longacres horse track was demolished. Therefore the monuments do not reach the threshold of 50 years old for documentation. However, WSDOT will coordinate with the City prior to activities that may disturb the monuments.

8. The 2003 Park, Recreation, and Open Space Plan indicates the City's Public Works Department has plans to develop this site as a water retention area. The plan further states this development "…creates several opportunities for passive recreation. Proposed facilities at the site could include: boardwalk/interpretive trails, viewpoint areas/vistas, and trail systems.

After additional coordination with the City of Renton, FHWA has determined that due to the lack of public access and a lack of a specific development plan for this property, this site is currently not a Section 4(f) resource. The City of Renton has agreed with this determination in its July 14, 2008 letter in Attachment 6.

9. After additional coordination with the City of Renton, FHWA has determined that the entire Cedar River Natural Area is considered a Section 4(f) resource. Please see the Final Section 4(f) Evaluation (Attachment 7). However, the Draft Section 4(f) Evaluation is still accurate with regard to how effects and mitigation are characterized. Please also see City of Renton letter dated July 14, 2008 in Attachment 6.

10. Please see response to Comment No. 3.

11. This was analyzed as part of viewpoint T5 in Exhibit 5-24 of the EA. This viewpoint is related to the project feature noted under the third bullet on page 5-53. FHWA has determined that this viewpoint will not have a significant effect due to the low visual quality of the existing view.

12. WSDOT will continue to coordinate with the City regarding future work activities related to this project as funding becomes available.

13. WSDOT will work with the City when construction funding is secured to identify and relocate all utilities within the Tri-Park area that are affected by this project.

Comment Letter AT-2: King County Department of Transportation

King County
Department of Transportation
201 South Jackson Street
Seattle, WA 98104-3856

RECEIVED
MAY 21 2008
URBAN CORRIDORS OFFICE

May 19, 2008

William Jordan
I-405 Project Office
108th Ave. NE, Suite 405
Bellevue, WA 98004

Dear Mr. Jordan:

1 Thank you for the opportunity to review and comment on the Environmental Assessment (EA) of the Interstate 405, Tukwila-to-Renton Improvement Project (I-5 to SR-169 – Phase 2), dated March 2008. While the EA adequately addresses the transportation impacts of the proposed project, we believe that it should also fully assess the potential impacts of developing a dual-lane high occupancy toll (HOT) facility in the corridor. We have made this recommendation before, and we continue to believe that the easiest and best time to create such a facility is when the freeway is being expanded. We also believe that recently passed legislation should influence a decision about proceeding with the proposed general-purpose-lane projects in the I-405 corridor. This legislation is ESSHB 1773, which establishes tolling guidelines, and ESSHB 2815, which sets goals for the reduction of greenhousegas (GHG) emissions and vehicle miles traveled (VMT). The EA should fully assess the potential for dual HOT lanes as a reasonable alternative that would be more consistent with the state's recently adopted goals.

HOT lanes

2 High occupancy vehicle (HOV) lanes in the Puget Sound region continue to be successful, but congestion is causing their performance to decline. This is especially true in the I-405 corridor. As reported in *The Gray Notebook, September 30, 2007, Measuring Delay and Congestion: Annual Update*, the existing single-lane HOV system in the I-405 corridor between Tukwila and the Swamp Creek Interchange does not meet the state's performance standard for freeway HOV lanes. This standard calls for the HOV lane to maintain an average speed of 45 miles per hour or faster during the peak period at least 90 percent of the time. The recommendation for continuation of a single HOV lane in this section of I-405 fails to explain how the state will improve HOV-lane performance in this corridor.

We believe that an evolution from HOV lanes into separated, dual HOT lanes may provide a solution for the region's congested HOV-lane system. Dual HOT lanes preserve the speed and reliability benefits for transit and HOVs, while providing an express alternative for single-occupancy vehicles. King County has enthusiastically supported the Washington State Department of Transportation's HOT lane pilot project now underway in the SR 167 corridor. We believe this pilot project will teach us a great deal about the use of variable tolling to

MOBILITY FOR THE REGION

William Jordan
May 19, 2008
Page 2

optimize traffic flow and maintain transit and HOV speed and reliability. We look forward to an analysis of the pilot project and its possible applications in other congested corridors, such as I-405.

Tolling

3

ESSHB 1773 provides for the State of Washington to use tolling to encourage effective use of the transportation system and to provide a source of transportation funding. The legislation states that tolling should be used when it can contribute a significant portion of the cost of a project that cannot be funded with existing sources, or when it can optimize the performance of the transportation system. Most of the elements of the Tukwila-to-Renton Improvement Project are unfunded; the EA indicates that funding is available only to design and construct the half-diamond interchange at SR-515. We believe that a discussion needs to take place about the possible use of tolling as a source of funds for the I-405, Tukwila-to-Renton project.

In February 2008, the Washington State Transportation Commission transmitted the *Washington State Comprehensive Tolling Study, Part 2,* ("tolling study") to the Governor and the Senate and House Transportation committees for their review and consideration. The tolling study identifies actions that might be taken early to carry out the overall direction described in the commission's Part 1 tolling study. The commission recommends six guiding principles for the state to consider. The first principle calls for the state to consider the impacts of tolling on the entire transportation system and not focus only on specific segments of highway that might be tolled. The study notes that "The decisions of today should not create stumbling blocks for future decisions." The tolling study further states:

> "Numerous projects are proceeding in the same corridor at once. For example, the SR 167 HOT lanes project is moving towards construction. A variety of studies are underway on I-405. There are several options being discussed for Lake Washington. None of these can be considered in isolation, yet there is not yet a comprehensive forum to come to agreement on the best approach for the state and region."

We agree with this observation and believe that a regional discussion is needed to determine if the addition of general-purpose lanes to I-405 is consistent with the state's policy on tolling.

Reduction of VMT and GHG

4

ESSHB 2815 provides a framework for reducing GHG emissions for all major sectors of the Washington economy. The legislation directs the state to limit emissions of GHG by 2050 to 50 percent below 1990 levels, or 70 percent below Washington's expected emissions level that year. ESSHB 2815 also establishes benchmarks for reduction of VMT, with the goal of reducing annual per capita VMT by 50 percent by the year 2050. The legislation calls for the Department of Transportation, using a collaborative process with the departments of Ecology and Community, Trade, and Economic Development, to make recommendations on tools and best practices to assist state, regional, and local entities in making progress towards the VMT reduction benchmarks.

William Jordan
May 19, 2008
Page 3

Given the clear intent of ESSHB 2815, we believe that the state and regional and local entities should discuss further the implications of this legislation on general-purpose-lane projects such as the I-405, Tukwila-to-Renton project. We would like to better understand how the addition of general-purpose lanes will contribute towards the goals of reducing GHG emissions and VMT.

4 Finally, the EA acknowledges that the EIS for the I-405 corridor indentified other possibilities to better manage the corridor through tolling. This could be done by using express toll lanes that could be created through the conversion of the HOV lane and, possibly, one of the proposed new general-purpose lanes. The EA also states that if express toll lanes are to be implemented in the future, additional operational analysis and environmental documentation would be prepared. While it may be easy to convert an existing HOV lane and a general-purpose lane into a dual HOT lane facility, it would likely generate considerable public opposition. As we mentioned previously, we believe that the easiest and best time to create a dual HOT lane facility is when the freeway is being expanded.

Specific additional comments on the EA are attached.

Thank you again for the opportunity to comment on the EA for the I-405, Tukwila-to-Renton Improvement Project (I-5 to SR-169 – Phase 2). We look forward to discussing the issues raised in this letter concerning tolling, GHG- and VMT-reduction goals, and their potential impacts on projects in this corridor. If you have any questions regarding this letter, please contact Ron Posthuma, at (206) 684-1007.

Sincerely,

Harold S. Taniguchi
Director, King County Department of Transportation

Attachment

cc: Laurie Brown, Deputy Director, King County Department of Transportation
Ron Posthuma, Assistant Director, King County Department of Transportation

Attachment: Specific comments on EA

5 Metro has several bus stops within the limits of the I-405 Tukwila-to-Renton Project that could be impacted by construction or rechannelization. The need to permanently relocate or alter bus stops that would be impacted by the construction may require that accessibility improvements and shelter footings be incorporated into the project. Please contact Transportation Planner Patt Comstock at (206) 684-1523 or patt.comstock@kingcounty.gov to arrange a detailed review of the potential impact locations.

Upon completion of the project, King County would be interested in looking at any vacant construction staging sites that could be used for park-and-ride lots or bus layover.

Contact our Construction Information Center at (206) 684-2732 to provide the following notifications:

- Five (5) business days notification for any road closure impacting transit routes or facilities.
- Three (3) business days notification for any temporary/short-term closures or relocations of bus stops.
- Ten (10) business days notification for the removal of any permanent structures (e.g.. bus shelters) belonging to King County Metro (contractor must provide the traffic control plan for any removals).

6 TDR Section 2, page 2-5: First section, "Reconstruct the off-ramp from NB 405 to 181" Exhibit 2-2 is missing the note to this change.

7 TDR Section 2, pages 2-20 to 2-21: Mill and Main Avenue options should be coordinated with King County Metro, as changes will affect Metro and Sound Transit routes as well as Metro facilities. Consideration should be given to better accommodate Metro service and riders as traffic increases on Bronson Way.

8 TDR Section 2, pages 2-23 to 2-24: Concerning Road Closures and Traffic Control, local agencies should also include the King County Transit Construction Coordination office.

9 TDR Section 5, page 5-10: Transit service and facilities on local streets will be affected by the reconfigurations of the local street network with the widening of the 405 bridge over the Cedar River, the widening of the Bronson Bridge, the new ramp to SR515, etc. Exhibit D-1 in Appendix D reports that the intersection of SR-515 and Grady Way will experience more delay in the mornings with the new ramp. Several Metro routes travel through this intersection. Intersection improvements should be considered at this and other locations where new traffic will be generated by the project.

10 TDR Section 5, page 5-10: There are two existing bus stops at Renton Village Place on SR-515, where the new southbound I-405 ramp is being proposed. These stops will be affected and will likely need to be relocated due to the project.

11 TDR Appendix A: Routes 154 and 161 are missing from the list. Route 154 will travel through the proposed Tukwila Parkway extension on SR-181, and Route 161 will travel through the new proposed frontage road connections on Lind Avenue. Since the project will directly route new traffic through these intersections, there will be some impact on these transit routes.

Responses to Comment Letter AT-2: King County Department of Transportation

1. WSDOT recognizes that the current HOV system no longer performs during the peak period at the established 45 miles per hour standard set for HOV lanes. These HOV lanes have been so successful that they are now overwhelmed. To address the lack of performance in the HOV lanes, many have suggested that the HOV system should go to three-person carpools. (For the project analysis, a change to 3+ carpools was assumed in determining future traffic operations.) The difficulty in switching the occupancy requirement is that nearly 80% of the users of the HOV system are two-person carpools. To restrict them from the HOV lane will not only further congest the general-purpose lanes, but will also leave the HOV lanes underutilized. This would lead to an inefficient use of our infrastructure. WSDOT sees HOT lanes as a way to better manage these lanes by providing not only a reliable trip to those in the lane, but also to ensure that the system is being used efficiently based on the demands of the transportation system through pricing.

In 2002, the I-405 Corridor Program Final Environmental Impact Statement and Record of Decision did acknowledge the need to provide the necessary accommodations to implement a managed lanes system, i.e., HOT lanes. At that time, the Executive Committee for the Program believed that another regional transportation body would provide the direction for I-405 to include these HOT lanes as a project component. Where as this regional transportation body has not formed, efforts have been undertaken to determine the benefits of HOT lanes on I-405.

During 2003, WSDOT embarked on a study of managed lanes in the corridor. The analysis looked at the benefits of: one HOV lane with a three-person carpool designation, a single HOT lane where three-person carpools would be free, a two-lane HOT lane system where two-person carpools were free, and a two-lane HOT lane system where three-person carpools were free. The results of the analysis showed that by managing two lanes through pricing, the overall roadway system could move more people and vehicles than to manage a single lane either by occupancy or through pricing.

In 2005, with the combination of Nickel and TPA gas tax funding, WSDOT saw the opportunity to look more closely at this HOT lane system in the northend of the corridor. The I-405, SR 520 to I-5 Improvement Project is currently evaluating the benefits of a two-lane HOT lane system. Legislative direction was also given to support this consideration.

A similar analysis was not embarked upon for the Tukwila to Renton Project due to the fact that the length of the project was not conducive for a HOT lane system. This does not mean that the HOT lanes are not a good idea for the south end of the corridor, but the length of the project as currently defined would not produce a logical stand-alone system. Should these lanes be considered for a switch to express toll lanes, this would be addressed in separate environmental documentation.

With the failure of Proposition 1 and ESSHB 1773, WSDOT has recently started an evaluation of a two-lane HOT lane system on I-405 from SR 167 to I-5 in Lynnwood to determine if tolling could generate the needed funding to build the infrastructure for the HOT lane system. Preliminary results of this analysis are expected later this year and we would be happy to meet with King County to discuss the results at that time.

With the successful opening of the SR 167 HOT lanes, WSDOT sees the timing of further discussion on expanding such a traffic management technique as very timely. We see the difficulty there would be if new lanes are opened to general-purpose traffic to later be used for a HOT lane system. We appreciate your support for such a system and look forward to working with you as this work continues.

2. Please see response to Comment No. 1.

3. Please see response to Comment No. 1.

4. ESSHB 2815 sets statewide greenhouse gas goals for Green House Gases (GHG) and per capita vehicle miles traveled (VMT) reductions. We are working to improve the quality of the climate change and GHG-related information discussed in our project-level environmental documents. At this point in time, we have two concurrent efforts in progress: we are trying to help the public and decision makers see where an individual project fits in; and

we are working with the Climate Action Team and its work groups to expand the tools and resources needed to explain what information we have and what it may mean. The current Tukwila to Renton Project EA discusses climate change and WSDOT's efforts, but given that much of the science and proposed methods are evolving at this point, we do not have quantitative information at the project-level. Looking at GHGs for individual projects that add single lanes of traffic, without taking into account the relationship to travel patterns of the area, would provide a skewed image of GHGs.

Corridor and regional scale analyses are another valuable resource on the horizon. For example, we are hopeful concerning the outcome of the Puget Sound Regional Council's (PSRC) regional travel demand modeling and similar efforts. PSRC is currently evaluating climate change and GHGs as part of their Destination 2030 plan update. This update will take all phases of the I-405 corridor improvements into account (including tolling scenarios), as well as other major project development in the region. This regional approach will give WSDOT, King County, and PSRC's other member jurisdictions a better and more comprehensive view of GHG and VMT effects.

5. WSDOT will coordinate with King County Metro prior to construction. WSDOT will develop a Traffic Management Plan that will address potential impacts to bus routes and service.

6. Exhibit 2-2 is provided as a visual reference. There is yellow shading on the off-ramp to indicate new construction will occur there.

7. Please see response to Comment No. 5.

8. Please see response to Comment No. 5.

9. Some movements at the SR 515/Grady Way intersection will experience slight delay increases once the currently funded portion of the project is built; however, much of the surrounding transportation network will operate better as a result of this project. In addition, freeway access for transit and other vehicles will be improved with this project. Please also note, the Bronson Way bridge will only be restriped, not widened. Also please note that Appendix D of the Transportation Discipline Report addresses only the effects of the funded SR 515 portion of this project. The Tukwila to Renton Project as a whole is expected to improve operation of the SR 515 and Grady Way intersection.

10. Please see response to Comment No. 5.

11. The table in Appendix A of the Transportation Discipline Report has been updated. The update can be found in Attachment 1: Errata to the EA and Technical Studies.

Comment Letter AT-3: Muckleshoot Indian Tribe

MUCKLESHOOT INDIAN TRIBE
Fisheries Division
39015 - 172nd Avenue SE • Auburn, Washington 98092-9763
Phone: (253) 939-3311 • Fax: (253) 931-0752

May 16, 2008

William Jordan
I-405 Environmental Manager
Washington State Department of Transportation
600 108th Avenue NE, Suite 405
Bellevue, WA 98004

RE: I-405, Tukwila to Renton Improvement Project (I-5 to SR 169, Phase 2), Environmental Assessment

Mr. Jordan:

The Muckleshoot Indian Tribe Fisheries Division has reviewed the Environmental Assessment and its associated Discipline Reports for the above referenced project. We offer the following comments in the interest of protecting and/or restoring the Tribe's fisheries resources.

In general, we have several concerns about the potential impacts associated with this project. The proposal to place temporary piles and falsework, bridge piles and fill into the Green River could potentially adversely affect Muckleshoot Tribal fishing that occurs in the area. In addition, this project will adversely affect the Tribe's treaty protected salmonid resources as discussed in the comments below. WSDOT will need to address these issues prior to permit approvals.

Our specific comments are attached for your review and consideration. We appreciate the opportunity to comment on this proposal. If you have any questions about these comments or would like to meet to discuss them, please contact me at (253) 876-3116.

Sincerely,

Karen Walter
Watershed and Land Use Team Leader

Cc: Steve Boch, FHWA
Rebecca McAndrew, ACOE, Regulatory Branch
Krista Rave-Perkins, EPA, Region 10
Mike Grady, NMFS
Emily Teachout, USFWS
Jim Fraser, WDFW
Larry Fisher, WDFW
Rebekah Padgett, WDOE, Northwest Region, Water Quality Program

EA Comments

1 General comment: Since the I-405 Corridor Program DEIS and Record of Decision (ROD) was adopted by WSDOT and Federal Highway Administration, gas prices have increased substantially making mass transit a more desirable option for many commuters. It seems reasonable that this project should also give equal consideration to a third alternative that considers increasing bus transit, carpools and other methods to relive congestion.

2 Page 1-2 It is misleading for this project to issue this EA, which includes the SR 515 Interchange Project after the Corps permit was put out for public notice and potentially approved. This approach piecemeals the review process and makes it difficult to evaluate potential cumulative impacts from the SR 515 Project and the larger I-405 Tukwila to Renton project

3 Page 1-3 The cumulative effects statements are incorrect. There will be permanent filling of floodplains, stream channels, wetlands, stream and wetland buffers, additional stormwater from increases in impervious surfaces, and the potential for the continuation of blocking culverts for fish passage. All of these actions are significant and will result in negative long-term cumulative effects to aquatic habitat.

4 Page 1-3 and 1-4 The details of the Panther Creek Watershed Rehabilitation Plan, which is mentioned in several places but not fully discussed are unknown at this time and cannot be evaluated to determine if this mitigation plan will be sufficient to mitigate for impacts to the Green River, Springbrook Creek, Thunder Hills Creek and its tributary, Rolling Hills and its tributary, Panther Creek, Gilliam Creek and its tributaries and the Cedar River. As a result, we reserve the right to comment on this potential mitigation plan and amend these comments accordingly.

5 Page 1-4, Please clarify what further evaluation is needed for the "seven" fish passage barrier culverts within the study area. See also our comments below regarding if number of barriers in the project area is correct or not.

6 Page 1-4, We strongly disagree with the statement that the project will not have a "disproportionately high or adverse effects on minority or low-income people" with respect to the Muckleshoot Indian Tribe. See our specific comments below under the Environmental Justice DR comments.

7 Page1-6, There is no analysis in the Water Resources DR or anywhere else to suggest that peak and/or base flows will not be altered by the project. Similarly, there is no analysis regarding other impacts associated with floodplain fill except potential increases in flood elevations. This is not the only potential impact.

8 Page 1-6, The decision to issue a Finding of No Significant Impact (FONSI) should be made once all of the comments are in for this EA. Anything less pre-supposes the outcome. There is potential that an Environmental Impact Statement is needed based on the comments and potential impacts associated with the project.

9 Pages 3-5 and 3-6, Please discuss how the proposed new bridge over the Nelson Side Channel and Green River is consistent with the WRIA 9 Salmon Recovery Plan's project to build a side channel feature at the Nelson Side channel. It appears that this project element may be in conflict with planned habitat restoration.

10 Page 3-6, The decision to conduct the majority of the widening to the south to avoid business to the north has impacts for area streams and wetlands. This approach appears to ignore the first step of mitigation, which is avoidance of impacts.

11 Page 3-7, Please clarify if the bridge piers for the bridge modifications/new bridges crossing the Cedar River will be

within the 100 year floodplain or not.

12 Page 4-8, Locating the proposed stormwater feature shown on the east side of SR 167 along Panther Creek on the west side of the highway would likely have less impact on the Panther Creek wetland complex. Please explain why the lower impact location was not selected.

13 Page 4-16, Please clarify if the culvert conveying Thunder Hills Creek will need to be extended as part of this project or not. If this culvert will need to be extended, please indicate when this determination was made.

14 Page 4-21, Please clarify if the Bronson Way North bridge crossing over the Cedar River will need to be expanded or not.

15 Page 4-24, Please indicate if the "Tri-Park" area will have additional impacts to the floodplain, river, and riparian areas of the Cedar River. If so, these impacts need to be disclosed and analyzed as part of the cumulative impacts analysis.

16 Page 5-21, Please clarify if the Noise Barrier 8 will result in additional filling to the stream channel and/or additional removal of riparian vegetation for Thunder Hills Creek.

17 Page 5-22, Please clarify whether the location and extent of Noise Barriers 10B and 10A could impact any future culvert removal necessary for Rolling Hills Creek.

18 Page 5-59, Significant adverse impacts to water resources in the project area has occurred as a result of the existing highway. The EA fails to mention this.

19 Page 5-59, The print date for this EA is March 2008. The EA should reflect the most current 303(d) list information, note the 2004 list.

20 Page 5-77, Significant adverse impacts to rivers and streams and their riparian areas in the project area has occurred as a result of the existing highway. The EA fails to mention this.

21 Page 5-77, Per the Final Responses to the I-405 Renton Nickel 404 Permit (WSDOT February 9, 2007 document in response to MITFD comments) there are 82 culverts in the project area. Fifty of these culverts convey stormwater, 2 culverts convey mine sweeps, 5 culverts are plugged and convey no water; 25 culverts convey "waters of the state". Of these 25 culverts, 24 were identified to convey fish bearing streams. WSDOT determined that 11 of these culverts are fish passage barriers; 1 needs additional information and 5 are fish passable as of February 2007. However, the Ecosystems Discipline Report for this project indicates that there are 10 culverts conveying fish bearing waters for the same project area. Please explain this discrepancy.

22 Also on this page, please note that based on U.S. *v.* Washington, case no. CV 9213RSM, Subproceeding No. 01-01, WSDOT will need to resolve all culverts issues for this project with the Muckleshoot Indian Tribe and may not be able to rely on its MOA with the Washington Department of Fish and Wildlife to address fish passage issues for this project.

23 Page 5-78, Exhibit 5-37, Please see previous comments regarding the number of culverts in the project area. Also, the culvert/floodgate on Gilliam Creek at the Green River confluence is at least a partial barrier as it prevents upstream and downstream passage when it is closed.

Also, please clarify if the Puget Dr S culvert conveying Rolling Hills is fish passable or not. It is part of the SR 515 project.

24 Pages 5-38 and 5-39, Please clarify how the information in Exhibit 5-38 and 5-39 considered the current fish blocking culverts in the project area when determining presumed fish use.

25 Page 5-81, Please clarify the statement "The National Marine Fisheries Service (NMFS) has concluded that critical habitat cannot be determined at this time for Puget Sound steelhead trout." This statement appears to contradict the following documents: http://www.nwr.noaa.gov/Publications/FR-Notices/2005/upload/70FR52630Pre.pdf http://www.nwr.noaa.gov/ESA-Salmon-Listings/upload/snapshot0208.pdf

26 Page 5-84, Please define what is meant by a "temporary impact" as the result of riparian vegetation removal. The affected streams and the Green River are already degraded with respect to riparian buffers and instream habitat and any loss of additional instream or riparian habitat should be viewed as a significant impact. Planting smaller sized trees does not address the temporal impact that occurs when larger trees are removed. There is a need for additional mitigation.

27 Page 5-84, Please indicate which culverts will be replaced or lengthened as a result of this project so that we can assess potential impacts associated with these actions.

28 Page 5-85, Exhibit 5-42, Please note that the impact values shown in this table are substantial and will likely cause significant adverse impacts to the affected water bodies as a result.

29 Page 5-87, Exhibit 5-44, Please note that the impact values shown in this table are substantial and will likely cause significant adverse impacts to the affected wetlands and potentially associated streams as well.

30 Page 5-89, Exhibit 5-45, Please note that the impact values shown in this table are substantial and will likely cause significant adverse impacts to the affected wetlands and potentially associated streams as well.

31 Page 5-99, Since this analysis is looking at the time frame from 1960 through 2030, there should be an analysis and discussion about the amount of streams that are currently piped and culverted as a result of I-405 since 1960, as well as, the length of streams and rivers that have been relocated.

32 Page 5-102, There are other projects that should have been addressed in the cumulative impacts analysis, including but not limited to, the relocated PSE transmission line near Thunder Hills Creek, the Thunder Hills Emergency culvert repair, etc.

33 Page 5-104, The Washington Water Quality standards have changed since 2004 and this may affect the number of waterbodies listed under the 303(d) list.

34 Page 5-105, Please provide the data to demonstrate that the goal on "No net loss" for wetlands has occurred within the project area.

35 Page 5-107, There is insufficient data to support the statement that in the long-term the cumulative effects of "these projects" (not fully discussed) will be successful in creating more wetland functions than those lost.

36 Page 5-107 Regarding cumulative construction impacts, please see previous comments regarding the Thunder Hills

Creek emergency culvert and the PSE transmission line relocation.

37 Page 5-109 Since it was not disclosed or discussed fully in the EA, we do not know how many of the existing blocking culverts will be replaced with fish passable structures. It is pre-mature to assume that the built project will result in improvements to fish passage compared to the no-build alternative. The project will cause other impacts besides blocking culverts to the aquatic resources in the project area, which are not identified on this page. See also our comments on the various DR documents below.

38 Page 6-7, There is no basis for the statement that "peak and base flow rates to streams and rivers will not be negatively altered during project construction because detention ponds will be constructed prior to highway widening". Elsewhere in the EA it is noted that the ponds must discharge their stormwater within 24 hours to avoid creating ponds and attracting waterfowl. This suggests there will be impacts to peak and baseflows as a result since stormwater won't be detained for more than 24 hours nor infiltrated.

39 Page 6-11, Mitigation should be proposed for impacts to groundwater and peak flows associated with increases in impervious surfaces. Please clarify what the proposed mitigation is for the increase in impervious surfaces and impacts to groundwater.

40 Page 6-15, Note that the work windows for fish typically aim to protect juvenile fish and not adult salmon.

41 Page 6-15, Please discuss how many credits will be sought from the Springbrook Creek Wetland Mitigation Bank. We remain skeptical about this wetland mitigation bank and will require an evaluation of its success to date or its effectiveness outlook.

42 Page 6-16, We reserve the right to address statements made on this page once we have reviewed the Panther Creek Watershed Rehabilitation Plan.

43 Page 6-17, We disagree with the statement that no additional measures will be needed to avoid or minimize substantial adverse cumulative effects based on the comments on this letter.

SPECIFIC Discipline Report Comments
Appendix F: Cumulative Effects Technical Memorandum

44 Page 19, Please note that a TMDL is in the works for the Green River for temperature and dissolved oxygen. A water quality plan is proposed to be released this summer and may affect this project. See http://www.ecy.wa.gov/pubs/0610061.pdf for more information.

45 Page 23, We disagree with the statement that the goal of no net loss of wetlands, avoidance and mitigation measures are helping restore wetland areas. Please see http://seattletimes.nwsource.com/html/localnews/2004407515_growth_wetlands15m1.html for a recent discussion about how wetlands are continued to being lost despite regulatory programs.

46 Page 26, The section regarding existing impacts fails to discuss the amount of streams that are currently piped and culverted as a result of I-405 and how this number will likely change as a result of this project.

47 Page 31, The direct removal of trees and other vegetation may lead to increases in water temperatures and decreases in dissolved oxygen. Increases in TSS concentrations may result should the construction ponds fail or discharge unregulated stormwater. Since many of the waterbodies already do not meet state water quality standards for temperature and dissolved oxygen these actions would add to the existing degraded condition. The report fails to acknowledge these potential impacts and the subsequent impacts that may occur to salmonids as a result.

48 Page 32- The direct impacts section fails to discuss changes to water quantity as a result of increasing impervious surfaces and the lack of infiltration for treatment. There is no analysis to demonstrate that baseflows for the various streams will not be impacted as part of this project as a result of new impervious surfaces and wetland filling (i.e. filling of 5.42 acres of Wetland 24.7R, the Panther Creek wetland that supports salmonids). In fact , the Ecosystems DR states the opposite " rerouting of stormwater into new or existing stormwater systems can change baseline drainage patterns into or away from creeks, and can also result in lost opportunities for groundwater infiltration" (page 5-11).

49 Also since WSDOT will not be managing the project's stormwater to match flow durations with pre-developed conditions that there will likely be a loss of rearing habitat (particularly for coho) where stormwater is discharged to these habitat areas. Stormwater from this project and other projects, stream piping and culverts will all likely reduce the amount of rearing habitat. None of these cumulative impacts were considered for the various affected streams in the project area.

50 Page 34, Data has not been presented to demonstrate that the loss of 7.5 acres of wetland will be functionally replaced at the Springbrook Creek Wetland Mitigation Bank. In particular, the flood storage capacity of the wetlands to be filled has not been evaluated and the potential increases in flows in affected streams as a result. For example, there is a statement that wetlands that currently receive stormwater will benefit from stormwater management measures but no details and no analysis. A trade off between improved water quality and degraded water quantity is not necessarily a positive cumulative impact.

51 Page 35- As far as direct construction impacts are concerned, the loss of a single tree that provides shade and a source of wood recruitment should be considered a significant impact as these two functions require decades of tree growth to restore. The loss of several trees would be substantial and is not adequately addressed in this section.

52 The direct, indirect and cumulative operation impacts sections fail to fully consider that the affected portion of the Green River, Gilliam Creek, Rolling Hills Creek, Thunder Hills Creek, Panther Creek and the affected portion of the Cedar River are all suffering from degraded instream habitat and riparian conditions, and poor water quality conditions due in part to I-405 and the associated roadways in the project area. Where the roadway and its associated facilities expand into these areas represents a permanent loss of functions and the potential for adding significant time to recover the areas that will be revegetated or relocated. As noted in the Ecosystems Discipline Report, 1.68 acres (73,500 ft2) will have permanent impacts below the ordinary high water mark. There will be another 318,000 ft2 of permanent impacts to riparian areas for streams and rivers in the project area. These values don't include the other temporary impacts to these areas or the permanent and temporary impacts to wetlands. The lack of commitment by WSDOT to replace existing blocking culverts as required under State law as part of this project is not fully considered or evaluated. All of the impacts described above along with the stormwater impacts (both water quantity and quality) equate to a project that will cause cumulative impacts to wetlands, streams, and salmon species that do and/or could use the affected streams in the project area. There is no data or basis for the statement that "proper maintenance and continued operation of the Tukwila to Renton Project's water treatment facilities, culverts, and fish passage facilities, when combined with those associated with the Renton Nickel Improvement, Renton to Bellevue, SR 167 Improvements, Westfield Shoppingtown Mall Access, and SR 518 Corridor Improvement Projects, should

result in a positive cumulative effect on aquatic resources".

53 Page 38 -The project will likely need measures to avoid or minimize adverse cumulative impacts.

Appendix J-Environmental Justice

54 We strongly disagree with the statement that this project "will not result in disproportionately high or adverse effects on minority or low-income populations". This project has a great potential to cause adverse impacts to salmonid populations that the Muckleshoot Indian Tribal members depend upon, as well as, potential impacts to areas where the Tribe fishes. The DR fails to explicitly consider the environmental effects on salmon that may result in a new or continued loss of fish production that may adversely affect the Tribe by reducing their fishing opportunities. Unlike the non-tribal fishing community, the Muckleshoot Indian Tribe is not able to go fishing just anywhere within Washington State and they cannot exercise their treaty right out of state. Their fishing area is defined in U.S. v Washington which limits the area that they are able to fish. As a result, they have to rely in part on the fish production capabilities of the habitat in the project. Impacts from the project that reduce fish production would limit their opportunities now and in the future. There are several issues with this project that will likely result in a loss of fish production in WRIA 8 (Lake Washington basin) and WRIA 9 (Green-Duwamish basin). None of these issues were considered in this Discipline Report (DR). In fact, the DR did not consider the information in the Ecosystems nor the Water Resource DRs created for this project when evaluating potential impacts to minority or low income communities.

Appendix I- Ecosystems Discipline Report

55 Page 3-7, per the Final Responses to the I-405 Renton Nickel 404 Permit (WSDOT February 9, 2007) there are 82 culverts in the project area. Fifty of these culverts convey stormwater, 2 culverts convey mine sweeps, 5 culverts are plugged and convey no water; 25 culverts convey "waters of the state". Of these 25 culverts, 24 were identified to convey fish bearing streams. WSDOT determined that 11 of these culverts are fish passage barriers; 1 needs additional information and 5 are fish passable as of February 2007. The Discipline Report for this project indicates that there are 10 culverts conveying fish bearing waters for the same project area. Please explain this discrepancy.

56 Also on this page, please note that based on U.S. *v.* Washington, case no. CV 9213RSM, Subproceeding No. 01-01, WSDOT will need to resolve all culverts issues for this project with the Muckleshoot Indian Tribe and may not be able to rely on its MOA with the Washington Department of Fish and Wildlife to address fish passage issues for this project.

57 Page 4-2, Exhibit 4-1 and Page 4-8. It is our understanding that wetland 0.15 R is as a previous WSDOT mitigation wetland site for the SR 167, South 180th Street to SR 405 Northbound HOV (Tukwila) project. According to WSDOT (2007), this wetland has a combined cover of herbaceous and tree/shrub later greater than 90%. The exhibit fails to note this wetland is a mitigation site. The DR also fails to discuss potential impacts to this wetland that may negate the mitigation. Finally, we recommend that this wetland be avoided as part of this project or additional mitigation will be needed for the cumulative impact of this and the previous project.

58 Page 4-7, With respect to the 22 wetlands in the project area, please indicate how many of these wetlands have been affected by the construction and operation of I-405 in the project area since it was constructed in 1960. The DR notes that "of the 15 wetlands in the study area that occur within Renton, nine (60 percent) are considered to be Category 3 according to the Renton CAO[26]. These wetlands have undergone human related hydrologic alterations such as ditching or channelization, thus qualifying them as Category 3" without identifying how many and which of these wetlands were ditched or channelized as a direct impact from I-405 actions since 1960.

59 Page 4-17, The DR fails to note that the rivers and streams in the Project Area have also been altered due to I-405, its interchanges and connections to local roads since 1960. There is fill in the channels and floodplains to accommodate bridges, streams are flowing in culverts and pipes, etc.

60 Pages 4-18, Exhibit 4-12 and 4-19, Exhibit 4-13. This table is misleading as it tells us nothing about the potential for fish use should blocking culverts and pipes be replaced/removed for the smaller streams that are not marked for fish presence or presumption of use. Most of the data cited is limited in its application to these smaller streams.

61 Page 4-31, Coho don't necessarily need a defined channel to use the wetland and the unnamed tributary to the Cedar River (see http://www.psmfc.org/habitat/cohowin.html and http://www.kenaiwetlands.net/Habitat.htm. Since none of the surveys were conducting during higher flows, it is likely that this stream has not been fully assessed for potential anadromous fish use.

62 Also on this page, please note that based on U.S. *v.* Washington, case no. CV 9213RSM, Subproceeding No. 01-01 ("culvert case"), WSDOT will need to resolve all culverts issues for this project with the Muckleshoot Indian Tribe and may not be able to rely on its MOA with the Washington Department of Fish and Wildlife to address fish passage issues for this project.

63 Page 4-32, Exhibit 4-26, Please see previous comments regarding the number of culverts in the project area. Also, the culvert/floodgate on Gilliam Creek at the Green River confluence is at least a partial barrier as it prevents upstream and downstream passage when it is closed.

64 Page 4-40, Riparian areas are the source for wood to recruit to stream channels and create pools and other forms of salmon habitat. This is critical point because all of the affected streams in the project area are lacking wood and the project will be removing trees as a result. Per the tree survey in the DR, as many as 1063 trees equal to or greater than 6" in diameter within 200 feet of the affected waterbodies could be removed. This is a significant impact that will not be fully mitigated by planting smaller trees outside of permanently impacted areas. Additional mitigation will be needed.

65 Page 4-44, Chinook spawning occurs in the Cedar River within the project area.

66 Page 4-46 The section regarding the Muckleshoot Indian Tribe and Yakama Tribes should be modified as follows: *"The Muckleshoot Indian Tribe has adjudicated Usual and Accustomed Fishing Grounds and Stations within the Tukwila to Renton Project area. The Muckleshoot Tribe's Usual and Accustomed Grounds and Stations include the Green, Cedar and Black Rivers as well as their tributaries and Lake Washington." 384 F.Supp at 365.*

"The Yakama Tribe has been found to at treaty times to have used fisheries located in the Puget Sound area. This use of fisheries in the Puget Sound area was found to be by the consent of the tribes in that region. 384 F.Supp at 380. That consent requirement remains today."

67 Page 5-7, Please note that some of the activities described on this page will adversely affect both treaty protected fish and tribal fishing. These issues will need to be resolved prior to permit completion.

68 Page 5-8, Overwater structures can also interfere with the establishment of trees necessary to provide wood to create instream habitat for fish.

69 Page 5-9, Overwater structures can produce shade, which can create favorable conditions for ambush salmonid

predators such as sculpin and bass. Lighting on overwater structures can have the same impact, too and should be evaluated as part of this DR.

69 Also on this page, pilings for bridges within the ordinary high water mark of streams and rivers (i.e. Green River, Rolling Hills Tributary and Rolling Hills Creek) can trap wood, which is typically removed as part of routine road maintenance activities. When this wood is removed, it creates a permanent lost potential for pools and other habitats to form for salmonids.

70 Page 5-17, This project will result in the further loss of instream and riparian habitat and additional stormwater for the streams and rivers in the project area that will likely adversely affect salmonids. No where is this stated as such.

Appendix S- Water Resources Discipline Report

71 Page viii- Filling in the floodplain has more impact on natural resources than just floodwater elevations. This filling disconnects the stream/river from its floodplain, which adversely affects habitat forming processes and biological processes necessary to support salmonids.

72 Page ix- The DR fails to demonstrate that the proposed detention facilities within the Green River and Springbrook Creek basins will not increase flow durations with subsequent increases in water velocities to the detriment of rearing salmonids. There are statements elsewhere in the EA and other DR documents that contradict this statement. The streams and rivers that will receive additional stormwater are simplified and degraded and already are limited in rearing and refuge habitat that juvenile salmonids need to avoid stormwater. Additional stormwater discharges will likely make a bad situation worse.

Also on this page, the stormwater treatment facilities, if functioning probably are expected to decrease total suspended solids, total zinc, and total copper pollutant loading. There are other pollutants associated with stormwater from motor vehicles: cadmium, chromium, oil and grease (WDOE, 2006). It is not clear if the treatment facilities will treat these pollutants or not.

73 Page 1-4, As noted on this page, stormwater is proposed to be discharged into the Cedar River without flow control. This approach may adversely affect juvenile salmonids using margin habitats along the Cedar River during high flow events. Opportunities for stormwater infiltration should be explored.

Also on this page, the proposal to discharge stormwater into the Panther Creek stream and wetlands may adversely affect salmonids rearing in this area. Panther Creek is simplified and degraded and already are limited in rearing and refuge habitat that juvenile salmonids need to avoid stormwater. Additional stormwater discharges will likely make a bad situation worse.

74 Page 3-1, With respect to the Phase 1 Built Alternative detailed in the *I-405 Renton Nickel Improvement Project, I-5 to SR 169, Environmental Assessment*, this EA and the project was amended to address the concerns of the Muckleshoot Indian Tribe Fisheries Division. These changes reflect the baseline conditions. Also, since the Renton Nickel EA was published, the culvert conveying Thunder Hills Creek underneath I-405 failed and required an emergency repair that resulted in additional fill and riparian removal as well as a new culvert that will not provide fish passage to upstream habitat.

75 Page 3-2, Tribal treaty rights, including senior water rights is another aspect to consider for water resource impacts associated with this project. There is no discussion about Tribal treaty rights here.

76 Pages 4-2 through 4-5, Please clarify if the existing conditions described on these pages include any filling or piping conducted under Phase 1: I-405 Renton Nickel or not.

77 Page 4-5, Water Quality conditions for affected surface waterbodies. Please note that this section fails to provide any data or information about the condition of these waterbodies beyond what is shown in the 303(d) list. Please indicate if WSDOT is conducting any water quality assessment for its stormwater outfalls in the project area and provide the data accordingly.

78 The DR lacks an analysis to determine whether the proposed project will cause violations of Washington State water quality standards and cause degradation to the existing quality of the surface water. The range (maximum and minimum) of concentrations (and loads) of each pollutant should be estimated for the comparison of No-Build and Proposed Project effects.

79 The project should discuss how it will contribute to reducing pollution from roadway runoff given the alarming occurrence of pre-spawn mortality (PSM) of adult coho salmon. PSM in adult coho has been consistently observed by NOAA researchers (led by Nathaniel Scholz, Northwest Fisheries Science Center) over the past several years in urban Puget Sound area streams. PSM rates are extreme and have ranged from 63 to 89 percent. Although the precise cause of PSM in these streams is not yet known, conventional water quality parameters (i.e., temperature and dissolved oxygen) and disease do not appear to be the cause. A spatial analysis of land cover by NOAA found that total area of heavy use roads was the most highly correlated with coho PSM rates, suggesting that pollutants specific to roadway runoff from heavy use roads may be the cause.

80 Page 4-6 Please note that a TMDL is in the works for the Green River for temperature and dissolved oxygen. A water quality plan is proposed to be released this summer and may affect this project. See http://www.ecy.wa.gov/pubs/0610061.pdf for more information.

81 Page 4- 7, These pollutants (copper, zinc, and cadmium; oil and grease and sediment) can all adversely affect salmonids.

82 Page 4-8, Please clarify if WSDOT is using a predeveloped condition to design this project's stormwater ponds or not.

83 Page 4-9, Since the new stormwater ponds will not have a permanent wetpool due to concerns with the creating waterfowl habitat, then there should be an analysis to demonstrate that the new ponds will remove suspended solids and meet State water quality standards. Also, please quantify the capacity of the existing stormwater ponds. Finally, please quantify the current treatment efficiency of the existing biofiltration swales.

84 Page 4-11, Please discuss the pollutants can be removed up to 90% via ecology embankments.

85 Page 4-12 Please provide information and/or letter to support the statement that "according to Ecology, projects meeting the Ecology guidelines or equivalent standards such as the HRM are presumed to meet federal and state water quality requirements."

86 Page 5-4, Please clarify what is meant about a direct discharge of stormwater to the Panther Creek wetlands described on this page and what impacts will occur to rearing salmonids as a result.

87 Page 5-9 The groundwater discussion on this page only considers impacts to the Cedar River Valley aquifer and fails

to discuss if decreases in the shallow alluvial aquifers will be adversely affected with subsequent reductions in baseflows for streams and wetlands that salmon in the project area depend upon.

88 Page 5-11, The indirect effects analysis is incomplete. If there are changes to water quantity and/or quality in the project area as a result of this project that adversely affect salmonids, then this project will likely contribute towards the current declining population trends.

Also on this page, the cumulative effects analysis are not adequately addressed. See previous comments above.

89 Page 6-1, Since we do not have a scour analysis for any proposed highway related structures that are over rivers or streams or below the OHWM of these water bodies, we cannot assess these potential impacts at this time. We reserve the right to provide additional comments on this issue once the information is available. Also please note that we have seen very few, if any "fish-friendly stream bank protection or bridge modifications" to date if they are needed to avoid scouring these new structures.

90 Page 6-3, Since we do not have complete plans for compensatory floodplain storage for temporary and permanent fill, we cannot evaluate this potential impact at this time. Please note that there are other impacts beside flood elevations that will likely require mitigation beyond the proposed "mitigation compensating for fill" approach.

91 Page 6-6. On this page, it states "Stormwater facilities for this project will maintain the peak flow rate of stormwater runoff at present day conditions or better as mandated by the HRM for a range of storms from 50 percent of the 2-year up through the 50-year recurrent storm event." This statement implies that only peak flow rates will be managed, not flow durations as described elsewhere in this and other DRs. If this is the approach for this project, then additional mitigation will be needed to address increases in flow durations as a result of stormwater discharges.

92 Page 7-1, To meet requirements to avoid ponding water, the propose stormwater facilities will likely cause an increase in water velocities over longer periods of time than existing conditions. This is unavoidable impact caused by constraints due to the Renton airport could result in significant adverse impacts to the water resources in the project area and the salmonids dependent upon them.

Responses to Comment Letter AT-3: Muckleshoot Indian Tribe

1. As described in the I-405 Corridor Program Record of Decision, the Selected Alternative does include multi-modal project elements including increased transit, increased vanpools, bus rapid transit, increased capacity of park-and-rides, managed lanes, and improved bicycle routes. The project does not preclude tolling or additional multi-modal opportunities if funding becomes available. Page 2-4 of the EA discusses further the use of express toll lanes and commits to additional operational analysis and appropriate environmental documentation if this idea is advanced.

2. The nationwide permit did not go out for public review. The SR 515 Interchange Project is simply the currently funded portion of the larger Tukwila to Renton Project. The EA evaluates the entire Tukwila to Renton Project. As it is all one project, the funded portion (SR 515) has no additional cumulative effect. The sequence for permit acquisition, in the case of the funded portion of the Tukwila to Renton Project, was different from what has occurred on I-405 projects in the past.

3. The Build Alternative treats runoff from new and existing impervious surfaces, utilizes the Springbrook Creek Wetland and Habitat Mitigation Bank (the Bank) for effects to wetlands, contemplates significant improvements to the Panther Creek watershed, and provides improvements to the stream habitat through mitigation requirements. Culverts affected by the project would also be examined for fish passage per the Memorandum of Agreement (MOA) with the Washington State Department of Fish and Wildlife (WDFW) and current WSDOT policies. WSDOT will work directly with the Muckleshoot Indian Tribe to resolve its concerns. The Build Alternative would also provide mitigation for filling of floodplains by removing existing fill at a ratio of 1:1 within one-foot elevation of the same floodplain in which the effect occurs. Combined, the actions associated with the Build Alternative are not expected to result in significant long-term negative cumulative effects on aquatic habitat.

4. WSDOT will continue to consult with the Muckleshoot Indian Tribe on mitigation plans during the permitting phase for the project. WSDOT agrees to evaluate a range of mitigation opportunities including bringing the Panther Creek Watershed Rehabilitation Plan forward with design as further funded elements of the Tukwila to Renton Project advance. WSDOT provided a copy of the Panther Creek Watershed Rehabilitation Plan to the Tribe on July 3, 2008.

5. Since the EA was written, the culvert conveying Thunder Hills Creek was replaced as part of an emergency repair project. Therefore, per our response to Comment No. 13, WSDOT will not impact the new Thunder Hills Creek culvert as part of the Tukwila to Renton Project. WSDOT has updated the culvert information to show that the Thunder Hills Creek culvert will not be impacted, which has required a change in the number of culverts proposed for in-water work. The EA noted that there were 10 culverts conveying waters of the state proposed for in-water work, the errata to the EA notes that there are 9 culverts conveying waters of the state that are proposed for in-water work.

Further evaluation will be required to determine the type of design. Permit packages will be developed as additional funding becomes available. Please see the response to Comment No. 21 for our discussion on barriers. There are 88 culverts in the project area, 52 convey stormwater, 36 convey waters of the state. In the study area, 9 of the 36 conveying waters of the state and are proposed for in-water work, of these 9, 6 culverts are considered fish passage barriers. The 9 culverts proposed for in-water work are included in Exhibit 5-37 in the errata to the EA. The 6 culverts considered to be fish passage barriers are: Rolling Hills Creek 48", Rolling Hills Creek 132", Unnamed Tributary to Rolling Hills, Panther Creek 24", Panther creek 30", and Panther Creek 72".

6. Please see response to Comment No. 54

7. Peak flow analysis (and durations) were modeled using the Hydrologic Simulation Program for Fortran (HSPF) for a low rain event (50% of a typical 2-year storm) and a high rain event (100-year rain event). This peak flow analysis matched existing peak flows. While WSDOT did not complete a quantitative analysis to determine effects to base flows, WSDOT does not anticipate a change to stream base flows as a result of the project.

WSDOT will follow the Highway Runoff Manual (HRM) and WSDOT policies in effect at the time stormwater design is completed for the project. The current HRM requires WSDOT to match existing conditions for peak flows and durations for 50% of a typical 2-year storm except the designs for the flow control exempt waterbodies. Therefore WSDOT does not anticipate impacts to be associated with the implementation of the approved stormwater design.

8. This language has been changed in the errata to note that upon completing the EA and considering the comments received, FHWA will decide which approach to take. This may be to initiate an EIS or to issue a Finding of No Significant Impact (FONSI).

9. WSDOT has previously coordinated with staff at King County to ensure this project will not impede the planned future development of the Nelsen Side Channel. The Final WRIA 9 Salmon Recovery Plan acknowledges the future planned improvements to I-405. WSDOT has committed to conduct additional and continued conversations with King County staff, including Andy Levesque, to ensure the Nelsen Side Channel work and the proposed I-405 bridge work remain coordinated.

10. Engineering, hydrology, stormwater treatment obligations, and avoidance and minimization efforts drove the decision to widen to the south. The decision to widen to the south attempted all feasible means to avoid impacts to both streams and wetlands, as well as residences and businesses.

11. Bridge piers will be placed within the 100-year floodplain of the Cedar River. Please see page 5-9 of the Water Resources Discipline Report for more details regarding floodplain impacts.

12. The new pavement is located to the east of SR 167. Ecology embankments depend on capturing stormwater as sheet flow and treating it before it is concentrated. The new pavement will slope to the east; therefore, the only place to capture that water and treat it is to the east of the highway. The mitigation plans for the SR 167 Stage III mitigation work have also been reviewed, and the ecology embankment is not expected to compromise this site as the proposed ecology embankment is north of this site.

13. As part of the Thunder Hills Creek Emergency Culvert Replacement Project, the existing culvert is being abandoned and replaced by a new culvert. This new culvert will not be extended as part of the Tukwila to Renton Project.

14. The Bronson Way Bridge will not be expanded as part of this project.

15. The cumulative effects analysis used all available resources to reach a conclusion. There was no definitive information available on impacts to the floodplain, river, and riparian areas of the Cedar River associated with the Tri-Park Master Plan. The Tri-Park Master Plan is a City of Renton initiative. The City of Renton will be responsible for project permitting and environmental documentation for the Tri-Park Master Plan. No further details have been developed at this time.

16. Noise Barrier 8 will not affect the channel or riparian habitat of Thunder Hills Creek.

17. Noise Barriers 10B and 10A do not cross over the Rolling Hills Creek culvert and therefore their construction will not impede any potential work regarding the Rolling Hills Creek culvert.

18. We have added “transportation facilities” to our discussion of previous effects.

19. At the time of publication for this EA, the 2004 Integrated Water Quality Assessment (IWQA) is the most current available. The 2008 IWQA is yet to be issued and will cover both the 2006 and 2008 assessment periods.

20. Please see response to Comment No. 18

21. The response WSDOT provided for comments on the Renton Nickel Improvement Project 404 permit was a comprehensive list of all known culverts in the study area. Exhibit 4-26 on page 4-23 is not intended to be a comprehensive list of all culverts in the study area. The culverts identified in the Ecosystems Discipline Report in Exhibit 4-26 are only those culverts conveying waters of the state where in-water work is proposed to occur for this project. This language has been changed in the errata to clarify this. A listing of culverts is provided in response to Comment No. 5.

22. This project will follow the MOA with WDFW and current WSDOT policies when addressing fish passage issues. WSDOT will work directly with the Muckleshoot Indian Tribe to resolve the Tribe’s concerns with this issue as funded pieces advance through permitting and more design details and opportunities become available.

23. Please see response to Comment No. 21. The culvert at Gilliam Creek outlet is assumed passable. The flap gate on this culvert is a separate component of a flood control system owned by the City of Tukwila and the second footnote of the exhibit notes that when closed, the flap gate prevents fish passage. The culvert is also owned by the City of Tukwila.

Impacts below the ordinary high water mark (OHWM) were avoided at Puget Drive S; therefore, the culvert that conveys Rolling Hills Creek under Puget Drive S was not assessed for fish passage. The culvert conveying Rolling Hills Creek under Puget Drive S is understood to be owned by the City of Renton.

Copies of the right-of-way plan showing the Gilliam Creek culvert outside of WSDOT's property limits have been provided to the Muckleshoot Indian Tribe.

24. Fish presence was determined by available habitat and documented observations. Please see references 29 and 30 on pages 4-18 and 4-19 of the Ecosystems Discipline Report. Human-created barriers were not the basis for determining presumed fish use. The project team made every attempt to err on the side of assuming fish use if there was any question of that possibility. However, the team also attempted to use well documented sources before reaching conclusions about use. Most of the assessment work was completed early on by Paul LaRiviere with subsequent work by Derek Koellmann and other I-405 team members. The protocol used is explained in detail in Appendix A of the Ecosystems Discipline Report.

Exhibit 5-38 of the EA and Exhibit 4-12 of the Ecosystems Discipline Report have been updated in the errata section to show coho salmon presence in Rolling Hills Creek per conversation with Karen Walter of the Muckleshoot Tribe on July 3, 2008.

25. NOAA is currently assessing critical habitat, but had yet to designate critical habitat for Puget Sound steelhead trout. The proposal was issued in February 2007 and as of publication of the EA for this project, NOAA had not issued a final decision on critical habitat.

26. Temporary stream buffer impacts are ones that result from ground-disturbing activities, such as clearing and grubbing, that could not be avoided in constructing the project, but will be restored after construction. Mitigation will be determined during permitting as the project receives funding. WSDOT recognizes that the removal of larger trees may not be fully mitigated by smaller replacement trees. Mitigation for tree loss will be addressed as additional engineering details become available.

27. Please see response to Comment No. 5.

28. Measures to avoid or minimize effects are described in Chapter 6 of this EA and are proposed for implementation to offset impacts to these resources. Appropriate specific mitigation requirements will be determined at the time of permitting.

29. Please see response to Comment No. 28.

30. Please see response to Comment No. 28.

31. No unavoidable adverse cumulative effects are anticipated due to the construction of the Tukwila to Renton Project. The cumulative effects analysis looks at the effects of all projects from 1960 to 2030 with a goal of determining if this proposed project will, in combination with other projects, lead to environmental change. With available information, it is difficult to accurately assess incremental impacts from past individual projects, including past construction relating to I-405. However, by practicing avoidance, minimization, and mitigation, this I-405 project will not contribute to a negative adverse cumulative effect.

The cumulative effects analysis made attempts to understand the impacts associated with past projects within the study area. However, not all historical information (as-builts) is available for a complete understanding of individual projects and why certain engineering decisions were made. In addition, laws and regulations have changed since 1960, and the current biological understanding of species level effects were less well understood than they are today. The project has made every reasonable effort to avoid and minimize any further cumulative environmental effects.

32. Both the Puget Sound Energy transmission line relocation and the Thunder Hills Creek Emergency Culvert Replacement Project have been reviewed in context of the cumulative effects analysis and no change to the effects determination was made. These projects were added as errata to the list on page 5-102 of the EA and to the list in the cumulative effects analysis. The Thunder Hills Creek culvert emergency work will be mitigated through the conditions of the permit associated with the emergency work.

33. Please see response to Comment No. 19.

34. All permitted WSDOT projects within the study area have mitigated for wetland loss at a ratio of equal to or greater than 1:1. Therefore, the goal of no net loss has been maintained by WSDOT. The project will continue its on-going stewardship of all its wetland mitigation sites. As monitoring data become available, WSDOT will provide the information to the permitting agencies, the Muckleshoot Indian Tribe, and other interested parties.

35. The monitoring data are not yet available. However, WSDOT is held to performance measures that must be met for each wetland mitigation site to ensure that each mitigation site is successful in creating the intended habitat functions.

36. Please see response to Comment No. 32.

37. WSDOT will follow the MOA with WDFW and current WSDOT policies when addressing fish passage issues. This commitment does not exist with selection of the No Build Alternative.

As we move through the design-build process and the design is advanced, fish passage at these culverts will be addressed per the MOA and WSDOT policies. In addition, please see the response to Comment No. 5.

38. Stormwater design will follow the HRM. Designing to a 24-hour discharge within the FAA mandated zones is consistent with the HRM and is not expected to result in any additional impacts. The Cedar River is flow control exempt. Details regarding how the 24-hour standard was met and the associated sizing of the ponds to meet this obligation are part of the engineering hydrology analysis that was required to meet the HRM. Preliminary design shows these to meet the HRM. Final design will be obligated to fully meet the HRM, which will require the ponds to not to exceed the peak flow. If standing water must remain past 24 hours in the 10,000-foot management zone, it will be required to be covered with netting, or some other FAA approved mechanism will need to be in place to deter bird use. Please see response to Comment No. 7 for additional discussions regarding peak and base flow rates.

39. Groundwater is not anticipated to be affected because most of the recharge occurs upgradient and outside of the study area. WSDOT does not anticipate the stormwater design to adversely affect groundwater or peak flows. Please see page 5-9 and page 6-6 of the Water Resources Discipline Report for more information. Also please see response to Comment No. 7.

Mitigation for other project effects will be implemented during the required permitting processes.

40. Comment noted.

41. The amount of credits debited from the Bank will be determined at the time of permitting. The project design will need to advance further before this level of detail becomes available.

42. See response to Comment No. 4. A conceptual plan has been shared with the permitting agencies and the Muckleshoot Indian Tribe. The Tribe received a copy on July 3, 2008.

43. Mitigation commitments made in this section, along with the development of specific mitigation plans during permitting of the project, are anticipated to mitigate for the project's effects.

44. Comment noted. The project will monitor this development and incorporate any information that comes out as the project becomes funded.

45. Please see responses to Comments No. 34 and No. 35.

46. Please see response to Comment No. 31. WSDOT will be able to provide additional stream impact information as more pieces of the overall project become funded. Mitigation for effects will therefore be addressed during the permitting phase.

47. Stormwater treatment measures, including detention ponds will be designed to meet WSDOT's HRM, which makes failure unlikely for the storm events modeled. WSDOT will also follow permit conditions to ensure water quality is met during construction. Mitigation for loss of aquatic and riparian habitat will be designed to offset the effects of the project as determined through the permitting process. WSDOT acknowledges that removal of large trees near streams can influence water temperatures and may have an effect on dissolved oxygen in some cases. WSDOT acknowledges that removal of larger trees may not be fully mitigated by replacement with smaller trees. WSDOT will follow the latest NPDES permitting provisions (as they relate to temperature and dissolved oxygen) as the project becomes funded. Also see response to Comment No. 26.

48. It is true that as a potential effect, as described in Chapter 5 of the Ecosystems Discipline Report, rerouting of stormwater could create a change in the hydrology of streams. However, in Chapter 6 (pgs 6-3 and 6-4) of the Ecosystems Discipline Report, avoidance and minimization measures are described that will be employed to offset potential effects resulting from new impervious surfaces. Please also see the responses to Comments No. 7 and No. 39.

49. Effects associated with in-water work by this project will be mitigated. Please see the response to Comment No. 7, regarding stormwater flows.

50. Wetland impacts are anticipated to be mitigated at the Bank as appropriate. However, specific mitigation plans will be determined during the permitting process.

51. When considering the potential effects of the project after proposed avoidance and minimization measures outlined in this EA, each discipline report, each technical memorandum, and the errata noted in response to Comment No. 32, FHWA has determined no additional mitigation is required for cumulative effects. Please also see response to Comment No. 26 regarding tree impacts.

52. WSDOT acknowledges some level of cumulative effects cannot be avoided. However, WSDOT will mitigate its contribution to these cumulative effects to the extent possible. WSDOT will work with the permitting agencies, the Muckleshoot Indian Tribe, and other Tribes during the permitting process to identify possible mitigation opportunities.

53. Please see response to Comment No. 52.

54. WSDOT understands that as a result of the decisions from U.S. v. Washington, the Muckleshoot Indian Tribe's treaty fishing rights are restricted to a specific geographic area. The construction and operation of the project are not expected to reduce the net population of fish within the study area. WSDOT expects some improvement for fish habitat through implementation of water quality and mitigation measures if the Build Alternative is constructed. WSDOT expects to improve water quality in the affected streams by providing treatment to untreated stormwater from all new and a portion of existing impervious surfaces, which should benefit fish and fish habitat. As noted in the Ecosystems Discipline Report, WSDOT will also be addressing fish passage barriers per the MOA with WDFW and WSDOT policies. WSDOT will work directly with the Muckleshoot Indian Tribe to resolve its concerns. WSDOT will carry these commitments through the permitting process, mitigation plan development, final design, and construction.

It is not WSDOT's intent to obstruct fishing access with this project. For example, bridge piers for the two I-405 bridges over the Cedar River and the Tukwila Parkway extension over the Green River will remain outside of the OHWM, and are expected to allow unobstructed fishing access (please see Exhibits 4-2 and 4-12 of the EA for locations of these structures). The existing five bridges over the Green River (please see Exhibit 4-2 of the EA) may be modified or rebuilt by the project. As part of this work, new piers may be placed below the OHWM in the same general location as the existing piers. The footprint for the new piers may be slightly larger than the existing piers. WSDOT will continue to consult with the Muckleshoot Indian Tribe during the permitting phase of this project regarding tribal treaty rights.

55. Please see response to Comment No. 21.

56. Please see response to Comment No. 22.

57. The project will not impact wetland 0.15R. Exhibit 4-7 has been modified to reflect that wetland 0.15R is an existing WSDOT mitigation site.

58. WSDOT does not have specific knowledge of past effects that I-405 may have had on these wetlands. The discipline report assumes all Category 3 wetlands within the City of Renton have incurred human disturbance, either through construction of I-405 or other infrastructure development within the study area.

59. Please see response to Comment No. 18.

60. Please see response to Comment No. 24.

61. The unnamed tributary to the Cedar River mentioned on page 4-31 will not be modified by this project. If future I-405 projects are determined to have the potential to affect this stream, additional analysis will be conducted at that time.

62. Please see response to Comment No. 22.

63. Please see responses to Comments No. 21 and 23.

64. Please see response to Comment No. 26.

65. This point is acknowledged in the errata for page 4-44 of the Ecosystems Discipline Report in the statement "…substrate conditions in the Cedar River in the study area could provide ~~some limited~~ spawning habitat." Spawning has occurred in the lower Cedar River per the 2000, 2001, and 2002 Salmonid Spawner Survey Results for the Lower Cedar River and Elliot Rearing/Spawning Side-Channel. These surveys were prepared for the U.S. Army Corps of Engineers Section 205 Cedar River Flood Damage Reduction Project and these citations were provided by the Muckleshoot Indian Tribe.

66. This language has been updated in the errata to reflect your suggestion.

67. Please see response to Comment No. 54. WSDOT will work through this issue during permitting. As we move through the design-build process and design is advanced, fish passage will be addressed per the MOA and WSDOT policies. WSDOT will work directly with the Muckleshoot Indian Tribe to resolve the Tribe's concerns.

68. Comment noted.

69. All new lighting over waterbodies will be installed to focus the illumination on the roadway and to minimize the spill over of light onto the waterbodies. The new lighting will incorporate "cut-off" fixtures.

Regarding removal of material from bridge supports, WSDOT will operate under its Hydraulic Project Approval (HPA) for maintenance activities. The website for the maintenance HPA is: http://www.wsdot.wa.gov/environment/Programattics/default.htm.

The existing HPA states if large woody debris (LWD) becomes lodged next to the bridge piers within the OHWM during the operation of the facility, WSDOT maintenance will reposition the LWD downstream of that bridge to provide stable, functional fish habitat.

70. While mitigation measures have not been fully decided, it is WSDOT's intent that this project, with its associated mitigation measures, does not result in any significant adverse effects to salmonids.

71. Effects to floodplains will be mitigated by removing compensatory fill within 1 foot of elevations and within the same basin for which fill was placed in the floodplain. If there are additional effects determined during design that are associated with filling within the floodplain, appropriate mitigation will be implemented during permitting. A WSDOT fisheries biologist will be consulted during permitting regarding floodplain effects. WSDOT will work with the Muckleshoot Indian Tribe to identify and resolve these impacts.

72. Please see response to Comment No. 7. The facilities are designed for a certain level of storm events and are not expected to fail for engineering reasons at the modeled storm events. Also, these facilities will treat some level of other metals found in stormwater runoff. This is an improvement over existing conditions. Cadmium and chromium are included in total suspended solids (TSS). Grease and oil are noted on page 4-6 of the Water Resources Discipline Report to become attached to small particles in the water. The Build Alternative reduces TSS; therefore, these pollutants are also assumed to decrease.

As noted in the HRM, durations must also be taken into account in the calculations. The text "and duration" has been added to the sentence in the errata to make it clearer. The design criteria of the HRM requires matching durations for the range of storms from 50% of the 2-year storm through the 50-year recurrent storm event.

73. As noted in the Water Resources Discipline Report page 4-22, the opportunities for infiltration within the study area are limited due to the City of Renton Municipal Code, which limits infiltration opportunities within this aquifer recharge zone. The City code cited in the discipline report specifically prohibits infiltration here. If effects are identified, WSDOT will work to address these through the permitting process.

Treatment standards detailed in the HRM will ensure discharge into the Panther Creek wetland complex will not further degrade the system. It is not anticipated that the project will affect habitat at the discharge locations. As further details are identified, WSDOT will work through any additional issues through the permitting process.

74. A permit was issued for the Thunder Hills Creek emergency repair work in March 2008. Errata have been added acknowledging the changed baseline condition.

75. We have added a bullet in the errata to note tribal treaty rights, including any associated senior water rights where applicable.

76. The baseline conditions for this report assume the Renton Nickel Improvement Project is constructed.

77. We are not conducting an analysis within this study area. However, please view the WSDOT NPDES website that provides information regarding WSDOT's state-wide analysis: http://www.wsdot.wa.gov/Environment/WaterQuality/default.htm. To date, WSDOT has not conducted stormwater monitoring in this area. However, other monitoring has occurred in western Washington.

78. It is assumed the project will meet state water quality standards by meeting the HRM. See also Appendix C of the Water Resources Discipline Report.

79. This reduction in pollutant loading is provided in Appendix C of the Water Resources Discipline Report. WSDOT and FHWA have coordinated closely with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (USFWS) on this project.

80. Comment noted.

81. The Build Alternative proposes reductions in TSS and metals. Also, please see responses to Comments No. 72 and No. 79.

82. The Springbrook Creek basin was modeled using the pre-project (existing) condition. Effects, if identified, will be mitigated during permitting. The Green River basin was modeled using 75% forested/25% pasture, assuming that predevelopment conditions included pasture and forests affected by forest fires. The Cedar River basin is flow control exempt.

83. This analysis was completed and is summarized in Appendix C of the Water Resources Discipline Report. Stormwater ponds are considered to provide only negligible water quality treatment, they are designed for flow control. The project will use best management practices recommended in the HRM to provide water quality treatment prior to stormwater entering the detention ponds. Detention and treatment can, in some cases, be considered separately.

Capacities for existing stormwater ponds and treatment efficiencies for biofiltration swales within the study area were not calculated for this project because this information does not contribute to calculations needed to be made for the current treatment standards. WSDOT calculated water quality and water quantity treatment needs for the effects of this project based upon water resources and used this information as described in the HRM to design treatment measures to offset these effects.

Where open water cannot be passed through the 10,000-foot safety zone within 24 hours, other measures, such as netting, must be considered to prevent bird use. Also see response to Comment No. 38.

84. The 90% is in relation to TSS. The language has been modified in the errata to note this.

85. Information on the HRM, including Ecology's concurrence memorandum, can be found at the following website: http://www.wsdot.wa.gov/Environment/WaterQuality/Runoff/HighwayRunoffManual.htm.

86. Direct discharge with the Panther Creek Watershed Rehabilitation Plan would include discharging treated stormwater directly to the Panther Creek wetland complex without detaining the new, or equivalent area of the new, impervious surfaces. No assessment of the effects of the proposed discharge was made because two options exist, and this portion of the project remains unfunded. If a direct discharge to Panther Creek is not permitted, other options for detention will be considered.

87. Decreases in shallow alluvial aquifers resulting from this project are not expected to be substantial. The reference to the Cedar Valley Aquifer is only used as an example to support the preceding statement about shallow alluvial aquifers in the vicinity of the project. Also, please see response to Comment No. 7.

88. Based on the information presented, FHWA finds the selection of the Build Alternative is not anticipated to adversely affect water quality. The Build Alternative is expected to provide better water quality improvements than the No Build Alternative. Selection of the Build Alternative is expected to do more for those populations of salmonids that are declining than selection of the No Build Alternative.

FHWA stands by its conclusions made within the cumulative effects analysis. No unavoidable adverse cumulative effects are anticipated due to the construction of the Tukwila to Renton Project.

89. WSDOT will continue to consult with the Muckleshoot Indian Tribe during the permitting process.

90. WSDOT will continue to consult with the Muckleshoot Indian Tribe during the permitting process.

91. Please see response to Comment No. 72.

92. The release of stormwater over a 24-hour period within the FAA zone is consistent with the HRM. No significant adverse effects are expected to result from this.

Where open water cannot be passed through the 10,000-foot safety zone within 24 hours, other measures, such as netting, must be considered to prevent bird use.

Also see response to Comment No. 7 regarding flow durations.

Comment Letter AT-4: U.S. Department of the Interior

United States Department of the Interior
OFFICE OF THE SECRETARY
Washington, DC 20240

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Mr. William Jordan
I-405 Project Office
Washington State Department of Transportation
600 – 108th Avenue NE, Suite 405
Bellevue, WA 98004

Dear Mr. Jordan:

The U.S. Department of the Interior (Department) has reviewed the Draft Environmental Assessment (DEA) and the Draft Section 4(f) Evaluation for the **I-405, Tukwila to Renton Improvement Project (I-5 to SR 169 – Phase 2), King County, Washington.** The Department offers the following comments:

Section 4(f) Comments

The Draft Section 4(f) Evaluation was very well-written and contained helpful maps and aerials. The document illustrated proposed impacts very clearly. The consultant who worked on this document did an excellent job of clearly incorporating 6(f) issues. To make the Final Section 4(f) Evaluation even more helpful than the draft, we recommend showing the existing right-of-way and any proposed new right-of-way on most of the map exhibits.

Duwamish-Green River Trail/Christensen Greenbelt

1 Part of the proposed project involves constructing a new bridge over the Duwamish-Green River Trail/Christensen Greenbelt, which is adjacent to the Green River. The Draft Section 4(f) Evaluation does not consider this a "use," because no land will be permanently incorporated into the transportation facility. *See* Page 5-5.

This statement is consistent with Federal Highway Administration's (FHWA's) position of not recognizing "air rights" to be a "use," unless it substantially impairs the protected attributes of the 4(f) resource. *See* FHWA's Section 4(f) Policy Paper, available *at* http://www.environment.fhwa.dot.gov/projdev/4fpolicy.asp#1.

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1 However, the National Park Service (NPS) disagrees with FHWA's position insofar as "air rights" include occupancy of areas above land that require an easement. We believe FHWA's treatment of Section 4(f) regarding air rights is inconsistent with its statement in the Section 4(f) Policy Paper that "[l]and will be considered permanently incorporated into a transportation project when it has been purchased as right-of-way or sufficient property interests have been otherwise acquired for the purpose of project implementation." Furthermore, this represents a conversion of use under Section 6(f)(3) of the Land and Water Conservation Fund (LWCF) Act.

The NPS cannot concur that there is no "use" of Duwamish-Green River Trail/Christensen Greenbelt, particularly in this case where the bridge will be low enough so that the trail will have to be lowered by approximately 8 feet to provide adequate clearance for trail users. The NPS considers the new bridge to be a "use" under Section 4(f). It is also a conversion under Section 6(f)(3) of the LWCF Act.

Cedar River Natural Area

2 On page 4-2 and 4-3, Exhibits 4-1 and 4-2, respectively, Cedar River Natural Area is not considered a 4(f) resource, because it is not considered significant as a park. It appears that the City of Renton Parks Department concluded it was not significant as a park, because it was not included in the *2003 Park, Recreation, and Open Space Implementation Plan*. We are perplexed that this area is not considered significant, since the open space appears to be contiguous to the Narco Site and the Cedar River Trail, and part of the larger complex of parks (i.e., Liberty Park, Cedar River Park, and the Narco Site). We believe that these sites should be viewed jointly and that this larger area seems to represent an excellent opportunity to preserve contiguous park land and open space in an increasingly urbanized area.

<u>Section 6(f) of the LWCF Act</u>

Duwamish-Green River Trail/Christensen Greenbelt

3 The Draft Section 4(f) Evaluation does a good job of discussing 6(f) issues. However, some of the discussion should be clarified. Construction of the new Tukwila Parkway bridge and the I-405 northbound on-ramp from State Route 181 will result in a 6(f) conversion. This should be clearly stated throughout (see pages x to xi, 2-6, 4-7 to 4-8, and 5-4 to 5-5) and addressed.

Duwamish-Green River Trail Trailhead

4 The project will result in a conversion of the Duwamish-Green River Trail Trailhead under Section 6(f).

2 of 7

4 In summary, the conclusion in the Draft Section 4(f) Evaluation that 6(f) conversion issues have been avoided is in error. There are two conversions that will result from the project: one for the new bridge over Duwamish-Green River Trail/Christensen Greenbelt, and one for the highway expansion where it impacts Duwamish-Green River Trail Trailhead.

Please continue to coordinate with the Washington Recreation and Conservation Office and NPS on 6(f) conversion issues.

Section 7 of the Endangered Species Act (ESA)

The proposed action was the subject of a formal ESA Section 7 consultation conducted over the period June 2007 – March 2008 (FWS Ref. No. 13410-2007-F-0416). On March 3, 2008, the U.S. Fish and Wildlife Service (Western Washington Fish and Wildlife Office - Lacey) and National Marine Fisheries Service (Washington State Habitat Office - Lacey) (Services) signed a joint Biological Opinion (BO) concluding Section 7 consultation with the FHWA.

The proposed action's unavoidable impacts to instream habitat and habitat connectivity, and potential direct and indirect effects to watershed functions and surface water quality, and their effects on bull trout and Puget Sound Chinook salmon were the focus of the section 7 consultation. During the course of consultation, the FHWA and Washington State Department of Transportation (WSDOT) committed to implementation of measures described in the Services' joint BO. We offer the following comments as they relate to the Section 7 ESA consultation:

5 ▪ The FHWA/WSDOT committed to capturing and treating stormwater runoff from an area equivalent to the net-new impervious surface associated with the highway and related improvements, plus stormwater runoff originating from approximately 64 acres of existing, currently untreated impervious surface. The DEA and supporting documentation accurately reflect these agreed-upon measures.

6 ▪ The FHWA/WSDOT committed to instream habitat and watershed functional enhancements associated with a related activity; the proposed Panther Creek Watershed Rehabilitation Plan. The proponent also committed to in-kind mitigation for unavoidable impacts to the Green and Cedar Rivers. The DEA accurately reflects these measures.

7 ▪ The FHWA/WSDOT committed to enhancing fish passage at culverts replaced or modified by the project in compliance with the current Memorandum of Agreement between WSDOT and the Washington State Department of Fish and Wildlife. They also agreed to construct other,

7 concurrent, instream habitat enhancements "in lieu of replacing a fish passage barrier(s)". While content from the DEA accurately reflects the commitment to further assess and prioritize fish passage enhancements, it does not identify whether and how the proponent will replace lost or impaired functions in the event one or more fish passage corrections are deemed impracticable.

In comments offered previously for the I-405, Renton Nickel Improvement Project (Letter Correspondence with Ms. Allison Ray, WSDOT/ I-405 Corridor Program; dated 11/9/06), U.S. Fish and Wildlife Service (USFWS) expressed similar concerns related to the prioritization of fish passage enhancements:

8 The EA and supporting documentation should include more information to explain which structures were assessed, what is their current fish passage status and reason(s) for deficiency, and what criteria were used to examine the costs, benefits and feasibility of retrofit for improved passage. Where the project will modify but not correct existing deficient structures, the decision and supporting rationale should be explained in clear and transparent terms.

The U.S. Fish and Wildlife Service remains concerned the WSDOT and FHWA lack a strategy for identifying, prioritizing, and reaching consensus on the necessary and appropriate fish passage corrections, or "in lieu" habitat enhancements, to be undertaken as part of the proposed action (and/or the related "nickel improvements"). We also note the proponent's plans for correcting (or not correcting) fish passage barriers within the project limits remains a significant issue for the Muckleshoot Tribe tribal interests.

Contact Information

If we can be of further assistance, please contact us.

For Section 4(f) questions:

Ms. Kelly Powell
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For Section 6(f) questions:

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For Section 7 questions:

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Thank you for the opportunity to provide these comments.

Sincerely,

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

cc: (next page)

5 of 7

cc:
Ms. Leslie Betlach
Director
Renton Parks
Renton City Hall
1055 S. Grady Way
Renton, WA 98057

Mr. Bruce Fletcher
Parks Director
City of Tukwila
6300 Southcenter Blvd.
Tukwila, WA 98188

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Responses to Comment Letter AT-4: U.S. Department of the Interior

1. FHWA believes a use does not exist, because the trail will not be incorporated into the transportation facility. The construction of the new bridge does not substantially impair the continued use of the property as a trail in the future.

While the trail will be lowered, the experience will not change for the trail user. Even if this was deemed a use under 4(f), there are no feasible and prudent avoidance alternatives and the project currently incorporates all possible planning to minimize harm.

Please see response to Comment No. 3 for Section 6(f) resources.

2. After additional coordination with the City of Renton, FHWA has determined that the entire Cedar River Natural Area is considered a Section 4(f) resource. However, the Draft Section 4(f) Evaluation is still accurate with regard to how effects and mitigation are characterized. Please also see letter from the City of Renton dated July 14, 2008 in Attachment 6.

3. The Draft Section 4(f) Evaluation is not intended to discuss Section 6(f) resources. Please see Chapter 5 and Chapter 6 of the EA for more discussion on Section 6(f) resources.

WSDOT will ensure compliance with requirements from both the National Park Service and the State Recreation and Conservation Office prior to project construction, which may affect Section 6(f) resources.

4. A Section 6(f) conversion package will be completed once project funding has been secured.

5. Comment noted.

6. Comment noted.

7. Correcting fish passage culverts will be conducted using the MOA between WSDOT and WDFW.

WSDOT consulted with NMFS and the USFWS. This consultation resulted in a Biological Opinion from NMFS and USFWS that stated this project is not likely to jeopardize the continued existence of Puget Sound Chinook salmon, Puget Sound steelhead trout, or bull trout.

8. Please see response to Comment No. 7.

Attachment 6: Agency Agreements

This section contains the following documents:

- Section 106 Programmatic Agreement
- EPA Concurrence regarding the Cedar Valley Sole Source Aquifer
- City of Renton Concurrence on Section 4(f) Resources

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PROGRAMMATIC AGREEMENT
Pursuant to Section 106 of the National Historic Preservation Act of 1966

Among

The Federal Highway Administration,
The Washington State Historic Preservation Officer,
The Washington State Department of Transportation,
The Muckleshoot Indian Tribe, and
The Snoqualmie Indian Tribe

For Improvements to Interstate 405 (I-405) Corridor,
King County and Snohomish County, Washington

WHEREAS, the U.S. Department of Transportation, Federal Highway Administration (FHWA), may provide assistance to the Washington State Department of Transportation (WSDOT) to make improvements to Interstate Highway 405 Corridor in King County and Snohomish County, Washington (the program), to provide multi-modal congestion relief; and

WHEREAS, FHWA issued a corridor level Record of Decision (ROD) under the National Environmental Policy Act (NEPA) for the program on October 9, 2002, covering the Selected Alternative, as identified in the ROD, which attempts to substantially improve mobility options for all travel modes and to provide a high capacity transit system throughout the study area, as described in the final environmental impact statement (FEIS) issued by the FHWA as FHWA-WA-EIS-01-01-F, approved on June 10, 2002 and issued on June 28, 2002; and

WHEREAS, the improvements within the I-405 Corridor program have been divided into individual projects for design and funding purposes; and

WHEREAS, some of the projects are not yet fully funded, meaning that some properties which are planned to be purchased are not currently available and/or may be inaccessible for study; and

WHEREAS, the projects may be implemented using a design-build procurement process, which integrates the final design and construction phases; and

WHEREAS, the design-build process requires flexibility in the location of certain ground-disturbing elements, including but not limited to stormwater detention ponds and ecology embankments, meaning that the location of some ground-disturbing elements may not be known until immediately prior to construction; and

WHEREAS, a NEPA environmental analysis which, among other things, considers impacts to historic properties in coordination with provisions of the NHPA, will be conducted for each individual project; and

WHEREAS, according to 36 CFR § 800.16 (l) historic property "means any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria;" and

WHEREAS, FHWA and WSDOT, in consultation with the Washington State Historic Preservation Officer (SHPO) and affected federally-recognized Indian tribes and interested parties, will conduct cultural resource studies for each individual project to identify and evaluate historic properties located within the project's Area of Potential Effects (APE) which are listed in or eligible for listing in the National Register of Historic Places (National Register); and

WHEREAS, FHWA and WSDOT have determined that the design-build process and phased funding for the projects means that some of the project effects upon historic properties can not be determined until property is acquired or the design is completed by the design/build contractor, and that this Agreement is authorized by 36 C.F.R. § 800.14(b)(1)(ii); and

WHEREAS, FHWA and WSDOT have determined, in consultation with SHPO, that the APE for the projects, as defined in 36 CFR § 800.16(d) of the Council's regulations, are defined as (1) all areas where ground disturbance is planned, including but not limited to: clearing and grubbing, grading, bridge foundations, retaining walls, noise walls, detention ponds, conveyances, and ecology embankments, creation or enhancement of wetland mitigation sites, and staging and stockpiling areas, and (2) historic properties located either one tax lot on each side of the affected rights-of-way or 200 feet from their margins, whichever is less; and

WHEREAS, the Advisory Council on Historic Preservation has been invited to participate in the development of this Agreement, and has declined to participate; and

WHEREAS, the following parties have been consulted and invited to concur with this Agreement: Muckleshoot Indian Tribe, Snoqualmie Tribe, Tulalip Tribes, Yakama Nation, the Duwamish Tribal Organization; and

WHEREAS, the Muckleshoot Indian Tribe and Snoqualmie Indian Tribe have agreed to consider being concurring parties to this Agreement, and

WHEREAS, the Yakama Nation, the Duwamish Tribal Organization, and the Tulalip Indian Tribes have chosen to not participate in this Agreement; and

WHEREAS, pursuant to 36 CFR § 800.2(c)(4) FHWA has authorized WSDOT to initiate consultation with SHPO, but still retains legal responsibility for all findings and determinations of eligibility and effect; and

WHEREAS, pursuant to 36 CFR § 800.13, FHWA WSDOT, and SHPO have developed procedures in this Agreement to ensure that the identification and evaluation of historic properties, assessment of effects, and development of treatment and mitigation plans for

unforeseen effects to previously identified historic properties and/or historic properties discovered during implementation of the projects are properly coordinated with all phases of the design and construction of the projects; and

NOW, THEREFORE, FHWA, WSDOT and SHPO agree that the projects shall be implemented in accordance with the following stipulations in order to take into account foreseen and unforeseen future effects to historic properties.

STIPULATIONS

FHWA, in coordination with WSDOT, will ensure that the following measures are carried out.

I. GENERAL PROCESS FOR CONSIDERATION OF HISTORIC PROPERTIES

A. Prior to concluding the project-specific NEPA process, FHWA and WSDOT shall conduct a cultural resources survey to identify and evaluate historic properties in areas where project effects can be predicted prior to final design or purchase. For some of the I-405 projects, these surveys are already underway. For each survey:

1. Consulting parties will have the opportunity to review and comment on the project's Area of Potential Effects.

2. All potentially historic above-ground structures will be evaluated in the survey report. Level of evaluation may vary and will be determined in consultation with DAHP.

3. Archaeological survey will be conducted in known and accessible areas of proposed ground disturbance within funded portions of the project.

4. Consulting parties will be notified of any archaeological finds, and offered the opportunity to comment on evaluation methods and observe fieldwork.

5. All consulting parties will be afforded the opportunity to review and comment on the results of the survey, and on the historic properties determinations made by FHWA, per 36 CFR § 800.4.

B. After design of project elements, or after purchase of property, whichever is appropriate depending on the level of design detail needed, FHWA and WSDOT will conduct studies as described in Stipulations III and IV for project elements that were not previously considered as described in Stipulation I.A.

C. FHWA and WSDOT will ensure that all work under this Agreement is performed by or under the direct supervision of a qualified individual(s) in the appropriate historic preservation discipline who meets, at a minimum, the Secretary of Interior's Professional Qualification Standards as set forth in 36 CFR § 61. Under certain circumstances it may be appropriate to have a tribal monitor (who is not required to meet the Secretary of Interior's Professional Qualification Standards) involved in the work being performed.

D. FHWA and WSDOT affirm that avoidance of adverse effects to historic properties remains the preferred course of action and that design activities may include the shifting of project elements if feasible to avoid adverse effects to historic properties.

E. If adverse effects to historic properties cannot be avoided, FHWA and WSDOT will seek to resolve the adverse effect in consultation with the signatories, consulting parties, and the public, as described in 36 CFR § 800.6 and further explained in Stipulation VI.

F. FHWA and WSDOT will ensure that the design-build contractor is aware of, understands, and complies with the requirements of this Agreement. The design-build contractor shall ensure that its sub-contractors comply with the requirements of this Agreement. Compliance with this Agreement shall be required as part of the project contract and will be included in the project contract.

II. PUBLIC PARTICIPATION

A. FHWA and WSDOT will ensure opportunities for public participation for Section 106-related activities conducted after the project-specific NEPA process is complete. Modified versions of reports on historic properties (locational information removed as appropriate, in accordance with state and federal laws) will be made available for review to the general public at the I-405 Project Office, or on the WSDOT website, or through other reasonable means. The views of interested parties and the general public will be considered by FHWA and WSDOT with respect to the terms of this Agreement.

B. To the extent required by Section 304 of the NHPA and Section 9 of the Archaeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. 470hh), the signatories and participating concurring parties to this Agreement will withhold from disclosure to the public information about the location, character, or ownership of a historic property until the Secretary of the Interior can determine whether disclosure may (1) cause a significant invasion of privacy, (2) risk harm to a historic property, or (3) impact the significance or use of a traditional religious site by practitioners. To the extent authorized by state and federal law, information will also be withheld from disclosure at the owner's request.

III. POST-NEPA CONSIDERATION OF PREVIOUSLY INACCESSIBLE PROPERTY

A. In certain circumstances, cultural resource investigations are not possible or practicable at the time of the NEPA analysis due to private ownership or physical inaccessibility. In these cases, cultural resource investigations may be deferred until the property has been acquired by WSDOT.

B. Once properties have been acquired by WSDOT, and sufficient design detail is available to know where ground disturbance will occur, FHWA and WSDOT, will work together to determine whether proposed activity at the property has the potential to affect historic

properties. This determination may be made using the terrain map described in Stipulation IV.C. WSDOT will notify SHPO and the concurring parties of the determination via email and telephone. SHPO and the concurring parties will review the documentation and respond within thirty (30) calendar days.

C. FHWA and WSDOT, in consultation with SHPO and the concurring parties, may determine that further study is necessary. This may require fieldwork, including pedestrian survey and subsurface testing.

D. If subsurface testing is required to determine whether archaeological resources are present, WSDOT will obtain the concurrence of FHWA prior to notifying the design-build contractor, if under contract. The maximum extent of construction-related ground disturbance will be defined and flagged by the design-build contractor, if under contract, or by WSDOT.

E. WSDOT will arrange to have the fieldwork conducted by a qualified professional, consistent with Stipulation I.C.

F. Testing must be consistent with the I-405 Corridor Program Cultural Resources Assessment Guidelines (Appendix A).

IV. DESIGN-BUILD PROCEDURES

A. Due to the nature of the design-build process, the exact location of some ground disturbing project elements, such as support columns, detention ponds, or stormwater conveyance alignments, will be designed by the design-build contractor. The interval between the design of an element and its construction may be too short to perform standard Section 106 identification, evaluation, and assessment of effects on an historic property.

B. Adverse effects on archaeological historic properties will be prevented or minimized in two ways: a phased series of terrain surveys to identify completely disturbed, covered-by-fill, and relatively lightly disturbed areas, assuming that disturbance is the largest factor affecting archaeological potential (Stipulation IV.C.); and development of streamlined protocol for resource review and resolution of adverse effects (Stipulations V and VI.A.).

C. The archaeological potential of specific terrain areas within the I-405 project areas, based on extent and type of previous ground disturbance, will be established using the following methods:

1. Within each project area, WSDOT Cultural Resources Specialists (CRS) will determine the archaeological potential of specific zones based on the locations of the original cut-and-fill lines and corresponding extent of disturbance for the construction of I-405 using low-elevation aerial photographs, as-built maps, recent topographic

maps produced by I-405 program, previous archaeological studies, and ground reconnaissance.

2. The CRS will verify existing terrain conditions by windshield survey, pedestrian survey, and shovel/auger/probe testing as necessary. Specific terrain zones will be delineated precisely on a map.

3. Zones where Holocene era native surfaces and post-glacial soils and sediments have been removed entirely will be considered "Unrestricted." The design-builder may locate any ground-disturbing project element in an Unrestricted Zone without any further cultural resources review.

4. Zones identified as having deep fill, where native soils and possibly buried surfaces still may be present under the fill will be classified as "Fill Zones." Each fill zone will be labeled on the map with a number indicating estimated depth of fill. The design-builder may locate any ground-disturbing project element in a Fill Zone when design indicates disturbance will not exceed three-quarters (3/4) the fill depth (to account for over-excavation).

5. Zones identified as having little to no previous ground disturbance, where native sediments and buried surfaces are likely to be present will be classified as "Restricted Zones." The design-builder may NOT locate any ground-disturbing project element, regardless of the depth of the projected ground disturbance, in a Restricted Zone until it is reviewed and approved (in email or letter) by the WSDOT in consultation with interested and affected tribes and SHPO (see Stipulation IV.D).

6. WSDOT will provide a printed map showing the locations of Unrestricted, Fill, and Restricted Zones, and an electronic data file of the map, to the interested and affected tribes and SHPO.

7. Tribes and SHPO will have thirty (30) calendar days to review the map and associated documentation.

8. WSDOT CRS will amend the map based on tribal and SHPO comments, if necessary, and provide a final paper map and electronic file to the Tribes, SHPO, FHWA, and the design-build contractor.

D. If the design-build contractor wishes to change the location of a ground-disturbing project element within a Restricted Zone or to a Restricted Zone, the contractor must notify WSDOT 15 days prior to scheduled ground disturbance. WSDOT CRS will review the project element description and location.

1. The WSDOT CRS will determine, in consultation with interested and affected tribes and SHPO, whether a cultural resources survey is required. Survey will only be required if the area has not already been adequately investigated or characterized. If a

survey is required, it must be consistent with the I-405 Corridor Program Cultural Resources Assessment Guidelines (Appendix A).

2. If a survey is required, WSDOT will notify FHWA prior to notifying the design-build contractor, if under contract. The maximum extent of construction-related ground disturbance will be defined and flagged by the design-build contractor, if under contract, or by WSDOT. WSDOT will arrange to have the archaeological work conducted by a qualified professional, consistent with Stipulation I.C.

3. DAHP and the interested and affected tribes will have ten (10) calendar days to review the survey results and either concur with the findings, or notify WSDOT and FHWA that DAHP does not concur.

4. WSDOT will ensure that no more than two (2) project elements are under review at any time by DAHP and the interested and affected tribes.

5. Work will not proceed until a survey has been completed, tribes have been consulted, and SHPO has concurred with the findings of the survey, per provisions of 36 CFR § 800.

E. Staging, parking, or material storage areas, or temporary buildings (hereafter, "staging areas"), may be located on any paved or prepared gravel surface, provided that the use will not require penetrating the pavement or gravel surface. For staging areas not on paved or prepared gravel surfaces, or penetrating through those surfaces:

1. Within the right-of-way, the contractor may locate staging areas in an unrestricted zone regardless of planned ground disturbance, or in a fill zone as long as planned ground disturbance is less than 3/4 of the known depth of the fill. In a restricted zone, the staging area must be reviewed as in Stipulation IV.D.

2. Outside the right-of-way, any staging, parking, or material storage areas, or temporary buildings not located on pavement or prepared gravel surfaces must be reviewed as in Stipulation IV.D.

V. COORDINATION OF REVIEWS

A. Consulting parties and SHPO will have a review period of thirty (30) calendar days for commenting on all documents, resource evaluations of significance, treatment plans and specifications under the terms of this Agreement, except as described in Stipulation IV. D.3. If multiple historic properties are involved, the review time may be extended, as appropriate, by FHWA.

B. SHPO and the other consulting parties recognize the time-sensitive nature of the project work and will attempt to expedite comments or concurrence when requested, if possible. If SHPO or other consulting parties fail to provide comments within the designated

review period, FHWA will assume their concurrence and proceed with the proposed action or activity.

VI. POST-NEPA AND POST-REVIEW DISCOVERIES

A. If an archaeological resource is identified in a Fill or Restricted Zone during subsurface testing associated with design-build project elements, and cannot be avoided by project redesign, it will be considered eligible for listing in the National Register of Historic Places and subjected to mitigation measures (including but not necessarily limited to data recovery), following procedures outlined in 36 CFR § 800.13(b) and § 800.13(c). Mitigation measures will be determined in consultation with the consulting parties.

B. If WSDOT or FHWA, in consultation with DAHP and interested and affected tribes, determines that an archaeological resource is not eligible for listing in the National Register of Historic Places, work may proceed with no further cultural resources investigation.

C. If previously unidentified archaeological resources are identified during ground-disturbing activities during the construction or during post-construction maintenance or improvement, such activities shall cease in the immediate area of the discovery and the WSDOT I-405 Environmental Manager will follow the procedures outlined in the I-405 Corridor Unanticipated Archaeological Discovery Plan (Appendix B) .

VII. DISPUTE RESOLUTION

A. Should any consulting party object, in writing, within five (5) calendar days to the implementation of the terms of this Agreement, FHWA and WSDOT shall work with the disputing party to resolve the dispute. If FHWA determines that the objection cannot be resolved, FHWA shall forward all documentation relevant to the dispute to the Advisory Council on Historic Preservation (Council) and request that the Council comment.

B. Any Council comment provided in response to such request shall be taken into account by the FHWA in accordance with 36 CFR § 800.7(c)(4) with reference only to the subject of the dispute. The FHWA responsibility to carry out all other actions and activities under this Agreement that are not the subject of the dispute remain unchanged.

VIII. AMENDMENTS AND NONCOMPLIANCE.

A. If FHWA, WSDOT, or SHPO determines that the terms of this Agreement will not or cannot be carried out or that an amendment to its terms must be made, that party shall provide a written explanation for such a determination to all signatories and immediately consult with the other signatories to develop an amendment to this Agreement. The

amendment will be effective on the date a copy is signed by FHWA, SHPO, and WSDOT.

B. If the signatories cannot agree to appropriate terms to amend this Agreement, any one of these parties unilaterally may terminate the agreement in accordance with Stipulation X, below.

IX. EMERGENCY SITUATIONS

Should an emergency situation occur which represents an imminent threat to public health or safety, or creates a hazardous condition, the FHWA and WSDOT shall immediately notify SHPO and consulting parties of the situation and the measures taken to respond to the emergency or hazardous condition. Should SHPO or consulting parties desire to comment or provide technical assistance to the WSDOT, they shall immediately notify WSDOT via email and telephone of their intent to submit comments and shall submit the comments within five (5) calendar days of WSDOT's initial notification, if the nature of the emergency or hazardous condition allows for such coordination.

X. TERMINATION

A. If FHWA or WSDOT determines that it cannot implement the terms of this Agreement, or if SHPO determines that this Agreement is not being properly implemented, FHWA, WSDOT, or SHPO may propose to the other parties that the Agreement be terminated.

B. The party proposing to terminate this Agreement shall notify all parties to this Agreement accordingly in writing, explaining the reasons for termination and affording them at least thirty (30) days to consult and seek alternatives to termination.

C. Should such consultation fail and this Agreement is terminated, the FHWA shall either:

1. Consult in accordance with 36 CFR § 800.6 to develop a new Agreement; or

2. Request the comments of the Council pursuant to 36 CFR § 800.7 and take into account such comments in accordance with such section prior to continuing the project.

By:

Federal Highway Administration, Division Administrator

Daniel M. Mathis — 04/04/08

Daniel M. Mathis — Date

Washington State Department of Transportation, Urban Corridors Office, Administrator

Craig Stone — 4-2-08

Craig Stone — Date

Washington State Historic Preservation Officer

4/4/08

Allyson Brooks — Date

Concur:

Muckleshoot Indian Tribe, Chairperson

Charlotte Williams — 3-21-08

Charlotte Williams — Date

Snoqualmie Tribe, Vice Chairperson

MaryAnne Hinzman — 3-25-08

MaryAnne Hinzman — Date

Appendices:
Appendix A: I-405 Corridor Program Cultural Resources Assessment Guidelines
Appendix B: I-405 Corridor Program Unanticipated Archaeological Discovery Plan

ATTACHMENT A
Contact Information

1. Primary WSDOT Contacts

WSDOT I-405 Environmental Manager	Bill Jordan 425.456.8647 425.457.0642 (cell)
UCO Environmental Services Director	Sasha Visconty 206.464.1227 206.713-9406 (cell)
UCO Deputy Environmental Services Director	Allison Hanson 206.716.1136 206.714.1548 (cell)

1. WSDOT Cultural Resources Contacts

UCO Cultural Resource Specialist	Ken Juell 206.464.1236 206.498.0508 (cell)
WSDOT Cultural Resource Specialist	Barbara Bundy 206.716.1122 206.389.8552 360.915.3429 (cell)
WSDOT Cultural Resources Program Manager	Craig Holstine 360.570.6637 360.701.5955 (cell)
WSDOT Cultural Resource Specialist	Michael Chidley 206.440.4525 206.947.0919 (cell)

WSDOT Tribal Liaison	Colleen Jollie 360.705.7025

3. Agencies to be notified by WSDOT only.

Federal Highway Administration	Steve Boch 206.382.6360
Department of Archaeology and Historic Preservation	Matthew Sterner 360.586.3082 360.480.9654 (cell)
King County Sheriff's Office (Non-emergency)	206.296.4155
King County Medical Examiner	206.731.3232

4. Appropriate Tribal Staff to be notified by WSDOT only.

Duwamish Contact:	Honorable Cecile Hansen 206.431.7582
Muckleshoot Contacts:	Laura Murphy 253.876.3272
	Warren KingGeorge (human remains) 253.876.3269
Snoqualmie Contact:	Andrea Rodgers 425.888.6551
Tulalip Contact:	Hank Gobin 360.651.3310
Yakama Nation Contact:	Johnson Meninick 509.856.5121 (ext. 4737)

ATTACHMENT B
Acronyms & Abbreviations

CRS	Cultural Resource Specialist
DAHP	Department of Archaeology and Historic Preservation
FHWA	Federal Highway Administration
MOA	Memorandum of Agreement
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
UCO	Urban Corridors Office
WSDOT	Washington State Department of Transportation

I-405 Corridor Program Cultural Resources Assessment Guidelines
For Compliance with Washington State Department of Transportation Policy
And Section 106 of the National Historic Preservation Act
July 24, 2007

The WSDOT receives federal highway funds to complete I-405 Program improvement projects and thus must comply with the provisions of 36 CFR 800, the regulations that implement Section 106 of the National Historic Preservation Act (NHPA).

The guidelines for cultural resource assessments presented below represent newly revised agency standards designed to increase the likelihood that all cultural resources in project areas are identified early in the process, to reduce the number of unanticipated discoveries during construction (and the associated increased costs).

The most notable changes in protocol are:

- increasing the intensity of subsurface probing, by increasing the number of shovel probes excavated per unit area,
- increasing the probabilities of detecting deeply buried resources by using heavy machinery to excavate to necessary depths,
- phasing subsurface investigations in some project areas to reduce the number of shovel probes that would otherwise be excavated in previously disturbed locations, and
- requiring more substantive reporting of sedimentary horizons and profiles to ensure comprehensive sampling of the entire Holocene epoch.

Identify Project Elements and Assess Effects
Project elements may include: roadway widening strips, stormwater conveyances, detention ponds, front- and backslope modifications, retaining walls, noise barriers, ecology embankments, staging areas, and cut and fill areas.

The cultural resources management (CRM) CONSULTANT, should assess project effects by comprehensively identifying areas where ground disturbance will take or likely take place, and where indirect effects such as changes in views or increased noise will occur.

Define Area of Potential Effects (APE)
The APE, both below and above the ground surface, is the geographic area or areas within which an undertaking may directly or indirectly cause changes to the character or use of historic properties, if any such properties exist. The CRM CONSULTANT should coordinate with the Project Environmental Manager (PEM) and the WSDOT Cultural Resource Specialist(s) (CRS) to define the APE. The APE should include both the area where ground disturbance is anticipated or possible, and the area where standing structures are recorded for the purposes of acquisition or determining indirect project effects. An important consideration for archaeological sampling design is the depth of Holocene sediment profiles over glacial sediments. The entire vertical APE must be sampled, and WSDOT will work closely with the CRM CONSULTANT to determine the 3-dimensional APE of the project. See the section on Subsurface Exploration, below, for details on sampling.

This task shall be accomplished by means of a review of the proposed project, its boundaries, and identified areas of ground disturbance, if any, in coordination with the Project Environmental Manager (PEM) and CRS. It is assumed that determining the APE will require 3 rounds of map review cycles by the I-405 Team of the materials submitted by CRM CONSULTANT. The PEM will let the CRM CONSULTANT know through correspondence (any verbal correspondence will need to be followed up with an e-mail or written letter) if changes are needed, and will approve up to two additional review cycles, if deemed necessary by WSDOT.

Define Archaeological Probability Areas
Probability (high, moderate, low) attribution should be based explicitly on environmental variables, including but not necessarily limited to slope, topographic position, distance to permanent water sources/channels, and vegetation ecotone. Probability areas, geomorphological work, and project design will dictate pedestrian survey and shovel testing locations.

The research design for sampling project areas should consider environmental factors along with the fact that channel positions of the major rivers are known to have meandered across time during the last 15,000 years.

Gently sloped areas and areas within 200 feet or so of permanent water sources (lakes or streams) are considered high-probability zones for cultural resources. Moderate slopes and areas farther from water courses/natural wetlands are considered moderate probability areas. Steeply sloped areas and areas relatively far from water courses are low probability areas.

Background Search
The CRM CONSULTANT should conduct background research at the Washington State Department of Archaeology and Historic Preservation, and at other appropriate repositories, to determine the nature and distribution of known cultural resources within the vicinity of the project area.

Collected information may include:

- recording forms, other descriptions, and photographs of historic structures, landmarks, districts, ethnographic sites, historic and pre-contact archaeological sites, and other culturally significant sites within 1 mile of the proposed APE (if known and available),
- completed assessments for previous I-405 projects located nearby or partially subsumed by the project, such as the I-405 "Nickel" projects, and
- geology, surficial geomorphology, and soil studies of the project area and vicinity.

Tribal Consultation
FHWA, through WSDOT, is responsible for tribal consultation, and will identify concerned tribes for the project. With approval from the I-405 Environmental Manager, the CRM CONSULTANT may coordinate with tribes to gain information through the Section 106